



To: Jeff Harris, Toll Brothers

Cc: Dennis Hughes, Holland & Knight
Chip Glasgow, Holland & Knight

From: Jami L. Milanovich, P.E.
Jason J. Shetler, E.I.T

Date: April 4, 2014

Re: Proposed PUD Modification
Union Place – Phase IIA + IIB
Washington, DC

OVERVIEW

Union Place is a multi-phase residential development with ground floor retail located in Square 749 in northeast Washington, DC. As shown on Figure 1, the site generally is bounded by K Street on the south, 2nd Street on the west, L Street on the north, and 3rd Street on the east. Phase I of the project is complete and occupies the southeast corner of the square. Phase I includes 212 residential units, approximately 3,700 SF of ground floor retail, and 173 residential parking spaces (0.82 spaces per unit). Phase II is approved to include 500 residential units ($\pm$ 5 percent), 13,800 SF of ground floor retail, including a 3,400 SF daycare), and 329 residential parking spaces. The number of parking spaces established in the PUD for Phase II A and B is nearly 200 more parking spaces than would be required under the DCMR for a C-3-C zone. Phase II will occupy the western portion of the site and may be constructed in two phases (see Figure 2 for the ground floor plan for Phases IIA and IIB). Phase III is proposed to include 41 residential units and no on-site parking. Phase III will be located on the northeast corner of the site.

On April 20, 2006, the District of Columbia Zoning Commission granted preliminary PUD approval for Phases I and II of the development, consolidated PUD approval for Phase I, and approved a related map amendment to rezone the site from C-M-3 and C-2-B to C-3-C (Zoning Commission Order 05-36). As part of the PUD approval, the overall project was required to have one parking space per residential unit.

Subsequent to the initial case, several related cases and modifications were approved by the Zoning Commission, as summarized below in Table 1.

Table 1
Summary of Related Cases

Case No.	Description	Residential Unit Count and Parking Count	Date Approved
05-36	Preliminary PUD for Phases I and II Consolidated PUD for Phase I Related Map Amendment	Phase I: 202 units ($\pm 5\%$); 177 spaces Phase II: 500 units ($\pm 5\%$); 525 spaces	4/20/06
05-36B	Minor Modification for Phase I to allow loss of public access to a portion of the plaza	No change	7/14/08
05-36A	Stage 2 PUD for Phase II, including relief from retail parking requirements	Phase II: 500 units ($\pm 5\%$); 545 spaces 55 bicycle spaces	7/28/08
05-36C	Minor Modification for Phase I related to affordable housing	No change	12/14/09
05-36D	Time Extension	No change	11/08/10
05-36E	Minor Modification to allow Phase II to be constructed in two phases and to reduce the residential parking ratio for the overall PUD to 0.71 spaces per unit	Phase II: 500 units ($\pm 5\%$); 329 spaces	12/13/10
05-36F	Time Extension	No change	7/30/12
05-36H	Minor Modification to permit Phases IIA and IIb to be constructed as separate buildings	Phase II: 500 units ($\pm 5\%$); 329 spaces 55 bicycle spaces	3/11/13
05-36G	Modification to include a third phase of the PUD and to reduce the residential parking ratio for the overall PUD to 0.67 spaces per unit	Phase III: 41 units ($\pm 5\%$); 0 spaces	11/18/13

As shown in Table 1, current approvals would require a residential parking ratio of 0.67 spaces per unit for the overall PUD. With a total of 778 units now proposed for the overall PUD (212 units in Phase I, 525 units proposed for Phase II, and 41 units proposed for Phase III), 344 parking spaces would be required in conjunction with Phase II ($778 \times 0.67 = 521$ spaces – 173 spaces constructed as part of Phase I = 348 spaces).



WELLS + ASSOCIATES

MEMORANDUM

Based on changing market conditions, Toll Brothers, the Owner of Phase II, now proposes to reduce the amount of residential parking provided as part of Phase II to 243 spaces. Based on a proposed residential unit count of 525 dwelling units in Phase II, this would equate to a parking ratio of 0.46 spaces per unit for Phase II and an overall ratio of 0.53 for the entire project.

As demonstrated herein, both national and regional trends show that auto ownership and auto travel have declined in recent years. In Washington, DC, the increased use of non-auto modes of travel is, in large part, due to the City's investment in a variety of transportation options. This investment, coupled with private entrepreneurial investment, has resulted in a comprehensive transportation system that is among the best in the nation. The site's proximity to an abundance of non-auto transportation options will reduce the need for and reliance on private automobiles. Most notably, the site is located just 1½ blocks from the south entrance of the NoMA – Gallaudet U (New York Ave) Metro Station and is served by eight Metrobus routes. Other non-auto transportation options are available in the site vicinity, including nine car-sharing vehicles and three Capital BikeShare stations located within a ¼ mile radius of the site.

In addition to the reduction in parking for Phase II, the following additional changes also are proposed with the PUD Modification:

- The curb cut for the garage is proposed to be shifted further north (further from K Street) and will be located approximately mid-block,
- The two separate loading areas originally proposed for Phase II will be consolidated into one loading area served by a single curb cut on 2nd Street (thereby eliminating one curb on 2nd Street), and
- Relief is now being sought from the 55-foot loading requirement (a 30-foot berth is proposed in lieu of the 55-foot berth).

The proposed changes to the loading facilities improve the overall project by eliminating a curb cut on 2nd Street and potentially reducing the number of large trucks coming to/from the site. To address the need to accommodate larger trucks in rare cases, the Owner will implement a Loading Management Plan, which will be discussed in detail in the Loading Evaluation section of this report.



WELLS + ASSOCIATES

MEMORANDUM

ANALYSIS OF RESIDENTIAL MODE SPLIT TRENDS

Regional Trends

Washington, DC currently has the second-highest rate of households without cars of all major U.S. cities (second only to New York). In fact, in 2012, 37.9 percent of households in Washington, DC did not have a car.¹

Another recent study evaluated changing travel patterns in urbanized areas in the United States. The study found that in the Washington, DC area, driving has decreased and non-auto travel has increased. Specifically:

- The percentage of workers commuting to work by private vehicle decreased by 4.7 percent from 2000 to 2007-2011 in the Washington, DC urban area (note that the 2007-2011 data was taken from the five year estimates from the American Community Survey while the 2000 data was taken from the 2000 U.S. Census),
- The number of vehicle miles traveled per capita decreased by 4.9 percent in the Washington, DC urban area between 2006 and 2011, and
- The percent increase in passenger miles traveled on transit per capita increased by 7.0 percent in the Washington, DC urban area between 2005 and 2010.²

Additionally, bicycling in the District increased by an estimated 82 percent between 2005 and 2011³ and increased 30 percent from 2012 to 2013.⁴

The trend toward decreasing auto ownership and increasing use of non-auto modes of transportation in the region is further substantiated by Arlington County's recently published Residential Building Performance Monitoring Study.⁵ The study is a compilation of 16 performance monitoring studies conducted to gather information about travel and parking behaviors in residential buildings where TDM services are provided by Arlington County Commuter Services. While some of the underlying conditions in the study differ from

¹ Has Motorization in the U.S. Peaked? Part 4: Households without a Light-Duty Vehicle, Michael Sivak, University of Transportation Research Institute, January 2014.

² Transportation in Transition. A Look at Changing Travel Patterns in America's Biggest Cities. U.S. PIRG Education Fund and Frontier Group, December 2013.

³ LaFrance, Adrienne. "In Washington, Options Open Up for Commuting on Two Wheels." *The Washington Post*. Updated March 1, 2014. *The Washington Post*. Web. March 3, 2014.

⁴ "Transportation and Cities of the Future." Transportation Research Board 93rd Annual Meeting, Washington Hilton, Washington, DC, January 15, 2014. Presentation.

⁵ Residential Building Performance Monitoring Study, Arlington County Commuter Services, September 2013.



WELLS + ASSOCIATES

MEMORANDUM

those in the District, it does illustrate some general trends relating to auto ownership. For example:

- Auto ownership for apartments and condos in Metro corridors were substantially lower than in non-metro corridors,
- Vehicle ownership decreased as the Transit Score increased,
- Vehicle ownership decreased as the number of spaces provided decreased,
- Vehicle ownership decreased as the cost of parking increased, and
- The percentage of residents who walked and biked increased when information on walking and biking was provided and when bicycle parking was provided.

National Trends

A recent study conducted to determine the changing characteristics of the transportation systems in America presents several indications of a decrease in vehicle usage in recent years.⁶ The information further substantiates the notion that fewer trips will be made via personal vehicles, car ownership will be lower, and that the recent trends indicate an increase in non-auto transportation modes (i.e. public transit, bicycling, etc.).

The statistics include:

- From 2001 to 2009, the annual number of vehicle-miles traveled by 16 to 34 year-olds decreased from 10,300 miles to 7,900 miles per capita, a drop of 23 percent.
- Among people between 30 and 34 years of age, per-capita driving fell by 17 percent from 2001 to 2009.
- In 2011, the percentage of 16 to 24 year-olds with a driver's license dropped to 67 percent, the lowest percentage since 1963.
- In 2009, 16 to 34 year-olds as a whole took 24 percent more total bike trips than they took in 2001, despite the age group shrinking in size by two percent.
- From 2001 to 2009, the number of passenger-miles traveled per capita by 16 to 34 year-olds on public transit increased by 40 percent.
- In 2011, nearly ten percent more trips were made via public transportation than had been made in 2005. This growth continued into 2012, despite reduced services and increased fares in many locations.
- The number of bicycle commuters increased by 39 percent between 2005 and 2011.

⁶ A New Direction: Our Changing Relationship with Driving and the Implications for America's Future. U.S. PIRG Education Fund and Frontier Group, Spring 2013.



WELLS + ASSOCIATES

MEMORANDUM

- Between 2005 and 2009, the number of people making their commute on foot increased by 20 percent.
- Advancements in technology have broadened the appeal of non-auto travel options, provided new transportation options (car-sharing, bike sharing, taxi booking services, etc.), and have provided substitutes for driving such as teleworking, shopping online, online education, and teleconferencing.

PUBLIC INVESTMENT IN TRANSPORTATION

Over the years, the District has invested heavily in non-auto modes of transportation. As summarized below, these efforts have resulted in a world-class public transportation system and the first bikeshare program in North America.

Metrorail/Metrobus

Metro is the cornerstone of the District's transportation system. Since its opening in 1976, Metrorail has grown to 86 stations and 106 miles of track. Metrobus provides service 24 hours a day, seven days a week via 1,500 buses.

Metro operates the nation's second busiest heavy rail system behind only New York. In 2012, the average weekday ridership on all Metrorail lines was 744,918 passenger trips per day. The annual ridership for 2012 was 212,188,640 passenger trips. Metro also operates the sixth largest bus system in the U.S.

In 2012, Metro began to implement Metro Forward, a six-year improvement program. The \$5 billion program will modernize Metro by renovating and rebuilding infrastructure (including track, railcars, and buses) and updating technology.

In addition, construction of Phase 1 of a 23.1 mile extension of the Metrorail system, known as the Silver Line, is nearing completion. Phase 1 of the extension will extend rail service from the existing Orange Line in Falls Church west through Tysons to Reston. Phase 1 is expected to be operational in Summer 2014. Once complete, the expanded Metrorail system will provide another option for residents in the western suburbs who commute to the District, and for residents of the District to access more of the region. Phase 2 of the extension will extend the Silver line to Dulles International Airport.

While the Metro system has been the cornerstone of the District's transportation system, several years ago, the District undertook a study to identify gaps in transit and identified ways to enhance the City's public transportation options and to better meet the needs of its residents. As a result of that effort, DDOT began focusing, in part, on expanding transit service in the form of the DC Circulator and streetcar.



DC Circulator

The DC Circulator is the result of a public-private partnership between DDOT, WMATA, and DC Surface Transit, Inc. Begun in 2005, the DC Circulator provides efficient, low-cost transportation options by providing 10 minute headways and \$1 fares. The five existing Circulator routes link the District's neighborhoods and Rosslyn, VA to downtown. In 2013, ridership on the five Circulator routes exceeded 5.5 million passengers.⁷

DC Streetcar

The planned streetcar system will serve 150,000 people daily and will stretch 37 miles.⁸ The first phase of the streetcar system, the H/Benning Road Line is under construction and is anticipated to begin operation in mid-2014. The H/Benning Road Line will provide direct service to Union Station to the west (providing access to Metro's Red Line) and will terminate at Benning Road/Oklahoma Avenue to the east. A planned future extension of the H/Benning Line will extend streetcar to either Minnesota Avenue or the Benning Road Metro Station. Ultimately, the H/Benning Road Line will be just one piece of the overall One City Line that will traverse the city east to west from beyond the Anacostia to the Georgetown waterfront.

Bicycling

The District also has made great strides in promoting and facilitating bicycling as an emergent mode of transportation. Today, the District has 56 miles of bicycle lanes and 55 miles of trails.

In 2008, DC became the first city in North America to implement a bikesharing system. The system initially began as SmartBike DC with just 120 bicycles at 10 stations in the District. In 2010, the District joined forces with Arlington County and launched Capital Bikeshare, which has grown to 2,500 bicycles at 300 stations in Washington, DC, Arlington and Alexandria, VA, and Montgomery County, MD.⁹ As a result of the District's investment in bikeshare, the number of annual members has increased steadily, with 22,200 annual members in November 2012.¹⁰ The number of trips taken using Capital Bikeshare also has increased,

⁷ DC Circulator. 2013 Ridership. <http://circulatordashboard.dc.gov/cirdashboard/#Ridership/StartDate=9/6/2013EndDate=2/6/2014PubDate=2/6/2014>.

⁸ Sustainability DC – Sustainable DC Plan. http://sustainable.dc.gov/sites/default/files/dc/sites/sustainable/page_content/attachments/DCS-008%20Report%20508.3j.pdf.

⁹ <http://capitalbikeshare.com/about>

¹⁰ 2013 Capital Bikeshare Member Survey Report. LDA Consulting, May 22, 2013.



WELLS + ASSOCIATES

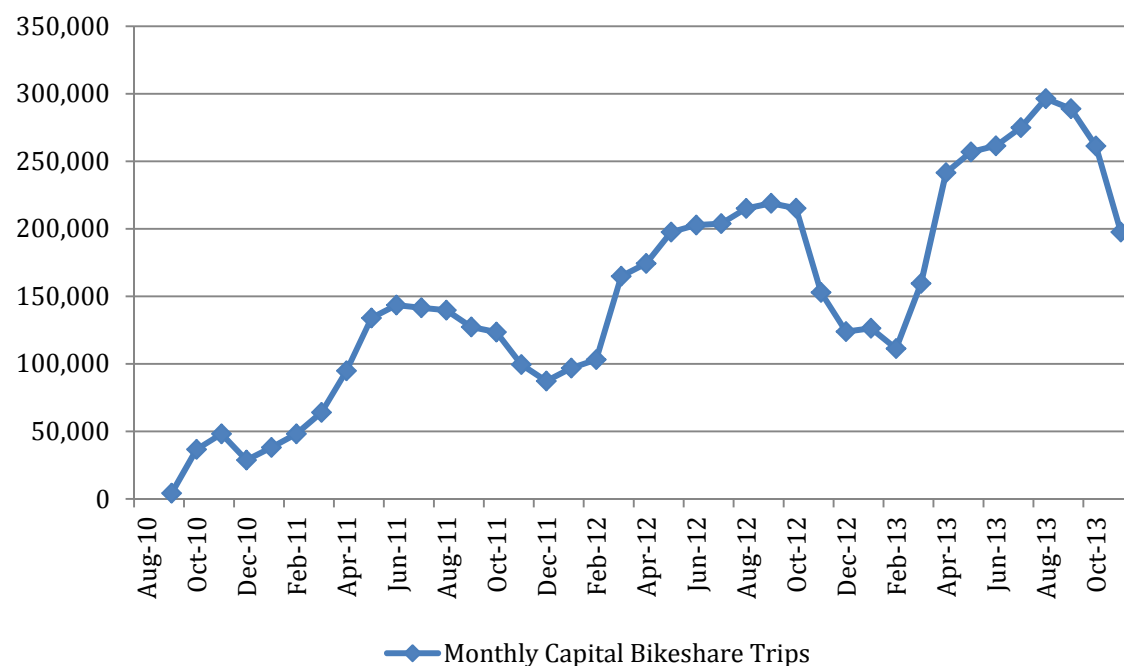
MEMORANDUM

with expected seasonal declines during the winter. As shown on Chart 1, the number of Capital Bikeshare trips recently peaked in August 2013 with nearly 300,000 trips for the month. On average, the number of trips by Capital Bikeshare has increased by 100,000 trips per year since bikeshare's inception in the District.

According to a 2013 survey of Capital Bikeshare members, the average driving reduction among respondents was 198 miles per year, which when extrapolated to all annual members, yields a reduction of 4.4 million vehicle miles per year.¹¹

More than half of the members surveyed indicated that they do not have a personal vehicle. Approximately four percent of those surveyed indicated that they sold a car since joining Capital Bikeshare and that bikeshare was a factor in their decision.¹²

Chart 1
Monthly Capital Bikeshare Trips¹³



¹¹ 2013 Capital Bikeshare Member Survey Report. LDA Consulting, May 22, 2013.

¹² Ibid.

¹³ <http://capitalbikeshare.com/about>



WELLS + ASSOCIATES

MEMORANDUM

PRIVATE INVESTMENT IN TRANSPORTATION

Washington, DC also has seen significant investment in private transportation options. Perhaps most significant is the advent of car-sharing services in the District. Car-sharing was first introduced in the District in 2001 when Flexcar was awarded a contract from WMATA to establish and operate a car-sharing operation at select Metro stations. Since then, DDOT has encouraged the growth of car sharing. In 2005, DDOT reserved over 80 curbside parking spaces for car-sharing vehicles. More recently, DDOT granted a permit that allows Car2Go vehicles to park in any legal space in the City.¹⁴ Currently, four car-sharing companies provide service in the District.

An online survey of the nation's leading car-sharing providers conducted in 2008 revealed that auto ownership decreased from 0.47 vehicles per household before joining car-sharing to 0.24 vehicles per household after joining car-sharing (a reduction of nearly 50 percent).¹⁵ Importantly, 80 percent of those surveyed did not own any vehicles after joining car-sharing.¹⁶

Additional transportation options continue to emerge. One such option is Uber, which is a private on-demand car service offered in the Washington, DC area. Four types of services are available: 1) a traditional taxi-like Black Car service, 2) a similar service that operates with SUV livery, 3) non-taxi ridesharing called UberX that is operated by private drivers, and 4) traditional taxi service booked through Uber. The service is available via a mobile app, text message, or the internet, which allows anyone to request a ride. Customers can track their car's location via the app. The customer's credit card on file is then charged after the ride and a receipt detailing the trip will be sent through email. Uber's pricing is similar to metered taxis. If the Uber car is traveling at a speed greater than 11 mph, the price is calculated on a distance basis. Otherwise, the price is calculated on a time basis.

¹⁴ Chavez, Nicole. "Car-sharing picks up speed in D.C." *The Washington Post*. August 11, 2013. *The Washington Post*. Web. February 26, 2014.

¹⁵ Martin, Elliot and Susan Shaheen. "The Impact of Carsharing on Household Vehicle Ownership." *Access* 38. Spring (2011): 23-27. University of California Transportation Center Web. February 26, 2014.

¹⁶ Ibid.



WELLS + ASSOCIATES

MEMORANDUM

INVENTORY OF NON-AUTO MODES OF TRANSPORTATION

The subject site is well-situated to capitalize on the public and private transportation investments that have been made in the District. As described below, the site is well served by both Metrorail and Metrobus and is proximate to car-sharing services and Capital Bikeshare. Additionally, pedestrian and bicycle amenities make the area pedestrian and bicycle friendly.

Metrorail Service/Facilities

As shown on Figure 3, the subject site is located just 1½ blocks from the south entrance of the NoMA – Gallaudet U (New York Ave) Metro Station (or less than a 5-minute walk). Union Station also is located near the site, approximately 0.6 miles to the south (or an approximate 15-minute walk). The NoMA Metro Station and Union Station both are served by Metro's Red Line, which provides direct service to the Gallery Place – Chinatown and Metro Center Stations and to stations in Montgomery County. Red Line passengers can transfer to the Green and Yellow Lines at the Gallery Place – Chinatown Station and to the Blue and Orange Lines at Metro Center Station.

Bus Service/Facilities

The Washington Metropolitan Area Transit Authority (WMATA) and DC Circulator currently provide extensive public bus service in the site vicinity. The Ivy City-Dupont Circle Line (Route D3), Ivy City-Franklin Square Line (Route D4), Hospital Center Line (Route D8), Benning Road Line (Route X1), and Benning Road-H Street Line (Route X2) provide service and each have stops within two blocks of the site.

The site is served by both the Union Station – Navy Yard Metro Circulator Line and Georgetown – Union Station Circulator Line. The nearest Circulator stop is located in the Union Station parking garage, which has pedestrian access via H Street on the Hopscotch Bridge. This stop is 0.5 miles from the site (or approximately a 12-minute walk). There are multiple stops in the immediate vicinity of Union Station.

Figure 3 displays the bus routes that service the area surrounding the site and Table 1 presents the minimum, maximum, and average headways for Metrobus and DC Circulator routes in the site vicinity.



WELLS + ASSOCIATES

MEMORANDUM

Table 1
Metrobus and DC Circulator Headways (in minutes)

HEADWAY	NORTHBOUND/WESTBOUND			SOUTHBOUND/EASTBOUND		
	AM Peak Period	Midday Period	PM Peak Period	AM Peak Period	Midday Period	PM Peak Period
	7:00 AM to 10:00 AM	10:00 AM to 4:00 PM	4:00 PM to 7:00 PM	7:00 AM to 10:00 AM	10:00 AM to 4:00 PM	4:00 PM to 7:00 PM
Ivy City – Dupont Circle Line (Metrobus Route D3)*						
Min	0:20	N/A	N/A	N/A	N/A	0:24
Max	0:27	N/A	N/A	N/A	N/A	0:31
Avg	0:23	N/A	N/A	N/A	N/A	0:28
Ivy City – Franklin Square Line (Metrobus Route D4)						
Min	0:15	0:22	0:16	0:16	0:17	0:16
Max	0:20	0:32	0:23	0:31	0:30	0:21
Avg	0:16	0:29	0:18	0:18	0:26	0:17
Hospital Center Line (Metrobus Route D8)						
Min	0:12	0:07	0:07	0:14	0:13	0:07
Max	0:16	0:17	0:18	0:16	0:16	0:20
Avg	0:14	0:14	0:11	0:15	0:15	0:12
Benning Road Line (Metrobus Route X1)*						
Min	0:15	N/A	N/A	N/A	N/A	0:15
Max	0:23	N/A	N/A	N/A	N/A	0:28
Avg	0:18	N/A	N/A	N/A	N/A	0:24
Benning Road – H Street Line (Metrobus Route X2)						
Min	0:06	0:06	0:06	0:06	0:06	0:05
Max	0:10	0:09	0:15	0:11	0:10	0:08
Avg	0:07	0:07	0:08	0:08	0:08	0:06
* Supplemental service; route operates during peak periods only.						



WELLS + ASSOCIATES

MEMORANDUM

Table 1 (continued)
Metrobus and DC Circulator Headways (in minutes)

HEADWAY	NORTHBOUND/WESTBOUND			SOUTHBOUND/EASTBOUND		
	AM Peak Period	Midday Period	PM Peak Period	AM Peak Period	Midday Period	PM Peak Period
	7:00 AM to 10:00 AM	10:00 AM to 4:00 PM	4:00 PM to 7:00 PM	7:00 AM to 10:00 AM	10:00 AM to 4:00 PM	4:00 PM to 7:00 PM
Benning Road – H Street Limited Line (Metrobus Route X9)*						
Min	0:13	N/A	0:15	0:15	N/A	0:15
Max	0:18	N/A	0:30	0:20	N/A	0:15
Avg	0:15	N/A	0:17	0:15	N/A	0:15
North Capitol Street Line (Metrobus Route 80)						
Min	0:12	0:09	0:10	0:08	0:13	0:08
Max	0:17	0:20	0:16	0:15	0:17	0:19
Avg	0:14	0:14	0:10	0:10	0:14	0:13
East Capitol Street – Cardozo Line (Metrobus Route 96)						
Min	0:18	0:22	0:19	0:15	0:21	0:20
Max	0:22	0:24	0:21	0:28	0:27	0:21
Avg	0:20	0:23	0:20	0:20	0:23	0:20
DC CIRCULATOR UNION STATION – NAVY YARD LINE						
Avg	0:10	0:10	0:10	0:10	0:10	0:10
DC CIRCULATOR GEORGETOWN – ROSSLYN LINE						
Avg	0:10	0:10	0:10	0:10	0:10	0:10
* Supplemental service; route operates during peak periods only.						

Streetcar Service/Facilities

As previously stated, the H/Benning Road Streetcar Line is anticipated to begin operation in mid-2014. The streetcar will serve the subject site with a stop at the 3rd Street/H Street intersection, which is 0.2 miles from the site (or approximately a 5-minute walk). The stop is at the western terminus of the line, but ultimately, the streetcar line is proposed to be extended to the west to the Georgetown waterfront.

**Car-Sharing Services**

Four car-sharing providers currently operate in the District. Zipcar requires a \$25 application fee and members can choose from three plans: \$60 per year (pay as you go based on the standard hourly or daily rate), \$6 per month (pay as you go based on the standard hourly or daily rate), or \$50 per month (pay as you go based on a discounted hourly or daily rate). Cars must be returned to the same designated parking spaces from which they were picked up. The nearest Zipcars are located in Phase I of the project (two Zipcars are located in the garage and are accessible by the public). Nine Zipcars are located within a ¼ mile radius of the site.

Car2Go requires a one-time \$35 application fee. No reservation is required and car usage is charged by the minute, with hourly and daily maximum fees. Unlike Zipcar, a Car2Go vehicle does not have to be returned to its original location; a Car2Go vehicle can be parked in any unrestricted curbside parking space, in any metered/paystation curbside parking space (without paying meter/paystation fees), or in any residential permit parking space. Car2Go currently has 300 vehicles in the District.

Hertz 24/7 has no annual fee and Enterprise CarShare has a \$40 annual membership fee. Cars can be reserved for both services by the hour or day (hourly and daily fees are charged per usage). In the District, cars must be returned to their original location. The nearest Hertz 24/7 facility, located at 637 3rd Street NE, is three blocks south of the site (or an approximate 8-minute walk) and is equipped with one vehicle. The nearest Enterprise CarShare facility, located at Union Station, is 0.5 miles from the site (or an approximate 12-minute walk) and is equipped with two vehicles.

Car-sharing locations are shown on Figure 3.

Capital BikeShare

Capital BikeShare also is available near the proposed development. The closest BikeShare station is located just one block away at the M Street/Delaware Avenue intersection and which houses 23 docks. A 15-dock station also is located just two blocks away at the intersection of M Street and 1st Street. The Capital Bikeshare stations are shown on Figure 3.



WELLS + ASSOCIATES

MEMORANDUM

Bicycle Facilities

Several dedicated bicycle lanes exist in the vicinity of the subject site. The Metropolitan Branch Trail runs north-south along the west side of 2nd Street. The trail runs from Union Station at the south to NoMA and points beyond to the north. 4th Street has a dedicated bicycle lane on the west side of the roadway for southbound bicycle traffic (4th Street is one-way southbound), 6th Street has a dedicated bicycle lane on the east side of the roadway for northbound bicycle traffic (6th Street is one-way northbound to K Street) and 6th Street has a dedicated bicycle lane on both sides of the roadway for bicycle traffic (6th Street is two-way north of K Street).

Pedestrian Facilities

Sidewalks are present along the perimeter of the block in which the site is located and along all roadways that connect the site to desirable locations (i.e., shops, parks, bus stops, Metrorail stations, etc.). Crosswalks are present at the 2nd Street/L Street unsignalized intersection and at the 2nd Street/K Street signalized intersection directly adjacent to the site.

Walk, Transit, and Bike Scores

The proposed redevelopment site is considered to be “very walkable,” has “excellent transit,” and is a “biker’s paradise” according to the Walk Score website (www.walkscore.com). The walk score considers how close various amenities, such as coffee shops, grocery stores, schools, parks, and banks are to the site. The transit score considers how close rail and bus services are to the site. The bike score measures whether a location is good for biking based on availability of on- or off-street bicycle lanes/paths, topography, destinations and road connectivity, and the bicycle commuting mode share. The scales utilized by Walk Score are shown in Table 3.

Union Place Phase II scores an 82 out of a possible 100 on the walk score scale, an 81 out of a possible 100 on the transit score scale, and a 92 out of a possible 100 on the bike score scale. As such, residents of the proposed development are likely to use non-auto modes of transportation for daily commuting and leisure activities.



WELLS + ASSOCIATES

MEMORANDUM

Table 3
Walk, Transit, and Bike Score Scales

WALK SCORE	DESCRIPTION
90-100	Walker's Paradise — Daily errands do not require a car.
70-89	Very Walkable — Most errands can be accomplished on foot.
50-69	Somewhat Walkable — Some amenities within walking distance.
25-49	Car-Dependent — A few amenities within walking distance.
0-24	Car-Dependent — Almost all errands require a car.
TRANSIT SCORE	DESCRIPTION
90-100	Rider's Paradise — World-class public transportation.
70-89	Excellent Transit — Transit is convenient for most trips.
50-69	Good Transit — Many nearby public transportation options.
25-49	Some Transit — A few nearby public transportation options.
0-24	Minimal Transit — It is possible to get on a bus.
BIKE SCORE	DESCRIPTION
90-100	Biker's Paradise — Daily errands can be accomplished on bike.
70-89	Very Bikeable — Biking is convenient for most trips.
50-69	Bikeable — Some bike infrastructure.
0-49	Somewhat Bikeable — Minimal bike infrastructure.

PARKING ASSESSMENT

Phase II Vehicular Parking Requirements

In accordance with the Second Stage PUD approval for Phase II, relief was granted from the parking requirements for the retail component, including the daycare (Order No. 05-36A). For the residential component, prior zoning approvals required sufficient parking to be provided in Phase II to achieve a parking ratio of 0.67 spaces per unit for the overall project (Order no. 05-36G). Therefore, a total of 348 spaces would be required for Phase II based on the prior approvals.

According to the District of Columbia Municipal Regulations (DCMR) in the C-3-C district, one parking space is required for every four residential dwelling units. Therefore, the proposed 525 residential units in Phase II would require a minimum of 131 parking spaces. As



WELLS + ASSOCIATES

MEMORANDUM

currently proposed, 243 parking spaces (or one space per 2.16 units or 0.46 spaces per unit) would be provided, thereby exceeding DCMR requirements by 85 percent.

With the proposed 243 parking spaces, the parking ratio for the overall project would be 0.53 spaces per unit or more than two times the amount required by the DCMR.

As of March 6, 2014, 201 of the 212 residential units in Phase I (or 94.8 percent) were occupied. As of the same date, 117 parking spaces (or just 68 percent) were leased to residential tenants. Therefore, the parking supply provided for Phase I (0.82 spaces per unit) more than adequately accommodates the demand for Phase I.

It is anticipated that Phase II will have less parking demand than Phase I as a result of the car ownership and utilization decreases herein identified and given that tenants will know prior to leasing in Phase II whether a parking space is available to them (if they desire a space).

Phase II Bicycle Parking Requirements

According to the DCMR, bicycle parking spaces shall be provided for office, retail, and service uses, except retail and service uses in the C-3-C, C-4, and C-5 (PAD) Districts. Therefore, the proposed redevelopment is not required to provide bicycle parking under the DCMR.

Although the DCMR does not require bicycle parking for residential buildings, prior zoning approvals require a minimum of 55 bicycle spaces for Phase II. Additionally, District law requires that one bicycle parking space be provided for every three residential dwelling units.¹⁷ Therefore, the proposed development would require 175 bicycle parking spaces. Bicycle storage rooms will be located in Phase IIA and Phase IIB and will provide storage for a minimum of 175 bicycles.

LOADING EVALUATION

According to the DCMR, in the C-3-C district, a residential building with 50 or more dwelling units would require one 55-foot loading berth, one 200 SF loading platform and one 20-foot service/delivery space.

Under the Second Stage PUD approval, Phase II originally was proposed to include two 55-foot loading berths, two 200 SF platforms, and two 20-foot service/delivery spaces. Two separate loading areas were proposed, with access provided via two separate curb cuts on 2nd Street.

¹⁷ D.C. Code § 50-1641.05(b)(1)



WELLS + ASSOCIATES

MEMORANDUM

In accordance with the proposed PUD Modification, relief is sought for the loading requirements. Under the current proposal, the loading for Phase IIA and Phase IIB has been consolidated thereby eliminating one curb cut on 2nd Street. Additionally, consistent with many residential projects in the District, the 55-foot loading berths have been eliminated. Instead, one 30-foot loading berth and one bay that will serve as a service/delivery space as well as provide access to the trash receptacle are proposed. The loading facilities will be accessed via a single curb cut on 2nd Street.

Although 55-foot trucks are not anticipated, except in rare circumstances, the Owner will implement a Loading Management Plan, the purpose of which is to promote safe and efficient travel for all users, (e.g. cars, trucks, and pedestrians) and to set forth guidelines and procedures for loading and delivery operations that will avoid adverse impacts on the residents of the proposed building and the surrounding community. The following are the components of the loading management plan:

- 1) A member of the on-site management team will be designated as the loading coordinator (duties may be part of other duties assigned to the individual). He or she will coordinate the various retail and residential deliveries (including deliveries, trash disposal, and residential move-in and move-out activities).
- 2) The loading coordinator will inform tenants of the guidelines and procedures for loading and delivery operations. The loading coordinator will inform residents of DDOT's regulations for moving trucks.
- 3) A lease provision will require all tenants to use only the loading dock for deliveries and move-in/move-out activities, except in special circumstances as outlined in #5 below.
- 4) All tenants will be required to notify the loading coordinator before moving in or out so that the loading coordinator can ensure no conflicting loading activities will occur and the proper permits, as required, can be obtained from DDOT. The tenant shall provide the loading coordinator the following information: time and date that the truck is anticipated to arrive, size of truck being used, and name of the moving service (if any).
- 5) In the rare event that a 55-foot truck is required, in accordance with DDOT policies, a permit is required and a temporary no parking zone can be established on an adjacent street to allow for curb-side loading or unloading adjacent to the building. In this case, the tenants shall notify the loading manager in advance so proper permits can be obtained from DDOT and Emergency No Parking signs issued. The tenant shall provide the loading coordinator the following information: time and date that the truck is anticipated to arrive, size of truck being used, and name of the moving service (if any).



WELLS + ASSOCIATES

MEMORANDUM

- 6) Permits are required by DDOT for trucks over 40 feet long. The loading coordinator will assist tenants in obtaining appropriate permits; however, issuance of permits is at the discretion of DDOT.
- 7) No truck idling shall be permitted anywhere on the premises.

CONCLUSIONS

The parking ratio currently proposed for Union Place Phase II (0.46 spaces per unit) exceeds the minimum parking requirement of the DCMR (0.25 spaces per unit) by 85 percent. The overall parking ratio for the PUD would be 0.53 spaces per unit.

The Union Place site is well served by non-auto modes of transportation, providing future residents of the proposed development a variety of transportation alternatives. Specifically, the proposed development will be located within a five minute walk of the NoMA Metro Station and will be served by eight bus routes within a ½ mile radius of the site. Numerous other non-auto transportation options are available in the site vicinity, including nine car-sharing vehicles located within a ¼ mile of the site and a Capital BikeShare station located one block from the site. On-site bicycle parking and excellent pedestrian and bicycle facilities will naturally encourage residents to walk and bike, rather than drive. The site's proximity to the existing prevalent non-auto transportation options will support the growing trend toward reduced auto ownership and auto travel.

Based on these factors and the documented trends of declining auto travel, decreasing auto ownership, and increasing use of non-auto modes of transportation, the proposed parking supply is appropriate and is not anticipated to have an adverse impact on the surrounding area. Should you require any additional information, please do not hesitate to contact us at 703-917-6620, jlmlanovich@mjwells.com, or jjshetler@mjwells.com.

O:\Projects\6001-6500\6116 Union Place\Documents\6116_Traffic Parking Evaluation 04.04.14.docx

FIGURES

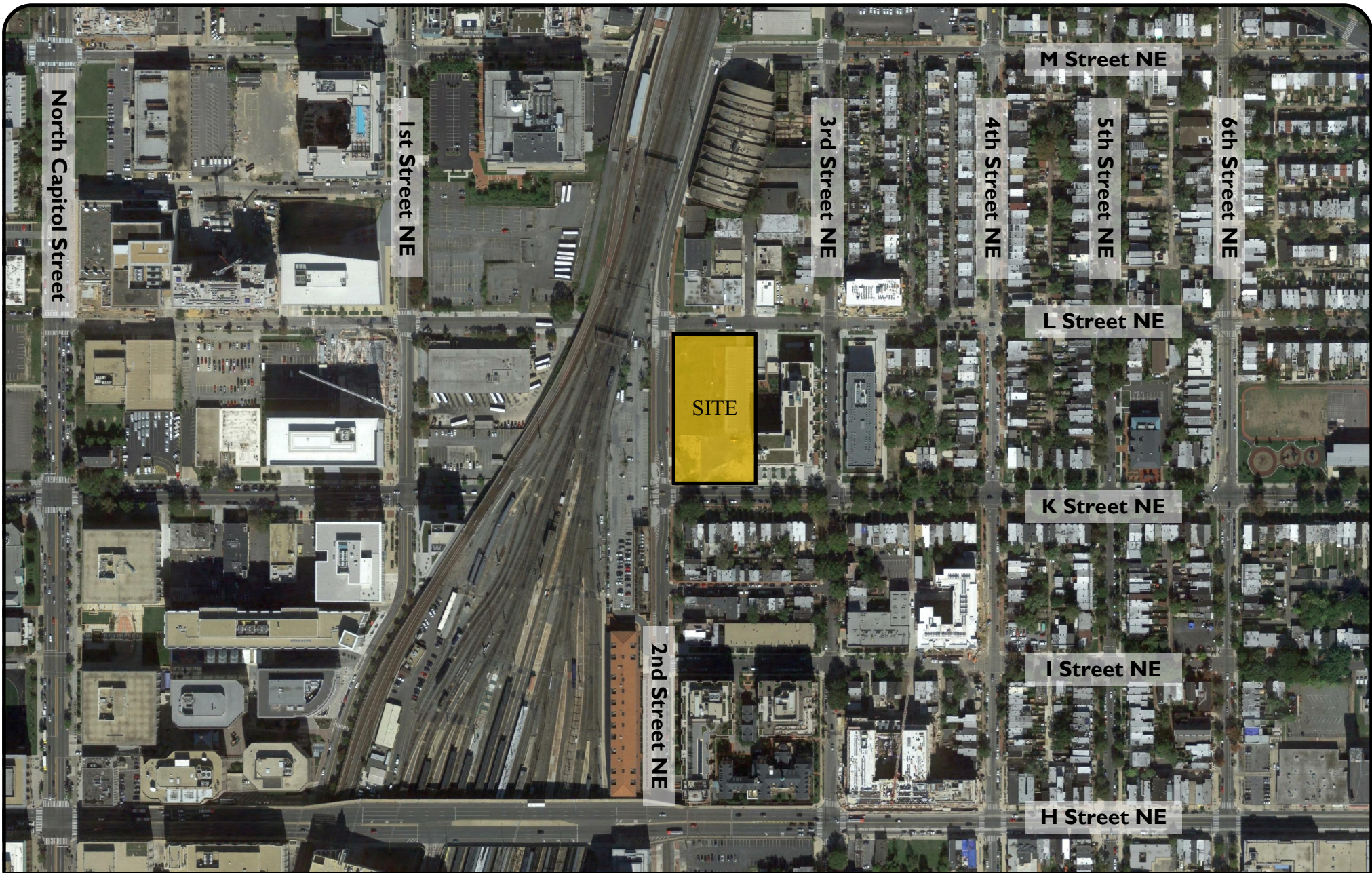


Figure I
Site Location



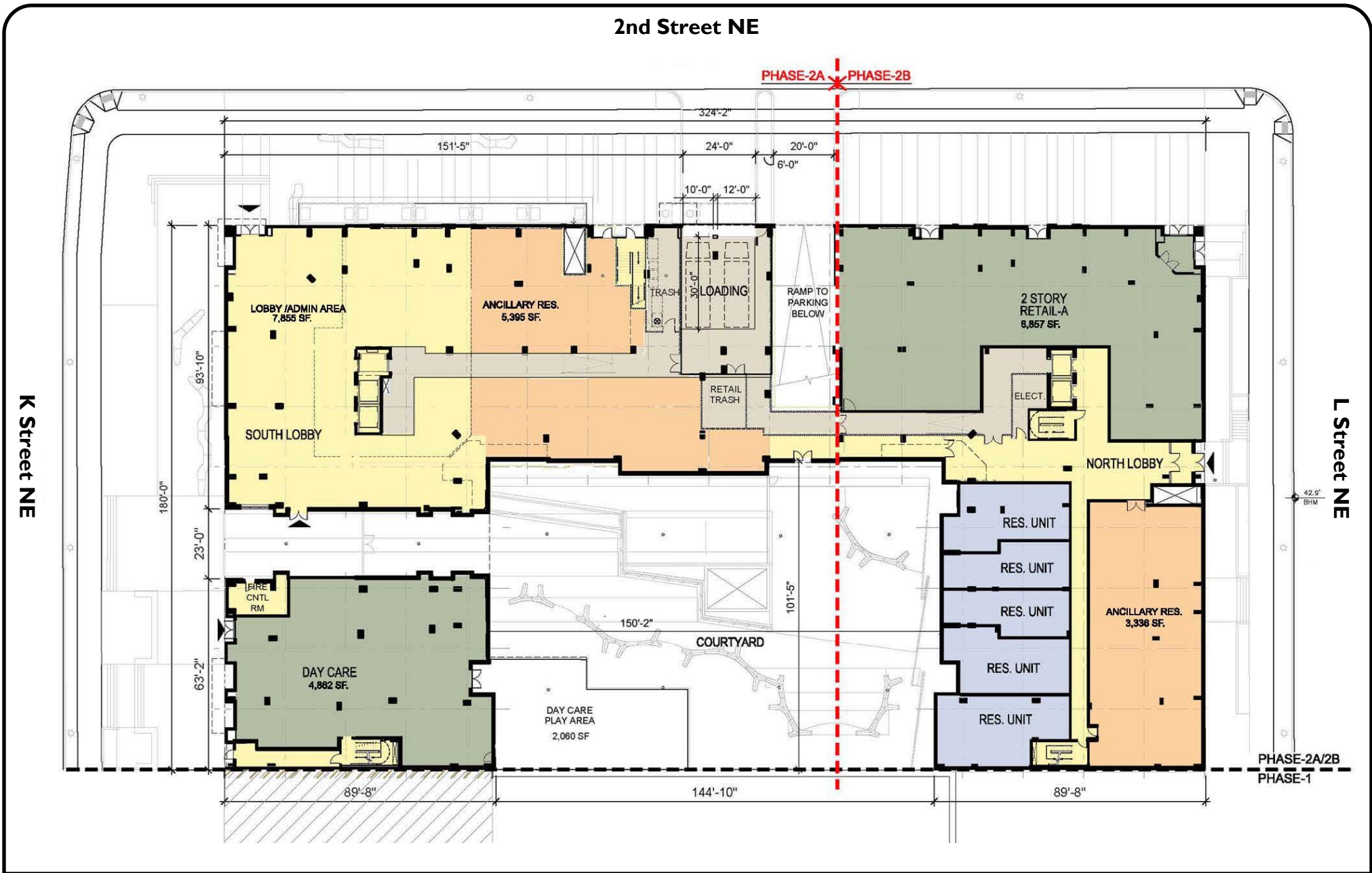


Figure 2
Ground Floor Plans

Source: DCS Design
Date: 3/27/2014
Sheet: A-203

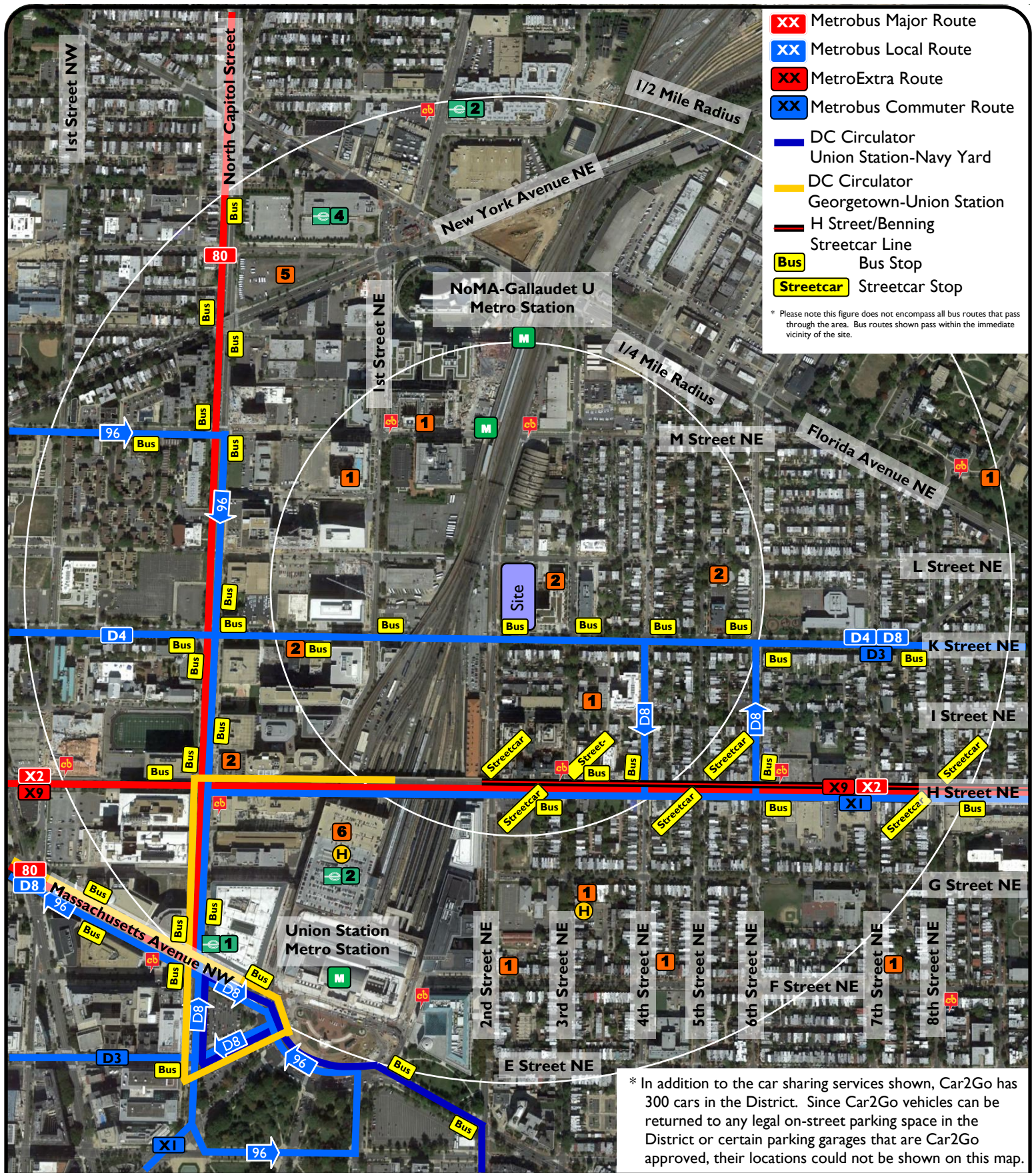


Figure 3
Non-Auto Transportation Modes

Union Place
Washington, DC