NAPERVILLE METRA STATION BUS DEPOT AND COMMUTER ACCESS FEASIBILITY STUDY

Naperville, Illinois

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Prepared for:

City of Naperville

Prepared by:

Traffic Analysis & Design, Inc.

233 S. Wacker Drive - Suite 8400 Chicago, Illinois 60606 www.traffic-ad.com

Stanley Consultants, Inc.

8501 W. Higgins Road, Suite 730 Chicago, Illinois 60631







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TECHNICAL MEMORANDUM

MARCH 22, 2012



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INTRODUCTION

The Naperville Metra Station is a unique and critical component of the City's transportation system. Despite its decidedly residential setting just one block from the Naperville Historic District, the Naperville Metra Station is the second busiest suburban station in the entire Metra system¹, serving commuters from the surrounding neighborhoods and adjacent municipalities. The City of Naperville supports a comprehensive, multi modal transportation network that provides commuters with options to access both the Naperville and Route 59 Stations. Commuters access the Naperville Station through a variety of methods, including travel by vehicle (daily fee and permit parking), carpool/vanpool, kiss-and-ride, transit, bicycle, and pedestrian activity. Through this Study, the City of Naperville evaluated the feasibility of a bus depot at the Naperville Metra Station as an opportunity to promote balance across the various means of commuter access to the train station.

Project History

In 2009, the City adopted the 5th Avenue Study, a land use, transportation, and parking study for the vicinity of the Naperville Metra Station. As part of the 5th Avenue Study, the City identified opportunities to enhance multimodal commuter access (i.e., vehicle parking, kiss-and-ride, transit, bicycle and pedestrian access) to the train station. Among the wide range of multimodal access and circulation improvements was the concept of establishing a bus depot on city owned or leased property near the Naperville Metra Station. Based on an evaluation of commuter parking, transit, existing and future traffic conditions, and public input received throughout the 5th Avenue Study, a bus depot was identified as an opportunity to enhance commuter access and meet the following objectives:

- Provide a defined transit center for commuters;
- Improve transit access to/from the train station;
- Consolidate passenger pick-up/drop-off activity;
- Reduce congestion and minimize conflicts between Pace bus operations, pedestrians, bicycles, and kiss-and-ride activity; and
- Minimize bus staging/queuing on adjacent neighborhood streets.

A summary of the public input received throughout the 5th Avenue Study is provided in the Appendix.

Purpose and Scope

As part of implementation of the 5th Avenue Study, the City retained Traffic, Analysis & Design, Inc., and Stanley Consultants ("project team") to evaluate the benefits, impacts, and feasibility of establishing a bus depot adjacent to the Naperville Metra Station as summarized below:

- Identify viable bus depot location(s) and configuration(s) on parcels currently owned or leased by the City.
- Identify short-term enhancements to address station access and circulation issues, either as a phase of a long-term bus depot implementation or as mutually exclusive improvements.
- Analyze relative impacts of depot access and adjusted circulation patterns on adjacent streets and

¹Per data provided in the *Commuter Access Report*, prepared by the City of Naperville Transportation, Engineering, & Development Business Group on November 30, 2007.



intersections.

- Recommend plan components that enhance intermodal connectivity, improve circulation for commuters and transit to and through the station area, and address impacts of site design and circulation patterns on the surrounding neighborhood.
- Develop options to compensate for displaced commuter parking resulting from a bus depot plan.
- Prepare preliminary plans for the feasible alternative(s) with planning-level cost estimates.

Through a study process that considered several potential sites and a range of operational, safety, efficiency, design, and logistical characteristics, the project team collaborated with City staff, Metra Suburban Rail Service (Metra), the Burlington Northern Santa Fe (BNSF) Railway, Pace Suburban Bus (Pace), and the Regional Transportation Authority (RTA) in order to identify feasible sites and depot configurations for use in further stages of study and engineering design. The recommendations developed through this study are intended to enhance overall commuter access to the Metra Station in a manner that balances the needs of the City and transit agencies while maintaining cohesiveness with the existing character of the surrounding neighborhood.

Study Area

With station platforms and access on both sides of the railroad tracks, a large commuter parking supply, and a unique neighborhood setting, the functional area of the Naperville Metra Station extends beyond the immediately adjacent public streets. In order to consider the effects of a bus depot and the related changes to circulation for all modes, commuter parking supply, and area transportation operation, the selected study area is generally bound by 5th Avenue on the north, School Street on the south, Loomis Street on the east, and Washington Street on the west and also includes all commuter parking lots lying immediately outside these borders (i.e., the DuPage Children's Museum, Kroehler Lot, Water Tower West Lot, and 4th Avenue Serpentine Lot). It is anticipated that the majority of transportation-related improvements, modifications, and impacts would be limited to this defined study area; these boundaries, however, do not preclude consideration of complementary improvements outside of the study area. The study area is illustrated on Exhibit 1.







Potential Bus Depot Sites

Based on the 5th Avenue Study public input and bus depot objectives, as well as input from the RTA, Pace and Metra, the project team reviewed the study area in order to identify potential locations for a bus depot at the Naperville Metra Station. This exercise conformed to specific direction from the Naperville City Council that only parcels owned, controlled, and/or leased by the City should be included in this study. With these factors in mind, the potential bus depot sites illustrated on **Exhibit 6** and listed below were identified for further study.

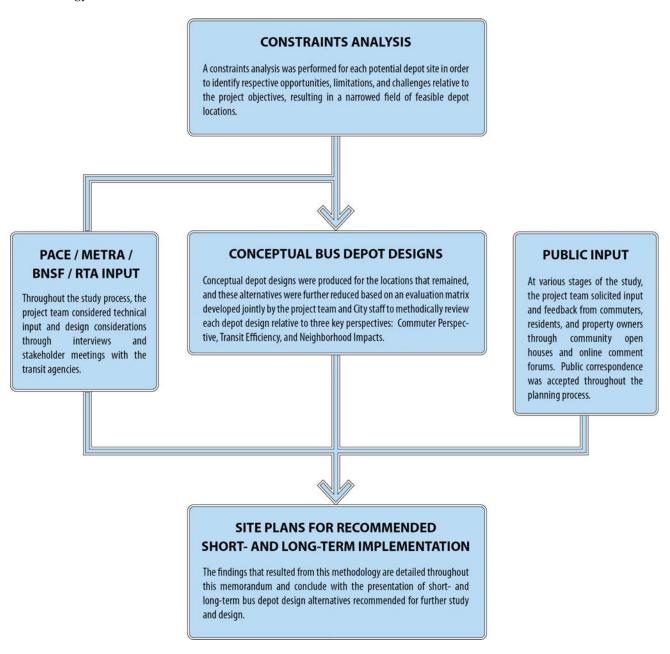
- Parkview Lot
- Upper Burlington Lot
- Lower Burlington Lot
- Eastern Burlington Lot
- 4th Avenue south of the Train Station
- 4th Avenue between Loomis Street & Ellsworth Street
- Burlington Square Park (perimeter)
- DuPage Children's Museum Lot

Each location was evaluated according to the study methodology (outlined on page 5), enabling the project team to narrow the options and identify feasible short- and long-term recommendations for a bus depot at the Naperville Metra Station.



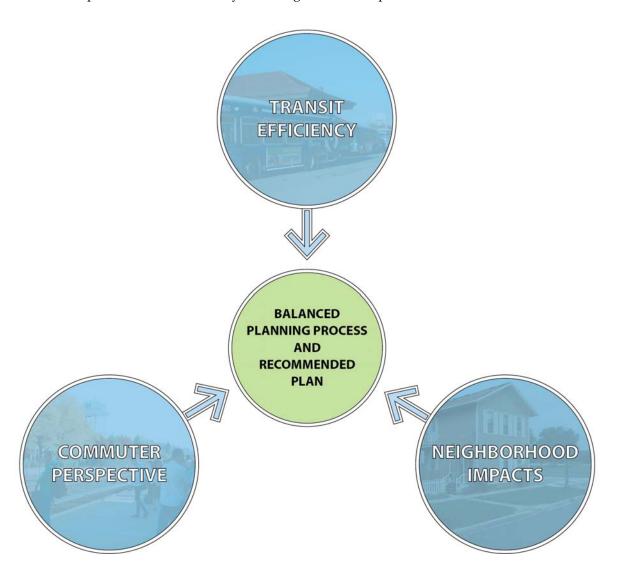
STUDY METHODOLOGY

The short- and long-term recommendations developed through this study are based on a comprehensive evaluation of the potential bus depot sites. A multitude of factors were considered to evaluate each potential bus depot site, and subsequently to evaluate the conceptual bus depot designs. A summary of the study methodology is outlined below.





Because the Bus Depot and Commuter Access Feasibility Study holds the potential to improve operation, safety, and efficiency of access for a variety of users at the Naperville Metra Station, the project team designed a three-faceted evaluation methodology to address key components of a successful bus depot design: the Commuter Perspective, Transit Efficiency, and Neighborhood Impacts.



These three key project perspectives, summarized in the table on the following page, were maintained throughout each stage of the study methodology in an effort to identify recommended improvements that provide balanced benefits to all stakeholders.



Transit Efficiency	 Transit priorities and preferences include: Efficient access to/from the train station in order to maintain/enhance performance, including routes, schedules and operating/maintenance costs; Encourage new and existing transit ridership to/from the Naperville Metra Station; Convenience for transit riders; Bus route safety (e.g., minimize uncontrolled left-turn movements, minimize conflicts with other travel modes); Passenger safety (i.e., passenger loading/unloading areas); and Operating efficiency in terms of schedule, maintenance, and operating costs.
Commuter Perspective	Commuters at the Naperville Metra Station include pedestrians, bicyclists, transit riders, motorists using permit or daily fee parking spaces, and kiss-and-ride passengers. Commuter priorities and preferences include: • Convenient access to/from the station platforms; • Efficient traffic circulation and operation; • Consideration for the safety of motorists, pedestrians, and bicyclists; • Convenient, timely transit service; and • Availability of adequate and proximate parking.
Neighborhood Impacts	Priorities and preferences identified by residents and business owners in the vicinity of the Naperville Metra Station include: • Removing bus staging from neighborhood streets; • Minimal bus travel through the adjacent neighborhood; • Reduced impact on neighborhood character resulting from station-related traffic, including kiss-and-ride activity; and • Maintained access to Center Street businesses throughout the day.

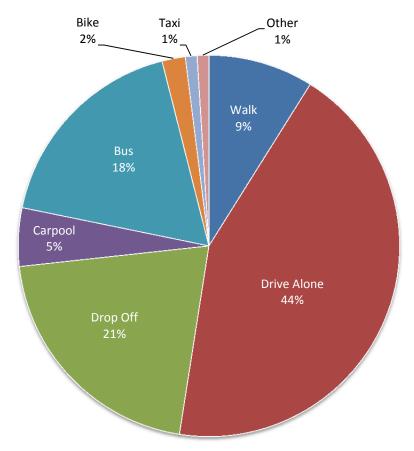
While the various users at the Naperville Metra Station have competing interests, including those among the various types of commuters (e.g., pedestrians, bicyclists, transit riders, motorists using permit or daily fee parking spaces, and kiss-and-ride passengers), the purpose of this study is to evaluate the feasibility of a bus depot in order to enhance access to the train station while balancing the various commuter and neighborhood priorities and preferences.



EXISTING CONDITIONS

The Naperville Metra Station, located one block east of Washington Street between 4th and 5th Avenues, serves rail commuters along Metra's Burlington Northern Santa Fe (BNSF) Railway. This location is the second busiest suburban stop in the Metra system, with over 4,100 weekday commuters boarding at this station¹. The surrounding area is predominantly residential, but in the immediate vicinity of the train station, commercial uses front Washington Street, Center Street, Ellsworth Street, and 5th Avenue. In addition, the DuPage Children's Museum is located at the northwest corner of Washington Street/North Avenue, and Washington Jr. High School is located at the southwest corner of Washington Street/Spring Avenue. Downtown Naperville is roughly one half-mile southwest of the Naperville Metra Station.

Access to the Naperville Metra Station is provided by a variety of transportation modes, including vehicle parking (i.e., permit and daily fee), kiss-and-ride activity, transit (including park-and-ride activity), bicycles, motorcycles, and walking. Mode of access to the station is summarized below based on Year 2006 survey data.



Source: Metra's Fall 2006 Origin-Destination Survey

¹Per data provided in the *Commuter Access Report*, prepared by the City of Naperville Transportation, Engineering, & Development Business Group on November 30, 2007.



In order to evaluate existing commuter access to the Naperville Metra Station and identify short- and long-term improvements, the project team, in coordination with the City, evaluated available data and performed field observations, as documented in the subsequent sections.

Area Roadway Network

With a platform on both sides of the tracks, the Naperville Metra Station has distinct features on the north and south sides with regard to adjacent roadway characteristics, access configuration, and vehicle staging. A discussion of the respective roadway features on the north and south sides of the station is provided below.

North Side of the Station

Commuter parking adjacent to the station on the north side of the tracks is provided in the Upper Burlington Lot, Lower Burlington Lot, and Eastern Burlington Lot. Vehicular access to these commuter parking lots and the northern platform (typically used by outbound trains) is provided via Center Street (ingress and egress) and Ellsworth Street (egress only). Each access roadway has a two-lane cross-section, and both intersect the east-west, two-lane collector 5th Avenue to the north at minor-leg stop-controlled intersections. On-street parking is provided for a daily fee along the western curb of Ellsworth Street south of 5th Avenue and along both sides of 5th Avenue for much of the study area.

At its signalized "T" intersection with Washington Street, 5th Avenue provides separate westbound leftand right-turn lanes. Field observations revealed significant congestion on westbound 5th Avenue at Washington Street during the evening peak hour and particularly after the arrival of outbound trains, resulting in a vehicle queue that extends east of Center Street and into the station area on both Center and Ellsworth Streets.

Pace buses, kiss-and-ride vehicles, and taxis enter via Center Street to access the northern platform and their respective vehicle staging areas. A 210-foot bus lane is reserved along the platform during peak periods (6-9AM and 5-7PM), providing a defined location for passengers to board/alight and for buses to stage between routes. A taxi stand is provided near the platform, and taxis are also permitted to stand along the eastern curb of Ellsworth Street between the station pedestrian tunnel and the access driveway to the 5th Avenue Station building parking lot. Kiss-and-ride activity does not have a designated area on the north side of the station; therefore, kiss-and-ride vehicles were observed using the bus lane during the restricted time periods. The kiss-and-ride vehicles also stage parallel to the platform next to the accessible parking spaces, in the drive aisles of the Upper and Eastern Burlington Lots, and in other locations that impede circulation for exiting passenger vehicles and arriving buses. Observations of kiss-and-ride activity north of the train tracks during Summer (June 2011) and Winter (January 2012) indicated peak queues of 6 and 22 vehicles, respectively. These peak queues represent the maximum number of kiss-and-ride vehicles observed at the station simultaneously during field observations.

South Side of the Station

South of the railroad tracks, commuter parking with direct access to the station/platform can be found in the Parkview Lot and in the DuPage Children's Museum Lot. The southern platform, which contains the station building and typically serves inbound trains, borders 4th Avenue between Center and Ellsworth Streets. In this location, Ellsworth Street is a one-lane, one-way northbound roadway and carries traffic



traveling to the station. Daily fee parallel parking spaces are provided along the western curb of Ellsworth Street between North Avenue and 4th Avenue, and a bus-only lane is reserved for peak-period staging on the eastern curb. Center Street provides a single lane for one-way southbound travel between 4th Avenue and North Avenue and has daily fee parallel parking spaces along its eastern curb. Time-restricted angled and parallel parking spaces for adjacent businesses, residences, and visitors are provided along the west side of Center Street. Both Center Street and Ellsworth Street meet North Avenue at minor-leg stop-controlled intersections.

North Avenue serves one-way westbound traffic in a single lane between Ellsworth and Center Streets and in two lanes between Washington and Center Streets, but allows two-way travel elsewhere. Both parallel and angled daily fee parking spaces are provided along the one-way portion of North Avenue, which ultimately meets Washington Street at a signalized intersection opposite the access driveway to DuPage Children's Museum. During the evening peak period and particularly after the arrival of outbound trains, westbound vehicle queues frequently extend east from Washington Street as Parkview Lot commuters, Pace buses, and kiss-and-ride passengers exit the station area. At times, vehicle queues extend along North Avenue east to Center Street and beyond along North Avenue and Center Street.

Immediately in front of the station, 4th Avenue provides two westbound travel lanes separated by a raised median, which is flanked by time-restricted daily fee parallel parking spaces on both sides. The northern half of 4th Avenue is reserved for Pace buses only during peak periods (6-8AM, 5-7PM). Six Pace buses stage on the northern curb immediately adjacent to the station building, and the remaining six south-side routes stage in the northbound bus-only lane on the east side of Ellsworth Street.

Kiss-and-ride vehicles are permitted to use the southern half of 4th Avenue to pick-up and drop-off passengers during the morning and evening peak, though many private vehicles were observed using the bus lane during the restricted time periods. Once the parking lane along the south side of the 4th Avenue median is fully occupied, kiss-and-ride vehicles begin to double park and occasionally block circulation along 4th Avenue near Ellsworth Street while waiting for passengers exiting the pedestrian tunnel near the east side of the station. Other kiss-and-ride vehicles were seen on 4th Avenue east of Ellsworth Street and west of Center Street. As vehicles exit the area in front of the station, both the northern and southern portions of 4th Avenue are subject to stop control before continuing onto Center Street. Observations of kiss-and-ride activity south of the train tracks during Summer (June 2011) and Winter (January 2012) indicated peak queues of 25 and 23 vehicles, respectively. These peak queues represent the maximum number of kiss-and-ride vehicles observed at the station simultaneously during field observations.

Additional vehicle staging on the south side of the tracks includes private shuttles run by nearby corporations (which typically pick up and drop off at the front door to the station building) and independent intercity bus services (such as the Trailways Bus Service) that typically run off-peak and stage curbside adjacent to the station building.

Exhibit 2 illustrates the station area and identifies existing Pace bus, kiss-and-ride, parking, and circulation patterns.

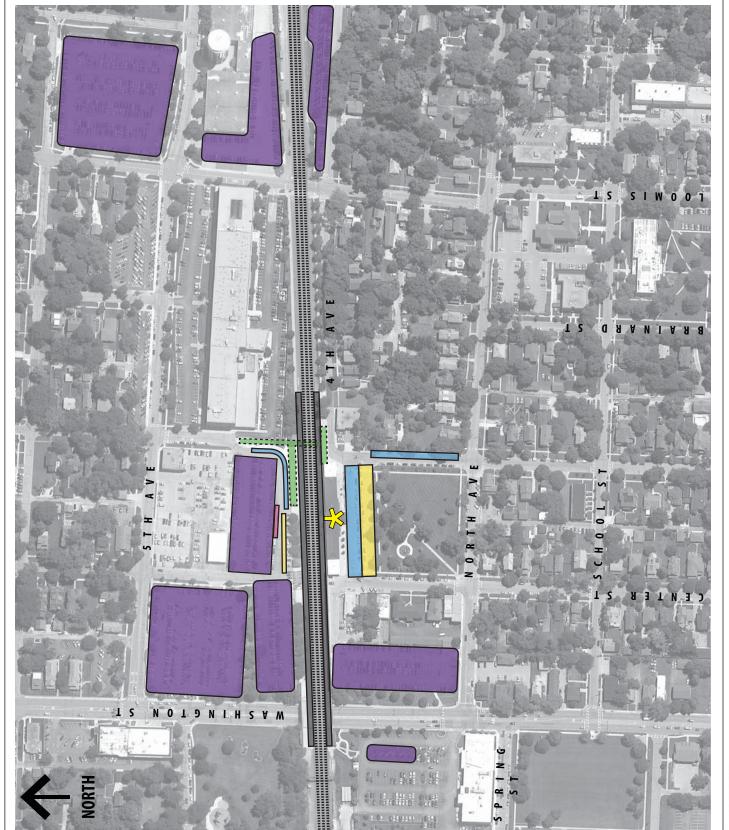
Kiss-and-Ride Area

Station Platform

Off-Street Parking

Pedestrian Tunnel

Taxi Stand









Pace Bus Service

The Naperville Metra Station is currently served by 15 Pace Bus routes operating with stops on either the north or south side of the station, as follows:

North of Station

- 676 Cress Creek
- 681 Naperville-Saybrook
- 682 Naperville-Brookdale

South of Station

- 530* West Galena-Westfield Fox Valley Center
- 677 Naperville-West Glens
- 678 Naperville-Carriage Hill
- 680 Naperville-Knoch Knolls
- 683 Naperville-Ashbury
- 684 Naperville-Maplebrook
- 685 Naperville-West Wind Estates
- 686 Naperville-Old Farm
- 687 Naperville-Farmstead
- 688 Naperville-Huntington
- 689 Naperville-Hobson Village
- 714* College of DuPage-Naperville-Wheaton Connector

Travel patterns exhibited by these routes within the station area are presented on **Exhibit 3**. This exhibit and the above list reveal that 12 of the 15 buses serving the Naperville Metra Station stop south of the station. Of the 12 buses that stop south of the station, 11 of the bus routes approach and depart via roadways south of the train tracks; Route 714 is the only bus that stops south of the station and approaches/departs from north of the train tracks (i.e., Washington Street). As noted above, Pace Bus Routes 530 and 714 are fixed routes that run throughout the day and are among the 12 routes that stop on the south side of the railroad tracks; these routes begin running to and from the station just before 6:00AM and end shortly after 6:30PM. The remaining routes are designed to serve specific trains during peak periods. The feeder routes that stop on the north side of the station also serve as shuttles to specific areas, including the Cantera office park (Route 676), Conagra and OfficeMax corporate centers (Route 681), and the park-and-ride facility at St. Thomas the Apostle Catholic Church (Route 682). Average weekday ridership (representing combined boardings and alightings) for each route serving the Naperville Metra Station is summarized in **Table 1**.

^{*}Fixed bus route that runs throughout the day. All other bus routes are feeder routes serving the Naperville Metra Station during peak morning and afternoon periods only.



Bus Stop

Pace Routes 530, 677, 678, 680,

683, 684, and 686

Pace Routes 676 and 682

Pace Route 685

Pace Route 681

Pace Route 714

Pace Routes 687,

688, and 689

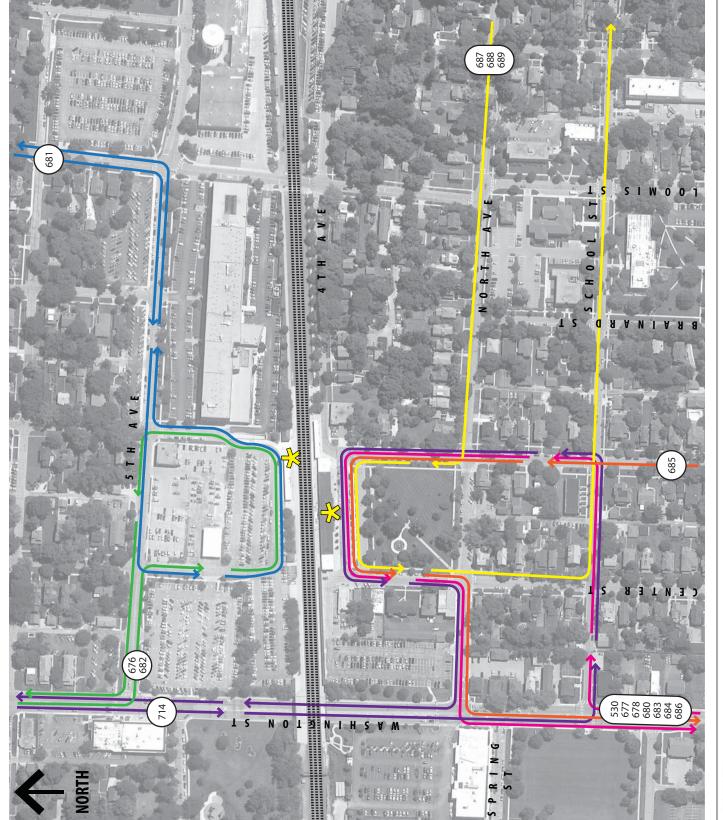








Table 1. Average Weekday Ridership

Pace Bus Route Number:	Average Weekday Ridership
Route 530	808
Route 676	90
Route 677	50
Route 678	99
Route 680	120
Route 681	45
Route 682	64
Route 683	94
Route 684	89
Route 685	72
Route 686	87
Route 687	69
Route 688	62
Route 689	50
Route 714	313
Total	2,112

As provided on www.rtams.org for November 2010 through October 2011, the most current data available for a full 12 months.

Based on Metra's Fall 2006 Origin-Destination Survey, 18 percent of commuters at the Naperville Station arrive and depart via bus. To provide context, the three most proximate commuter parking lots (Parkview, Upper Burlington Lot, and Eastern Burlington Lot) provide a total of 426 parking spaces to serve a combined 12 percent of Metra ridership at the station (assuming a vehicle occupancy rate of 1.2 persons/vehicle¹, 426 spaces x 1.2 persons per space ÷ 4,100 Metra boardings = 12 percent). Thus, current bus ridership represents a more concentrated point of access for commuters compared to the most proximate parking lots that represent potential bus depot locations. Furthermore, with capacity for approximately 80 commuters per bus and 15 routes serving the station, Pace service also holds the potential for increased ridership to and from the Naperville Metra Station, further increasing the concentration of access by bus compared to auto parking adjacent to the station. Pace bus service is an important component of the station's multimodal access system, providing an alternate commute option that limits the impact of additional traffic on the area's street system and parking accommodations.

Metra Station Parking

As illustrated in **Exhibit 4**, the Naperville Metra Station is served by several off-street parking lots and onstreet parking areas within the study area. A summary of the available parking supply, along with the average occupancy rate for the most recent year of survey data, is provided in **Table 2**.

¹Per data provided in Metra's Fall 2006 Origin-Destination Survey, 5 percent of riders at Naperville Station arrive via carpool and 44 percent arrive by driving alone; as such, roughly 10 percent of vehicles (5 percent carpool \div 49 percent driving = 10 percent) parking within the station area carry more than one passenger. In order to conservatively allow for some carpool vehicles to carry more than one additional passenger, it was assumed that 1 in 10 vehicles would carry three riders to the station in order to calculate an estimated occupancy rate (12 persons \div 10 vehicles = 1.2 persons/vehicle).



On-Street Parking



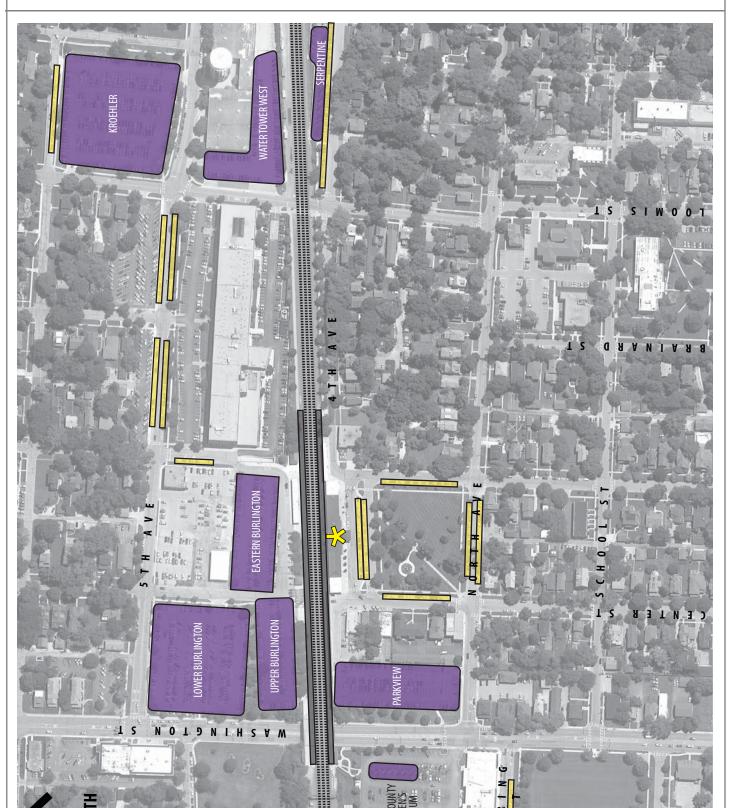








Table 2. Existing Parking Supply and Average Occupancy Rates at Naperville Metra Station

Location:	Type of Parking	Parking Supply ¹	Average Occupancy ²
Burlington Lot ³	Permit	523	89%
Burnington Lot	Accessible	13	79%
Parkview Lot	Permit	126	81%
Parkview Lot	Accessible	10	95%
Kroehler Lot	Permit	281	85%
Kroenier Lot	Daily Fee	44	99%
5 th Avenue (On-Street)	Daily Fee	112	100%
Water Tower West Lot	Daily Fee	115	95%
4 th Avenue			
Serpentine (On- & Off-Street)	Daily Fee	132	100%
At Station House (On Street)	Daily Fee	20	87%
At Station House (On-Street)	Accessible	2	100%
6 th Avenue (On-Street)	Daily Fee	10	99%
North Avenue (On-Street)	Daily Fee	29	100%
Spring Avenue (On-Street)	Daily Fee	21	99%
Center Street (On-Street)	Daily Fee	9	100%
Ellsworth Street (On-Street)			
North of Tracks	Daily Fee	6	100%
South of Tracks	Daily Fee	10	100%
DuPage Children's Museum	Daily Fee	28	79% ⁴
Total Permit Spaces		930	87%
Total Daily Fee Spaces		536	97%
Total Accessible Spaces		25	87%
Total Parking Supply		1,491	90%

¹Provided by the City of Naperville. Note that some parking supply counts were adjusted for field conditions at the time of data collection.

The above data reveals that daily fee parking spaces are in the highest demand at an average 97 percent occupancy rate over the last year of survey data. Permit parking and accessible spaces were both occupied at a rate of 87 percent.

Pedestrian & Bicycle Accommodations

As shown on **Exhibit 5**, sidewalks and crosswalks are provided throughout the study area, providing connectivity between the Naperville Metra Station and the surrounding neighborhood. In addition, area pedestrians are served by a tunnel that provides an accessible connection between the northern and southern

²Based on a series of mid-month data collected by the City of Naperville from June 2010 through May 2011. Because the available parking supply varied according to field conditions for each observation, the average of each percent occupancy rate was used to calculate this value. The total occupancy rates at the bottom are a weighted average based on current parking supply numbers.

³Includes the Upper Burlington Lot, Lower Burlington Lot, and Eastern Burlington Lot shown on Exhibit 4.

⁴Occupancy data for the Museum spaces available for May 2011 only.

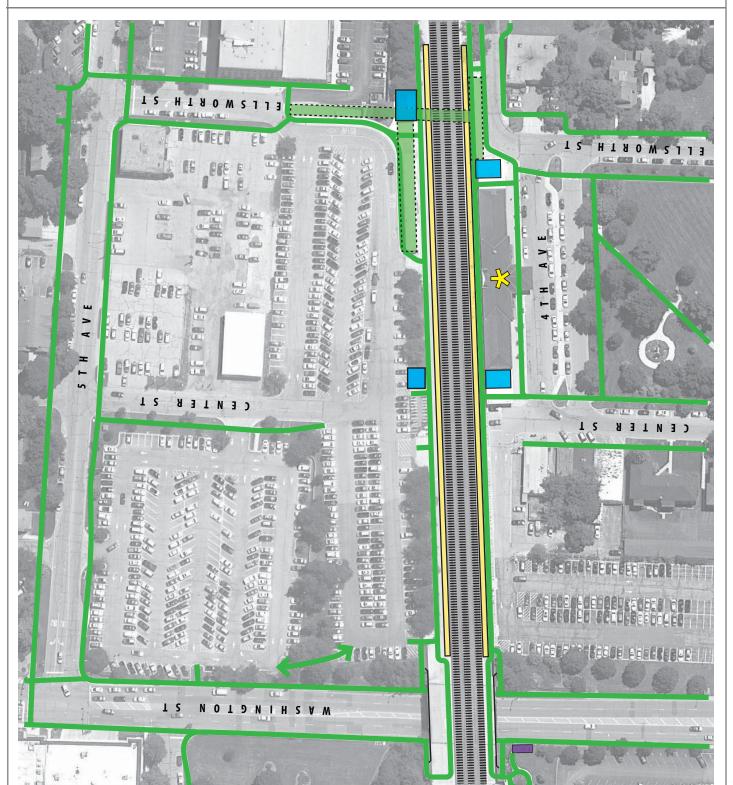
Pedestrian Sidewalk or Route Metra Station

Uncovered Bicycle Parking

Platform

Covered Bicycle Parking

Pedestrian Tunnel









platforms near the eastern end of the station. Stairs connect both platforms to sidewalks along Washington Street where the roadway is grade-separated from the train tracks. A sidewalk links the southern platform to the DuPage Children's Museum parking lot where 28 daily fee parking spaces are currently provided. Bicycle parking is provided at various locations along both platforms, several of which are covered.

During field observations, heavy pedestrian traffic was noted at locations within the station area that were not marked for pedestrian movements, particularly during the evening peak hour. On the north side, pedestrians were seen exiting the tunnel onto Ellsworth Street in various directions to return to their parked vehicles, access kiss-and-ride, board a Pace bus, or walk to the surrounding neighborhood. The location at which the tunnel meets Ellsworth is also significant from a vehicular standpoint: this single outbound travel lane carries all exiting buses and kiss-and-ride vehicles, and it is also a point of intersection with a drive aisle for the Eastern Burlington Lot. As a result, the lack of guidance for and heavy volume of pedestrians contribute to a congested intersection at this location.

On the south side, heavy pedestrian traffic was observed exiting the tunnel near the intersection of Ellsworth Street and 4th Avenue. The mix of bus traffic, kiss-and-ride activity, and pedestrian movements in this location created significant congestion and the potential for a variety of conflicts and safety concerns.

While the bicycle racks were utilized heavily on the date of field observations, there were no notable conflicts observed between bicyclists and the other modes of transportation. Furthermore, the project team did not observe conflicts between motorcyclists and the other modes of transportation operating near the reserved motorcycle parking spaces located immediately west of the station building on the south platform or the unreserved motorcycle parking area on the north platform.



STAKEHOLDER INTERVIEWS

In an effort to identify key issues, opportunities, design standards, and other relevant considerations for the Feasibility Study, the project team conducted interviews with the RTA, Pace, and Metra with the BNSF Railroad. The stakeholder interviews are summarized below. Note that each interview was performed with the presence of City staff and documented in meeting minutes that were approved by the project team and the respective agency; meeting minutes are provided in the Appendix.

The feedback received from each stakeholder was considered in the project team's efforts to identify potential sites for the bus depot for both the short- and long-term, the development of an evaluation matrix to compare these sites, and the subsequent alternatives analyses.

Study Priority:

- Potential impacts to Pace bus service should be considered; an additional minute or two of travel time can impact schedule and operating/maintenance costs for each route.
- The study should include short-term recommendations given the difficulty obtaining capital funds for more significant, long-term improvements.

Bus Depot Location:

The RTA indicated that locations north of the tracks seemed less feasible due to the likely impact on bus route schedules.

Study Priority:

Pace staff indicated the following priorities for the study and its recommendations:

- Minimize impacts to bus travel times and operating costs.
- Separate transportation modes, including defined spaces for buses, automobiles/private vehicles, and pedestrians.
- Provide convenient pedestrian access between the platforms and the bus staging area(s).
- Consider wayfinding signage to assist riders in locating their particular route both external to and within the proposed depot.

Bus Depot Location:

As most of the bus routes serving this station are located on the south side of the tracks, Pace indicated a general preference for a south-side bus depot in order to minimize impacts to bus schedules, operating costs, and maintenance costs.

Bus Depot Design:

With regard to the bus depot design characteristics, Pace staff provided the following feedback (paraphrased for conciseness):

- Ideally, a bus depot at the Naperville Metra Station would be capable of accommodating up to 16 buses at the same time (based on current routes/schedules).
- A "sawtooth" design is preferred over a "parallel" design because the latter requires buses to exit in a first-infirst-out fashion, thereby placing greater constraints on bus circulation within the depot. A sawtooth design would allow buses to exit regardless of the order in which they arrived.
- Existing bus depots with the parallel design do not operate as well as those with a sawtooth design.
- Shuttles and private vehicles should not use the bus depot for pick-up/drop-off during peak commute periods in order to minimize conflicts.
- Pace has no current plans to introduce additional routes or larger buses at the Naperville Metra Station.

Pace Suburban Bus



Study Priority:

- Safety, particularly at the existing at-grade rail crossing at Loomis Street, was observed as a top priority.
- Metra expressed a desire to maintain or minimize impacts to the existing parking supply (both after project completion and during phased construction) and to sustain minimal compromises in the existing kiss-and-ride operations.
- BNSF Railroad noted that three spaces should be reserved very near to the station for BNSF clerks and an Amtrak ticketing agent.

Bus Depot Location:

Metra expressed a willingness to keep bus routes on both sides of the tracks as they are today, pointing to the presence of commuter parking and kiss-and-ride activity on both sides of the tracks as a means of distributing peak period traffic congestion. Metra offered the following feedback on specific sites that could potentially be used for a bus depot (paraphrased for conciseness):

- **Burlington Square Park** With a "counterflow" design on the south side of the station, buses would be routed in a clockwise direction and Burlington Square Park would be used as an area for passengers to board/alight the Pace buses. Kiss-and-ride activity would maintain its existing counterclockwise flow around the Park. This alternative could be used as either a short- or long-term improvement, has limited impact on the station's parking supply, and requires limited expenditures of capital funds.
- Parkview Lot This parking lot is viewed as an undesirable location for a bus depot due to the difficulties associated with accessing Washington Street from this location. The Parkview lot is also located far away from the pedestrian tunnel.
- **DuPage Children's Museum** BNSF suggested that there may be some benefits to locating kiss-and-ride and bus pick-up/drop-off activities in the parking lot at the DuPage Children's Museum, given the complementary peaks of commuter uses and the Museum's clientele. Metra added that an existing detention pond at the Museum could potentially be buried to create more space for parking, kiss-and-ride, and bus staging.

In terms of rail operations at the subject station, Metra indicated that one or two outbound trains use the south platform on a daily basis. No specific information was provided on future ridership or anticipated growth trends, but Metra staff stated that additional parking may be desirable in the future as growth continues in southern Naperville and other communities to the south.



COMMUNITY OUTREACH

Throughout the various stages of the feasibility analysis, the project team solicited public feedback during two Open House events held at the Naperville Municipal Center. A brief summary of these events and their purpose is provided below:

Open House #1 - Monday, September 12, 2011

This event was intended to introduce the purpose and objectives of the study to residents, property owners, businesses, commuters, and other interested stakeholders. The potential bus depot sites and the associated opportunities and constraints analysis were available for public review and comment. City staff and the consultant team were available to answer questions and collect comment cards from attendees. For those who were unable to attend the Open House, the information displayed during the event was posted to the City's website; public comments were accepted through Tuesday, September 20.

Open House #2 - Monday, November 14, 2011

The second open house invited the public to view and comment on the bus depot concepts prepared by the project team. The eliminated potential depot sites were summarized along with the respective reasons for elimination, and the factors considered in the development of each depot concept were presented. Illustrated bus depot concepts and a summary of the opportunities and limitations/challenges for each design were displayed for public review and comment. Bus capacity (defined as number of routes) and access were also highlighted for each concept. A preliminary menu of parking impact mitigation options was also presented for public review and comment. The public was invited to submit additional parking mitigation options for City staff consideration. City staff and the consultant team were present to answer questions, discuss the bus depot concepts, accept feedback, and collect comment cards. For those who were unable to attend the Open House, the information displayed during the event was posted to the City's website; public comments were accepted through Friday, December 2.

The public comments received as a result of these two Open House events can be found in the Appendix.



SITE CONSTRAINTS / OPPORTUNITIES EVALUATION

The eight potential bus depot locations (**Exhibit 6**) were reviewed within the context of the three key project perspectives: commuter convenience, transit efficiency, and neighborhood impacts. The resulting constraints analysis provides a reference for the limitations, challenges, and opportunities of each site for the establishment of short-term enhancements and a long-term bus depot solution.

In order to properly evaluate site constraints, the project team identified a number of design considerations to guide the constraints analysis, including accessibility, circulation patterns, right-of-way availability and/or property limits, grant and lease agreements, and capacity/demand with respect to the bus routes and kiss-and-ride. The eight potential bus depot locations illustrated in **Exhibit 6** were evaluated in order to identify the respective limitations on bus depot design (such as layout, access configuration, and capacity) and the design opportunities and challenges anticipated for each. Each of the potential bus depot sites have three common constraints that should be considered regardless of the preferred locations.

- Impacts to Bus Routes, Schedule and Operating/Maintenance Costs Three Pace routes stop at the north side of the station, and twelve routes stop at the south. If a bus depot is designed to consolidate all 15 Pace routes on one side of the train station, there will be impacts to the travel time and operating and maintenance costs of routes that must switch from the north side to the south side or vice versa. The cumulative impact would be greater for a bus depot on the north side of the station, since 80 percent of the routes in the study area currently travel to and from the south side of the station. An alternative that may be considered is a hybrid scenario that establishes the primary bus depot area on one side of the station with a more modest level of improvements on the other side, thus maintaining the current stops and eliminating additional operating and maintenance expenses associated with relocating routes north or south of the train station.
- **Future Development/Redevelopment Opportunity -** The placement of a bus depot on any of these sites may limit the potential future use of that property (e.g., redevelopment, parking garage, etc.).
- Cost Construction of a bus depot is a significant capital investment regardless of the site selected. Because many of the costs associated with establishing a bus depot are independent of the site location (e.g., platforms, shelters/canopies, lighting, etc.), cost-related constraints identified in **Table 3** (page 26) represent aspects that may be unique to a specific location and are not necessarily relevant at other sites (e.g., significant grading, retaining walls, etc.). These cost considerations are one reason it is important to identify and evaluate interim options in addition to a long-term plan.

In addition to the shared constraints above, three of the potential sites (namely, the Parkview Lot, Upper Burlington Lot, and Lower Burlington Lot) share a common characteristic in their direct adjacency to Washington Street, providing a potential opportunity for Washington Street access. While the significant grade difference precludes a direct connection between Washington Street and the Upper Burlington Lot, City staff indicated that the opportunity to provide such access for the Parkview and Lower Burlington Lots should undergo further evaluation. As a key criterion for this evaluation, it was assumed that Washington Street access should not adversely affect the bus depot configuration (layout of the bus bays, circulation aisles, pedestrian platforms, and other design features). With these design considerations in mind, the project team considered the factors that may or may not enable direct Washington Street access for the Parkview and Lower Burlington Lots (listed on page 24).

Metra Station

Parkview Lot

Upper Burlington Lot Lower Burlington Lot

Eastern Burlington Lot

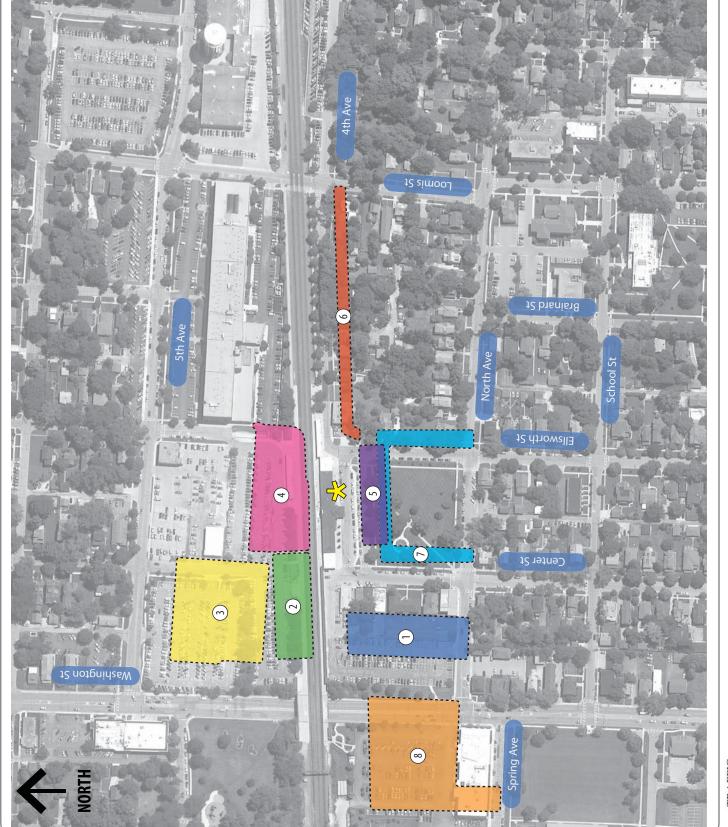
Station - Front. South Lo

4th Avenue

Burlington Square Park

DuPage County Children's Museum

∞









Grade Change between Washington Street and Depot

- Pace generally recommends a maximum grade of 6 percent and that changes in grade be gradual to allow buses to navigate a sloped roadway more easily. It was therefore assumed that a maximum 6 percent grade would be needed to accommodate the ingress and egress of buses via Washington Street.
- Due to the sloping grade of Washington Street under the railroad tracks, the difference in elevation between Washington Street and the lots increase as access is located further from either North Avenue or 5th Avenue.
- Based on these assumptions, Washington Street could likely accommodate direct access to/from a
 bus depot up to 125 feet north of the North Avenue centerline and 205 feet south of 5th Avenue
 centerline.

Proximity to Traffic Signals

- In order to limit conflicts between turning movements and vehicle queues, the distance between access driveways and adjacent signalized intersections should be maximized.
- Along high-volume arterial roadways such as Washington Street, appropriate intersection spacing should be maintained to provide good traffic flow and vehicle progression along the corridor.
- Given the current traffic volumes and vehicle queues along Washington Street, lines of sight
 obstructed by the railroad viaduct, and close proximity of areas with acceptable access grades,
 provision of direct full access via a driveway on Washington Street is not feasible.
- As an alternative, a direct access that creates a fifth leg to the Washington/North intersection was
 considered. However, the resulting alignment, intersection size, pedestrian sidewalks, and impact on
 the functional area for a depot at the Parkview Lot lead to an undesirable access option that would
 likely have adverse impacts on traffic operation and safety for motorists and pedestrians alike.

In summary, the maximum grade requirements and best access management practices present conflicting constraints for an access driveway to Washington Street; the existing topography requires that this driveway be placed within 125 feet of 5th Avenue or North Avenue, but this placement is too close to a signalized intersection from the standpoint of traffic operations and safety. There would also be undesirable impacts to vehicular and pedestrian safety and operation if this access driveway were implemented as a fifth leg to the Washington Street/North Avenue intersection. As such, direct Washington Street access is not feasible to accommodate Pace buses entering or exiting the Parkview or Lower Burlington Lots.

A matrix summarizing the constraints analyses for each of the potential bus depot sites is provided in **Table 3** beginning on page 26. It should be noted that the constraints analysis matrix was reviewed by City staff and the RTA, Pace, and Metra/BNSF and refined accordingly. The analysis was subsequently presented to the public for review and comment at an Open House on Monday, September 12, 2011 (detailed further in *Community Outreach*, page 21).



Initial Bus Depot Locations Eliminated from Consideration

Based on an evaluation of the opportunities, challenges and limitations associated with each potential bus depot location; public input; and feedback from the RTA, Pace and Metra/BNSF, the following sites were eliminated as feasible bus depot locations based on the challenges and constraints detailed in **Table 3**, beginning on the following page.

DuPage Children's Museum Lot - Several factors contributed to the determination that this location is not a feasible site for a bus depot, including its distance from the station and accessible pedestrian tunnel and the associated impact of increased commuter walk time on bus schedules and operating/maintenance costs. Furthermore, this site does not provide a dedicated space for a bus depot, as the Museum has Thursday evening hours and hosts special evening events. Because the depot would be sharing space with other users in the parking lot, the bus capacity of a depot would be subject to coordination with the Museum; in addition, there would be an increased likelihood of bus conflicts with automobiles and pedestrians.

Lower Burlington Lot – This site was eliminated from consideration because of its distance from the station; access constraints and increased operating costs imposed by congestion on 5th Avenue; and the likelihood of increased conflicts between buses, vehicles, and pedestrians in this lot, which would be expected to maintain some level of commuter parking even if a 16-bus depot were constructed.

Burlington Square Park (Perimeter) – The perimeter of the park was eliminated as a feasible bus depot location for several key reasons. An evaluation of bus turning radii at the corners of the park revealed that the 12 bus routes currently stopping on the south side of the station could not simultaneously stage along the north, east, and west edges of the park. This limitation is a function of the distance required for a bus to park curbside after completing a 90-degree turn, as well as the required modifications to corner radii around the park itself. There were also several concerns raised with regard to the potential conflicts between buses and kiss-and-ride vehicles in a counterflow configuration, the potential for vehicle-pedestrian conflicts resulting from the new pedestrian paths that would be associated with designs for this location, and the potential conflicts between buses and private vehicles utilizing the angled parking spaces on Center Street.

The remaining sites were further evaluated as potential bus depot locations, as detailed in *Concept Development* on page 33.



Table 3. Opportunities and Constraints Analysis for Potential Bus Depot Locations

Location/Perspectives	Limitations	Opportunities	Challenges
1. Parkview Lot			
Commuter Convenience	 Not proximate to pedestrian tunnel to/from north (outbound) platform, which provides an accessible route to/from north (outbound) platform 	 Potential to accommodate all bus routes serving station Proximity to south (inbound) platform Reduces conflicts/increases safety with designated pedestrian routes and separation from kiss-and-ride Distinct area for depot Depot visibility from platforms provides easy wayfinding for unfamiliar users 	 Mitigate loss of 136 parking spaces Identified by City staff as the preferred parking lot for many commuters
Transit Efficiency	 Grade on west side precludes direct access to Washington Street With tracks on north, Washington on west, North Avenue on south, and buildings to the east, site provides limited opportunity for future expansion should transit demands increase 	 Provides designated area for bus use only Could relocate south access driveway and/or westbound stop bar on North Avenue to facilitate bus access to depot Requires few changes to existing routing patterns for 12 buses serving the south side of the train tracks 	 Potential impacts to the routes, schedules and operating costs for three north-side bus routes Close proximity of Washington Street/North Avenue intersection to potential access driveway could impact how buses exit
Neighborhood Impacts	 Physical constraints of adjacent properties limit ability to expand parking lot and the width of northeast access 	 Bus staging would be removed and not visible from neighborhood streets Potential to revise one-way street layout or allow two-way traffic on North Avenue to reduce length of bus travel on local streets 	 Revised one-way street layout could impact curbside neighborhood parking on North Avenue Businesses on Center Street utilize Parkview Lot spaces during non-peak periods in lieu of providing full off-street parking requirements
Other	Limited right-of-way prevents simultaneous entrance/exit at north end of lot	 With ability to accommodate up to 16 bus routes simultaneously, provides a good option for ultimate depot location Space facilitates more than one design option, including parallel (with or without by-pass lane) and sawtooth More than one option for access and circulation configuration: Entry/exit via North Avenue access Separate entrance and exit using both access driveways 	 Need to mitigate a loss of parking spaces limits viability in the interim Without modifications to North Avenue access, buses may experience congestion and/or delays Need to relocate 3 parking spaces for Metra/BNSF and Amtrak



Table 3. Opportunities and Constraints Analysis for Potential Bus Depot Locations (continued)

Location/Perspectives	Limitations	Opportunities	Challenges
2. Upper Burlington Lot			
Commuter Convenience	 Not proximate to pedestrian tunnel, which provides an accessible route to/from south (inbound) platform Requires use of tunnel or stairs to access inbound platform during morning commute 	 Reduces conflicts/increases safety with separation from Kiss-and-Ride Distinct area for depot Depot visibility from platforms provides easier wayfinding for unfamiliar users 	 Mitigate loss of 150 parking spaces, including 6 currently reserved for Amtrak and at least 3 accessible spaces Would require expansion to accommodate 16 buses; expansion into Lower Burlington Lot is likely expensive due to elevation difference.
Transit Efficiency	Placement within lot and grade on west side precludes direct external access	Provides designated area for bus use only	 Potential impacts to the routes, schedules and operating costs for up to 12 of the station's 15 bus routes Access constraints Westbound delay on 5th Avenue would impact travel times for departing buses Location is best accessed to/from Center Street, which operates with significant outbound congestion at 5th Avenue during the evening peak Access configuration (via Center Street or toward Ellsworth Street via station-front kiss-and-ride) does not separate buses from parkers or kiss-and-ride and may result in delays for exiting buses during the evening peak
Neighborhood Impacts		Bus staging would be removed from neighborhood streets	With congestion on westbound 5 th Avenue, bus routes may use neighborhood
Neighborhood impacts		Potential to remove bus routes from neighborhood south of tracks	streets (e.g., Ellsworth Street) rather than Washington Street to travel north
Other	 Would require extensive grading work toward north if additional width were needed Physical constraints of existing space necessitates a design with a 180° turn by buses 	Could extend length of depot by shifting Center Street eastward	Need to mitigate loss of parking spaces limits viability in the short-term



Table 3. Opportunities and Constraints Analysis for Potential Bus Depot Locations (continued)

Location/Perspectives	Limitations	Opportunities	Challenges
3. Lower Burlington Lot			
Commuter Convenience	 Not proximate to platforms or to pedestrian tunnel, the latter of which provides an accessible route to/from south platform Requires use of tunnel or stairs to access inbound platform during morning commute 	 Potential to accommodate all bus routes serving station Reduces conflicts/increases safety with separation from Kiss-and-Ride 	 Mitigate loss of approximately 125 parking spaces or more Limited visibility from station May result in additional conflicts due to mixing of buses with a commuter parking area
Transit Efficiency	Grade on west side may preclude direct access to Washington Street	 Shorter travel distance into station than offered by other north-side locations Potential right-in access for buses via Washington Street to limit impact on bus operations associated with relocating southern routes to the north side of the station 	 Potential impacts to the routes, schedules and operating costs for 12 of the station's 15 bus routes Access constraints: Westbound delay on 5th Avenue would impact travel times for departing buses Location is best accessed to/from Center Street, which operates with significant outbound congestion at 5th Avenue during the evening peak Access configuration (via Center Street or toward Ellsworth Street via station-front kiss-and-ride) does not separate buses from parkers or kiss-and-ride and may result in delays for exiting buses during the evening peak
Neighborhood Impacts		 Bus staging would be removed and with limited visibility from neighborhood streets Potential to remove bus routes from the residential neighborhood south of the train tracks 	With congestion on westbound 5 th Avenue, bus routes may use neighborhood streets (e.g., Center Street) rather than Washington Street to travel north
Other		 Large space provides significant flexibility in bus depot layout and design, potential for future expansion 	Need to mitigate loss of parking spaces limits viability in the short-term



Table 3. Opportunities and Constraints Analysis for Potential Bus Depot Locations (continued)

Location/Perspectives	Limitations	Opportunities	Challenges
4. Eastern Burlington Lot ¹			
Commuter Convenience	 Requires use of pedestrian tunnel to access south (inbound) platform during morning commute Wedge shape of parcel may limit design options 	 Potential to accommodate all bus routes serving station Reduces conflicts/increases safety with separation from kiss-and-ride Depot visibility from platforms provides easier wayfinding for unfamiliar users Potential to relocate accessible spaces along guard rail and extend kiss-and-ride lane 	 Mitigate loss of 151 parking spaces, including some accessible spaces Has potential for additional pedestrian conflicts with kiss-and-ride and buses given that shortest route to platform is perpendicular to bus staging May require taxi stand to be relocated May conflict with commuter vehicle exit route via Ellsworth
Transit Efficiency	Placement within lot precludes direct external access	 Could be designed to provide designated area for bus use only Flexibility for sawtooth or parallel design 	 Potential impacts to the routes, schedules and operating costs for up to 12 of the station's 15 bus routes Access constraints Westbound delay on 5th Avenue would impact travel times for departing buses Access configuration (via Center Street or toward Ellsworth Street via station-front kiss-and-ride) does not separate buses from parkers or kiss-and-ride and may result in delays for exiting buses during the evening peak Buses likely to experience delays due to outbound congestion at Ellsworth pinch point Conflicts could result with depot exit route very near to pedestrian tunnel exit
Neighborhood Impacts		 Bus staging would be removed and with limited visibility from neighborhood streets Potential to remove bus routes from the residential neighborhood south of the train tracks 	 With congestion on westbound 5th Avenue, bus routes may use neighborhood streets (e.g., Center or Ellsworth Streets) rather than Washington Street to travel north
Other	Physical constraints to north/east/south limit ability to expand should transit demands increase	 With all Burlington spaces west of Center Street, could more easily discourage sporadic pedestrian crossings across kiss-and-ride area Short-term solution at north-side station front could have minimal impact on parking and limited cost 	 Need to mitigate loss of parking limits viability in the short-term

^{1 –} Includes potential for an interim solution at the north-side station front.



Table 3. Opportunities and Constraints Analysis for Potential Bus Depot Locations (continued)

Location/Perspectives	Limitations	Opportunities	Challenges
5. Station-Front, South Side			
Commuter Convenience	 Kiss-and-ride stacking distance on 4th Avenue between Loomis and Ellsworth is finite 	 Potential to accommodate 12 routes currently serving the south side of the train tracks Proximity to south (inbound) platform and pedestrian tunnel to/from north (outbound) platform Reduces conflicts/increases safety with separation from Kiss-and-Ride Relocated kiss-and-ride area on 4th Avenue provides adequate distance to stack current demand between Loomis Street and Ellsworth Street Ability to reduce pedestrian conflicts with largely curbside service for both buses and Kiss-and-Ride 	 Station-front parking spaces may be eliminated Increased travel distance for kiss-and-ride vehicles to arrive at station via 4th Avenue Eastern end of 4th Avenue curbside for kiss-and-ride lacks close proximity to platform
Transit Efficiency		 Requires no changes to existing bus routing patterns for 12 buses serving the south side of the train tracks Removal of kiss-and-ride traffic from Central Street north of North Avenue would reduce outbound congestion and delays 	 Enforcement of Kiss-and-Ride behaviors are crucial to design's success New conflict points created between departing kiss-and-ride vehicles and arriving buses at Ellsworth Street/entry to station-front depot
Neighborhood Impacts	 Existing roadway grid, boundaries of Burlington Square Park, and placement of area businesses/residences limit ability to expand should transit demands increase 	Removes staged buses from Ellsworth Street	 Bus depot would be visible from nearby residences and Burlington Square Park Increased traffic and vehicle staging on 4th Avenue Introduction of southbound vehicle traffic on Ellsworth, northbound lane restricted to bus traffic only (at least during peak periods) May require widening and loss of trees on 4th Avenue to accommodate relocated kiss-and-ride Could limit customer access to businesses on Center Street
Other		 Minimal impact on parking and limited cost 4th Avenue would be converted to one-way westbound, facilitating passenger-side exits and keeping pedestrians from entering street 	 If 4th Avenue is changed to one-way westbound, future overflows in Kiss-and-Ride queues could present congestion issue at Loomis Street rail crossing May require land from Burlington Square Park if additional buses are to be accommodated in long-term design Enforcement will be crucial to controlling depot area as bus-only



Table 3. Opportunities and Constraints Analysis for Potential Bus Depot Locations (continued)

Location/Perspectives	Limitations	Opportunities	Challenges
6. 4 th Avenue			
Commuter Convenience		 Able to accommodate all bus routes serving station with first-in-first-out operation Proximity to south (inbound) platform and pedestrian tunnel to/from north (outbound) platform Ability to reduce pedestrian conflicts with largely curbside service for both buses and Kiss-and-Ride 	 Increased travel distance for many arriving buses Eastern end of 4th Avenue curbside for bus parking lacks close proximity to platform
Transit Efficiency	 One-point entry to depot via 4th Avenue at Loomis Street limits accessibility 	New route to North Avenue in southbound bus-only lane on Ellsworth could reduce outbound congestion and departure delays	 Requires buses to reroute to enter staging area at Loomis Street/4th Avenue New conflict points created between arriving kiss-and-ride vehicles and departing buses at Ellsworth Street/entry to station-front depot As a public street, area could be used by non-designated vehicle types
Neighborhood Impacts	Existing roadway grid and proximity to area residences limit ability to expand	Removes staged buses from Ellsworth Street	 New impact to residences on 4th Avenue Introduction of southbound bus traffic on Ellsworth May require widening and loss of trees on 4th Avenue to accommodate bus staging
Other		 Minimal impact on parking and limited cost 4th Avenue could be converted to one-way westbound, facilitating passenger-side exits and keeping pedestrians from entering street 	 If 4th Avenue is changed to one-way westbound, overflow in bus queues could present congestion issue at Loomis Street rail crossing Enforcement will be crucial to controlling depot area as bus-only
7. Burlington Square Park			
Commuter Convenience	Kiss-and-ride stacking distance between Center and Ellsworth is finite	 Proximity to south (inbound) platform Proximity to pedestrian tunnel for routes staged on north and east sides of park Ability to reduce pedestrian conflicts with largely curbside service for both buses and Kiss-and-Ride 	 Mitigate loss of 22 daily fee parking spaces on 4th Avenue between Ellsworth and Center Streets If converted to counter-flow circulation and staging, introduction of two-way traffic creates more potential for vehicular and pedestrian conflicts and may require large turning radii at corners of park Reduced number of lanes for Kiss-and-Ride adjacent to station
Transit Efficiency	 Fixed bus capacity along park perimeter provides limited opportunity for future expansion should transit demands increase 	New route to North Avenue on southbound Ellsworth could reduce outbound congestion and departure delays	Does not separate buses from other modes
Neighborhood Impacts	 Existing roadway grid placement of area businesses/residences limit ability to expand should transit demands increase 		 Increased number of buses staging on neighborhood streets Rerouting buses from Ellsworth to Center impacts different set of residents
Other	 Park boundary is constrained by grant agreement with the Park District 	Minimal impact on parking and limited cost make option viable for short-term design	Potential conflict between staged buses on west edge of Burlington Square Park and private vehicles backing out of on-street parking spaces on Center Street



Table 3. Opportunities and Constraints Analysis for Potential Bus Depot Locations (continued)

Location/Perspectives	Limitations	Opportunities	Challenges
8. DuPage Children's Museum			
Commuter Convenience	 Not proximate to station or pedestrian tunnel to/from north (outbound) platform 	 Peak commuter traffic occurs before museum opens at 9am, after Museum's typical weekday closing at 4pm Stairways to/from Washington Street sidewalk provide access to/from north (outbound) platform Reduces conflicts/increases safety with separation from kiss-and-ride South side station-front area for use by kiss-and-ride only 	 Museum operates until 8pm every third Thursday and occasionally holds special events in the evenings Creates potential for bus/pedestrian conflicts in an area with many children Could result in additional outbound congestion at museum accesses Platform access is not accessible from this site, nor is the crosswalk on the north leg of Washington Street at North Avenue
Transit Efficiency	 Bus capacity is unknown, subject to coordination with the DuPage Children's Museum 	Direct, signalized access to Washington Street and full access to Spring Avenue could promote faster ingress/egress for buses	 Unlikely to provide a dedicated area for buses Distance from the platforms and increased commuter walking distance could impact bus staging time and schedules
Neighborhood Impacts		Removes bus routes from staging or driving on neighborhood streets	 Additional traffic and resulting conflicts due to bus traffic could adversely affect museum attendance
Other	 Residential parcel to west, tracks on north, and existing streets to east and south limit expansion outside of existing Museum property 	Potential to create underground detention area in order to expand parking lot	Would require amendments to existing lease agreement between City and Museum



CONCEPT DEVELOPMENT

In order to develop conceptual design alternatives for the remaining bus depot sites, the project team applied the physical design requirements of two primary bus depot layouts: the "parallel" and "sawtooth" staging configurations. Design components were based on the 35-foot buses that currently serve the Naperville Metra Station and are expected to remain in use into the foreseeable future; yet in order to provide a conservative design within the depot and at external access points, turning radii were designed according to the needs of a 40-foot bus. More detail on each depot layout and its respective design requirements are provided in the following paragraphs and illustrated on **Exhibit** 7.

Parallel Design

A parallel depot design stacks buses end-to-end along a straight curb line. Parallel staging can be designed with or without a bypass lane that enables buses to depart at any time without waiting for other buses to clear. If no bypass lane is desired, bus stacking could be provided at 40 feet per 35-foot bus. If a bypass lane is included, the depot must provide more stacking space per bus (70 feet long, 15 feet wide per 35-foot bus) to accommodate the turning radius from the curbside lane to the bypass lane. The pedestrian refuge area is typically wider for a parallel design than a sawtooth design. Parallel staging, particularly without a by-pass lane, does not practically allow for a consistent and designated location for each bus. On the other hand, a configuration with multiple aisles would allow buses to park in the same aisle consistently to assist riders in finding their desired route in the same general area each day.

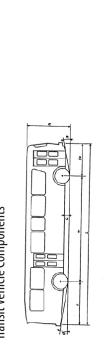
Sawtooth Design

A sawtooth design provides angled parking bays for bus staging. This configuration allows buses to pull into a space and depart from a space independently of other buses even when adjacent spaces are occupied, and it also facilitates designated spaces for each bus route. Sawtooth parking bays require 60 feet of stacking distance per 35-foot bus. The central refuge median typically requires less width in a sawtooth design than in a parallel design due to the additional pedestrian storage space created by the angled parking bays.

As specific concepts were developed, the viable sites were further refined in order to consider a hybrid depot design (allowing buses to maintain their respective stops north and south of the tracks) and/or the potential relocation of kiss-and-ride activity in both the short- and long-term. The resulting depot sites and their respective conceptual designs are summarized on the pages that follow. A summary of key features associated with each conceptual design is provided in the Appendix.

Figure III-1

Transit Vehicle Components



40.7 Feet with bum 8.5 Feet 10 Feet with mirro

Length Overall Length Width Overall Width

PACE DESIGN GUIDELINES (with assumed adjustments)

Assumed Design Guideline Adjustment

XX feet

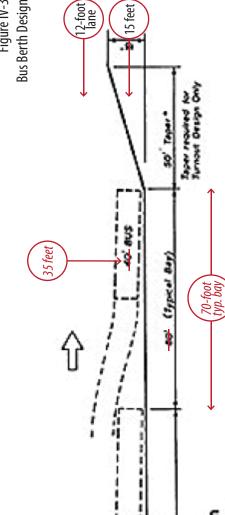
Existing Design Guideline

(XX feet

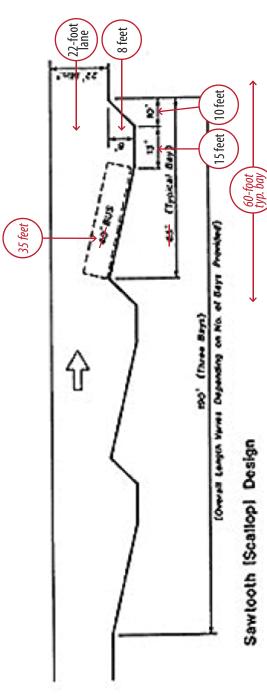
LEGEND

Figure IV-3

Bus Berth Design



Parallel Design





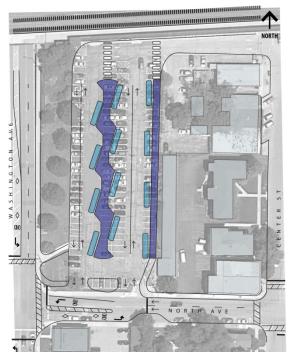




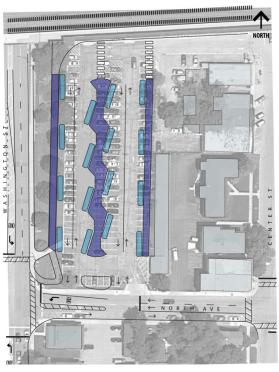
Parkview Lot Concepts

Alternatives 1A & 1B

A sawtooth design with a parallel bus staging area on the east side of the lot provides capacity for 12 buses within the existing Parkview Lot pavement area (illustrated as Alternative 1A), enabling all bus routes that currently stop on the south side of the tracks to use this depot design. This depot would be a viable south-side component of a hybrid design in which north- and south-side routes maintain their current stops, but could also be expanded (shown in Alternative 1B) to accommodate 16 buses in the future if north-side routes were relocated or if transit demand increased at the station.



Alternative 1A



Alternative 1B

North Avenue Access

For each Parkview Lot concept, the bus depot could be designed such that buses routed along Washington Street could enter and/or exit via North Avenue without traveling through the neighborhood. This design would involve converting North Avenue from a one-way westbound street to a two-way street, shifting the stop bar and signal mast arms for westbound North Avenue to a location immediately east of the depot access driveways, and (for Alternatives 1A & 1B) installing additional signal equipment for southbound buses exiting the depot. The signal equipment at Washington Street/North Avenue and at the bus depot access intersection on North Avenue would operate under a single controller, and timings would presumably be designed to keep the roadway segment between these two intersections clear at all times. The associated modifications to the lane geometry could also be extended east to allow two-way traffic on North Avenue to Ellsworth Street.



Alternative 2

A parallel design within the existing Parkview Lot pavement area provides capacity for 12 buses, enabling all bus routes that currently stop on the south side of the tracks to use this depot design. This depot would be a viable south-side component of a hybrid design in which north-and south-side routes maintained their current stops at the Naperville Metra Station. Expansion outside of the existing pavement area would require a greater amount of land than the preceding Alternative 1B because of the width of this parallel depot configuration.

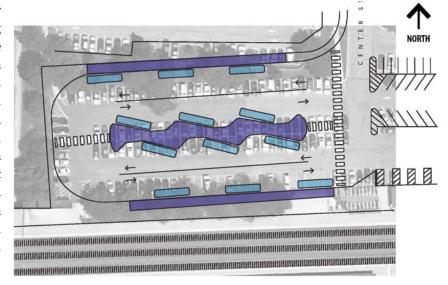


Alternative 2

Upper Burlington Lot Concept

A sawtooth design with parallel bus staging areas on the north and south side of the Lot provides capacity for 12 buses. The depot could accommodate the 3 routes that currently stop north of the tracks and support relocation of 9 buses from the south side of the tracks; alternatively, the 12 buses currently south of the tracks

could be relocated to the Upper Burlington Lot, while maintaining the location of the 3 north side buses in the Eastern Burlington Lot. It should be noted, however, that this site must be expanded north in order to provide enough space for U-turns by the selected design vehicle; this expansion would encroach into the southeast corner of the Lower Burlington Lot, likely requiring construction of a retaining wall, and would result in additional displaced parking.

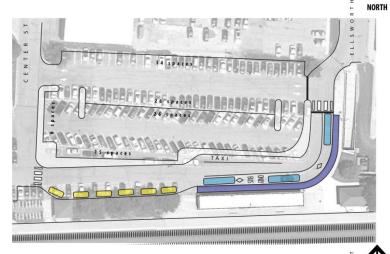




Eastern Burlington Lot Concepts

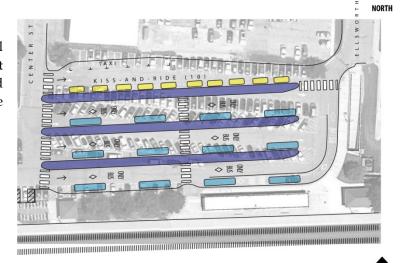
Alternative 1

With capacity for three buses, this alternative would accommodate all bus routes that currently stop north of the tracks, making it a viable north-side component of a hybrid design in which north- and south-side routes maintained their current stops at the station.



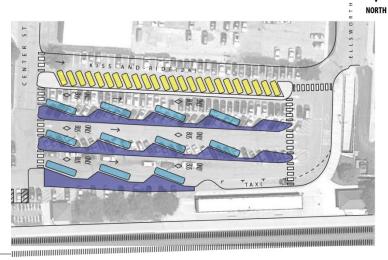
Alternative 2

With capacity for 12 buses, this parallel design accommodates the 3 routes that currently stop north of the tracks and supports relocation of 9 routes from the south side of the tracks.



Alternative 3

With capacity for 11 buses, a sawtooth design provides space for the 3 routes that currently stop north of the tracks and for relocation of 8 routes from the south side of the tracks.





4th Avenue Concept

Reconfiguration of the area south of the train station building would allow for 12 buses to stage on 4th Avenue between Ellsworth Street and Center Street, enabling all bus routes that currently stop on the south side of the tracks to use this depot design. Kiss-and-ride activity would be relocated to 4th Avenue, where the travel direction would be reversed to one-way westbound. This concept would be a south-side component of a hybrid design in which north- and south-side routes maintained their current stops at the Naperville Metra Station.



In order to collectively review the strengths and weaknesses of these concepts, the project team developed an evaluation matrix that draws on the three perspectives identified in the project objectives: the Commuter Perspective, Transit Efficiency, and Neighborhood Impacts. Existing conditions were also evaluated under the same criteria in order to provide a baseline for identifying feasible bus depot concepts. This matrix is presented in **Table 4** on the following page.

Table 4. Concept Alternatives Evaluation Matrix

	Transit Efficiency			Commuter Perspective				Neighborhood Impacts				
Bus Depot Alternatives	Bus Capacity (# of routes)	Maximum # of Bus Routes Impacted ¹	Bus Access to/from Depot	Transit Commuter Access to Platform (Inbound) from Depot	Future Expansion Potential	Off-Street Parking Impacts (estimated # of spaces)	On-Street Parking Impacts (estimated # of spaces)	Bus Conflicts with Pedestrians/ Bicyclists	Bus Conflicts with Automobiles	Pedestrian Conflicts with Automobiles	Bus Queues on Neighborhood Streets	Bus Travel on Neighborhood Streets
Existing Conditions	3 buses on north 12 buses on south	N/A	•	•	No	N/A	N/A	•	•	•	•	•
Parkview Lot												
Alternative 1A	3 buses on north 12 buses on south (depot)	0 buses	•	•	Yes	-136	0 ²	•	•	•	•	•
Alternative 1B	0 buses on north 16 buses on south (depot)	3 buses	•	•	No	-136	0 ²	•	•	•	•	•
Alternative 2	3 buses on north 12 buses on south (depot)	0 buses	•	•	Yes	-136	0 ²	•	•	•	•	•
Upper Burlington Lot												
Alternative 1	12 buses on north (depot) 3 buses on south	9 buses	•	•	No	-150	0	0	•	•	•	•
Eastern Burlington Lot												
Alternative 1	3 buses on north (depot) 12 buses on south	0 buses	•	•	Yes	-37	0	•	•	•	•	•
Alternative 2	12 buses on north (depot) 3 buses on south	9 buses	•	•	No	-151	0	•	•	•	•	•
Alternative 3	11 buses on north (depot) 4 buses on south	8 buses	•	•	No	-151	0	•	•	•	•	•
4 th Avenue												
Alternative 1	3 buses on north 12 buses on south (depot)	0 buses	•	•	No	0	-22	•	•	•	3	•

^{1 -} Impacts to bus routes are expected to result in increased bus travel time and operating costs. Further discussion of these impacts can be found in the Appendix.

Legend

- Satisfies the objectives of the Naperville Metra Station Bus Depot and Commuter Access Feasibility Study.
- Satisfies some of the project objectives.
- Does not meet the project objectives and/or results in a negative impact within the station area.

⁻ Includes loss of 7 spaces (North Avenue: Washington to Center), loss of 6 spaces (North Avenue - south side: Center to Ellsworth with angle-to-parallel conversion), and gain of 13 spaces (North Avenue - north side: Center to Ellsworth with parallel-to-angle conversion).

While buses would not queue on neighborhood streets, kiss-and-ride activity would be relocated to 4th Avenue between Ellsworth Street and Loomis Street. Feedback with neighbors along 4th Avenue indicated opposition to this kiss-and-ride staging concept.



LONG-TERM RECOMMENDATIONS

Overview

To meet the project objectives of the Naperville Metra Station Bus Depot and Commuter Access Feasibility Study, a long-term recommendation was developed for a dedicated bus depot. A defined off-street bus depot would be expected to promote the use of bus transit to and from the station, enable the separation of travel modes and their respective access/circulation patterns, and reduce conflicts between buses, kiss-and-ride vehicles, pedestrians, and bicyclists, resulting in enhanced intermodal connectivity and improved circulation within and around the station area.

Following the analyses of all potential bus depot sites, it is recommended that a bus depot be constructed on the Parkview Lot. As demonstrated by the findings of the Alternatives Evaluation Matrix in **Table 4**, this site offers the greatest number of options and flexibility for providing a dedicated bus depot that meets the project objectives. It is anticipated that a 12-bus depot would meet existing transit demands at the station and conform to a hybrid bus depot design, in which buses that currently stop on the north side of the tracks maintain their existing routes to avoid increased travel times and operating costs. It is worth noting, however, that the Parkview Lot also holds the potential for a 16-bus depot under the concept previously illustrated as Parkview Lot Alternative 1B. Potential configurations for this long-term solution are illustrated in **Exhibits 8 through 10**. Complementary improvements are also proposed for the north side of the tracks in the Eastern Burlington Lot, as presented in **Exhibit 12**. These modifications would accommodate each of the three bus routes that currently stop north of the tracks and would facilitate a hybrid depot design if a 12-bus depot were pursued south of the tracks.

Given the preliminary nature of the analyses performed for this Feasibility Study, it should be noted that this recommendation is subject to further study and engineering design, as well as any additional approval processes as required by the City of Naperville. Details of the recommended long-term bus depot are provided in the following paragraphs.

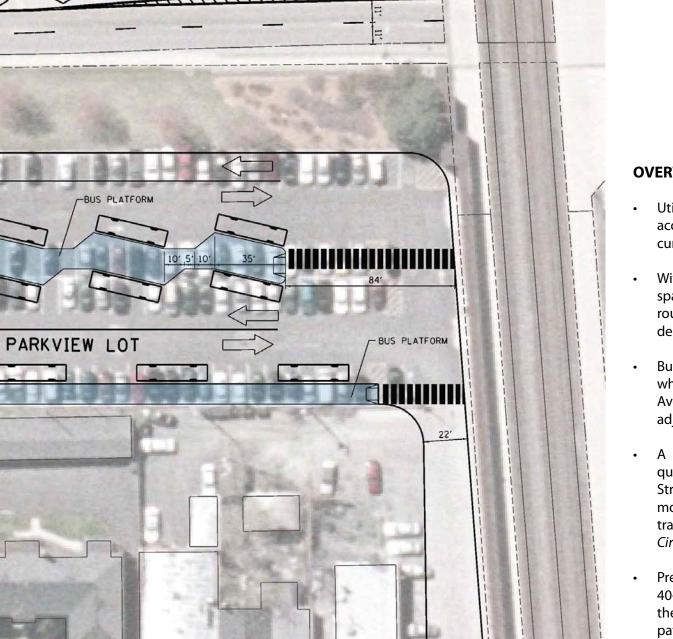
South Side of Station

Three concepts were developed for a bus depot on the Parkview Lot: Alternative 1A, Alternative 1B, and Alternative 2. Each design would enable a dedicated space for each of the 12 bus routes that currently stop on the south side of the tracks. Alternative 1B would allow an additional four buses to stage in the depot should transit demands increase or to accommodate relocation of the three routes that currently pick up and drop off passengers north of the tracks. Key design aspects of each alternative are summarized in **Exhibits 8** through 10.

In order to facilitate more direct bus access into and out of the depot and reduce travel on neighborhood streets by buses and automobiles, North Avenue between Washington and Ellsworth Streets should be converted to a two-way roadway segment. **Exhibit 11** illustrates the recommended lane geometry for this two-way segment, as well as some associated changes to the on-street parking supply that are recommended to accompany this improvement. This modification could be accompanied by signal modifications at the Washington/North intersection in order to allow Pace Route 714 to perform a southbound left at this



SCALE: 1'' = 50'



WASHINGTON AVE

CENTER ST

SIDEWALK

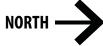
OVERVIEW

- Utilizes the existing pavement area to accommodate all 12 bus routes that currently stop on the south side of the tracks.
- With the ability to enter and exit the depot spaces independently of each other, bus routes could utilize assigned spaces, if desired.
- Buses would enter and exit via North Avenue, which includes the conversion of North Avenue from a one-way westbound street adjacent to the site to a two-way street.
- A modified signal system would facilitate quick ingress and egress from Washington Street. Further discussion of this signal modification and its impact on station-area traffic circulation is provided in Station Area Circulation on page 54.
- Preliminary AutoTURN runs indicate that a 40-foot bus will be able to circulate around the north side of the depot in a U-turn pattern, but that the existing width of the Parkview Lot does not allow two buses to perform a U-Turn in this area simultaneously.



PROPOSED SIGNAL

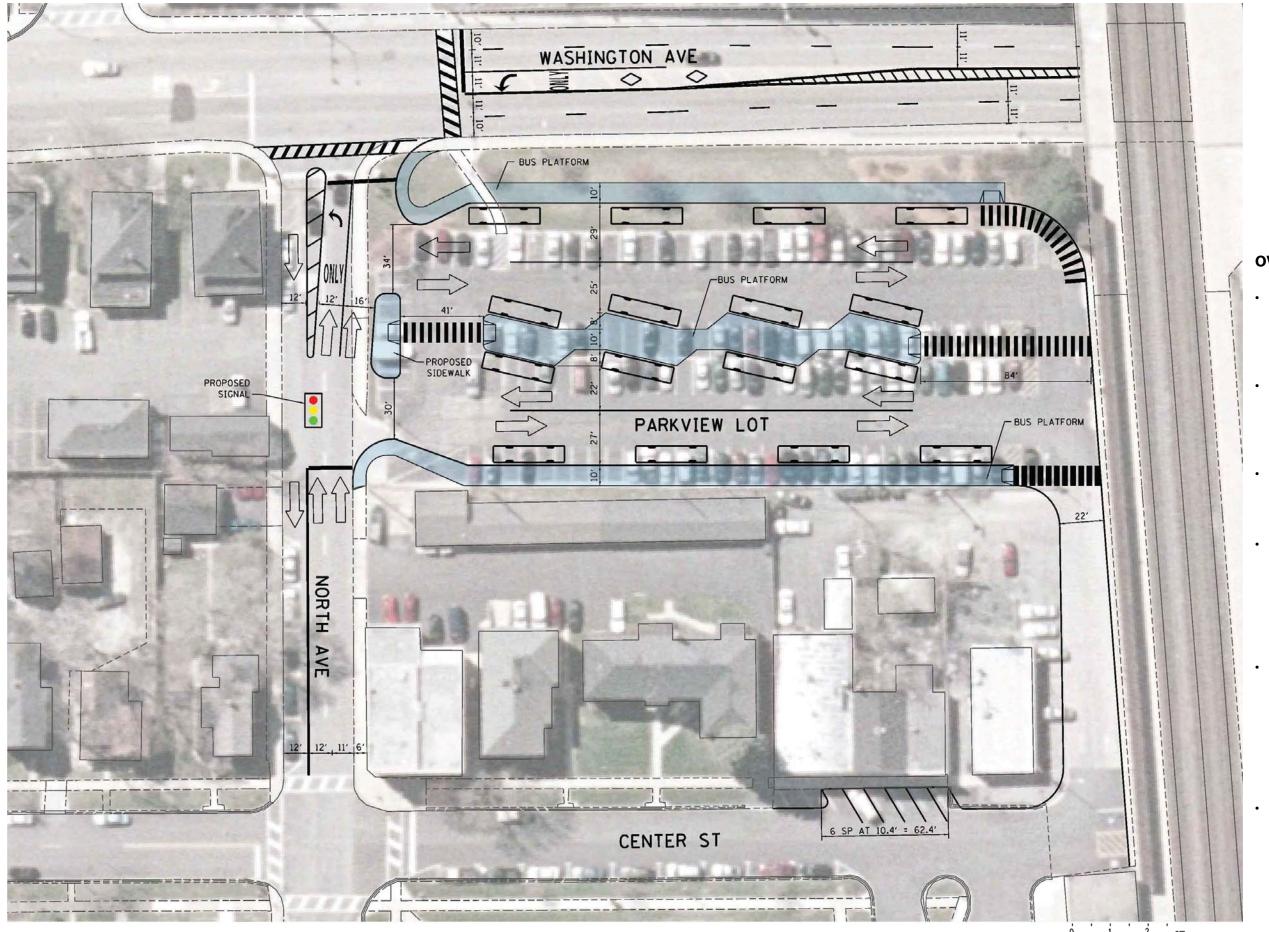
NORTH



SCALE: 1'' = 50'

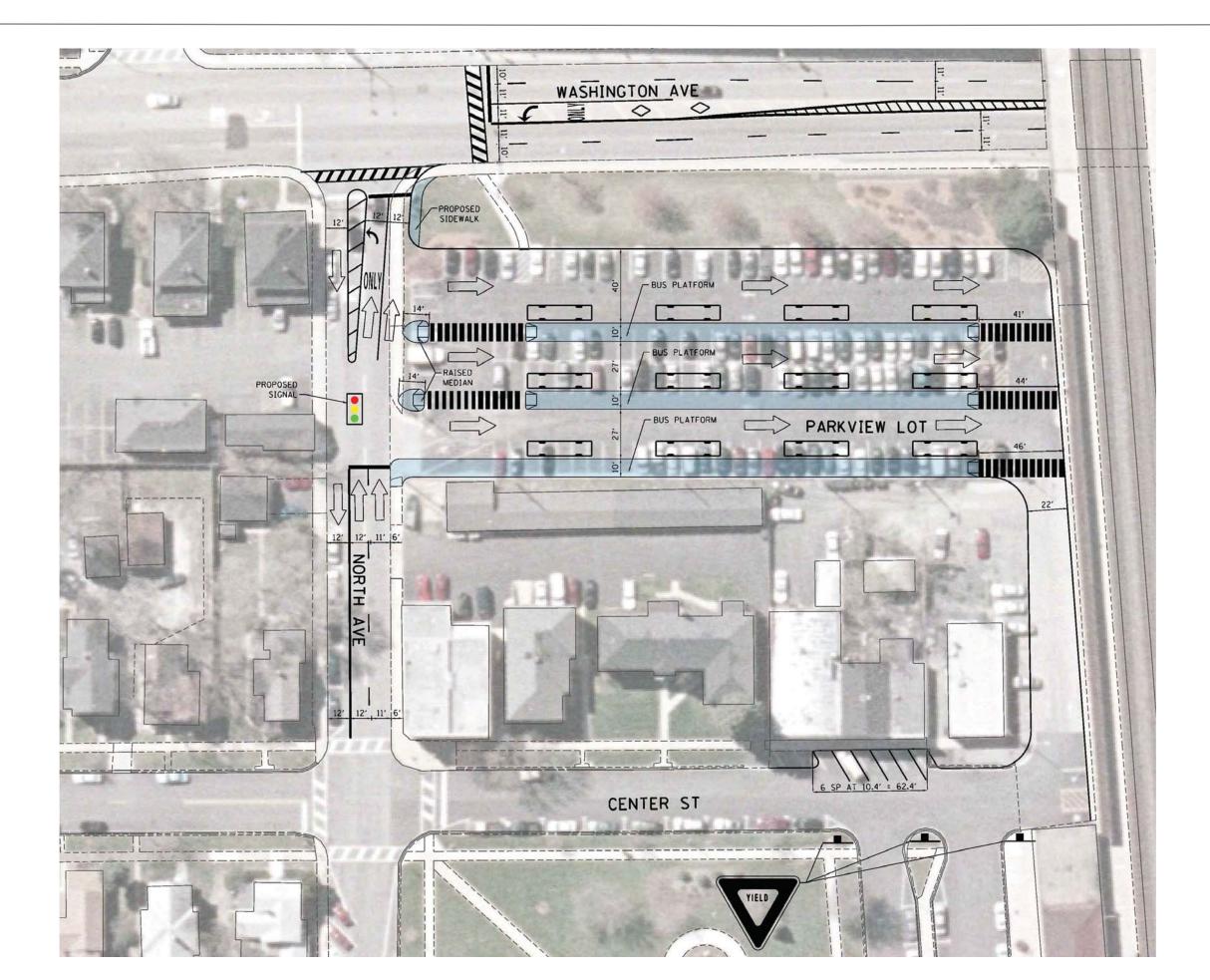


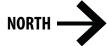
- Widens the Parkview Lot west of its existing boundary to accommodate up to 16 bus routes, exceeding the number of routes that currently serve the Naperville Metra Station.
- With the ability to enter and exit the depot spaces independently of each other, bus routes could utilize assigned spaces, if desired.
- Similar to Alternative 1A, buses would both enter and exit via North Avenue with the two-way conversion of North Avenue.
- A modified signal system would facilitate quick ingress and egress from Washington Street. Further discussion of this signal modification and its impact on station-area traffic circulation is provided in *Station Area Circulation* on page 54.
- Alternative 1B is not constrained by the current paved boundaries of the Parkview Lot and involves a westward expansion of the paved area to provide another four parallel bus bays and to allow two buses to simultaneously circulate around the northern end of the depot.
- Widening for additional pavement area and bus platform results in a maximum embankment slope of 1V:3H from northern limit of bus platform to back of the Washington Street sidewalk.











SCALE: 1'' = 50'

OVERVIEW

- Utilizes the existing pavement area to accommodate all 12 bus routes that currently stop on the south side of the tracks.
- With the ability to enter and exit the depot spaces independently of each other, bus routes could utilize assigned spaces, if desired.
- The parallel design allows the opportunity to stage buses more closely together in order to accommodate up to three additional bus routes, if needed. However, this staging strategy would operationally limit access to first-in-first-out.
- Buses would enter via North Avenue and exit via 4th Avenue to southbound Center Street.
- Buses are not expected to be able to exit to Center Street simultaneous with a passenger vehicle approaching in the opposite direction to access the parking and alley behind the commercial businesses at the north end of Center Street.
- A modified signal system would facilitate quick ingress from Washington Street.
 Further discussion of this signal modification and its impact on station-area traffic circulation is provided in Station Area Circulation on page 54.











location; otherwise, this route would be expected to maintain its current travel pattern involving a southbound left turn from Washington Street to School Street, continuing east to Ellsworth Street, and traveling north on Ellsworth Street to the station. If this bus-only southbound left-turning movement is incorporated, signal timing and equipment modifications would be required at the Washington Street/North Avenue intersection, resulting in reduced green time for one or more of the existing phases at this signalized intersection when a Route 714 bus is present. Preliminary capacity analyses reveal that this new phase could be added without significantly impacting overall traffic operation at this intersection.

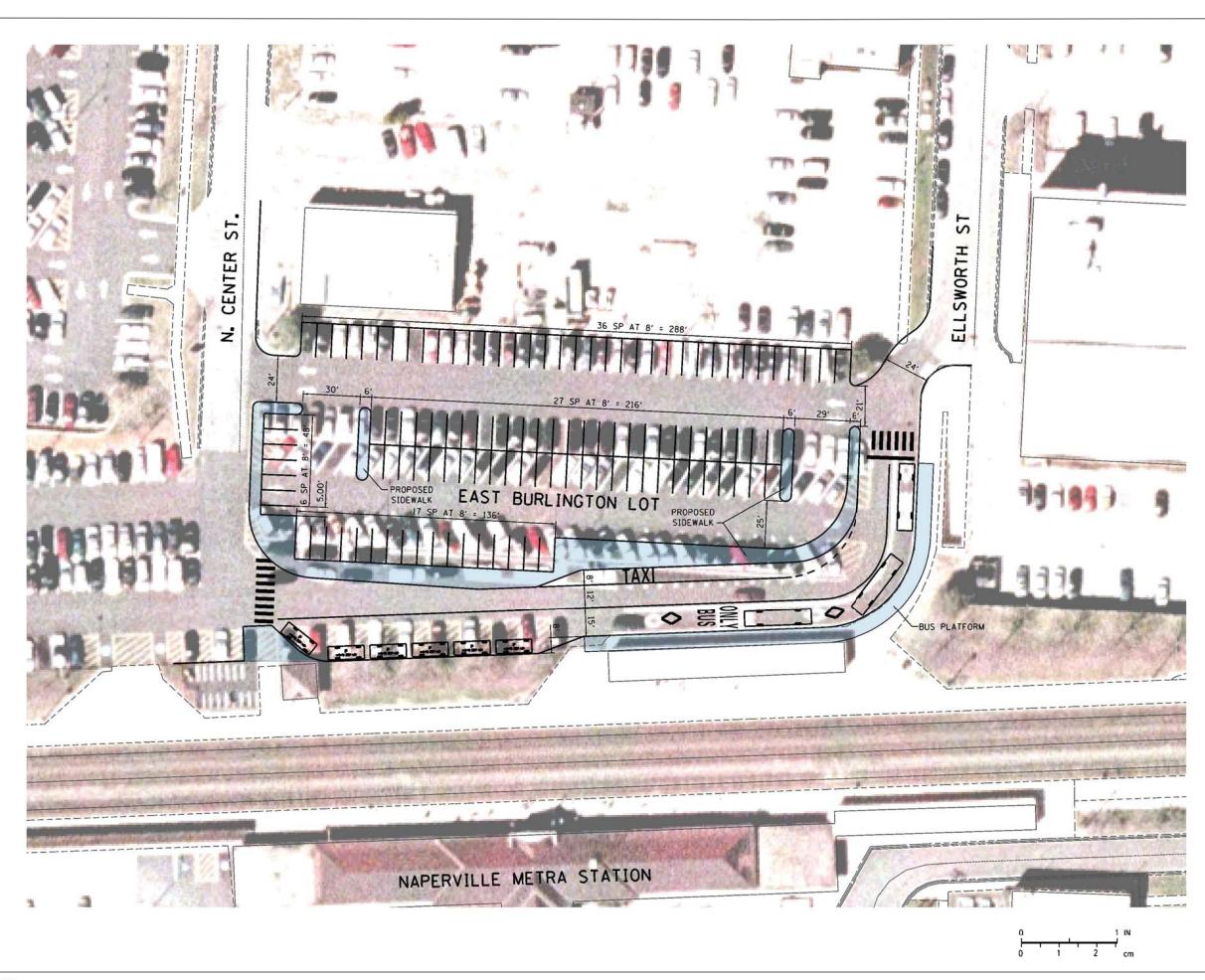
North Side of Station – Eastern Burlington Lot

To better separate bus and kiss-and-ride staging areas on the north side of the station, it is recommended that the Eastern Burlington Lot Alternative 1 be implemented as shown in **Exhibit 12**. This design provides a recessed area for kiss-and-ride vehicles, thereby limiting conflicts with bus access to the station, as it occurs today. The revised parking lot layout provides greater separation between the Eastern Burlington Lot and the bus staging area and also provides a single cross-access between the parking lot and Ellsworth Street; limiting vehicle movements through the Eastern Burlington Lot is expected to reduce the potential conflict points and clarify right-of-way between departing buses and exiting commuters during the evening peak.

Improved delineation between bus staging, kiss-and-ride, and the adjacent parking lot is the primary benefit of this design. As a result of this improvement, it is anticipated that buses would experience less delay and departing buses would be subject to fewer potential conflicts with other vehicles. The design is limited in that buses are not provided with a dedicated space and would continue to mix with other modes in order to enter and exit the depot area, but these disadvantages are viewed as superior to the longer travel times for commuters, increased operating and maintenance costs for Pace, and additional bus routes circulating south of the station that would occur if the three north-side routes were relocated to an area south of the tracks.

Kiss-and-Ride

With the removal of bus staging from 4th Avenue, the area immediately south of the station building would be available for kiss-and-ride activity and daily fee parking spaces. The long-term recommendation, illustrated in Exhibit 13, includes 44 angled daily fee spaces on this roadway segment (an increase of 22 spaces over the existing condition). These spaces would be time-restricted daily fee spaces available for use from 8:00AM until 4:00PM only and designated as 15-minute parking spaces for use by kiss-and-ride vehicles during the morning and evening peak periods. After the conclusion of the evening rush period, the spaces could be available for nearby Center Street businesses and residences. The northern curb of 4th Avenue adjacent to the station building would be available for pick-up/drop-off by corporate shuttles, independent bus services, and kiss-and-ride vehicles throughout the day; this space could accommodate up to 10 automobiles at a time, contributing to a total 54 spaces for peak period kiss-and-ride activity. In addition, this supply would be expected to accommodate current demand and allow for seasonal variations and significant growth in kiss-and-ride vehicles into the long-term future.





SCALE: 1" = 50'





Kiss-and-Ride Area*

Metra Station

Bus Depot

serve daily fee parking between 8:00 AM and 4:00 PM. * Note: Kiss-and-Ride spaces will







EXHIBIT 13



Station Area Circulation

Based on the project objectives and resident feedback received before and during this feasibility study, it is desirable to facilitate a direct route between Washington Street and a Parkview Lot bus depot in order to minimize bus travel on neighborhood streets and promote transit efficiency. Due to the sloping grade between Washington Street and the Parkview Lot, the impact of bus turning movements on internal circulation patterns, lines of sight along Washington Street, and proximity to the Washington/North intersection, creating a direct access for full ingress and egress via Washington Street is not feasible for the Parkview Lot; further discussion of the constraint imposed by direct access to Washington Street was detailed beginning on page 22. Therefore, the Parkview Lot alternatives incorporate access to/from Washington Street via North Avenue. In order to achieve this access configuration, a preliminary plan for a clustered traffic signal system was devised to link the Washington Street/North Avenue intersection with the new depot access driveway(s) on North Avenue. Key aspects of this signal system would include:

- Conversion of North Avenue from a one-way westbound street to a two-way street to allow buses to enter the depot from Washington Street via North Avenue.
- Relocation of the westbound North Avenue stop bar to a location immediately east of the bus depot
 access driveway(s) to keep the portion of North Avenue in front of the depot access driveways clear
 of westbound vehicle queues.
- Installation of new traffic signal heads for southbound buses exiting the bus depot (Alternatives 1A and 1B only) and for the relocated westbound stop bar on North Avenue.
- Potential to add a southbound left-turn phase at Washington Street/North Avenue to eliminate neighborhood travel for Route 714 (if not implemented in the short-term). This new movement would presumably operate under actuated, protected-only phasing and would be signed for bus use only to prevent private vehicles from using the left-turn lane, which would be limited in length by the narrowing cross-section on Washington Street north of North Avenue. If this additional phase is not desired, Route 714 could continue to perform a southbound left turn at School Street and continue to the bus depot via Center Street and North Avenue.
- Implementation of signal phasing designed to keep private vehicles clear from westbound North
 Avenue along the bus depot frontage. In doing so, buses arriving via Washington Street would have
 clear access into the bus depot. Phasing could also be set up to allow departing buses to exit a short
 time before receiving a westbound green light at Washington/North in order to use the available
 green time more efficiently.

Preliminary capacity analyses were performed with Synchro 8 software for this modified signal scenario; for a conservative analysis, it was assumed that Alternatives 1A or 1B were in place in order to evaluate the impact of both bus ingress and egress via North Avenue. Because the Washington Street/North Avenue signal is currently part of a coordinated system along the Washington Street corridor, it was assumed that the existing cycle length (AM Peak: 140 seconds, PM Peak: 160 seconds) must be maintained as a part of these potential modifications. Traffic projections employed in this preliminary exercise are based on data provided by the City from the 2008 5th Avenue Study and include projected traffic redistribution resulting from converting North Avenue to a two-way street, as well as anticipated bus routing in accordance with the existing Pace schedules during the morning and evening peak hours.



The findings of these analyses revealed that the tradeoff of an additional signal phase to accommodate outbound bus routes would result in an overall increase in delay on the remaining intersection approaches during the periods when buses are present. This operational impact would be most prevalent during the morning and evening peak periods when the Pace feeder routes are active; the bus-only signal phase would be much shorter throughout the remainder of the day when only the two fixed routes would utilize the bus depot. This outcome is not unexpected, since the green time allocated to buses was previously utilized by other vehicles currently on the area roadway network. While delay would be expected to increase on Washington Street, it is anticipated that the north- and southbound approaches at this intersection would operate within City standards. During peak hours, 95th percentile queues at the relocated stop bar for westbound North Avenue are expected to extend past Center Street. In addition, westbound North Avenue and the southbound bus depot driveways are expected to operate at Levels of Service (LOS) E and F, respectively, denoting at-capacity and over-capacity conditions. These high delay projections can be partly attributed to the long cycle length currently in place along the Washington Street corridor - based on projected modifications to the signal timings, a vehicle arriving at the westbound North Avenue stop bar on red could wait up to two-and-a-half minutes before receiving a green light, a 20-second increase over the longest red light in place today - but heavy traffic demand at these intersections during the peak hours is also a significant contributor. It is worth noting that these factors also impact existing traffic operation at this intersection, where Year 2008 capacity analyses prepared during the 5th Avenue Study indicated LOS E for westbound North Avenue at Washington Street during both the morning and evening peak hours.

If this signal system were set up to allow all buses to exit the depot at once, it is anticipated that 60 or more seconds (of the 140- and 160-second AM and PM cycle lengths) may need to be allocated to exiting buses at one time, thereby reducing the amount of time available to the remaining approaches during that particular cycle. This would be followed by a recovery period for the rest of the study area, during which time vehicular delay and queues would be expected to slowly normalize until the next set of bus departures occurred. During this period of high westbound delay, it is possible that motorists would seek alternate routes to Washington Street in the area, likely heading south via Center Street or Ellsworth Street to avoid westbound queues on North Avenue and traveling westbound on such roadways as Franklin Avenue or Benton Avenue.

An alternative signal timing strategy could be designed to allow buses to exit the depot during shorter green phases over the course of many cycles. This approach would distribute the impact on other vehicles throughout the peak hour and, in turn, would increase delay for departing buses. This strategy may result in an undesirable increase in bus travel time and operating costs, counter to some of the objectives of establishing a separate bus depot. Subject to further engineering design of a bus depot on the Parkview Lot, Pace Bus input regarding acceptable passenger delays and resulting impacts on ridership should be considered when developing a traffic signal phasing and timing plan so that an appropriate balance of delay and vehicle queuing can be established for these intersections.

It should be noted that Synchro software is a macroscopic analysis tool that evaluates traffic operation with the use of stochastic assignment and is not directly suited to evaluating unique traffic events that take place during concentrated periods of less than one hour. This discussion of capacity impacts is highly preliminary in nature and should not be used as the basis for the ultimate design of signal phasing at this location, should it be implemented. In order to fully evaluate traffic operation under this potential signal configuration, it is recommended that traffic count data focusing on the peak periods prior to the arrivals of inbound trains in



the morning and following the arrivals of outbound trains in the evening be collected and modeled with the appropriate tools in following stages of study and design.

Parking Impacts

Within the areas adjacent to and most conveniently accessible to the Naperville Metra Station, there are several competing interests. In order to balance these diverse preferences held by the wide variety of station users and neighbors, the project team applied the three-faceted evaluation methodology throughout the study process, culminating in the short- and long-term recommendations for the station area. This balance was incorporated into the long-term study recommendations through the consideration of only city-owned or -controlled properties as potential sites for a bus depot, the preference to locate buses near the station to encourage use of bus as a means of access, and the benefit of promoting kiss-and-ride as a mode of transportation that does not incur demand on the station's already limited parking supply. In light of these factors, it is likely that current parking spaces would be displaced as a part of the effort to balance access for other modes. Yet given the high demand for commuter parking in the station area, it is certainly recognized that from a commuter perspective, opportunities to mitigate displaced parking should be explored in order to continue to provide multimodal access to the station.

Based on the proposed parking supply modifications along North Avenue and around Burlington Square Park (illustrated on **Exhibits 11 and 13**), it is anticipated that a net gain of 37 on-street, daily fee parking spaces would be realized as a part of the recommended long-term plan (compared to existing conditions). Within the Parkview Lot itself, 136 existing permit spaces would be displaced as a result of the bus depot. A summary of parking supply displaced and gained as a result of the long-term study recommendations is provided in **Table 5**.

Table 5. Impact on Parking Supply with Long-Term Recommendations

Location of Parking Supply	Impact on Permit Spaces	Impact on Daily Fee Spaces	Total Impact on Parking Supply
Parkview Lot	-136	0	-136
North Avenue & Perimeter of Burlington Square Park	0	+37	+37
Eastern Burlington Lot	-37	0	-37
Net Change in Parking Supply	-173	+37	-136

This impact to off-street parking supply could be mitigated with one or more of the strategies identified in *Parking Mitigation* on page 56.



SHORT-TERM RECOMMENDATIONS

Overview

Given the significant capital investment and significant long-term planning efforts that would likely accompany a new bus depot, one of the identified project objectives designates the need for a lower impact short-term recommendation that may be utilized until funding is available and design is completed for construction of a long-term bus depot. The intent of this short-term plan would be to improve transit access to the station, reduce congestion, decrease conflicts across modes, and minimize bus staging on adjacent neighborhood streets while limiting the need for new infrastructure and displacement of commuter parking. As opportunity allows, a short-term depot design could lay the foundation for phased construction of a long-term solution.

Based on these goals and the analyses detailed within this study, the project team identified a preferred short-term plan that removes bus staging from Ellsworth Street, reduces bus travel through the neighborhood south of the tracks with the conversion of North Avenue to a two-way street, and delineates a bus staging area apart from kiss-and-ride activity on both the north and south sides of the station. This short-term solution, illustrated in **Exhibits 14 and 12** for the south and north sides of the station, respectively, is described in detail below.

South of Station

Building on the station-front bus staging that takes place currently, it is recommended that the segment of 4th Avenue between Ellsworth and Center Streets be modified to allow staging of 12 buses simultaneously. This improvement would require some modifications to the existing center median on 4th Avenue and the removal of 22 time-restricted daily fee parking spaces to provide a pedestrian refuge area that meets Pace design standards. A center crosswalk would help convey commuters to and from the station building in order to access both buses and the Burlington Square Park area. The existing bus lane on Ellsworth Street north of North Avenue would be converted to a standard travel lane, enabling motorists traveling to the residential segment of 4th Avenue east of the station to largely bypass station-related traffic.

With the station-front segment of 4th Avenue dedicated to bus staging, kiss-and-ride activity would be relocated to angled parking spaces constructed along Burlington Square Park on Ellsworth and Center Streets (illustrated in Exhibit 14). This supply would exceed the peak kiss-and-ride activity noted on the south side of the station. These spaces are recommended to provide 15-minute parking for vehicles to wait for Metra commuters out of the flow of Pace buses or traffic on public streets. After the morning rush period, these spaces could be available as time-restricted daily fee spaces, similar to the 22 spaces currently located along both sides of the median on 4th Avenue adjacent to the station. This location enables commuters to remain on the sidewalk that abuts the south platform and out of the path of buses as they walk toward the kiss-and-ride area. To encourage kiss-and-ride vehicles to transition to this new staging plan and maintain the station-front lanes for buses only, appropriate wayfinding, signage, and enforcement should be applied. Such applications may include "Bus Only" and "Do Not Enter" signs and striping in the bus staging area; the City may also coordinate with Pace to explore the opportunity to install a stop bar/traffic arm that may be opened remotely by bus drivers for further enforcement.



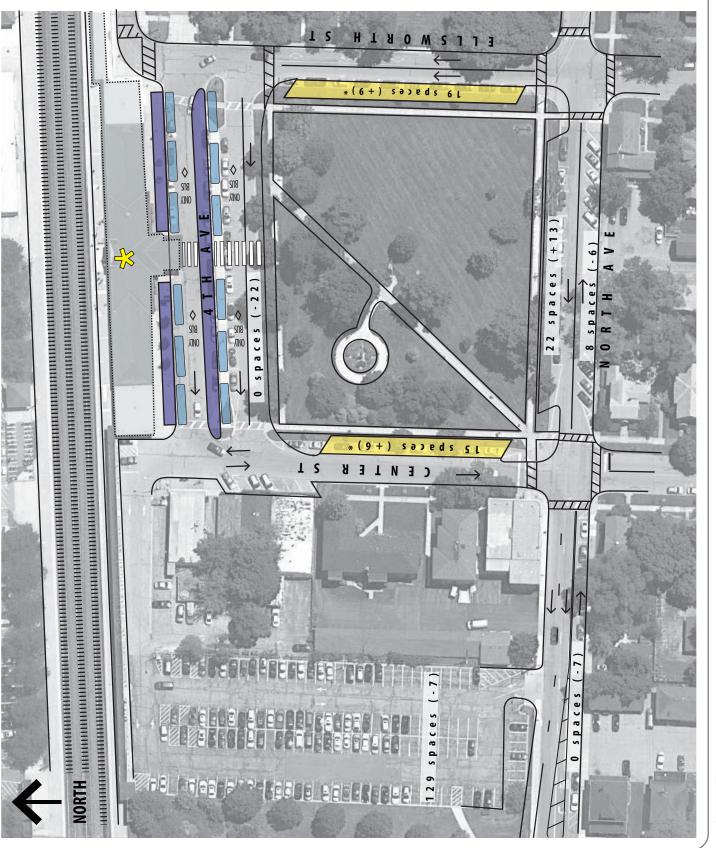
Passenger Waiting Area Metra Station



Kiss-and-Ride Area*



Pace Bus







serve daily fee parking between 8:00 AM and 4:00 PM.

* Note: Kiss-and-Ride spaces will



It is anticipated that corporate shuttles and independent bus services would utilize available curbside space near the station building under the recommended short-term design, similar to the existing condition. Corporate shuttles could also take advantage of the angled kiss-and-ride spaces around Burlington Square Park during peak periods when bus staging occupies the entirety of 4th Avenue south of the station. Because staging demand is minor for corporate shuttles and occurs off-peak for independent bus service, it is not anticipated that bus service would be disturbed as a result of these other vehicles picking up and dropping off near the station building. The opportunity would also exist to relocate independently run buses to the north side of the tracks, where excess staging space would be available along the north platform under the recommended layout. The City should coordinate with independent bus service operators to identify an appropriate location for staging as a part of the project implementation plan.

In order to promote continuous traffic flow and maintain access to Center Street businesses at all times of day, a westbound bypass lane would be provided on 4^{th} Avenue between Ellsworth and Center Streets south of the bus staging area. This bypass lane should be signed as a tow-zone with no stopping/no standing. Enforcement will play a significant role in deterring kiss-and-ride vehicles from illegally using this area during peak periods.

The following summary outlines the key benefits of this design and challenges that limit this recommendation to a short-term solution.

Key Benefits

- Separation of bus and kiss-and-ride vehicles.
- Reduced congestion for buses entering and exiting the depot area.
- Removal of bus staging from Ellsworth Street.
- Improved pedestrian routes with reduced potential for conflicts with buses and other vehicles.
- Relatively simple to implement and requires minimal impact to existing operations and commuter parking.
- Recommendations for 4th Avenue are generally compatible with the long-term recommendations for the area, although some modifications would be necessary.

Challenges

- Managing kiss-and-ride compliance with their desire to be at the front door of the station and pedestrian tunnel rather than in the designated spaces around Burlington Square Park.
- The bypass lane along the north side of Burlington Square Park may be illegally used by kissand-ride vehicles and negatively impact traffic circulation to Center Street properties north of North Avenue.
- Conflicts between pedestrians and buses as some bus commuters must cross a travel lane in the depot between the pedestrian median and the station.

Limitations as a Long-Term Solution

The short-term recommendations would result in limited improvements to transit access to/from
the train station as buses south of the station would continue to route through the neighborhood
to access the Naperville Station.



- The compliance of kiss-and-ride activity in the designated spaces around Burlington Square Park
 may not be ideal in the long term, as changing the desired location for numerous vehicles could
 prove difficult to manage and enforce over time.
- The short-term recommendations do not provide a defined transit center for commuters. While
 the passenger loading/unloading area is further separated from other modes over existing
 conditions, the routes to and from the depot include mixing with other traffic.

Station Area Circulation

In addition to the short-term recommendations along 4th Avenue and along the east and west sides of Burlington Square Park, conversion of North Avenue from a one-way westbound street to a two-way street between Washington Street and Ellsworth Street is recommended to provide an opportunity for buses and other traffic from Washington Street to access the area immediately south of the station along 4th Avenue without having to circulate through the adjacent neighborhood on School Street and Ellsworth Street south of North Avenue. However, the need for implementation of this two-way conversion is mutually exclusive from the other short-term recommendations south of the station. The short-term recommendations for 4th Avenue and the perimeter of Burlington Square Park to accommodate bus activity and parking modifications may be implemented independent of the North Avenue conversion or may be included as part a phased approach to implementation.

North Side of Station - Eastern Burlington Lot

Based on the relatively minor long-term recommendations identified for the Eastern Burlington Lot in the long term, it is recommended that the improvements illustrated in **Exhibit 12** be executed in the near term in order to yield the anticipated benefits to north-side operations. As noted previously, the primary benefit anticipated as a result of the recommended modifications is the ability to provide greater delineation between bus staging, kiss-and-ride, and the adjacent parking lot, which would be expected to reduce delay for both arriving and departing Pace buses.

Parking Impacts

Implementation of the short-term improvements would impact some permit and daily fee parking spaces. South of the tracks, 22 time-restricted daily fee parking spaces currently provided along both sides of the median on 4th Avenue between Ellsworth and Center Streets would be removed. Elsewhere in the study area, the conversion of North Avenue to accommodate two-way traffic would be expected to impact 13 existing daily fee spaces along the southern curb between Washington and Ellsworth Streets. The recommended modifications to North Avenue and the resulting changes in parking supply along this segment and at the southern end of the Parkview Lot are shown in **Exhibit 11**. As shown previously on **Exhibit 14**, it is recommended that parallel parking on the east, west, and south edges of the park be converted to angled parking spaces in order to gain an estimated 28 spaces. This modification would result in a net loss of seven on-street time-restricted daily fee parking spaces. A summary of the short-term parking impacts resulting from study recommendations is provided in **Table 6**.



Table 6. Impact on Parking Supply with Short-Term Recommendations

Location of Parking Supply	Impact on Permit Spaces	Impact on Daily Fee Spaces	Total Impact on Parking Supply	
Parkview Lot	-7	0	-7	
4 th Avenue between Center and Ellsworth Streets	0	-22	-22	
North Avenue & Burlington Square Park Perimeter	0	+15	+15	
Eastern Burlington Lot	-37	0	-37	
Net Change in Parking Supply	-44	-7	-51	

Additional parking mitigation could be achieved using one or more of the strategies identified in *Parking Mitigation* on page 56.



PARKING MITIGATION

In order to minimize the loss of and impact to commuter parking spaces as a result of the short- and long-term bus depot solutions, the project team identified a menu of options that could be considered to accompany the recommended improvements. The intention of this menu is to provide a broad range of solutions that may be used individually or in combination to mitigate parking impacts, but that may be chosen at a later date when factors such as funding, property ownership, and City initiatives related to bus depot construction are better defined. Depending on the strategies pursued, implementation of these options could result in a net increase in commuter parking. **Table 7** summarizes each strategy and, where available, the potential number of parking spaces that could be gained in its implementation. **Exhibits 15 through 17** illustrate the parking mitigation options identified for the Water Tower West site.

Table 7. Parking Mitigation Options

Parking Mitigation Strategy	Description	Anticipated Benefit (# of spaces) ¹
Add parking spaces at Water	 Reconfigure current parking layout on this City-owned parcel to gain additional spaces (see Exhibit 15) 	+24 spaces
	 Repave and stripe new parking spaces on currently unutilized portions of the parking lot (see Exhibit 16) 	+71 spaces
Tower West Lot ²	 Demolish the existing building and pave the entire parcel to create a new parking lot (see Exhibit 17) 	+263 spaces
Modify spaces around Burlington Square Park ³	 As recommended in Short-Term Recommendations, convert existing parallel parking spaces and parkway around the park on Ellsworth Street, Center Street, and North Avenue to increase supply 	+28 spaces
Establish carpool/rideshare spaces	 Reduce total parking demand by promoting carpool/rideshare permit spaces Incentivize program by providing highly proximate parking for participants Increase efficient use of current parking supply and improve station access for a greater number of commuters Utilize a ride-matching service to group potential commuter carpools based on area of residence and complementary schedule Continue the Guaranteed Ride Home Program to accommodate participants who occasionally need to return home early or late Develop enforcement plan with severe penalties for abuse of rules Coordinate with homeowner associations to promote carpools 	Reduce parking demand by 1-2 spaces per dedicated parking space

Additional parking supply is estimated for each potential mitigation strategy; final numbers are subject to further study and engineering.

^{2 -} Consideration should be given to how this strategy may impact or be impacted by future redevelopment opportunities.

Excludes modification to the existing on-street parking on the south side of North Avenue between Washington Street and Ellsworth Street.

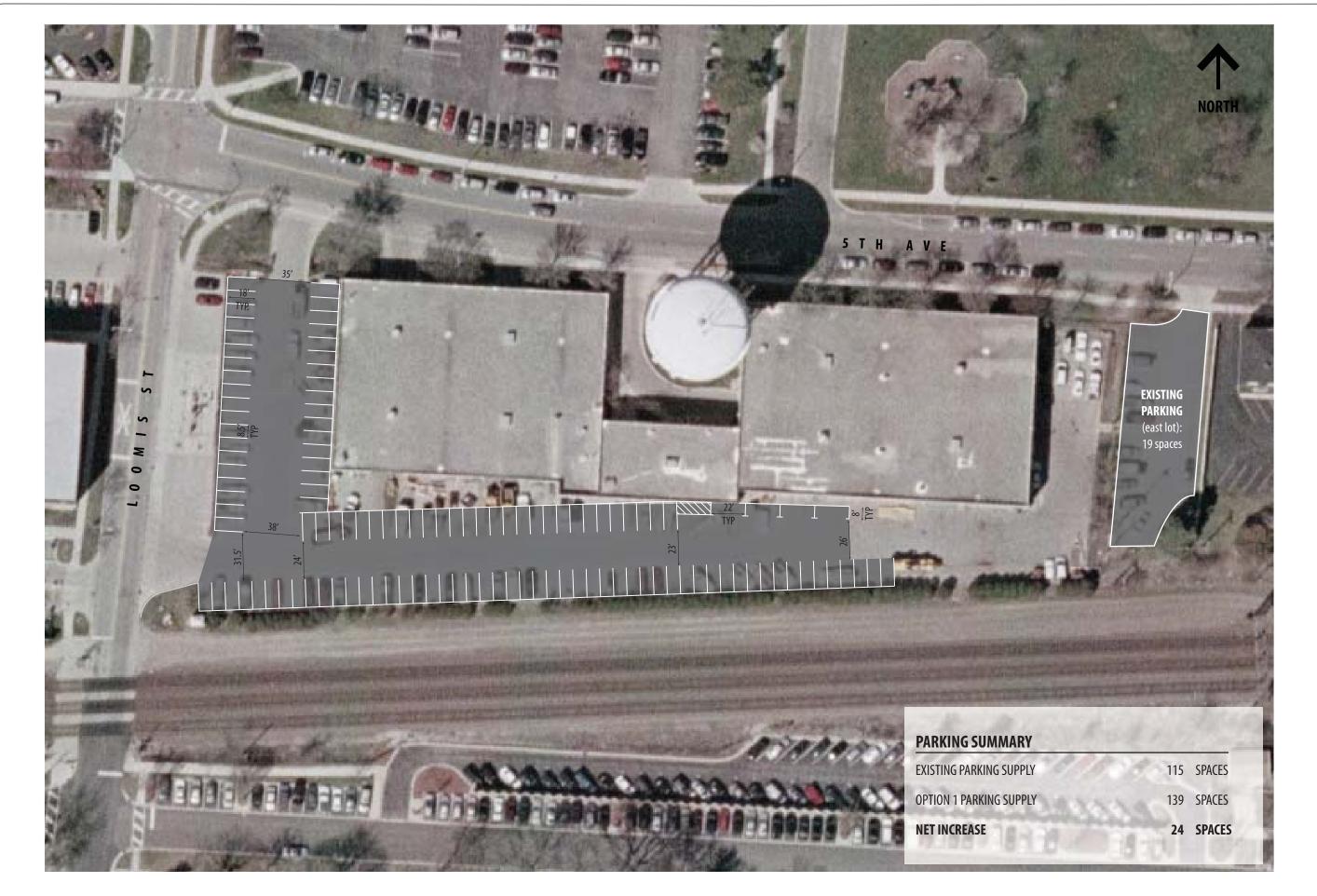


Table 7. Parking Mitigation Options (cont.)

Parking Mitigation Strategy	Description	Anticipated Benefit (# of spaces) ¹
Develop a public- private partnership	 Incorporate commuter parking into a private redevelopment project with designated commuter spaces or shared spaces with uses that offer a complimentary period of peak parking demand Potential sites may include, but are not limited to, Water Tower West and the Kroehler Lot 	Highly dependent on parcel size and nature of agreement
Add spaces at DuPage Children's	 Based on the current lease agreement between the City and the Museum, additional spaces could be allocated for daily fee use 	+28 spaces
Museum	 With use of underground detention, the northwest portion of the site could be converted into an expanded parking lot. 	+30 spaces
Add parking along 4 th Avenue	 Widen 4th Avenue between Ellsworth and Loomis Streets to provide parallel parking spaces on the north side of this roadway 	+20 spaces
Establish Geographic Parking Permit Restrictions	 Restrict eligibility for commuter parking permits within a defined boundary in close proximity to the station Increase permit access to those for whom walking/biking to the station is not a reasonable option Promotes use of non-auto modes for those within close proximity of the station 	Subject to geographic boundary and audit of current permit system
Establish Variable Parking Permits (e.g., daily permit, weekly permit, etc.)	Increase permit access to individuals with variable commute schedules	Changes to demand for quarterly parking permits and reduced waitlist
Identify park-and- ride lot(s) ³	 Establish site(s) south and east of the station, consistent with distribution and anticipated growth of Metra ridership Serve park-and-ride lot(s) via Pace bus or shuttle routes to/from Naperville Metra Station Utilize convenient and accessible sites with excess parking and/or complementary non-weekday parking needs (i.e., churches, oversized retail parking lots, etc.) 	+100-150 off-site spaces

Additional parking supply is estimated for each potential mitigation strategy; final numbers are subject to further study and engineering.

^{4 -} An existing park-and-ride facility at St. Thomas the Apostle Catholic Church has 75 spaces for use by Naperville Metra Station commuters.





















NEXT STEPS

In order to continue progress toward a bus depot at the Naperville Metra Station, a suggested series of next steps for subsequent stages of study, engineering design, and the ultimate construction of approved infrastructure improvements is outlined on the following pages. This outline briefly summarizes the anticipated next steps involved in executing both short- and long-term improvements within the station area.

To minimize the impact on station-area operations, it is recommended that construction be phased such that the net impact to the parking supply is minimized and areas available for kiss-and-ride staging are maintained. Following City Council approval of the short- and long-term bus depot recommendations, City staff will develop an Implementation Plan with additional information regarding the next steps. With preparation of the Implementation Plan, City staff will review implementation phasing to minimize impacts to commuter parking, maintain access to the Naperville Metra Station, and ensure that construction of the short-term improvements do not adversely impact future execution of the long-term improvements.

Based on the outline provided on the following pages, City staff will incorporate next steps into the annual Transportation Team work program and the Capital Improvement Program (CIP) for City Council consideration. This approach will provide City Council with the opportunity to approve specific next steps on an annual basis and evaluate progress on completed items.



• Implementation Plan

Develop an Implementation Plan to include a construction phasing plan, an evaluation of the parking mitigation options, funding opportunities and potential implementation timeline(s).

• City Review Process

Prior to implementation of the short-term improvements, the City shall incorporate next steps into the annual Transportation Team work program and the Capital Improvement Program (CIP) for Transportation Advisory Board and City Council consideration as follows.

- Incorporate Improvements into City's Capital Improvement Program (CIP)

This task would be an early step toward identifying project financing and schedule. Preliminary cost estimates for this purpose are detailed in the following section, *Planning-Level Cost Estimates*. The Capital Improvement Program is subject to City Council review and approval.

- Text Amendments

Prior to construction, text amendments shall be required to modify parking restrictions on the south side of the train tracks. The text amendments shall be subject to Transportation Advisory Board review and City Council approval.

• Project Coordination

Collaborate with the appropriate stakeholders (e.g., Pace, Metra, BNSF, Naperville Park District and Naperville Police Department) throughout design, construction and upon project completion.

- Coordinate with Pace to ensure the design meets Pace's *Development Guidelines* and to maintain efficient transit service on the south side of the train tracks.
- Coordinate with Naperville Park District to implement perimeter modifications to Burlington Square Park.
- Coordinate with the Naperville Police Department to maintain commuter access to the train station throughout design, construction and upon project completion.
- Coordinate with Pace and the Naperville Police Department to identify enforcement policies, such as the installation of new signage, striping, and/or a traffic arm on 4th Avenue (controlled by Pace bus drivers) for access to designated Bus Only areas.
- Notify stakeholders, including commuters, adjacent property owners and residents, of the construction schedule and associated Maintenance of Traffic Plan to maintain access to the train station and adjacent properties.

• Construct Short-Term Improvements

With development of an Implementation Plan and through the City's Capital Improvement Program, a schedule for construction of the short-term improvements will be developed.

- North Side of Station

- Identify a parking mitigation strategy to minimize loss of permit parking spaces in Eastern Burlington Lot and to address the displaced accessible parking spaces along the north platform (see *Parking Mitigation Options*).
- As appropriate, develop a Maintenance of Traffic Plan for continued Pace bus service on the north side of the station during the construction of short-term improvements to Eastern Burlington Lot.
- Implement recommended modifications to the Eastern Burlington Lot and proposed kiss-and-ride staging area along north platform.

- South Side of Station

- Install angled parking spaces along east, west, and south edges of Burlington Square Park. Identify an appropriate mitigation strategy to address parking impacts.
- Modify 4th Avenue between Ellsworth and Center Streets to provide revised median for 12-bus staging, center crosswalk, and bypass lane.
- Implement two-way traffic flow on North Avenue between Washington and Ellsworth Streets, including the removal and restriping of parking areas as recommended on **Exhibit 11**.



• Engineering Study and Design – Pursue Funding and Prepare Plans

Prior to implementation of the long-term recommendations, the City shall pursue funding for further study and design and prepare final engineering plans. These plans would be expected to include, but are not limited to, detailed construction plans for the bus depot (such as curb heights, pedestrian flow devices, lighting, shelters, and other amenities); further traffic analyses, modeling, and design for the adjacent roadways, intersections, and proposed signal modifications at Washington Street/North Avenue; and environmental impacts (detailed further on page 70).

• City Review Process

Prior to implementation of the long-term improvements, the City shall incorporate next steps into the annual Transportation Team work program and the Capital Improvement Program (CIP) for Transportation Advisory Board and City Council consideration as follows.

- Incorporate Improvements into City's Capital Improvement Program (CIP)

This task would be an early step toward identifying project financing and schedule. Preliminary cost estimates for this purpose are detailed in the following section, *Planning-Level Cost Estimates*. The Capital Improvement Program is subject to City Council review and approval.

- Identify Preferred Parking Mitigation Options

The options previously listed in **Table 7** will be used as a baseline as the City considers preferred mitigation options for inclusion in further engineering study or design.

- Text Amendments

Prior to construction of the parking mitigation strategies and bus depot, text amendments to modify commuter parking shall be reviewed by the Transportation Advisory Board and approved by the City Council.

Project Coordination

- Coordinate with Pace to ensure the final design meets Pace's *Development Guidelines* and other agency policies.
- Coordinate with the Naperville Police Department to maintain commuter access to the train station throughout design, construction and upon project completion.
- Coordinate with Pace and the Naperville Police Department to identify enforcement policies, such as the installation of new signage, striping, and/or a traffic arm on 4th Avenue (controlled by Pace bus drivers) for access to designated Bus Only areas.
- Notify stakeholders, including commuters, adjacent property owners and residents, of the construction schedule and associated Maintenance of Traffic Plan to maintain access to the train station and adjacent properties.

Pursue and Allocate Project Funding

The City will pursue project funding opportunities using final cost estimates developed along with construction documents for the bus depot and any supporting projects (such as parking mitigation). In order to facilitate the City's advance preparation, preliminary cost estimates for the recommended long-term improvements are detailed in the following section, *Planning-Level Cost Estimates*.

• Implement Preferred Parking Mitigation Options

Prior to construction of a bus depot on the Parkview Lot, provisions to accommodate displaced parkers shall be implemented in order to maintain the balance of spaces and avoid an adverse impact on station-area parking supply during construction.

• Construct Long-Term Improvements for a Naperville Metra Station Bus Depot

Implement final project initiatives based on engineering plans approved by the City and the appropriate transit agencies.



Planning-Level Cost Estimates

In order to guide next project steps, the project team developed preliminary cost estimates for key elements of the short- and long-term project recommendations. A brief summary of each planning-level cost estimate is provided in **Table 8** with itemized costs for major construction categories involved in the improvement; detailed cost estimates with quantities, unit prices, and other assumptions and exceptions are provided in the Appendix. These cost estimates will require further refinement subject to the preparation of detailed engineering plans are developed for the project.

Table 8. Planning-Level Cost Estimates for Study Recommendations

Recommended Infrastructure Improvement/Modifications	Planning-	Planning-Level Cost Estimate		
Long-Term Improvements, Parkview Lot Alternative 1A (Exhibit 8)	\$	575,041.20		
Pavement Rehabilitation	\$	103,250.00		
Curb & Gutter	\$	25,442.50		
Sidewalk & Median	\$	57,057.00		
Electrical	\$	250,000.00		
Signing & Striping	\$	3,213.25		
Other	\$	136,078.45		
Long-Term Improvements, Parkview Lot Alternative 1B (Exhibit 9)	\$	724,959.86		
Pavement Rehabilitation	\$	149,202.00		
Curb & Gutter	\$	35,792.00		
Sidewalk & Median	\$	106,460.00		
Electrical	\$	250,000.00		
Signing & Striping	\$	4,309.25		
Other	\$	179,196.61		
Long-Term Improvements, Parkview Lot Alternative 2 (Exhibit 10)	\$	613,286.98		
Pavement Rehabilitation	\$	116,050.00		
Curb & Gutter	\$	35,700.00		
Sidewalk & Median	\$	63,026.00		
Electrical	\$	250,000.00		
Signing & Striping	\$	3,382.00		
Other	\$	145,128.98		
North Avenue – Recommended Two-Way Conversion (Exhibit 11)	\$	214,813.89		
Pavement Rehabilitation	\$	81,440.00		
Curb & Gutter	\$	17,566.70		
Sidewalk & Median	\$	24,000.00		
Electrical	\$	30,000.00		
Signing & Striping	\$	8,507.50		
Other	\$	53,299.69		



Table 8. Planning-Level Cost Estimates for Study Recommendations (continued)

Recommended Infrastructure Improvement/Modifications		Planning-Level Cost Estimate		
Long-Term Improvements, North Side of Station (Exhibit 12)	\$	284,434.45		
Pavement Rehabilitation	\$	119,050.00		
Curb & Gutter	\$	39,750.00		
Sidewalk & Median	\$	43,925.00		
Electrical	\$	0.00		
Signing & Striping	\$	6,417.98		
Other	\$	75,291.47		
Long-Term Improvements, South Side of Station (Exhibit 13)	\$	258,293.51		
4 th Avenue between Center and Ellsworth Streets ¹	\$	93,081.57		
Pavement Rehabilitation	\$	23,750.00		
Curb & Gutter	\$	11,295.00		
Sidewalk & Median	\$	27,889.00		
Electrical	\$	0.00		
Signing & Striping	\$	5,008.75		
Other	\$	25,138.82		
Modifications to Center and Ellsworth Streets ²	\$	165,211.94		
Pavement Rehabilitation	\$	76,100.00		
Curb & Gutter	\$	16,765.00		
Sidewalk & Median	\$	20,585.00		
Electrical	\$	7,500.00		
Signing & Striping	\$	3,269.50		
Other	\$	40,992.44		
Short-Term Improvements, 4 th Avenue South of Station Building (Exhibit 14)	\$	281,860.25		
Pavement Rehabilitation	\$	118,310.00		
Curb & Gutter	\$	28,347.50		
Sidewalk & Median	\$	44,490.00		
Electrical	\$	15,000.00		
Signing & Striping	\$	5,777.50		
Other	\$	69,935.25		
WTW Parking Mitigation – Reconfigure Existing Layout (Exhibit 15)	\$	109,134.38		
Pavement Rehabilitation	\$	41,900.00		
Curb & Gutter	\$	1,425.00		
Sidewalk & Median	\$	0.00		
Electrical	\$	37,500.00		
Signing & Striping	\$	6,482.50		
Other	\$	21,826.88		

⁻ Assumes implementation from short-term recommendations. A separate planning-level cost estimate is provided in the appendix for the implementation of these recommendations from existing conditions.

^{2 -} Assumes implementation from existing condition.



Table 8. Planning-Level Cost Estimates for Study Recommendations (continued)

Recommended Infrastructure Improvement/Modifications	Planning-Level Cost Estimate		
WTW Parking Mitigation – Repave/Restripe Existing Paved Area (Exhibit 16)	\$	208,009.60	
Pavement Rehabilitation	\$	73,750.00	
Curb & Gutter	\$	6,545.00	
Sidewalk & Median	\$	12,360.00	
Electrical	\$	60,000.00	
Signing & Striping	\$	9,852.50	
Other	\$	45,502.10	
WTW Parking Mitigation – Demolish & Pave Entire Property (Exhibit 17)	\$	1,222,435.27	
Pavement Rehabilitation	\$	700,650.00	
Curb & Gutter	\$	20,287.50	
Sidewalk & Median	\$	12,960.00	
Electrical	\$	157,500.00	
Signing & Striping	\$	10,768.75	
Other ²	\$	320,269.02	

^{2 -} Excludes building demolition costs.



Environmental Impacts

The study area was reviewed for potential environmentally sensitive resources. A review of the National Wetland Inventory (NWI) did not indicate any wetlands in the study area, and the project area does not include any floodplains and floodways based on current Flood Insurance Rate Map (FIRM). No endangered species were identified in the vicinity of the project area.

A review of the Illinois Environmental Protection Agency (IEPA) Leaking Underground Storage Tanks (LUST) database revealed four records as follows:

- Moser Lumber Inc. 301 N. Washington Street, Naperville
- DuPage Asphalt 190 E. 5th Avenue, Naperville
- Aspen Associates LP 300 E. 5th Avenue, Naperville
- City of Naperville 414 E. 5th Avenue, Naperville

The identified LUST records, the adjacency to a railroad corridor, and anticipated subsurface excavation suggest that a special waste concern may exist. A Preliminary Environmental Site Assessment (PESA) is recommended for future stages of study based on the identified LUST records and the presence of railroad corridor. The PESA will clearly identify if a Preliminary Site Investigation (PSI) is needed, which would involve detailed analyses of soil conditions and extent of contamination. The PSI report would identify areas impacted by special waste or regulated substances, recommend actions to be taken, and provide estimated costs for excavating, transporting, and disposing of any material exceeding IEPA's Tiered Approach to Corrective Action Objectives.

A PESA is typically conducted during the preliminary engineering phase and the PSI is conducted during the design phase of the project. The responsibility for conducting the PESA will depend on the project funding source. The City will be responsible for the PSI if required.

The removal and mitigation of contaminated soils will be defined in the contract documents prepared for construction of the improvements. The project will need to meet IEPA's Clean Construction and Demolition Debris (CCDD) requirements and may incur additional cost depending on the nature of special and hazardous waste. The environmental studies are not likely to add time to the project assuming they are conducted in conjunction with the preliminary and design studies. The additional costs anticipated in order to carry out the PESA, PSI, and mitigation measures should be considered when identifying funds for further engineering study and construction of this project.



CONCLUSION

Based on the evaluation of potential bus depot sites, input and feedback received from the transit agencies, commuters, and station area neighbors and a planning process intended to seek a balance of competing interests, short- and long-term plans are recommended to establish a bus depot at the Naperville Metra Station and achieve the study objectives. A summary of the long-term improvements for the station area is provided below:

Long-Term Recommendations

South Side of the Station

- Establish a bus depot on the Parkview Lot (final design subject to further engineering).
- Implement intersection and traffic signal improvements on North Avenue immediately east of Washington Street to accommodate the depot access
- Reconfigure 4th Avenue south of the station to provide time-restricted daily fee parking and short-term parking for kiss-and-ride activity during the morning and evening peak commute periods.
- Convert North Avenue from a one-way westbound street between Ellsworth Street and Washington Street to a two-way street.
- Accommodate displaced parkers from the Parkview Lot utilizing one or more of the parking mitigation options outlined in Table 7.
- See Exhibits 8 through 11 and Exhibit 13.

North Side of the Station

- Maintain the three north-side bus routes in the Eastern Burlington Lot.
- Modify the Eastern Burlington Lot to increase separation between buses, parking, and a new kissand-ride staging area.
- Accommodate displaced parkers from the Eastern Burlington Lot utilizing one or more of the parking mitigation options outlined in Table 7.
- See Exhibit 12.

As noted previously in this report, the above recommendations would require significant long-term planning efforts in order to prepare final engineering plans, develop a construction phasing plan, identify funding, and mitigate parking impacts resulting from the construction of a bus depot on the Parkview Lot. The capital investment required to complete this project would include the construction of the depot itself as well as any costs associated with parking mitigation, preliminarily identified on an individual basis in *Planning-Level Cost Estimates*.

In order to facilitate near-term improvements to station-area operation, the project team identified a set of short-term recommendations that address key issues that exist at the Naperville Metra Station and are complementary to the identified long-term improvements. Should the City decide to move forward with an interim set of improvements to the station area, it is recommended that future stages of study prioritize the ability to transition these infrastructure modifications into the long-term design. A summary of the recommended short-term improvements is provided on the following page.



Short-Term Recommendations

South Side of the Station

- Relocate buses currently staging on Ellsworth Street to 4th Avenue adjacent to the station and south of an adjusted median. All buses on the south side of the station would stage in the segment of 4th Avenue between Ellsworth and Center Streets.
- Convert parallel parking on the south, east, and west sides of Burlington Square Park to angled spaces for purposes of mitigating the loss of daily fee spaces on 4th Avenue next to the station.
- Relocate kiss-and-ride activity to angled spaces on east and west sides of Burlington Square Park.
- Convert North Avenue to a two-way street to improve neighborhood circulation and limit bus travel through the adjacent neighborhood.
- See Exhibit 14.

North Side of the Station

- Due to relative ease of implementation and limited impact to existing station-area parking supply, implement the modifications to the Eastern Burlington Lot (see Long-Term Recommendations).
- See Exhibit 12.

It should be noted that some of the identified short-term improvements (such as two-way travel on North Avenue and the construction of angled parking around Burlington Square Park) may also be implemented independently of the other improvements to facilitate a gradual transition toward a modified bus staging area and to yield overall benefits to the neighborhood transportation network. With relatively minor infrastructure modifications and limited impact on station-area parking supply, it is anticipated that the above improvements would:

- Enhance transit access to/from the train station;
- Reduce congestion for and minimize conflicts between Pace bus operations, pedestrians, bicycles, and kiss-and-ride activity; and
- Minimize bus staging/queuing on adjacent neighborhood streets.



APPENDIX

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STAKEHOLDER INTERVIEW MEETING MINUTES



NAPERVILLE METRA STATION BUS DEPOT AND COMMUTER ACCESS FEASIBILITY STUDY

Stakeholder Meeting Minutes - Regional Transportation Authority

Date: Thursday, June 16, 2011

Attendees: Regional Transportation Authority (RTA)

City of Naperville

Traffic Analysis & Design, Inc.

Stanley Consultants

The meeting began at approximately 9:00AM via conference call. Following a discussion of billing procedure, the project team posed several questions to RTA staff in order to gather their initial input on the study. A summary of the questions asked by the project team and answers provided by RTA and/or the City of Naperville is provided below. Unless otherwise noted, the paraphrased responses were provided by the RTA.

Q: What are RTA's priorities in this project?

A: With regard to the location of possible bus facilities or different staging strategies, keep in mind that an additional minute or two of travel time does have a significant impact on the bus routes. These potential impacts should be seriously considered when selecting a preferred site. Pace will be able to provide helpful guidance on this matter.

Also remember to maintain the feasibility of the study recommendations, particularly for the interim scenario. Given the difficulty of obtaining funding, the project team should consider things that come at a relatively low capital cost that can improve the existing commuter experience for everyone. Practicality and the ability to show progress after study completion are also high priorities. Interim improvements are a great way to be cost effective but keep momentum toward an ultimate design. Until the ultimate design can be achieved, it is important to build stakeholder consensus so that the project can progress once money is available.

For specific operating criteria, the team should work closely with Pace and Metra. These groups are best in touch with their specific needs.

- Q: All other factors held equal, does the RTA have a preferred location for the bus depot?
- A: Locations north of the tracks are a little worrisome relative to impacts on the bus route schedule, but the RTA otherwise has no preconceived notions.
- Q: Are there any existing bus depots under the RTA's jurisdiction that could provide the team with good pointers?





- A: It would be worth looking at the operations at the Elgin bus depot; this location is probably the closest to Naperville in terms of project objectives, though the Naperville site is admittedly more residential in nature. One key difference is that Elgin is a system of fixed routes, whereas the Naperville bus routes tie into the train schedules. The Elgin bus depot isn't a perfect facility, but its example could help the team get a feel for design features.
- Q: Are there restrictions that that the team should keep in mind regarding the limits of the project improvement relative to later funding aspects? For example, if one-way street layouts are modified and it impacts signal operations a few blocks away, would that be ineligible for certain types of funding?
- A: This question should be asked of City staff, because the answer comes down to what the City is willing to implement.
- Q: Are there any potential lessons that the RTA would offer to the project team, particularly for implementation in phases?
- A: Metra will want to know about station parking: where it will be placed and when, sequencing, who's paying for it, etc. Metra is more than willing to help and provide information, and there are always certain key things that they push. Consultants have made mistakes in the past by not giving those items enough priority.
- Q: To the City Is Metra involved in the parking permits or is that purely on the City side?
- A: Naperville That revenue is purely on the City side. There are grants for some parking in Burlington, Kroehler, and Parkview (the latter through BNSF); the City and the project team will have to make sure that with the terms of those grants are complied with.
- Q: *To the City –* The City keeps all revenue from parking?
- A: *Naperville* Yes.
- Q: How would future projections for ridership impact the needs at this station?
- A: That question is best directed to Metra. In the past, though, they've been a bit guarded about that information, possibly because the methodology isn't entirely defined. They should be able to give you something to go on at the very least.
- Q: Was a study done for the Elgin location?
- A: A study for the bus depot on National Street, which is nearly finished, was done by LandVision and can be found under Planning on the RTA website.
- Q: What is the degree of coordination between Metra and Pace at the Naperville station? Is it based on train schedules or real-time information?
- A: This question should be posed to both Metra and Pace. If some contradictory information is received, the project team should feel free to get in touch with RTA staff.





We can be helpful, particularly in cases where two conflicting answers are being provided.

- Q: Are there internal invoicing deadlines with RTA or the City that we should be aware of?
- A: It's better if the invoicing is more frequent than not; anything more often than every two months works for the RTA. Otherwise, check the project team's contract with the City.

The conference call adjourned at approximately 10:30AM.



NAPERVILLE METRA STATION BUS DEPOT AND COMMUTER ACCESS FEASIBILITY STUDY

Stakeholder Meeting Minutes – Pace

Date: Thursday, June 16, 2011

Attendees: Pace Suburban Bus Service

City of Naperville

Traffic Analysis & Design, Inc.

Stanley Consultants

The meeting began at approximately 1:00PM at the Naperville Municipal Center. A summary of the questions asked by the project team and answers provided by Pace and/or the City of Naperville is provided below. Unless otherwise noted, the paraphrased responses were provided by Pace.

- Q: If this project accomplishes one thing for Pace, what is that main objective?
- A: One of Pace's primary goals is the separation of the various modes of transportation, including buses, automobiles/private vehicles, and pedestrians. Better pedestrian access to buses is also desirable. Signage for each bus route within the proposed depot, providing a designated spot for each bus route that is consistent each day, would help promote easy wayfinding for riders. Existing bus depots currently use fixed signage for this purpose, not variable message signs.
- Q: Does Pace have a preference, from a commuter's perspective, for whether commuters alight buses on the inbound platform side in the AM or board on the outbound platform side in the PM?
- A: The bus routes at the Naperville Metra station are largely feeder routes and are designed to wait for the trains in order to best serve commuters. Given that most of the bus routes serving this station are located on the south side of the train tracks, it may be best to locate the bus depot at the southern end of the station.
- Q: Please confirm any station features that should be considered in the design alternatives (such as the need for employee parking, maintenance or access requirements, etc.).
- A: The ideal design would be capable of accommodating up to 16 buses at the same time, based on the current route schedules.
 - A "sawtooth" design is preferred over a "drive-through" design, because the latter requires buses to exit in a first-in-first-out fashion and therefore places greater constraints on bus circulation within the depot. The sawtooth design would allow buses to exit regardless of the order in which they arrived. Existing bus depots with the drive-through design do not operate as well as those with a sawtooth design.





It should be assumed that shuttles and private vehicles would not use the bus depot for pick-up/drop-off. The bus depot at the Rosemont station for the CTA Blue Line, for example, has a separate designated space for shuttles.

The bus depots at Harvey and at 95th Street/Dan Ryan Expressway are good examples of depots designed well and for a large capacity of buses. These locations and those at Aurora and on Lake-Cook Road may be worth looking at before the design phase begins.

- Q: Are there any future conditions that should be considered, such as the potential for larger buses, additional routes, or routes that stop at the bus depot with increased frequency?
- A: It is unlikely that expanded Pace service would affect the study area. The potential to consolidate some of the bus routes in question has been discussed, but should not be considered in this study. It is worth noting that the existing routes and schedules serving the Naperville Metra station have been in place for roughly 20 years.
- Q: Pursuant to the previous question, what is Pace's preferred design vehicle for this depot?
- A: *Pace* The buses used for these routes currently are 30 feet in length; it is unlikely that larger buses would be required for Pace service at this location.
 - City of Naperville The bus depot would ideally be a flexible space that could be used for other purposes when not occupied by Pace buses, so a school bus or trolley would be the ideal design vehicle.
- Q: A key consideration in our alternatives analysis will relate to how the bus depot and its resulting effects on travel patterns may impact route schedules. Is this an evaluation that Pace can assist the project team with?
- A: Pace does not have a model that evaluates the buses' travel times between stops; rather, the route is driven multiple times to determine an appropriate estimated travel time. That said, increased travel times are very undesirable and should be considered in this study.
- Q: All things being equal, does Pace have any thoughts on ideal location for a bus depot?
- A: With most of the bus routes serving the southern side of the station, it seems to make sense to have a bus depot on the south side of the tracks to avoid impacting the existing route schedules. Given the residential proximity to the current bus staging locations, the Parkview Lot may be a viable location for the depot.
- Q: It was noted during a field visit that the buses stage in the same location every time; is this a desirable behavior to consider as a part of this project?
- A: City of Naperville From the commuter's perspective, this is a desirable feature that enables riders to find their bus easily.
- Q: Is there a shared ridership between the fixed and feeder routes that stop at the Naperville Metra station?
- A: While the data may be available and can be requested, the shared ridership is probably very small.

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- Q: Is there any communication between the buses and trains, particularly in cases of a Metra delay or service interruption?
- A: The relationship between the buses and trains is largely based on the respective schedules, but drivers are able to call their dispatcher to inquire about delays.
- Q: Is it common that buses are early and/or idling at the station?
- A: Recovery time has been built in to the existing routes, so buses may be early at the station for that reason. It is also worth noting that commuters are generally happy when their bus arrives early. Based on these two factors, no schedule changes have been made (nor are they planned) to address early arrivals or idling.
- Q: It doesn't appear that transfers between bus routes happen much at present. Is there a desire to enhance the ability to make these transfers as a part of the bus depot?
- A: City of Naperville Possibly. This has been considered as a general idea in the past, but the demand for this service hasn't been high.
- Q: What role could remote parking possibly play in replacing any parking supply lost as result of the bus depot?
- A: City of Naperville Some attempts have been made in this regard for Route 682. The City expects that this remote lot will be a success once the economy improves. If a park-and-ride is considered, staff recommends evaluating a new park-and-ride location toward the east end of the City.

At the conclusion of the meeting, the project team asked Pace for any additional thoughts and tips for the proposed bus depot. Pace suggested that the project team be conscious of the pedestrian path relative to bus routing patterns. Amenities such as good lighting and heat lamps/warming shelters were suggested. The meeting adjourned at approximately 2:00 PM.



NAPERVILLE METRA STATION BUS DEPOT AND COMMUTER ACCESS FEASIBILITY STUDY

Stakeholder Meeting Minutes – Metra

Date: Monday, June 20, 2011

Attendees: Metra Suburban Rail Service

Burlington Northern Santa Fe (BNSF) Railroad

City of Naperville

Traffic Analysis & Design, Inc.

Stanley Consultants

The meeting began at approximately 9:30AM at Metra's office at 547 W. Jackson, Chicago, Illinois. A summary of the questions asked by the project team and answers provided by Metra, BNSF, and/or the City of Naperville is provided below. Unless otherwise noted, the paraphrased responses were provided by Metra staff.

- Q: If this project accomplishes one thing for Metra, what is that main objective?
- A: Metra has a number of primary goals for this project. Safety is important, especially at the at-grade crossing at Loomis Street. The project team should aim to avoid creating new queues at this at-grade crossing. The potential to increase pedestrian safety at this crossing could also be considered through such measures as a zig-zag sidewalk approach that encourages pedestrians to look down the tracks for approaching trains and deters them from bypassing an activated gate.
 - Metra also hopes to maintain or minimize losses for the existing station parking supply and sustain minimal compromises in the existing kiss-and-ride operations. Pedestrianvehicle conflicts should also be considered by the project team.
- Q: Does Metra have a preference, from a rail commuter's perspective, for whether commuters alight buses on the inbound platform side in the AM or board on the outbound platform side in the PM?
- A: The impact to a commuter's time should be strongly considered. Metra is not opposed to keeping bus routes on both sides of the tracks, as they are today, similarly to how Metra tries to provide parking and kiss-and-ride locations on both sides to alleviate peak period congestion. It should be noted that the growth trend in this station's ridership is located to the south.
- Q: Please confirm parking requirements for Metra employees near the station. Are there any guidelines for where they may be (i.e., distance to the station)?
- A: BNSF Two spaces are currently reserved for BNSF clerks and should be maintained. These spaces are located very near to the station for safety reasons, because these employees may arrive very early in the morning. One space is also reserved for the Amtrak ticket agent. Based on past experience, these spaces cannot be shared between the two entities.





- Q: Please confirm parking requirements and related policies during implementation phasing from parking lot to bus depot.
- A: The change in parking supply would be ideally be zero as a result of this project, even during phased construction. Metra's policy is to provide parking within one quartermile and with a line of sight to the station.
- Q: Is there potential to move the fence along the south side of the tracks between the station and Loomis to make way for angled parking on the north side of 4th Avenue?
- A: *BNSF* This may be possible and can be looked into. The area in question may actually belong to the City as a part of past work with the Public Works Department. When considering changes to this area, the project team should consider that at least 500′ of horizontal sight distance must be provided in each direction for at-grade crossings.
- Q: Are there any maintenance or access requirements that must be maintained on either side of the tracks, but could be impacted by the establishment of a bus depot?
- A: *BNSF* It should be noted that the current platform would allow an unauthorized vehicle to drive onto the platform, presenting a safety concern. The congestion caused by pedestrian traffic near the coffee truck should also be considered for safety reasons.
- Q: Is there any communication between the trains and buses in the event of a train delay or Metra service interruption?
- A: There is not; because the buses are feeder routes designed to serve the train riders, this communication isn't considered necessary.
- Q: All things being equal, does Metra have any thoughts on ideal location for a bus depot?
- A: *Metra* Based on internal discussions, Metra staff has a suggested design for the project team's consideration. Under this "counterflow" design alternative for the south side of the station, kiss-and-ride would maintain its existing counterclockwise flow around the park. Buses would be routed in a clockwise direction, and the park would be used to store riders who are waiting for, boarding, or alighting the Pace bus routes on the south side of the tracks. This alternative could be used as either an interim or ultimate design, has no impact on the station's parking supply, and requires limited expenditures of capital funds.

Metra views the Parkview lot as an undesirable location for a bus depot due to the difficulties associated with accessing Washington Street from this location. The Parkview lot is also located far away from the pedestrian tunnel.

BNSF – There may be some benefits to locating kiss-and-ride and bus pick-up/drop-off activities in the parking lot at the DuPage Children's Museum, given the complementary peaks of commuter uses and the Museum's clientele.

Metra – Given BNSF's suggestion, an existing detention pond at the Museum could potentially be buried to create more space for parking, kiss-and-ride, and bus staging.

BNSF – Amtrak has significant kiss-and-ride activity, and these vehicles typically linger longer than those dropping off Metra riders. For this reason, it would not be desirable for Amtrak kiss-and-ride to be located across the street at the Children's Museum. However, Amtrak kiss-and-ride may have complementary peaking characteristics to the bus routes, providing an opportunity for these uses to share space.





- Q: What information can be provided on future growth in service and/or ridership for this station?
- A: BNSF Growth along this line is occurring from Downers Grove west, but the line is limited by infrastructure at Union Station and recent Amtrak policy changes for signal standards. As a result, longer trains are not expected to be an option for this line. Instead, it is likely that there may be changes in the way that Zones are designated and/or the combination of stations visited by express trains.

Metra – As growth continues in southern Naperville and other communities to the south, more parking may be needed for this station.

BNSF – It may also be possible that transit ridership to this station could be increased, given perceptions by younger demographics that car ownership can be undesirable. Are car sharing services currently in use at this station?

City of Naperville – A car sharing service approached the City about locating cars at this Metra station, but the City would have been responsible for maintaining the cars. As a result, a deal was not reached.

- Q: Is the reverse commute an important consideration for Metra at this location?
- A: The reverse commute does happen, but is not the predominant demand for Metra service.
- Q: During field observations, some outbound trains were observed using the south (inbound) platform. Is this common?
- A: One or two trains do this on a daily basis, while others may do so under special circumstances.

At the conclusion of the meeting, Metra suggested that the project team consider adding a couple of items to the design alternatives evaluation matrix: user convenience and rail safety (particularly at the Loomis Street at-grade crossing). The meeting adjourned at approximately 10:45AM.



5TH AVENUE STUDY PUBLIC INPUT SUMMARY

Public Input

From the 5th Avenue Study

For the 5th Avenue Study the city solicited public input on a variety of issues, including bus access to the Naperville Metra Station and the potential for a bus depot. A summary of the public input received is provided below.

- Concern expressed about buses queuing on residential streets as it relates to air quality, pedestrian and vehicle safety, and access to private driveways.
- ☐ Concern expressed about buses traveling on residential streets as it relates to air quality, pedestrian safety, and vehicle safety.
- ☐ Support for a dedicated transit facility as an opportunity to enhance access to/from the Station and increase public awareness of alternative transportation options.
- ☐ Support for bus depot concept as an opportunity to remove bus queues from residential streets.

As a part of the public input received during the 5th Avenue Study, the following comments were received regarding the scope of the Naperville Metra Station Bus Depot and Commuter Access Feasibility Study.

- ☐ As part of the evaluation of a bus depot on the Parkview Lot, explore access from Washington Street and/or North Avenue.
- ☐ All bus routes, including those serving the north and south side of the train tracks, should be included in the evaluation of a bus depot.
- ☐ Explore the feasibility of a bus depot on city-owned properties in the immediate vicinity of the Station, including the north and south side of the train tracks.
- ☐ Potential impacts to bus routes, schedules and costs should be evaluated.





Note:

A copy of the correspondence received by the City throughout the 5th Avenue Study is available through the City of Naperville Transportation, Engineering, and Development Business Group.



OPEN HOUSE PUBLIC COMMENTS

	Public input will be one factor considered when developing and evaluating bus depot alternatives. Please note that a number of factors will be considered, including: site	Please check all that apply (at least one option must be checked). This information will help obetter understand the perspective of participants in the public comment period. Personal inf						
No.	location, configuration and access points; commuter parking impacts and mitigation options; and Pace and Metra requirements.	G .	Resident of Naperville			If "Other Stakeholder,"		
1	If all the buses could be accommodated, first choice would be the 4th Avenue except there	Commuter	Metra Station Vicinity	Other Resident		please specify Transportation Advisory		
	are homes on 4th Avenue. Make North Avenue two-way to keep buses out of neighborhood on School Street. Parking on North Avenue would partially need to be removed. 2nd choice would be Burlington Square - maybe parking after 9 a.m. and end at 4 p.m. with North Avenue 2-way. In front of train station could be possible also 3rd choice Parkview - North Avenue 2-way - most costly probably - would affect least amount of homeowners - landlords 4th choice - Children's Museum - with the Museum hours adjusted to 9 to 4 weekdays			Lives 2.5 blocks from the Station		Board Member		
2	Location #1 (Parkview Lot) - Living on Ellsworth (between North & School) this is a good option. Tear down the old PW bldg and put parking lost by this option over there. Option 2 is also good.		Resident of Naperville Metra Station Vicinity					
3	Location #6 (4th Avenue) - I would support a kiss-and-ride at this location; the traffic direction would need to be reversed	Commuter						
4	Location #1 (Parkview Lot) - Parkview Lot use for the bus depot is the best location to keep buses out of neighborhoods. However parking for displaced cars must be part of this. Use of available space (closed businesses, public works building) for car parking must be taken into consideration for a proper solution. Also Parkview Lot would need a revised stop light location to facilitate buses coming out of the lot to Washington Street.	Commuter						
5	Locations #7 (Burlington Square Park perimeter) & #5 (south of train station) - Allowing 2-way traffic on North (maybe just for buses) would help prevent buses going through residential neighborhoods. Also allowing better traffic flow through stop light on North Avenue would get buses out of the area faster and discourage them from going through other neighborhoods (such as Center Street south of North Avenue)	Commuter						
	Location #8 (DuPage Children's Museum) - Can't put more bus traffic west on Spring - it's terrible already; offers best Washington Street access of all locations Location #7 (Burlington Square Park perimeter) - Kiss-and-ride should be less							
	accommodative in favor of bus transportation. Or consider kiss-and-ride in Children's Museum Lot.							
8	Location #5 (south of train station) - Having served on TAB and considering the bus depot etc. I vote for the depot on the south side outside the train depot. Reasons are 1) convenience for patrons; 2) multiple lanes for buses would eliminate queuing on Ellsworth St. Place kiss-and-ride on 4th St east of Ellsworth. To provide additional space remove cupola at depot entrance. Also if additional space needed, a portion of the park could be used.		Resident of Naperville Metra Station Vicinity			Former Transportation Advisory Board Member		
9	South side alt is weaker, larger due to the short distance to Washington St offering limited opportunities to get traffic out of the lot							
10	Location #6 (4th Avenue) unfairly moves bus traffic to a residential area currently without bus traffic. Kiss-and-ride for location 6 is a better, less intrusive alternative							
11	Caveat 1: As a commuter I am only concerned about commuter conveniece. Caveat 2: Typically I ride my bike to the train station saving Pace for inclement weather or winter (Dec-Mar) so I am not a daily rider Comment: As a north side resident I am only family with the routes on that side of the tracks and have never seen more than 3 buses lined up. I don't see many problems with that set up and hope that we don't create a solution that becomes more inconvenient fo north side homeowners. If the buses are moved to the South side of the tracks, and the train comes in on the North platform, I will probably just walk as it won't be much slower than having to go the buses. Please take into consideration the two sides (North & South) and make sure your solution doesn't inconvenience one over the other. Thank you.	Commuter						
12	Moving Kiss & Ride or bus staging to 4th Ave will create a worse situation for residents of this street than exists on any current residential street except Ellesworth between North and 4th where there are only two residential houses exist. The queuing that occurs on Ellesworth south of North Ave is worst at only the peak times but moving bus staging or K&R to 4th Ave creates a permanent impact all day every day. It would turn 4th ave from a relatively quiet residential street in to a busy thoroughfare. It seems that the Parkview and Childrens Museum are the most favourable options. Depending on the degree of grants and flexibility, these lots could be developed just a little or significantly. Perhaps a deal can be made to relocate the childrens museum to another close location to get better use of that lot. Perhaps 5th Ave or even the old dept. works building.		Resident of Naperville Metra Station Vicinity					
13	Perform the studyit's good information to gather, but do not act on any part of it. The city has higher (or should have higher) priorities for its monies. Right now the city is exploring the idea of charging for fire and emergency response services which are already funded. That's a horible idea. Building new facilities must come after funding basic services. We don't need another bell towerat lease until the city's revenues return to pre recession levels. This project is a "nice to have" project not a "need to have" project.	Commuter		Other Resident		Pace bus rider, bicycle rider, and pedestrian		
14	Many of the locations entail a significant loss of parking spaces. This is troubling because parking spaces are essential for commuters that are unable to use buses (for example, due to work hours 12pm-9pm outside the norm). I would like to see the options to mitigate the loss of parking spaces presented with the bus depot alternatives.			Other Resident				
15	I think the best areas for a bus depot are: locations 1, 3, and 4. They offer the best opportunity to get buses in and out effectively and efficiently from Washington and/or 5th Avenue. These options would greatly help get the buses out of the residential neighborhood. Locations 5 and 7 and really no different than the current conditions and would not bring any noticeable benefit for the future. Location 6 is absurd! Two buses can't even fit down the street side by side. How are you going to protect residential access from being blocked? This option actually would increase bus traffic through the residential neighborhood and lengthen times on bus routes. There is no benefit to this location in any way!		Resident of Naperville Metra Station Vicinity					
16	The northern lots are prominent to anyone driving or walking down Washington. Converting them to a bus depot would provide an industrial look to the area, whereas the south side lots (particularly Parkview) are more secluded, and would thus provide a more cosmetic solution of where to place the depot.	Commuter	Resident of Naperville Metra Station Vicinity					

Comment	alternatives. Please note that a number of factors will be considered, including: site		nd the perspective of part	the perspective of participants in the public comment period. Persocident of Naparville					
	location, configuration and access points; commuter parking impacts and mitigation options; and Pace and Metra requirements.	Commuter	Resident of Naperville Metra Station Vicinity	Other Resident		If "Other Stakeholder," please specify			
	Please consider putting the facility under part of Kendall Park. It would be out of the weather, out of view, and cause little disruption to this infrequently used park. Connect the facility to the station by a pedestrian tunnel. As an alternative, why do so many buses have to arrive at and leave the station at the same time? If they were staggered and commuters waited a few minutes more for "their train" inbound, or waited on the bus a bit longer after getting off the train, there could be an orderly flow of buses. Surely the ongoing renovations will allow the station to accommodate more waiting commuters. Maybe bus routes can be adjusted too. Do we really need 819, 821, running part of the way next to 727 in south Naperville. The first two go to the Lisle station but pick up in Naperville and Lisle. Yes, it is a big secret. The Lisle station is far less crowded. You always get a seat on the train. The train arrives in downtown Chicago within minutes of the train from Naperville. And it costs less to commute from Lisle. Run more of the buses to Lisle. Also, why are the engines left running on waiting buses with no one on board except the driver? Cut down on air pollution and energy use. Turn off the engines. Someone may also want to publicize the 855 bus route. It is another big secret. The bus, leaves Bolingbrook and runs down I-55. Route 855, the I-55 Flyer can, by law, drive on the shoulder of I-55 and can pass slow traffic. You can park in two lots for free. One is near I-55 and one is on Canterbury across from the police station and post office, so it is very safe. Ample free parking is no more than 150 feet from where you board the bus. Bus fare costs less than the train from Naperville or Lisle. The bus is a motor coach with wide reclining seats, package rack, TV, footrest, and a restroom. Inbound it goes as far as the intersection of Chicago Ave and Michigan Ave., so there may be no need to transfer to a CTA bus. That saves more money. Travel time to Chicago and Michigan from Bolingbrook is about 1 hou	Commuter		Other Resident					
	Please do not consider building bus depots or "kiss and ride" options on neighborhood residential streets. We are property owners on 4th Avenue and already get a flow of illegally parked "kiss and ride" cars. The flow of traffic is burdensome as it is. Please consider other alternatives before considering placing bus depots on more residential streets.		Resident of Naperville Metra Station Vicinity						
	To Whom it may concern, I live at 222 E 4th Ave, I am the first house on 4th Ave. I am STRONGLY opposed to any solution that may move buses or kiss and ride commuters to my street. Everyday I face the problem of people parking on the street in areas identied as no stopping or standing during rush hour periods. Nearly everyday I have to honk my horn or aggressively ask someone to move their car so I can pull into my driveway. In the mornings I have the same trouble getting out of my driveway. The street is just not wide enough to accommodate this traffic. If a proposed solution involves 4th avenue, I will have to involve every legal right to block this, as my patience with the city currently not enforcing the no parking rule has already worn my patience thin.		Resident of Naperville Metra Station Vicinity						
	Regarding commuter access, I have been a commuter for the last several years and have noticed an increasing traffic problem at the Route 59 station. I ride the PACE bus from a park-n-ride location (Wheatland Salem Church) to Rt. 59. Often times in the morning, the bus driver is forced to take different routes to avoid congestion at the light on Rt. 59 turning into the train station. The bigger problem, though, is the evening commute. Because there is no traffic signal or police officer directing traffic and there is no dedicated bus lane, it becomes a free for all to get out of the parking lot of the Rt. 59 station to head back to our cars on the south side of Naperville. Cars think nothing of cutting off the bus and it takes AT LEAST 20 minutes, if not longer, just to get out of the parking lot! We have voiced a concern and expressed a desire for a dedicated bus lane and/or traffic signal at the Rt. 59 station parking lot to the City of Naperville (where we reside and pay taxes) and the City of Aurora and PACE to no avail. This is extremely frustrating to say the least. It is high time the cities join together with PACE and the taxpayers to work out a solution to this traffic problem in the Rt. 59 station parking lot and surrounding area. As residents of Naperville, we expect this problem to be addressed.	Commuter		Other Resident		Rt. 59 commuter/ NAPERVILLE RESIDENT!			
	Would the busses currently serving south Naperville be included in this study? The buses at the Rt.59 station are very inconvenient for the commuters. The morning drop-off seems to work fine, however, the afternoon commute is horrible. The buses usually need 25 minutes to leave the Rt. 59 station. Since as commuters using mass transportation, we are trying to do the right thing for the city by reducing the number of cars on Rt.59 however, the city is not making it easy for us. We understand that the Rt 59 parking lot belongs to Aurora, but as Naperville residents, paying Naperville taxes, shouldn't our city take care of us? So again, are the busses serving south Naperville being considered and will they be moved to the new proposed depot?	Commuter		Other Resident					

Comment	Public input will be one factor considered when developing and evaluating bus depot alternatives. Please note that a number of factors will be considered, including: site		that apply (at least one o	="		
No.	location, configuration and access points; commuter parking impacts and mitigation options; and Pace and Metra requirements.	Commuter	Resident of Naperville Metra Station Vicinity	Other Resident	Other Stakeholder	If "Other Stakeholder," please specify
22	The fact that there are multi-year waiting lists for parking indicates that people want more parking. Please include the feasibility of acquiring the asphalt company land, and possibly the small office building in order to grow the Burlington lots. At the very least, this should be included in order to "mitigate" to lost parking spaces. There are no other services in Naperville that require multi-year waiting lists. The fact that nothing is being done about the parking situation is unacceptable. Meanwhile, crybaby neighbors are upset that there are buses and traffic near a train station that has been in continuous use for over 100 years!! Spending money to make these few crybabies happy, while leaving hundreds on multi-year waiting lists?? Removing parking spaces??? Instead of Adding? Crazy!!! http://en.wikipedia.org/wiki/Naperville_(Amtrak_station) " Naperville Station was originally built in 1910 by the Chicago, Burlington and Quincy Railroad". There are certainly ZERO residents in place since before the train station! 1) There is a need for MORE parking, not less 2) The asphalt property is an eyesore - make it into a lot to help commuters. 3) the parking is expensive - \$480	Commuter				
23	First, I have been a PACE rider for almost 10 years and have seen ridership on my route (684) increase dramatically over the years. One of the major issues I have as a rider is with the evening routes leaving the downtown Naperville station. My bus leaves from the sound side of the station, and between the busses leaving the station, commuters being picked up at the station, commuters exiting their parking spots around Burlington Park, and cars exiting the Parkview lot everyone is trying to get onto Washington Street, and some days it takes our bus 10 minutes just to get onto Washington Street, and then we sit in traffic until we get south of Chicago Avenue. I think of all the options being presented, a bus depot in the Parkview lot is the best alternative since it would have the easiest access to getting the busses on to Washington. However, that would mean a loss of parking spots in the "lot of the Gods" as we commuters lovingly refer to the Parkview lot, and those commuters would put up a fight if they were to be displaced. I have many good friends that park in the Parkview lot, and I know they cherish those spots.	Commuter				Also a PACE rider
24	To; Rory Fancler/T.E.D., Hello Rory, We spoke the other night at the open house. We own the property and run our business (Shiffler Builders Inc.) at the corner of North/Center. We also own the building directly north (313 N. Center St.) We represent a total of 13 tenants in apartments and 2- commercial tenants Some of our concerns if Location #7 is utilized for the new bus depot: -Added traffic/congestion from consolidating all 15 routes to this one area on this side of the tracks. If there are about 70 bus drop-offs/pick-ups now, I would expect that there would be about 16-18 more if all the routes used this area. I also assume that in the future there may be added routes to the systemThe additional emissions/pollution concentrated in this area is bad now and would get worseThe added noise levels at certain times of the day for our tenants as well as the area residents is a big negativeAn actual physical "Bus Depot" structure will detract from the view of the parkA single Depot will also concentrate persons coming to or through Naperville that may, how can I say itbe up to no good. I am certain that there would be increased vandalisim, crime and littering in our immediate area. This would certainly make our tenants as well as the other area residents feel less safe living in this neighborhood. It is likely that as Landlords, that it will be more difficult for us to find viable tenants for our apartments and commercial unit(s)A Bus Depot at location #7 could also adversly affect our property values now and in the futureFor us, location #1 has many of the negatives that location #7 has but to a somewhat lesser degreeIt would seem that the entirely commercial/parking area on the north side of the tracks (locations 2/3/4) would overall, negatively affect fewer residents/businessesAfter speaking to the staff at the open house on 9-12, I get the distinct feeling that location #7 is the front-runner for the depot. Since most of the routes come from the south, PACE seems to consider this th				Other Stakeholder	Center Street Property Owner and Tenant
25	I think that the Parkview lot is preferable for a few reasons. First, since most of the buses currently service the south side of the tracks, relocating all of them to the north side would add several minutes to everybody's commute, and the buses would have to leave earlier. Second, adding the additional traffic down Washington will potentially endanger kids coming to and from school. Third, the Parkview lot is somewhat hidden from Washington and public view. As the beautification of the 5th Avenue area proceeds, a parking lot on the north side will be a thumb to the eye of planners (and citizens) who want to improve the look and feel of Washington and 5th Avenue.	Commuter	Resident of Naperville Metra Station Vicinity			
	None of the proposals seems better than the existing setup, with north side busses staying on the north side of the tracks and south side busses staying on the south side. Forcing all the busses to one side or the other will create additional traffic/congestion issues that no one seems to be taking into account. Busses and cars will need to share the same streets no matter which of these plans would be implemented. They all seem like a solution in search of a problem. If Naperville has tax dollars burning a hole in its collective pocket, there must be better ways to spend them than this. How about connecting the upper and lower decks of the downtown parking garage on Chicago Ave behind the Barnes and Noble, for example? Or restore the fall brush pickup!	Commuter	Resident of Naperville Metra Station Vicinity			

Public input will be one factor considered when developing and evaluating bus depot alternatives. Please note that a number of factors will be considered, including: site better understand the perspective of participants in the public comment period.							
No.	location, configuration and access points; commuter parking impacts and mitigation options; and Pace and Metra requirements.	Commuter	Resident of Naperville Metra Station Vicinity	Other Resident	Stakeholder	If "Other Stakeholder," please specify	
27	I wanted to submit a few comments regarding the Bus Depot Feasibility Study alternative station/location number-seven (Burlington Square Park perimeter) including Center Street. Originally I didn't believe this area was even being considered for the bus depot. It seems to be in contradiction with the concept of getting the buses out of the area surrounding the train station. I believe the main premise for the depot is to alleviate traffic and buses stacking up on Ellsworth and in front of the train station. But this alternative would in my opinion produce even more congestion and disruption for residents around the train station. Also from what I understand it would add more bus routes to the already substantial number on the south side of the tracks. This it seems would only exacerbate the original congestion problems cited by residents. It would also dramatically reduce on street parking in the area. As one of the property owners on Center Street, clearly we would prefer that you choose one of the other study areas for the depot preferably on the north side of the tracks. I believe this Burlington Park-Center Street perimeter bus depot alternative could also be restrictive to any possible redevelopment around the train station in the future. I know that several developers have expressed interest in redeveloping the Center Street block with the idea of a project similar to the condo/retail structures in downtown Downers Grove. I think the idea of a development with condos on the upper levels and a restaurant and retail on the ground level would be good for Naperville and the Metra train station area in the future. It seems this is something the city would want to encourage to become a reality down the road. But I feel a bus depot around the Burlington Park-Center Street perimeter area could adversely affect the interest of future development around the Metra train station and Burlington Park area. These are just a couple of points of contention I wanted to express regarding the alternative station/location num					Property owner-321-325 N. Center Street, Naperville, Illinois	

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	Public input will be one factor considered when evaluating the bus depot alternatives. Please note that a number of factors will be considered, including: site location, configuration and access points; commuter parking impacts and mitigation options; and Pace and Metra requirements.	•	Resident of Naperville Metra Station Vicinity	Othon Posidont	Other Stakeholder	If "Other Stakeholder,"		
1	The list of people waiting to get a parking space is 8 years long! It doesn't make sense to reduce the amount of parking spaces. Not to mention the loss of income for the City.	Commuter Commuter	Vicinity	Other Resident	Stakenoider	please specify		
2	I believe that the City should not pursue the options that include closing the Parkview lot. I'm a commuter parker who waited MANY years to obtain a parking permit. The other options to close any of the lots are quite concerning as the current parking permit waitlist is 8-10 years. The parking shortage was a factor in delaying my decision to move to Naperville.	Commuter						
3	I think that any plan that eliminates parking at the train is a terrible idea. With such high demand for parking, as evidenced by the long wait lists for the various lots, it seems foolish to plan a bus depot without first having a plan for replacing the commuter parking. I waited 7 years for a spot in the Parkview lot, and have been a tax paying citizen of Naperville for almost 15 years. I don't think it's fair to take away my access to the train for a perceived "problem" by area residents. I have never seen any problems with the bus flow in 15 years.	Commuter		Other Resident				
4	What will happen to my parking space at the Parkview Lot? I waited a very long time to obtain this space and do not want to give it up. I already lost my Senior Citizen's free ride program on Metra and now Metra has increased the cost of tickets. Now the City of Naperville wants to take away my parking space? I strongly object to this!	Commuter	Resident of Naperville Metra Station Vicinity					
5	After reviewing the options, in my opinion, the South Side of the Train Station option seems like the best. The two most important issues are: minimal impact to parking and cost. This option eliminates the fewest parking sports. I'm sure if we redesign our current lots, we can find room for the 12 spots we would lose with this option. Regarding cost, the other options would require major changes to each site which would cost a great deal of money. This option would not. In these tough economic times, we should not be over spending. I do not think combining the kiss-and-ride location with the bus depot will cause problems. If the lanes are identified with appropriate signage, we shouldn't have a problem. This option would get the job done and maintain the character of the surrounding neighborhood. Naperville is unique and functional. That's why people like to live her. Thank you.		Resident of Naperville Metra Station Vicinity		Other Stakeholder	I commuted into Chicago for many years until recently.		
6	I strongly oppose the South option. It does nothing to mitigate the impact on local residents. Options on the North side of the tracks are the only ones that reduce the impact on residents. Parking Mitigation Option G. is not reasonable. We already have commuters and students parking in front of our homes all day. We have no driveways and can never find a spot to park in front of our homes.		Resident of Naperville Metra Station Vicinity					
7	Having lived in Naperville for almost 30 years and commuted for 18 of those years on the BNSF, I never felt that the Naperville train station was in drastic need for a bus depot, especially with one that could so dramatically effect the already drastic parking situation around the depot. Tearing up either the Parkview or Upper Burlington lot makes the least sense of all. What good could possible come by moving that many parkings spaces for a bus service that isn't used always used that much? If money really is itching in the city's pockets and it is truly felt that this needs to happen, the only choices that make any short or long term sense are for the Easy lot or for the South Side of the train station. These are the least destructive during construction to the area, and have the least effect on parking spaces that have to be migrated elsewhere. Again, I have to reinforce the lack of knowledge as to why this really needs to happen in the first place. I feel the money could be better used for the physical infrastructure of the city in other places; for I don't really see this as a major issue effecting commuters (again, spoken as a 18 year commuter).	Commuter			Other Stakeholder	After 12 year wai hold Burlington parking pass		
8	I agree there are going to be obstacles to all options but I, along with all four property owners on the 300 block of center street oppose the parkview lot completely, having a bus depot right behind our business would bring down property values. I own Orazio Pub and the traffic passing through the south side of the train station is already very congested with no room for relief. One car not used to the traffic pattern can cause a major back up so adding more busses to the mix will add more strain on not only my business, but the entire neighborhood. I understand the busses will have to go through neighborhoods no matter where you put them because of the location of the train station, but the north side offers a more open lot with a lot more flexibility to be set up to handle heavier traffic. Also the south side could easily be used for kiss and ride and handle 4 times what it already does and NOT block traffic like it does now. The northside is the answer and I would offer my time and knowledge of 25 years in this location to help in anyway I can. Thank you		Resident of Naperville Metra Station Vicinity		Other Stakeholder	Owner Orazio Pu 333 and 329 N Center St.		
	I have been on the waiting list for a parking space in the Burlington lot for over 10 years. As there are 98 people before me on the waiting list, and likely hundreds after, there are many commuters/residents in my situation. I would not be in favor of any option which would result in the loss of more than 100 parking spaces in that lot. In addition, it seems that moving all bus and kiss and ride activity to the same side of the tracks would create terrible congestion. Finally, I have not seen any information on the potential cost. Thank you for your consideration.	Commuter						
10	If the buses make a deal w/railroad for parking on railroad land, then it's no use to argue. The streets and parking have gotten steadily worse even to the point of parking past 4 hours and competing with Little Friend's workers for street parking along all surrounding streets, the speeding issues alone should be addressed, then the over-parking (tax paying residents are totally at bottom of pecking order) not just train buses, it's school buses and parkers racing to make their trains that are at issue. The college has, so far been the only principal to have even made an attempt at providing parking and even that is not enough, the competition for a space in a residential neighborhood has been severly compromised. Many of us have contacted code enforcement only to be told that, so long as traffic can pass in both directions it's OK for the diesel pollution (a known carcinigen) speeding, a threat to life, (crossing a street is not anoption). Keeping ahead of the game is difficult!		Resident of Naperville Metra Station Vicinity					
11	I've reviewed and visited the sites for the proposed Bus Depot Options and would like to submit these comments and observations for your consideration. South Train Station Option: This is the only option that doesn't seem to fulfill any of the criteria for the purpose of the Bus Depot study. It simply reshuffles the current problems to different areas and adds new, potentially dangerous, concerns for residents and commuters, vehicles and pedestrians. The most notable problem is the potentially dangerous intersection at 4th and Loomis created by changing the direction of the one-way on 4th Avenue towards the train station for a kiss-and-ride lane. Commuters coming from the North would risk being stranded on the tracks if traffic backs up from the kiss-and ride lane at the intersection either due to vehicles stopped or pedestrians crossing in the crosswalk. 4th Avenue runs along the tracks and there is not a lot of space between the intersection and the tracks. Loomis is also a designated walkway for children going South to Ellsworth school and mixing hurried commuters with walking school children is bad public safety policy. Dramatically increasing traffic at this intersection will obviously increase conflicts between vehicles and pedestrians and increase the risk of an accident between vehicle and train. Trains coming from the East do not have the ability to see the intersection in time to stop and Freight trains don't stop at the station moving in either direction. Many of the reasons for removing the Burlington Square Park (Perimeter) Option also apply to this Bus Depot option only with more conflicts:		Resident of Naperville Metra Station Vicinity					

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11 (continued)	- Limited kiss-and-ride capacity should demand increase - Limited right-of-way; requires encroachment into Burlington Square Park - Potential (increased) conflicts between buses, vehicles, pedestrians and trains! - Impacts to bus routes, schedules and operating costs - Burlington Square Park lease agreement with the Naperville Park District					
	Additional Limitations/Challenges/Conflicts: - Crossing at Loomis is potentially dangerous to vehicles going South if traffic stops because of kiss-and-ride backup or pedestrians crossing. - No direct access to the bus loading area. Buses will still need to be routed through the residential neighborhood to get to the depot. - Increased conflicts between buses and exiting kiss-and-ride vehicles and resident vehicles from 4th Avenue at Ellsworth. Residents on 4th Avenue will now have to be apart of the congestion at the train station. Residents who live on 4th Avenue and who gain access to their property using the alley on 4th Avenue will be forced to become a part of the congestion at the train station. The alley is the only way in and out for many residents and instead of exiting away from the station residents will now exit towards and into the bus depot. Buses, vehicles and pedestrians will all converge at the intersection of 4th Avenue and Ellsworth increasing the current existing conflicts. - Kiss-and-ride is located East of the station when most of the boarding occurs West of the station. - Increased traffic through residential neighborhood surrounding the train station. Kiss-and-ride vehicles will now have to drive through the residential neighborhood to get to 4th Avenue at Loomis. This will be a potential increase in conflicts between vehicles and pedestrians throughout the surrounding neighborhood not just at the train station. The only positive about this option is that the buses are consolidated for passenger loading/unloading. Maintaining the one-way on 4th Avenue and widening the street to include a safe kiss-and-ride lane that could also be fee parking during non-peak may be a better alternative. Unfortunately this option does nothing to enhance access to the train station and places additional burdens on the surrounding residential neighborhood.					
	additional depot elsewhere. - Alternatives 2 and 3 consolidate bus passenger loading/unloading and frees up the south station for kiss-and-ride traffic. These are good options but still have limitations/conflicts with vehicles and pedestrians that may need further review. - The exit onto Ellsworth from the depot has an increased conflict between buses, vehicles and pedestrians. - Increased conflicts between buses, vehicles and pedestrians at Ellsworth and 5th Avenue. Parkview Lot Options:					
	These are clearly the best options for the bus depot. All three alternatives support the purpose of the Bus Depot Study more than any of the other options. All three alternatives consolidate bus passenger loading/unloading. - minimize bus traffic/queues on residential streets. - reduce bus conflicts with pedestrian and kiss-and-ride traffic, increases pedestrian safety. - enhance access to the train station while having a low impact on the surrounding residential neighborhood. - have proximity to South platform, west of station where majority of boarding occurs. - have additional pedestrian access with underpass stairs on either side of Washington.					
	I believe Parkview Lot Alternative 2 is the best option for a bus depot: - It has potential benefit for bus routes. - It is separated from kiss-and-ride and pedestrian traffic, reducing traffic conflicts and increasing pedestrian safety. - It accommodates all existing bus routes with potential for future expansion. Parkview Lot Alternative 2 is what I think residents and commuters had in mind when asking for a bus depot. Thank you.					
12	Putting the South side buses in a depot on the North side of the tracks would be a disaster. The traffic conjestion from the kiss and ride and getting in and out of the station mixed with the buses would create huge delays. It is already congested now with just parkers and a couple buses. The best solution seems to be to use the South side of the station fr the south side buses and have the few north side buses on the north side. this would be a combination of the plan using the south side and the plan using a portion of the Eastern section of the burlington lot. An option that was not included was to take out a portion of the park in front of the station to make a better solution for the kiss and ride portion of the plan. It would seem if we took just a small portion of the northern edge of the park we could add more lanes to lessesn congestion and also separate the bus lanes from the car lanes. I am a 24 year commuter.	Commuter		Other Resident		
13	Thanks for the opportunity for comments, here are my thoughts: 1) One of the goals is to promote alternative transportation options, I'm not clear on how this is measured, can you explain this? 2) It seems preserving parking and vehicle access are the key items being considered with the goal of pushing the buses and their issues off where they will be less a bother for drivers. Car should be defined and a lower priority and treated as such. 3) The study didn't seem to consider both sides of the bus trip or the impact of a distant terminal: a) arrival - everyone wants to be at the station, why would I want to be anywhere else if it is raining or cold or the bus is running late or early. As a practical mater I think arrival should remain as it is today and it doesn't appear to be a congestion problem. I don't want to walk in the rain from the far corner of some lot because that is where the 677 is told to go, how would this enhance the commuter experience? b) departure - today if the 677 is late (more likely the train is late) I can wait in the station, I'm aware that some routes are always late. How does it promote the bus option to have us stand in some parking lot in the rain/snow/cold/heat and not wait in the station? 4) The real win/win situation would seem to be a way to get all the traffic (car and bus) to exit the station area quicker. This appears to be problem with the lights on Washington street not being flexible enough to handle large volumes for brief periods. No proposals seem to deal with this, the assumption is that you can massage the layout and fix the flow which would be really optimistic in this situation.					
14	Please consider the importance of the depot being well lit and located in an area that is not desolate or obscured (for safety reasons) We often have to wait for the bus (from the 6:50pm and 7:35pm trains) Consider the importance of the buses being able to quickly leave the immediate area. For example, the southeast bus routes are taking much longer to leave the area now because 4th avenue is blocked off. Having to take Washington, Center or Ellsworth adds time to the commute. Plus driving down streets like 4th and north seems safer for pedestrians as well as faster for the commuters. Ultimately I'm suggesting to look at how the depot location impacts the routes. Consider that some of the buses arrive 'just in time' in the morning so as things stand there isn't a lot of extra time to walk great lengths to the train platform. Pickup times might need to shift accordingly and would lengthen the overall commute.	Commuter				
15	30 year commuter and Parkview permit holder since it opened. Need to have parking permit as option (Children Museum best) as park and ride or carpooling not an option due to varying schedule. We should not lose our permit parking.	Commuter	Resident of Naperville Metra Station Vicinity			

	during the November 14 public open house.		Please check all that apply (at least one option must be checked). This information will help city staff better understand the perspective of participants in the public comment period.					
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16	I'd like to understand how so much time can be spent on resolution for bus traffic at the downtown station, yet when repeatedly asked to get involved with Route 59 problems, the standard reply is always that the buses are on the Aurora side. I have suggested moving them to Naperville's side to ridiculous excuses. Many of my fellow commuters have voiced their complaints to the city as well. I am a Naperville resident, as are many of the Route 59 commuters, yet you continue to ignore the problems at 59.	Commuter	Vicinity	omer resident	Starchouce	prease speeny		
17	Please consider acquiring the property (asphalt and small office) adjacent/contiguous to the Burlington Lots - or perhaps on the North side as well. A 9 year waiting list for parking is unacceptable. Why are commuters treated so poorly by the city? You doubled the price for parking and there is nothing to show for it. Also - Monthly bus passes are going up in price on jan or Feb 1? Also- Garden plots are 3 times larger than a parking space and are \$37 for 6 months. Parking is \$480/year for commuters but free for shoppers. Doesn't seem fair to me.	Commuter						
18	I believe that cancelling all permit parking in commuter lots would go a long way towards mitigating the parking issues at the station. Making all lots 100% daily fee would involve some additional infrastructure initially, but would ensure the most efficient use of the existing parking lots. I would be skeptical of any solution that does not materially increase the actual number of parking spaces available to commuters: additional ride sharing and public transit options might have a slight impact, but are basically ancillary.	Commuter		Other Resident				
19	Terrible idea. Shortage for parking as is and already a traffic logjam by the Parkview and Burlington lots. There are far more projects that Naperville needs to improve traffic than a bus depot.	Commuter						
20	My comments are from the perspective of a Naperville resident who has commuted to/from Chicago on the Burlington line for the last 25 years. Any reduction of the number and location of commuter parking spaces is disastrous. Each of the plans as presented have a negative impact on commuter parking. The needs and the desires of the residents/citizens/taxpayers/commuters must be strongly considered. The commuter with a parking permit seems to come out last again in your planning. In years past, you allowed taxis (which are for-profit businesses) to invade the parking lots and clog the driving lanes. They purposely incited commuters, and I actually witnessed confrontations. The city's response was to give the taxis in the East Burlington lot their own lane. I question whether any permit fee is paid by taxis for this privilege. Even this is not enough, as the taxis (and private commuter vans) still sometimes block driving lanes and permit parking spaces. Busing is important, but not nearly so much as you might think. Many times, I witness a rush hour Pace bus carrying only one, two, or three riders. From my previous residence in Saybrook, I walked to the train for 8 years, until an injury caused me to take the bus for a time. Unfortunately, the bus was very unreliable, and you could not be assured of which train you could catch to get to work. After a seven year wait, I obtained a parking permit, which allowed me to move to a more desirable home in Naperville. The so-called Kiss and Ride commuters are a major contributor to the problem in the commuter parking lots. They come into the lots and literally create gridlock during many rush hours. Poor city planning and lack of traffic enforcement has left this as a completely unchecked problem. The Kiss and Ride commuters should have their accomodations at a higher level than the for-profit taxis, and in a separate area. In my early years of commuting, I always asked my wife to pick me up north of the intersection of Brainerd and 5th Ave. when I was not walking. This kep		Resident of Naperville Metra Station Vicinity					
21	As a regular PACE rider (route 683) I think the current system is better than anything I see here. So my vote is simple: None of the above. Don't change a thing if you want to encourage the use of commuter buses. If you simply must make a change, the best alternative is the South of Train Station option with plan B for parking mitigation.	Commuter		Other Resident				
22	The Parkview alternatives seem to pack too much density in a very small space. Particularly of concern are the two views where the street (with the light) into the depot are two way to the depot entrance, but one way (going west) immediately beyond the depot. Seems like a recipe for disaster. Also, that road is a major thoroughfare for traffic across town, and in particular to the high school in the morning, thus there is a lot of a.m. traffic conflict on the street. Finally, the option with the 20' added to Parkview doesn't take into account the need to build up the surface due to the current angle down to Washington. I saw this in the other plans, but not for that Parkview alternative. The options for the Burlington lots seem to have better roadway egress to the east and west for buses. Does the kiss and ride have to be where it is in the main Burlington option (3 busses)? Can buses be on one side of tracks and kiss and ride on the other? People have to cross over and under anyway in many cases. Don't like the option in front of the train station. It seems to make the entrance to the station look like a parking lot rather than a somewhat quaint entryway to the station, fronted by the park.	Commuter	Resident of Naperville Metra Station Vicinity					
23	As a parking space stakeholder in Station 4, obviously my most immediate concern would be where will my new parking space would be located. Ideally, my commute time and access currently experienced shouldnt be compromised, or minimized. Waiting 9 years to get that spot was enduring enough and now having been in this lot for many years, I am concerned with losing the value of having this location. I do realize and appreciate that the plan will be implemented with care and caution based on my review of all the options, clearly there is a good amount of review and analysis taking place. My opinion is that Station 4 would be a more difficult option to implement based on costs of construction and traffic concerns. While the Station 4 is extremely convenient as a bus depot, the logistics of the bus arrival/departures would be an interesting traffic study, given the proximity to Washington street and turning the adjacent street to a two-way vs existing one way. I would envision daily morning and afternoon car commuters being a bit angry with the congestion at the traffic light on Washington. I hope my comments are helpful.	Commuter			Other Stakeholder	Parkview Lot stakeholder		
24	The most viable is the "South of Train Station" option. Why couldn't some of the park land / open space be converted for this use? All other require significant "mitigation" of lost parking spaces. With what is now the longest waiting list in the nation for a parking permit - this only compounds the frustration of Naperville commuters. I currently park in the Parkview lot and have been a commuter permit holder for almost 15 years. The park and ride closest to my home goes to the 59 station which increases my 10 ride ticket costs as well as the daily bus fee. The entrance and exit for the Parkview Lot during peak commuter hours is already a significant issue. If you are not among the first few to exit the lot, you can spend almost 10 minutes waiting for a break in the westbound traffic on North Ave. in order to exit the lot and make a left onto Washington Street. In addition it does not seem to make sense to add more bus traffic on the south side of the station with the college, private catholic school and a middle school all within three blocks. The congestion in that area already during the morning hours when parents are dropping off and students are walking to school would be substantially worse.	Commuter						
25	The final decision must take into consideration the lowest number of lost, or sacrificed, parking spots. As a Pace commuter, my observation is that most of the congestion is due to "conflicts" between kiss and ride commuters and Pace buses. Since most commuters have the option to utilize Pace, relocating the kiss and ride "lanes" should be considered above relocating bus loading. Additionally, reloacting those lanes would reduce congestion during bus arrivals and departures.	Commuter						

			ll that apply (at least better understand th			
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26	Consider the use of the vacant municipal works property. Allow both lanes on westbound North St to		Vicinity	Other Resident	Stakenoluei	prease specify
27	I park in the parkview lot which I have been for probably 5 years now. I was on the waiting list to get in that lot for 12 years and believe that lot to be the best accesible lot in all Naperville for commuters. I can't even imagin losing my spot there and how buses would pull in and leave in a lot that small. In addition, I am really concerned about the safety of commuters due to the crime that is usually associated around Bus Terminals. Lastly that area is so dense with traffic, pedestrians and housing adding to the congestions seems wrong and ill thought. Why wouldn't you think of Rt. 59 station with its easy accesibility and open parking that could be reconfigured to handle Bus Traffic.	Commuter				
28	I ride the BNSF train almost everyday, and I have not observed any problem with the current bus arrangements. The problem at the train station is the same for buses as cars: traffic leaving the noth side of the station at night. Rather than spend money on a bus depot, the city should reconfugure access to the station to allow quicker exit for all vehicles.	Commuter		Other Resident		
29	First, thank you for putting everything in easy to understand terms. I take the bus home and I was afraid that the commuters that take buses would have to walk fairly far to get on the buses. I think the layouts that you have look pretty fair for all parties involved which should eliminate the people who think it's okay to park in the bus lanes to pick up passengers.	Commuter				
30	The thought of losing my parking space fills me with great trepidation and I'm already losing sleep over this. The only thing regular about my work hours at the accounting firm where I work is that they are irregular. The bus is not an option for me so I have to drive. I spent 10 years on the list waiting for a parking spot. Most of the plans seem to cut the number of parking spaces available. I can't see anyone being happy with this as a potential outcome.	Commuter		Other Resident		
31	comments on the Parkview Lot Option Traffic on North Avenue needs to be considered. The proximity of the southern entrance and exit from the lot are too close to Washington Street for proper traffic flow. When the light on North Ave is red, buses turning from Washington Street to head east on North Ave will quickly fill the turning lane, but will not be able to turn, since the red light on North Ave will cause kiss and ride traffic on North Ave westbound to fill the lanes. The result will be North and South bound bus trafffic on Washington will not be able to turn and will stage on Washington Street. When the light on North AVe is green, the staged kiss and ride traffic will prevent buses from exiting the parking lot and crossing over to the westbound turning lane to head south on Washington. This is a current logistical problem even for cars leaving the Parkview Lot. Also, the heaviest bus traffic is in the evening when trains unload on the North side. It would make more sense to have the bus depot on the North side. As a long time Naperville resident and commuter, with parking so limited at the station, losing 135 parking spaces is irreplaceable. If alternates are available for relocating, it would make more sense to add to the parking capacity instead replacement parking.					
32	Parkview is not an appropriate choice without a viable plan to replace all 136 spaces with new spaces. The options mentioned to me at the open house were: 1) 58 spaces at the Children's Museum, which is 78 spaces short and reduces daily parking. Add this to the likely 15 spaces gone in Burlington North and there is a serious shortage. 2) The depot lot, but not enough room to replace spaces unless the whole area is taken. Also, it would be improper and possibly actionable to demote long-term parkers who worked their way up after years to the farthest parking, so the alternate would be to demote Burlington North parkers, ensuring that 300 people would be displaced and mad. 3) All other increased parking options listed would be costly, gain few spaces, or annoy the neighbors (more street parking – really? Wouldn't the solution be worse than the problem?). None of these options are diagramed or list how many spaces they would gain, showing that this part of the plan is not worked out. It would be irresponsible to approve half of a plan, one that shows taking spaces are taken but not replacing them in enough detail to be believable. The next problem with all Parkview plans is traffic flow. Access Option #1 has the most problems, as there will be cars trying to turn in where the best access has been for MANY years and they will have nowhere intelligent to turn around and will be wandering through the buses. There would be more traffic congestion on North Avenue than there is now. I heard it said that "it's only 12 buses versus 136 cars" and later I figured out what is wrong with that idea. The 12 buses will be moving in and out several times every morning and evening, but only about 30 cars go in for each train in the morning and leave after each train in the evening. Also they do not take the right of way, or all leave by the same exit. The buses will cause North Avenue to back up further than it does now and cause more cars to detour to other streets. Alternative #3 looks cleaner but ignores the tight turns and con					
33	The East Burlington Lot - Alternative 3 is a well thought out plan. This design meets the goal of the project with the added benefit of providing improved pedestrian safety, separate taxi lane, and additional bike areas. This improvement to the East Lot will also provide additional benefits to the community, such as the potential to expand (or more efficient layout) for the farmers market and other events. The East Lot needs attention and selection of this site would bring a change to the north side of the station. Also, by using the East lot, the simple yet elegant layout of the south side of the station is retained. The train depot and surrounding area would still have the historical look and feel of the area. As for the other alternatives, the use of the Parkview Lot is an option, but the traffic flow options are confusing and probably unrealistic. Alternative 1 & 2—with a left only lane should not be considered. Left turns are difficult enough at that intersection as many vehicles first go left, then cut across lanes and make a right onto Spring Avenue. A left turn only lane would only encourage the use of Spring Avenue when trying to go north. A left turn only lane also makes it tricky for residents on Center, Ellsworth, Brainard, Loomis, and North Avenue to go north on Washington. Residents would now be diverted either to Franklin Avenue (passing schools) or the train crossing on Loomis. All three Parkview options also have a "bus only" right turn lane off of Washington. Drivers on Washington are already confused enough at that intersection as many turn right onto the one-way North Avenue. The volume of traffic on North Avenue in the morning and the traffic mix of commuters, 203 schools buses, and parents/students heading to Washington and Naperville North could also be a concern as Metra buses try to turn into the Parkview lot.		Resident of Naperville Metra Station Vicinity			

	Below, please provide comments and/or questions regarding the bus depot alternatives displayed during the November 14 public open house.	Please check all that apply (at least one option must be checked). This information help city staff better understand the perspective of participants in the public period.				
	Public input will be one factor considered when evaluating the bus depot alternatives. Please note that a number of factors will be considered, including: site location, configuration and access points; commuter parking impacts and mitigation options; and Pace and Metra requirements.	Commuter	Resident of Naperville Metra Station Vicinity	Other Resident	Other Stakeholder	If ''Other Stakeholder,'' please specify
33 (continued)	The South of Train Station option doesn't really solve the problem. Just more buses in an already congested area. Every morning and evening there are Kiss-and-Ride drivers in the current bus lane. It's a natural event to drop off someone "in front of the train station", more so when someone is running late. Relocation to 4th avenue would just bring additional traffic to a residential street. The South of Train Station option does include a feature that should still be considered independent of the site selection. The corner extensions on Burlington Square Park for traffic control and pedestrian crossings are an excellent idea. As for parking, I agree that it should not influence the site selection and evaluated at later date. I would suggest an immediate halt to issuing parking permits to the lots surrounding the station until the issue is addressed.					
34	Taking away parking spots in the existing lots is not the answer. Parking is so tight as it is, and as an existing space renter in the Parkview Lot that took 10 years to get, I am definitely opposed to this idea. I do not find the areas where the buses currently load and unload a problem.	Commuter		Other Resident	Other Stakeholder	User of Parkview parking lot.
35	Naperville commuter parking is hard to come by especially for a new home owner like myself. While studing and researching the commuter situation I think it should be important to also audit the parking space owners. I am aware of several individuals who no longer have need to own a parking space at the Naperville they have since retired or have job in the suburbs now and do not take the train daily. These people are now selling their parking spot to other people letting them rent it while they still own the space. This behavior needs to spot and the city needs to enfore this. I urge you to take this into consideration while conducting your study if more people could get a parking spot they would not have to take the bus.	Commuter	Resident of Naperville Metra Station Vicinity			
36	Thank you for the opportunity to provide input. I have been a daily commuter and Pace bus rider for the past 17 years and expect to continue this practice for the foreseeable future. On limited occasion, my wife drives me to the station or I will use one of the daily parking slots to gain access to the train. That said, I am very aware of the situation at the Naperville station and agree something needs to be done to alleviate the traffic snarl and improve access. I applaud you for taking this on! The first question that comes to mind is the fact that with the Pace bus program periodically in jeopardy of making service cuts, will all of this evaluation and eventual construction become a moot point in short order? (Realizing that there are no guarantees in life, of course.) That question aside, why such focus on bus access? The Parking Mitigation Options portion seems to be somewhat of an afterthought in this scenario. I truly believe that in order for this project to achieve optimal success, all three elements: bus, commuter (kiss 'n ride) and parking must be given equal consideration. Instead, this project appears to make the assumption that train riders will reduce driving and parking constraints will be reduced in turn, just because bus access is improved. With these points in mind, I believe the project should include the following elements: A. Deploy the Parkview Lot - Alternative 2 option and create a dedicated area for Pace bus staging; B. Demolish the former Dept. of Public Works Building and construct a low-rise parking ramp on the Water Tower West site; C. Isolate Kiss 'n Ride, taxi and handicap parking areas on the North and South sides. This scenario: allows for future expansion if demand increases (and hopefully will); addresses some of the backlog for monthly parking passes; provides the opportunity to accommodate daily parking; and alleviates some of the strain on the residents around Burlington Square Park and home adjacent to 4th and 5th avenues. Please feel free to contact me for additional cl	Commuter				
37	Has a study been done to see if the number of Pace buses can be reduced? I often see buses less than half full. Maybe routes can be consolidated and eliminate some buses. Can the Museum lot be better utilized for kiss and ride commuters? You can easily access either side of the platform and it would remove congestion from in front of the station. Another option would be to spread out the buses. Move a couple to the Museum lot, one or two to Parkview, two to three south of the station, etc. If none of these are possibilities then the south side of the station option looks to be the best option.	Commuter				
38	While it is necessary to ease the bus impact on houses in the area - it is also necessary to consider the parking spaces you will be eliminating - which will mean probably eliminating daily pay parking spaces to accommodate those lucky enough to get parking lot permits. This is completely UNACCEPTABLE. How can it be that you need to be at the Naperville train station by 6.15 in order to get a daily parking spot. I realize this is not the venue regarding parking, but the bus depot will impact every aspect. I utilize both the pace bus and daily parking - I ride the train daily.	Commuter		Other Resident	Other Stakeholder	Naperville Resident and daily commuter to downtown Chicago
39	How can you even be considering eliminating commuter parking spots? The parking situation is terrible now. You should be considering building a muti-level parking deck.	Commuter				
40	I would hope that a very high priority be placed on minimizing negative impacts on available parking. I have been using the BNSF for 27 years and parking has always been the bigest issue with station access. Also, after having spent millions on platform refurbishment of questionable necessity, cost factors should be a concern.	Commuter				
41	Why isn't the acquisition of the eyesore Asphalt property being considered? What about the little office building? There is a 9 year waiting list for parking and you are considering getting rid of over 100 spaces?? Ridiculous!! Is there a 9 year wait for a building inspector?? A 9 year wait for electricity hookup or trash collection?? A 9 year wait for a garden plot or a timeslot to shoot a shotgun?? No - but a 9 year wait to get a parking space to go to work. Awful. Unless you are addressing the fundamental lack of parking, you are just avoiding the real issue. Buses can be part of the solution - but only if there is enough parking. Raise the prices for daily to \$3 and \$150 or \$200 quarterly - but get MORE spaces, not fewer.	Commuter		Other Resident		
42	Comments on Parking Mitigation Options: - "D. Coordinate with Pace to identify new park-and-ride location(s)" - "F. Evaluate preferred parking spaces for vanpools" - "H. Coordinate with homeowner associations to promote vanpools" The options D, F, H are only beneficial to commuters that travel during the rush hours. My major concern with the bus depot and parking mitigation proposal is that it will reduce the number of parking spaces, and only offer replacement options that are useful for those that travel at rush hour. For those traveling at offpeak times, e.g., returning from Chicago on the 8:30PM or later trains, there are no options for taking a commuter bus or van pooling. The only option for traveling offpeak is the use of daily parking spaces that open up after 9AM. The existence of these spaces is already a gamble due to their use by permit parkers (at present, daily spaces are relatively easy to find, that was not the case 2 years ago, and if the economy grows again, it would be reasonable to expect the 9AM daily spaces to be mostly filled by 9AM) "Option B - Demolish the former Department of Public Works building in order to provide additional parking spaces on the Water Tower West site." This is the best option listed to avoid decreasing the number of parking spaces available. The best option not listed is to build a multi-level parking garage at the station (I am aware that this has been considered in the past). Thank you.			Other Resident		
	Pleaseconsider those of us that use daily parking - it's very difficult now to get a spot prior to 9:00AM (and even afterwards), and losing any moredaily spots would worsen an already tough situation. As an aside, can anything be done to keep monthly permit parkers out of the numbered daily spots in the lots? It's very frustrating to be kept from parking in the lots close to the station (especially when returning late at night) when there are empty monthly permit-only spots open - many thanks!			Other Resident	Other Stakeholder	"Daily" spot parker at both commuter and nor commuter times

			all that apply (at least better understand the	_		
	Public input will be one factor considered when evaluating the bus depot alternatives. Please note that a number of factors will be considered, including: site location, configuration and access points; commuter parking impacts and mitigation options; and Pace and Metra requirements.	Commuter	Resident of Naperville Metra Station Vicinity	Other Resident	Other Stakeholder	If "Other Stakeholder," please specify
44	I am very happy that these plans where finally put together. I believe that if a better bus depot could be developed that more commuters would take the bus. The current system just doesn't work as the buses get caught up with all the kiss n drive traffic and daily spaces on the south side. I feel that the ability of the buses to leave the station quickly with as little traffic as possible is very important. I feel the South Side of Train station layout would work the best. And while I would lose my space in the Parkland lot, I think that plan is the second best layout.					,
45	Please do not use the Upper Burlington Lot or East Burlington Lot. There is no PACE Bus that serves the 4:43 AM Eastbound Train from the Naperville Fourth Avenue Station to Chicago. Thank you. P.S. There is currently graffiti in the station pedestrian tunnel at the base of the North Platform stair corridor. As commuter parking fees have doubled, the maintenance of the train station vicinity should be flawless.	Commuter		Other Resident	Other Stakeholder	
46	Expand current parking by building a commuter parking garage that will address the loss problem for the expanded bus service and the hundreds on the waiting list - this is a solution that has been waiting in the wings for too long.			Other Resident		
	1) I am curious what the number and percentage of bus riders are there today in respect to train ridership as well as number and percentage of monthly and daily parking users. I would assume the remainder would be kiss and ride and commuters who park off site or walk. What is the capacity and utilization of the buses per route? 2) These plans do not indicate the impact of weather on the parking. Snow is often piled high in some of these corners making bus traffic difficult to do. Will that be examined as part of the planning? I do not think saying that better management would be needed, because it probably won't happen. 3) What is the impact on handicapped or movement inhibited commuters on each scenario? In light of the far Burlington lot and Parkview lot, many people would have to walk farther (through ice and snow) because they can't use the stairs at Washington. They would have to use the tunnel. This makes it difficult for someone who slow. Also, the buses would have to adjust timing to allow for all the people to exit the train and arrive at the bus depot. Has this timing been calculated for the plans? 4) Although parking mitigation is discussed, it seems there are no plans for where existing commuters might be relocated. This should be part of the plan. As a stakeholder, I should be given information as what is to come of the parking pass I have. Additionally, by eliminating some places and reviewing the potential locations, I believe you will have slowed down the wait list even longer. What will be the impact of each plan on the wait list? 5) Has Pace considered right-sizing buses to the traffic, thus reducing the footprint of the buses? One of the original problems was how the buses were taking up space. Could smaller buses (see item 1) be used to transport commuters? This would take up less place and may allow the current system to remain. 6) Has the stakeholders of the commuter parking been fully informed, since I believe other than a letter, no other signs or flyers have been posted at the parking l				Other Stakeholder	A one -time Commuter and spouse of a commuter
48	I currently have a Parkview permit. Currently both cars and buses compete to leave the train station and the wait can be up to 10 minutes to exit a parking lot. The idea of a bus depot makes sense, but the traffic patterns of all the buses leaving at the same time need to be considered and improved, and not compete with the cars also leaving the station. Consider adding buses to meet all express trains mornings and evenings. This would further decrease the need for individual parking.	Commuter				
49	Any work at the train station that will reduce the number of parking spaces for commuters should not be approved to begin until a suitable alternative for the loss of parking is agreed. The parking situation at our train station is a long standing joke among commuters - a 10 year waiting list for a parking permit is unacceptable and to hear we will lose daily fee parking spaces as a result of this change is even more unacceptable. I suggest the following measures be taken before the bus depot configuration is approved: - Limit the number of parking permits to one per household until everyone on the waiting list has been satisfied - Conduct an audit of parking permits on a monthly basis; checking the cars in the lot to ensure the permit and car registration match and if they do not match revoke the parking permit and impose a fine to the permit holder - Remove the restriction on spaces where parking can only begin at 9:00am to match all other daily fee spaces. Commuters are the ones that need more flexible options for parking, especially if we need to wait 10 years for a parking permit.	Commuter				
50	How will the proposed bus depot impact persons with disabilities exiting trains and attempting to locate and board a Pace bus? Have the needs of persons with mobility disabilities, intellectual disabilities and sensory disabilities (i.e. blind/low vision and deaf/hard of hearing) been considered as this project has moved forward? Have efforts specifically been made to reach to the disability community on this project?			Other Resident		
51	Taking out entire Parkview Lot to serve 12 buses seem extreme. Seems like space could be more efficiently used. To go from what now exists to eliminating 136 parking spaces is questionnable to me.	Commuter				
52	I was surprised when I looked at all the exhibits. All said "Need to mitigate the loss of X number of parking spaces." However the exhibits did not say something like "this plan will provide bus access for X number of additional persons. For example if you lose 16 parking spaces that will impact 16-20 persons depending on # of persons per car. However additional buses hold approx 30 -40 persons. So if 16 parking spaces are lots, but 10 buses are accommodated, that is a trade off of huge additional capacity. If the buses make 2 or 3 runs, it's more capacity. This benefit needs to be leveraged. Also, you ought to raise the price of commuter parking spots. Chicago's prices to park went up when parking went private. People are paying it. Thank you.		Resident of Naperville Metra Station Vicinity			
53	Exiting south, even with stop lights, with back up all traffic coming west on North Street for multiple lights, unless the light is longer and delays Washington traffic. This will happen every 20 minutes! All buses leaving south now can fan out sooner, some going straight south and some turning right. Current Parkview cars can exit north or south, buses will not so the problem will worsen! Parkview removes the most spaces and no displacement plan looks palatable. It is also not a flexible choice, taking all spaces at once.					
54 55	Station 7 (South Side of the Train Station) - I believe this would be the least disruptive. The idea of having a kiss and ride on 4th Ave will not work. Additional congestion on the street will make it even more difficult to get on my driveway. If you do the K&R, then create a barrier between the K&R and the street so that both sides don't get backed up.	Commuter	Resident of Naperville Metra Station Vicinity			

	Below, please provide comments and/or questions regarding the bus depot alternatives displayed during the November 14 public open house.	Please check all that apply (at least one option must be checked). This information will help city staff better understand the perspective of participants in the public commen period.						
Comment No.	Public input will be one factor considered when evaluating the bus depot alternatives. Please note that a number of factors will be considered, including: site location, configuration and access points; commuter parking impacts and mitigation options; and Pace and Metra requirements.	Commuter	Resident of Naperville Metra Station Vicinity	Other Resident	Other Stakeholder	If "Other Stakeholder," please specify		
56	The gateway to downtown should NOT be cluttered with buses. Burlington Square is beautiful, green and an excellent welcoming ambassador to Naperville. Consider better wayfinding to downtown.							
57	Prefer Parkview 1 with North Ave traffic flow (2)		Resident of Naperville Metra Station Vicinity					
58	South Side of the Train Station is Best of the Lot 1) Least expensive; 2) does not negatively impact permit parking; 3) will accommodate all busses. Suggestion - move kiss and ride to north side after busses (3) that use the north side are relocated to the south side terminal. Partially remove portico on south side so that a straight curb along side of depot.		Resident of Naperville Metra Station Vicinity		Other Stakeholder	Former TAB member		

From:

Sent: Tuesday, November 15, 2011 7:32 PM

To: Fancler, Rory Subject: train parking

In addition to considering options for buses, you should also work with the police to enforce parking and traffic laws in the parking lots. The kiss-n-ride people and especially the taxi cabs park and drive in places where it is illegal, such as across the center lines. This is unsafe. Also they block in cars when they park and wait for someone to pick up. They should have to park in an empty spot while they are waiting or in designated spaces only. This is especially a problem for the afternoon express trains.

From:

Sent: Tuesday, November 15, 2011 3:51 PM

To: Fancler, Rory

Subject: Couldn't Make Open House

Follow Up Flag: Follow up Completed

I sent an email to the City a couple weeks ago but unfortunately don't remember which department I sent it to. I am a 35 year resident in Naperville and a commuter parking pass holder for almost as long. I have been in the Parkview lot since it was opened and before that on the north side. I am very concerned that I will lose parking as a result of this. I know your project design says parking space loss will be mitigated but I wonder what plans you have in place specifically for long term parking permit holders like me. My job requires variability in hours so park and ride and bus commuting are not an option. Please comment. Thanks.

From:

Sent: Tuesday, November 15, 2011 10:19 PM

To: Fancler, Rory Subject: Bus Depot

Follow Up Flag: Follow up Completed

Rory,

As a civil engineer that has a little experience in traffic and road design, I don't think the Parkview parking lot would be a good choice for the Bus Depot. The primary reason is that the exit is too close to the stoplight on Washington after turning left. The traffic at the light will back up before the buses are loaded and ready to exit the parking lot. In my opinion, they will have a difficult time getting out of the parking lot which will result in significant delays. I'd put the bus depot directly across the tracks in the upper lot.

Best Regards,

From:

Sent: Sunday, November 20, 2011 3:17 PM

To: Fancler, Rory Subject: Bus Depot

After looking over the newest bus depot sites, one caught my eye.

Fourth Ave. south of the train station.

Down under "Summary of initial Site Evaluation" one of the site opportunities stated that it requires no changes to existing bus routes on the south side of the train tracks. About 20 years ago, Pace Bus started to route their buses through our residential neighborhood. Now there are about 70 Pace buses a day going by, in addition to Trailways buses every day, school buses, beer trucks and other trucks for Orozios Bar, cars and an ever growing number of taxi's, etc. All of this traffic is causing untold noise and diesel fumes continuously throughout the day.

This has caused the value of our properties to go down in addition to the downturn of the economy right now. We pay high taxes on our property to be able to live in Naperville and yet are not getting the value for our payments.

Who wants to live on a street with this much congestion and noise and air pollution. This bus Depot plan would be very wrong for the neighborhood and would be completely ignoring what we have been putting up with all these years. This is a chance to fix the mistakes that were made 20 years ago.

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From:

Sent: Monday, November 21, 2011 4:52 PM

To: Fancler, Rory Subject: Bus Depot Study

Follow Up Flag: Follow up Completed

Hi Rory. I live in the 300 block of N. Wright St. which is the last block before the tracks. I live about a 1/2 block South of 4th Ave. and the tracks. I have been reviewing the material about the Bus Depot Study and have some concerns. First of all, it sounds like you are putting too much emphasis on how many parking spaces will be lost when the depot is finally built. That is something that doesn't seem that important compared to the impact the depot can have on the residents, for example. I believe that it might be wise to consider a parking garage at some point in the near future that can be located at any one of about 3 different locations without disburbing residents hardly at all. A garage could be located on the Parkview Lot, the East Burlington Lot or the Lower Burlington Lot.

Actually, the East Burlington Lot would be ideal for a garage. I also recommend this lot for the bus depot. See my comments a little later on.

Further study would be needed to determine which one would be best.

Another matter the city seems concerned about is the access to the pedestrian tunnel. I would suggest considering the possibility of building a new tunnel or bridge if the Upper Burlington Lot or the Parkview Lot are chosen. Next,I have a lot of concern about the 4th Avenue location and the South of the Train Station location. Both will generate a lot of traffic on 4th Avenue,Loomis,Sleight and Wright Streets. As it is, the commuters come speeding down Wright St. from the parking places along 4th Avenue.

They drive in a very unsafe manner. These two locations would have such an impact on the 4th Avenue residents as to be grossly unfair to them. I don't know that the city can avoid a certain amount of conflict no matter which location is chosen. The only thing you can do is minimize those conflicts. I would immediately eliminate the 4th Avenue and the South of the Train Station Locations as you certainly can't expand at either one of these locations and they will have the greatest impact on the residents. I think it is great that you are thinking ahead about the possibility of future expansion. This is something that is frequently ignored by others.

My choice would be the East Burlington Lot. This lot has huge potential for expansion including the parking lot to the North. I realize that the city does not own this property, however, the possibility exists to buy some or all of this land or work out a leasing arrangement. The limitations and challenges listed on your sheet that I printed out from your website don't seem that important relatively speaking. Many of these are problems that can be dealt with. I thank you for your consideration. If I can be of any further help, please let me know.

From:

Sent: Tuesday, November 22, 2011 12:07 PM

To: Fancler, Rory Subject: Bus Depot

One of the strengths of the Naperville community is it's train service to Chicago.

The wait for a spot in the Burlington lot is at least 8 years, If you take spaces from these lots it will severely impact this wait.

Some of the proposed areas would remove 140-150 spaces with no proposed solution to replace them.

I urge you to consider it a high priority to minimize the impact to the parking near the station.

Thank You

From:

Wednesday, November 23, 2011 1:24 PM Sent:

To:

Fancler, Rory Parking Lot - Bus Depot initiative Subject:

Hi Rory,

I submitted my comments earlier today via the website, one quick question, what is the expected timeframe in which 1) the designated lot will be identified, 2) once identified, time between implementing the plan, i.e parking spot changes?

Thanks Bob

From:

Sent: Wednesday, November 30, 2011 12:34 PM

To: Fancler, Rory

Subject: 5th Avenue Naperville Metra Station Bus Depot Study

Dear Rory,

Many thanks for all of your long hours and efforts on this project, we all really do appreciate everything you've done. Hopefully, the Planning & Zoning Commision and the City Council will heed our pleas and take action. The following are my comments for them. Gratefully,

Thirty plus years ago, the City of Naperville directed the Transportation Department to change both North Avenue and School Street into one way streets, primarily for access to the train station. The Greater Naperville Transportation System or GNATS bus system did not constantly run throughout the day. The Pace Buses however, run all day, approximately every 30 minutes. The rush hour Pace Buses are fully occupied, while the buses during the day have only 2 to 5 passengers on board or in most cases totally empty! What is the monetary cost of all these nearly vacant and empty buses to the City of Naperville? Each month, our neighborhood tolerates almost 2000 buses and hundreeds of cars encroaching past and around our homes, enroute to the train station, some days you can see the diesel exhaust hanging in the air encircling our homes. Any slight variation or emergency on the Burlington Metra rail line can result in 22 to 30 running buses waiting, lined up extending from the Metra Station down the street 2 to 3 blocks. Studies by the American Cancer Society (americancancersociety.com) of those constantly exposed to diesel exhaust found their risk of lung cancer increased by 50%! It is suspected that cancer of the larynx, pancreas, bladder and kidney may also be linked to diesel exhaust. Exhaust from diesel engines is made up of both gases and soot. The gas portion is mainly comprised of carbon dioxide, carbon monnxide, nitrogen dioxide, sulfur oxides and hydrocarbons, according

to the American Cancer Society"s web site. Commuters living in the Village of Lisle, leave the train take a few steps and board the buses. There is no crowding through a damp, dirty tunnel in order to board the buses. Please construct a Bus Depot on the north side of the train station for the commuters ease, our families lives, health, vegetation, and homes of our neighborhood.

Thank you,

From:

Sent: Wednesday, November 30, 2011 7:29 PM

To: Fancler, Rory Subject: suggestion

Follow Up Flag: Follow up Flag Status: Flagged

N. Center St. (that leads to parking) desperately needs to have a turn lane added. It would significantly reduce the backup that occurs as people try to exit the parking lot, especially during the busiest times. It should be relatively simple and inexpensive for the amount of good it would do.

From:

Sent: Thursday, December 01, 2011 9:38 AM

To: Fancler, Rory

Subject: Bus Depot alternatives

We would favor the possibilities that minimize traffic flow through or around the college and Historic District in order to keep the traffic from increasing in those high pedestrian areas and due to the narrow streets. Thanks.

From:

Sent: Thursday, December 01, 2011 9:37 AM

To: Fancler, Rory

Subject: Comment Letter Re: Bus Depot Alternatives

Attachments: Boecker Letter to Naperville re Bus Depot Alternatives 120111.doc

Good Morning Rory:

Attached is a comment letter concerning the Bus Depot Alternative plans.

I had hoped to get a comment letter submitted to you much earlier, however I just received comments from my clients yesterday.

The attached letter is unsigned. I intend to mail a signed copy to you, or in the alternative if you require a signed copy by tomorrow's deadline I will hand deliver it.

Will the attached copy suffice or do you need a signed copy of the letter?

Also, will the City send out an additional notice announcing the date of the hearings for the alternatives? In our phone conversation a couple of weeks ago, you mentioned likely dates of either January 7, 2012 or February 4, 2012.

Thanks so much.

December	1.	201	1

Ms. Rory Fancler, Project Manager City of Naperville Transportation, Engineering and Development Business Group 400 S. Eagle Street Naperville, Il 60540

Re: Proposed Bus Terminal Alternative Plans

Dear Ms. Fancler:

I am writing on behalf of the Boecker and Mueller families, the owners of the property commonly known as 190 E. 5th Avenue. My clients sincerely appreciate the opportunity to comment upon the proposed Bus Depot Alternatives currently under consideration by the City. The choices that the City makes are very important to my clients given the location of their property relative to the Metra train station as well as to the City owned commuter parking lots.

The Boecker and Mueller families clearly understand the importance of having appropriate facilities to accommodate rail commuters arriving and departing from the Metra station and in general support the City's efforts to improve the existing facilities. The benefits of properly functioning commuter facilities are beneficial to the residents and property owners in the immediate area and to the City in general.

After examining the alternate plans which have been put forth by the City, the Boecker and Mueller families tend to believe that the alternatives known as the Parkview Lot plan and the South of Train Station plan are the more desirable of the current proposals.

This position has been taken given the substantial number of both publically and privately owned parking spaces for commuters and for support of the commercial activites which are located north of the railroad tracks. This area north of the tracks already generates a fair amount of traffic and the infusion of a measurable amount of bus traffic will not be particularly beneficial to this area, especially as there are reasonable alternative opportunities to manage the traffic.

By focusing the bus depot improvements on the south side of the railroad tracks, the commuter auto traffic which is focused on the north side will be separated from the majority of the bus traffic. This scenario should tend to optimize the fluidity of traffic movement around the Metra station area.

I am available to discuss my clients' position on this matter. Please do not hesitate to contact me directly.

From:

Sent: Thursday, December 01, 2011 1:45 AM

To: Fancler, Rory Subject: Fancler, Rory

Follow Up Flag: Follow up Completed

Dear Rory Fancler,

Thank you for this opportunity to voice our opinion regarding the location of the Bus Depot and the rerouting of bus traffic.

A couple summers ago, our gracious neighbor allowed us to invite the Council Members to spend a few hours on her front porch to experience the complaints of the community for themselves. The traffic congestion, noise, smell and endless activity spoke for itself. When the trains are delayed, which is often, the cars and buses line up with their motors running just waiting. I have been caught in a traffic jam in front of my own home.

Due to the exhaust fumes of the buses, our lovely porch and bedroom windows must remain closed to keep out the horrendous stench and debris. The buses begin very early and continue for several hours. My husband works Midnights and the loud screeching of their breaks make it quite difficult to get proper rest. We do not permit our children to play in our front yard because of all the unsafe conditions.

Frankly, I am surprised that the City of Naperville would allow such poor conditions to occur in their so proudly acclaimed Historic District.

Some of our neighbors have insightful and logical solutions for this problem. One simple example, is to change the direction of the One Way streets. We are sure the experts can come up with a plan that will keep the heavy traffic away from the residential areas, yet be acceptable to the bus companies.

I look forward to a healthier and safer environment for our loved ones in the Naperville community. Along with your help we may achieve a brighter and more tranquil future.

Sincerely,

From:

Sent: Thursday, December 01, 2011 8:40 PM

To: Fancler, Rory

Subject: 5th Ave Metra Bus Depot Study

Rory,

As a long time (25 yrs) metra commuter and resident 2 blocks south of 5th Ave station, I strongly urge the City of Naperville to:

1st Priority: develop an appropriate Bus Depot in the Parkview Lot and remove as many buses and traffic from the nearby residential neighborhoods that have unjustly been burdened for too many years.

2nd Priority: develop a parking deck for metra commuters north of the tracks along the east side of Washington.

Thank you,

From:

Sent: Thursday, December 01, 2011 7:24 PM

To: Fancler, Rory

Subject: Bus Depot Alternatives at Downtown Naperville Train Station

Follow Up Flag: Follow up Flag Status: Flagged

I have been commuting to downtown Chicago from this station for 8 years and have traveled to and from the station:

- by driving myself and parking in a day-parking space
- having my husband drop me off and pick me up
- by PACE bus
- · walking on foot
- via taxi
- nope --- have not taken a bicycle -- not yet! ;-)

I have the following observations/comments:

It is not clear if the intention is to have one bus depot or more than one - what I mean is, will one be considered on BOTH the north (outbound to Aurora) side and the south (inbound to Chicago) side as it is now? Or, is the City proposing to have only one depot?

If considering two drop off / pick up points, then Station 6 East Burlington Lot for the north and Station 7 South of Train Station both make sense as the commuter drop/pickup points are nearest the underpass tunnel and the Station 7 location is also right in front of the Station building.

If considering only one place for the depot, then Station 7 South of Train Station makes perfect sense because:

- for commuters being dropped off by PACE, there is often very little time to get to the platform before the train pulls
 in.
 - So, if one needs to use the underpass tunnel, it makes sense to be as near to it as possible.
 - If one needs to buy a ticket at the METRA ticket window, a drop off closest to the building entrance is essential.
- for commuters being dropped off by PACE, these needs are served:
 - proximity to the shelter of the METRA station building in inclement weather
 - the additional safety of not having to walk farther than necessary on snow/ice covered walks
 - easier access to underpass, shelter and ticket cage for the physically challenged

I think taxi and kiss-n-ride would be better located away from the buses and on both north and south sides of the tracks using the Station 4 Parkview and Station 5 Upper Burlington spots. This would give easy access to the commuters being dropped/picked up but it would keep them separate from the bus loading/unloading areas providing increasing pedestrian safety and decreasing congestion.

Thanks.

From:

Sent: Thursday, December 01, 2011 11:27 AM

To: Fancler, Rory Subject: Bus Depot Feedback

Follow Up Flag: Follow up Flag Status: Flagged

Rory,

We own the properties at 301 N. Center (corner building) as well as 313 N. Center.

Some of our concerns with utilizing the Parkview lot for the Bus Depot are as follows:

- -Possible "bottle-neck" of traffic at the new mid-block light. This will back-up traffic right in front of our south parking lot entrance as well as in front of our building.
- -With the concentration of buses and pedestrians right next door to our properties we foresee the potential for increased vandalism and litter on our property.
- -Alternative 3 which allows all the buses to circle around the north end and back up Center St. would be the least desirable option. All the bus traffic would in-effect surround our properties.
- -Since we have 2-story structures with apartments that look out to the west (over the proposed depot location) we would ask that the new bus depot structures have buffers and/or be angled such that the majority of the noise and lighting be directed out towards Washington St. We would also want a solid, impenetrable type wall/fence on the east side of the Parkview lot to prevent easy access to our properties.
- -Along with the new singular Bus Depot location, we would hope that Police presence is increased in this area especially in the early/late hours of the day.
- -We are concerned with the concentration of the exhaust/pollution that would (with prevailing westerly winds) constantly be adversely affecting our air quality.
- -Finally, we worry that a Bus Depot located at the Parkview lot would decrease our property values.

Please feel free to contact us if you have any questions/comments. Sincerely,

From:

Sent: Friday, December 02, 2011 3:04 PM

To: Fancler, Rory

Cc:

Subject: Re: Bus Depot Comments

Dear Rory,

I wanted to submit a few comments on the proposed bus depot on the city owned Parkview lot. I feel discarding the depot alternative surrounding Burlington Square Park is a positive. But I still have a great number of concerns about having the depot located behind our property on the Parkview lot. The other property owners have contacted me to express their concerns that a Parkview bus depot would adversely affect the property values in the Center street area. They are also very concerned about dramatically increased traffic congestion and pollution in the area with businesses and restaurants that include outdoor seating. We would essentially be an island surrounded by buses. Some of our apartment tenants have also expressed concerns about the depot causing increased noise, congestion, and exhaust. Clearly concentrating 12-16 buses routing in either one or two different access points will create more congestion, noise, pollution etc... We all feel it would be preferable to locate the bus depot on the north side of the tracks as it provides many benefits.

These are just a few of my areas of concern, but I understand that it is difficult to find an alternative that is agreeable to all. So I appreciate your soliciting our feedback and comments. Thanks very much!

Sincerely,

From:

Sent: Saturday, January 07, 2012 9:33 AM

To: Fancler, Rory **Subject:** Bus Depot

Rory,

I was very impressed with your presentation. Thank you very much for your hard work. The Trailway buses do go by at odd hours and it feels like a house moving in front of our front windows, they are so large. Also the Pace buses do park more often than I think is realized in front of our houses. Sometimes, I look down toward the station and there are no buses between the station and North St. and still there could be two or three buses sitting in front of our houses.

Also, are those packets available to us through the city site and at the Municipal building?

Sincerely, Ellsworth St.

From:

Sent: Friday, February 24, 2012 11:20 AM

To: Fancler, Rory

Subject: Are there any graphics or images of the proposed changes to Fifth Avenue?

Rory:

It would be helpful to have graphics or illustrations of the proposed changes to Fifth Avenue to increase understanding and acceptance of the proposal.

Show what the bus areas would look like and the proposed area for installation, including possible areas where parking spaces would be lost.

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From:

Sent: Monday, February 27, 2012 5:02 PM

To: Fancler, Rory

Subject: Fwd: Naperville Transportation Advisory Board to Consider the Naperville Metra Station Bus

Depot and Commuter Access Feasibility Study - FULL AGENDA INCLUDED

Comment: It is unreasonable that there is a multi-year waiting list for parking and that the only proposals are those the REDUCE the number of parking spots. PLEASE consider aquiring the Asphalt property (and maybe the small office building) to EXPAND the number of parking spots. The parking permits DOUBLED in price so now reducing the number will definitely cost the city money. The people lving by the train station knew full well that a train was there (it has been since 1905?) and there have been buses there for a long, long time.

To not pursue an acquisition is really counter-productive. Please EXPAND the number of permit spots and then consider a change to busing. At best, any alternative should preserve the number of permit spots. To reduce them with a multi-year wating list is cruel and inhuman.

Also - garden plot spots are 3x larger than a parking spot and are \$40 for 6 months. Parking spots at the station are now \$480 / year. How is this fair???

Thank you.

-----Forwarded message ----From: City of Naperville <info@naperville.il.us

From:

Sent: Wednesday, February 29, 2012 12:10 PM

To: Fancler, Rory

Subject: Re: Naperville Transportation Advisory Board to Consider the Naperville Metra Station Bus

Depot and Commuter Access Feasibility Study - FULL AGENDA INCLUDED

1) Can you send the link to the "March 3 TAB agenda packet" - as it is not available on the page http://www.naperville.il.us/busdepotfeasibility.aspx - I have seen the options on http://www.naperville.il.us/emplibrary/Station%208%20-%20Bus%20Depot.pdf

2) Why is acquisition of the Asphalt property NOT one of the mitigation options? I am perplexed that selling off the Kroehloer lot to developers was "on the table" for the 5th avenue study, but adding parking to the existing lots by acquiring an eyesore property was not an option.

Thanks!!!

From:

Sent: Wednesday, February 29, 2012 5:06 PM

To: Fancler, Rory

Subject: Re: Naperville Transportation Advisory Board to Consider the Naperville Metra Station Bus

Depot and Commuter Access Feasibility Study - FULL AGENDA INCLUDED

Thanks for your responses.

While I am most in favor of the status quo (the train and buses were there when ALL of the residents bought their properties),

if the Parkview lot IS to be repurposed, I strongly favor making up ALL the lost parking on the water tower site (and adding more).

From:

Sent: Wednesday, March 07, 2012 10:02 AM

To: Fancler, Rory

Subject: Fwd: Staff Recommendations Considered for Metra Station Bus Depot and Commuter

Access Feasibility Study

Rory,

What will happen to all the ADA parking spaces in the Parkview lot when a bus depot is built there?

From:

Sent: Wednesday, March 07, 2012 3:52 PM

To: Fancler, Rory

Cc:

Subject: Feedback: Naperville Bus Depot Feasibility

Hi Rory,

First let me say I thought the feasibility study was very detailed and comprehensive. I appreciate the effort that goes into putting proposals together, so thank you for your effort and sharing this with the public.

I was not able to attend the Transportation Advisory meeting on March 3, but wanted to share my suggestions and feedback regarding the impact to commuter parking as a result of the proposed changes:

- Frequent audit of commuter parking lots; if the car registration does not match the parking permit, the parking permit should be revoked
- Limit the number of parking permits to 1 per household until all requests on the waiting list have been fulfilled. If there are currently households with more than 1 permit the additional permits should be revoked
- As a replacement for the parking that will be removed south of the tracks, adjust the parking restriction on the daily fee spaces in the Burlington and Kroehler lots from 9:00am to 8:00am.

The statistics provided in the study show that daily parking is full 100% of the time, and permit parking is not, therefore any changes that would reduce the number of daily fee spaces should not be supported or approved.

If you would like more details or have any questions on this feedback, please let me know.

1 nank	you		

From:

Sent: Wednesday, March 07, 2012 7:12 PM

To: Fancler, Rory

Subject: Bus depot/commuter lot

Hi,

I'm not an engineer ... but I do want to register my thoughts on the bus depot plan. I'd recommend that we keep the bus flow the way it is until the city can find a plan that does not eliminate parking spots. With gas prices going through the roof, and more and more citizens concerned about the environment, we need to add spots -- not eliminate them.

I wish our time and tax money could go toward finding a way to get more spaces.

Thanks,

March 8, 2012

Rory Fancler
Project Manager
City of Naperville Transportation Group

I have been a resident of Naperville since 1992 and have been commuting to downtown Chicago from the Naperville train station on a daily basis since the beginning (20 years). At the very start, I applied for a parking spot at the station and eventually got one many years later. I eventually was "upgraded" to the Parkview lot quite a few years after that (you can stay on the waiting list for a closer lot until you finally get to this lot). I'm sure you know how it works, but I wanted to at least emphasize the amount of time is invested to eventually get the privilege of parking in this lot.

My career is such that when I am working normal business hours, I use the Pace bus system to get to/from my home to the station, and I can drive/park in the Parkview lot when my hours are different and do not work with the Pace schedule. I am not just a driver or a Pace passenger -- I am both.

I've read the bus depot recommendation report on the website. I ask that the board please consider the following.

- I have never seen an issue of congestion with the buses arriving or departing the station. I would understand the need for a depot if I had witnessed any chaos or crowding as the buses and cars arrive and leave the station but the current setup has always run smoothly. I'm not sure what I am missing here. In all honesty, it feels like someone is trying to create a job (and career) for themselves with this project. And the taxpayers of course will have to pay for it.
- If the Parkview lot was changed to a bus depot, please consider how much time it would take for all of these buses to depart this lot. I have experience in exiting the Parkview lot and it takes a lot of time with just my car to actually merge into the traffic onto North Avenue in order to make a left turn onto Washington Street. I personally believe it would be a nightmare if the amount of buses you are considering were to try to do the same regardless of how you reconfigure that street. This would add even more time and frustration to the passengers' commute (which is long enough).
- I also disagree with the idea of re-painting any of the current lots to allow more spaces. If you've
 ever parked in a lot in downtown Chicago that has been re-painted to create more spots, you will
 understand. It is practically impossible to get in or out of your car without your door hitting the car
 next to you. I have witnessed individuals having to crawl into the passenger side of their car to
 get to the driver's seat.
- The amount of congestion I do envision if this depot were to be completed as suggested, would be the amount of passengers moving through the tunnel to get to/from the buses in both the morning and evening commutes. In addition, this would entail a much longer walk for a large number of commuters.

Thank you for your consideration.

From:

Sent: Monday, March 12, 2012 11:32 AM

To: Fancler, Rory

Subject: Re: Staff Recommendations Considered for Metra Station Bus Depot and Commuter Access

Feasibility Study

Rory,

ADA parking spaces can't be moved around willy nilly. There are slope considerations, proximity considerations, etc. It's really unconscionable that plans for a bus station could have been drawn without an equally detailed plan for the dislocated ADA parking spaces. "Oh, we'll just move them somewhere else" shows the lack of consideration for the handicapped that I have come to expect from the City of Naperville.

You may not know this, but for years I have fought with the city over ADA parking at the train stations. The ADA calls for parking to be distributed around and in close proximity to the train *station*. For years the city fought back saying the cluster of ADA spaces in the Parkview lot were advantageous to disabled commuters because it's at the west end of the platform where BNSF operates the lift equipped train cars.

Now a bus station suddenly trumps that consideration with ADA relocation not even part of the bus station planning? Unbelievable.

From:

Sent: Monday, March 12, 2012 2:13 PM

To: Fancler, Rory

Subject: Re: Staff Recommendations Considered for Metra Station Bus Depot and Commuter Access

Feasibility Study

Rory,

I don't think you get my point at all. It's impossible to evaluate the feasability of putting a bus station in the Parkview lot without also studying the feasability of moving the ADA spaces AT THE SAME TIME. Your assurance that the engineering of new ADA spaces will happen if and when the city council approves construction of a depot, is pointless if the only acceptable place for ADA spaces is the Parkview lot.

For example, the ADA requires that no facility renovation may make a facility LESS accessible than it was before the renovation. One could argue that moving the Parkview ADA spaces *anywhere* other than were they are, would make the facility less accessible. So if may be unfeasible to build a depot at Parkview at all. Your feasibility study, therefore, is not complete because you did not consider the ADA impacts.

With the city, ADA is always considered an engineering issue, not a design issue. That's the trouble with you guys; you don't consider ADA from the very beginning.

From:

Sent: Monday, March 12, 2012 9:24 PM

To: Fancler, Rory

Subject: Bus terminal at Naperville Metra station

Rory Fancler:

Was not able to attend the last TAB Board meeting, but as a former member of that board would like to make a few comments. As stated while on the board and also at the open forums, I believe that the best location for said terminal is in front of the depot on the South side. There is enough room for at least three lanes, with platforms between, and would eliminate only short term parking--the fewest--and provide plenty of space so that busses would not queue on Ellsworth St. in the evening. "Kiss and ride" which is really in effect during the morning rush can be diverted east on Fourth Ave. as some are doing now. The City has done a great job with the system of one way streets around the south side of the depot, and incorporating them into the project will make it work. I believe that this location is the least expensive, placing the terminal on the Parkview Lot would displace a great number of parking spaces as well as other negatives as to that llocation. There is no solution that will satisfy everyone, but sooner or later a decision will need to be made. I understand that the TAB Board couldn't make a firm decision.

From:

Monday, April 02, 2012 7:32 PM Fancler, Rory Metra Bus Depot Question Sent:

To:

Subject:

Was any thought ever put into locating the bus depot at the old Naperville public works garage that isn't being used anymore?

Best Regards,

From:

Sent: Thursday, April 12, 2012 4:32 PM

To: Fancler, Rory Subject: Transit Study

There is no bus that meets the 4:43 AM inbound METRA BNSF train to Chicago. I waited 8 years and 3 months for my parking permit. The parking fee has doubled while I remain on a multi year pay freeze in my single income Naperville City household. I currently compete for available parking with reverse commuters and AMTRAK passengers who occupy parking spaces for multiple weeks at a time. Please do NOT take my Burlington Parking Lot Parking Permit away from me and other similarly situated Naperville City resident commuters. Thank you.

From: Robles, Karyn

Sent: Monday, April 16, 2012 11:27 AM

To: Fancler, Rory

Subject: FW: Bus Depot Feedback

A

From:

Sent: Saturday, April 14, 2012 10:43 AM

To: Pradel, George

Subject: Fwd: Bus Depot Feedback

Mayor Pradel,	

First of all, we appreciated your presence at Ken's funeral. He enjoyed your friendship throughout the years.

Thank you for taking a moment to read this email correspondence before the April 17th meeting.

We are now the owners of the properties at 301 N. Center (corner building) and 313 N. Center. These properties have been owned by the Shiffler Family for decades. In-fact, our predecessors at Shiffler Builders Inc. built the buildings at both 313 and 321 N. Center. Our office has been in the 301 N. Center building since the 1940's.

We oppose the use of the Parkview lot for a Bus Depot.

We appreciate the comments/questions that the Transportation Advisory Board Members voiced at the March 3rd meeting when they voted (2-6) to not approve to recommend the Parkview Lot for a Bus Depot. We too question if there wouldn't be a better location for the Bus Depot. We feel that the final selection of a site should consider first the stakeholders and citizens of Naperville and secondly the wants/needs of the PACE bus company.

We have been communicating with the Manager/Owners of 321/325 N. Center (Paul Bernstein, John McCarthy) as well as 329/333 N. Center (the late Owen Egizio). As the owners of the properties directly adjacent to the potential Metra Bus Depot at the Parkview location, we have some shared specific concerns...

- -With the Bus Depot to the west of us and buses circling around the north end to access Center St. our properties would in-effect be "surrounded" by Bus Depot activity. We are very concerned what may happen if the Parkview Lot were to be approved by the Council and the final layout and traffic patterns were left to the "engineering phase".
- -Possible "bottle-neck" of traffic at the new mid-block light. This will back-up traffic right in front of our south parking lot entrance as well as in front of our building(s).
- -Having the Bus Depot right next door to our properties, we foresee the potential for increased vandalism and litter on our properties.
- -Since the entire fleet of PACE buses may be using one Depot, we are concerned with the concentration of the noise and exhaust/pollution that would constantly be adversely affecting our tenants and businesses.
- -We feel certain that a Bus Depot located at the Parkview lot would decrease all of our property values and may also limit the potential development of this area in the future.
- -We question how a Bus Depot at this location, fronting Washington Street, compliments the "beautification" efforts of the Washington Street corridor.

Thanks again and please feel free to contact us if you have any questions/comments before or after the 4-17 meeting.

From: Robles, Karyn

Sent: Monday, April 16, 2012 11:27 AM

To: Fancler, Rory

Subject: FW: Bus Depot Parkview Lot

From: Pradel, George

Sent: Monday, April 16, 2012 11:04 AM **To**: Schatz, Marcie; Robles, Karyn

Cc: Krieger, Doug

Subject: FW: Bus Depot Parkview Lot

From:

Sent: Friday, April 13, 2012 7:29 PM

To: Pradel, George

Subject: Re: Bus Depot Parkview Lot

Dear Mayor Pradel:

Our family along with the Lenert and Perry family own the apartment building property at 321-325 North Center Street in Naperville, Ill. I am writing this letter to express our opposition to the planning staff's recommendation for a bus depot, which will include 12-16 buses staging on the Parkview commuter lot. All the property owners on the Center Street block area have previously expressed concerns and opposition in writing and at the TAB meeting to this project. At the March 3rd, 2012 TAB meeting the commission majority voted 6-2 in opposition to building this bus depot on the Parkview lot. Metra has also expressed their opposition to the project. We believe this is the right decision, because building a bus depot on the lot will dramatically reduce all of the property values on the Center Street block area. It will also eliminate numerous commuter parking spots. The Parkview depot will discourage any incentive for developers in the future to redevelop the area around the train station. This proposal would essentially leave the Center Street block area surrounded by constant bus activity.

Another serious area of concern is the noise, pollution and increased traffic levels it will create. Many of our tenants have already expressed concerns about the noise and pollution that this depot alternative would create. In addition, next to our property, a new restaurant is going into the old Petey Z's property, and they are planning to include outdoor seating for their patrons. This depot alternative would clearly not be advantageous for them.

Owen Egizio the owner of Orazio's Pub who passed away last month in a motorcycle accident was very concerned about this Parkview depot. He believed this alternative would adversely affect his business. The buses would have to route right in front of his property in a very confined and tight area. He believed this depot proposal would dramatically reduce his customer traffic and hurt his overall business activity. I believe in his memory many of his concerns should be taken into account.

These are just a few of my areas of concern. We hope that you will take into consideration the views of all of

the property owners on Center Street many who have been there for more than 30 years.

Thank you very much!



BUS DEPOT CONCEPTS

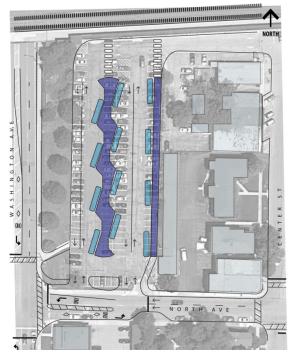


The following is a summary of the key features associated with the depot sites and their respective conceptual designs.

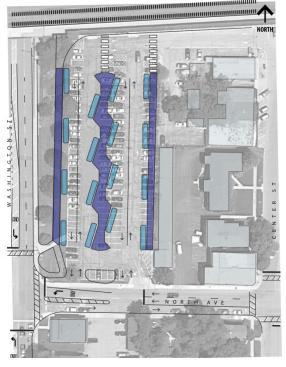
Parkview Lot Concepts

Alternatives 1A & 1B

- Location is in close proximity to the south (inbound) platform, which is a higher priority than the north (outbound) platform given commuters' preference to be closer to their desired platform when boarding a train in the morning than when alighting a train in the evening.
- Modified lane geometry and signal timing structure at Washington Street/North Avenue could enable North Avenue access to and from the depot, thereby limiting bus travel through the adjacent neighborhood.
- Provides dedicated area for bus use only, removing bus staging activity from public streets.
- Access to and from the depot is more proximate to Washington Street to decrease the potential for buses to mix with kiss-and-ride activity and other commuter traffic, which would be expected to have a positive impact on travel time.
- Design allows buses to enter and exit independently of each other, enabling assigned spaces for each bus route, if desired.
- Pedestrians walk parallel to the bus travel paths, minimizing the potential for conflicts and promoting safety for all depot users.
- With Alternative 1B there is potential to relocate the three north-side bus routes to the south side of the tracks. Should the City proceed with Alternative 1B, appropriate coordination should take place between the City and Pace Suburban Bus Service. The Appendix includes a summary of the anticipated impacts associated with relocation of the three northside routes to the south side of the tracks.
- Need to mitigate impact on 136 parking spaces in the Parkview Lot, as well as any additional on-street spaces impacted by changes in North Avenue lane geometry.



Alternative 1A

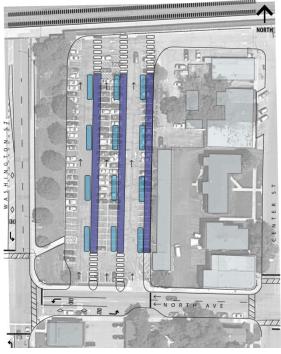


Alternative 1B



Alternative 2

- Location is in close proximity to the south (inbound) platform, which is a higher priority than the north (outbound) platform given commuters' preference to be closer to their desired platform when boarding a train in the morning than when alighting a train in the evening.
- Modified lane geometry and signal timing structure at the intersection of Washington Street/North Avenue could enable North Avenue access to the depot, thereby limiting bus travel through the adjacent neighborhood.
- Provides dedicated area for bus use only, removing bus staging activity from public streets.
- Ingress to the depot provides the opportunity for decreased bus interaction with kiss-and-ride activity and other commuter traffic, which would be expected to have a positive impact on travel time. Buses would then egress at the north end to Center Street, maintaining a similar departure route as is in place today for buses that stop on the south side of the tracks.



Alternative 2

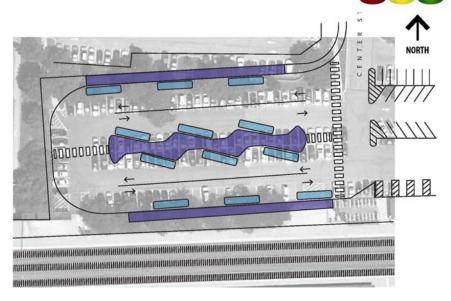
- Turning movements of exiting buses at the north end of the depot may conflict with vehicles accessing the adjacent commercial businesses.
- Design allows buses to enter and exit independently of each other, enabling assigned spaces for each bus route, if desired.
- Pedestrians walk parallel to the bus travel paths, minimizing the potential for conflicts and promoting safety for all depot users.
- Need to mitigate impact on 136 parking spaces within the Parkview lot, as well as any additional onstreet spaces impacted due to changes in lane geometry on North Avenue.
- With only inbound access via North Avenue, the traffic signal timing at the North Avenue/Washington Street intersection is not impacted as much as would be anticipated under Alternatives 1A and 1B.

Upper Burlington Lot Concept

- Location is in close proximity to the north (typically outbound) platform. This is a less desirable location than proximity to the south (inbound) platform, because commuters generally prefer to be closer to the platform when boarding a train in the morning than in the evening when feeder buses wait for outbound trains to arrive.
- Any bus routes relocated from the south side of the tracks would reduce bus travel on neighborhood streets and bus staging activity would be removed from public streets.
- Provides dedicated area for bus use only.



No direct access to/from the depot is provided. Arriving buses would enter the depot via 5th Avenue to Center Street and buses would exit at Center Street and/or Ellsworth Street. Access to a depot in this location would require buses to mix with other vehicles in the traffic stream and would also subject additional bus routes to 5th Avenue congestion, thereby negatively impacting travel time for transit riders and commuters who park in



the north-side parking lots. Additional bus route travel time would result in schedule change(s) and increased operation costs.

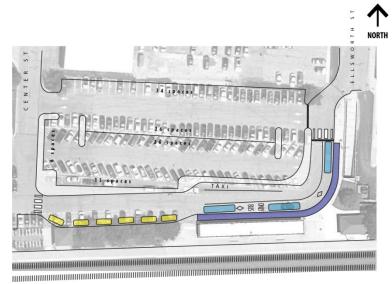
- Design allows buses to enter and exit the depot independently of each other, enabling assigned spaces for each bus route, if desired.
- Pedestrians would be directed to walk parallel to the bus travel paths in order to minimize the potential for conflicts and promote safety for all depot users; however, there is potential for conflicts between pedestrians and buses as the shortest route to the platform is perpendicular to the bus travel paths.
- Need to mitigate impact on 150 parking spaces within the Upper Burlington Lot and a portion of the Lower Burlington Lot.

Eastern Burlington Lot Concepts

Alternative 1

- Location is in close proximity to the north (typically outbound) platform. This is a less desirable location
 than proximity to the south (inbound) platform because commuters generally prefer to be closer to the
 platform when boarding a train in the morning than in the evening when feeder buses wait for outbound
 trains to arrive. It should be noted, however, that this location is proximate to the pedestrian tunnel to
 provide an accessible route to/from the inbound platform.
- This depot design does not directly improve bus travel or staging activity on neighborhood streets south
 of the tracks.
- This depot design does not meet the project objective of providing a dedicated area for bus use only.
 Rather, this concept provides a recessed lane for kiss-and-ride vehicles and increased separation between
 the staging area and the adjacent parking lot in an effort to reduce the potential for bus conflicts with
 vehicles when entering and exiting the depot area.

Buses would access this area using the same routes that are in place today north of the tracks, arriving via Center Street and departing via Ellsworth This access route requires buses to mix with other vehicles in the traffic stream and results in delays entering and exiting the depot. While the revised kiss-and-ride configuration and separation from the adjacent parking lot are expected to reduce some delays by decreasing the potential for conflicts, it is anticipated that the bus routes would still be subject to some delays as a result of this mixed traffic stream.



- Design is such that buses would likely enter in the order of arrival and would not easily accommodate assigned spaces for each bus route. Yet with only three buses in this area, consistent use of a designated bay for each bus is not as important as it may be with a larger depot. The presence of an adjacent bypass lane would enable buses to exit independently of each other, rather than in a first-in-first-out fashion.
- Pedestrians would be directed walk parallel to the bus travel paths in order to minimize the potential for
 conflicts and promote safety for all depot users; however, there is potential for conflicts between
 pedestrians and buses, as the shortest route to the platform is perpendicular to the bus travel paths. It is
 also worth noting that the crosswalk nearest the pedestrian tunnel lies across the exit route for buses and
 kiss-and-ride vehicles.
- Design provides for additional kiss-and-ride capacity compared to the current layout on the north side.
- Need to mitigate impact on 38 spaces in the Eastern Burlington Lot, including 11 accessible spaces.

Alternative 2

- Location is in close proximity to the north (typically outbound) platform. This is a less desirable location than proximity to the south (inbound) platform, because commuters generally prefer to be closer to the platform when boarding a train in the morning than in the evening when feeder buses wait for outbound trains to arrive. It should be noted, however, that this location is relatively proximate to the pedestrian tunnel to provide an accessible route to/from the inbound platform.
- Relocation of 9 bus routes from the south side of the tracks would reduce bus travel on neighborhood streets from 12 routes to 3 routes, and bus staging activity would be removed from public streets. It should be noted, however, that these relocated bus routes would be subject to and could exacerbate the evening peak period congestion and queuing that commonly occurs on 5th Avenue and Ellsworth Street.
- Provides dedicated area for bus use only.

NORTH

- Buses would access this depot using the same routes that are in place today north of the tracks, arriving via Center Street and departing via Ellsworth Street. This access route requires buses to mix with other vehicles in the traffic stream and results in delays entering and exiting the depot. While the revised kissand-ride configuration would be expected to reduce some delays by decreasing the potential for conflicts, it is still likely that the bus routes would be subject to some delays as a result of this mixed traffic stream.
- Arriving buses would make Alternative 2
- southbound left-turn from Center Street into the depot area, a movement
 - that has the potential to conflict with commuter vehicles departing the Upper Burlington Lot. The potential also exists for some vehicles leaving the Upper and Lower Burlington Lots to travel through the kiss-and-ride or bus depot areas toward Ellsworth Street, further increasing the potential for conflicts and outbound congestion from the depot area.
- Design allows buses to enter and exit independently of each other, enabling assigned spaces for each bus route, if desired.
- Pedestrians would be directed to walk parallel to the bus travel paths until they reach a defined crosswalk in order to minimize the potential for conflicts and promote safety for all depot users; yet because the shortest route to the platform runs perpendicular to the bus travel paths, there is the potential for conflicts between pedestrians and buses in this configuration. It is also worth noting that the crosswalk nearest the pedestrian tunnel lies across the exit route for buses.
- A separate area would be available for kiss-and-ride activity to limit mixing with commuters and bus staging. This area would be expected to accommodate more automobiles than the current configuration on the north side and may potentially be used midday for time-restricted daily fee Metra riders.
- Taxi passenger pick-up/drop-off area would be relocated to area north of bus depot and kiss-and-ride spaces, not adjacent to north platform or pedestrian tunnel.
- Need to mitigate impact on 151 spaces within the Eastern Burlington Lot, including 11 accessible spaces.

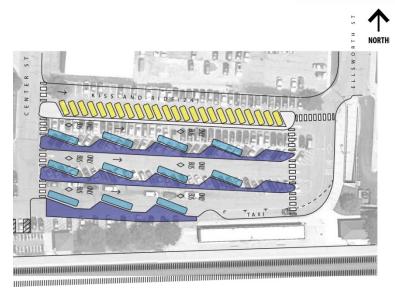
Alternative 3

Location is in close proximity to the north (typically outbound) platform. This is a less desirable location than proximity to the south (inbound) platform, because commuters generally prefer to be closer to the platform when boarding a train in the morning than in the evening when feeder buses wait for outbound trains to arrive. It should be noted, however, that this location is relatively proximate to the pedestrian tunnel to provide an accessible route to/from the inbound platform.



- Relocation of 8 bus routes from the south side of the tracks would reduce bus travel on neighborhood streets from 12 routes to 4 routes, and bus staging activity would be removed from public streets It should be noted, however, that these relocated bus routes would be subject to and could exacerbate the evening peak period congestion and queuing that commonly occurs on 5th Avenue and Ellsworth Street.
- Provides dedicated area for bus use only.
- Buses would access this depot using the same routes that are in place today north of the tracks, arriving via Center Street and departing via Ellsworth other vehicles in the traffic stream and

mixed traffic stream.



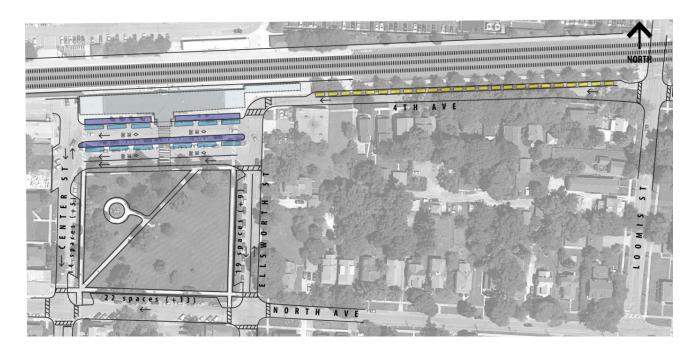
Street and departing via Ellsworth Street. This accentrative equires buses to mix with other vehicles in the traffic stream and results in delays entering and exiting the depot. While the revised kiss-and-ride configuration would be expected to reduce some delays by decreasing the potential for conflicts, it is still likely that the bus routes would be subject to some delays as a result of this

- Arriving buses would make a southbound left-turn from Center Street into the depot, holding the potential to conflict with vehicles departing the Upper Burlington Lot. The potential also exists for some vehicles leaving the Upper and Lower Burlington Lots to travel through the kiss-and-ride or bus depot areas toward Ellsworth Street, further increasing the potential for conflicts and outbound congestion. It is anticipated that motorists would be less likely to drive through the sawtooth design of Alternative 3 than the parallel design of Alternative 2, given the greater visual indication that the area is for bus use.
- Design allows buses to enter and exit independently of each other, enabling assigned spaces for each bus route, if desired.
- Pedestrians would be directed to walk parallel to the bus travel paths until they reach a defined
 crosswalk in order to minimize the potential for conflicts and promote safety for all depot users; yet
 because the shortest route to the platform runs perpendicular to the bus travel paths, there is the potential
 for conflicts between pedestrians and buses in this configuration. It is also worth noting that the
 crosswalk nearest the pedestrian tunnel lies across the exit route for buses.
- A separate area would be available for kiss-and-ride activity to limit mixing vehicles and bus staging.
 This area provides for additional kiss-and-ride capacity compared to the current configuration on the
 north side and may potentially be used midday for time-restricted daily fee Metra riders.
- Taxi passenger pick-up/drop-off area would be relocated to area north of bus depot and kiss-and-ride spaces, not adjacent to north platform or pedestrian tunnel.
- Need to mitigate impact on 151 spaces within the Eastern Burlington lot, including 11 accessible spaces.



4th Avenue Concept

- Location is in close proximity to the south (inbound) platform, which is a higher priority than the north (outbound) platform given the number of feeder routes present on the south side of the station.
- Buses would be expected to maintain their current routes on neighborhood streets. Bus staging activity
 would be removed from Ellsworth Street.
- While the depot area would be largely dedicated for bus use (during peak periods at a minimum), a
 bypass lane along the park is recommended in order to maintain access to Center Street businesses and to
 support area traffic circulation.
- Conversion of 4th Avenue to a one-way westbound roadway would allow kiss-and-ride commuters to exit directly from the passenger side of the vehicle onto the sidewalk, reducing the potential for vehicle-pedestrian conflicts. Westbound traffic flow would also encourage vehicles to drop-off/pick-up as far west along the curb as possible to be near the station and pedestrian tunnel, thereby discouraging double-parking and traffic obstructions at the kiss-and-ride entry as currently occurs in front of the station just west of Ellsworth Street. In addition, kiss-and-ride vehicles would enter the station area via Loomis Street and would therefore have less interaction with buses entering 4th Avenue south of the train station building.
- Design is such that buses would likely enter in the order of arrival and would not easily accommodate assigned spaces for each bus route.
- The area provided for kiss-and-ride activity would be expected to accommodate peak kiss-and-ride queues observed on the south side.
- Half of the buses would let riders out directly onto the platform, avoiding any potential for conflicts
 between buses and pedestrians. Riders on the remaining buses would be directed to walk parallel to the
 bus travel paths until they reach a defined crosswalk in order to minimize the potential for conflicts and
 promote safety for all depot users; however, there is potential for conflicts between pedestrians and buses
 as the shortest route to the platform is perpendicular to the bus travel paths. With the buses staged in a





- more closely-spaced, first-in/first-out configuration, the potential for pedestrians to cross between buses and outside of the marked crosswalk may be lessened. A mid-block crosswalk that aligns with the station's front door is included in this concept.
- Need to mitigate impact on 22 daily fee parking spaces on 4th Avenue between Ellsworth and Center Streets. This concept includes converting parallel parking spaces and parkway along the east, west, and south sides of Burlington Square Park into angled parking spaces.



ESTIMATED IMPACTS TO OPERATING COSTS FOR PACE SUBURBAN BUS SERVICE



Using data on current daily operating costs from Pace Suburban Bus Service for the routes currently serving the Naperville Metra Station, the project team developed an estimate of the increased operating costs that would result from relocated stops as identified for some of the concept alternatives. It should be noted that these estimates are based on an assumed six-minute increase in running time for each route relocated from the south side of the tracks to the north side or vice versa. These estimates do not include consideration for several logistical issues that would be expected to arise as a result of these route relocations, including:

- Compounded impacts of the additional running time throughout the day. This outcome would likely
 require bus schedules to be revised and may result in a discrepancy between the arrival and departure
 times of Pace buses and that of peak period Metra express trains. If the existing level of service were to
 be maintained, it is possible that two buses would be required to run a route that was previously run
 by one bus. The additional operating costs of adding a bus to affected routes is not included in the
 costs listed on the following page.
- The separation of routes that currently provide overlapped service outside of peak periods. Bus Routes 182, 183, 184, and 185 provide service to Pace riders from a combination of the existing feeder routes that serve the Naperville Metra Station, as detailed on page 120. This combined off-peak service is structured such that routes currently stopping on the north side of the tracks are grouped together and served by Route 182 and routes currently stopping on the south side of the tracks are grouped together (Route 183, 184, and 185). If only some of the routes are relocated to the opposite side of the tracks, it is likely that Pace would have to restructure this combined service and may need to add buses in order to maintain the current level of service to riders.



Table A1. Preliminary Estimates of Increased Annual Operating Costs due to Relocated Bus Routes

Bus Depot Alternatives	Bus Capacity (# of routes)	Maximum # of Bus Routes Impacted	Estimated Increase in Annual Operating Costs
Parkview Lot			
Alternative 1A	3 buses on north 12 buses on south (depot)	0 buses	N/A
Alternative 1B	0 buses on north 16 buses on south (depot)	3 buses	\$61,776.00
Alternative 2	3 buses on north 12 buses on south (depot)	0 buses	N/A
Upper Burlington Lot			
Alternative 1	12 buses on north (depot) 3 buses on south	9 buses	\$149,292.00 - \$220,627.68
Eastern Burlington Lot			
Alternative 1	3 buses on north (depot) 12 buses on south	0 buses	N/A
Alternative 2	12 buses on north (depot) 3 buses on south	9 buses	N/A
Alternative 3	11 buses on north (depot) 4 buses on south	8 buses	\$126,126.00 - \$205,183.68
4 th Avenue			
Alternative 1	3 buses on north 12 buses on south (depot)	0 buses	N/A

As shown in **Table A1**, the increase in operating costs may vary depending on the routes selected for relocation under the alternatives listed. For example, the relocation of Routes 530 and/or 714 would be more costly than relocating the station's feeder routes, since these two routes run throughout the day. Further details on the calculations performed to yield the values above are provided on the following pages. It should be noted that these estimates are preliminary in nature and that the City should coordinate with Pace to more precisely determine the impacts to bus operations, maintenance, and service should route relocation be desired in the future.

Naperville Bus Depot and Commuter Access Feasibility Study
Bus Route Impact Evaluation

Route	Daily Revenue	Daily Vehicle	Cost Per Hour	(Fox Valley	Daily Cost	Annual Cost	+6-mir	nute cost Roul	+6-minute cost Routes/day Add'l cost
	Hours	Hours	(First Student)	Koutes 530 + 714)					
676 Cress Creek	7.10		\$ 99.00		702.90	\$ 182,754.00	s	9.90	10 \$ 25,740.00
681 Naperville - Saybrook	2.47		\$ 99.00	0,	244.53	\$ 63,578	s	9.90	6 \$ 15,444.00
682 Naperville - Brookdale	3.32		\$ 99.00	0,	328.68	\$ 85,457	ss	9.90	8 \$ 20,592.00
677 Naperville - West Glens	3.67		\$ 99.00	0,	363.33	\$ 94,466	s	06'6	10 \$ 25,740.00
678 Naperville - Carriage Hill	4.54		\$ 99.00	0,	449.46	\$ 116,860	s	9.90	9 \$ 23,166.00
680 Naperville - Knock Knolls	3.80		\$ 99.00		376.20	\$ 97,812	s	9.90	6 \$ 15,444.00
683 Naperville - Ashbury	5.23		\$ 99.00		517.77	\$ 134,620	s	9.90	7 \$ 18,018.00
684 Naperville - Maplebrook	4.22		\$ 99.00		417.78	\$ 108,623	s	9.90	6 \$ 15,444.00
685 Naperville - West Wind Estates	4.01		\$ 99.00	0,	396.99	\$ 103,217	s	9.90	6 \$ 15,444.00
686 Naperville - Old Farm	3.72		\$ 99.00	0,	368.28	\$ 95,753	s	9.90	6 \$ 15,444.00
687 Naperville - Farmstead	3.85		\$ 99.00	0,	381.15	660'66 \$	s	9.90	6 \$ 15,444.00
688 Naperville - Huntington	4.15		\$ 99.00	0,	410.85	\$ 106,821	s	9.90	6 \$ 15,444.00
689 Naperville - Hobson Village	3.54		\$ 99.00	0,	350.46	\$ 91,120	s	9.90	6 \$ 15,444.00
783 Naperville - Evening Service ¹	7.35		\$ 99.00	0,	727.65	\$ 189,189.00	s	9.90	\$
wkday 520 Feedbar March March 112		70.93		\$ 76.20	5,404.87	\$ 1,405,265	s	7.62	24 \$ 47,548.80
saturday 330 rox valley iviall - ivapel ville		65.42		\$ 76.20	4,985.00	\$ 1,296,101	s	7.62	22 \$ 8,717.28
714 College of DuPage - Naperville - Wheaton		34.15		\$ 76.20	2,602.23	\$ 676,580	s	7.62	18 \$ 35,661.60
i e e e	10.02	01014	1 206.00	2 03 000		00 000 00 0 000 000			

imated at 7.35 hours per day based on hours the vehicle is required between trips. Mileage will vary

st to relocate:	Minimum	M	1aximum
3 routes from north to south	\$ 61,776.00 \$	\$	61,776.00
8 routes from south to north	\$ 126,126.00		205,183.68
9 routes from south to north	\$ 149,292.00	٠,	220,627.68

Afternoc	Afternoon Overlap		
Departs	Board Route # Covers:	How overlap is Accounted for in Routes/Day Count:	Total Number of Routes Subtracted from:
6:49pm	182 676, 681, 682	Subtracted 1 from 681, 682	9
4:39pm	183 677, 680, 683, 684, 685, 686	Subtracted 1 from 680, 683, 684, 685, 686	9
6:49pm	183 677, 680, 683, 684, 685, 686	Subtracted 1 from 680, 683, 684, 685, 686	9
7:29pm	184 677, 678, 680, 683, 684, 685, 686, 687, 688, 689	Subtracted 1 from 678, 680, 683, 684, 685, 686, 687, 688, 689	9
8:39pm	184 677, 678, 680, 683, 684, 685, 686, 687, 688, 689	Subtracted 1 from 678, 680, 683, 684, 685, 686, 687, 688, 689	9
4:39pm	185 678, 687, 688, 689	Subtracted 1 from 687, 688, 689	9
6:49pm	185 678, 687, 688, 689	Subtracted 1 from 687, 688, 689	9

	How overlap is Accounted for in Routes/Day Count:	Total Number of Routes Subtracted from:	
	Subtracted 1 from 681, 682	0 929	
, 685, 686	Subtracted 1 from 680, 683, 684, 685, 686	681 1	
, 685, 686	Subtracted 1 from 680, 683, 684, 685, 686	682 1	
, 684, 685, 686, 687, 688, 689	Subtracted 1 from 678, 680, 683, 684, 685, 686, 687, 688, 689	0 429	
, 684, 685, 686, 687, 688, 689	Subtracted 1 from 678, 680, 683, 684, 685, 686, 687, 688, 689	678 2	
	Subtracted 1 from 687, 688, 689	680 4	
	Subtracted 1 from 687, 688, 689	683 4	
		684 4	
		685 4	
		686 4	
		687 4	

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PRELIMINARY COST ESTIMATES

Prepared by Stanley Consultants

EXHIBIT 8

LONG-TERM RECOMMENDATION (SOUTH OF STATION - PARKVIEW LOT 1A) PRELIMINARY COST ESTIMATE

Note: If this alternate is selected to be constructed, it is recommended that the two way conversion of North Avenue shown in Exhibit 11 also be constructed.

Scope:

- -Modifications to the Parkview Lot including the construction of a saw-tooth shaped bus platform in the center of the Parkview Lot and a bus platform on east side of the Parkview lot.
- -Revised north curb line on North Avenue adjacent to Parkview Lot to provide dual entrances/exits.
- -Modifications to the signal system including installation of new traffic signal heads for southbound buses exiting the bus depot and for the relocated westbound stop bar on North Avenue

1. PAVEMENT REHABILITATION	QTY	UNIT	UNIT PRICE	TOTAL
PAVEMENT RESURFACING	3835	SQ YD	\$10.00	\$38,350.00
PAVEMENT REMOVAL	770	SQ YD	\$20.00	\$15,400.00
PAVEMENT REPLACEMENT	550	SQ YD	\$90.00	\$49,500.00
SUBTOTAL (PAVEMENT REHABILITATION)				\$103,250.00
2. CURB AND GUTTER				
CURB AND GUTTER REMOVAL	605	FOOT	\$8.50	\$5,142.50
COMBINATION CONCRETE CURB AND GUTTER	1015	FOOT	\$20.00	\$20,300.00
SUBTOTAL (CURB AND GUTTER)				\$25,442.50
3. SIDEWALK AND MEDIAN				
PORTLAND CEMENT CONCRETE SIDEWALK 6 INCH	170	SQ FT	\$7.00	\$1,190.00
MEDIAN, PORTLAND CEMENT CONCRETE 6 INCH	535	SQ FT	\$7.00	\$3,745.00
BUS PLATFORM, PORTLAND CEMENT CONCRETE 6 INCH	7210	SQ FT	\$7.00	\$50,470.00
SIDEWALK REMOVAL	826	SQ FT	\$2.00	\$1,652.00
SUBTOTAL (SIDEWALK AND MEDIAN)				\$57,057.00
4. ELECTRICAL				
TRAFFIC SIGNAL	1	L SUM	\$200,000.00	\$200,000.00
RE-OPTIMIZE TRAFFIC SIGNAL SYSTEM	1	EACH	\$5,000.00	\$5,000.00
LIGHTING	6	EACH	\$7,500.00	\$45,000.00
SUBTOTAL (ELECTRICAL)				\$250,000.00
5. SIGNING AND STRIPING				
SIGNING	10	EACH	\$160.00	\$1,600.00
PAVEMENT MARKING	1	L SUM	\$1,613.25	\$1,613.25
SUBTOTAL (SIGNING AND STRIPING)				\$3,213.25
BASE COST TOTAL				\$438,962.75
6. OTHER				
EARTHWORK	0	CU YD	\$35.00	\$0.00
DRAINAGE (ASSUME 5% OF BASE COST)	1	L SUM	\$21,948.14	\$21,948.14
LANDSCAPING/EROSION CONTROL (ASSUME 1% OF BASE COST)	1	L SUM	\$4,389.63	\$4,389.63
TRAFFIC CONTROL AND PROTECTION (ASSUME 5% OF BASE COST)	1	L SUM	\$21,948.14	\$21,948.14
CONSTRUCTION CONTINGENCY (ASSUME 20% OF BASE COST)	1	L SUM	\$87,792.55	\$87,792.55
SUBTOTAL (OTHER)				\$136,078.45
TOTAL				\$575,041.20

EXHIBIT 8
LONG-TERM RECOMMENDATION (SOUTH OF STATION - PARKVIEW LOT 1A)
PRELIMINARY COST ESTIMATE

ASSUMPTIONS

*EXISTING PAVEMENT WITHIN LIMITS OF PROPOSED PARKVIEW LOT IS ASSUMED TO BE RESURFACED. FUTURE COORDINATION WITH PACE WILL BE REQUIRED TO DETERMINE IF PAVEMENT STRUCTURE IS SUFFICIENT FOR ADDED BUS TRAFFIC. IF THE PAVEMENT STRUCTURE IS NOT SUFFICIENT, THERE WILL BE ADDITIONAL COSTS BEYOND THE COST ESTIMATE PROVIDED.

*INCLUDES RE-OPTIMIZATION OF TRAFFIC SIGNAL SYSTEM AT INTERSECTION OF WASHINGTON STREET AND NORTH AVENUE. *INCLUDES LIGHTING IMPROVEMENTS TO RECONFIGURED PARKVIEW LOT

*PAVEMENT RESURFACING INCLUDES THE FOLLOWING ITEMS:

- HOT-MIX ASPHALT SURFACE REMOVAL, 1 1/2"
- HOT MIX ASPHALT SURFACE COURSE, 1 1/2"

*PAVEMENT REPLACEMENT INCLUDES THE FOLLOWING ITEMS:

- PAVEMENT REMOVAL
- SUBBASE GRANULAR MATERIAL, 6"
- PORTLAND CEMENT CONCRETE BASE COURSE 8"
- HOT MIX ASPHALT BINDER COURSE, 2 1/4"
- HOT MIX ASPHALT SURFACE COURSE, 1 1/2"

*COST FOR PROPOSED CANOPIES ON BUS PLATFORMS IS INCLUDED IN THE COST PROVIDED FOR CONSTRUCTION CONTINGENCY

*IT IS ASSUMED THAT PRIOR TO THIS WORK, NORTH AVENUE BETWEEN CENTER STREET AND WASHINGTON STREET HAS BEEN CONVERTED TO A THREE LANE SECTION CONSISTING OF ONE EASTBOUND TRAVEL LANE AND TWO WESTBOUND TRAVEL LANES. THE WIDENING REQUIRED ON NORTH AVENUE TO THE NORTH, APPROACHING WASHINGTON STREET, TO ALLOW FOR THE RIGHT TURN MOVEMENT FROM NORTHBOUND WASHINGTON STREET TO EASTBOUND NORTH AVENUE IS ASSUMED TO HAVE ALREADY BEEN COMPLETED WITH THE MODIFICATION OF NORTH AVENUE TO A TWO-WAY STREET. IT IS ASSUMED THAT THE RELOCATION OF THE TRAFFIC SIGNAL EQUIPMENT AT THE NORTHEAST CORNER OF WASHINGTON STREET AND NORTH AVENUE WAS COMPLETED AT THE TIME OF THE CONVERSION OF NORTH AVENUE TO A TWO-WAY STREET.

EXCEPTIONS

*DOES NOT INCLUDE REMOVAL AND DISPOSAL OF HAZARDOUS MATERIAL.

*DOES NOT INCLUDE THE RELOCATION OF THE TRAFFIC SIGNAL EQUIPMENT AT THE NORTHEAST CORNER OF NORTH AVENUE AND WASHINGTON STREET.

*DOES NOT INCLUDE WIDENING REQUIRED ON NORTH AVENUE TO THE NORTH APPROACHING WASHINGTON STREET TO ALLOW FOR THE RIGHT TURN MOVEMENT FROM NORTHBOUND WASHINGTON STREET TO EASTBOUND NORTH AVENUE.

EXHIBIT 9

LONG-TERM RECOMMENDATION (SOUTH OF STATION - PARKVIEW LOT 1B) PRELIMINARY COST ESTIMATE

Note: If this alternate is selected to be constructed, it is recommended that the two way conversion of North Avenue shown in Exhibit 11 also be constructed.

Scope:

- -Modifications to the Parkview Lot including the construction of a saw-tooth shaped bus platform in the center of the Parkview Lot and a bus platform on the east side of the Parkview Lot.
- -Widening of the Parkview Lot to the west and the construction of a bus platform on the west side of the modified Parkview Lot. The area between the proposed bus platform on the west side of the Parkview Lot and the back of walk on Washington Street will require re-grading.
- -Revised north curb line on North Avenue adjacent to Parkview Lot to provide dual entrances/exits.
- -Modifications to the signal system including installation of new traffic signal heads for southbound buses exiting the bus depot and for the relocated westbound stop bar on North Avenue.

1. PAVEMENT REHABILITATION	QTY	UNIT	UNIT PRICE	TOTAL
PAVEMENT RESURFACING	3835	SQ YD	\$10.00	\$38,350.00
PAVEMENT REMOVAL	760	SQ YD	\$20.00	\$15,200.00
PAVEMENT REPLACEMENT	1062.8	SQ YD	\$90.00	\$95,652.00
SUBTOTAL (PAVEMENT REHABILITATION)				\$149,202.00
2. CURB AND GUTTER				
CURB AND GUTTER REMOVAL	952	FOOT	\$8.50	\$8,092.00
COMBINATION CONCRETE CURB AND GUTTER	1385	FOOT	\$20.00	\$27,700.00
SUBTOTAL (CURB AND GUTTER)				\$35,792.00
3. SIDEWALK AND MEDIAN				
PORTLAND CEMENT CONCRETE SIDEWALK 6 INCH	515	SQ FT	\$7.00	\$3,605.00
MEDIAN, PORTLAND CEMENT CONCRETE 6 INCH	535	SQ FT	\$7.00	\$3,745.00
BUS PLATFORM, PORTLAND CEMENT CONCRETE 6 INCH	9680	SQ FT	\$7.00	\$67,760.00
BUS PLATFORM PEDESTRIAN RAILING	270	FOOT	\$110.00	\$29,700.00
SIDEWALK REMOVAL	825	SQ FT	\$2.00	\$1,650.00
SUBTOTAL (SIDEWALK AND MEDIAN)				\$106,460.00
4. ELECTRICAL				
RE-OPTIMIZE TRAFFIC SIGNAL SYSTEM	1	EACH	\$5,000.00	\$5,000.00
TRAFFIC SIGNAL	1	L SUM	\$200,000.00	\$200,000.00
LIGHTING	6	EACH	\$7,500.00	\$45,000.00
SUBTOTAL (ELECTRICAL)				\$250,000.00
5. SIGNING AND STRIPING				
SIGNING	10	EACH	\$160.00	\$1,600.00
PAVEMENT MARKING	1	L SUM	\$2,709.25	\$2,709.25
SUBTOTAL (SIGNING AND STRIPING)				\$4,309.25
BASE COST TOTAL				\$545,763.25
6. OTHER				
EARTHWORK	286	CU YD	\$35.00	\$10,010.00
DRAINAGE (ASSUME 5% OF BASE COST)	1	L SUM	\$27,288.16	\$27,288.16
LANDSCAPING/EROSION CONTROL (ASSUME 1% OF BASE COST)	1	L SUM	\$5,457.63	\$5,457.63
TRAFFIC CONTROL AND PROTECTION (ASSUME 5% OF BASE COST)	1	L SUM	\$27,288.16	\$27,288.16
CONSTRUCTION CONTINGENCY (ASSUME 20% OF BASE COST)	1	L SUM	\$109,152.65	\$109,152.65
SUBTOTAL (OTHER)				\$179,196.61
TOTAL				\$724,959.86

EXHIBIT 9

LONG-TERM RECOMMENDATION (SOUTH OF STATION - PARKVIEW LOT 1B) PRELIMINARY COST ESTIMATE

ASSUMPTIONS

*EXISTING PAVEMENT WITHIN LIMITS OF PROPOSED PARKVIEW LOT IS ASSUMED TO BE RESURFACED. FUTURE COORDINATION WITH PACE WILL BE REQUIRED TO DETERMINE IF PAVEMENT STRUCTURE IS SUFFICIENT FOR ADDED BUS TRAFFIC. IF THE PAVEMENT STRUCTURE IS NOT SUFFICIENT, THERE WILL BE ADDITIONAL COSTS BEYOND THE COST ESTIMATE PROVIDED.

*INCLUDES RE-OPTIMIZATION OF TRAFFIC SIGNAL SYSTEM AT INTERSECTION OF WASHINGTON STREET AND NORTH AVENUE *INCLUDES LIGHTING IMPROVEMENTS TO RECONFIGURED PARKVIEW LOT

*PAVEMENT RESURFACING INCLUDES THE FOLLOWING ITEMS:

- HOT-MIX ASPHALT SURFACE REMOVAL, 1 1/2"
- HOT MIX ASPHALT SURFACE COURSE, 1 1/2"

*PAVEMENT REPLACEMENT INCLUDES THE FOLLOWING ITEMS:

- PAVEMENT REMOVAL
- SUBBASE GRANULAR MATERIAL, 6"
- PORTLAND CEMENT CONCRETE BASE COURSE 8"
- HOT MIX ASPHALT BINDER COURSE, 2 1/4"
- HOT MIX ASPHALT SURFACE COURSE, 1 1/2"

*COST FOR PROPOSED CANOPIES ON BUS PLATFORMS IS INCLUDED IN THE COST PROVIDED FOR CONSTRUCTION CONTINGENCY

*IT IS ASSUMED THAT PRIOR TO THIS WORK, NORTH AVENUE BETWEEN CENTER STREET AND WASHINGTON STREET HAS BEEN CONVERTED TO A THREE LANE SECTION CONSISTING OF ONE EASTBOUND TRAVEL LANE AND TWO WESTBOUND TRAVEL LANES. THE WIDENING REQUIRED ON NORTH AVENUE TO THE NORTH, APPROACHING WASHINGTON STREET, TO ALLOW FOR THE RIGHT TURN MOVEMENT FROM NORTHBOUND WASHINGTON STREET TO EASTBOUND NORTH AVENUE IS ASSUMED TO HAVE ALREADY BEEN COMPLETED WITH THE MODIFICATION OF NORTH AVENUE TO A TWO-WAY STREET. IT IS ASSUMED THAT THE RELOCATION OF THE TRAFFIC SIGNAL EQUIPMENT AT THE NORTHEAST CORNER OF WASHINGTON STREET AND NORTH AVENUE WAS COMPLETED AT THE TIME OF THE CONVERSION OF NORTH AVENUE TO A TWO-WAY STREET.

EXCEPTIONS

*DOES NOT INCLUDE REMOVAL AND DISPOSAL OF HAZARDOUS MATERIAL.

*DOES NOT INCLUDE THE RELOCATION OF THE TRAFFIC SIGNAL EQUIPMENT AT THE NORTHEAST CORNER OF NORTH AVENUE AND WASHINGTON STREET.

*DOES NOT INCLUDE WIDENING REQUIRED ON NORTH AVENUE TO THE NORTH APPROACHING WASHINGTON STREET TO ALLOW FOR THE RIGHT TURN MOVEMENT FROM NORTHBOUND WASHINGTON STREET TO EASTBOUND NORTH AVENUE.

EXHIBIT 10 LONG-TERM RECOMMENDATION (SOUTH OF STATION - PARKVIEW LOT 2) PRELIMINARY COST ESTIMATE

Note: If this alternate is selected to be constructed, it is recommended that the two way conversion of North Avenue shown in Exhibit 11 also be constructed.

Scope:

- -Modifications to the Parkview Lot including the construction of three ten foot wide bus platforms running North/South.
- -Revised north curb line on North Avenue adjacent to Parkview Lot to provide three entrances into Parkview Lot.
- -Modifications to the signal system including installation of new traffic signal heads for the relocated westbound stop bar on North Avenue.

1. PAVEMENT REHABILITATION	QTY	UNIT	UNIT PRICE	TOTAL
PAVEMENT RESURFACING	3370	SQ YD	\$10.00	\$33,700.00
PAVEMENT REMOVAL	900	SQ YD	\$20.00	\$18,000.00
PAVEMENT REPLACEMENT	715	SQ YD	\$90.00	\$64,350.00
SUBTOTAL (PAVEMENT REHABILITATION)				\$116,050.00
2. CURB AND GUTTER				
CURB AND GUTTER REMOVAL	600	FOOT	\$8.50	\$5,100.00
COMBINATION CONCRETE CURB AND GUTTER	1530	FOOT	\$20.00	\$30,600.00
SUBTOTAL (CURB AND GUTTER)				\$35,700.00
3. SIDEWALK AND MEDIAN				
PORTLAND CEMENT CONCRETE SIDEWALK 6 INCH	451	SQ FT	\$7.00	\$3,157.00
MEDIAN, PORTLAND CEMENT CONCRETE 6 INCH	282	SQ FT	\$7.00	\$1,974.00
BUS PLATFORM, PORTLAND CEMENT CONCRETE 6 INCH	8035	SQ FT	\$7.00	\$56,245.00
SIDEWALK REMOVAL	825	SQ FT	\$2.00	\$1,650.00
SUBTOTAL (SIDEWALK AND MEDIAN)				\$63,026.00
4. ELECTRICAL				
RE-OPTIMIZE TRAFFIC SIGNAL SYSTEM	1	EACH	\$5,000.00	\$5,000.00
TRAFFIC SIGNAL	1	L SUM	\$200,000.00	\$200,000.00
LIGHTING	6	EACH	\$7,500.00	\$45,000.00
SUBTOTAL (ELECTRICAL)				\$250,000.00
5. SIGNING AND STRIPING				
SIGNING	10	EACH	\$160.00	\$1,600.00
PAVEMENT MARKING	1	L SUM	\$1,782.00	\$1,782.00
SUBTOTAL (SIGNING AND STRIPING)				\$3,382.00
BASE COST TOTAL				\$468,158.00
6. OTHER				
EARTHWORK	0	CU YD	\$35.00	\$0.00
DRAINAGE (ASSUME 5% OF BASE COST)	1	L SUM	\$23,407.90	\$23,407.90
LANDSCAPING/EROSION CONTROL (ASSUME 1% OF BASE COST)	1	L SUM	\$4,681.58	\$4,681.58
TRAFFIC CONTROL AND PROTECTION (ASSUME 5% OF BASE COST)	1	L SUM	\$23,407.90	\$23,407.90
CONSTRUCTION CONTINGENCY (ASSUME 20% OF BASE COST)	1	L SUM	\$93,631.60	\$93,631.60
SUBTOTAL (OTHER)				\$145,128.98
TOTAL				\$613,286.98

EXHIBIT 10 LONG-TERM RECOMMENDATION (SOUTH OF STATION - PARKVIEW LOT 2) PRELIMINARY COST ESTIMATE

ASSUMPTIONS

*EXISTING PAVEMENT WITHIN LIMITS OF PROPOSED PARKVIEW LOT IS ASSUMED TO BE RESURFACED. FUTURE COORDINATION WITH PACE WILL BE REQUIRED TO DETERMINE IF PAVEMENT STRUCTURE IS SUFFICIENT FOR ADDED BUS TRAFFIC. IF THE PAVEMENT STRUCTURE IS NOT SUFFICIENT, THERE WILL BE ADDITIONAL COSTS BEYOND THE COST ESTIMATE PROVIDED. *INCLUDES RE-OPTIMIZATION OF TRAFFIC SIGNAL SYSTEM AT INTERSECTION OF WASHINGTON STREET AND NORTH AVENUE *INCLUDES LIGHTING IMPROVEMENTS TO RECONFIGURED PARKVIEW LOT

- *PAVEMENT RESURFACING INCLUDES THE FOLLOWING ITEMS:
 - HOT-MIX ASPHALT SURFACE REMOVAL, 1 1/2" - HOT MIX ASPHALT SURFACE COURSE, 1 1/2"
- *PAVEMENT REPLACEMENT INCLUDES THE FOLLOWING ITEMS:
 - PAVEMENT REMOVAL
 - SUBBASE GRANULAR MATERIAL, 6"
 - PORTLAND CEMENT CONCRETE BASE COURSE 8"
 - HOT MIX ASPHALT BINDER COURSE, 2 1/4"
 - HOT MIX ASPHALT SURFACE COURSE, 1 1/2"

*COST FOR PROPOSED CANOPIES ON BUS PLATFORMS IS INCLUDED IN THE COST PROVIDED FOR CONSTRUCTION CONTINGENCY

*IT IS ASSUMED THAT PRIOR TO THIS WORK, NORTH AVENUE BETWEEN CENTER STREET AND WASHINGTON STREET HAS BEEN CONVERTED TO A THREE LANE SECTION CONSISTING OF ONE EASTBOUND TRAVEL LANE AND TWO WESTBOUND TRAVEL LANES. THE WIDENING REQUIRED ON NORTH AVENUE TO THE NORTH, APPROACHING WASHINGTON STREET, TO ALLOW FOR THE RIGHT TURN MOVEMENT FROM NORTHBOUND WASHINGTON STREET TO EASTBOUND NORTH AVENUE IS ASSUMED TO HAVE ALREADY BEEN COMPLETED WITH THE MODIFICATION OF NORTH AVENUE TO A TWO-WAY STREET. IT IS ASSUMED THAT THE RELOCATION OF THE TRAFFIC SIGNAL EQUIPMENT AT THE NORTHEAST CORNER OF WASHINGTON STREET AND NORTH AVENUE WAS COMPLETED AT THE TIME OF THE CONVERSION OF NORTH AVENUE TO A TWO-WAY STREET.

EXCEPTIONS

*DOES NOT INCLUDE REMOVAL AND DISPOSAL OF HAZARDOUS MATERIAL.

*DOES NOT INCLUDE THE RELOCATION OF THE TRAFFIC SIGNAL EQUIPMENT AT THE NORTHEAST CORNER OF NORTH AVENUE AND WASHINGTON STREET.

*DOES NOT INCLUDE WIDENING REQUIRED ON NORTH AVENUE TO THE NORTH APPROACHING WASHINGTON STREET TO ALLOW FOR THE RIGHT TURN MOVEMENT FROM NORTHBOUND WASHINGTON STREET TO EASTBOUND NORTH AVENUE.

EXHIBIT 11 NORTH AVENUE - RECOMMENDED TWO-WAY CONVERSION PRELIMINARY COST ESTIMATE

Scope:

-Conversion of North Avenue between Center Street and Ellsworth Street to a two lane section (one eastbound travel lane and one westbound travel lane) with diagonal parking on the north side and parallel parking on the south side.

-Conversion of North Avenue between Center Street and Washington Street to a three lane section consisting of one eastbound travel lane and two westbound travel lanes. Widening is required on North Avenue to the north approaching Washington Street to allow for the right turn movement from northbound Washington Street to eastbound North Avenue. Due to the widening, the traffic signal equipment located at the northwest corner of the Washington Street/Center Street intersection will need to be relocated.

1. PAVEMENT REHABILITATION	QTY	UNIT	UNIT PRICE	TOTAL
PAVEMENT RESURFACING	3000	SQ YD	\$10.00	\$30,000.00
PAVEMENT REMOVAL	187	SQ YD	\$20.00	\$3,740.00
PAVEMENT REPLACEMENT	530	SQ YD	\$90.00	\$47,700.00
SUBTOTAL (PAVEMENT REHABILITATION)			*******	\$81,440.00
2. CURB AND GUTTER				
CURB AND GUTTER REMOVAL	490.2	FOOT	\$8.50	\$4.166.70
COMBINATION CONCRETE CURB AND GUTTER	490.2 670	FOOT	\$20.00	\$13.400.00
SUBTOTAL (CURB AND GUTTER)	070	1001	Ψ20.00	\$17,566.70
3. SIDEWALK AND MEDIAN				
PORTLAND CEMENT CONCRETE SIDEWALK 6 INCH	2610	SQ FT	\$7.00	\$18,270.00
MEDIAN, PORTLAND CEMENT CONCRETE 6 INCH	2010	SQ FT	\$7.00 \$7.00	\$10,270.00
BUS PLATFORM, PORTLAND CEMENT CONCRETE 6 INCH	0	SQ FT	\$7.00	\$0.00
SIDEWALK REMOVAL	2865	SQ FT	\$2.00	\$5,730.00
SUBTOTAL (SIDEWALK AND MEDIAN)				\$24,000.00
4 ELECTRICAL				
4. ELECTRICAL			#05.000.00	405.000.00
RELOCATE TRAFFIC SIGNAL EQUIPMENT RE-OPTIMIZE TRAFFIC SIGNAL SYSTEM	1	L SUM EACH	\$25,000.00 \$5,000.00	\$25,000.00 \$5,000.00
TRAFFIC SIGNAL STSTEM	0	L SUM	\$200.000.00	\$0.00
LIGHTING	0	EACH	\$7,500.00	\$0.00 \$0.00
SUBTOTAL (ELECTRICAL)	o o	LAOIT	Ψ1,500.00	\$30,000.00
5. SIGNING AND STRIPING		=		
SIGNING	10	EACH	\$160.00	\$1,600.00
PAVEMENT MARKING SUBTOTAL (SIGNING AND STRIPING)	1	L SUM	\$6,907.50	\$6,907.50 \$8,507.50
SUBTUTAL (SIGNING AND STRIFING)				\$0,507.50
BASE COST TOTAL				\$161,514.20
6. OTHER				
EARTHWORK (ASSUME 2% OF BASE COST)	1	L SUM	\$3,230.28	\$3,230.28
DRAINAGE (ASSUME 5% OF BASE COST)	1	L SUM	\$8,075.71	\$8,075.71
LANDSCAPING/EROSION CONTROL (ASSUME 1% OF BASE COST)	1	L SUM	\$1,615.14	\$1,615.14
TRAFFIC CONTROL AND PROTECTION (ASSUME 5% OF BASE COST)	1	L SUM	\$8,075.71	\$8,075.71
CONSTRUCTION CONTINGENCY (ASSUME 20% OF BASE COST)	1	L SUM	\$32,302.84	\$32,302.84
SUBTOTAL (OTHER)				\$53,299.69
TOTAL				\$214,813.89

NORTH AVENUE - RECOMMENDED TWO-WAY CONVERSION PRELIMINARY COST ESTIMATE

ASSUMPTIONS

*EXISTING PAVEMENT ON NORTH AVENUE BETWEEN WASHINGTON STREET AND ELLWORTH STREET IS ASSUMED TO REQUIRE

*PROPOSED RECONFIGURATION TO NORTH AVENUE IS ASSUMED TO REQUIRE REMOVAL AND REPLACEMENT OF SIDEWALK ON NORTH SIDE OF NORTH AVENUE BETWEEN CENTER STREET AND ELLSWORTH STREET.

*INCLUDES RE-OPTIMIZATION OF TRAFFIC SIGNAL SYSTEM AT INTERSECTION OF WASHINGTON STREET AND NORTH AVENUE *PAVEMENT RESURFACING INCLUDES THE FOLLOWING ITEMS:

- HOT-MIX ASPHALT SURFACE REMOVAL, 1 1/2"
- HOT MIX ASPHALT SURFACE COURSE, 1 1/2"

*PAVEMENT REPLACEMENT INCLUDES THE FOLLOWING ITEMS:

- PAVEMENT REMOVAL
- SUBBASE GRANULAR MATERIAL, 6"
- PORTLAND CEMENT CONCRETE BASE COURSE 8"
 HOT MIX ASPHALT BINDER COURSE, 2 1/4"
- HOT MIX ASPHALT SURFACE COURSE, 1 1/2"

EXCEPTIONS

*DOES NOT INCLUDE REMOVAL AND DISPOSAL OF HAZARDOUS MATERIAL.

EXHIBIT 12

LONG-TERM RECOMMENDATION (NORTH OF STATION - EASTERN BURLINGTON LOT) PRELIMINARY COST ESTIMATE

Scope:

-Revisions to Eastern Burlington parking lot layout including construction of a raised median to provide greater separation between the Eastern Burlington Lot and the bus staging area.

1. PAVEMENT REHABILITATION PAVEMENT RESURFACING PAVEMENT REMOVAL PAVEMENT REPLACEMENT SUBTOTAL (PAVEMENT REHABILITATION)	QTY 5610 740 535	SQ YD SQ YD SQ YD	\$10.00 \$20.00 \$90.00	\$56,100.00 \$14,800.00 \$48,150.00 \$119,050.00
·				ψ113,030.00
2. CURB AND GUTTER CURB AND GUTTER REMOVAL COMBINATION CONCRETE CURB AND GUTTER SUBTOTAL (CURB AND GUTTER)	100 1945	FOOT FOOT	\$8.50 \$20.00	\$850.00 \$38,900.00 \$39,750.00
3. SIDEWALK AND MEDIAN PORTLAND CEMENT CONCRETE SIDEWALK 6 INCH MEDIAN, PORTLAND CEMENT CONCRETE 6 INCH BUS PLATFORM, PORTLAND CEMENT CONCRETE 6 INCH SUBTOTAL (SIDEWALK AND MEDIAN)	1240 4935 100	SQ FT SQ FT SQ FT	\$7.00 \$7.00 \$7.00	\$8,680.00 \$34,545.00 \$700.00 \$43,925.00
4. ELECTRICAL				
TRAFFIC SIGNAL LIGHTING SUBTOTAL (ELECTRICAL)	0	L SUM EACH	\$200,000.00 \$7,500.00	\$0.00 \$0.00 \$0.00
5. SIGNING AND STRIPING				
SIGNING PAVEMENT MARKING SUBTOTAL (SIGNING AND STRIPING)	20 1	EACH L SUM	\$160.00 \$3,217.98	\$3,200.00 \$3,217.98 \$6,417.98
BASE COST TOTAL				\$209,142.98
6. OTHER				
EARTHWORK DRAINAGE (ASSUME 10% OF BASE COST) LANDSCAPING/EROSION CONTROL (ASSUME 1% OF BASE COST) TRAFFIC CONTROL AND PROTECTION (ASSUME 5% OF BASE COST) CONSTRUCTION CONTINGENCY (ASSUME 20% OF BASE COST) SUBTOTAL (OTHER)	0 1 1 1 1	CU YD L SUM L SUM L SUM L SUM	\$35.00 \$20,914.30 \$2,091.43 \$10,457.15 \$41,828.60	\$0.00 \$20,914.30 \$2,091.43 \$10,457.15 \$41,828.60 \$75,291.47

TOTAL \$284,434.45

ASSUMPTIONS

*EXISTING PAVEMENT WITHIN LIMITS OF PROPOSED RECONFIGURATION IS ASSUMED TO REQUIRE RESURFACING *PAVEMENT RESURFACING INCLUDES THE FOLLOWING ITEMS:

- HOT-MIX ASPHALT SURFACE REMOVAL, 1 1/2"
- HOT MIX ASPHALT SURFACE COURSE, 1 1/2"

*PAVEMENT REPLACEMENT INCLUDES THE FOLLOWING ITEMS:

- PAVEMENT REMOVAL
- SUBBASE GRANULAR MATERIAL, 6"
- PORTLAND CEMENT CONCRETE BASE COURSE 8"
- HOT MIX ASPHALT BINDER COURSE, 2 1/4"
- HOT MIX ASPHALT SURFACE COURSE, 1 1/2"

EXCEPTIONS

*DOES NOT INCLUDE REMOVAL AND DISPOSAL OF HAZARDOUS MATERIAL.

*DOES NOT INCLUDE LIGHTING IMPROVEMENTS

EXHIBIT 13

LONG-TERM RECOMMENDATION (SOUTH OF STATION - 4TH AVENUE) (FROM SHORT TERM RECOMMENDATION) PRELIMINARY COST ESTIMATE

Note: If this alternate is selected to be constructed, it is recommended that the two way conversion of North Avenue shown in Exhibit 11 also be constructed. With this alternative, it is also recommended to construct diagonal parking on the park side of Center Street, North Avenue, and Ellsworth Street as shown in Exhibit 13.

Scope:

- Modifications to the center median on 4th Avenue constructed in the short term design to provide for angled parking south of the center median. New configuration north of the center median consists of a lane allocated for kiss and ride activity and daily fee parking and a travel lane. New configuration south of the center median consists of an angled parking lane and an access lane.

1. PAVEMENT REHABILITATION	QTY	UNIT	UNIT PRICE	TOTAL
PAVEMENT RESURFACING (4TH AVENUE)	0	SQ YD	\$10.00	\$0.00
PAVEMENT REMOVAL	265	SQ YD	\$20.00	\$5,300.00
PAVEMENT REPLACEMENT	205	SQ YD	\$90.00	\$18,450.00
SUBTOTAL (PAVEMENT REHABILITATION)				\$23,750.00
2. CURB AND GUTTER				
CURB AND GUTTER REMOVAL	470	FOOT	\$8.50	\$3,995.00
COMBINATION CONCRETE CURB AND GUTTER	365	FOOT	\$20.00	\$7,300.00
SUBTOTAL (CURB AND GUTTER)				\$11,295.00
3. SIDEWALK AND MEDIAN				
PORTLAND CEMENT CONCRETE SIDEWALK 6 INCH	1892	SQ FT	\$7.00	\$13,244.00
MEDIAN, PORTLAND CEMENT CONCRETE 6 INCH	1645	SQ FT	\$7.00	\$11,515.00
BUS PLATFORM, PORTLAND CEMENT CONCRETE 6 INCH	0	SQ FT	\$7.00	\$0.00
SIDEWALK REMOVAL	1565	SQ FT	\$2.00	\$3,130.00
SUBTOTAL (SIDEWALK AND MEDIAN)				\$27,889.00
4. ELECTRICAL				
TRAFFIC SIGNAL	0	L SUM	\$200,000.00	\$0.00
LIGHTING	0	EACH	\$7,500.00	\$0.00
SUBTOTAL (ELECTRICAL)				\$0.00
5. SIGNING AND STRIPING				
SIGNING	20	EACH	\$160.00	\$3,200.00
PAVEMENT MARKING	1	L SUM	\$1,808.75	\$1,808.75
SUBTOTAL (SIGNING AND STRIPING)				\$5,008.75
BASE COST TOTAL				\$67,942.75
6. OTHER				
EARTHWORK (ASSUME 2% OF BASE COST)	1	L SUM	\$1,358.86	\$1,358.86
DRAINAGE (ASSUME 5% OF BASE COST)	1	L SUM	\$3,397.14	\$3,397.14
LANDSCAPING/EROSION CONTROL (ASSUME 5% OF BASE COST)	1	L SUM	\$3,397.14	\$3,397.14
TRAFFIC CONTROL AND PROTECTION (ASSUME 5% OF BASE COST)	1	L SUM	\$3,397.14	\$3,397.14
CONSTRUCTION CONTINGENCY (ASSUME 20% OF BASE COST)	1	L SUM	\$13,588.55	\$13,588.55
SUBTOTAL (OTHER)				\$25,138.82
TOTAL				\$93,081.57

EXHIBIT 13

LONG-TERM RECOMMENDATION (SOUTH OF STATION - 4TH AVENUE) (FROM SHORT TERM RECOMMENDATION) PRELIMINARY COST ESTIMATE

ASSUMPTIONS

*ESTIMATE PROVIDES COSTS ASSOCIATED WITH RECONFIGURING 4TH AVENUE SOUTH OF THE STATION FROM THE SHORT-TERM RECOMMENDATION TO THE LONG-TERM RECOMMENDATION

*IT IS ASSUMED THAT THE RECONFIGURATION OF 4TH AVENUE SOUTH OF THE STATION FROM THE SHORT-TERM RECOMMENDATION TO THE LONG-TERM RECOMMENDATION WILL REQUIRE REMOVAL AND REPLACEMENT OF THE COMBINATION CURB AND GUTTER AND SIDEWALK ON THE SOUTH SIDE OF 4TH AVENUE

*PAVEMENT RESURFACING INCLUDES THE FOLLOWING ITEMS:

- HOT-MIX ASPHALT SURFACE REMOVAL, 1 1/2"
- HOT MIX ASPHALT SURFACE COURSE, 1 1/2"

*PAVEMENT REPLACEMENT INCLUDES THE FOLLOWING ITEMS:

- PAVEMENT REMOVAL
- SUBBASE GRANULAR MATERIAL, 6"
- PORTLAND CEMENT CONCRETE BASE COURSE 8"
- HOT MIX ASPHALT BINDER COURSE, 2 1/4"
- HOT MIX ASPHALT SURFACE COURSE, 1 1/2"

EXCEPTIONS

*DOES NOT INCLUDE REMOVAL AND DISPOSAL OF HAZARDOUS MATERIAL.

*EXISTING PAVEMENT WITHIN LIMITS OF PROPOSED RECONFIGURATION ON 4TH AVENUE IS NOT ASSUMED TO REQUIRE RESURFACING.

FXHIBIT 13

LONG-TERM RECOMMENDATION (SOUTH OF STATION - 4TH AVENUE) (FROM EXISTING CONDITIONS) PRELIMINARY COST ESTIMATE

Note: If this alternate is selected to be constructed, it is recommended that the two way conversion of North Avenue shown in Exhibit 11 also be constructed. With this alternative, it is also recommended to construct diagonal parking on the park side of Center Street, North Avenue, and Ellsworth Street as shown in Exhibit 13.

Scope:

- Removal and reconstruction of the center median on 4th Avenue. New configuration north of the center median consists of a lane allocated for kiss and ride activity and daily fee parking and a travel lane. New configuration south of the center median consists of angled parking on both sides of an access aisle

1. PAVEMENT REHABILITATION	QTY	UNIT	UNIT PRICE	TOTAL
PAVEMENT RESURFACING (4TH AVENUE)	2315	SQ YD	\$10.00	\$23,150.00
PAVEMENT REMOVAL	365	SQ YD	\$20.00	\$7,300.00
PAVEMENT REPLACEMENT	860	SQ YD	\$90.00	\$77,400.00
SUBTOTAL (PAVEMENT REHABILITATION)				\$107,850.00
2. CURB AND GUTTER				
CURB AND GUTTER REMOVAL	1010	FOOT	\$8.50	\$8,585.00
COMBINATION CONCRETE CURB AND GUTTER	1110	FOOT	\$20.00	\$22,200.00
SUBTOTAL (CURB AND GUTTER)				\$30,785.00
3. SIDEWALK AND MEDIAN				
PORTLAND CEMENT CONCRETE SIDEWALK 6 INCH	1880	SQ FT	\$7.00	\$13,160.00
MEDIAN, PORTLAND CEMENT CONCRETE 6 INCH	0	SQ FT	\$7.00	\$0.00
BUS PLATFORM, PORTLAND CEMENT CONCRETE 6 INCH	4500	SQ FT	\$7.00	\$31,500.00
SIDEWALK REMOVAL	1750	SQ FT	\$2.00	\$3,500.00
MEDIAN REMOVAL	3570	SQ FT	\$2.00	\$7,140.00
SUBTOTAL (SIDEWALK AND MEDIAN)				\$55,300.00
4. ELECTRICAL				
TRAFFIC SIGNAL	0	L SUM	\$200,000.00	\$0.00
LIGHTING	2	EACH	\$7,500.00	\$15,000.00
SUBTOTAL (ELECTRICAL)				\$15,000.00
5. SIGNING AND STRIPING				
SIGNING	20	EACH	\$160.00	\$3,200.00
PAVEMENT MARKING	1	L SUM	\$2,697.50	\$2,697.50
SUBTOTAL (SIGNING AND STRIPING)				\$5,897.50
BASE COST TOTAL				\$214,832.50
6. OTHER				
EARTHWORK (ASSUME 2% OF BASE COST)	1	L SUM	\$4.296.65	\$4,296.65
DRAINAGE (ASSUME 5% OF BASE COST)	1	L SUM	\$10,741.63	\$10,741.63
LANDSCAPING/EROSION CONTROL (ASSUME 1% OF BASE COST)	1	L SUM	\$2,148.33	\$2,148.33
TRAFFIC CONTROL AND PROTECTION (ASSUME 5% OF BASE COST)	1	L SUM	\$10,741.63	\$10,741.63
CONSTRUCTION CONTINGENCY (ASSUME 20% OF BASE COST)	1	L SUM	\$42,966.50	\$42,966.50
SUBTOTAL (OTHER)				\$70,894.73
TOTAL				\$285,727.23
				Ψ 2 00,. 22 0

LONG-TERM RECOMMENDATION (SOUTH OF STATION - 4TH AVENUE) (FROM EXISTING CONDITIONS) PRELIMINARY COST ESTIMATE

ASSUMPTIONS

*EXISTING PAVEMENT WITHIN LIMITS OF PROPOSED RECONFIGURATION ON 4TH AVENUE IS ASSUMED TO REQUIRE RESURFACING *REMOVAL AND REPLACEMENT OF SIDEWALK ON SOUTH SIDE OF 4TH AVENUE IS ASSUMED TO BE REQUIRED FOR PROPOSED RECONFIGURATION OF 4TH AVENUE.

*PAVEMENT RESURFACING INCLUDES THE FOLLOWING ITEMS:

- HOT-MIX ASPHALT SURFACE REMOVAL, 1 1/2"
- HOT MIX ASPHALT SURFACE COURSE, 1 1/2"
- *PAVEMENT REPLACEMENT INCLUDES THE FOLLOWING ITEMS:
 - PAVEMENT REMOVAL
 - SUBBASE GRANULAR MATERIAL, 6"
 - PORTLAND CEMENT CONCRETE BASE COURSE 8"
 HOT MIX ASPHALT BINDER COURSE, 2 1/4"

 - HOT MIX ASPHALT SURFACE COURSE, 1 1/2"

EXCEPTIONS

*DOES NOT INCLUDE REMOVAL AND DISPOSAL OF HAZARDOUS MATERIAL.

*DOES NOT INCLUDE RELOCATION OF EXISTING POWER POLES

*DOES NOT INCLUDE IMPROVEMENTS TO ELLSWORTH STREET, NORTH AVENUE, OR CENTER STREET

EXHIBIT 13 LONG-TERM RECOMMENDATION (MODIFICATIONS TO CENTER STREET AND ELLSWORTH STREET) (FROM EXISTING CONDITIONS)

PRELIMINARY COST ESTIMATE

Scope:

-Conversion of Center Street and Ellsworth Street to a two lane section around Burlington Square with diagonal parking adjacent to Burlington Square..

1. PAVEMENT REHABILITATION	QTY	UNIT	UNIT PRICE	TOTAL
PAVEMENT RESURFACING	1870	SQ YD	\$10.00	\$18,700.00
PAVEMENT REMOVAL	80	SQ YD	\$20.00	\$1,600.00
PAVEMENT REPLACEMENT	620	SQ YD	\$90.00	\$55,800.00
SUBTOTAL (PAVEMENT REHABILITATION)				\$76,100.00
2. CURB AND GUTTER				
CURB AND GUTTER REMOVAL	490	FOOT	\$8.50	\$4,165.00
COMBINATION CONCRETE CURB AND GUTTER	630	FOOT	\$20.00	\$12,600.00
SUBTOTAL (CURB AND GUTTER)				\$16,765.00
3. SIDEWALK AND MEDIAN				
PORTLAND CEMENT CONCRETE SIDEWALK 6 INCH	2285	SQ FT	\$7.00	\$15,995.00
MEDIAN, PORTLAND CEMENT CONCRETE 6 INCH	0	SQ FT	\$7.00	\$0.00
BUS PLATFORM, PORTLAND CEMENT CONCRETE 6 INCH	0	SQ FT	\$7.00	\$0.00
SIDEWALK REMOVAL	2295	SQ FT	\$2.00	\$4,590.00
MEDIAN REMOVAL	0	SQ FT	\$2.00	\$0.00
SUBTOTAL (SIDEWALK AND MEDIAN)				\$20,585.00
4. ELECTRICAL				
TRAFFIC SIGNAL	0	L SUM	\$200,000.00	\$0.00
LIGHTING	1	EACH	\$7,500.00	\$7,500.00
SUBTOTAL (ELECTRICAL)				\$7,500.00
5. SIGNING AND STRIPING				
SIGNING	10	EACH	\$160.00	\$1,600.00
PAVEMENT MARKING	1	L SUM	\$1,669.50	\$1,669.50
SUBTOTAL (SIGNING AND STRIPING)				\$3,269.50
BASE COST TOTAL				\$124,219.50
6. OTHER				
EARTHWORK (ASSUME 2% OF BASE COST)	1	L SUM	\$2,484.39	\$2,484.39
DRAINAGE (ASSUME 5% OF BASE COST)	1	L SUM	\$6,210.98	\$6,210.98
LANDSCAPING/EROSION CONTROL (ASSUME 1% OF BASE COST)	1	L SUM	\$1,242.20	\$1,242.20
TRAFFIC CONTROL AND PROTECTION (ASSUME 5% OF BASE COST)	1	L SUM	\$6,210.98	\$6,210.98
CONSTRUCTION CONTINGENCY (ASSUME 20% OF BASE COST)	1	L SUM	\$24,843.90	\$24,843.90
SUBTOTAL (OTHER)				\$40,992.44
TOTAL				\$165,211.94

FXHIBIT 13

LONG-TERM RECOMMENDATION (MODIFICATIONS TO CENTER STREET AND ELLSWORTH STREET) (FROM EXISTING CONDITIONS)

PRELIMINARY COST ESTIMATE

ASSUMPTIONS

*EXISTING PAVEMENT WITHIN LIMITS OF PROPOSED RECONFIGURATION ON CENTER STREET AND ELLSWORTH STREET IS ASSUMED TO REQUIRE RESURFACING

*REMOVAL AND REPLACEMENT OF SIDEWALK IS ASSUMED TO BE REQUIRED FOR PROPOSED RECONFIGURATION OF CENTER STREET AND ELLSWORTH STREET

*PAVEMENT RESURFACING INCLUDES THE FOLLOWING ITEMS:

- HOT-MIX ASPHALT SURFACE REMOVAL, 1 1/2"
- HOT MIX ASPHALT SURFACE COURSE, 1 1/2"

*PAVEMENT REPLACEMENT INCLUDES THE FOLLOWING ITEMS:

- PAVEMENT REMOVAL
- SUBBASE GRANULAR MATERIAL, 6"
- PORTLAND CEMENT CONCRETE BASE COURSE 8"
- HOT MIX ASPHALT BINDER COURSE, 2 1/4"
- HOT MIX ASPHALT SURFACE COURSE, 1 1/2"

EXCEPTIONS

*DOES NOT INCLUDE REMOVAL AND DISPOSAL OF HAZARDOUS MATERIAL.

*DOES NOT INCLUDE RELOCATION OF EXISTING POWER POLES

*DOES NOT INCLUDE IMPROVEMENTS TO 4TH AVENUE OR NORTH AVENUE

EXHIBIT 14

SHORT-TERM RECOMMENDATION (SOUTH OF STATION - FOURTH AVENUE) PRELIMINARY COST ESTIMATE

Note: If this alternate is selected to be constructed, it is recommended that the two way conversion of North Avenue shown in Exhibit 11 also be constructed. With this alternative, it is also recommended to construct diagonal parking on the park side of Center Street, North Avenue, and Ellsworth Street as shown in Exhibit 13.

Scope:

⁻ Removal and reconstruction of the center median on 4th Avenue and widening of 4th Avenue to the south. New configuration north of the center median consists of a bus staging lane and a bus only travel lane. New configuration south of the center median consists of a bus staging lane and two travel lanes south of the center median.

1. PAVEMENT REHABILITATION	QTY	UNIT	UNIT PRICE	TOTAL
PAVEMENT RESURFACING (4TH AVENUE)	2375	SQ YD	\$10.00	\$23,750.00
PAVEMENT REMOVAL	300	SQ YD	\$20.00	\$6,000.00
PAVEMENT REPLACEMENT	984	SQ YD	\$90.00	\$88,560.00
SUBTOTAL (PAVEMENT REHABILITATION)			******	\$118,310.00
,				
2. CURB AND GUTTER				
CURB AND GUTTER REMOVAL	1015	FOOT	\$8.50	\$8,627.50
COMBINATION CONCRETE CURB AND GUTTER	986	FOOT	\$20.00	\$19,720.00
SUBTOTAL (CURB AND GUTTER)				\$28,347.50
3. SIDEWALK AND MEDIAN				
PORTLAND CEMENT CONCRETE SIDEWALK 6 INCH	1650	SQ FT	\$7.00	\$11,550.00
MEDIAN. PORTLAND CEMENT CONCRETE 6 INCH	0	SQ FT	\$7.00	\$0.00
BUS PLATFORM, PORTLAND CEMENT CONCRETE 6 INCH	3200	SQ FT	\$7.00	\$22,400.00
SIDEWALK REMOVAL	1700	SQ FT	\$2.00	\$3,400.00
MEDIAN REMOVAL	3570	SQ FT	\$2.00	\$7,140.00
SUBTOTAL (SIDEWALK AND MEDIAN)			•	\$44,490.00
,				
4. ELECTRICAL				
TRAFFIC SIGNAL	0	L SUM	\$200,000.00	\$0.00
LIGHTING	2	EACH	\$7,500.00	\$15,000.00
SUBTOTAL (ELECTRICAL)				\$15,000.00
5. SIGNING AND STRIPING				
SIGNING	15	EACH	\$160.00	\$2,400.00
PAVEMENT MARKING	1	L SUM	\$3,377.50	\$3,377.50
SUBTOTAL (SIGNING AND STRIPING)			*-,-	\$5,777.50
(1)				**,
BASE COST TOTAL				\$211,925.00
6. OTHER				
EARTHWORK (ASSUME 2% OF BASE COST)	1	L SUM	\$4,238.50	\$4,238,50
DRAINAGE (ASSUME 5% OF BASE COST)	1	L SUM	\$10,596.25	\$10,596.25
LANDSCAPING/EROSION CONTROL (ASSUME 1% OF BASE COST)	1	L SUM	\$2,119.25	\$2,119.25
TRAFFIC CONTROL AND PROTECTION (ASSUME 5% OF BASE COST)	1	L SUM	\$10,596.25	\$10,596.25
CONSTRUCTION CONTINGENCY (ASSUME 20% OF BASE COST)	1	L SUM	\$42,385.00	\$42,385.00
SUBTOTAL (OTHER)	'	_ 00W	Ψ+2,000.00	\$69,935.25
				¥55,555.25
TOTAL				\$281,860.25

SHORT-TERM RECOMMENDATION (SOUTH OF STATION - FOURTH AVENUE) PRELIMINARY COST ESTIMATE

ASSUMPTIONS

*EXISTING PAVEMENT WITHIN LIMITS OF PROPOSED RECONFIGURATION ON 4TH AVENUE IS ASSUMED TO REQUIRE RESURFACING *REMOVAL AND REPLACEMENT OF SIDEWALK ON SOUTH SIDE OF 4TH AVENUE IS ASSUMED TO BE REQUIRED FOR PROPOSED WIDENING AND RECONFIGURATION OF 4TH AVENUE

*PAVEMENT RESURFACING INCLUDES THE FOLLOWING ITEMS:

- HOT-MIX ASPHALT SURFACE REMOVAL, 1 1/2"

- HOT-MIX ASPHALT SURFACE REMOVAL, 1 1/2
- HOT MIX ASPHALT SURFACE COURSE, 1 1/2"
*PAVEMENT REPLACEMENT INCLUDES THE FOLLOWING ITEMS:

- PAVEMENT REMOVAL
- SUBBASE GRANULAR MATERIAL, 6"
- PORTLAND CEMENT CONCRETE BASE COURSE 8"
- HOT MIX ASPHALT BINDER COURSE, 2 1/4"
- HOT MIX ASPHALT SURFACE COURSE, 1 1/2"

- *DOES NOT INCLUDE REMOVAL AND DISPOSAL OF HAZARDOUS MATERIAL.
- *DOES NOT INCLUDE RELOCATION OF EXISTING POWER POLES
- *DOES NOT INCLUDE IMPROVEMENTS TO ELLSWORTH STREET, NORTH AVENUE, OR CENTER STREET

EXHIBIT 15

WATER TOWER WEST - PARKING MITIGATION OPTION 1 (RECONFIGURE EXISTING LAYOUT) PRELIMINARY COST ESTIMATE

Scope:

⁻ Reconfiguration of the west and south portion of the Water Tower West Parking lot to increase parking supply.

1. PAVEMENT REMOVAL 300 SQ YD \$10.00 \$30,000.00 PAVEMENT REMOVAL 10 SQ YD \$20.00 \$30,000.00 PAVEMENT REMOVAL 10 SQ YD \$20.00 \$32,000.00 PAVEMENT REMOVAL 10 SQ YD \$90.00 \$2,000.00 SUBTOTAL (PAVEMENT REHABILITATION) \$10 SQ YD \$90.00 \$2,000.00 \$41,900.					
PAVEMENT REMOVAL 10	1. PAVEMENT REHABILITATION	QTY	UNIT	UNIT PRICE	TOTAL
PAVEMENT REPLACEMENT SUBTOTAL (PAVEMENT REHABILITATION)					. ,
SUBTOTAL (PAVEMENT REHABILITATION) \$41,900.00					*
CURB AND GUTTER CURB AND GUTTER REMOVAL 50 FOOT \$8.50 \$425.00 \$425.00 \$1,000		30	SQ YD	\$90.00	. ,
CURB AND GUTTER REMOVAL COMBINATION CONCRETE CURB AND GUTTER S0 FOOT \$8.50 \$425.00 \$1,000.00 \$1,	SUBTOTAL (PAVEMENT REHABILITATION)				\$41,900.00
COMBINATION CONCRETE GURB AND GUTTER \$50	2. CURB AND GUTTER				
SUBTOTAL (CURB AND GUTTER) \$1,425.00	CURB AND GUTTER REMOVAL	50	FOOT	\$8.50	\$425.00
3. SIDEWALK AND MEDIAN PORTLAND CEMENT CONCRETE SIDEWALK 6 INCH	COMBINATION CONCRETE CURB AND GUTTER	50	FOOT	\$20.00	\$1,000.00
PORTLAND CEMENT CONCRETE SIDEWALK 6 INCH	SUBTOTAL (CURB AND GUTTER)				\$1,425.00
PORTLAND CEMENT CONCRETE SIDEWALK 6 INCH					
MEDIAN, PORTLAND CEMENT CONCRETE 6 INCH 0 SQ FT \$7.00 \$0.00 BUS PLATFORM, PORTLAND CEMENT CONCRETE 6 INCH 0 SQ FT \$7.00 \$0.00 \$0.00 SIDEWALK REMOVAL 0 SQ FT \$2.00 \$0.00 \$0.00 SUBTOTAL (SIDEWALK AND MEDIAN)					
BUS PLATFORM, PORTLAND CEMENT CONCRETE 6 INCH SIDEWALK REMOVAL SUBTOTAL (SIDEWALK AND MEDIAN) 4. ELECTRICAL TRAFFIC SIGNAL LIGHTING SUBTOTAL (ELECTRICAL) 5. SIGNING AND STRIPING SIGNING PAVEMENT MARKING SUBTOTAL (SIGNING AND STRIPING) BASE COST TOTAL EARTHWORK DRAINGE (ASSUME 0% OF BASE COST) LANDSCAPING/EROSION CONTROL (ASSUME 0% OF BASE COST) TRAFFIC CONTROL AND PROTECTION (ASSUME 5% OF BASE COST) SUBTOTAL (ASSUME 0% OF BASE COST) TRAFFIC CONTROL AND PROTECTION (ASSUME 5% OF BASE COST) SUBTOTAL (ASSUME 0% OF BASE COST) TRAFFIC CONTROL AND PROTECTION (ASSUME 5% OF BASE COST) SUBTOTAL (ASSUME 0% OF BASE COST) TRAFFIC CONTROL AND PROTECTION (ASSUME 5% OF BASE COST) SUBTOTAL (OTHER) **TOTO SQ FT		-		*	·
SIDEWALK REMOVAL (SIDEWALK AND MEDIAN) SQ FT \$2.00 \$0.		ū			·
SUBTOTAL (SIDEWALK AND MEDIAN) \$0.00	,	-			*
4. ELECTRICAL TRAFFIC SIGNAL LIGHTING SUBTOTAL (ELECTRICAL) 5. SIGNING AND STRIPING SIGNING PAVEMENT MARKING SUBTOTAL (SIGNING AND STRIPING) BASE COST TOTAL EARTHWORK DRAINAGE (ASSUME 0% OF BASE COST) DRAINAGE (ASSUME 0% OF BASE COST) TRAFFIC CONTROL AND PROTECTION (ASSUME 20% OF BASE COST) SUBTOTAL (OTHER) 4. ELECTRICAL 0. L SUM S20,000,000 S27,500.00 S4,000.00 S4,00		0	SQFI	\$2.00	*
TRAFFIC SIGNAL LIGHTING SUBTOTAL (ELECTRICAL) 5. SIGNING AND STRIPING SIGNING PAVEMENT MARKING SUBTOTAL (SIGNING AND STRIPING) EARTHWORK DRAINAGE (ASSUME 0% OF BASE COST) L SUM LANDSCAPING/EROSION CONTROL (ASSUME 5% OF BASE COST) TRAFFIC CONTROL AND PROTECTION (ASSUME 5% OF BASE COST) CONSTRUCTION CONTINGENCY (ASSUME 20% OF BASE COST) SUBTOTAL (OTHER) SUBTOTAL (SIGNING AND STRIPING) EARTHWORK O CU YD S35.00 S0.00 \$0.00	SUBTOTAL (SIDEWALK AND MEDIAN)				\$0.00
TRAFFIC SIGNAL LIGHTING SUBTOTAL (ELECTRICAL) 5. SIGNING AND STRIPING SIGNING PAVEMENT MARKING SUBTOTAL (SIGNING AND STRIPING) EARTHWORK DRAINAGE (ASSUME 0% OF BASE COST) L SUM LANDSCAPING/EROSION CONTROL (ASSUME 5% OF BASE COST) TRAFFIC CONTROL AND PROTECTION (ASSUME 5% OF BASE COST) CONSTRUCTION CONTINGENCY (ASSUME 20% OF BASE COST) SUBTOTAL (OTHER) SOURCE L SUM	4 FLECTRICAL				
LIGHTING		0	LSUM	\$200,000,00	\$0.00
SUBTOTAL (ELECTRICAL) \$37,500.00		-		. ,	*
5. SIGNING AND STRIPING SIGNING SIGNING PAVEMENT MARKING SUBTOTAL (SIGNING AND STRIPING) BASE COST TOTAL 6. OTHER EARTHWORK DRAINAGE (ASSUME 0% OF BASE COST) LANDSCAPING/EROSION CONTROL (ASSUME 0% OF BASE COST) TRAFFIC CONTROL AND PROTECTION (ASSUME 5% OF BASE COST) TRAFFIC CONTROL AND PROTECTION (ASSUME 5% OF BASE COST) SUBTOTAL (OTHER) 5. SIGNING AND STRIPING 1 L SUM \$160.00 \$4,000.00 \$2,482.50 \$24,82.50 \$87,307.50 \$87,307.50 \$1 L SUM \$0.00 \$0.00 \$0.00 \$0.00 \$1,000 \$		· ·	2,1011	ψ.,σσσ.σσ	
SIGNING	,				
PAVEMENT MARKING SUBTOTAL (SIGNING AND STRIPING) BASE COST TOTAL \$87,307.50 6. OTHER EARTHWORK DRAINAGE (ASSUME 0% OF BASE COST) LANDSCAPING/EROSION CONTROL (ASSUME 0% OF BASE COST) TRAFFIC CONTROL AND PROTECTION (ASSUME 5% OF BASE COST) TRAFFIC CONTROL AND PROTECTION (ASSUME 5% OF BASE COST) SUBTOTAL (OTHER) 1 L SUM \$2,482.50 \$\$2,482.50 \$\$2,482.50 \$\$5,482.50 \$\$1,482.50	5. SIGNING AND STRIPING				
SUBTOTAL (SIGNING AND STRIPING) \$6,482.50 BASE COST TOTAL \$87,307.50 6. OTHER 0 CU YD \$35.00 \$0.00 EARTHWORK 0 CU YD \$35.00 \$0.00 \$0.00 DRAINAGE (ASSUME 0% OF BASE COST) 0 L SUM \$0.00 \$0.00 \$0.00 LANDSCAPING/EROSION CONTROL (ASSUME 0% OF BASE COST) 0 L SUM \$0.00 \$0.00 \$0.00 TRAFFIC CONTROL AND PROTECTION (ASSUME 5% OF BASE COST) 1 L SUM \$4,365.38 \$4,365.38 \$4,365.38 CONSTRUCTION CONTINGENCY (ASSUME 20% OF BASE COST) 1 L SUM \$17,461.50 \$17,461.50 SUBTOTAL (OTHER) \$21,826.88	SIGNING	25	EACH	\$160.00	\$4,000.00
### ST ##		1	L SUM	\$2,482.50	. ,
6. OTHER EARTHWORK DRAINAGE (ASSUME 0% OF BASE COST) LANDSCAPING/EROSION CONTROL (ASSUME 0% OF BASE COST) TRAFFIC CONTROL AND PROTECTION (ASSUME 5% OF BASE COST) CONSTRUCTION CONTINGENCY (ASSUME 20% OF BASE COST) SUBTOTAL (OTHER) O CU YD \$35.00 \$0.00 \$0.00 \$0.00 \$1.00 \$21,826.88	SUBTOTAL (SIGNING AND STRIPING)				\$6,482.50
6. OTHER EARTHWORK DRAINAGE (ASSUME 0% OF BASE COST) LANDSCAPING/EROSION CONTROL (ASSUME 0% OF BASE COST) TRAFFIC CONTROL AND PROTECTION (ASSUME 5% OF BASE COST) CONSTRUCTION CONTINGENCY (ASSUME 20% OF BASE COST) SUBTOTAL (OTHER) O CU YD \$35.00 \$0.00 \$0.00 \$0.00 \$1.00 \$21,826.88					44-44-
EARTHWORK 0 CU YD \$35.00 \$0.00 DRAINAGE (ASSUME 0% OF BASE COST) 0 L SUM \$0.00 \$0.00 LANDSCAPING/EROSION CONTROL (ASSUME 0% OF BASE COST) 0 L SUM \$0.00 \$0.00 TRAFFIC CONTROL AND PROTECTION (ASSUME 5% OF BASE COST) 1 L SUM \$4,365.38 \$4,365.38 CONSTRUCTION CONTINGENCY (ASSUME 20% OF BASE COST) 1 L SUM \$17,461.50 \$17,461.50 SUBTOTAL (OTHER) \$21,826.88	BASE COST TOTAL				\$87,307.50
EARTHWORK 0 CU YD \$35.00 \$0.00 DRAINAGE (ASSUME 0% OF BASE COST) 0 L SUM \$0.00 \$0.00 LANDSCAPING/EROSION CONTROL (ASSUME 0% OF BASE COST) 0 L SUM \$0.00 \$0.00 TRAFFIC CONTROL AND PROTECTION (ASSUME 5% OF BASE COST) 1 L SUM \$4,365.38 \$4,365.38 CONSTRUCTION CONTINGENCY (ASSUME 20% OF BASE COST) 1 L SUM \$17,461.50 \$17,461.50 SUBTOTAL (OTHER) \$21,826.88	c OTHER				
DRAINAGE (ASSUME 0% OF BASE COST) 0 L SUM \$0.00 \$0.00 LANDSCAPING/EROSION CONTROL (ASSUME 0% OF BASE COST) 0 L SUM \$0.00 \$0.00 TRAFFIC CONTROL AND PROTECTION (ASSUME 5% OF BASE COST) 1 L SUM \$4,365.38 \$4,365.38 CONSTRUCTION CONTINGENCY (ASSUME 20% OF BASE COST) 1 L SUM \$17,461.50 \$17,461.50 SUBTOTAL (OTHER) \$21,826.88		0	CLLVD	¢35.00	00.02
LANDSCAPING/EROSION CONTROL (ASSUME 0% OF BASE COST) 0 L SUM \$0.00 \$0.00 TRAFFIC CONTROL AND PROTECTION (ASSUME 5% OF BASE COST) 1 L SUM \$4,365.38 \$4,365.38 CONSTRUCTION CONTINGENCY (ASSUME 20% OF BASE COST) 1 L SUM \$17,461.50 \$17,461.50 SUBTOTAL (OTHER) \$21,826.88		-		*	*
TRAFFIC CONTROL AND PROTECTION (ASSUME 5% OF BASE COST) 1 L SUM \$4,365.38 \$4,365.38 CONSTRUCTION CONTINGENCY (ASSUME 20% OF BASE COST) 1 L SUM \$17,461.50 \$17,461.50 SUBTOTAL (OTHER) \$21,826.88	,			*	*
CONSTRUCTION CONTINGENCY (ASSUME 20% OF BASE COST) 1 L SUM \$17,461.50 \$17,461.50 SUBTOTAL (OTHER) \$21,826.88		-		*	*
		1	L SUM		. ,
TOTAL \$109,134.38	SUBTOTAL (OTHER)			•	\$21,826.88
TOTAL \$109,134.38					
	TOTAL				\$109,134.38

ASSUMPTIONS

*EXISTING PAVEMENT WITHIN LIMITS OF PROPOSED WATER TOWER WEST LOT IS ASSUMED TO REQUIRE RESURFACING *COSTS INCLUDE LIGHTING IMPROVEMENTS TO PROPOSED WATER TOWER WEST LOT

- *PAVEMENT RESURFACING INCLUDES THE FOLLOWING ITEMS:
 - HOT-MIX ASPHALT SURFACE REMOVAL, 1 1/2"
 - HOT MIX ASPHALT SURFACE COURSE, 1 1/2"
- *PAVEMENT REPLACEMENT INCLUDES THE FOLLOWING ITEMS:
 - PAVEMENT REMOVAL
 - SUBBASE GRANULAR MATERIAL, 6"
 - PORTLAND CEMENT CONCRETE BASE COURSE 8"
 - HOT MIX ASPHALT BINDER COURSE, 2 1/4"
 - HOT MIX ASPHALT SURFACE COURSE, 1 1/2"

EXCEPTIONS

*DOES NOT INCLUDE REMOVAL AND DISPOSAL OF HAZARDOUS MATERIAL.

EXHIBIT 16

WATER TOWER WEST - PARKING MITIGATION OPTION 2 (REPAVE/RESTRIPE ENTIRE PAVED AREA) PRELIMINARY COST ESTIMATE

Scope:

- Reconfiguration of the entire Water Tower West Parking lot to increase parking supply.
- Construction of a ten foot wide raised sidewalk on the west side of the Water Tower West Parking Lot.

1. PAVEMENT REHABILITATION PAVEMENT RESURFACING PAVEMENT REMOVAL PAVEMENT REPLACEMENT SUBTOTAL (PAVEMENT REHABILITATION)	5800 180 135	UNIT SQ YD SQ YD SQ YD	UNIT PRICE \$10.00 \$20.00 \$90.00	\$58,000.00 \$3,600.00 \$12,150.00 \$73,750.00
2. CURB AND GUTTER CURB AND GUTTER REMOVAL COMBINATION CONCRETE CURB AND GUTTER CONCRETE CURB, TYPE B SUBTOTAL (CURB AND GUTTER)	50 50 320	FOOT FOOT FOOT	\$8.50 \$20.00 \$16.00	\$425.00 \$1,000.00 \$5,120.00 \$6,545.00
3. SIDEWALK AND MEDIAN PORTLAND CEMENT CONCRETE SIDEWALK 6 INCH BUS PLATFORM, PORTLAND CEMENT CONCRETE 6 INCH SIDEWALK REMOVAL SUBTOTAL (SIDEWALK AND MEDIAN)	1720 0 160	SQ FT SQ FT SQ FT	\$7.00 \$7.00 \$2.00	\$12,040.00 \$0.00 \$320.00 \$12,360.00
4. ELECTRICAL TRAFFIC SIGNAL LIGHTING SUBTOTAL (ELECTRICAL)	0 8	L SUM EACH	\$200,000.00 \$7,500.00	\$0.00 \$60,000.00 \$60,000.00
5. SIGNING AND STRIPING SIGNING PAVEMENT MARKING SUBTOTAL (SIGNING AND STRIPING)	40 1	EACH L SUM	\$160.00 \$3,452.50	\$6,400.00 \$3,452.50 \$9,852.50
BASE COST TOTAL				\$162,507.50
6. OTHER EARTHWORK DRAINAGE (ASSUME 2% OF BASE COST) LANDSCAPING/EROSION CONTROL (ASSUME 1% OF BASE COST) TRAFFIC CONTROL AND PROTECTION (ASSUME 5% OF BASE COST) CONSTRUCTION CONTINGENCY (ASSUME 20% OF BASE COST) SUBTOTAL (OTHER)	0 1 1 1	CU YD L SUM L SUM L SUM L SUM	\$35.00 \$3,250.15 \$1,625.08 \$8,125.38 \$32,501.50	\$0.00 \$3,250.15 \$1,625.08 \$8,125.38 \$32,501.50 \$45,502.10

ASSUMPTIONS

TOTAL

*EXISTING PAVEMENT WITHIN LIMITS OF PROPOSED WATER TOWER WEST LOT IS ASSUMED TO REQUIRE RESURFACING *COSTS INCLUDE LIGHTING IMPROVEMENTS TO PROPOSED WATER TOWER WEST LOT *PAVEMENT RESURFACING INCLUDES THE FOLLOWING ITEMS:

- HOT-MIX ASPHALT SURFACE REMOVAL, 1 1/2"
- HOT MIX ASPHALT SURFACE COURSE, 1 1/2"

*PAVEMENT REPLACEMENT INCLUDES THE FOLLOWING ITEMS:

- PAVEMENT REMOVAL
- SUBBASE GRANULAR MATERIAL, 6"
- PORTLAND CEMENT CONCRETE BASE COURSE 8"
- HOT MIX ASPHALT BINDER COURSE, 2 1/4"
- HOT MIX ASPHALT SURFACE COURSE, 1 1/2"

EXCEPTIONS

*DOES NOT INCLUDE REMOVAL AND DISPOSAL OF HAZARDOUS MATERIAL.

\$208,009.60

EXHIBIT 17

WATER TOWER WEST - PARKING MITIGATION OPTION 3 (ENTIRE PROPERTY) PRELIMINARY COST ESTIMATE

Scope:

- Demolition of existing building surrounding the water tower. Conversion of that space to pavement to expand Water Tower West Parking Lot.
- Reconfiguration of the entire Water Tower West Parking lot to increase parking supply.
- Construction of a ten foot wide raised sidewalk on the west side of the Water Tower West Parking Lot.

1. PAVEMENT REHABILITATION	QTY	UNIT	UNIT PRICE	TOTAL
PAVEMENT RESURFACING	5415	SQ YD	\$10.00	\$54,150.00
PAVEMENT REMOVAL	375	SQ YD	\$20.00	\$7,500.00
PAVEMENT REPLACEMENT	7100	SQ YD	\$90.00	\$639,000.00
SUBTOTAL (PAVEMENT REHABILITATION)				\$700,650.00
2. CURB AND GUTTER				
CURB AND GUTTER REMOVAL	1055	FOOT	\$8.50	\$8,967.50
COMBINATION CONCRETE CURB AND GUTTER	310	FOOT	\$20.00	\$6,200.00
CONCRETE CURB, TYPE B	320	FOOT	\$16.00	\$5,120.00
SUBTOTAL (CURB AND GUTTER)				\$20,287.50
3. SIDEWALK AND MEDIAN				
PORTLAND CEMENT CONCRETE SIDEWALK 6 INCH	1720	SQ FT	\$7.00	\$12,040.00
BUS PLATFORM, PORTLAND CEMENT CONCRETE 6 INCH	0	SQ FT	\$7.00	\$0.00
SIDEWALK REMOVAL	460	SQ FT	\$2.00	\$920.00
SUBTOTAL (SIDEWALK AND MEDIAN)				\$12,960.00
4. ELECTRICAL				
TRAFFIC SIGNAL	0	L SUM	\$200,000.00	\$0.00
LIGHTING	21	EACH	\$7,500.00	\$157,500.00
SUBTOTAL (ELECTRICAL)				\$157,500.00
5. SIGNING AND STRIPING				
SIGNING	25	EACH	\$160.00	\$4,000.00
PAVEMENT MARKING	1	L SUM	\$6,768.75	\$6,768.75
SUBTOTAL (SIGNING AND STRIPING)				\$10,768.75
BASE COST TOTAL				\$902,166.25
6. OTHER				
EARTHWORK	0	CU YD	\$35.00	\$0.00
DRAINAGE (ASSUME 10% OF BASE COST)	1	L SUM	\$90,216.63	\$90,216.63
LANDSCAPING/EROSION CONTROL (ASSUME 0.5% OF BASE COST)	1	L SUM	\$4,510.83	\$4,510.83
TRAFFIC CONTROL AND PROTECTION (ASSUME 5% OF BASE COST)	1	L SUM	\$45,108.31	\$45,108.31
CONSTRUCTION CONTINGENCY (ASSUME 20% OF BASE COST)	1	L SUM	\$180,433.25	\$180,433.25
SUBTOTAL (OTHER)				\$320,269.02

TOTAL \$1,222,435.27

ASSUMPTIONS

*DEMOLITION OF BUILDING IS ASSUMED TO REQUIRE PAVEMENT REPLACEMENT TO LIMITS 15 FEET OUTSIDE OF BUILDING FACE

*EXISTING PAVEMENT WITHIN LIMITS OF PROPOSED WATER TOWER WEST LOT IS ASSUMED TO REQUIRE RESURFACING

*COSTS INCLUDE LIGHTING IMPROVEMENTS TO PROPOSED WATER TOWER WEST LOT *PAVEMENT RESURFACING INCLUDES THE FOLLOWING ITEMS:

- HOT-MIX ASPHALT SURFACE REMOVAL. 1 1/2"
- HOT MIX ASPHALT SURFACE COURSE, 1 1/2"

*PAVEMENT REPLACEMENT INCLUDES THE FOLLOWING ITEMS:

- PAVEMENT REMOVAL
- SUBBASE GRANULAR MATERIAL, 6"
- PORTLAND CEMENT CONCRETE BASE COURSE 8"
- HOT MIX ASPHALT BINDER COURSE, 2 1/4"
- HOT MIX ASPHALT SURFACE COURSE, 1 1/2"

EXCEPTIONS

- *DOES NOT INCLUDE REMOVAL AND DISPOSAL OF HAZARDOUS MATERIAL.
- *DOES NOT INCLUDE BUILDING DEMOLITION COSTS
- *DOES NOT INCLUDE EARTHWORK COSTS ASSOCIATED WITH DEMOLITION OF BUILDING