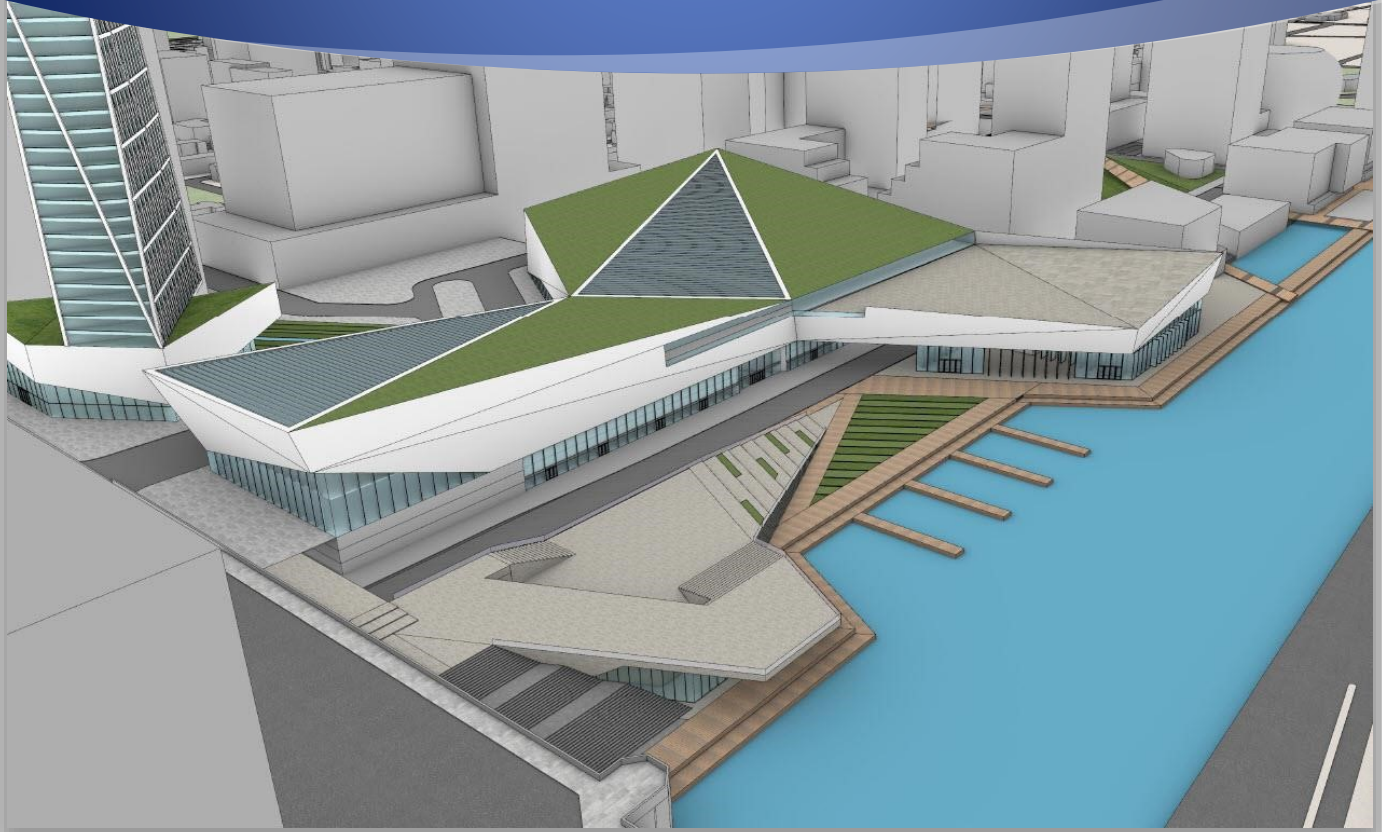


Transportation Study Proposed Chicago Casino

Chicago, Illinois



Prepared For:

RELATED

KLOA
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October 12, 2021

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1. Executive Summary

This report summarizes the results of a transportation study conducted by Kenig, Lindgren, O'Hara, Aboona, Inc. (KLOA, Inc.) for the proposed permanent Chicago Casino (Casino) to be located within the previously approved The 78 mixed-use development in Chicago, Illinois. The proposed Casino will be located within the northern half of The 78 which is generally bounded by Roosevelt Road to the north, Clark Street to the east and the south branch of the Chicago River to the west. The objectives of the traffic study are as follows:

- Determine the existing vehicular, pedestrian, bicycle, and public transportation conditions in the study area to establish a base condition.
- Assess the impact that the proposed Casino will have on transportation conditions in the area.
- Determine any street, access, bicycle, and pedestrian modifications and/or improvements that will be necessary to effectively accommodate and mitigate future conditions.

Study Area

Vehicle, pedestrian, and bicycle counts were conducted during the weekday morning and evening peak periods at ten intersections in the vicinity of the site in order to determine the existing traffic volumes during the general peak hour of commuter activity within each of these time periods. The intersections of Roosevelt Road with Canal Street, Delano Court, Clark Street and State Street; 18th Street with Canal Street, Wentworth Avenue, and Clark Street; Clark Street with 15th Street; and Polk Street with Wells Street and Clark Street were included in this study.

Alternate Modes of Transportation

Accessibility to and from the area is enhanced by various alternative modes of transportation. The existing and new streets will incorporate facilities to safely accommodate bicycle and pedestrian travel as well as micro-mobility options and will connect with the existing bicycle and/or pedestrian facilities along Roosevelt Road, Clark Street, Wells Street, Wentworth Avenue, 15th Street, and 18th Street. The Casino will also be within a convenient walking distance to several public transit lines including the CTA's Red rapid transit line at the future station within The 78 as well as the Orange and Green rapid transit lines at the Roosevelt Station and at least four CTA Bus Routes (#12, 18, 24, 192) that travel along Roosevelt Road or Clark Street and provides connections to Union Station and the LaSalle Street Metra Station. In addition, pedestrian facilities including sidewalks and crosswalks are generally provided in the area. Pedestrian countdown timers are provided at most of the signalized intersections except at the intersections of Roosevelt Road with Clark Street and Clark Street with 18th Street, which will be upgraded to include them.

The highest-volume pedestrian paths to the Casino are anticipated to occur along Roosevelt Road, Clark Street, Wells Street, and the Wells-Wentworth Connector. The intersection of Roosevelt Road and Delano Court will be a major at-grade crossing for pedestrians and off-site parkers oriented to/from the Roosevelt Collection. The Wells-Wentworth Connector will provide for grade-separated pedestrian access beneath Roosevelt Road. Pedestrian signal countdown timers, high-visibility crosswalk markings, new segments of sidewalk (particularly along Clark), pedestrian crossing signage, and ADA-compliant curb ramps are among the strategies that will be employed to enhance pedestrian safety and accessibility to the facility. Furthermore, Divvy bike stations and car-sharing vehicles, which are located in the area within close proximity to the site, will be expanded to better serve the increased demand.

Proposed Development

This study analyzes the development of the Casino with 3,900 gaming positions, a hotel with approximately 300 rooms and an observation tower. In addition, the Casino will be served by an approximate 2,500 space parking garage to be located below the facility and approximately 800 to 900 spaces that will be leased in the Roosevelt Collection garage immediately north of the site. Access to the site will be provided via multiple access drives off Roosevelt Road, Clark Street, and the planned Wells Street/Wentworth Avenue Connector.

The Casino will include a weather-protected, illuminated multi-lane Porte Cochere for access to the main entrance and valet services. A taxi stand/staging area will be located nearby along the curb lane of one of the adjoining new streets. Valet parking will be located within the parking garage. Charter buses will be loaded and unloaded in the Porte-Cochere. The charter buses will be directed to park off-site.

Commercial delivery trucks and building servicing vehicles will be routed to the Wells-Wentworth Connector to access the service dock of the facility on the east side of the building. Roosevelt Road and 18th Street are currently major biking corridors with dedicated bicycle lanes on both sides of the street. Wells Street is also a major bicycle access route. The Wells-Wentworth Connector, which will connect the bicycle facilities on Wells Street and 18th Street, will feature bicycle lanes on both sides of the street. Bicycle facilities will also be incorporated into the street design to connect the Roosevelt Road bike lanes with the bicycle parking facilities at the site.

Projected Conditions

The projected traffic conditions include the existing traffic volumes, background traffic growth from the Riverline and Southbank developments located to the north of the site, reassigned traffic due to the provision of the Wells Street/Wentworth Avenue Connector, and the multi-model traffic that will be generated by the Casino and the full buildout of The 78. It should be noted that reductions to the estimated traffic were applied to better reflect the mixed-use nature of the The 78 as well as its proximity to public transit and alternate modes of transportation in the area.

The projected traffic volumes, along with the proposed street modifications and site access system, were analyzed to determine the need for any improvements/modifications. In order to improve the existing operation of the studied intersections as well as mitigate potential issues due to the increase in traffic, a number of recommendations were made regarding nearly all intersections in the study area. These improvements/modifications range from the installation of new traffic signals and signalized approaches to protected/permissive left-turn phases and signal timing adjustments.

Traffic Management Plan

Transportation demand management (TDM) and Transportation Supply Management (TSM) measures will be incorporated into the plan and are intended to influence travel behavior, reduce traffic impacts and parking demand, and encourage travel by alternate modes than the automobile. Potential identified measures to encourage use of public transit by employees and visitors include funding assistance for a new Red Line Station at Clark Street/15th Street and additional bus shelters on Roosevelt Road, Clark Street and 18th Street, real-time transit arrival information in the lobbies, and inclusion of public transit access information in marketing literature, websites, and online platforms. Further, the project team will work with the CTA on potential bus routing options through The 78 and the allowance of last-mile micro-mobility options such as e-scooters to connect with the nearby train stations.

The south branch of the Chicago River is a significant transportation resource that will also be tapped by providing a new stop near the Permanent Facility for water taxi service currently connecting Michigan Avenue, Union Station/Ogilvie Transportation Center, and the north branch of the River with Chinatown.

Additional measures to increase travel by bicycle include the installation of Divvy bikeshare stations within The 78 in proximity to the Casino, enclosed/secured bicycle storage locations within and/or near the Casino with bicycle repair stations and shower/changing facilities. For employees that must drive, the Casino may organize an employee carpool matching program, provide preferential parking for carpool vehicles and guaranteed emergency rides home for non-driving employees. The parking garage will also feature electric-vehicle charging stations to support national trends towards clean-energy and sustainability. The Permanent Casino may operate shuttles to the off-site parking locations and the downtown Metra stations and carsharing services may be provided nearby within The 78 to reduce auto dependence by new residents and hotel guests.

Conclusions

- The volume of traffic to be generated by the Casino will be reduced given its location in an urban area and its proximity to alternative modes of transportation.
- The Casino will include a weather-protected, illuminated multi-lane drop-off/pick-up facility for access to the main entrance and valet services. A taxi stand/staging area will be located along the curb lane of one of the adjoining new streets. Valet parking will be located within the parking garage. Charter buses will be loaded and unloaded in the proposed Porte-Cochere. The charter buses will be directed to park off-site when their passengers are patronizing the Casino.
- The multi modal characteristics in the area indicate that approximately 35 and 50 percent of area residents drive a car to work while the remaining 50 to 65 percent use alternative modes of transportation to commute.
- The mixed-use nature of The 78 will promote interaction between uses, further reducing the volume of vehicular traffic to be generated by the Casino development.
- Multiple access points allow for good connectivity to the surrounding street system and allow for more efficient ingress/egress.
- The Wells Street/Wentworth Avenue Connector will provide an additional corridor in the area and alleviate traffic along other north-south corridors, particularly Canal Street and Clark Street.
- Adequate accommodations are provided in the area to promote alternate modes of transportation, such as walking and biking.
- The area is served by an extensive public transportation system, including Metra commuter trains and CTA rapid transit trains and buses.

- The provision of a new Red Line station is under consideration within/near the southern end of the site, which would further encourage the use of the CTA system, especially for the southern sub-areas.
- The following suggestions and recommendations are Transportation Demand Management (TDM) strategies that will be effective in a development such as this:
 - *Transit Subsidies* provided by employers and residential operators will provide discounted or free access to public transportation.
 - *Carpool Matching Services* can be provided by employers to match employees who live near each other and work similar schedules to carpool to and from the office. Van-pool services may also be provided.
 - *Preferential Carpool Parking* provides preferential treatment to those employees who carpool. Benefits can include a discounted cost for parking or the use of the “better” parking spaces within the parking garage.
 - *Guaranteed/Emergency Ride Home* reimburses non-driving employees for occasional taxi cab or ride-share rides when traveling to or from work outside of the normal commuting times.
 - *Flextime* provides formal policies allowing employees to work non-conventional schedules to reduce parking and traffic demand that occur during typical peak periods.
 - *Telecommuting* provides formal policies allowing employees to work remotely. Residential buildings in the area may consider the provision of high-speed internet access to further encourage this option.
 - *Bicycle-Sharing (Divvy) Stations* should be provided in the area to accommodate the proposed increase in population. The location and number of docks at each of these new stations should be determined based on employment centers and residential buildings in coordination with Divvy Bike Sharing. Employers/residential operators may choose to subsidize membership costs in order to reduce parking and traffic.
 - *Car-Sharing* should be provided throughout the development within the on-site parking garages. Coordination with car-share providers should determine the number and location of these vehicles. Employers/residential operators may choose to subsidize membership costs in order to reduce parking and traffic.

- *Changing Facilities* promote bicycle commuting by allowing employees to shower and get ready for work after their commute. This may also include agreements with nearby health clubs for the use of their facilities.
 - *Bike Storage and Bike Repair Facilities* within employment centers and residential buildings provide a secure place to store bicycles out of the elements. In addition, the space and tools to perform minor repairs when necessary will further encourage bicycle commuting.
 - *Charging for Parking* is an effective method to reduce traffic to and from the development as well as reduce the demand for on-site parking.
 - *Real-Time Transit Monitors* should be provided within public areas or building lobbies to inform potential transit users of approaching trains and buses.
 - *Distribute Information* in order to inform new residents and employees of transit options, programs, and incentives.
- The temporary Casino transportation impacts can be accommodated by the existing street network with the following recommendations:
 - In order to accommodate and facilitate the safe passage of future pedestrian traffic to/from the temporary Casino and the surface parking lot, high visibility crosswalks and pedestrian crossing signs should be provided on the Wells/Wentworth Connector.
 - Drop-off/pick-up activity for the temporary Casino should be accommodated within the proposed surface parking lot

2. Introduction

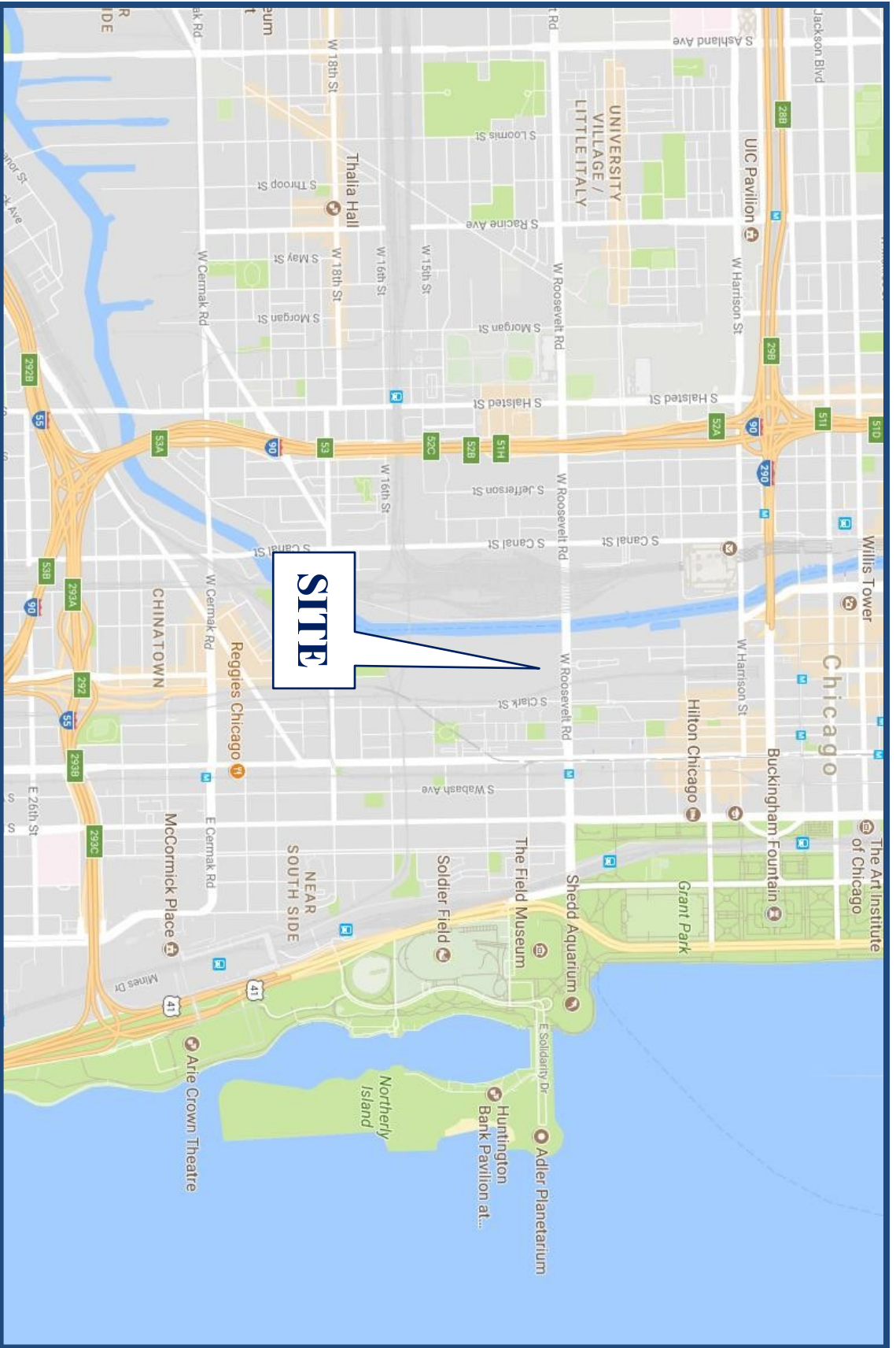
This report summarizes the results of a transportation study conducted by Kenig, Lindgren, O'Hara, Aboona, Inc. (KLOA, Inc.) for the proposed Casino to be located within The 78 mixed-use development in the South Loop neighborhood of Chicago, Illinois. The proposed Casino will be located within the northern half of The 78 which is generally bounded by Roosevelt Road to the north, Clark Street to the east and the south branch of the Chicago River to the west.

Based on a review of the preliminary concept plans, the site is proposed to be developed with a Casino with 3,900 gaming positions, a 300-room hotel and Observation Tower. In addition, the Casino will be served by an approximate 2,500 space parking garage to be located below the facility and approximately 800 to 900 spaces will be leased in the Roosevelt Collection garage immediately north of the site. Access to the site will be provided via multiple access drives off Roosevelt Road, Clark Street, and the planned Wells Street/Wentworth Avenue Connector.

Figure 1 shows the location of the site in relation to the area street system. **Figure 2** shows an aerial view of the site.

The purpose of this study is as follows:

- Determine the existing vehicular, pedestrian, bicycle, and public transportation conditions in the study area to establish a base condition.
- Assess the impact that the proposed Casino will have on transportation conditions in the area.
- Determine any street, access, bicycle, and pedestrian modifications and/or improvements that will be necessary to effectively accommodate and mitigate future conditions.



Site Location

Figure 1



Aerial View of Site

Figure 2

The sections of this report present the following:

- Existing street conditions including vehicle, pedestrian, and bicycle volumes for the weekday morning and weekday evening peak hours.
- Multi modal trip generation and directional distribution for the proposed Casino and The 78.
- Background growth in traffic due to planned developments near the traffic study area.
- Intersection capacity analyses for existing and future projected conditions for the weekday morning and evening peak hours.
- Recommendations with respect to vehicular access, the surrounding street network, and pedestrian and bicycle features for future conditions.

3. Existing Conditions

Existing street and traffic conditions within the study area were documented based on field visits and traffic counts. The following provides a summary of the physical characteristics of the streets including geometry and traffic control, alternative modes of transportation available in the area, and the peak hour vehicle, pedestrian, and bicycle flows along area streets.

Site Location

The site of the proposed Casino is located in the South Loop neighborhood of Chicago. The area offers a mixture of residential, institutional, and commercial uses, including the Roosevelt Collection Retail Center immediately north of the site. The Dan Ryan Expressway (I-90/I-94) is located approximately one half-mile west of the site and the south branch of the Chicago River forms the west boundary of the site. The site is currently vacant with the exception of multiple railroad tracks owned by the Northeast Illinois Regional Commuter Railroad Corporation (NIRC) and Illinois Central Railroad Company (IC), which cross the St. Charles Air Line Bridge.

Existing Street System Characteristics

The proposed Casino will be accessible from several existing streets (Roosevelt Road, Clark Street, 18th Street) and several streets that are either currently under construction (Wells-Wentworth Connector) or will be built as part of the The 78, including streets aligned with 15th Street and Delano Court. The new streets will incorporate facilities to safely accommodate bicycle and pedestrian travel as well as micro-mobility options and will connect with the existing bicycle and/or pedestrian facilities along Roosevelt Road, Clark Street, Wells Street, Wentworth Avenue, 15th Street, and 18th Street. The Casino will also be within a convenient walking distance to several public transit lines including the CTA's Red, Orange and Green rapid transit lines at the Roosevelt Station and at least four CTA Bus Routes (#12, 18, 24, 192) that travel along Roosevelt Road or Clark Street and provides connections to Union Station and the LaSalle Street Metra Station.

Some of the key characteristics of the existing streets and intersections within the study area are listed below and illustrated in **Figure 3** (all remaining figures are located in the Appendix). All streets are under the jurisdiction of the Chicago Department of Transportation (CDOT) except Roosevelt Road and Canal Street, which are under Illinois Department of Transportation (IDOT) jurisdiction.

- Traffic signal control is provided at the following intersections:
 - Roosevelt Road with Canal Street
 - Roosevelt Road with Delano Court
 - Roosevelt Road with Clark Street
 - Roosevelt Road with State Street
 - 18th Street with Canal Street
 - 18th Street with Wentworth Avenue
 - 18th Street with Clark Street
 - Clark Street with 15th Street
 - Polk Street with Clark Street
 - Polk Street with Wells Street

- Protected left-turn phases are provided at the following intersections:
 - Roosevelt Road with Canal Street
 - Roosevelt Road with Delano Court (eastbound, southbound)
 - Roosevelt Road with Clark Street
 - Roosevelt Road with State Street
 - 18th Street with Canal Street (eastbound, northbound, southbound)
 - 18th Street with Clark Street
 - Polk Street with Clark Street (northbound, southbound, westbound)
 - Polk Street with Wells Street (southbound, westbound)

- Pedestrian countdown timers are provided at the following intersections:
 - Roosevelt Road with Canal Street
 - Roosevelt Road with Delano Court
 - Roosevelt Road with State Street
 - 18th Street with Canal Street
 - 18th Street with Wentworth Avenue
 - Polk Street with Clark Street
 - Polk Street with Wells Street

- High-visibility crosswalk striping is provided at the following intersections:
 - Roosevelt Road with Canal Street
 - Roosevelt Road with Delano Court
 - Roosevelt Road with Clark Street
 - 18th Street with Canal Street
 - 18th Street with Wentworth Avenue
 - 18th Street with Clark Street
 - Polk Street with Wells Street

- Other crosswalk striping is provided at the following intersections:
 - Roosevelt Road with State Street (stamped crosswalk with standard striping)
 - Clark Street with 15th Street (standard striping on the westbound and northbound legs)
 - Polk Street with Clark Street (standard striping)

Wells Street/Wentworth Avenue Connector

In coordination with CDOT, Wells Street is currently being extended south from its existing terminus at Roosevelt Road and will connect with Wentworth Avenue in order to improve north-south connectivity in the area and provide access to The 78. The plans call for an 80-foot right-of-way providing the following pavement cross-section:

- Two 10-foot wide lanes
- Two five-foot wide bike lanes in each direction with a three-foot buffer
- Seven-foot wide parking lanes on both sides

Completion date is anticipated to be in September 2022.

Public Transportation

The public transportation serving the area is summarized below and illustrated in **Figure 4**.

Metra Commuter Rail. The LaSalle Street station is located approximately one-half mile north of the site in the southwest corner of the intersection of Congress Parkway with LaSalle Street. This station serves Metra's Rock Island District, which terminates in Joliet, Illinois.

CTA Rapid Transit. The area is served by the Chicago Transit Authority (CTA) rapid transit Green, Red, and Orange Lines via the Roosevelt station. At this station, the Red Line is located underground with access on both sides of State Street approximately 150 feet north of Roosevelt Road while the Green and Orange Lines are elevated with access on the via both sides of Roosevelt Road approximately 250 feet east of State Street. Access to each line is located less than one-quarter mile northeast corner of the site. The following summarizes each rapid transit line serving the area:

- The CTA Green Line operates daily along Lake Street between Harlem Avenue in Forest Park and the downtown Loop and from the downtown Loop to 63rd Street. South of 59th Street, the line branches off to provide service between Cottage Grove Avenue and Ashland Avenue.
- The CTA Orange Line provides rapid transit rail service between the downtown Loop and Midway Airport. Service is provided seven days a week and on holidays.
- The CTA Red Line operates 24 hours a day, seven days a week between Howard Street and the 95th/Dan Ryan station located along the Dan Ryan Expressway at 95th Street. Additional service is provided via the Green Line tracks between the Cermak-McCormick Place station and the Ashland/63rd station during rush periods only.

It should be noted that according to the Transit Friendly Development Guide produced in part by CDOT and the CTA, the area surrounding the Roosevelt station is considered a Major Activity Center (MC). This classification describes station areas which are intended to be developed at a significant density that supports and provides services for the region and nearby neighborhoods. These areas often provide a balance of residential, retail, and employment uses.

Furthermore, in order to enhance the accessibility of the proposed development to transit, a new Red Line station is proposed and will be located near the southern portion of the site.

CTA Bus Routes. The area is also served by the following bus routes, all of which have bus stops within a few blocks of the site. Additional bus routes and stops serving this area, including suburban commuter express routes, are located within walking distance of the site. It should also be noted that bus-only lanes are provided along Roosevelt Road.

Route 12 (Roosevelt) generally runs along Roosevelt Road between Indiana Avenue and Central Avenue serving destinations including Museum Campus and the Illinois Medical District. Service is provided seven days a week and on holidays from approximately 4:00 A.M. to 12:30 A.M.

Route 18 (16th – 18th) runs from Michigan Avenue to Cicero Avenue along 16th Street, Ogden Avenue, 18th Street, and Roosevelt Road. Service is provided seven days a week and on holidays from approximately 6:00 A.M. to 7:30 P.M.

Route 24 (Wentworth) provides north-south service between Wacker Drive to the north and 79th Street to the south generally along LaSalle Street and Wentworth Avenue. Stops include multiple Red Line stations, Grand Boulevard Plaza, the Loop, and US Cellular Field. Service is provided Monday through Friday generally from 5:00 A.M. to 9:30 P.M. Supplementary service may be provided as far south as 87th Street, including stops at Simeon Career Academy and the Gresham Metra Station.

Route 29 (State) generally runs along State Street between the Red Line's 95th/Dan Ryan station and the Illinois/Grand corridor. Service is provided seven days a week and on holidays generally from 4:00 A.M. to 1:30 A.M.

Route 62 (Archer) generally provides service along Archer Avenue and State Street from Archer Avenue with Harlem Avenue to the southwest to State Street with Kinzie Street to the northeast. Stops include multiple Orange Line stations, Midway Airport, and the Loop. Service runs generally at all times of the day with overnight (Night Owl) service only between the Loop and Midway Airport via Roosevelt Road and Halsted Street.

Route 146 (Inner Drive/Michigan Express) generally runs between Berwyn Avenue and Museum Campus along Lake Shore Drive, Michigan Avenue, and State Street. No stops are provided between the intersections of Michigan Avenue with Delaware Place and Lake Shore Drive with Belmont Avenue. Service is provided on weekdays from approximately 6:00 A.M. to 11:30 P.M. Earlier weekend service starting at 5:15 A.M. is also provided.

Alternative Modes of Transportation

The alternate modes of transportation serving the area are summarized below.

Pedestrian Accommodations. Sidewalks are generally located on both sides of all streets except segments of Clark Street due to the railroad tracks. As previously stated, high-visibility crosswalks or stamped crosswalks are provided at all intersections except the intersections of Clark Street with 15th Street and Polk Street with Wells Street and Clark Street, which have standard crosswalk striping. Furthermore, pedestrian countdown timers are provided for all legs at most intersections, except for the intersections of Roosevelt Road, 15th Street, and 18th Street along Clark Street.

Bike Lanes. Within the study area, barrier-protected bike lanes are provided on 18th Street generally between Canal Street and Wentworth Avenue. The east side of Canal Street north of Roosevelt Road also provides a barrier-protected bike lane, while the west side provides a buffer-protected bike lane. Dedicated bike lanes are also provided on Roosevelt Road and Canal Street. According to the City of Chicago's *Streets for Cycling Plan 2020* the following streets in the area are designated bike routes:

- Spoke Route
 - Wabash Avenue
 - Archer Avenue

- Crosstown Bike Route
 - 18th Street
 - Canal Street
 - Wells Street
 - Harrison Street
 - 14th Street
 - Jefferson Street

Mode-Sharing Transportation Availability. Multiple Divvy bike sharing stations are located within the area with the closest stations located at Wells Street and Polk Street, which provides 16 bike docks, Roosevelt Road and Delano Court, which provides approximately 20 bike docks and at Ping Tom Park, which provides six bike docks. In addition, car-sharing vehicles are located at multiple locations around the site, particularly to the north and east. The closest vehicle is available approximately a quarter-mile from the site near the intersection of Clark Street and 9th Street.

Existing Traffic Volumes

In order to determine current vehicle, pedestrian, and bicycle conditions within the study area, KLOA, Inc. utilized peak period traffic, pedestrian, and bicycle counts for the following intersections:

- Roosevelt Road with Canal Street (Wednesday, August 2, 2017)
- Roosevelt Road with Delano Court (Thursday, October 20, 2016)
- Roosevelt Road with Clark Street (Thursday, October 20, 2016)
- Roosevelt Road with State Street (Wednesday, August 2, 2017)
- 18th Street with Canal Street (Wednesday, August 2, 2017)
- 18th Street with Wentworth Avenue (Wednesday, August 2, 2017)
- 18th Street with Clark Street (Thursday, October 20, 2016)
- Clark Street with 15th Street (Wednesday, August 2, 2017)
- Polk Street with Wells Street (October 2012)
- Polk Street with Clark Street (Wednesday, May 6, 2015)

All counts were conducted during the morning (7:00 A.M. to 9:00 A.M.) and evening (4:00 P.M. to 6:00 P.M.) peak periods. The results of the traffic counts show that the peak hours generally occur between 7:30 A.M. and 8:30 A.M. during the morning peak hour and 5:00 P.M. and 6:00 P.M. during the evening peak hour. **Figure 5** illustrates the existing peak hour vehicle traffic volumes. **Figure 6** illustrates the existing peak hour pedestrian and bicycle volumes, showing the direction of travel.

4. Traffic Characteristics of the Proposed Casino

The following provides a description of the proposed Casino and The 78 with respect to the surrounding area and how traffic will be able to access the site by way of the existing and proposed street system. To evaluate the impact the Casino and The 78 will have on the area street system, it is necessary to quantify the number of vehicle trips that will be generated during the peak hours and to determine the directional distribution from where these vehicle trips will approach and depart the site.

Site Location

As previously indicated, the site of The 78 is generally bounded by Roosevelt Road to the north, Clark Street to the east, and the south branch of the Chicago River to the west.

Site Access

Access to the Casino and The 78 will be provided via Roosevelt Road, Clark Street, and the Wells Street/Wentworth Avenue Connector. Primary access to the Casino is described below.

Via Roosevelt Road

- A full ingress/egress access drive will be provided via a new north-south street (LaSalle Street) that will align with Delano Court and form the fourth (northbound) leg at its signalized intersection with Roosevelt Road. A westbound left-turn lane will be provided to accommodate the new movement into the site and the new northbound approach will provide two inbound lanes and three outbound lanes striped for dual left-turn lanes and a combined through/right-turn lane. LaSalle Street will extend south and wrap around the proposed Casino and connect to the west with the Wells/Wentworth extension. Pedestrian accommodations, including high visibility crosswalks and countdown timers, will also be provided.

Via Clark Street

- A third (eastbound) leg, henceforth known as the North Drive, will be provided at the existing traffic signal on Clark Street located approximately 300 feet south of Roosevelt Road. The North Drive will connect Clark Street with the proposed LaSalle Street and will provide full ingress/egress with one inbound lane and two outbound lanes striped to provide an exclusive left-turn lane and an exclusive right-turn lane. An exclusive left-turn lane will be provided for northbound movements as well. Pedestrian accommodations, including high visibility crosswalks and countdown timers, will also be provided.

Via Wells Street

- Access to the lower level parking garage for the Casino will be provided from the Wells Street/Wentworth Avenue Connector via one full access drive. This access drive will provide one inbound lane and two outbound lane under stop sign control. A southbound left-turn lane will be provided.
- The extension of La Salle Street will wrap around the Casino building and connect with the Wells Street/Wentworth Avenue connector. This intersection will be signalized. La Salle Street will provide one inbound lane and two outbound lanes striped for an exclusive left-turn lane and an exclusive right turn lane. A southbound left-turn lane will also be provided. Pedestrian accommodations, including high visibility crosswalks and countdown timers, will also be provided.

In addition to the access drives serving the proposed Casino, the following access drives will serve The 78.

Via Clark Street

- A third (eastbound) leg in alignment with 14th Street, which will also be known as 14th Street. This signalized intersection will be a full access drive providing one inbound lane and two outbound lanes striped for exclusive left-turn and right-turn lanes. A northbound left-turn lane will also be provided. Pedestrian accommodations, including high visibility crosswalks and countdown timers, will also be provided.
- A fourth (eastbound) leg will be provided opposite 15th Street providing full signalized access to the site. The leg will provide one inbound lane and two outbound lanes striped to provide one exclusive left-turn lane and one combined through/right-turn lane. A northbound left-turn lane will also be provided. 15th Street will extend east into the site, intersecting the proposed LaSalle Street before terminating at the Wells Street/Wentworth Avenue Connector with a signalized intersection. Pedestrian accommodations, including high visibility crosswalks and countdown timers, will also be provided.

Via Wells Street/Wentworth Connector

- A middle access drive will be provided off the Wells Street/Wentworth Avenue connector. This intersection will be signalized providing one inbound lane and two outbound lanes striped to provide exclusive left-turn and right-turn lanes. A southbound left-turn lane will also be provided. Pedestrian accommodations, including high visibility crosswalks and countdown timers, will also be provided.
- The terminus of the extension of 15th Street will intersect the Wells Street/Wentworth Avenue Connector at a signalized intersection. The westbound approach will be striped to provide exclusive left-turn and right-turn lanes. Pedestrian accommodations, including high visibility crosswalks and countdown timers, will also be provided.
- A restricted access drive (right-in/right-out only) will be provided for southern portion of the overall site. Outbound movements will be under stop sign control.

Proposed Casino Plan

This site is proposed to be developed with a Casino with 3,900 gaming positions, a hotel with approximately 300 rooms and an Observation Tower. In addition, the Casino will provide a 2,500 space parking garage located below the facility and approximately 800 to 900 spaces will be leased in the Roosevelt Collection garage immediately north of the site. Access to the site will be provided via multiple access drives off Roosevelt Road, Clark Street, and the planned Wells Street/Wentworth Avenue Connector.

The Casino will be located on the south side of Roosevelt Road immediately west of the new street that will aligned with Delano Court. The most direct access for vehicular traffic will be from Roosevelt Road although access will also be available from Clark Street and the Wells-Wentworth Connector. The Casino will include a weather-protected, illuminated multi-lane (two lane) Porte Cochere for access to the main entrance and valet services. A taxi stand/staging area will be located along the curb lane of one of the adjoining new streets. Valet parking will be located within the parking garage. Charter buses will be loaded and unloaded in the proposed Porte-Cochere. The charter buses will be directed to park off-site when their passengers are patronizing the Casino.

Commercial delivery trucks and building servicing vehicles will be routed to the Wells-Wentworth Connector to access the service dock of the facility on the west side of the building. Roosevelt Road and 18th Street are currently major biking corridors with dedicated bicycle lanes on both sides of the street. Wells Street is also a major bicycle access route. The Wells-Wentworth Connector, which will connect the bicycle facilities on Wells Street and 18th Street, will feature bicycle lanes on both sides of the street. Bicycle facilities will also be incorporated into the street design to connect the Roosevelt Road bike lanes with the bicycle parking facilities at the Permanent Facility.

In addition to the Casino, the transportation study also considered the traffic to be generated by the full buildout of The 78 mixed-use development which was approved to contain approximately 4,500 residential units, approximately 5.6 million square feet of office space, approximately 390,000 square feet of retail, and The Discovery Partners Institute (DPI), a University of Illinois-fueled innovation and research center with a maximum enrollment of 2,000 students.

Directional Distribution

The general directions of approach and departure of the future traffic that will be generated by the Casino and The 78 were estimated based on the following criteria and are illustrated in **Figure 7**.

- Existing traffic counts, which were used to determine existing travel patterns in the area.
- The proposed access to the site, which was used to determine the most efficient paths to and from each area within the site.
- The proposed extensions and connections linking the existing street system, particularly the Wells Street/Wentworth Avenue Connector and 15th Street extension.
- Locations and directions of travel to and from surrounding areas, such as residential, employment centers, and retail.
- Directions of travel to and from major streets and highways, including the Dan Ryan Expressway (I-90/I-94), Lake Shore Drive (US 41), the Stevenson Expressway (I-55), and the Eisenhower Expressway (I-290).

Development Traffic Generation

The number of trips to be generated by the proposed Casino was estimated based on trip generation surveys conducted by KLOA, Inc. of the Rivers Casino in Des Plaines in Illinois. The number of trips to be generated by the hotel and other uses within The 78 was estimated based on the vehicle trip generation rates contained in *Trip Generation Manual*, 10th Edition, published by the Institute of Transportation Engineers (ITE). It should be noted that these rates are based on suburban rates where the primary mode of transportation is the automobile. As such, adjustments were made to the trip generation to better reflect the location of the site in an urban environment and within proximity to various alternative modes of transportation. The following provides support for these adjustments:

- A review of U.S. Census tract data surrounding the site shows that between approximately 35 and 50 percent of area residents drive a car to work while the remaining 50 to 65 percent use alternative modes of transportation to commute.
- The site is located within close proximity of the downtown area, providing opportunities for housing or employment near the site.
- Adequate accommodations are provided in the area to promote alternate modes of transportation, such as walking and biking.
- The area is served by an extensive public transportation system, including Metra commuter trains and CTA rapid transit trains and buses.
- The provision of a new Red Line station is under consideration within/near the southern end of the site, which would further encourage the use of the CTA system, especially for the southern sub-areas.
- The mixed-use nature of the site encourages interaction among the multiple uses. Furthermore, the majority of the retail space provided within the development will consist of neighborhood-type retail stores, which would appeal to residents and employees already in the area, rather than attract patrons to a regional retail destination.
- Implementation of the recommended/suggested Transportation Demand Management (TDM) measures, which will be discussed later in the report.

The U.S. Census demographic data is provided in the Appendix.

It should be noted that Phase I of the overall development will incorporate the development of the Casino, the hotel, the observation tower and the DPI. Since the ITE Trip Generation Manual does not have trip generation rates for an observation tower, the square footage of the observation deck, the event space, thrill ride and the food and beverage area (21,300 s.f.) was utilized and the trip rates for a high turnover restaurant were applied. The estimated trips generation for Phase I of the overall development is shown in **Table 1**. The estimated trip generation for the Casino and the buildout of The 78 is shown in **Table 2**. The weekday morning and evening peak hour traffic volumes that will be generated by Phase I of the development were assigned to the street system in accordance with the previously described directional distribution and are shown in **Figures 8A** and **8B**. The weekday morning and evening peak hour traffic volumes that will be generated by the overall development were assigned to the street system in accordance with the previously described directional distribution and are shown in **Figures 9A** and **9B**.

Table 1
PROJECTED SITE-GENERATED TRAFFIC VOLUMES – PHASE I

ITE LUC	Land Use	Quantity	Weekday Morning Peak Hour			Weekday Evening Peak Hour		
			In	Out	Total	In	Out	Total
Casino		3,900 positions	172	62	234	817	755	1,572
	Modal Split Reduction (70%)		-120	-43	-163	-572	-528	-1,100
	Sub Total		52	19	71	245	227	472
	Captive Market Reduction (10%)		-5	-2	-7	-25	-23	-48
	Casino Total		47	17	64	220	204	424
310 Hotel		300 rooms	86	59	145	101	98	199
	Modal Split Reduction (50%)		-43	-30	-73	-51	-49	-100
	Sub Total		43	29	72	50	49	99
	Captive Market Reduction (20%)		-9	-6	-15	-10	-10	-20
	Total		34	23	57	40	39	79
540 Discovery Partners Institute		2,000 students	357	84	441	221	174	395
	Modal Split Reduction (60%)		-214	-50	-264	-133	-104	-237
	Sub Total		143	34	177	88	70	158
	Captive Market Reduction (20%)		-28	-7	-35	-18	-14	-32
	Total		115	27	142	70	56	126
932		Observation Deck	-	-	-	130	80	210
		69,200 sq.ft.¹	-	-	-	-	-	-
	Modal Split Reduction (50%)		-	-	-	-65	-40	-105
	Total		-	-	-	65	40	105
	Total Development Trips		196	67	263	395	339	734

Note: Casino trip generation based on KLOA, Inc. surveys of other Casinos in Illinois.
 1 – Only the square footage of the F & B, Thrill Ride, Event Space and Observation Deck (total of 21,300 sq. ft.) were utilized for the trip generation estimates. -

Table 2
PROJECTED SITE-GENERATED TRAFFIC VOLUMES – OVERALL DEVELOPMENT

ITE LUC	Land Use	Quantity	Weekday Morning Peak Hour			Weekday Evening Peak Hour		
			In	Out	Total	In	Out	Total
Casino		3,900 positions	172	62	234	817	755	1,572
	Modal Split Reduction (70%)		-120	-43	-163	-572	-528	-1,100
	Sub Total		52	19	71	245	227	472
	Captive Market Reduction (10%)		-5	-2	-7	-25	-23	-48
	Casino Total		47	17	64	220	204	424
310 Hotel		300 rooms	86	59	145	101	98	199
	Modal Split Reduction (50%)		-43	-30	-73	-51	-49	-100
	Sub Total		43	29	72	50	49	99
	Captive Market Reduction (20%)		-9	-6	-15	-10	-10	-20
	Total		34	23	57	40	39	79
540 Higher Education Institution		2,000 students	357	84	441	221	174	395
	Modal Split Reduction (60%)		-214	-50	-264	-133	-104	-237
	Sub Total		143	34	177	88	70	158
	Captive Market Reduction (20%)		-28	-7	-35	-18	-14	-32
	Total		115	27	142	70	56	126
222 Residential (High Rise)		4,500 units	305	968	1,273	938	600	1,538
	Modal Split Reduction (60%)		-183	-581	-764	-563	-360	-923
	Sub Total		122	387	509	375	240	615
	Captive Market Reduction (20%)		-24	-77	-101	-75	-48	-123
	Total		98	310	408	300	192	492
710 Office		5,642,000 s.f.	4,584	746	5,330	840	4,410	5,250
	Modal Split Reduction (70%)		-3,209	-522	-3,731	-588	-3,087	-3,675
	Sub Total		1,375	224	1,599	252	1,323	1,575
	Captive Market Reduction (20%)		-275	-45	-320	-50	-265	-315
	Total		1,100	179	1,279	202	1,058	1,260
820 Shopping Center/Ground Floor Retail		390,000 s.f.	227	139	366	714	773	1,487
	Modal Split Reduction ¹		-68	-42	-110	-214	-232	-446
	Sub Total		159	97	256	500	541	1,041
	Captive Market Reduction ¹		-32	-19	-51	-99	-109	-208
	Shopping Center Total		127	78	205	401	432	833
	Total Development Trips		1,521	634	2,155	1,233	1,981	3,214

¹ – Modal Split and Captive Market reductions vary from 20 to 50 percent depending on the location of the retail areas.
Note: Casino trip generation based on KLOA, Inc. surveys of other Casinos in Illinois



5. Phase I Projected Traffic Conditions

The Phase I total projected traffic volumes include the existing traffic volumes, the traffic estimated to be generated by the Phase I of the development, and the traffic estimated to be generated by planned developments in the nearby area.

Wells Street/Wentworth Avenue Connector Traffic Reassignment

The planned connection of Wells Street with Wentworth Avenue will provide a more efficient route for existing and future traffic to and from the study area. Therefore, a portion of the existing north/south traffic traversing the area during the morning and evening peak hours was reassigned to the connection. This alternate route will reduce the volume of traffic that traverses Clark Street and Canal Street, allowing the street system to better accommodate the proposed traffic volumes. Traffic count data for the north-south and east-west routes was reviewed and, based on this data, it was assumed that 10 percent of the traffic on both Clark Street and Canal Street would be rerouted to utilize the planned connection.

Planned Developments

To account for growth in the area, the study also reviewed proposed, planned, and under-construction developments near the study area in order to determine the traffic increase within the study area in the future. Therefore, the vehicle trips were estimated for the Riverline and Southbank developments, which will contain approximately 3,700 residential units. The development is to be located on Wells Street north of Roosevelt Road. Based on the location of the buildings and parking garage access drives off Wells Street and Harrison Street, it was assumed that approximately 10 percent of the traffic generated by this development will utilize the Wells Street/Wentworth Avenue Connector.

Phase I Access System

Under Phase I of the development, access will only be provided via a full access drive on Roosevelt Road and a full access drive off the Wells/Wentworth extension. The access drive off Roosevelt Road (LaSalle Street) will align with Delano Court and form the fourth (northbound) leg at its signalized intersection with Roosevelt Road. Consistent with the improvements for the overall development, a westbound left-turn lane will be provided to accommodate the new movement into the site and the new northbound approach will provide two inbound lanes and three outbound lanes striped for dual left-turn lanes and a combined through/right-turn lane. LaSalle Street will extend south and wrap around the proposed Casino and connect to the west with the Wells/Wentworth extension. Pedestrian accommodations, including high visibility crosswalks and countdown timers, will also be provided.

Projected Traffic Volumes

The existing traffic volumes were combined with the traffic from the other developments in the area, the reassignment of traffic due to the Wells Street/Wentworth Avenue Connector, and the new peak hour traffic volumes to be generated under Phase I of the development to determine the Phase I total projected traffic volumes, shown in **Figure 10A** and **10 B**. Furthermore, in order to account for the increase in population in the study area, bicycle and pedestrian volumes were increased at key intersections based on the anticipated modal split reduction for each land use presented in Table 1.

6. Projected Overall Traffic Conditions

The total projected traffic volumes include the existing traffic volumes, the traffic estimated to be generated by the proposed subject development, and the traffic estimated to be generated by planned developments in the nearby area.

Wells Street/Wentworth Avenue Connector Traffic Reassignment

As discussed under the Phase I Traffic Conditions, the planned connection of Wells Street with Wentworth Avenue will provide a more efficient route for existing and future traffic to and from the study area and a portion of the existing north/south traffic traversing the area during the morning and evening peak hours was reassigned to the connection. This alternate route will reduce the volume of traffic that traverses Clark Street and Canal Street, allowing the street system to better accommodate the proposed traffic volumes. Traffic count data for the north-south and east-west routes was reviewed and, based on this data, it was assumed that 10 percent of the traffic on both Clark Street and Canal Street would be rerouted to utilize the planned connection.

Planned Developments

Consistent with the assumptions under the Phase I Traffic Conditions and to account for growth in the area, the vehicle trips were estimated for the Riverline and Southbank developments, which will contain approximately 3,700 residential units were assigned to the area streets. Based on the location of the buildings and parking garage access drives off Wells Street and Harrison Street, it was assumed that approximately 10 percent of the traffic generated by this development will utilize the Wells Street/Wentworth Avenue Connector.

Projected Traffic Volumes

The existing traffic volumes were combined with the traffic from the other developments in the area, the reassignment of traffic due to the Wells Street/Wentworth Avenue Connector, and the new peak hour traffic volumes generated by the subject development to determine the total projected traffic volumes, shown in **Figure 11A** and **11B**. Furthermore, in order to account for the increase in population in the study area, bicycle and pedestrian volumes were increased at key intersections based on the anticipated modal split reduction for each land use presented in Table 2.

7. Traffic Analysis and Recommendations

Traffic analyses were performed to determine the operation of the existing street system, evaluate the impact of the proposed development, and determine the ability of the existing street system to accommodate projected traffic demands. Analyses were performed for the weekday morning and evening peak hours for all intersections within the study area for both the existing traffic volumes and projected traffic volumes upon the development of the site.

The traffic analyses were performed using the methodologies outlined in the Transportation Research Board's *Highway Capacity Manual (HCM)*, 6th Edition and modeled/analyzed using Synchro 11 software. The analyses for the traffic signal-controlled intersections were accomplished using existing cycle lengths and phasings obtained from CDOT to determine the average overall vehicle delay, volume-to-capacity ratios, and levels of service.

The ability of an intersection to accommodate traffic flow is expressed in terms of level of service, which is assigned a letter from A to F based on the average control delay experienced by vehicles passing through the intersection. The *Highway Capacity Manual* definitions for levels of service and the corresponding control delay for signalized intersections are included in the Appendix of this report.

A summary of the traffic analysis results for the existing, Phase I and full buildout traffic volumes are presented in **Tables 3, 4 and 5**. A discussion of the intersections and recommendations follows. Copies of the capacity analysis summary sheets are included in the Appendix.

Table 3
CAPACITY ANALYSIS RESULTS – EXISTING CONDITIONS

Intersection	Weekday Morning Peak Hour		Weekday Evening Peak Hour	
	LOS	Delay	LOS	Delay
Roosevelt Road with Clark Street				
• Overall	C	24.5	C	27.8
• Eastbound Approach	C	26.8	C	32.6
• Westbound Approach	C	24.4	C	26.9
• Northbound Approach	C	24.9	C	26.3
• Southbound Approach	B	14.0	B	15.0
Roosevelt Road with Delano Court/Proposed LaSalle Street				
• Overall	A	7.2	B	10.2
• Eastbound Approach	A	2.7	A	3.4
• Westbound Approach	A	7.6	B	14.5
• Southbound Approach	D	42.8	C	33.1
Roosevelt Road with State Street				
• Overall	D	36.4	D	37.1
• Eastbound Approach	C	32.9	C	28.8
• Westbound Approach	C	33.7	C	31.6
• Northbound Approach	D	48.6	D	40.1
• Southbound Approach	C	24.1	D	53.1
Roosevelt Road with Canal Street				
• Overall	C	30.8	C	34.3
• Eastbound Approach	C	27.8	C	33.0
• Westbound Approach	C	28.7	C	27.0
• Northbound Approach	D	37.1	D	46.4
• Southbound Approach	C	26.7	C	25.6
Canal Street with 18th Street				
• Overall	C	34.3	D	50.5
• Eastbound Approach	D	44.1	F	99+
• Westbound Approach	D	36.4	C	28.7
• Northbound Approach	C	32.5	C	30.6
• Southbound Approach	B	17.0	C	33.0

Table 3, continued

Intersection	Weekday Morning Peak Hour		Weekday Evening Peak Hour	
	LOS	Delay	LOS	Delay
18th Street with Wentworth Avenue				
• Overall	B	14.9	C	23.7
• Eastbound Approach	B	13.6	C	33.3
• Westbound Approach	B	13.0	B	16.3
• Northbound Approach	B	18.4	B	14.8
• Southbound Approach	B	10.6	B	12.0
18th Street with Clark Street				
• Overall	C	26.1	C	28.0
• Eastbound Approach	C	33.0	D	35.2
• Westbound Approach	D	49.1	D	44.3
• Northbound Approach	B	16.4	B	19.7
• Southbound Approach	B	14.4	C	22.6
Wells Street with Polk Street				
• Overall	C	31.0	C	22.9
• Westbound Approach	D	45.3	D	37.9
• Northbound Approach	B	16.4	B	14.0
• Southbound Approach	B	13.0	A	8.3
Clark Street with Polk Street				
• Overall	D	51.0	C	33.0
• Eastbound Approach	B	19.2	B	14.3
• Westbound Approach	C	30.4	C	27.1
• Northbound Approach	E	66.0	D	44.9
• Southbound Approach	C	22.9	C	25.0
Clark Street with 15th Street				
• Overall	A	2.8	A	2.5
• Westbound Approach	C	28.2	C	32.5
• Northbound Approach	A	2.1	A	1.6
• Southbound Approach	A	1.5	A	2.4
Delay is measured in seconds. All intersections are signalized.				

Table 4
CAPACITY ANALYSIS RESULTS – PHASE I

Intersection	Weekday Morning Peak Hour		Weekday Evening Peak Hour	
	LOS	Delay	LOS	Delay
Roosevelt Road with Clark Street¹				
• Overall	C	29.1	D	39.4
• Eastbound Approach	C	21.7	D	52.3
• Westbound Approach	D	37.8	D	35.7
• Northbound Approach	C	25.6	C	26.4
• Southbound Approach	B	12.5	B	19.9
Roosevelt Road with Delano Court/Proposed LaSalle Street¹				
• Overall	A	9.7	B	12.8
• Eastbound Approach	A	8.9	B	14.8
• Westbound Approach	A	7.9	A	8.4
• Northbound Approach	B	13.8	B	19.3
• Southbound Approach	D	41.9	C	25.8
Roosevelt Road with State Street¹				
• Overall	C	33.7	D	41.5
• Eastbound Approach	C	29.0	C	30.1
• Westbound Approach	C	34.0	D	40.0
• Northbound Approach	D	38.5	D	46.0
• Southbound Approach	C	32.4	E	57.1
Roosevelt Road with Canal Street¹				
• Overall	C	29.8	D	37.3
• Eastbound Approach	C	28.5	C	32.8
• Westbound Approach	C	28.7	C	27.1
• Northbound Approach	C	34.0	D	52.7
• Southbound Approach	C	24.4	D	42.5

Table 4 continued

Intersection	Weekday Morning Peak Hour		Weekday Evening Peak Hour	
	LOS	Delay	LOS	Delay
Canal Street with 18th Street¹				
• Overall	C	28.3	C	34.1
• Eastbound Approach	C	33.8	D	39.5
• Westbound Approach	C	29.6	C	30.6
• Northbound Approach	C	27.6	C	31.7
• Southbound Approach	B	16.3	C	33.8
18th Street with Wentworth Avenue¹				
• Overall	C	27.3	D	43.3
• Eastbound Approach	D	39.3	E	64.0
• Westbound Approach	C	30.8	C	33.9
• Northbound Approach	B	17.5	C	33.7
• Southbound Approach	B	16.4	D	35.1
18th Street with Clark Street¹				
• Overall	C	29.8	C	29.9
• Eastbound Approach	D	40.8	D	46.6
• Westbound Approach	D	48.7	D	43.4
• Northbound Approach	B	18.9	B	18.7
• Southbound Approach	B	16.5	C	20.8
Wells Street with Polk Street¹				
• Overall	F	99+	E	62.7
• Eastbound Approach	B	16.2	B	14.5
• Westbound Approach	F	99+	F	80.8
• Northbound Approach	D	53.0	D	53.7
• Southbound Approach	C	22.3	E	57.8
Clark Street with Polk Street¹				
• Overall	D	40.4	D	35.7
• Eastbound Approach	D	40.7	C	33.1
• Westbound Approach	D	43.3	D	38.1
• Northbound Approach	D	43.1	D	47.3
• Southbound Approach	C	32.2	C	21.7

Table 4, continued

Intersection	Weekday Morning Peak Hour		Weekday Evening Peak Hour	
	LOS	Delay	LOS	Delay
Wells-Wentworth Connector with LaSalle Street¹				
• Overall	B	12.5	B	11.0
• Westbound Approach	B	15.7	B	19.8
• Northbound Approach	B	16.4	A	8.9
• Southbound Approach	A	8.1	B	10.2
Delay is measured in seconds. 1 – Signalized intersection 2 – Unsignalized intersection				

Table 5
CAPACITY ANALYSIS RESULTS – PROJECTED CONDITIONS

Intersection	Weekday Morning Peak Hour		Weekday Evening Peak Hour	
	LOS	Delay	LOS	Delay
Roosevelt Road with Clark Street¹				
• Overall	C	29.0	E	64.5
• Eastbound Approach	B	18.2	E	72.9
• Westbound Approach	D	39.5	D	51.0
• Northbound Approach	C	29.3	E	64.7
• Southbound Approach	B	13.3	E	73.2
Roosevelt Road with Delano Court/Proposed LaSalle Street¹				
• Overall	B	16.8	C	24.1
• Eastbound Approach	B	16.5	C	24.6
• Westbound Approach	B	14.6	B	16.0
• Northbound Approach	C	25.0	D	44.4
• Southbound Approach	D	41.7	C	29.9
Roosevelt Road with State Street¹				
• Overall	D	51.4	E	56.8
• Eastbound Approach	D	44.1	D	47.5
• Westbound Approach	D	54.5	D	51.9
• Northbound Approach	E	61.4	E	76.4
• Southbound Approach	D	37.9	E	65.4
Roosevelt Road with Canal Street¹				
• Overall	C	33.9	D	45.3
• Eastbound Approach	D	35.0	D	43.3
• Westbound Approach	C	29.2	C	31.7
• Northbound Approach	D	36.9	E	65.2
• Southbound Approach	D	39.5	D	52.7

Table 5, continued

Intersection	Weekday Morning Peak Hour		Weekday Evening Peak Hour	
	LOS	Delay	LOS	Delay
Canal Street with 18th Street¹				
• Overall	C	29.2	D	39.1
• Eastbound Approach	D	35.4	D	47.2
• Westbound Approach	C	29.9	D	39.6
• Northbound Approach	C	28.2	C	33.4
• Southbound Approach	B	16.7	D	36.5
18th Street with Wentworth Avenue¹				
• Overall	C	29.5	D	48.6
• Eastbound Approach	C	34.6	E	71.0
• Westbound Approach	D	35.0	D	37.8
• Northbound Approach	C	23.7	D	45.0
• Southbound Approach	C	20.5	C	34.8
18th Street with Clark Street¹				
• Overall	C	30.2	C	31.7
• Eastbound Approach	D	43.3	D	52.0
• Westbound Approach	D	48.7	D	43.0
• Northbound Approach	B	19.4	B	19.4
• Southbound Approach	B	17.2	C	23.1
Wells Street with Polk Street¹				
• Overall	F	99+	F	99+
• Eastbound Approach	B	16.2	B	14.5
• Westbound Approach	F	99+	F	80.8
• Northbound Approach	F	99+	F	99+
• Southbound Approach	D	36.3	F	99+
Clark Street with Polk Street¹				
• Overall	E	59.0	E	57.8
• Eastbound Approach	D	40.7	C	33.1
• Westbound Approach	D	43.3	D	38.1
• Northbound Approach	E	71.3	F	89.9
• Southbound Approach	D	46.7	C	27.1

Table 5, continued

Intersection	Weekday Morning Peak Hour		Weekday Evening Peak Hour	
	LOS	Delay	LOS	Delay
Clark Street with 15th Street/South Access Drive¹				
• Overall	B	10.2	B	16.8
• Eastbound Approach	D	37.5	D	54.8
• Westbound Approach	B	12.4	A	5.6
• Northbound Approach	A	8.0	B	10.7
• Southbound Approach	A	8.1	A	9.7
Clark Street with 14th Street¹				
• Overall	B	11.5	B	16.7
• Eastbound Approach	D	38.3	D	53.1
• Westbound Approach	B	10.9	A	9.7
• Northbound Approach	A	8.5	B	13.2
Clark Street with North Access Drive¹				
• Overall	A	1.6	A	8.4
• Eastbound Approach	D	35.8	C	33.1
• Westbound Approach	A	1.8	A	3.3
• Northbound Approach	A	1.1	B	14.1
Wells-Wentworth Connector with Garage Access Drive²				
• Westbound Left Turn	B	12.3	C	22.3
• Westbound Right Turn	A	9.3	C	16.1
Wells-Wentworth Connector with LaSalle Street¹				
• Overall	B	19.1	B	13.3
• Westbound Approach	C	29.1	D	36.1
• Northbound Approach	B	19.7	A	6.7
• Southbound Approach	B	11.0	B	15.9
Wells-Wentworth Connector with Middle Access Drive¹				
• Overall	A	8.7	C	33.9
• Westbound Approach	B	14.1	B	16.4
• Northbound Approach	B	12.8	D	53.2
• Southbound Approach	A	6.0	C	23.4

Table 5, continued

Intersection	Weekday Morning Peak Hour		Weekday Evening Peak Hour	
	LOS	Delay	LOS	Delay
Wells-Wentworth Connector with 15th Street Extension¹				
• Overall	B	14.1	B	12.3
• Westbound Approach	B	13.1	B	13.6
• Northbound Approach	C	22.6	B	17.3
• Southbound Approach	A	9.4	A	7.5
Wells-Wentworth Connector with South Drive²				
• Westbound Right Turn	A	9.9	C	16.8
Delay is measured in seconds. 1 – Signalized intersection 2 – Unsignalized intersection				

Discussion and Recommendations

The following summarizes how the intersections within the study area currently operate and are projected to operate assuming the total projected traffic volumes. It will also identify any street and traffic control improvements and/or modifications necessary to accommodate the projected traffic volumes.

Area Intersections

Based on the results of the capacity analyses, the overall area intersections are generally operating at acceptable levels of service with delays that are typical and expected in a densely populated urban area. Most of the intersections in the study area are under traffic signal control, provide protected-permissive left-turn phases, and provide pedestrian crosswalks.

Under Phase I future traffic conditions, all of the studied intersections are projected to operate at an overall acceptable level of service with the exception of the intersection of Wells Street and Polk Street. This is due to the lack of right-of-way to implement any widening as there are buildings on all four corners of the intersection. Further inspection of the capacity analyses indicate that the intersections of Roosevelt Road with La Salle Street/Delano Court and the Wells/Wentworth intersection with La Salle Street will operate at acceptable levels of service with minimal delays thus indicating that the two access drives will be adequate in accommodating the Phase I future traffic volumes.

Under future conditions, the majority of the intersections will generally continue to operate at acceptable levels of service. Some of the individual movements at intersections will experience longer delays, primarily due to the increase of traffic on the major routes and limited availability of green times.

In order to better accommodate future traffic and pedestrian volumes throughout the study area, various improvements/modifications have been identified at each intersection. These improvements/modifications range from the installation of new traffic signals and the provision of protected-permissive left-turn phases to minor signal timing adjustments. **Table 6** presents a summary of the recommended improvements.

Table 6

PROPOSED INTERSECTION IMPROVEMENTS/MODIFICATIONS

Intersection	Improvements
Roosevelt Road with Canal Street	<ul style="list-style-type: none"> Adjust signal timings to provide longer protected southbound left-turn phase during the evening peak hour
Roosevelt Road with Delano Court/Proposed LaSalle Street	<ul style="list-style-type: none"> Modify intersection, signal, and timings to accommodate 4th (northbound) approach Northbound approach will provide two inbound lanes and three outbound lanes striped for dual left-turn lanes and a combined through/right-turn lane Restripe existing median to provide westbound left-turn lane Provide westbound protected/permissive left-turn phase Provide protected-only left-turn phases for the northbound and southbound approaches Signage and striping should be provided allowing right-turn movements onto LaSalle Street from the existing eastbound bus lane
Roosevelt Road with Clark Street	<ul style="list-style-type: none"> Adjust signal timings to provide longer protected eastbound left-turn phase during the morning peak hour Adjust signal timings to provide longer protected northbound left-turn phase during the evening peak hour Adjust offset during the morning peak hour Provide pedestrian countdown timers for all legs
Roosevelt Road with State Street	<ul style="list-style-type: none"> Adjust signal timings to provide longer protected northbound and eastbound left-turn phases during the morning and evening peak hours
18 th Street with Canal Street	<ul style="list-style-type: none"> Adjust signal timings to provide longer protected eastbound left-turn phase during the morning and evening peak hours
18 th Street with Wentworth Avenue	<ul style="list-style-type: none"> Adjust signal timings to provide protected/permissive left-turn phases for all approaches Increase the cycle length to 100 seconds during the evening peak hour Provide exclusive southbound right-turn lane
18 th Street with Clark Street	<ul style="list-style-type: none"> Adjust signal timings to provide longer eastbound and westbound protected left-turn phases during the morning peak hour Provide pedestrian countdown timers for all legs

<p>Clark Street with 15th Street</p>	<ul style="list-style-type: none"> • Modify intersection, signal, and timings to accommodate 4th (eastbound) approach • Eastbound approach will provide one inbound lane and two outbound lanes striped for exclusive left-turn lane and combined through/right-turn lane • Provide exclusive left-turn lanes for the northbound and southbound approaches with protected/permissive left-turn phases for each direction • Provide pedestrian countdown timers for all legs • Provide high-visibility crosswalks on all legs
<p>Polk Street with Clark Street</p>	<ul style="list-style-type: none"> • Restripe the northbound approach to provide a through lane and a shared through/right-turn lane • Prohibit on-street parking on the east side of Clark Street north of Polk Street during the morning and evening peak periods • Adjust signal timings to provide longer northbound protected left-turn phase during the morning peak hour • Adjust signal timings to provide longer northbound and southbound green time and longer northbound protected left-turn phase
<p>Polk Street with Wells Street (to be completed by others)</p>	<ul style="list-style-type: none"> • Adjust signal timing to provide longer northbound and southbound green time and longer eastbound and westbound green time during the evening peak hour
<p>Clark Street with Proposed North Drive</p>	<ul style="list-style-type: none"> • Modify existing intersection, signal, and timings to accommodate 3rd (eastbound) approach • Eastbound approach will provide one inbound lane and two outbound lanes striped to provide exclusive left-turn and right-turn lanes • Provide northbound left-turn lane with a protected/permissive left-turn phase • Provide pedestrian countdown timers for all legs • Provide high-visibility crosswalks on all legs
<p>Clark Street with Proposed 14th Street</p>	<ul style="list-style-type: none"> • Install traffic signal • Modify intersection to accommodate eastbound approach providing one inbound lane and two outbound lanes striped for an exclusive left-turn and right-turn lanes • Provide a northbound left-turn lane with a protected/permissive left-turn phase • Provide pedestrian countdown timers for all legs • Provide high-visibility crosswalks on all legs
<p>Wells Street/Wentworth Avenue Connector with North Garage Drive</p>	<ul style="list-style-type: none"> • Westbound approach will provide one inbound lane and two outbound lane striped for an exclusive left-turn lane and an exclusive right-turn lane with outbound movements under stop sign control • Provide a southbound left-turn lane

<p>Wells Street/Wentworth Avenue Connector with La Salle Street</p>	<ul style="list-style-type: none"> • Install traffic signal • Westbound approach will provide one inbound lane and two outbound lanes striped for exclusive left-turn and right-turn lanes • Provide a southbound left-turn lane with a protected/permissive left-turn phase • Provide pedestrian countdown timers for all legs • Provide high-visibility crosswalks on all legs
<p>Wells Street/Wentworth Avenue Connector with Middle Access Drive</p>	<ul style="list-style-type: none"> • Install traffic signal • Westbound approach t will provide one inbound lane and two outbound lanes striped for exclusive left-turn and right-turn lanes • Provide a southbound left-turn lane with a protected/permissive left-turn phase • Provide pedestrian countdown timers for all legs • Provide high-visibility crosswalks on all legs
<p>Wells Street/Wentworth Avenue Connector with 15th Street (Extended)</p>	<ul style="list-style-type: none"> • Install traffic signal • Westbound approach will provide one inbound lane and two outbound lanes striped as exclusive left-turn and right-turn lanes • Provide a southbound left-turn lane with a protected/permissive left-turn phase • Provide pedestrian countdown timers for all legs • Provide high-visibility crosswalks on all legs

Site Access

As previously stated, access to the development will be provided via Roosevelt Road, Clark Street, and the Wells Street/Wentworth Avenue Connector. This access system allows connectivity along multiple major streets, allowing for traffic to and from the development to approach/depart without overloading the street system. The Wells Street/Wentworth Avenue Connector further encourages connectivity by providing an additional north-south corridor which will be utilized by traffic generated by the development as well as throughout the area. Furthermore, the provision of multiple signalized access points will reduce delays to and from the development while promoting the progression of area traffic, particularly along Clark Street.

Porte-Cochere Evaluation

As previously indicated, the Casino will include a weather-protected, illuminated multi-lane (two lane) Porte Cochere for access to the main entrance and valet services. Therefore, the Casino has been designed to segregate many of the drop off and pick up activities throughout the facility. This will help mitigate any impact within the internal circulation system as it will spread the activity throughout this site and help to not overload any one specific area. The most activity will likely occur at the Porte Cochere and the ride-hailing loading zone, which are proposed to be designed as follows:

- The proposed Porte-Cochere will accommodate approximately 15 vehicles.
- A taxi stand/staging area will be located nearby along the curb lane of one of the adjoining new streets.
- Valet parking will be located within the parking garage.
- Charter buses will be loaded and unloaded in the Porte-Cochere. The charter buses will be directed to park off-site.

Further, to ensure efficient and orderly operations, the operator has committed to staff the Porte Cochere/loading areas with sufficient traffic control personnel and valet runners, which will perform the following tasks:

- Direct and manage the operation of the Porte-Cochere/loading areas.
- Expedite the loading and unloading of vehicles and buses.
- Minimize the standing and double parking of vehicles.

7. Transportation Demand Management

Transportation Demand Management (TDM) measures provide strategies that the proposed development can implement that have been effective at reducing the number of vehicle trips generated by a new development. These strategies are meant to not only reduce the traffic to and from the site, but also to reduce parking demand, increase the use of alternate modes of transportation and public transit ridership, and promote active lifestyles less dependent on personal vehicles.

TDM programs have been demonstrated to be highly effective at reducing the amount of vehicle trips created by new or existing developments. These programs are developed based on a comprehensive review of the best parking and transportation demand management practices conducted by private developments and communities throughout the United States. The measures work together as a mutually-reinforcing group of strategies that are most effective when applied simultaneously.

The following suggestions and recommendations are strategies that would be effective in a development such as this:

Transit Subsidies provided by employers and residential operators will provide discounted or free access to public transportation.

Carpool Matching Services can be provided by employers to match employees who live near each other and work similar schedules to carpool to and from the office. Van-pool services may also be provided.

Preferential Carpool Parking provides preferential treatment to those employees who carpool. Benefits can include a discounted cost for parking or the use of the “better” parking spaces within the parking garage.

Guaranteed/Emergency Ride Home reimburses non-driving employees for occasional taxi cab or ride-share rides when traveling to or from work outside of the normal commuting times.

Flextime provides formal policies allowing employees to work non-conventional schedules to reduce parking and traffic demand that occur during typical peak periods.

Telecommuting provides formal policies allowing employees to work remotely. Residential buildings in the area may consider the provision of high-speed internet access to further encourage this option.

Bicycle-Sharing (Divvy) Stations should be provided in the area to accommodate the proposed increase in population. The location and number of docks at each of these new stations should be determined based on employment centers and residential buildings in coordination with Divvy Bike Sharing. Employers/residential operators may choose to subsidize membership costs in order to reduce parking and traffic.

Car-Sharing should be provided throughout the development within the on-site parking garages. Coordination with car-share providers should determine the number and location of these vehicles. Employers/residential operators may choose to subsidize membership costs in order to reduce parking and traffic.

Changing Facilities promote bicycle commuting by allowing employees to shower and get ready for work after their commute. This may also include agreements with nearby health clubs for the use of their facilities.

Bike Storage and Bike Repair Facilities within employment centers and residential buildings provide a secure place to store bicycles out of the elements. In addition, the space and tools to perform minor repairs when necessary will further encourage bicycle commuting.

Charging for Parking is an effective method to reduce traffic to and from the development as well as reduce the demand for on-site parking.

Real-Time Transit Monitors should be provided within public areas or building lobbies to inform potential transit users of approaching trains and buses.

Distribute Information in order to inform new residents and employees of transit options, programs, and incentives.

8. Conclusion

This report summarizes the methodologies, results, and findings of a transportation study conducted by Kenig, Lindgren, O'Hara, Aboona, Inc. (KLOA, Inc.) to assess the impact of the proposed Casino within The 78 development in Chicago, Illinois. As proposed, the site will be developed with a Casino with 3,900 gaming positions and a hotel with approximately 500 rooms. In addition, the Casino will provide a 2,500-space parking garage located below the facility and approximately 800 to 900 spaces will be leased in the Roosevelt Collection garage immediately north of the site. Based on the preceding analyses and recommendations, the following conclusions have been made:

- The volume of traffic to be generated by the development will be reduced given its location in an urban area and its proximity to alternative modes of transportation.
- The mixed-use nature of the area and The 78 will promote interaction between uses, further reducing the volume of traffic to be generated by the development.
- Numerous improvements/modifications have been recommended in order to mitigate the impact of the proposed development and future conditions. These improvements/modifications range from the installation of multiple traffic signals and new signalized access points to protected/permissive phasing and signal timing adjustments.
- Multiple access points allow for good connectivity to the surrounding street system and allow for more efficient ingress/egress.
- The Wells Street/Wentworth Avenue Connector will provide an additional corridor in the area and alleviate traffic along other north-south corridors, particularly Canal Street and Clark Street.
- The outlined Travel Demand Measures will help reduce the impact of the development on the area street system as well as reduce parking demand, increase the use of alternate modes of transportation and public transit ridership, and promote active lifestyles less dependent on personal vehicles.
- The temporary Casino transportation impacts can be accommodated by the existing street network with the following recommendations:
 - In order to accommodate and facilitate the safe passage of future pedestrian traffic to/from the temporary Casino and the surface parking lot, high visibility crosswalks and pedestrian crossing signs should be provided on the Wells/Wentworth Connector.
 - Drop-off/pick-up activity for the temporary Casino should be accommodated within the proposed surface parking lot.

Appendix

Figures




















Demographic Data

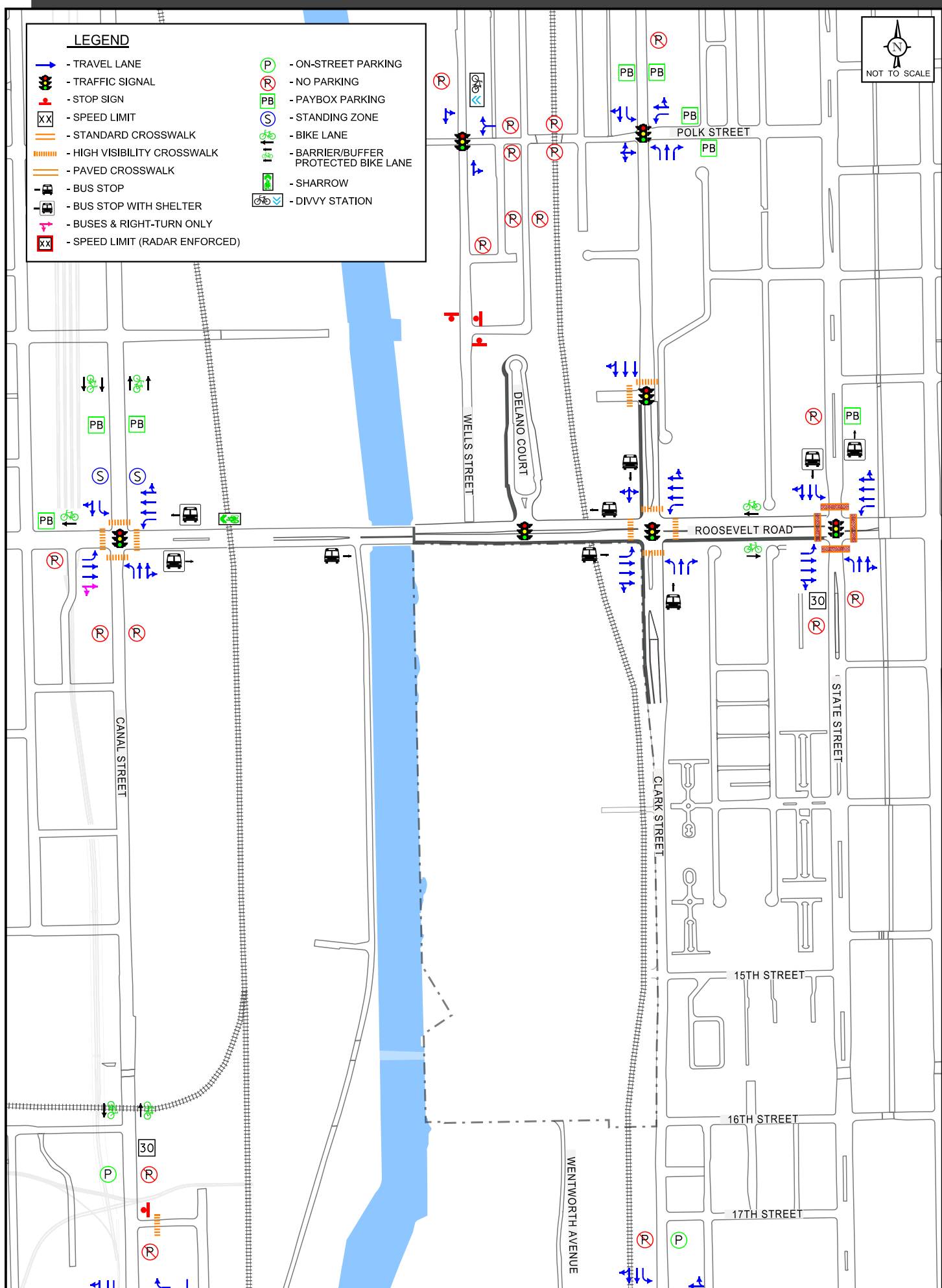
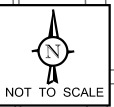
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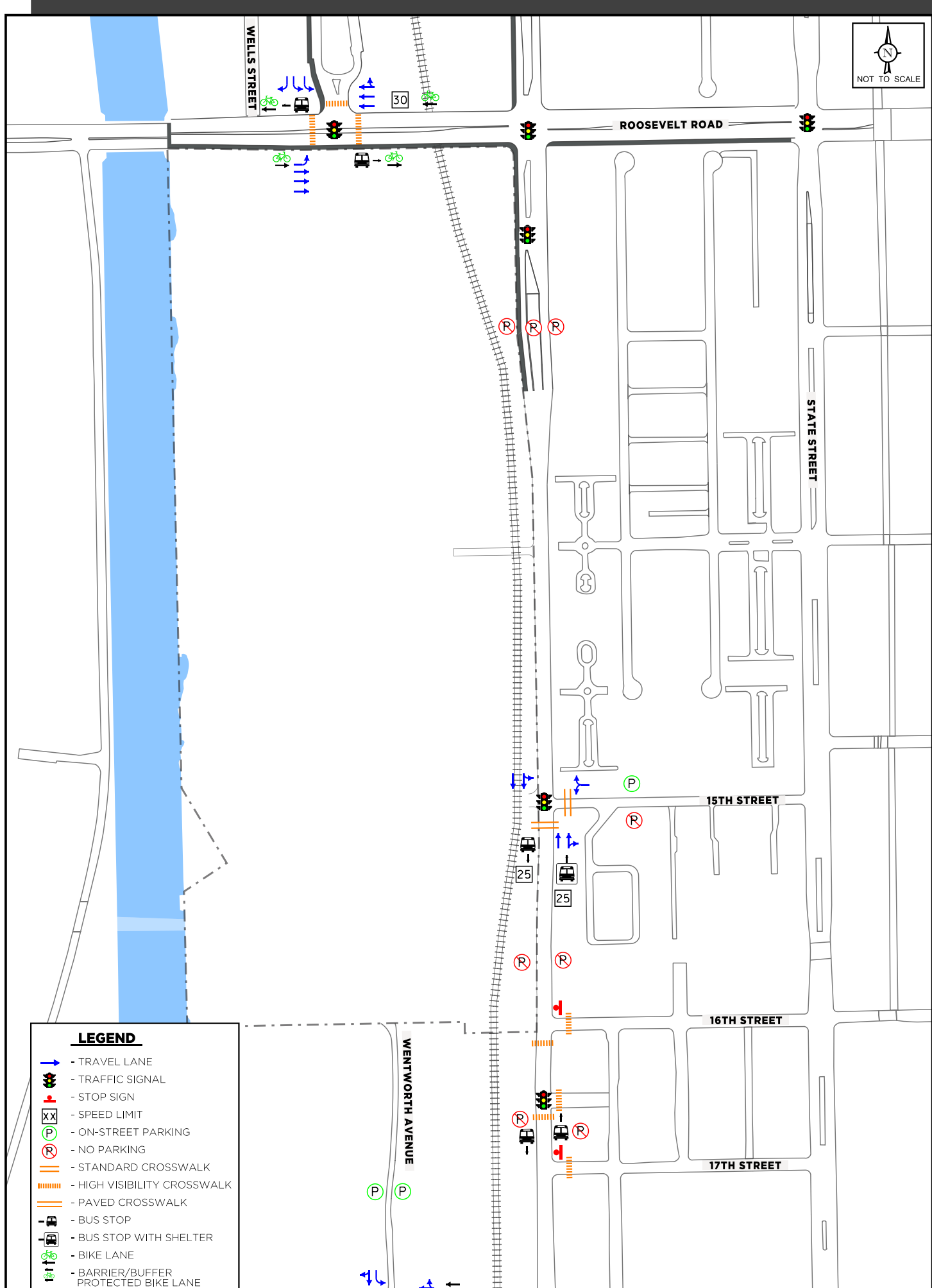
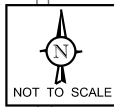
Capacity Analyses Reports

Figures












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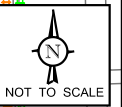
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-  - TRAFFIC SIGNAL
-  - STOP SIGN
-  - SPEED LIMIT
-  - STANDARD CROSSWALK
-  - HIGH VISIBILITY CROSSWALK
-  - PAVED CROSSWALK
-  - BUS STOP
-  - BUS STOP WITH SHELTER
-  - BUSES & RIGHT-TURN ONLY
-  - SPEED LIMIT (RADAR ENFORCED)
-  - ON-STREET PARKING
-  - NO PARKING
-  - PAYBOX PARKING
-  - STANDING ZONE
-  - BIKE LANE
-  - BARRIER/BUFFER PROTECTED BIKE LANE
-  - SHARROW
-  - DIVVY STATION





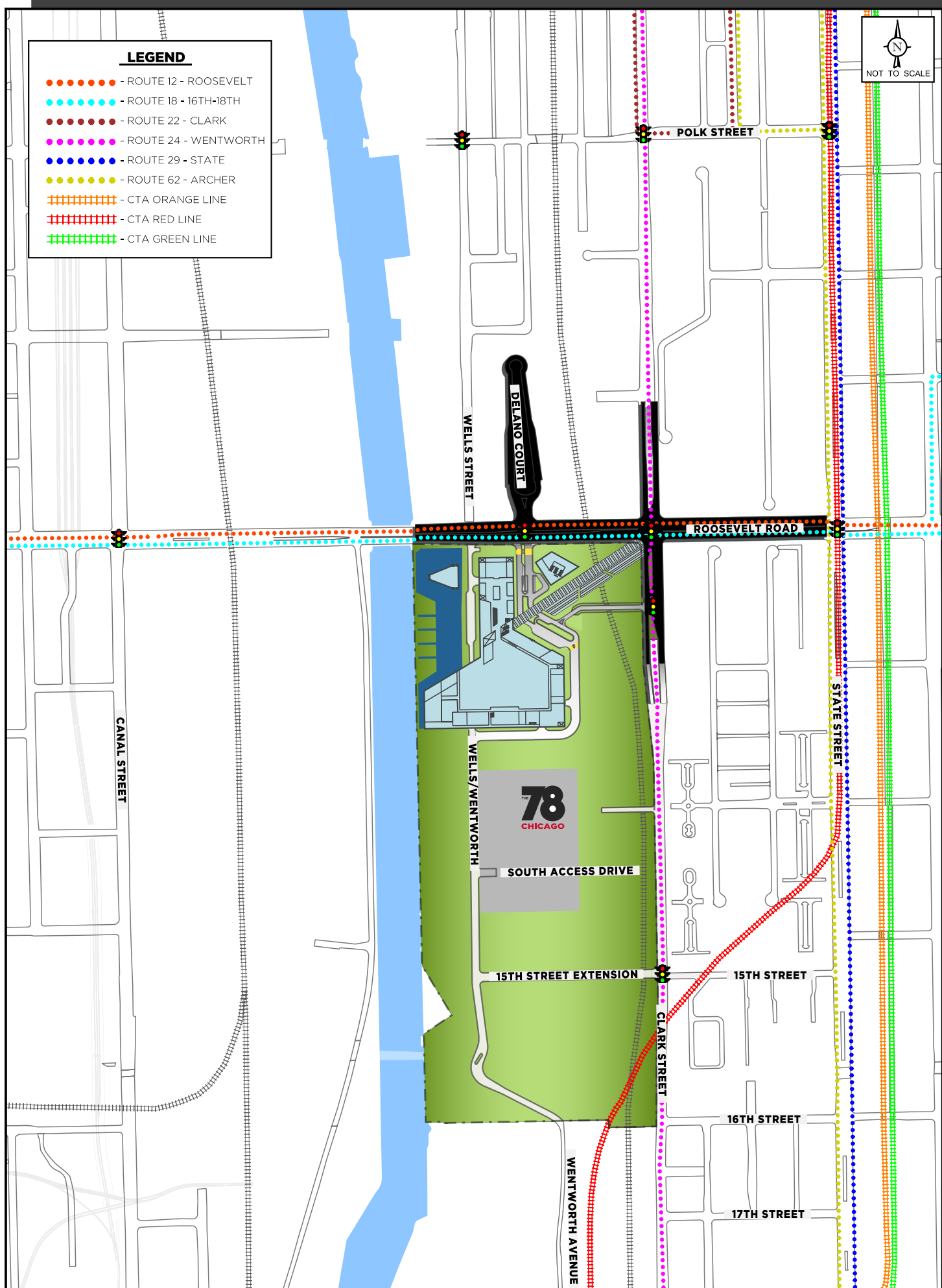
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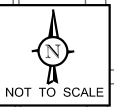
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-  - HIGH VISIBILITY CROSSWALK
-  - PAVED CROSSWALK
-  - BUS STOP
-  - BUS STOP WITH SHELTER
-  - BIKE LANE
- - BARRIER/BUFFER PROTECTED BIKE LANE



LEGEND

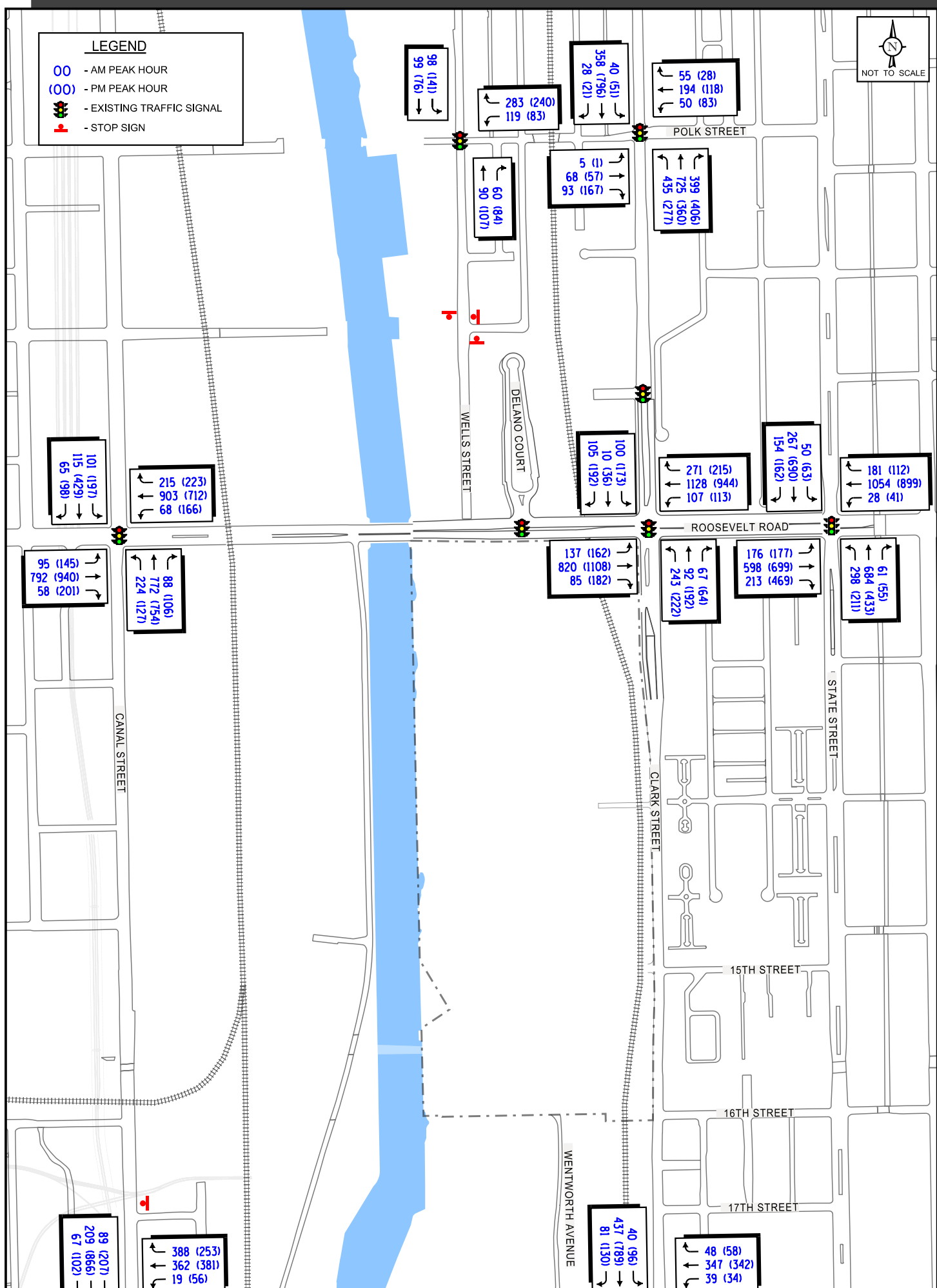
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- - ROUTE 18 - 16TH-18TH
- - ROUTE 22 - CLARK
- - ROUTE 24 - WENTWORTH
- - ROUTE 29 - STATE
- - ROUTE 62 - ARCHER
- ▤▤▤▤▤ - CTA ORANGE LINE
- ▤▤▤▤▤ - CTA RED LINE
- ▤▤▤▤▤ - CTA GREEN LINE





LEGEND

- OO - AM PEAK HOUR
- (OO) - PM PEAK HOUR
- 🚦 - EXISTING TRAFFIC SIGNAL
- 🛑 - STOP SIGN



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99 (76)

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119 (83)

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358 (796)
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55 (28)
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215 (223)
903 (712)
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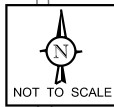
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437 (789)
81 (130)

48 (58)
347 (342)
39 (34)



ROOSEVELT ROAD

WELLS STREET

STATE STREET

15TH STREET

16TH STREET

17TH STREET

WENTWORTH AVENUE

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16 (90)

34 (98)
1442 (1260)

12 (90)
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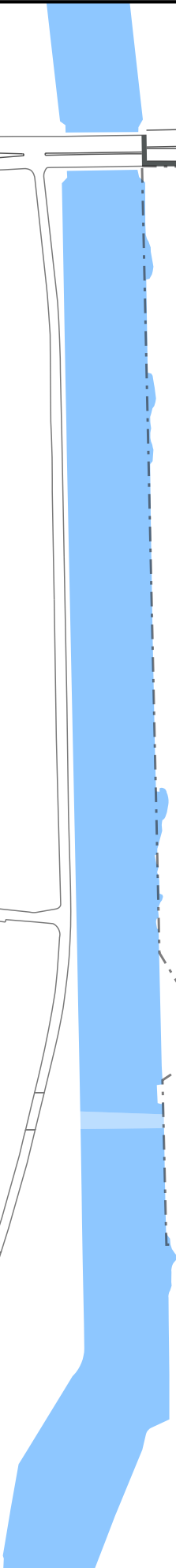
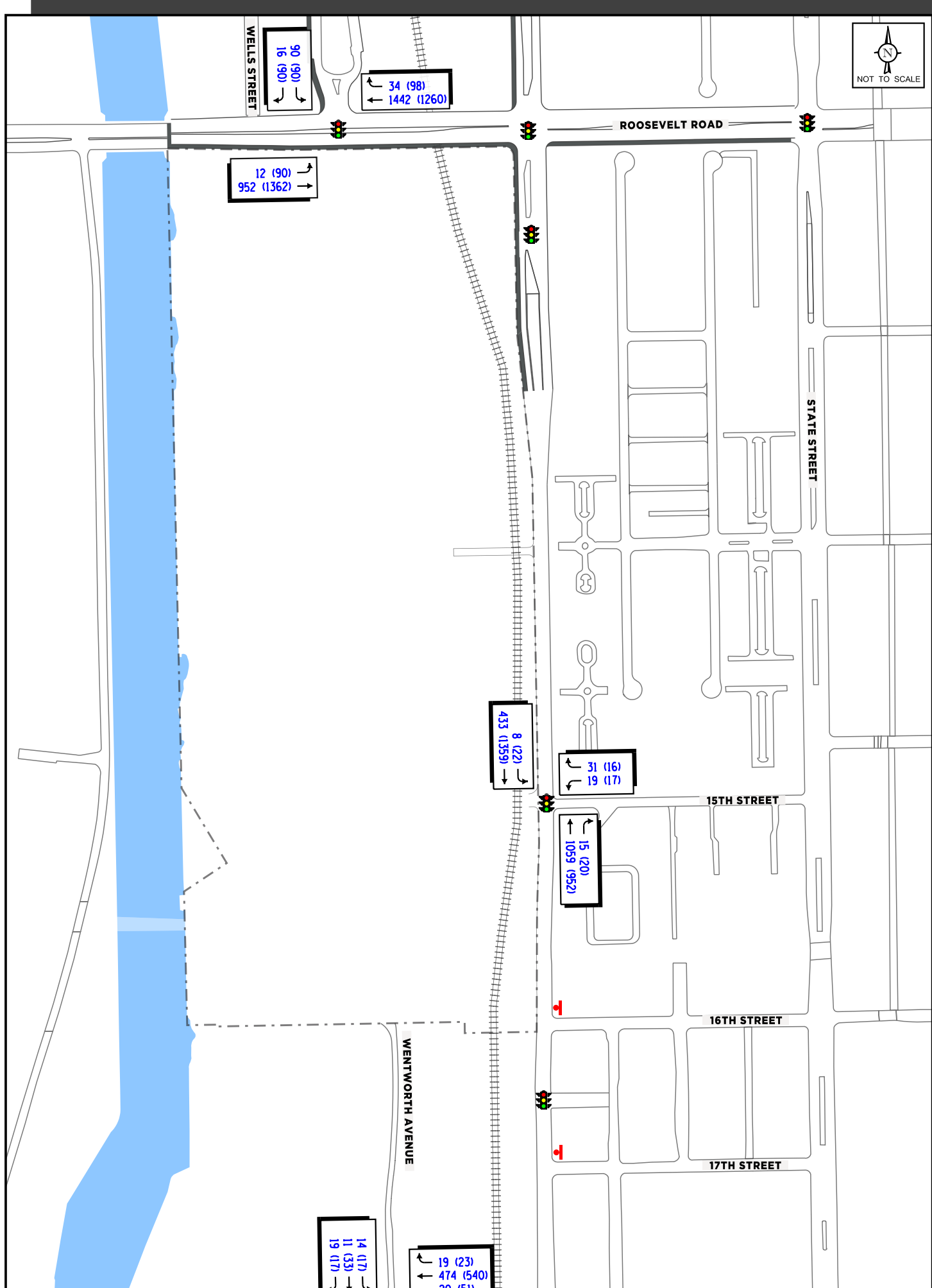
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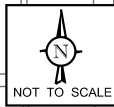
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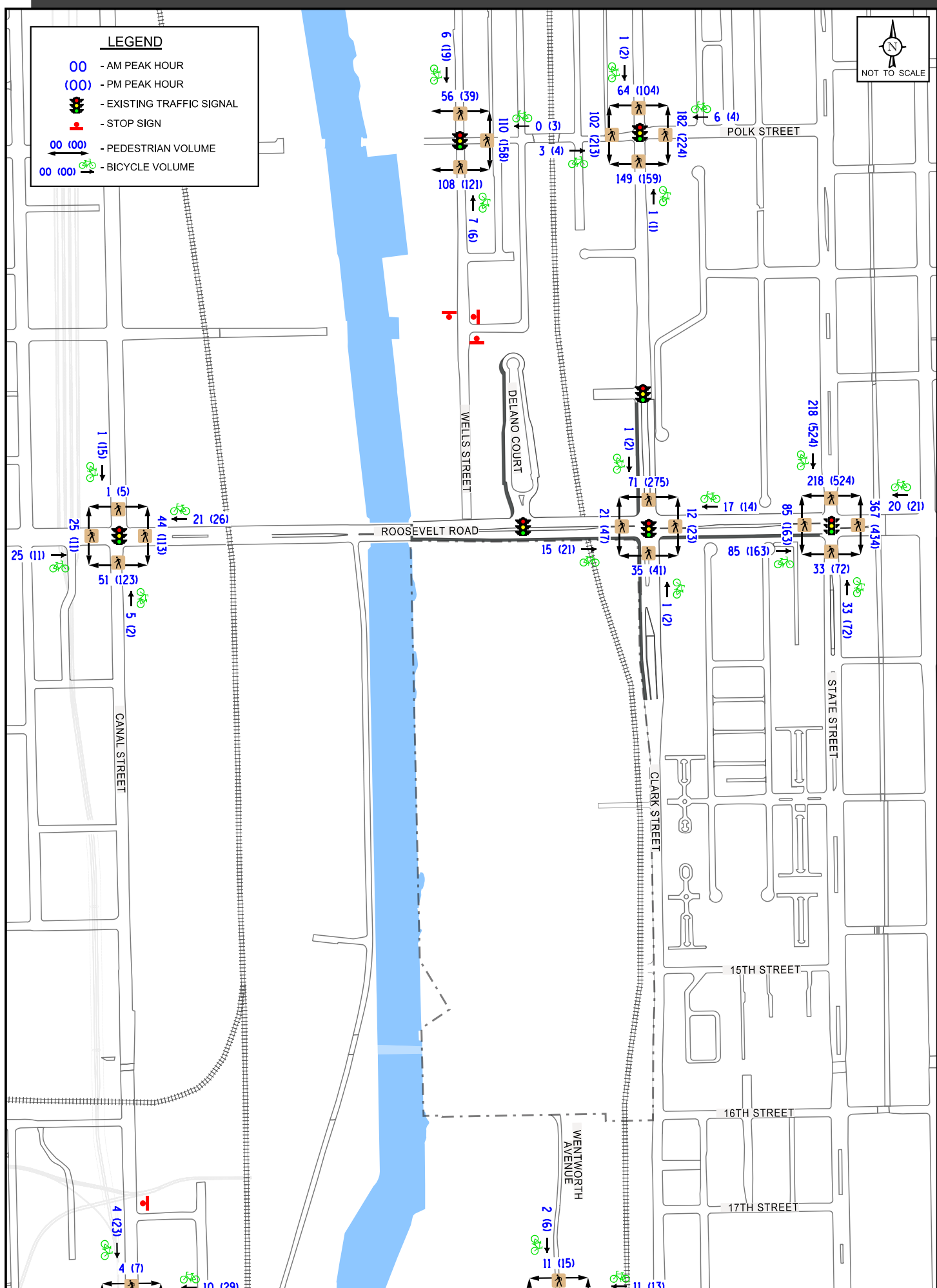
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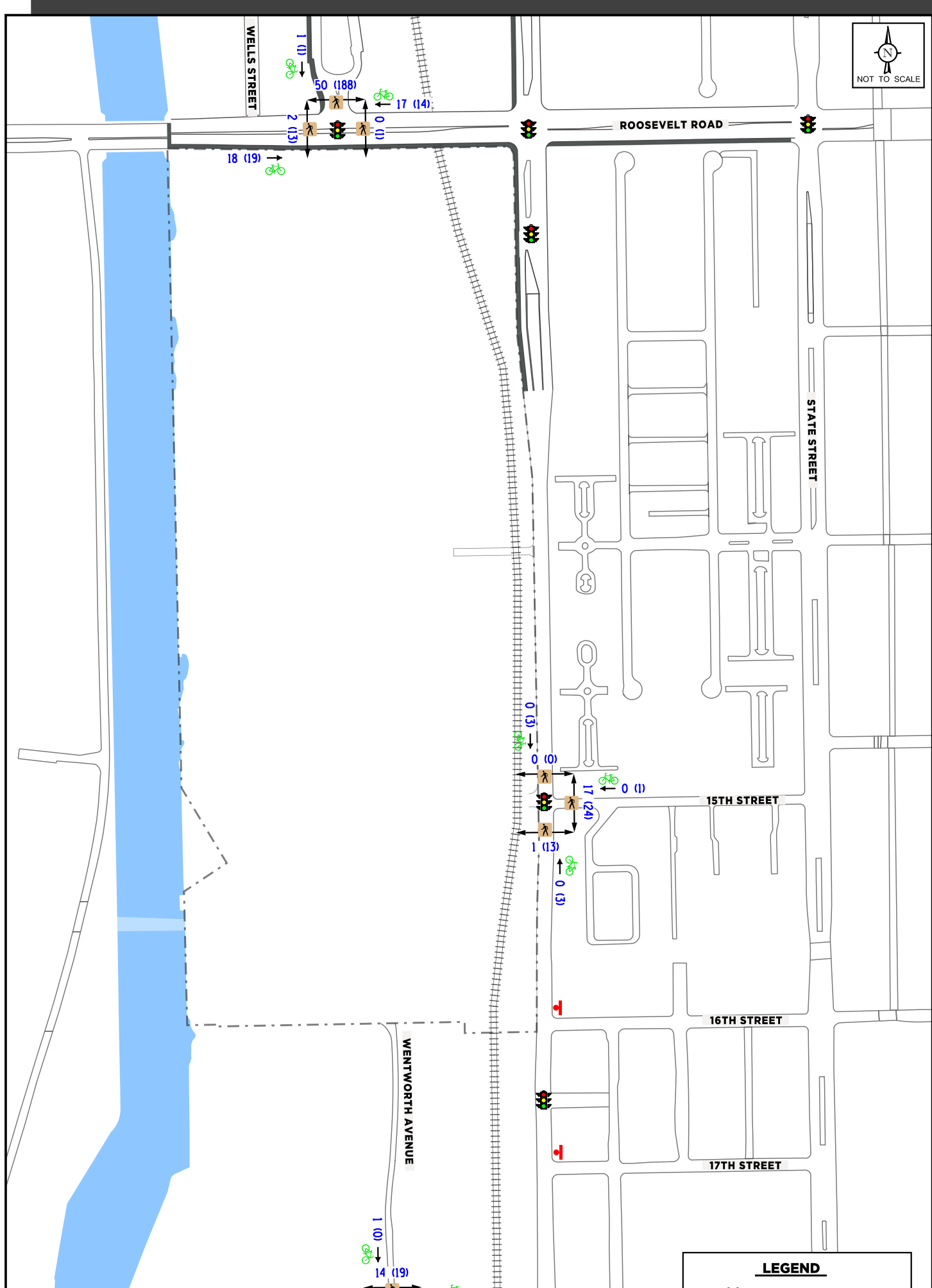
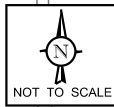




LEGEND

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- STOP SIGN
- 00 (00) - PEDESTRIAN VOLUME
- 00 (00) - BICYCLE VOLUME





WELLS STREET

ROOSEVELT ROAD

STATE STREET

15TH STREET

16TH STREET

17TH STREET

WENTWORTH AVENUE

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50 (188)

17 (14)

2 (13)

0 (0)

0 (3)

0 (0)

17 (24)

0 (1)

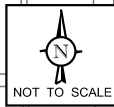
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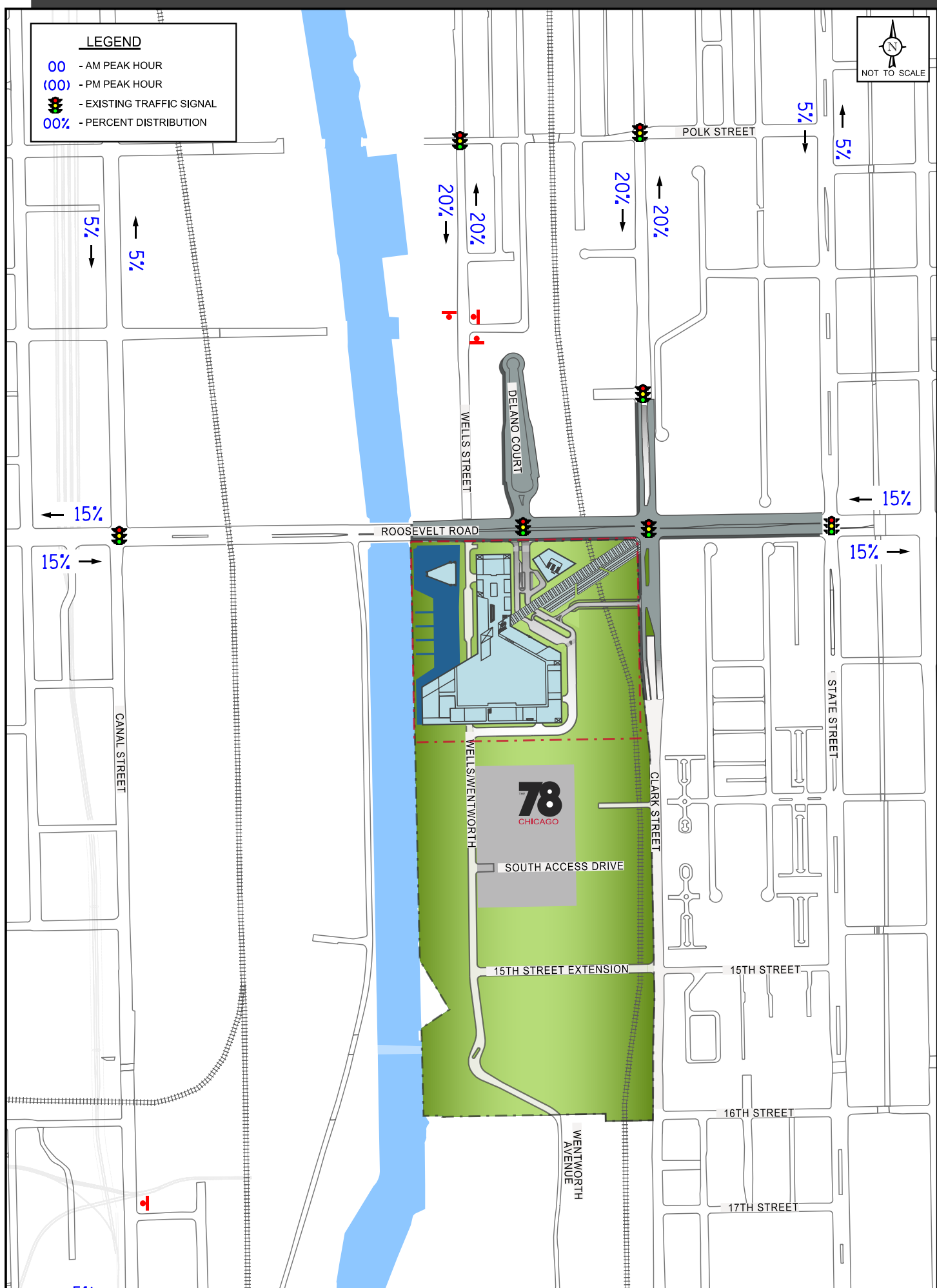
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LEGEND



LEGEND

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- 00% - PERCENT DISTRIBUTION



5% →

← 5%

20% →

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20% →

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15% →

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78
CHICAGO

SOUTH ACCESS DRIVE

15TH STREET EXTENSION

15TH STREET

16TH STREET

17TH STREET

CANAL STREET

ROOSEVELT ROAD

WELLS STREET

DELANO COURT

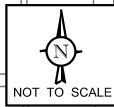
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STATE STREET

CLARK STREET

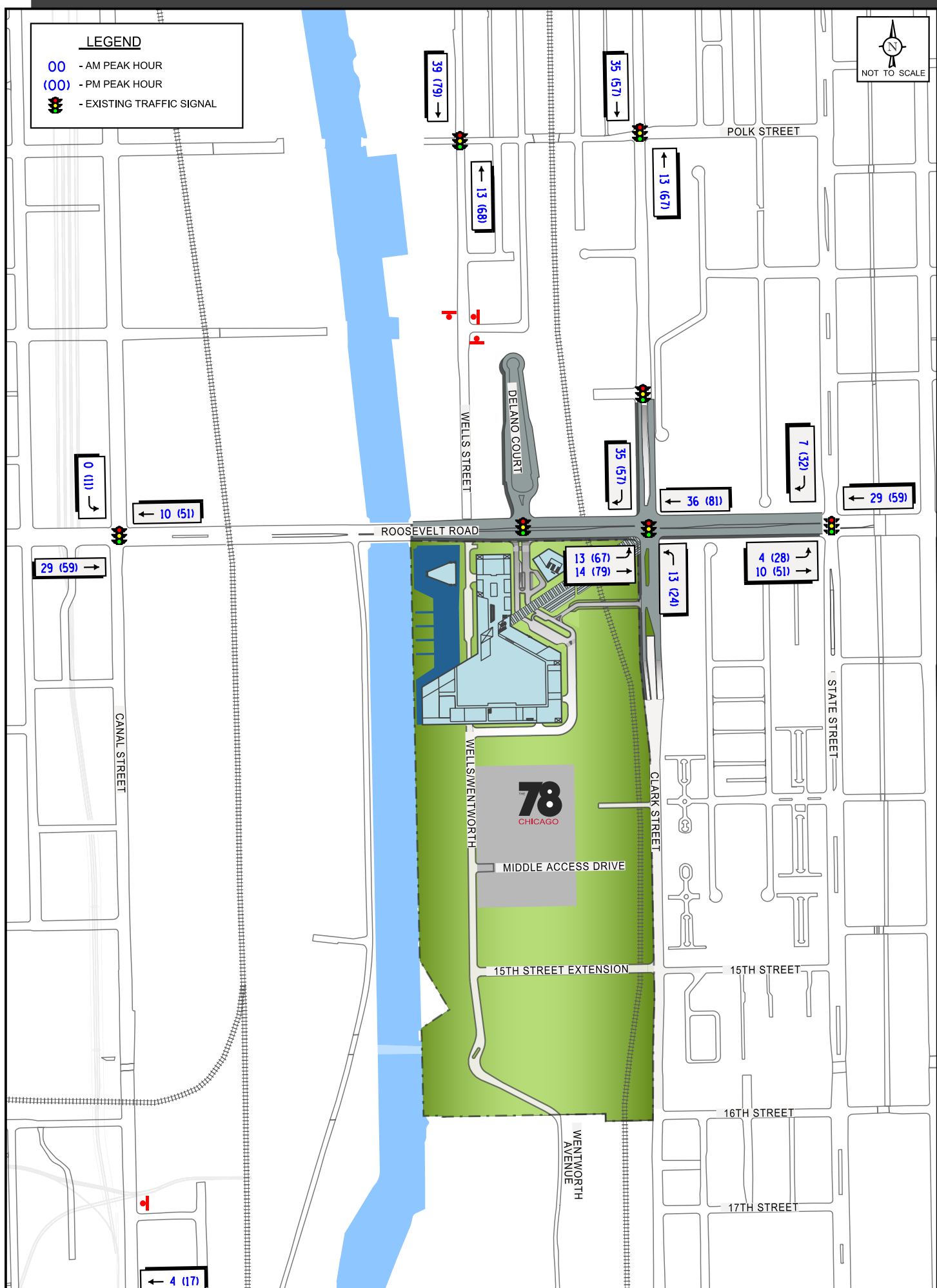
WELLS/WENTWORTH

WENTWORTH AVENUE



LEGEND

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35 (57) →

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0 (11) →

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← 36 (81)

7 (32) →

← 29 (59)

ROOSEVELT ROAD

29 (59) →

13 (67) →
14 (79) →

← 13 (24)

4 (28) →
10 (51) →

CANAL STREET

WELLS STREET

78
CHICAGO

MIDDLE ACCESS DRIVE

CLARK STREET

STATE STREET

15TH STREET EXTENSION

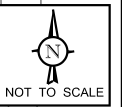
15TH STREET

WENTWORTH AVENUE

16TH STREET

17TH STREET

← 4 (17)



WELLS STREET

84 (158)

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- (-)
10 (51)

GARAGE ACCESS

NORTH DRIVE

13 (24)

39 (79)

13 (68)
17 (74)

LASALLE DRIVE

44 (73)

THE 78 CHICAGO

14TH STREET

MIDDLE ACCESS DR

13 (24)

15TH STREET EXTENSION

15TH STREET

SOUTH DRIVE

SOUTH DRIVE

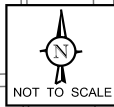
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WENTWORTH AVENUE

17TH STREET

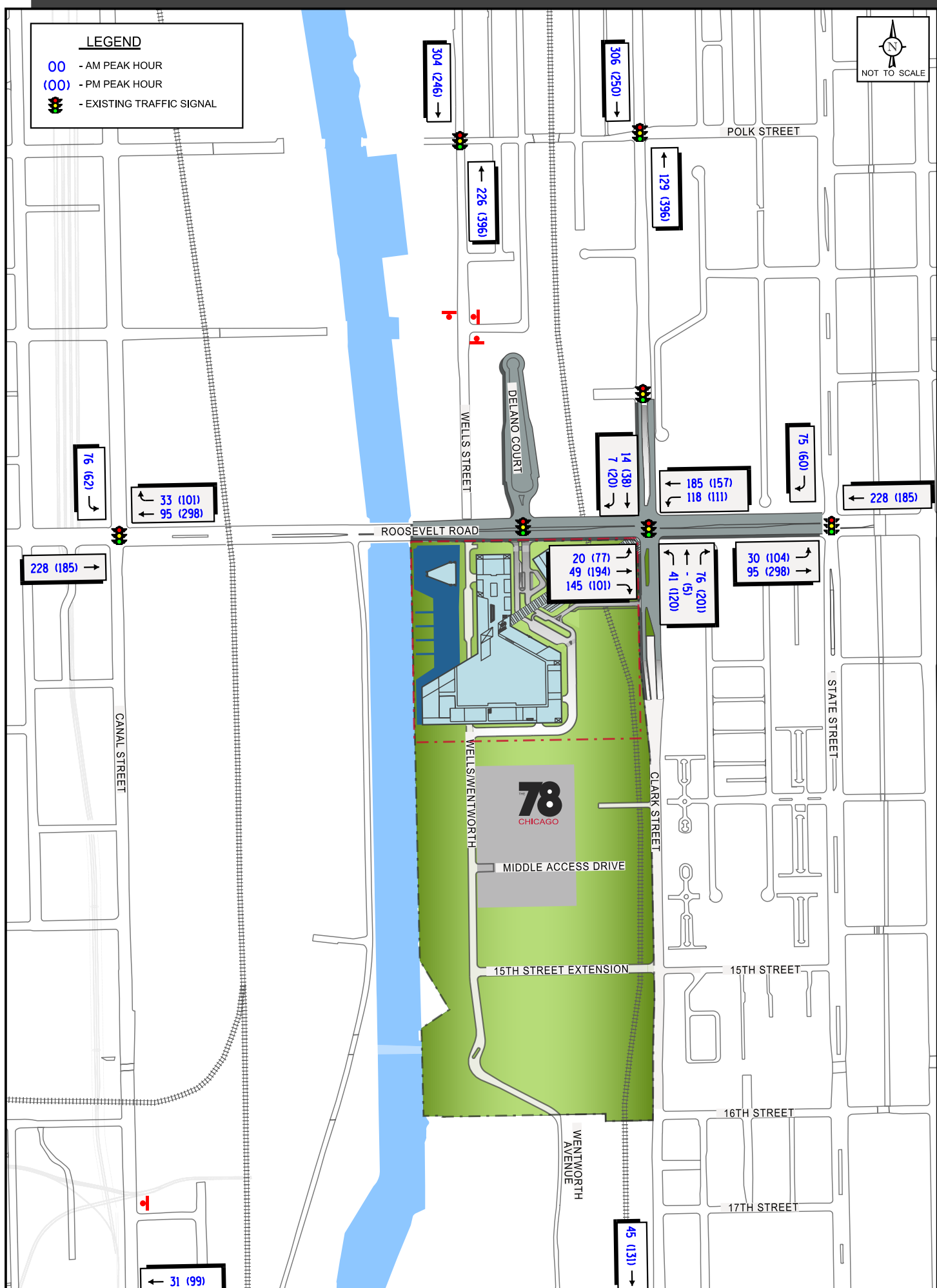
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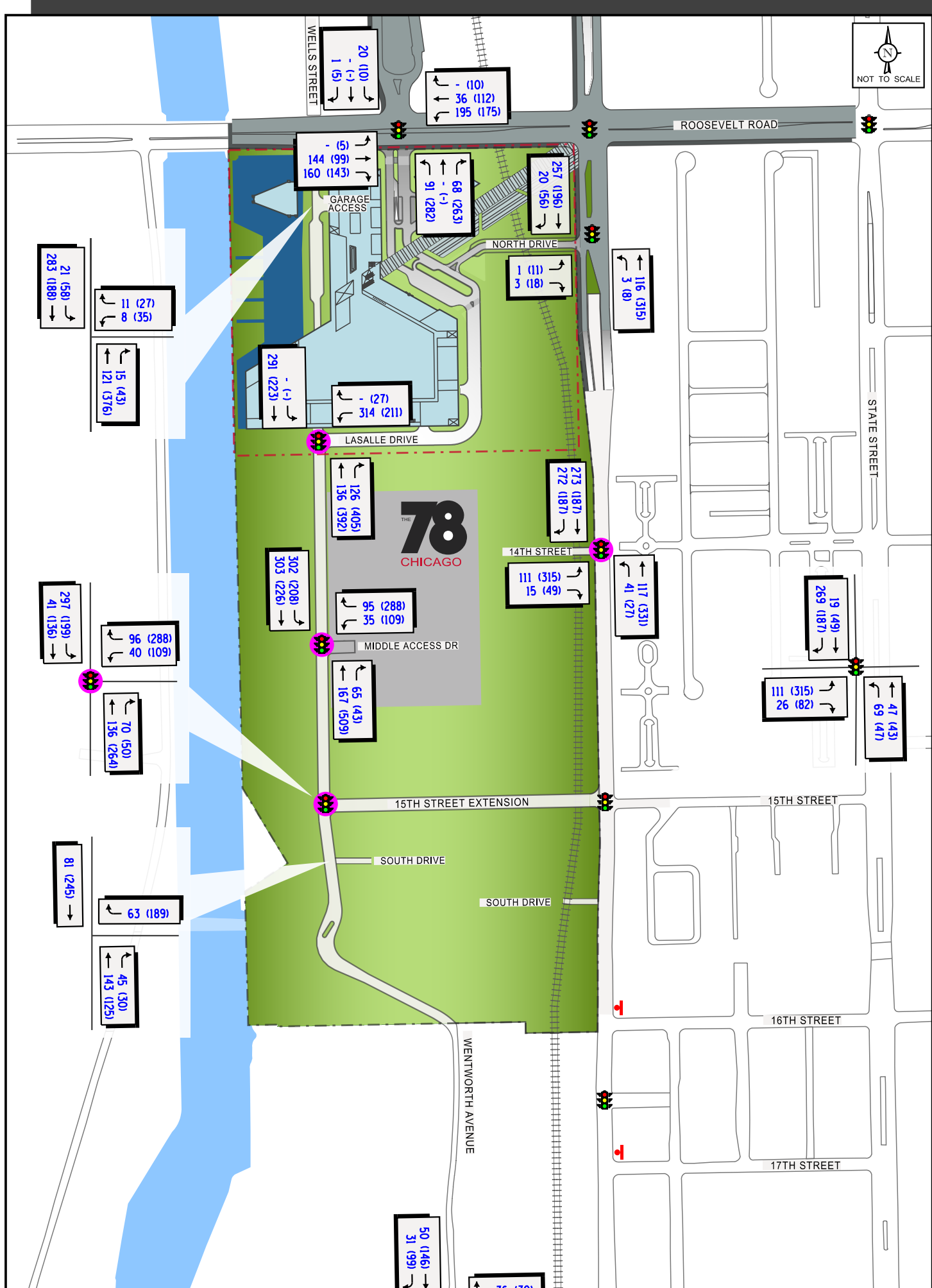
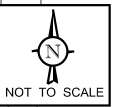
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THE 78
CHICAGO

WELLS STREET

ROOSEVELT ROAD

NORTH DRIVE

LASALLE DRIVE

14TH STREET

15TH STREET EXTENSION

15TH STREET

SOUTH DRIVE

SOUTH DRIVE

16TH STREET

17TH STREET

STATE STREET

WENTWORTH AVENUE

20 (10)
- (-)
1 (5)

- (10)
36 (112)
195 (175)

- (5)
144 (99)
160 (143)

68 (253)
- (-)
91 (282)

257 (196)
20 (56)

116 (315)
3 (8)

21 (58)
283 (188)

11 (27)
8 (35)

15 (43)
121 (376)

291 (223)
- (-)

- (27)
314 (211)

1 (11)
5 (18)

126 (405)
136 (392)

273 (187)
272 (187)

111 (315)
15 (49)

117 (331)
41 (27)

19 (49)
269 (187)

297 (199)
41 (136)

96 (288)
40 (109)

95 (288)
35 (109)

302 (208)
303 (226)

65 (43)
167 (509)

111 (315)
26 (82)

47 (43)
69 (47)

70 (50)
136 (264)

MIDDLE ACCESS DR

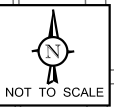
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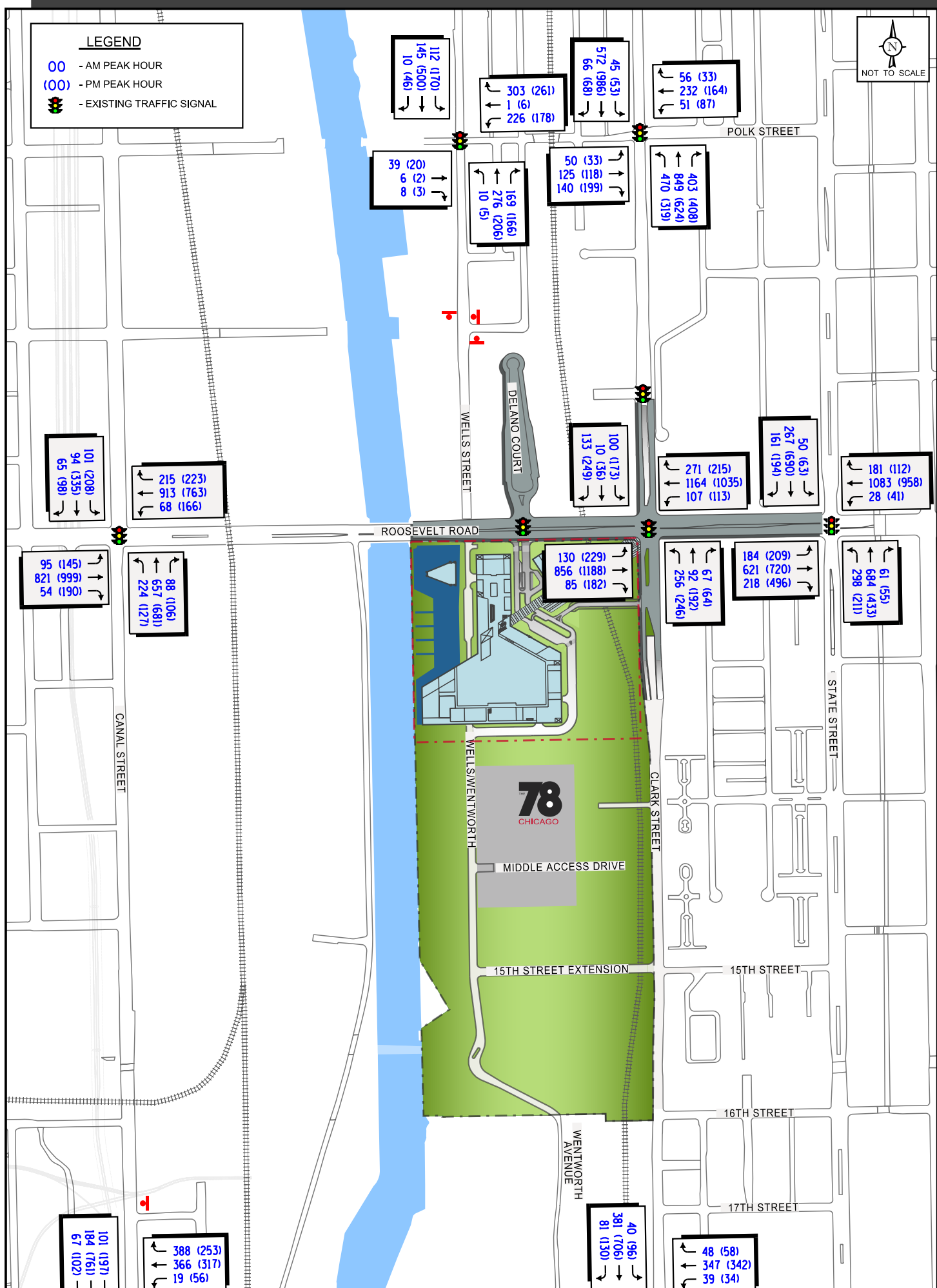
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LEGEND

- 00 - AM PEAK HOUR
- (00) - PM PEAK HOUR
- EXISTING TRAFFIC SIGNAL



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10 (46)

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1 (6)
226 (178)

45 (53)
572 (986)
66 (68)

56 (33)
232 (164)
51 (87)

39 (20)
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276 (206)
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50 (33)
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140 (199)

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657 (681)
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621 (720)
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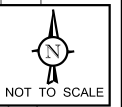
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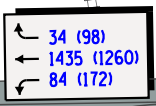
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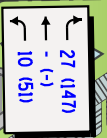
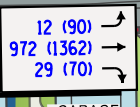
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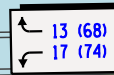
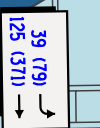
WELLS STREET



ROOSEVELT ROAD



NORTH DRIVE



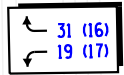
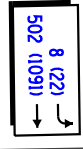
LASALLE DRIVE



THE 78 CHICAGO

14TH STREET

MIDDLE ACCESS DR



15TH STREET

15TH STREET EXTENSION

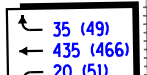
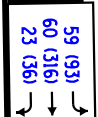
SOUTH DRIVE

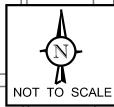
SOUTH DRIVE

16TH STREET

WENTWORTH AVENUE

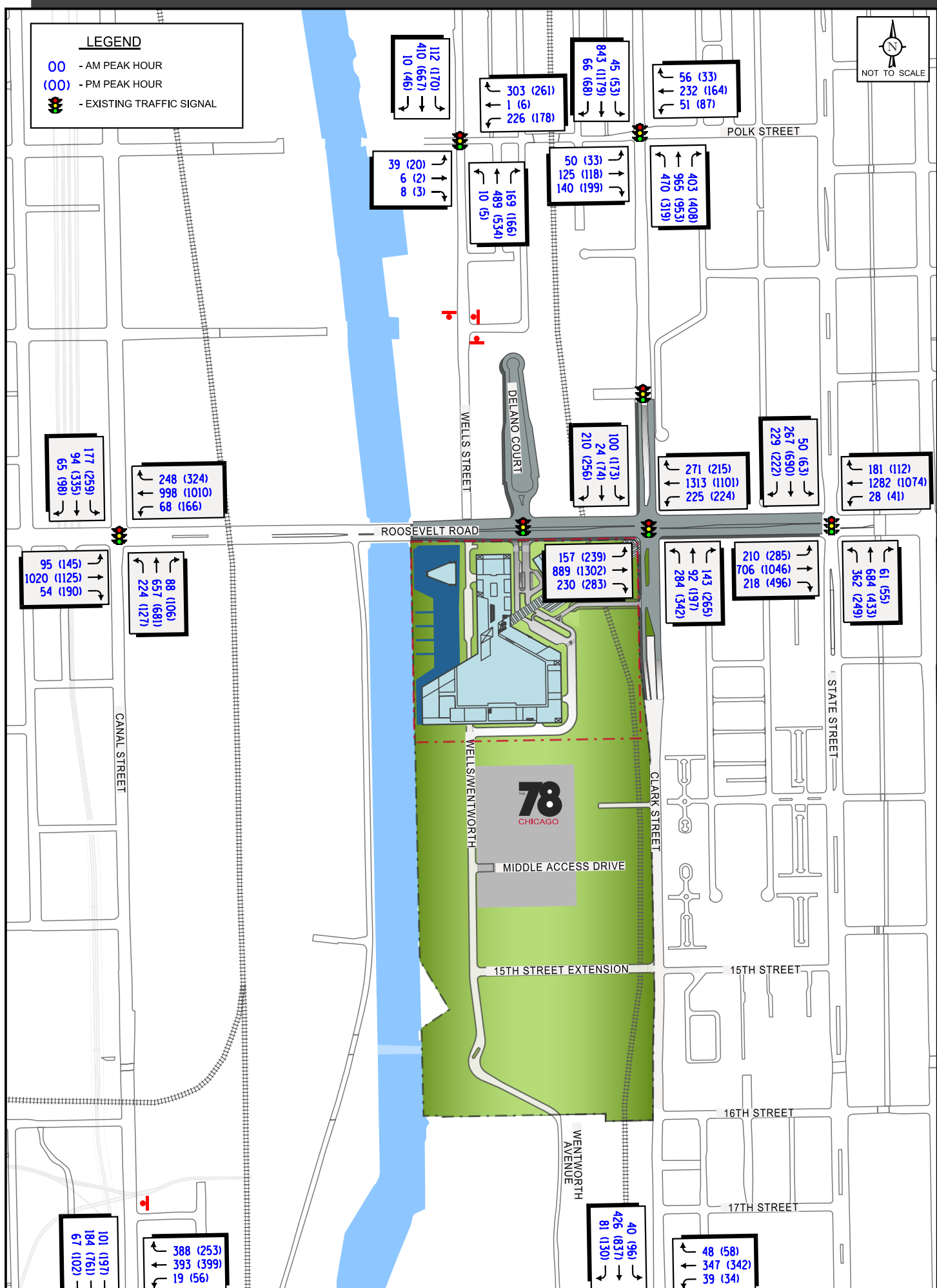
17TH STREET





LEGEND

- 00 - AM PEAK HOUR
- (00) - PM PEAK HOUR
- EXISTING TRAFFIC SIGNAL



112 (170)
410 (667)
10 (46)

303 (261)
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226 (178)

45 (53)
843 (1179)
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56 (33)
232 (164)
51 (87)

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8 (3)

169 (166)
489 (534)
10 (5)

50 (33)
125 (118)
140 (199)

403 (408)
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470 (319)

177 (259)
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65 (98)

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267 (690)
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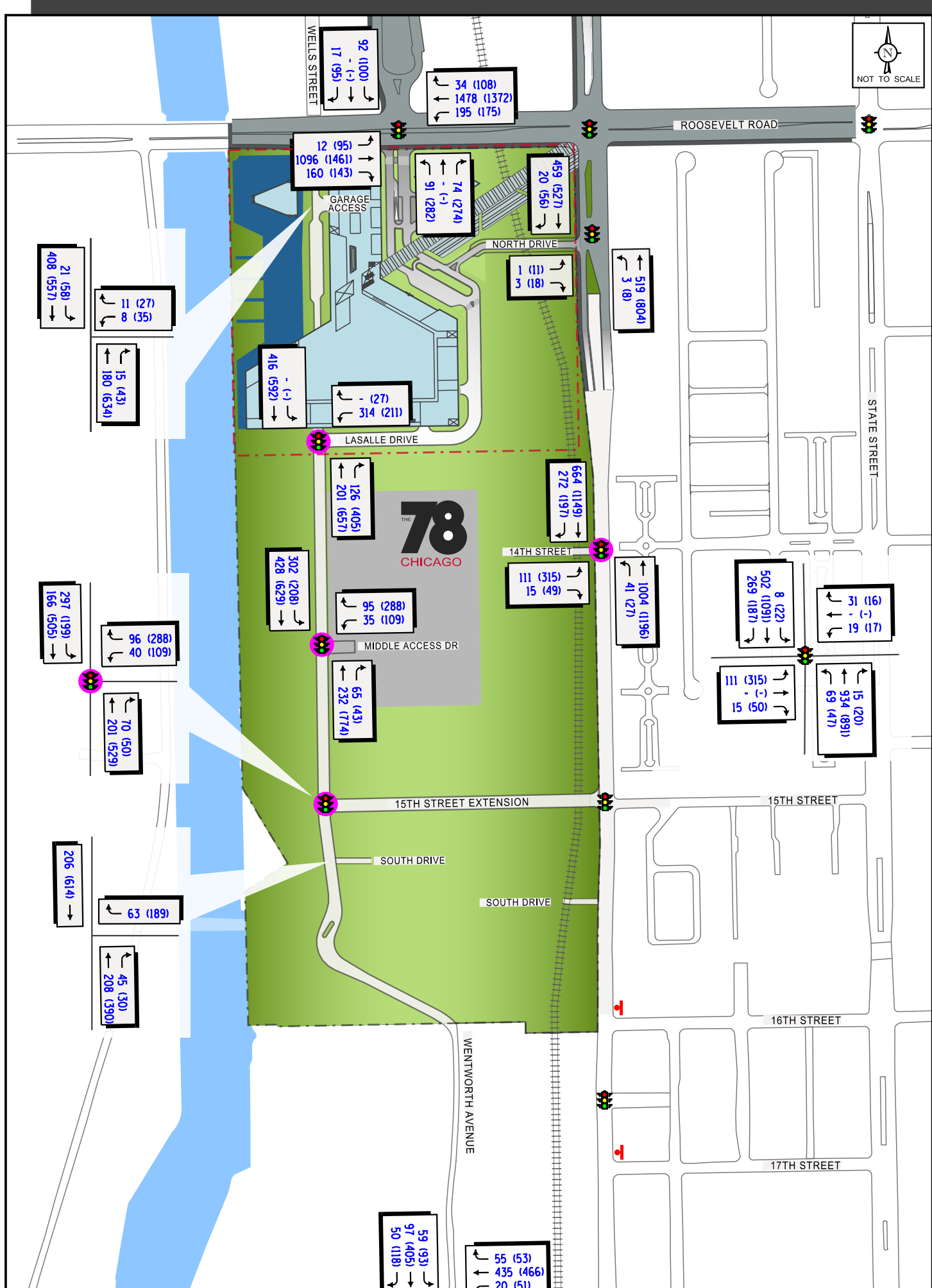
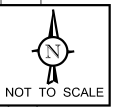
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57 (102)

388 (253)
393 (399)
19 (56)

40 (96)
426 (837)
81 (130)

48 (58)
347 (342)
39 (34)



THE 78
CHICAGO

WELLS STREET

ROOSEVELT ROAD

NORTH DRIVE

LASALLE DRIVE

14TH STREET

15TH STREET EXTENSION

15TH STREET

SOUTH DRIVE

SOUTH DRIVE

WENTWORTH AVENUE

STATE STREET

16TH STREET

17TH STREET

34 (108)
1478 (1372)
195 (175)

92 (100)
17 (95)

12 (95)
1096 (1461)
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74 (274)
91 (282)

459 (527)
20 (56)

1 (11)
3 (18)

519 (804)
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21 (58)
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11 (27)
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15 (43)
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416 (592)

314 (211)

126 (405)
201 (657)

664 (1149)
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8 (22)
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166 (505)

96 (288)
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70 (50)
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302 (208)
428 (629)

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15 (20)
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206 (614)

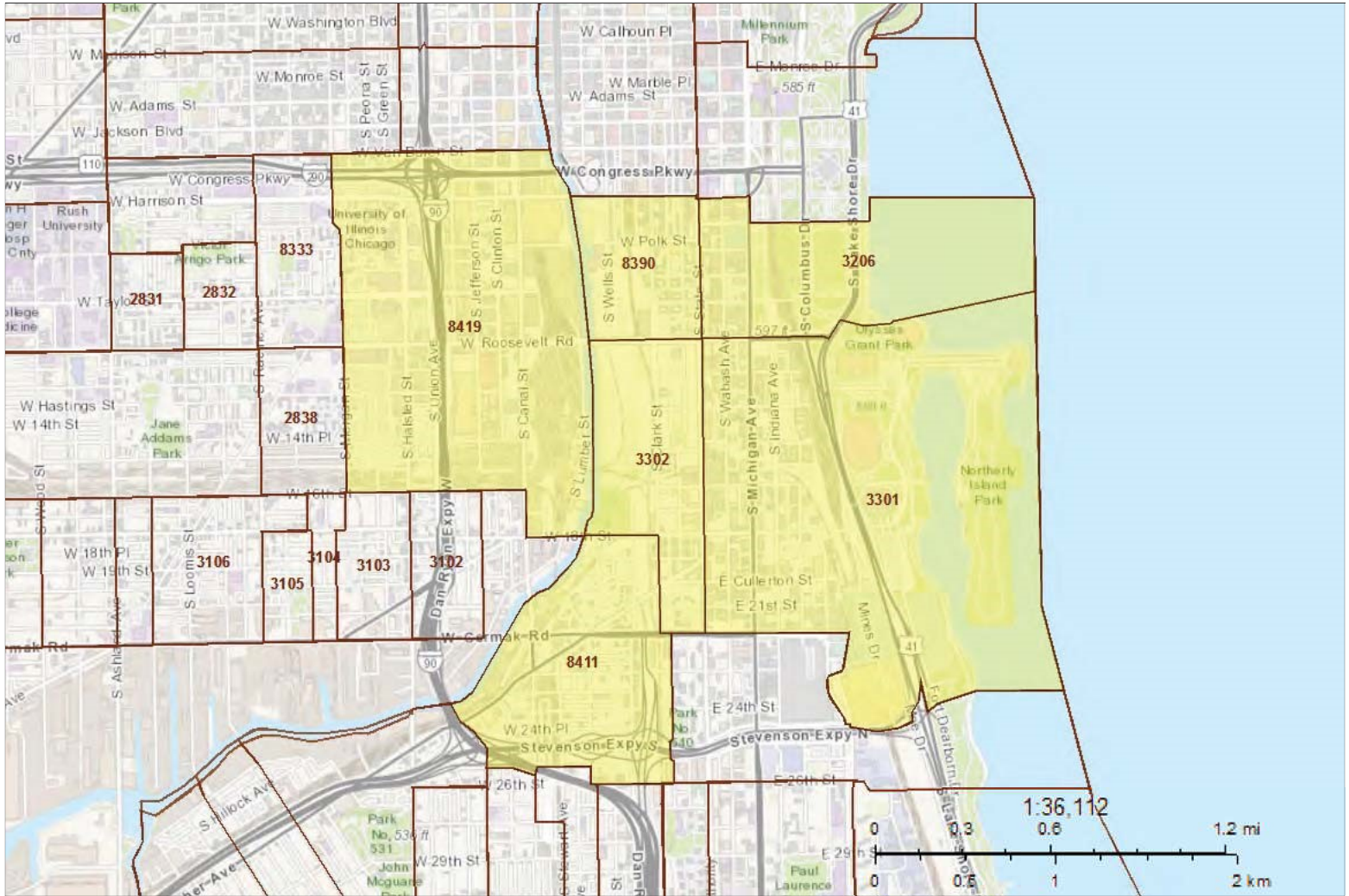
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45 (30)
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97 (405)
50 (118)

55 (53)
435 (466)
20 (51)

Demographic Data



Legend:

Your Selections

2015 boundaries were used to map 'Your Selections'

Selection Results

No Legend

2016 Boundaries

Census Tract

Note: This is a modified view of the original table.

Supporting documentation on code lists, subject definitions, data accuracy, and statistical testing can be found on the American Community Survey website in the Data and Documentation section.

Sample size and data quality measures (including coverage rates, allocation rates, and response rates) can be found on the American Community Survey website in the Methodology section.

Tell us what you think. Provide feedback to help make American Community Survey data more useful for you.

Although the American Community Survey (ACS) produces population, demographic and housing unit estimates, it is the Census Bureau's Population Estimates Program that produces and disseminates the official estimates of the population for the nation, states, counties, cities and towns and estimates of housing units for states and counties.

Subject	Census Tract 3206, Cook County, Illinois		Census Tract 3301, Cook County, Illinois		Census Tract 3302, Cook County, Illinois		Census Tract 8390, Cook County, Illinois		Census Tract 8411, Cook County, Illinois		Census Tract 8419, Cook County, Illinois	
	Percent		Percent		Percent		Percent		Percent		Percent	
EMPLOYMENT STATUS												
Population 16 years and over	4,447	15,300	3,081	7,971	6,437	5,581						
In labor force	80.3%	83.7%	71.9%	80.3%	60.3%	65.1%						
Civilian labor force	80.3%	83.7%	71.9%	79.4%	60.3%	65.1%						
Employed	75.8%	80.8%	68.6%	76.3%	52.0%	58.3%						
Unemployed	4.5%	2.9%	3.2%	3.1%	8.4%	6.8%						
Armed Forces	0.0%	0.0%	0.0%	0.9%	0.0%	0.0%						
Not in labor force	19.7%	16.3%	28.1%	19.7%	39.7%	34.9%						
Civilian labor force	3,573	12,810	2,214	6,331	3,884	3,633						
Unemployment Rate	5.6%	3.5%	4.5%	3.9%	13.9%	10.5%						
Females 16 years and over	2,465	7,769	1,599	4,418	3,244	2,931						
In labor force	77.9%	78.7%	65.0%	80.5%	57.8%	65.3%						
Civilian labor force	77.9%	78.7%	65.0%	80.5%	57.8%	65.3%						
Employed	71.7%	75.8%	62.9%	76.8%	49.3%	58.4%						

Subject	Census Tract 3206, Cook County, Illinois		Census Tract 3301, Cook County, Illinois		Census Tract 3302, Cook County, Illinois		Census Tract 8390, Cook County, Illinois		Census Tract 8411, Cook County, Illinois		Census Tract 8419, Cook County, Illinois	
	Percent		Percent		Percent		Percent		Percent		Percent	
Own children of the householder under 6 years	229	74.7%	1,491	47.6%	325	83.1%	482	84.0%	360	76.1%	275	74.2%
All parents in family in labor force												
Own children of the householder 6 to 17 years	101	100.0%	1,137	77.9%	320	98.1%	395	100.0%	1,052	75.8%	302	97.4%
All parents in family in labor force												
COMMUTING TO WORK												
Workers 16 years and over	3,373	33.1%	11,855	43.4%	2,062	45.9%	6,009	27.7%	3,334	38.7%	3,207	38.3%
Car, truck, or van -- drove alone		2.1%		7.3%		5.5%		5.0%		19.7%		4.6%
Car, truck, or van -- carpooled		26.8%		27.7%		24.2%		26.9%		13.3%		21.5%
Public transportation (excluding taxicab)		28.2%		9.1%		11.1%		29.1%		21.2%		22.5%
Walked		2.6%		6.4%		3.6%		3.5%		2.8%		5.9%
Other means		7.2%		6.1%		9.7%		7.9%		4.4%		7.3%
Worked at home												
Mean travel time to work (minutes)	(X)		(X)		(X)		(X)		(X)		(X)	
OCCUPATION												
Civilian employed population 16 years and over	3,373	73.0%	12,364	69.6%	2,115	60.0%	6,085	69.9%	3,346	20.3%	3,253	58.8%
Management, business, science, and arts occupations		12.0%		5.7%		15.9%		9.8%		45.8%		13.7%
Service occupations		11.9%		20.4%		19.9%		18.7%		18.6%		23.5%
Sales and office occupations		0.0%		1.7%		0.7%		0.6%		3.5%		0.8%
Natural resources, construction, and maintenance occupations		3.1%		2.5%		3.5%		1.0%		11.7%		3.1%
Production, transportation, and material moving occupations												
INDUSTRY												
Civilian employed population 16 years and over	3,373	0.0%	12,364	0.0%	2,115	0.4%	6,085	0.0%	3,346	0.0%	3,253	0.0%
Agriculture, forestry, fishing and hunting, and mining		1.2%		0.7%		0.7%		0.4%		3.6%		1.2%
Construction		5.0%		4.1%		9.8%		5.0%		5.9%		2.3%
Manufacturing		3.3%		4.7%		2.7%		1.0%		4.8%		3.0%
Wholesale trade		3.9%		3.0%		5.0%		3.5%		8.7%		8.5%
Retail trade		1.1%		1.7%		0.7%		5.3%		1.5%		1.7%
Transportation and warehousing, and utilities		14.1%		14.8%		15.7%		13.1%		3.9%		10.9%
Information		22.2%		17.0%		18.3%		26.7%		5.1%		21.8%
Finance and insurance, and real estate and rental and leasing		33.0%		35.6%		25.3%		30.9%		18.5%		32.8%
Professional, scientific, and management, and administrative and waste management services		6.4%		6.5%		8.6%		5.4%		40.0%		8.5%
Educational services, and health care and social assistance		4.1%		5.5%		7.8%		3.1%		3.3%		4.0%
Arts, entertainment, and recreation, and accommodation and food services		2.2%		3.0%		2.6%		2.1%		1.3%		4.3%
Other services, except public administration												
Public administration												

Subject	Census Tract 3206, Cook County, Illinois		Census Tract 3301, Cook County, Illinois		Census Tract 3302, Cook County, Illinois		Census Tract 8390, Cook County, Illinois		Census Tract 8411, Cook County, Illinois		Census Tract 8419, Cook County, Illinois	
	Percent	Percent	Percent	Percent	Percent	Percent	Percent	Percent	Percent	Percent	Percent	Percent
CLASS OF WORKER												
Civilian employed population 16 years and over	3,373	12,364	2,115	6,085	3,253							
Private wage and salary workers	84.2%	86.0%	79.4%	85.3%	86.7%							
Government workers	10.3%	12.7%	13.7%	7.4%	5.0%							
Self-employed in own not incorporated business workers	5.4%	1.3%	6.9%	7.3%	8.3%							
Unpaid family workers	0.0%	0.0%	0.0%	0.0%	0.0%							
INCOME AND BENEFITS (IN 2015 INFLATION-ADJUSTED DOLLARS)												
Total households	2,692	10,143	1,884	4,615	2,699							
Less than \$10,000	9.3%	7.0%	11.6%	9.8%	23.3%							
\$10,000 to \$14,999	8.2%	2.1%	5.0%	7.0%	10.4%							
\$15,000 to \$24,999	1.9%	5.3%	9.2%	1.0%	16.1%							
\$25,000 to \$34,999	2.4%	6.8%	5.3%	5.4%	12.7%							
\$35,000 to \$49,999	4.9%	10.3%	3.7%	8.3%	11.4%							
\$50,000 to \$74,999	15.3%	16.8%	11.9%	10.5%	13.4%							
\$75,000 to \$99,999	15.3%	9.3%	12.8%	16.0%	2.6%							
\$100,000 to \$149,999	23.4%	18.6%	12.0%	20.3%	8.3%							
\$150,000 to \$199,999	2.5%	9.6%	10.5%	12.8%	0.5%							
\$200,000 or more	16.9%	14.2%	17.9%	9.1%	1.2%							
Median household income (dollars)	(X)	(X)	(X)	(X)	(X)							
Mean household income (dollars)	(X)	(X)	(X)	(X)	(X)							
With earnings	84.9%	92.4%	75.2%	91.2%	70.0%							
Mean earnings (dollars)	(X)	(X)	(X)	(X)	(X)							
With Social Security	7.5%	10.2%	25.8%	9.6%	28.1%							
Mean Social Security income (dollars)	(X)	(X)	(X)	(X)	(X)							
With retirement income	11.1%	5.9%	9.7%	5.1%	5.3%							
Mean retirement income (dollars)	(X)	(X)	(X)	(X)	(X)							
With Supplemental Security Income	2.9%	1.1%	8.3%	2.0%	12.0%							
Mean Supplemental Security Income (dollars)	N	(X)	(X)	(X)	(X)							
With cash public assistance income	0.9%	0.3%	0.4%	0.0%	3.1%							
Mean cash public assistance income (dollars)	N	N	N	(X)	(X)							
With Food Stamp/SNAP benefits in the past 12 months	4.5%	7.0%	13.9%	4.2%	33.8%							
Families	1,109	3,655	849	1,680	2,026							
Less than \$10,000	2.6%	3.4%	4.1%	5.3%	18.0%							
\$10,000 to \$14,999	5.3%	1.9%	3.2%	0.0%	8.8%							
\$15,000 to \$24,999	0.0%	3.9%	9.7%	0.0%	18.6%							
\$25,000 to \$34,999	0.0%	3.4%	5.9%	0.0%	15.5%							
\$35,000 to \$49,999	3.2%	2.4%	5.3%	5.8%	13.2%							
\$50,000 to \$74,999	13.9%	7.1%	3.9%	2.7%	14.4%							
\$75,000 to \$99,999	15.5%	6.9%	9.8%	13.6%	2.4%							

Subject	Census Tract 3206, Cook County, Illinois	Census Tract 3301, Cook County, Illinois	Census Tract 3302, Cook County, Illinois	Census Tract 8390, Cook County, Illinois	Census Tract 8411, Cook County, Illinois	Census Tract 8419, Cook County, Illinois
	Percent	Percent	Percent	Percent	Percent	Percent
\$100,000 to \$149,999	24.2%	18.0%	10.1%	27.1%	7.5%	20.9%
\$150,000 to \$199,999	2.4%	20.0%	19.4%	26.5%	0.0%	26.1%
\$200,000 or more	32.8%	32.9%	28.6%	18.9%	1.6%	29.6%
Median family income (dollars)	(X)	(X)	(X)	(X)	(X)	(X)
Mean family income (dollars)	(X)	(X)	(X)	(X)	(X)	(X)
Per capita income (dollars)	(X)	(X)	(X)	(X)	(X)	(X)
Nonfamily households	1,583	6,488	1,035	2,935	673	992
Median nonfamily income (dollars)	(X)	(X)	(X)	(X)	(X)	(X)
Mean nonfamily income (dollars)	(X)	(X)	(X)	(X)	(X)	(X)
Median earnings for workers (dollars)	(X)	(X)	(X)	(X)	(X)	(X)
Median earnings for male full-time, year-round workers (dollars)	(X)	(X)	(X)	(X)	(X)	(X)
Median earnings for female full-time, year-round workers (dollars)	(X)	(X)	(X)	(X)	(X)	(X)
HEALTH INSURANCE COVERAGE						
Civilian noninstitutionalized population	4,791	17,759	3,730	8,779	7,673	6,158
With health insurance coverage	97.5%	96.6%	94.3%	96.0%	70.9%	94.8%
With private health insurance	88.0%	88.1%	78.1%	91.1%	32.2%	85.4%
With public coverage	15.5%	12.0%	22.3%	8.4%	44.8%	11.9%
No health insurance coverage	2.5%	3.4%	5.7%	4.0%	29.1%	5.2%
Civilian noninstitutionalized population under 18 years	344	2,703	686	877	1,577	589
No health insurance coverage	0.0%	0.0%	2.5%	0.0%	28.6%	1.0%
Civilian noninstitutionalized population 18 to 64 years	4,154	13,873	2,336	7,397	4,590	5,453
In labor force:	3,471	12,180	2,067	6,162	3,671	3,591
Employed:	3,274	11,824	1,976	5,916	3,244	3,211
With health insurance coverage	96.9%	95.6%	93.2%	95.2%	64.1%	96.1%
With private health insurance	95.1%	93.7%	92.2%	94.8%	46.0%	91.8%
With public coverage	2.1%	2.5%	1.5%	0.6%	19.4%	5.1%
No health insurance coverage	3.1%	4.4%	6.8%	4.8%	35.9%	3.9%
Unemployed:	197	356	91	246	427	380
With health insurance coverage	100.0%	100.0%	46.2%	100.0%	45.9%	87.6%
With private health insurance	70.1%	100.0%	37.4%	79.3%	16.9%	51.3%
With public coverage	41.6%	0.0%	8.8%	20.7%	29.0%	39.7%
No health insurance coverage	0.0%	0.0%	53.8%	0.0%	54.1%	12.4%
Not in labor force:	683	1,693	269	1,235	919	1,862
With health insurance coverage	97.2%	95.3%	95.9%	94.5%	60.6%	92.3%
With private health insurance	75.4%	82.5%	65.1%	91.7%	21.0%	81.9%
With public coverage	23.7%	13.0%	30.9%	6.8%	39.6%	14.3%
No health insurance coverage	2.8%	4.7%	4.1%	5.5%	39.4%	7.7%

Subject	Census Tract 3206, Cook County, Illinois	Census Tract 3301, Cook County, Illinois	Census Tract 3302, Cook County, Illinois	Census Tract 8390, Cook County, Illinois	Census Tract 8411, Cook County, Illinois	Census Tract 8419, Cook County, Illinois
	Percent	Percent	Percent	Percent	Percent	Percent
PERCENTAGE OF FAMILIES AND PEOPLE WHOSE INCOME IN THE PAST 12 MONTHS IS BELOW THE POVERTY LEVEL						
All families	7.9%	5.3%	7.3%	5.3%	35.4%	0.9%
With related children of the householder under 18 years	36.9%	8.5%	2.7%	9.3%	28.4%	0.0%
With related children of the householder under 5 years only	17.5%	12.8%	0.0%	0.0%	22.4%	0.0%
Married couple families	1.0%	3.3%	7.4%	1.6%	32.0%	1.0%
With related children of the householder under 18 years	0.0%	6.9%	0.0%	0.0%	22.8%	0.0%
With related children of the householder under 5 years only	0.0%	14.6%	0.0%	0.0%	9.1%	0.0%
Families with female householder, no husband present	42.2%	13.8%	12.8%	38.5%	43.7%	0.0%
With related children of the householder under 18 years	82.3%	13.0%	17.2%	100.0%	35.9%	0.0%
With related children of the householder under 5 years only	100.0%	0.0%	-	-	-	-
All people	15.2%	9.6%	12.7%	21.2%	37.0%	13.1%
Under 18 years	48.2%	15.7%	1.7%	11.7%	40.2%	0.0%
Related children of the householder under 18 years	48.2%	15.7%	1.7%	11.7%	35.1%	0.0%
Related children of the householder under 5 years	41.5%	16.0%	0.0%	0.0%	44.5%	0.0%
Related children of the householder 5 to 17 years	63.4%	15.5%	2.8%	26.1%	32.0%	0.0%
18 years and over	12.8%	8.5%	15.1%	22.3%	36.1%	15.5%
18 to 64 years	13.2%	7.9%	8.6%	21.9%	30.5%	15.9%
65 years and over	6.8%	15.3%	36.4%	29.1%	53.4%	5.2%
People in families	10.2%	7.3%	5.3%	5.5%	34.1%	0.6%
Unrelated individuals 15 years and over	20.9%	12.6%	25.9%	37.1%	55.4%	26.8%

Data are based on a sample and are subject to sampling variability. The degree of uncertainty from sampling variability is represented through the use of a margin of error. The value shown here is the 90 percent margin of error. The margin of error can be interpreted roughly as providing a 90 percent probability that the interval defined by the estimate minus the margin of error and the estimate plus the margin of error (the lower and upper confidence bounds) contains the true value. In addition to sampling variability, the ACS estimates are subject to nonsampling error (for a discussion of nonsampling variability, see Accuracy of the Data). The effect of nonsampling error is not represented in these tables.

Employment and unemployment estimates may vary from the official labor force data released by the Bureau of Labor Statistics because of differences in survey design and data collection. For guidance on differences in employment and unemployment estimates from different sources go to Labor Force Guidance.

Workers include members of the Armed Forces and civilians who were at work last week.

Occupation codes are 4-digit codes and are based on Standard Occupational Classification 2010.

Industry codes are 4-digit codes and are based on the North American Industry Classification System (NAICS). The Census industry codes for 2013 and later years are based on the 2012 revision of the NAICS. To allow for the creation of 2011-2015 tables, industry data in the multiyear files (2011-2015) were recoded to 2013 Census industry codes. We recommend using caution when comparing data coded using 2013 Census industry codes with data coded using Census industry codes prior to 2013. For more information on the Census industry code changes, please visit our website at <https://www.census.gov/people/fo/methodology/>.

Logical coverage edits applying a rules-based assignment of Medicaid, Medicare and military health coverage were added as of 2009 -- please see https://www.census.gov/library/working-papers/2010/demo/coverage_edits_final.html for more details. The 2008 data table in American FactFinder does not incorporate these edits. Therefore, the

estimates that appear in these tables are not comparable to the estimates in the 2009 and later tables. Select geographies of 2008 data comparable to the 2009 and later tables are available at <https://www.census.gov/data/tables/time-series/acs/1-year-re-run-health-insurance.html>. The health insurance coverage category names were modified in 2010. See https://www.census.gov/topics/health/insurance/about/glossary.htm#par_textimage_18 for a list of the insurance type definitions.

While the 2011-2015 American Community Survey (ACS) data generally reflect the February 2013 Office of Management and Budget (OMB) definitions of metropolitan and micropolitan statistical areas; in certain instances the names, codes, and boundaries of the principal cities shown in ACS tables may differ from the OMB definitions due to differences in the effective dates of the geographic entities.

Estimates of urban and rural population, housing units, and characteristics reflect boundaries of urban areas defined based on Census 2010 data. As a result, data for urban and rural areas from the ACS do not necessarily reflect the results of ongoing urbanization.

Source: U.S. Census Bureau, 2011-2015 American Community Survey 5-Year Estimates

Explanation of Symbols:

1. An '***' entry in the margin of error column indicates that either no sample observations or too few sample observations were available to compute a standard error and thus the margin of error. A statistical test is not appropriate.
2. An '-' entry in the estimate column indicates that either no sample observations or too few sample observations were available to compute an estimate, or a ratio of medians cannot be calculated because one or both of the median estimates falls in the lowest interval or upper interval of an open-ended distribution.
3. An '+' following a median estimate means the median falls in the lowest interval of an open-ended distribution.
4. An '+' following a median estimate means the median falls in the upper interval of an open-ended distribution.
5. An '***' entry in the margin of error column indicates that the median falls in the lowest interval or upper interval of an open-ended distribution. A statistical test is not appropriate.
6. An '*****' entry in the margin of error column indicates that the estimate is controlled. A statistical test for sampling variability is not appropriate.
7. An 'N' entry in the estimate and margin of error columns indicates that data for this geographic area cannot be displayed because the number of sample cases is too small.
8. An '(X)' means that the estimate is not applicable or not available.

Level of Service Table

LEVEL OF SERVICE CRITERIA

Signalized Intersections		
Level of Service	Interpretation	Average Control Delay (seconds per vehicle)
A	Favorable progression. Most vehicles arrive during the green indication and travel through the intersection without stopping.	≤10
B	Good progression, with more vehicles stopping than for Level of Service A.	>10 - 20
C	Individual cycle failures (i.e., one or more queued vehicles are not able to depart as a result of insufficient capacity during the cycle) may begin to appear. Number of vehicles stopping is significant, although many vehicles still pass through the intersection without stopping.	>20 - 35
D	The volume-to-capacity ratio is high and either progression is ineffective or the cycle length is too long. Many vehicles stop and individual cycle failures are noticeable.	>35 - 55
E	Progression is unfavorable. The volume-to-capacity ratio is high and the cycle length is long. Individual cycle failures are frequent.	>55 - 80
F	The volume-to-capacity ratio is very high, progression is very poor, and the cycle length is long. Most cycles fail to clear the queue.	>80.0
Unsignalized Intersections		
Level of Service	Average Total Delay (SEC/VEH)	
A	0 - 10	
B	> 10 - 15	
C	> 15 - 25	
D	> 25 - 35	
E	> 35 - 50	
F	> 50	

Source: *Highway Capacity Manual*, 2010.

Capacity Analyses Reports