

City of Madison

MADISON DEPARTMENT



OF TRANSPORTATION

DRAFT Short-Term Intercity Bus Access Area

September 16, 2019

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1.0 Background

The current passenger loading location at the Memorial Union (800 Langdon St.) has been used by intercity bus companies since the late 1970's. Students are frequent users of inter city buses, and this location provides restrooms and shelter from inclement weather. The Union previously had a small parking lot for passenger drop-off and pickup, and Memorial Union staff assisted the bus companies by selling tickets.

Over the past 10 years conditions have changed. The Badger Bus Depot closed in 2009, which increased passenger boarding traffic at Memorial Union and created a desire for additional bus companies to use 800 Langdon Street for boarding. Secondly, the construction of Alumni Park in 2017 removed the small parking area adjacent to Memorial Union, forcing auto drop-off to occur on the street. In addition, the Memorial Union is not a public building, so is technically not to be used by non-students or non-Union members.

This area in front of the Union is heavily used by pedestrians and bicyclists. The additional congestion caused by the changes intercity bus service, motor vehicle traffic, combined with the narrow street cross-section has created safety concerns (see Appendix, Langdon Safety analysis). During the periods when Memorial Union was under renovation, intercity bus boarding and alighting was relocated to 750 University Avenue, in front of the Chazen Museum of Art. This location proved to be problematic, as it created safety concerns with Metro buses interfering with bicycle traffic as they traveled around parked intercity buses (documented by City Traffic Engineering and noted below). Chazen officials also expressed concerns regarding passengers using their facility for restrooms and waiting, as well as passenger drop-off/pickup in their driveway. In response to these concerns, intercity bus loading returned to Langdon Street in front the Historical Society, where it exists as of summer of 2019.

Specific safety concerns associated with the Langdon Street site include:

- Pedestrian and bicycle crossing volumes are extremely high directly in front of the bus loading area. Passengers with luggage complicate the traffic situation by walking in travel lanes as they enter/exit buses.
- When buses are waiting for passengers, they create an intersection sight distance problem for northbound vehicles and buses turning east onto Langdon. Often pedestrians and vehicles in the opposing lane cannot be seen.

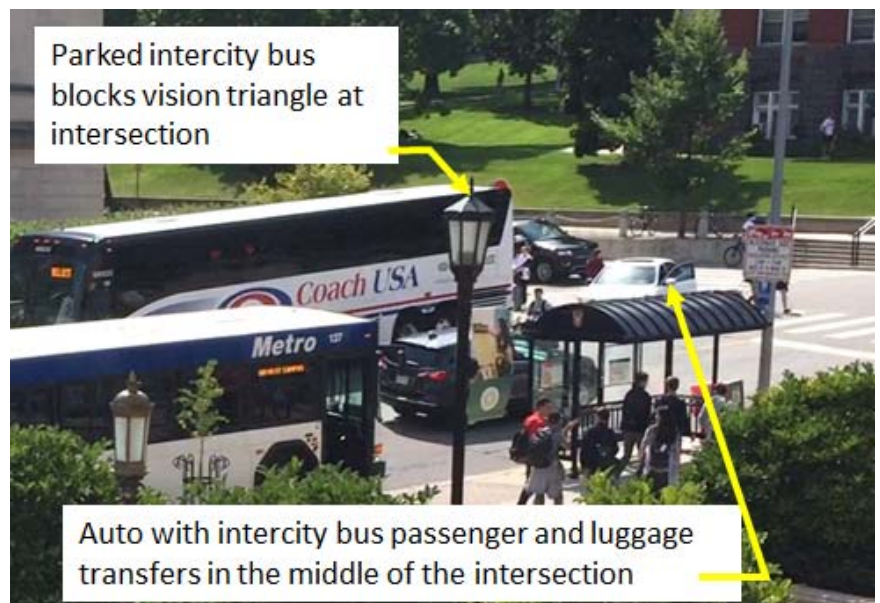


Figure 1.0-1 Limited Sight Distance on Langdon St.

- Because of the pedestrian mall environment on Langdon, students cross the street between buses – rather than at the marked cross walk. Motor vehicles on Langdon often cannot see pedestrians between the buses.

To address the safety concerns associated with the Langdon Intercity Bus location, the City of Madison Department of Transportation and UW-Madison Transportation Services staff evaluated a number of alternative locations for intercity bus loading for the near term (i.e. 2-3 years). Long-term intercity bus loading are being evaluated as a separate project and likely will be incorporated into the redesign of the Lake Street parking garage.

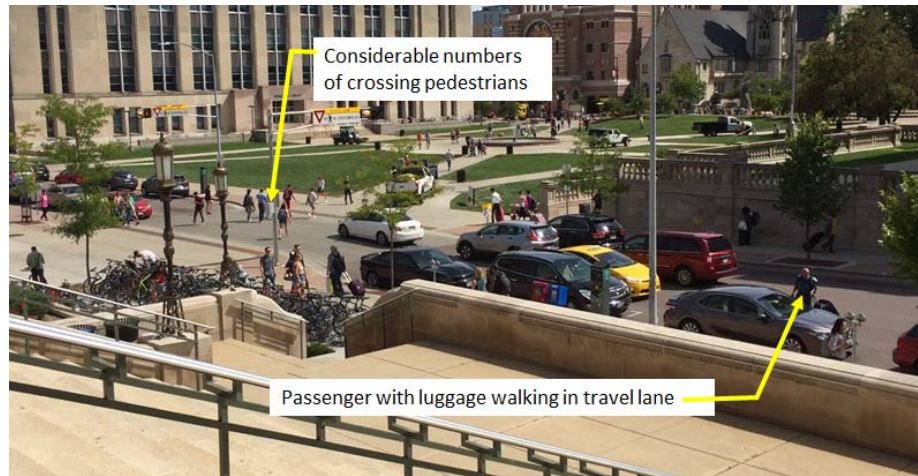


Figure 1.0-2 Pedestrian Activity in Front of Intercity Bus Zone.

2.0 Legal Authority

The City Attorney's Office indicated that the City can prohibit bus companies from using certain bus stops (or sections of roadway) to address safety concerns. Within the UW Campus, the safety rationale can likely be made based on the number of pedestrians, the multiple modes of transportation, and the street typical section that exists.

Legally, intercity buses are allowed to stop at any location that a local Metro bus stops. However, the City Attorney has made some distinctions between the two types of transit services being provided, and how the services differ.

With respect to Langdon Street, the services are different in the following ways:

1. Intercity buses often dwell for long periods of time (e.g., 20-30 minutes), which can create passenger queuing on sidewalks and encourage mid-block pedestrian crossings.
2. Intercity buses invite other modes of transport to drop off riders within the travel lane (additional passenger cars, taxis, rideshare, etc.) inhibiting through flow on the street.
3. Intercity buses serve people with luggage and other items not typically seen on local buses. When queuing occurs on a sidewalk with high pedestrian volumes, the luggage can further obstruct pedestrian flow.
4. There are usually never more than one or two Metro buses on Langdon at once, and they dwell for only a few seconds before departing. Intercity buses often queue many buses at a time and dwell for long periods, especially during peak passenger loading times.

3.0 Alternative Intercity Bus Access Locations

Alternative locations were re-evaluated based on a 2011 study jointly performed by the City of Madison and UW Transportation Services. The following graphic schematically illustrates the location of each potential intercity bus access location.

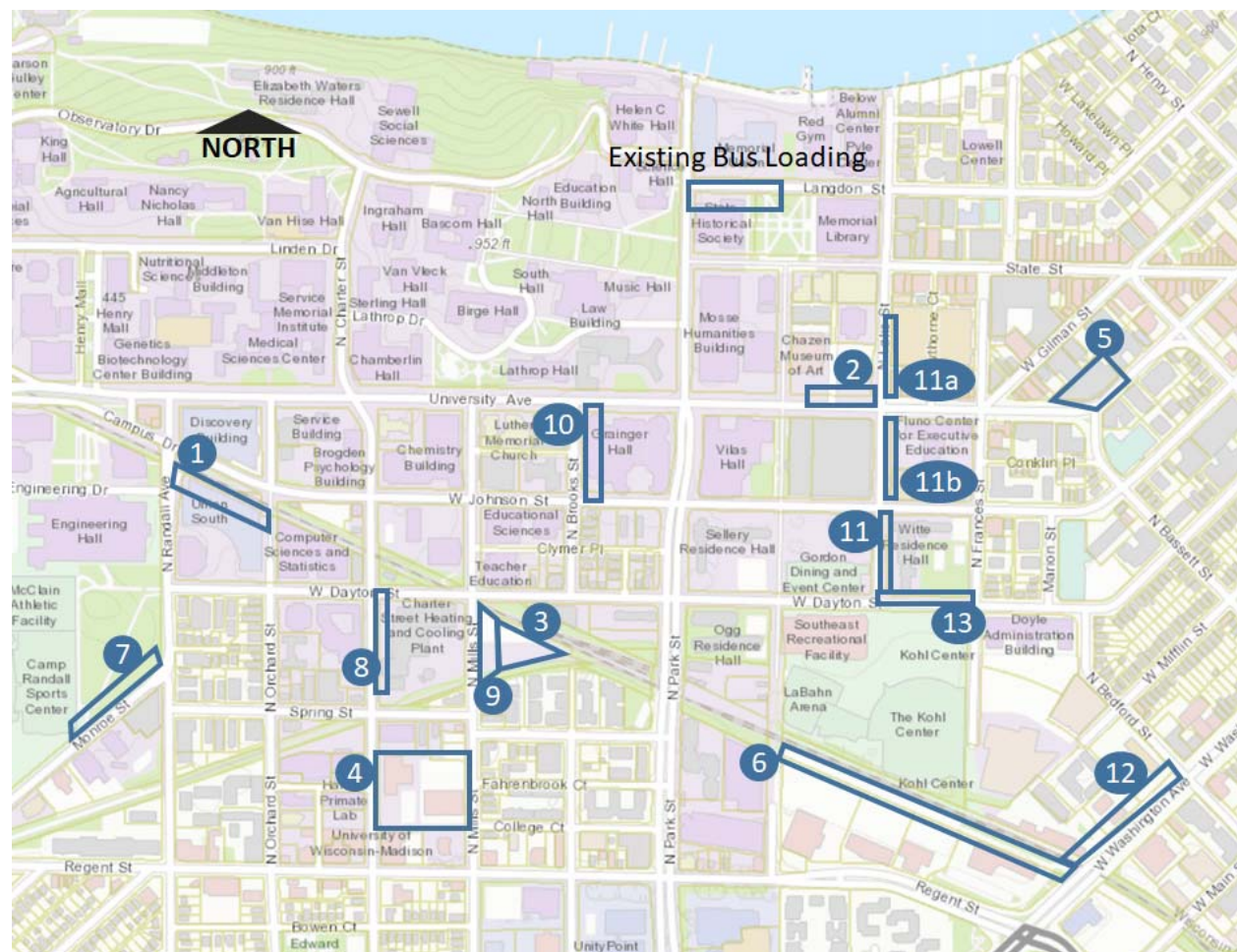


Figure 3.0-1 Intercity Bus Loading Zone Alternatives.

The locations include:

0. Existing Location – Langdon St across from Memorial Union
1. Union South
2. 702-734 University Ave
3. Charter Street Heating Plant
4. UW Facilities
5. Gorham and Bassett (No longer available)
6. Railroad Corridor
7. Monroe Street
8. Charter Street
9. Mills Street
10. Brooks Street
11. Lake Street (3 locations)

12. West Washington Ave

13. Dayton Street

Intercity bus companies have indicated a preference to be close to UW students. In conversations with those companies, they have indicated that as much as 80% of passenger ridership are UW students. The intercity bus loading zone serves all area residents, but reducing travel to and from the site for the largest passenger group (students) is a goal. Criteria used to understand the suitability of each location includes the following:

- Proximity to UW student residences
- Boarding area visibility
- Safety/security for customers
- Public Restrooms/Indoor Waiting area available.
- Parking/staging area for auto pick-up and drop-off
- Impacts to surrounding development (noise, exhaust, traffic, etc.)
- Ease of implementation
- Impact on auto/vehicular traffic
- Impact on bicycle/pedestrian traffic
- Driveway sight distance
- Number of loading spaces

(0) Existing Location – Langdon Across from Memorial Union

This option keeps the intercity bus loading zone in its current location across from the Memorial Union. The benefits of this location include its proximity to services (the Union) and it is close to UW housing. Difficulties associated with the site include the large number of pedestrians and cyclists in the area, along with reduced sightlines at the Langdon St – Park Street intersection.

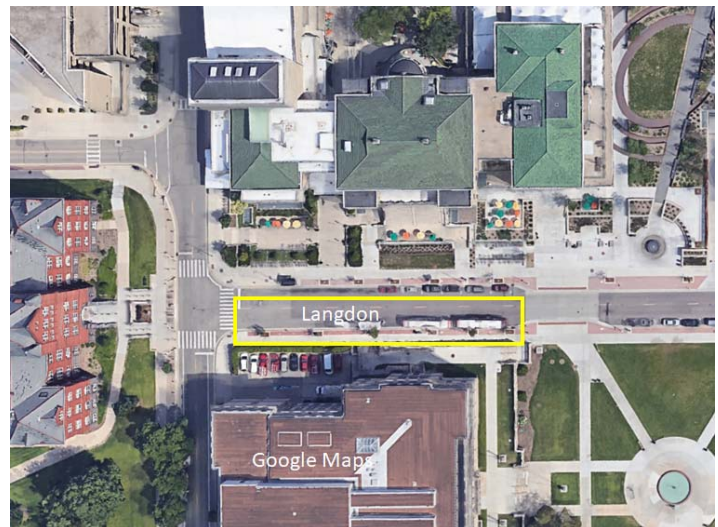


Figure 3.0-0 Existing Location – Langdon St

(1) Union South

The genesis for this location stemmed from the possibility of locating an intercity bus terminal near a rail corridor that was being considered in 2011. In absence of the rail connection, it has poor motor vehicle access adjacent to the rail corridor – with there not being much space to provide a driving lane. There is also limited curb space along surrounding street. There also is not a good staging area for passenger drop-off and/or vehicles waiting for passenger pickup. Near Union South there is a fair amount of pedestrians and cyclists, increasing the potential for bus/pedestrian/bicycle conflicts.



Figure 3.0-1 Union South

(2) Chazen Museum

This option would locate intercity buses on University Ave outside the recently reconstructed Chazen Museum, as was previously tried in 2017. This site continues to have the difficulty of parked inter-city buses interfering with Metro service in the bus lane. As Metro buses pull around the parked intercity buses, they encroach on the adjacent bike lane. At this location there is also limited staging area for passenger drop off/pickup. Other amenities, such as shelter and restrooms are not available (except in the museum.)

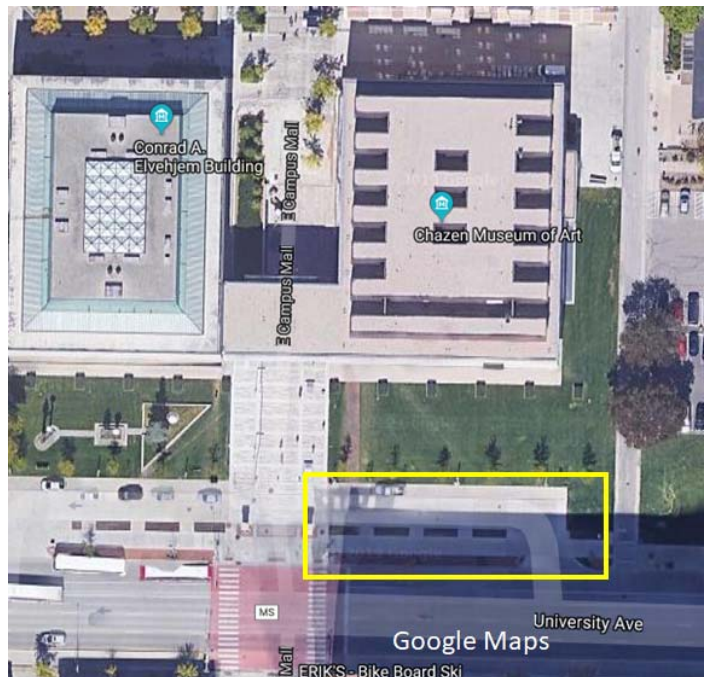


Figure 3.0-2&2a Chazen

(2a) Chazen Museum Pullout

The Chazen Museum Pullout has the locational advantages as the previous location, and does not have the safety concerns regarding Metro buses traveling around parked intercity buses. However intercity bus access/egress operations are difficult onto University Avenue. As with the on-street location, there is limited space for passenger drop-off/waiting for pickup. This particular location would affect disabled/accessible parking stalls – that are difficult to replace in this portion of the campus. Also, as with the on-street location, other amenities, such as shelter and restrooms are not available.

(3) Charter Street Heating Plant

This location would have intercity buses board within a parking lot 45, off of Mills Street, which is operated by the University. Because the boarding would occur within a parking lot, it is not a highly visible area and it is distant from the current location on Langdon St. This area has no commercial services, shelter, or restrooms. Bus operations within the parking lot may also be challenging due to turning radii.



Figure 3.0-3 Charter Street Heating Plant

(4) N. Charter Street (Spring-Regent)

This location would use the east side of Charter Street between Spring and Regent Streets.

It is not a highly visible area, although there are some commercial services in the area. As with the other sites, there is no shelter from inclement weather or restrooms.

(N/A) Gorham and Bassett

The Gorham and Bassett location evaluated in 2011 has since been redeveloped and is no longer available. It is mentioned here to maintain the same numbering as the 2011 study.

(5) RR Corridor (W. Wash-E. Campus Mall)

The City of Madison owns strip of land adjacent to the Southwest Path and south of the Kohl center, on the south side of the railroad. The City currently leases the strip to the Alexander Company for parking. Currently a hotel is also being considered within this parking lot. Because the parking lot is behind buildings fronting Regent Street, it is not a highly visible area. Intercity bus access/egress operations may be difficult within the parking lot. There are some limited commercial services in the



Figure 3.0-4 Charter Street

area. The location is far from the current intercity bus location at Langdon, but near former Badger depot. As with the other sites, there is no shelter nor restrooms or other amenities.

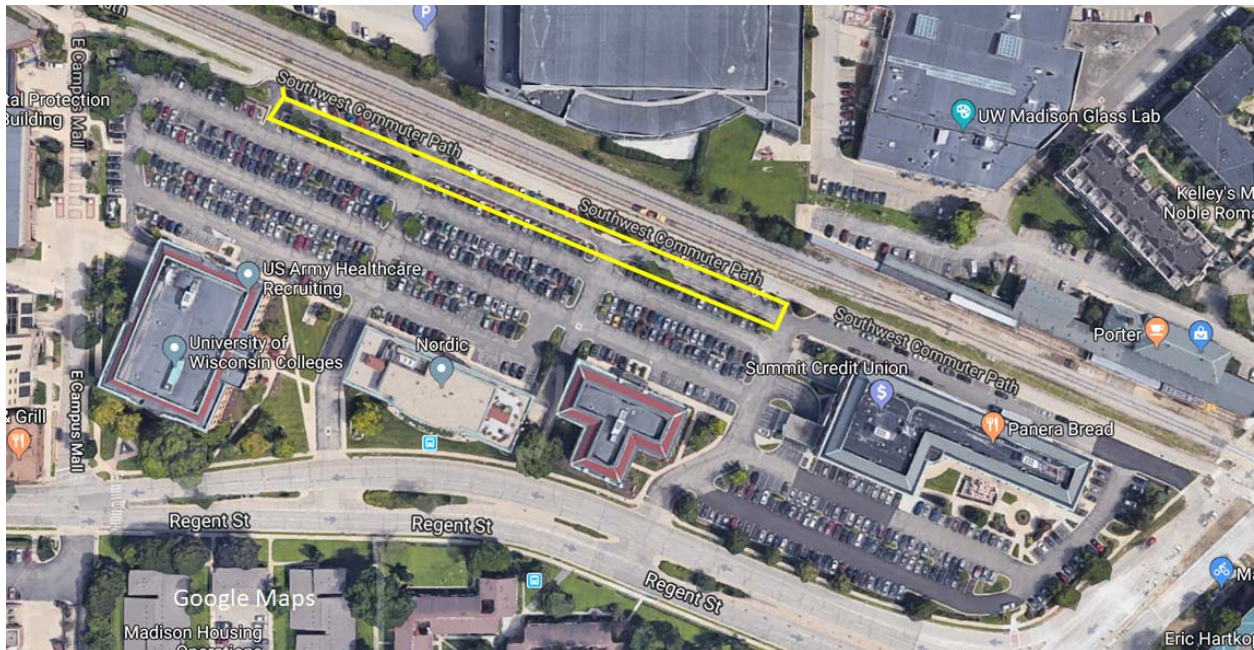


Figure 3.0-5 Railroad Corridor East of East Campus Mall

(6) Monroe St (west of Randall)

The Monroe Street location would load intercity buses just east of Camp Randall. The location has a considerable amount of curb space and there are commercial services in the area. It is also near both a fire and a police station. There are seven Saturday home football games and up to three other occasions where the street is closed, and intercity buses would have to be relocated. While close to campus, this location is relatively far from the current intercity bus location. There also is no shelter nor restrooms.

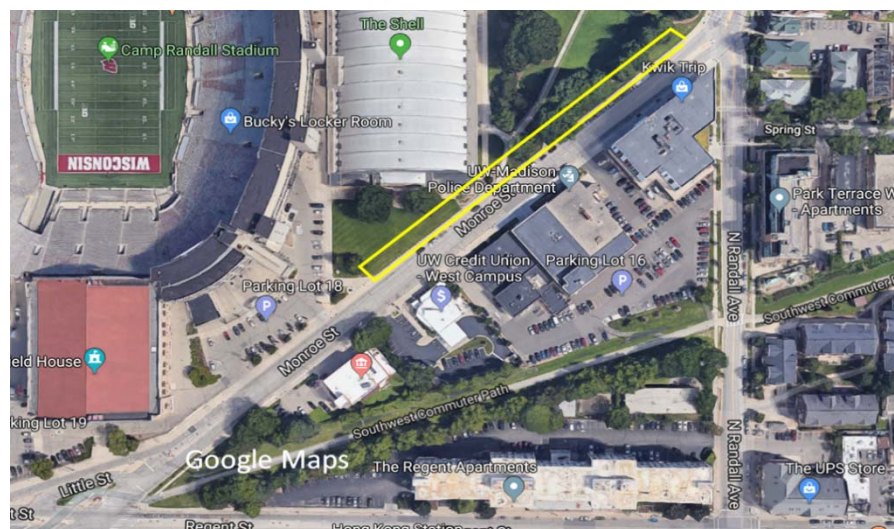


Figure 3.0-6 Monroe Street

(7) N. Charter Street (Dayton-Spring)

This location would load intercity buses on North Charter Street just south of Dayton Street. It is north of the previously described Charter Street location. The street has limited traffic volumes, but locating intercity buses would result in the loss of RP3 parking. It is not a highly visible area. As with the other sites, there is currently no shelter nor restroom facilities.

(8) Mills St (Dayton-SW Bike Path)

This site is similar to location 3, except that it would load intercity buses on Mills Street rather than within Lot 45. Similar advantages and disadvantages exist with this site. It is not highly visible, there are limited commercial services. Also, there could be a loss of RP3 parking. As with the other sites, there is no shelter nor restroom facilities.

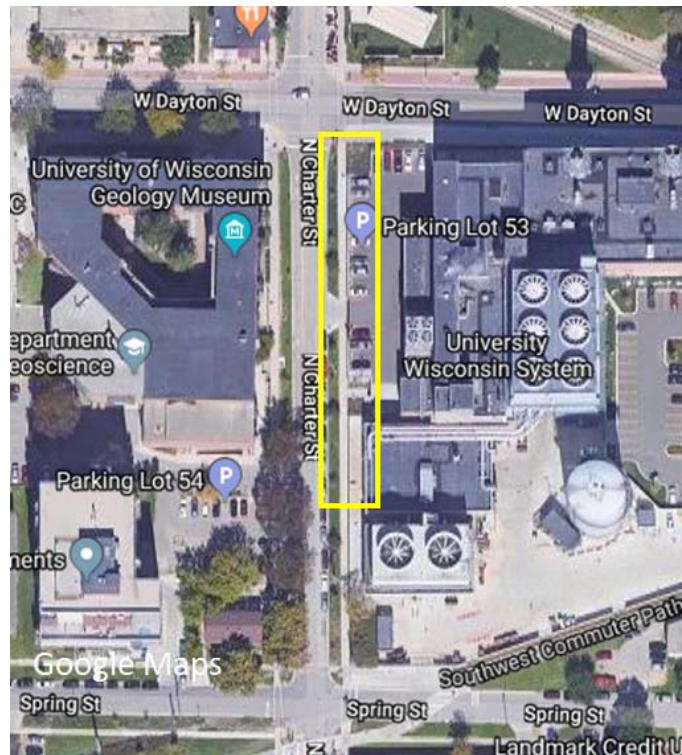


Figure 3.0-7 North Charter Street (Dayton)

(9) Brooks St (University-Johnson)

This location is just west of Grainger Hall on Brooks Street. It has good visibility. There could be concerns raised by the School of Business. It is relatively proximate to the existing intercity bus location on Langdon Street. Access and egress to and from University Avenue and Johnson Street is good, but there are numerous driveways which could cause sight line problems for vehicle access to adjacent development. As with the other sites, there is no shelter nor restroom facilities.



Figure 3.0-8 Mills Street

(10) Lake St (Dayton-Johnson)

This location would use either the east or the west sides of Lake Street between Dayton and Johnson Streets. It is adjacent to Witte Residence Hall and Gordon Commons. It has good visibility, and access to and from Johnson Street is good. However, there are frequent Kohl Center events where Lake Street is closed. Intercity bus loading would need to be relocated during these event times. As with the other locations, there is no shelter nor restroom facilities.



Figure 3.0-9 Brooks Street



Figure 3.0-10 Lake Street north of Dayton St

(11a) Lake St (University-State St)

This location is quite close to the existing intercity bus loading on Langdon Street. It is also close to where a longer term intercity bus terminal could be located, in association with the Lake Street parking ramp. The location is highly visible. Intercity bus access/egress movements could be challenging if Langdon is not used. There may be driveway visibility concerns with vehicles exiting the Lake Street ramp. There are good commercial services in the area. There is no shelter nor restroom facilities.

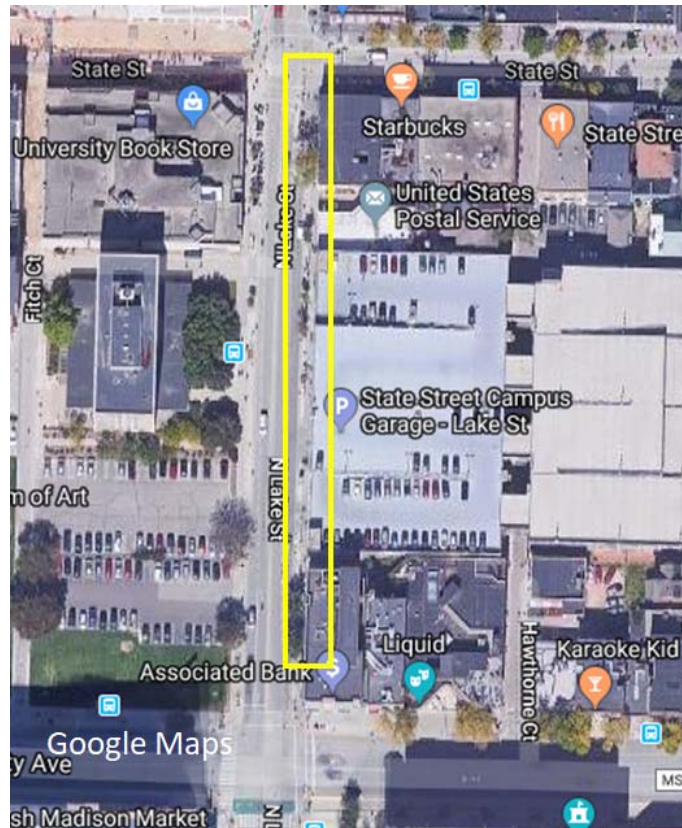


Figure 3.0-11a Lake Street north of University Ave

(11b) Lake St (University-Johnson)

This location would load intercity buses on Lake Street between University and Johnson Street, adjacent to the University's Johnson and Lake Street ramp. The location is highly visible and access to both Johnson Street and University Ave is good. There are commercial services in the area. There could be sight distance concerns with vehicles exiting the parking ramp. There is no shelter nor restroom facilities.

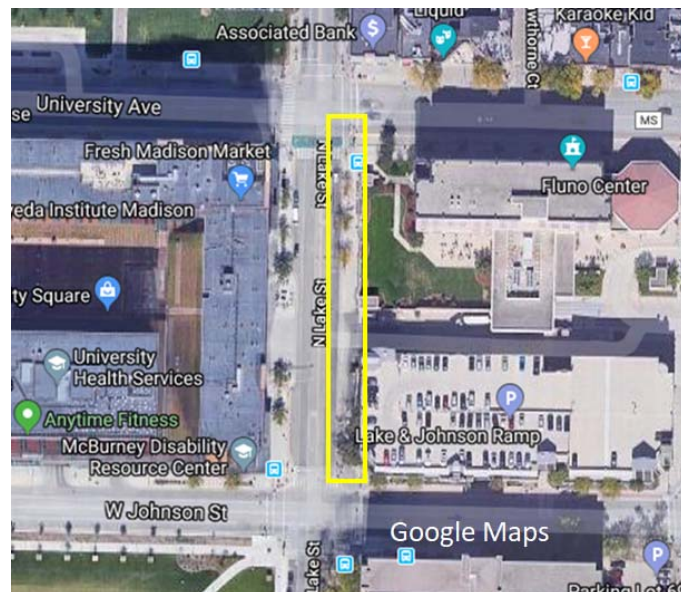


Figure 3.0-11b Lake Street between University and Johnson

(12) West Washington (RR-Bedford)

The West Washington intercity bus location would be just east of the existing railroad tracts. It is close to where the previous Badger Bus depot existed yet distant from the current loading area on Langdon Street. It is in a highly visible location and bus operations from and to the site on West Washington would be satisfactory. There are several commercial driveways in the area that could pose both staging challenges (is there enough curb space) as well as visibility challenges for vehicles exiting the driveways. There are commercial establishments near the site, yet there is no shelter nor restroom facilities.

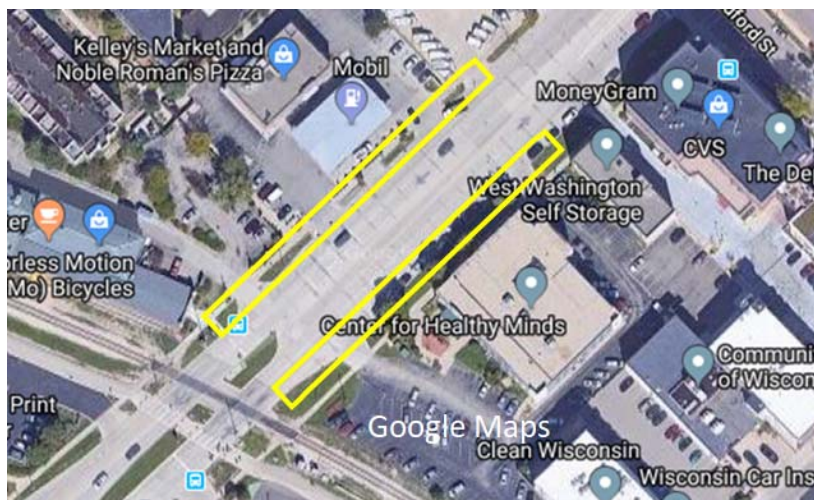


Figure 3.0-12 West Washington Ave

(13) Dayton St (E. Campus Mall-Frances)

This location would load intercity buses in front of the Kohl Center. While highly visible, this location would have numerous conflicts with events occurring at the Kohl Center. As with other locations, this site does not have a shelter nor restroom facilities.



Figure 3.0-13 Dayton Street – Kohl Center

4.0 Input

The project team has communicated with UW, several service providers, and discussed the relocation at the August 24, 2019 Transportation Commission meeting. The following bullets summarize the comments.

- The UW does not support the current Langdon Street location because of the high levels of pedestrian, bus, bike, and auto activity. They feel that loading and loading intercity buses adds to the confusion of an already complicated environment. The UW also does not support the Monroe Street location because of the relocation challenges associated with the street closure that occurs during game day events. The UW is generally supportive of Lake Street Alternatives (Alt 10 and 11b)
- Email and verbal comments received during the August 24, 2019 Transportation Commission generally supported leaving the intercity bus terminal at its current location because of the services afforded by the Memorial Union. If the intercity bus loading location is relocated,

RELATIVE ADVANTAGES AND DISADVANTAGES

5= Highly Favorable 4= Favorable 3= Neutral/Equally +/- 2= Mildly Unfavorable 1= Unfavorable

Intercity Bus Service Access Areas (<i>Downtown/Campus</i>)																
<i>EVALUATION CRITERIA</i>	(0) Langdon Street (<i>Current</i>)	(1) Union South	(2) Chazen	(2a) Chazen Pullout	(3) 27 N. Charter Street (Parking Lot)	(4) N. Charter Street (Spring- Regent)	(5) RR Corridor (W. Wash- E. Campus Mall)	(6) Monroe Street (west of Randall)	(7) N. Charter Street (Dayton- Spring)	(8) Mills St (Dayton- SW Bike Path)	(9) Brooks St (Univ- Johnson)	(10) Lake St (Dayton- Johnson)	(11a) Lake St (Univ- State St)	(11b) Lake St (Univ- Johnson)	(12) West Wash (RR- Bedford)	(13) Dayton St (E. Campus Mall- Frances)
Proximity to UW Student Residences	3	4	4	4	3	3	3	3	3	3	4	5	5	5	3	5
Boarding Area Visibility	4	5	4	2	1	1	1	5	1	2	4	3	4	5	4	4
Location Visibility: Safety/Security for Customers	5	5	3	3	1	2	2	4	1	1	2	3	3	4	3	2
Restrooms/Indoor Waiting Area Available (Public-5, Commercial-3, None-1)	5	5	1	1	1	1	1	3	1	1	1	3	1	2	3	1
Parking/Staging Area for Auto Pick-Up & Drop-Off	1	1	1	1	2	3	4	4	2	2	1	2	1	2	2	2
Impacts to Adjacent Development (exhaust, noise, etc.)	2	2	1	1	4	4	3	3	3	3	2	3	2	3	3	2
Ease of Implementation (space available, acceptance)	3	1	1	1	3	4	3	2	4	3	3	4	3	4	2	1
Connectivity to Public Transit, Bicycle and Pedestrian Networks	3	2	5	5	2	2	2	2	2	3	5	5	5	5	2	3
Impact on Auto/Vehicular Traffic	1	1	1	1	4	4	3	4	4	4	3	3	1	3	2	1
Impact on Bicycle/Pedestrian Traffic	1	1	1	1	4	4	3	3	3	4	3	3	2	3	2	1
Driveway Sight Distance	NA	NA	2	3	4	3	4	4	3	2	3	4	2	2	2	4
Approx. Number of Loading Spaces	4	0	4	4	3	6	7+	8+	5	3	4	4-5	3?	3	3?	5
Recommended								Alt 2				Yes		Alt 1		

commenters generally favored the Lake Street locations because they are central and easy to access using Metro Transit.

- Intercity Bus Providers (CoachUSA and Badger) seemed to accept both Lake Street locations. They expressed a preference for 10 because it provided more staging room for buses. The location also has the ability to have additional bus staging locations in front of the Kohl Center during peak travel holidays.

5.0 Recommendation

(1) Recommendation: Lake Street (Dayton – Johnson Street) (Alt 10)

Using the evaluation criteria contained in the attached evaluation matrix, the City and UW staff team recommend relocating the passenger pickup and drop off location to **the 200 block of Lake Street** (between Dayton and Johnson Streets) – Alternative 10. This location:

- Is located directly adjacent to one UW student residence hall, and close to others.
- Is located in a highly visible area with good surrounding commercial services.
- Has a high level of pedestrian activity, assisting in passenger security.
- Has a fair amount of curb space available for short-term vehicle staging, both along the east side of Lake Street and sections of Dayton Street.
- Has additional space on Dayton Street for bus staging during holiday periods.
- Does not require the relocation of Metro bus stops.

A disadvantage of this site is the high level of pedestrian and vehicular activity in the area during events at the Kohl Center.

A bus pad and shelter would need to be constructed, probably on a lawn area associated with Gordon Commons.

Intercity bus operators generally support this location, as it is close to UW residence halls and is only one block from the former University Ave/Chazen location, which they used for a couple of years.

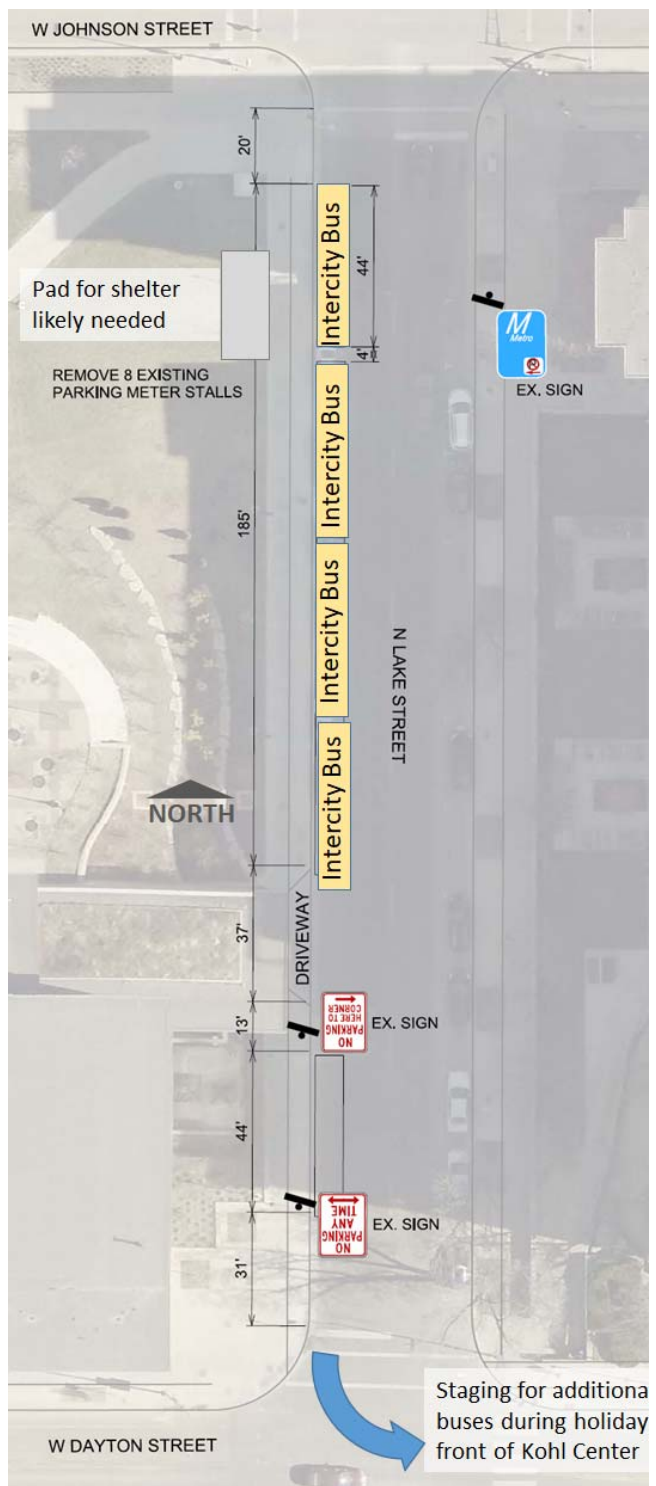


Figure 5.0-1 Lake Street Alt 10 Layout

(2) Alternate Recommendation: Lake Street (University Avenue – Johnson Street) (Alt 11b)

If Alt. 10 cannot be implemented, a secondary location – **the 300 block of Lake Street** (between University Avenue and Johnson Street) – could be considered (Alternative 11b). This location:

- Is located within 0.2 to 1.0 miles to UW student residence halls.
- Is also located in a highly visible area with good surrounding commercial services.
- Has a high level of pedestrian activity, assisting in passenger security.
- If passengers need services or supplies, Fresh Madison Market is nearby as a private business. Similarly, the Memorial Union is also only a couple of blocks from this location.

Two separate layouts were developed to address staging problems associated with bus boarding at this location. If this location were selected, there are several issues that still require resolution. These include:

- Staging – There is only enough room for three buses, whereas Langdon Street currently has room for staging 4 buses. It would be advantageous to identify one additional staging area.
- Metro bus stop relocation – This stop requires relocating the Metro bus stop. Relocating the stop to the north introduces problems associated with the Lake Street ramp. Therefore, a short-term stop in front of the Fluno Center Alley. This stop is not a time point, so the duration of Metro stops would be limited to the time it takes to board and unload.
- Left turning for the north most intercity bus – During busy times, the north most intercity bus may not be able to access the left turn lane, requiring them to travel north on Lake Street rather than taking a left onto University Ave. This maneuvering difficulty is illustrated in the adjacent graphic.

Outdoor passenger shelters would be provided on the block, probably within the street right-of-way, although they may encroach on UW land. Short-term vehicle parking/staging for drop off and pick up of passengers would be limited.

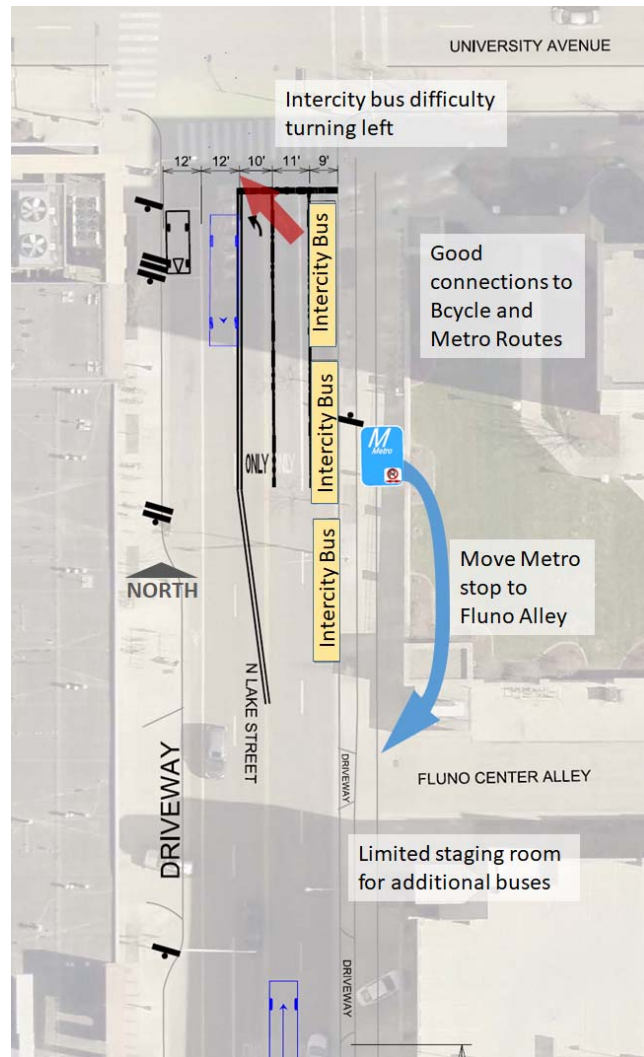


Figure 5.0-2 Lake Street Alt 11b Layout

The University administration currently supports this location. The Intercity bus operators generally support this geographic location, as it is only one block from the former University Ave/Chazen location. However, they expressed concerns about the lack of curb space available to auto traffic dropping off and picking up passengers before and after the bus arrives. City staff also are concerned about passenger drop off autos sitting in active loading zones that serve the dense commercial development on the west side of the street.

(3) Second Alternate Recommendation: Monroe Street (west of Randall Ave) (Alt 6)

If the previous two locations cannot be implemented, the **north side of the 1400 block Monroe Street**, corresponding to Alternative 6. This location:

- Is located within 0.5 to 0.75 miles from most UW student residence halls.
- Is located in a highly visible area, assisting in passenger safety and security. Additionally, UW Police and City of Madison Fire Station #4, staffed around the clock, are located within 1000 feet. This provides an additional level of security during times when pedestrian activity is lowest.
- Provides some commercial services through a 24-hour Kwik Trip at the corner of Monroe and Randall.
- Provides some level of services within a couple of blocks. If passengers need to use a restroom or shelter from inclement weather, the UW Union South is two blocks from this location.
- Provides opportunities for on-street, short-term vehicle parking/staging for drop off and pick up of passengers.

Outdoor passenger shelters would also be provided on the block, directly within the street right-of-way.

One complication of this location occurs during the seven days of the year when UW hosts a home football game and up to three other occasions with high attendance. This area is extremely congested with pedestrian traffic and the street is closed to through traffic. Intercity bus vehicle access, boarding and alighting would be highly problematic. During those times, passenger boarding could be temporarily located to the north side of the 1300 block of University Avenue. While this location is not ideal, it would be suitable for the limited number of days when necessary as it is only a 2 ½ block walk from 1400 block of Monroe Street. One alternate location during game days could also be on eastbound Johnson/Campus Drive just west of Randall, with similar characteristics.

The University administration does not favor this location. Further, during meetings held with two of the primary intercity bus operators, they indicated that this location was not desirable from their perspective. They expressed a preference to be closer to the current boarding location at Memorial Union. In addition, public testimony provided to the Transportation Commission by several members of the public also expressed negative views regarding this location.

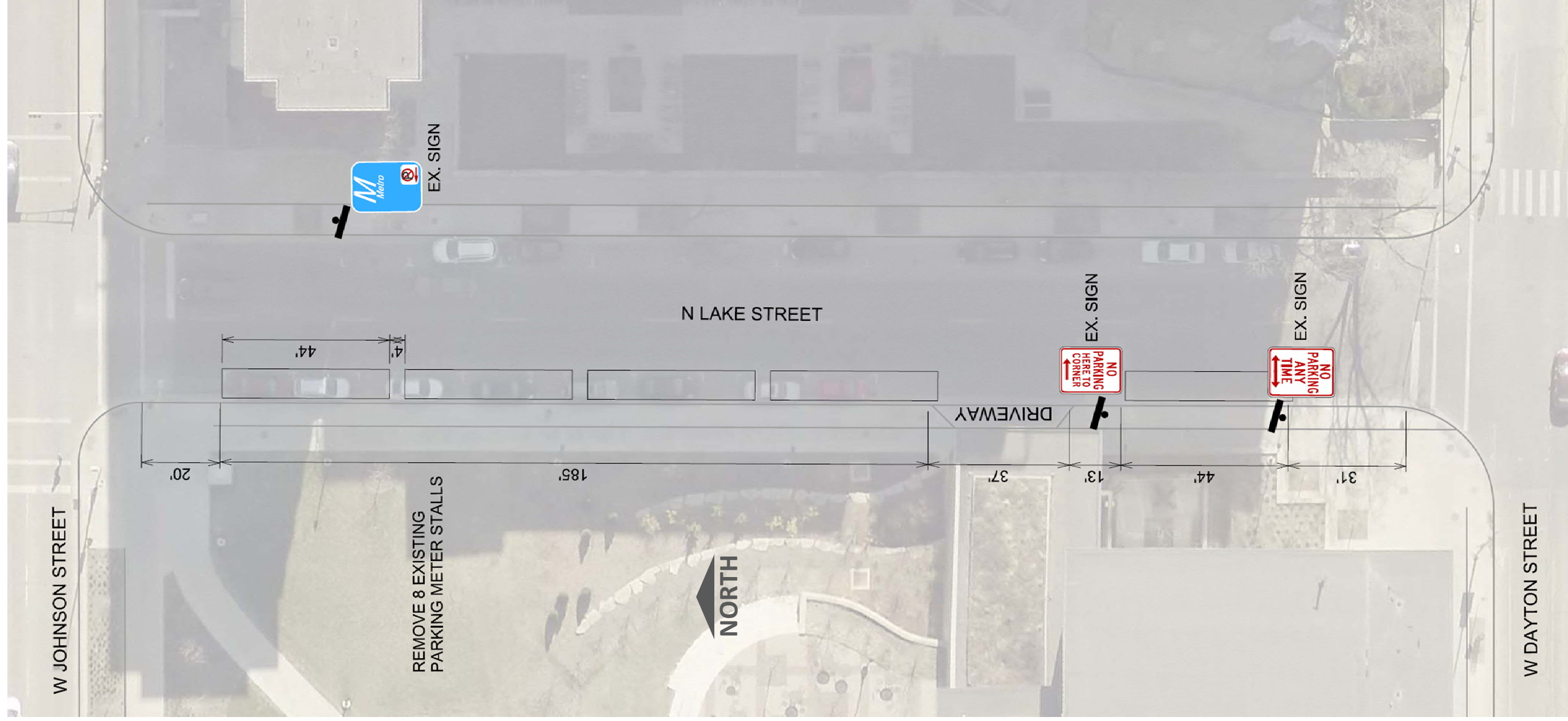
Site layouts of all three of these potential locations are attached to this report.

Financial Considerations of Relocation Implementation/Required Capital Upgrades

Any of the relocation alternatives will require limited capital improvements, including, but not limited to:

- Passenger shelters within the street right-of-way.
- Addition of concrete pads to support shelters.
- The possible reconstruction of the curb.

- Possible removal of pedestrian bulbout to accommodate bus staging on Lake Street.
- Signage, pavement marking or pedestrian crossing infrastructure



REVISED Location 10 Lake Street Between Dayton St and Johnson St



REVISED Location 11b Lake Street Between Johnson St and University Ave





Location 6 Monroe Street (west of Randall)

