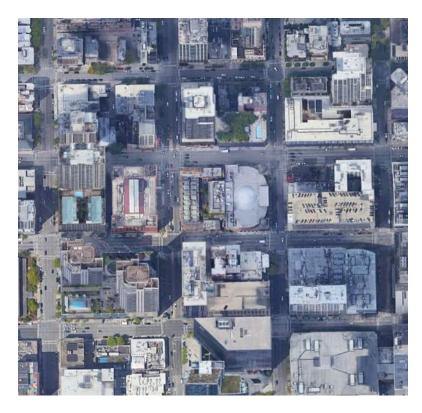
TRAFFIC IMPACT STUDY

REPORT FOR:

Bally's Temporary Casino – Medinah Temple



ONTARIO STREET AND OHIO STREET AT WABASH AVENUE CHICAGO, ILLINOIS

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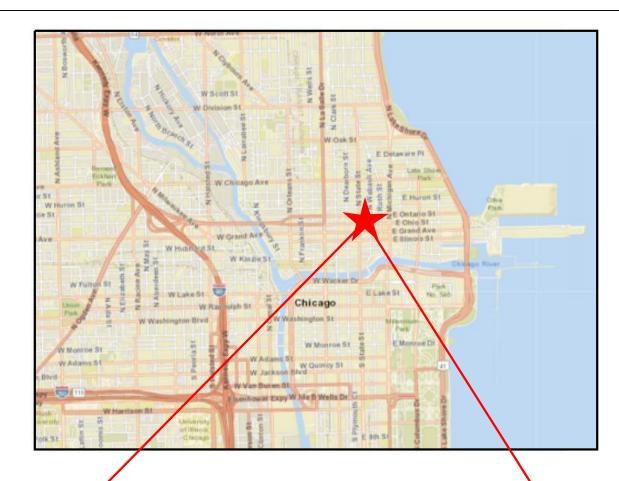
I. INTRODUCTION

V3 Companies and Fish Transportation Group have been retained by Bally's Corporation to conduct a traffic impact study for a proposed temporary casino located at the Medinah Temple at 600 North Wabash Avenue. The site is currently vacant and provides approximately 130,000 square feet and is bound by Ontario Street to the north, Wabash Avenue to the east, Ohio Street to the south, and existing office and retail buildings and State Street to the west. A location map is included as Figure 1.

It is our understanding that the proposed temporary casino will be constructed within the existing building on the site and that no new buildings will be constructed. The program for the proposed redevelopment with the temporary casino will include up to a total of 1,100 gaming positions. Any restaurant, bar space, or retail would be ancillary to the casino and not be destination-type facilities. The conceptual site plan for the proposed temporary casino is included as Figure 2.

The purpose of this study is to evaluate the potential traffic impacts of the proposed temporary casino redevelopment. Traffic estimates are projected to 2023 which is when the temporary casino is projected to be open. The study includes the existing signalized intersections along State Street at Ontario Street and Ohio Street and along Wabash Avenue at Ontario Street and Ohio Street.

This report includes a description of existing conditions, data collection and capacity analysis, evaluation of data, and conclusions.



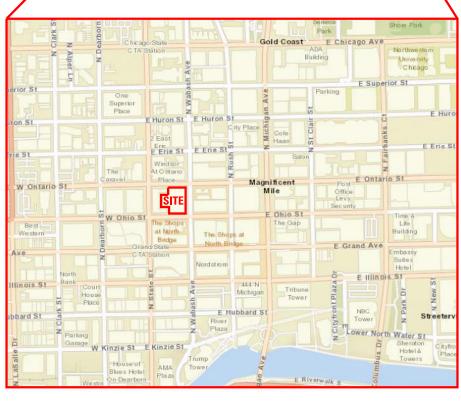


FIGURE 1 SITE LOCATION MAP



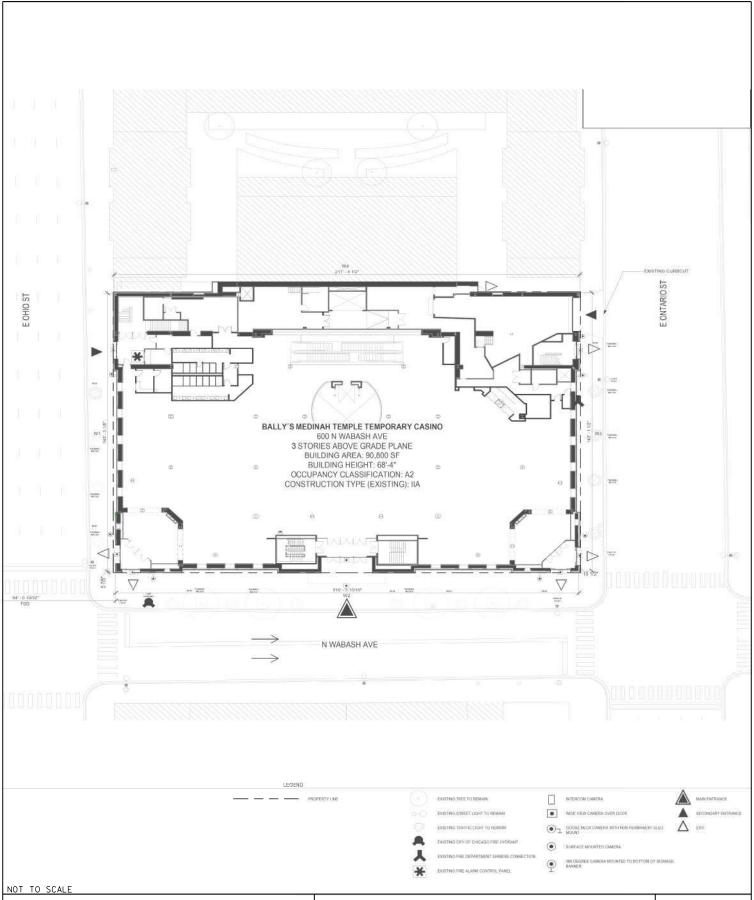


FIGURE 2 CONCEPTUAL SITE PLAN





II. PROJECT CONDITIONS

Land Uses

The Medinah Temple is situated within an area of nearby dense commercial and residential uses including substantial amounts of entertainment and dining. As such, the temporary casino would be a very complimentary land use in the area generating a cross-traffic capture of patrons between the temporary casino and nearby restaurants, bars, and other entertainment establishments. The area is served by roadways and parking adjacent to the site as well as transit, pedestrian, and bicycle infrastructure.

Roadway System

The characteristics of the roadways in the vicinity of the site are presented below. The existing lane configurations in the study area are illustrated in Figure 3.

Roadway Descriptions

Ohio Street is a major arterial street that borders the site on the south. It operates one-way eastbound as the extension of the Interstate 94 off-ramp. Along the site frontage, it functionally operates with three travel lanes. The north curb lane has a small valet operation with the remainder marked as no parking. The south curb lane has a garage entrance (10 East Grand garage), valet operations, and a small amount of on-street parking at the east end near Wabash Avenue. At its intersection with Wabash Avenue and State Streets, Ohio Street is under traffic signal control. Immediately east of the intersection with Wabash Avenue is the entrance to the Rush/Ohio/Wabash parking garage which would allow for any valet operations to easily travel a few hundred feet to the east and enter the garage. CTA bus route 125 operates along Ohio Street. Ohio Street is under the jurisdiction of the Illinois Department of Transportation (IDOT) and has 11,800 vehicles per day near the site.

Wabash Avenue is a local street that borders the site on the east. It operates as a two-way street and is approximately 40 feet wide. It provides access to the main entrance of Medinah Temple and two supplemental entrance/exit doors at the north and south ends of the building. Along the site frontage it functionally operates with two travel lanes due to parked vehicles and valet along the street. At its signalized intersections with Ontario Street, it is wide enough to allow for two separate lanes. The east side of Wabash Avenue prohibits parking but there is valet at one restaurant. Of note is the exit for the Rush/Ohio/Wabash garage. Along the west side of the street (frontage of the site) parking is not allowed. Pedestrians are readily accommodated by wide sidewalks. Wabash Avenue is under the jurisdiction of the City of Chicago and has 8,900 vehicles per day along the site frontage.

Ontario Street is a major arterial street that borders the Site on the north. It operates one-way westbound and travels west to become the Interstate 94 on-ramp. Along the site frontage it functionally operates with three travel lanes. The north curb lane prohibits parking and has the



entrance/exit to the 10 East Ontario parking garage. The south curb lane has paybox parking but with restrictions from 7 am to 9 am and 4 pm to 6:30 pm. Along the south side of the street (Site frontage), at the west end is an entrance door and the loading bay, approximately 30 feet wide. Ontario Street is under the jurisdiction of IDOT and has a daily vehicle count of 10,710 vehicles per day.

State Street is a two-way arterial street immediately to the west of the site and operates with a single lane in each direction with exclusive left turn lanes at its intersections with both Ohio Street and Ontario Street. At these intersections, State Street is under traffic signal control. The uses that front State Street are not part of the Medinah Temple building and consist of small shops and offices. The east and west curb lanes consist of no parking zones, short loading zones and a bus stop for CTA route 36. State Street is under the jurisdiction of the City of Chicago and has 14,800 vehicles per day near the site.

Intersection Descriptions

The intersection of *State Street and Ontario Street* is signalized and operates with a 75-second cycle length during the weekday evening pm peak period. The northbound approach of State Street consists of one left turn lane and one through lane while the southbound approach consists of one through lane and one shared through/right turn lane. The northbound left turn operates as a permitted left turn. The westbound approach of Ontario Street consists of one left turn/through lane, one through lane, and one through/right turn lane. There are existing pedestrian signals, sidewalk approaches, and crosswalks at each leg of the intersection.

The intersection of *Wabash Avenue and Ontario Street* is signalized and operates with a 75-second cycle length during the weekday evening pm peak period. The northbound approach of State Street consists of one left turn/through lane and one through lane while the southbound approach consists of one through lane and one shared through/right turn lane. The northbound left turn operates as a protected and permitted left turn. The westbound approach of Ontario Street consists of one left turn/through lane, one through lane, and one through/right turn lane. There are existing pedestrian signals, sidewalk approaches, and crosswalks at each leg of the intersection.

The intersection of *State Street and Ohio Street* is signalized and operates with a 75-second cycle length during the weekday evening pm peak period. The northbound approach of State Street consists of one shared through/right turn lane and the southbound approach consists of one left turn lane and one through lane. The southbound left turn operates as a permitted left turn. The eastbound approach of Ohio Street consists of one left turn/through lane, one through lane, and one through/right turn lane. There are existing pedestrian signals, sidewalk approaches, and crosswalks at each leg of the intersection.

The intersection of *Wabash Avenue and Ohio Street* is signalized and operates with a 75-second cycle length during the weekday evening pm peak period. The northbound approach of Wabash Avenue consists of one through lane and one through/right turn lane while the southbound



approach consists of one left turn/through lane and one through lane. The southbound left turn operates as a permitted left turn. The eastbound approach of Ohio Street consists of one left turn/through lane, one through lane, and one through/right turn lane. There are existing pedestrian signals, sidewalk approaches, and crosswalks at each leg of the intersection.

Transit and Non-Automotive Transportation System

A number of non-automotive modes of transportation are provided in the area, including bus and rail transit, pedestrian and bicycle infrastructure, and Divvy bikeshare stations. The characteristics of these non-auto modes of transportation are summarized below.

Transit

The area is directly served by CTA bus route 125 which travels between Metra's Ogilvie and Union Stations downtown and Michigan Avenue along Ohio Street and Ontario Street. CTA bus route 36 operates along State Street to the west, route 22 operates along Dearborn Street and Clark Street to the west, routes 29 and 65 operate along Grand Avenue to the south, and numerous bus routes operate along Michigan Avenue to the east.

The CTA Red Line Grand Avenue station is located at State Street and Grand Avenue, a short two block walk from the site's front door. The existing transit network is illustrated in Figure 4.

The area is very pedestrian oriented with sidewalks along both sides of every street in the vicinity of the site. Additionally, all four signalized intersections around the site have marked crosswalks for each leg of the intersection. Pedestrian countdown timers are provided at the crossings with lead pedestrian intervals which provides additional pedestrian safety by allowing the pedestrian to enter the crosswalk prior to the green signal for vehicles.

The City of Chicago has been expanding the bicycle facilities within the city for a number of years. Dearborn Avenue, Grand Avenue, and Huron Street provide a buffered bike lane near the site. There are also several Divvy stations located within a several block areas of the site. The existing bicycle network is illustrated in Figure 5.

Parking

While there is no on-site parking at the Medinah Temple, there are numerous parking options available around the site. In particular, there are parking garages in buildings directly adjacent to and within easy walking distance to the site that provide over 5,000 parking spaces as illustrated in Figure 6:

- 10 East Grand Avenue, 970 spaces
- 50 East Ohio Street, 1,025 spaces
- 10 East Ontario Street, 200 spaces
- 33 West Ontario Street, 356 spaces
- 516 North Rush Street, 200 spaces
- 430 North Rush Street, 218 spaces



- 540 North State Street, 314 spaces
- 10 West Grand Avenue, 1,000 spaces
- 401 North Wabash Avenue, 950 spaces

There is an Embassy Suites located on State Street to the west of the site that provides a valet station and a private parking garage with a driveway on State Street south of Ontario Street. Since this parking is for the hotel, it was not included in the available parking.

Curb Space and Management

The existing curb space along the four roadways encompassing the site includes various parking and no parking limitations, bus stops, valet drop off/pick up zones, and loading zones. Figure 7 illustrates the existing curb management around the Medinah Temple.

The site frontage along Ohio Street and Wabash Avenue prohibits parking. Ontario Street allows parking with the exception of the peak hours from 7 to 9 am and 4 to 6:30 pm for most of the block except at the intersections and a small loading zone for the Medinah Temple. The north side of Ontario Street and the east side of Wabash Avenue prohibit parking. The south side of Ohio Street prohibits parking except for one space that allows parking outside of the peak hours and also includes a bus stop and loading zone. State Street provides numerous curb functions, including a valet drop off/pick up, a bus stop, and 30-minute loading zone along the east side of the street. The west side of the street includes no parking and loading zones, a taxi zone, and a valet drop off/pick up for the Embassy Suites hotel.

Traffic Volumes

To assist in the evaluation of the traffic impact on the roadway system resulting from the proposed development, existing vehicular volumes were collected at the study area intersections.

Existing weekday peak hour traffic counts were collected on Thursday, May 12, 2022 from 5:00 pm to 9:00 pm at the intersections along State Street at Ontario Street and Ohio Street and along Wabash Avenue at Ontario Street and Ohio Street. The Friday casino peak hour counts were collected on Friday, May 13, 2022 from 5:00 pm to 9:00 pm. The time periods of the traffic counts were selected to coincide with the typical peak hours of the traffic travelling on collector and arterial roadways and typical peak traffic generating hours of retail, commercial and residential uses as well as the typical casino operating peak hours.

The existing peak hour volumes are illustrated in Figure 8. A summary of the traffic volumes collected in fifteen-minute increments is provided in Appendix A.

Proposed Development

It is our understanding that the Medinah Temple is currently vacant and will be reconstructed as a temporary casino and no additional buildings will be constructed or expanded. The program for the proposed redevelopment with the temporary casino will include a total of up to 1,100 gaming



positions. Any restaurant, bar space, or retail would be ancillary to the casino and not be destination-type facilities.

Existing Field Observations

Field observations were conducted by senior staff from V3 Companies and Fish Transportation Group to observe traffic operations at the four signalized intersections, the existing operations of the curb space around the site, and to collect parking counts at the three parking garages directly adjacent to the site. Observations were conducted on Friday, August 26 during the commuter peak period and the casino peak period from prior to 4 pm to after 8 pm.

Intersection Operations

The four intersections along State Street at Ontario Street and Ohio Street and along Wabash Avenue at Ontario Street and Ohio Street were observed during the commuter and casino peak hours on a clear Friday evening. During the observations, other intersections both upstream and downstream were also observed at the same time. The four signalized intersections operated efficiently, particularly for the eastbound movements on Ohio Street and the westbound movements on Ontario Street. The traffic signals in the eastbound and westbound directions are synchronized to improve traffic flow and the one-way operations of Ohio Street and Ontario Street with three travel lanes in each direction sufficiently accommodate the existing traffic demand. It appeared that vehicles would get the green signal from an upstream traffic signal and be able to travel through two signalized intersections before approaching a red signal. There were few times where traffic of any significance backed up on Ohio Street or Ontario Street due to traffic signal operations. While it is typical along roadways with multiple signalized intersections in an urban area to experience residual delays due to vehicles queuing, this was not observed along Ohio Street or Ontario Street.

With the two-way operations, typically only one travel lane in each direction, the left turns, and the short blocks between Ohio Street, and Ontario Street, the observed operations along State Street and Wabash Avenue appeared to have additional delays and queue but still operated sufficiently. The northbound and southbound movements had minimal residual delays at upstream signalized intersections that spilled over to the study intersections. The existing traffic signal timing plans accommodated the existing queues at the intersections and resulted in most vehicles being served by the green time of the signal.

During the field visit, there were minimal observations of pedestrians not obeying signals and causing additional delay for vehicles. Additionally, the existing curb operations with limited on street parking, valet drop off and pick up, rideshare drop off and pick up, loading zones, and bus stops had minimal impact on the vehicular operations of the traffic signals.

Operations at the intersection of Grand Avenue and State Street were also observed. This signalized intersection operated similarly with minimal residual delay and the existing traffic signal timing accommodating the vehicular demand in all directions.



Parking Observations

The following are observations and parking count results at the three adjacent parking garages:

- ROW Parking garage, 50 East Ohio Street
 - At 4 pm, approximately 265 spaces available
 - At 5:45 pm, approximately 374 spaces available
 - At 8 pm, approximately 449 spaces available
 - Bottom two floors, First Class Parking, better lighting, indicators for open parking spaces
 - General parking starts around level 4
- 10 East Grand Parking Garage
 - Sign at entrance ramp indicating number of open spaces
 - At 5:00 pm, 358 available spaces per illuminated sign
 - At 5:33 pm, 379 available spaces per illuminated sign
 - At 7:44 pm, 402 available spaces per illuminated sign
- 10 East Ontario Parking Garage
 - "Full" sign at garage entrance/exit
 - Over 5th floor is private parking for Ontario Place
 - About 26 spaces on 4th floor reserved for Ontario Place
 - At 5:45 pm, 95 spaces available
 - At 7:30 pm, 84 spaces available

Based on these parking counts, there are approximately 848 parking spaces available between 5:30 pm and 6 pm and approximately 935 parking spaces available between 7:30 and 8:00 pm. Additionally, there are several other parking garage options within a several block walk from the Medinah Temple.

It is estimated that the temporary casino will have a peak parking demand of approximately 500 parking spaces during typical operations, based on the following:

- 1,100 gaming positions with an anticipated maximum building occupancy of 1,500 individuals based on gaming position count and casino amenities
- 60 percent of casino patrons will drive, resulting in 900 patrons arriving by car
- Vehicle occupancy of approximately 2.0 people per car resulting in a parking demand of 450 spaces
- Most of the casino employees will travel by non-vehicular modes, such as transit, walking, and biking, and not require a parking space
- At peak times, it is anticipated that there will be 200 employees on site. Assuming that 25 percent drive results in an additional demand of 50 parking spaces
- Therefore, it is anticipated that the peak parking demand during normal operations will be 500 parking spaces.



Based on the completed parking observations, there is adequate parking in the area to accommodate this demand.

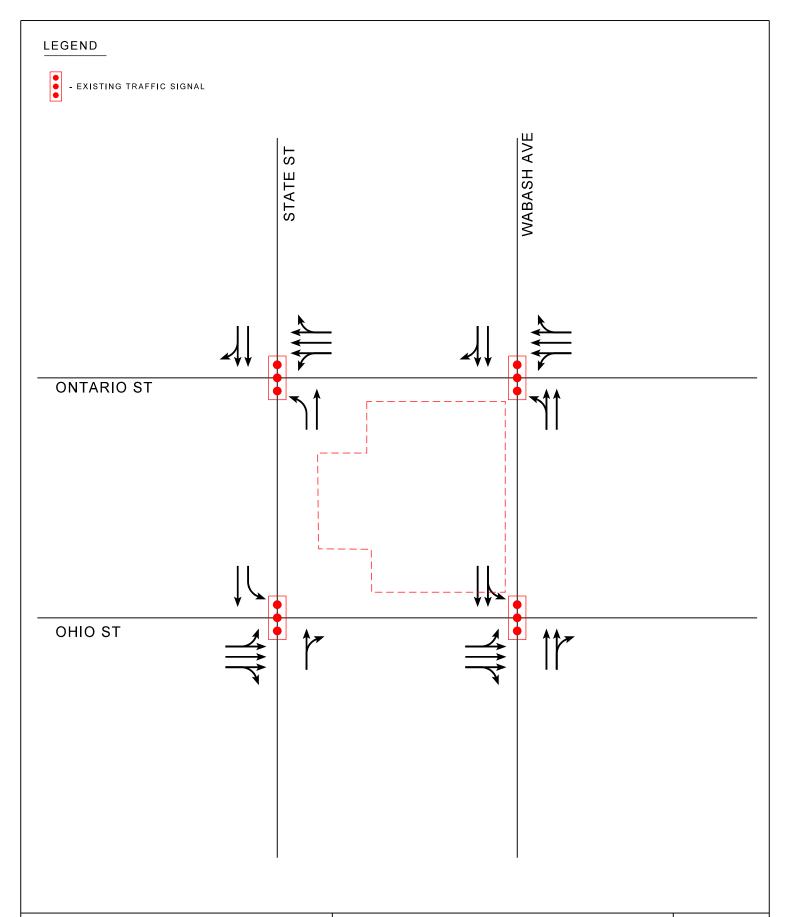


FIGURE 3 EXISTING LANE CONFIGURATION



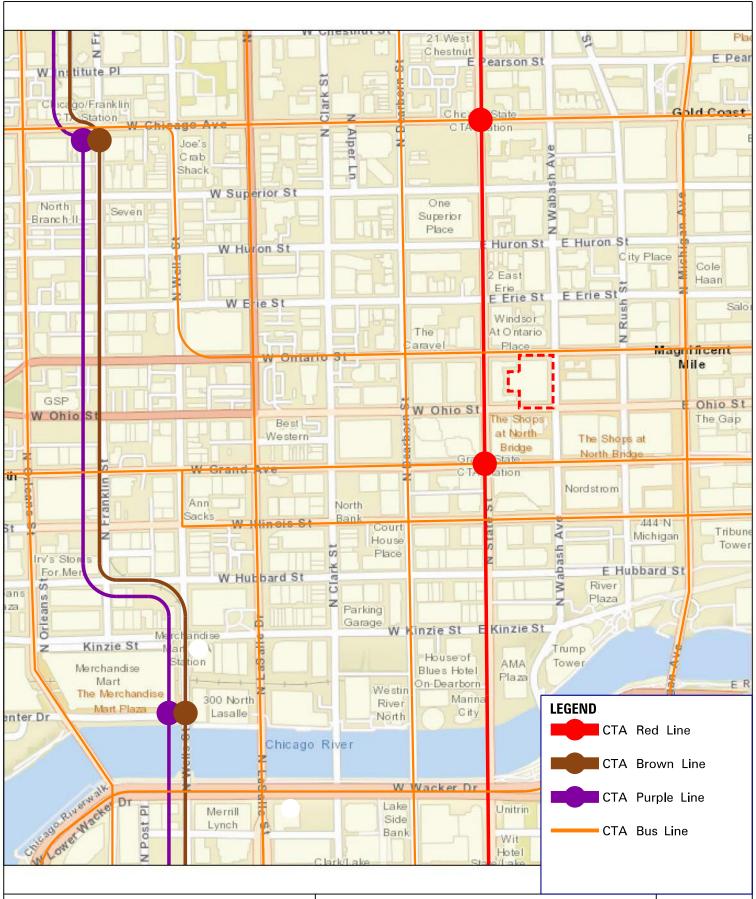


FIGURE 4 EXISTING TRANSIT NETWORK



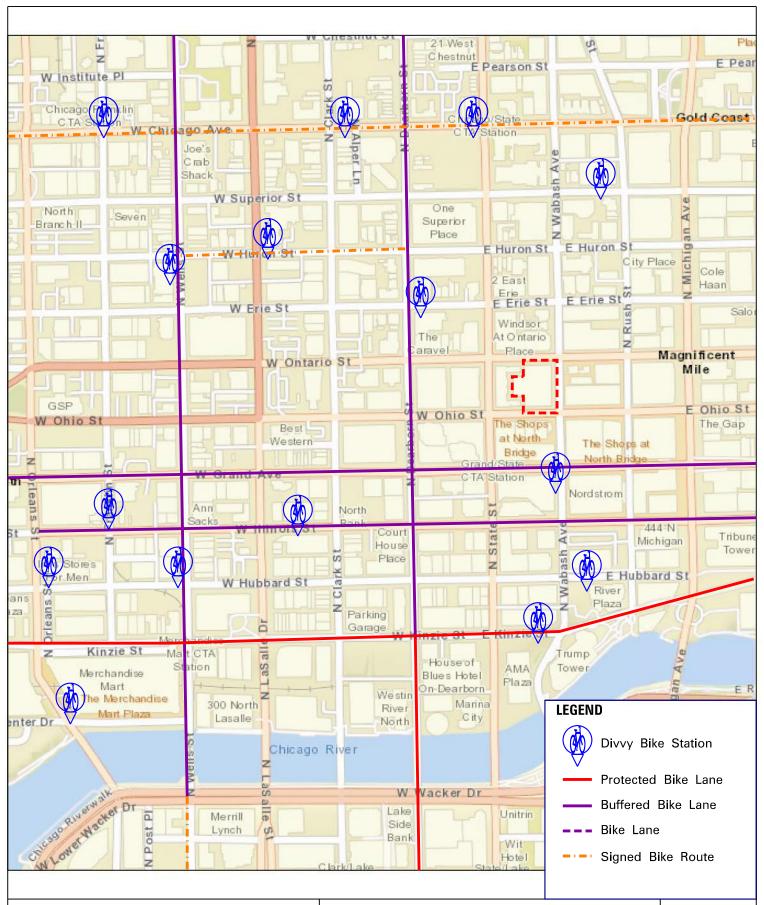


FIGURE 5 EXISTING BICYCLE NETWORK



LEGEND

TEMPORARY CASINO

NEARBY PARKING



- A. 50 E OHIO ST TYPE: NON-RESTRICTED TOTAL SPACES: 1025 OPERATOR: INTERPARK
- B. 630 N RUSH ST TYPE: NON-RESTRICTED TOTAL SPACES: 104 OPERATOR: Marriott

SOURCE: PARKME.COM

- C. 10 E ONTARIO

 TYPE: NON-RESTRICTED

 TOTAL SPACES: 200

 OPERATOR: INTERPARK
- D. 33 W ONTARIO ST

 TYPE: NON-RESTRICTED F.

 TOTAL SPACES: 356

 OPERATOR: REEF TECHNOLOGY
- GRAND PLAZA
 540 N STATE ST
 TYPE: NON-RESTRICTED
 TOTAL SPACES: 314
 OPERATOR: LAZ PARKING
 - THE SHOPS AT NORTH BRIDGE 10 E GRAND AVE TYPE: NON-RESTRICTED TOTAL SPACES: 970 OPERATOR: INTERPARK

BALLY'S TEMPORARY CASINO MEDINAH TEMPLE

FIGURE 6 NEARBY PARKING LOCATIONS

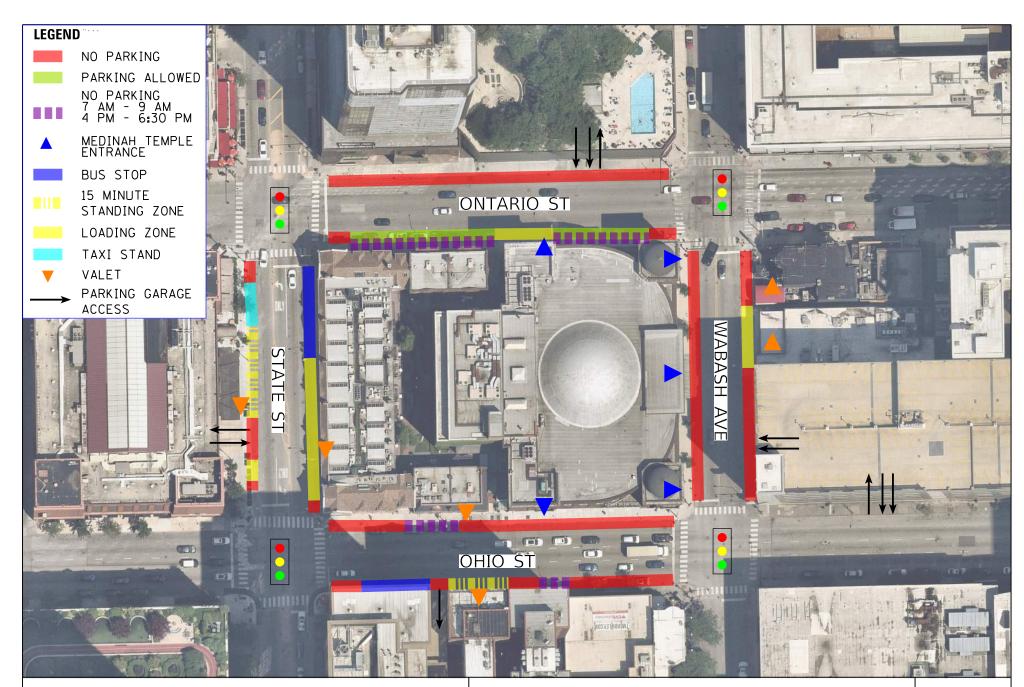


FIGURE 7 EXISTING CURB MANAGEMENT



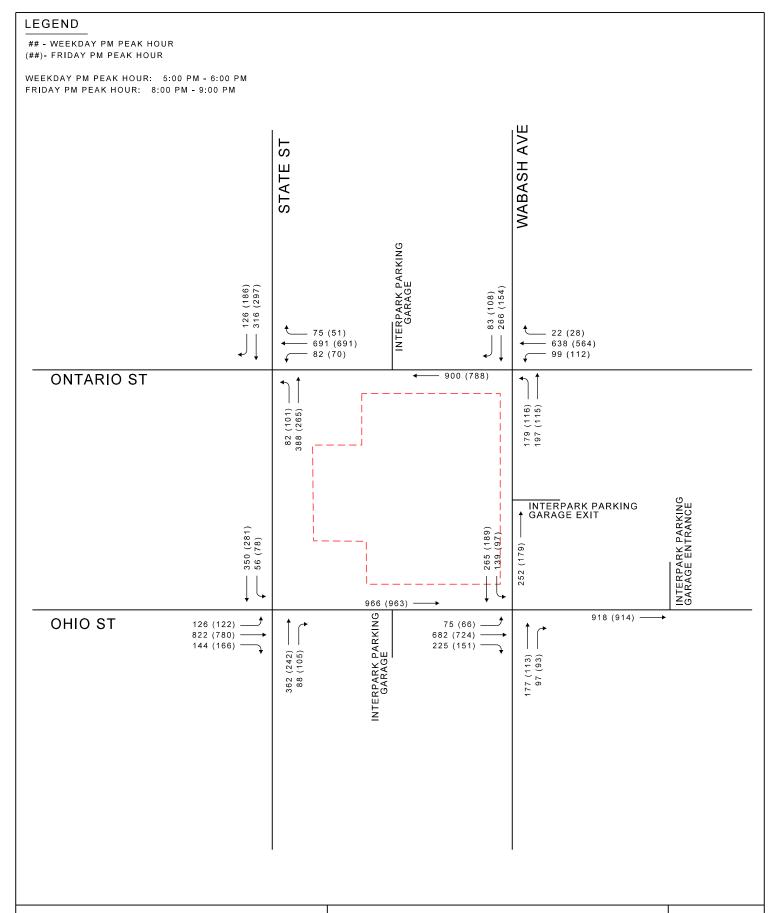


FIGURE 8 EXISTING TRAFFIC VOLUMES





III. TRAFFIC FORECASTS

Project Traffic Volumes

Trip Generation

The number of trips generated for the temporary casino site was estimated and reviewed for potential reductions for non-vehicular travel such as transit, walking, and capture between the casino and nearby restaurants and entertainment venues. Additionally, the number of taxi/rideshare trips was separately estimated as these trips generate entering and exiting trips for each pick up or drop off movement.

Trip generation for a proposed development is typically estimated using the Institute of Transportation Engineers (ITE) *Trip Generation Manual, 10th Edition.* ITE Land Use Code 473, Casino/Video Lottery Establishment is the closest land use with trip rates provided. However, the land use description explicitly states that the data provided does not include full-service casinos, those with food service, are not included. Therefore, it was determined that the ITE data provided is too limited and would not provide adequate estimates to the number of trips generated by the casino.

Therefore, a review of recent traffic studies was conducted for casinos within a similar urban context with nearby transit options to obtain trip rates during the casino peak periods. While several studies based the number of trips on the square footage of the casino, a majority of the studies developed trip rates based on the number of gaming positions. Gaming positions will be used as the independent variable to estimate the number of trips generated by the casino for this study.

Based upon the review of the various trip rates and discussions with the operator, it is estimated that the casino will generate trip rates of 0.42 trips per gaming position during the weekday evening commuter peak hour (4 pm to 6 pm) and 0.47 trips per gaming position during the Friday evening casino peak hour (8 pm to 11 pm). Using these trip rates and the 1,100 gaming positions proposed as part of this temporary entertainment redevelopment, the trip generation for the casino can be estimated.

It should be noted that the trip rate data collected was for a variety of casino sites, most of which had a number of ancillaries uses such as hotel, retail, restaurants, drinking places, conference center/meeting space, and theatres. For the purposes of this study, it was assumed that the trip rates presented above are only for the casino area and are likely a conservative estimate for the temporary casino since there are minimal ancillary uses.

A conservative ten percent reduction was applied for non-vehicular traffic, including transit, walking, and biking for casino patrons and employees. An additional ten percent reduction was applied for casino patrons that may already be in the area at other establishments, such as



restaurants and other entertainment venues that would not create an additional vehicular trip to and from the site.

It is assumed that 45 percent of the trips will be personal vehicles that will drive and park in one of the nearby parking garages and that 15 percent of trips will drive and utilize the valet parking along the Ohio Street frontage. Additionally, it is assumed that 15 percent of trips will use rideshare and five percent will use taxis. A taxi and rideshare trip actually generates two trips, one entering the site to drop off or pick up and one exiting the site; therefore, a redundancy rate was also added to account for the exiting trip. Typically, a redundancy reduction rate is applied to these trips assuming that the taxi or rideshare driver will also wait for or pick up another passenger leaving the site. However, to conduct a conservative analysis, a redundancy reduction rate was not used, assuming that all rideshare and taxi trips will generate two vehicular trips for each drop off or pick up trip.

After applying the reductions and the taxi/rideshare redundancy, it is estimated that the casino will generate 462 and 516 inbound and outbound trips during the weekday pm commuter peak hour and the Friday evening casino peak hour, respectively. Table 1 provides a summary of the trip generation for the casino.

Table 1: Trip Generation

LAND USE	SIZE		Weekday	PM Peak Hou	ır (4-6 pm)	Friday Casino Peak Hour (8-11 pm)			
LAND USE		SIZE	In	Out	Total	In	In Out		
Casino	1,100	Gaming Positions	245	217	462	238	279	517	
Local Ar	ea Captu	re Reduction (10%)	-25	-21	-46	-24	-28	-52	
No	n-Auto T	rip Reduction (10%)	-25	-21	-46	-24	-24 -28		
	Subto	tal Trips Generated	195	175	370	190 223		413	
Self-Drive and Park (45%)		110	98	208	107	126	233		
Self-Drive and Valet (15%)		37	33	70	36	41	77		
Taxi (5%)		12	11	23	11	15	26		
Rideshare (15%)		37	32	69	36	41	77		
Taxi/Rideshare Redundancy		43	49	92	56	47	103		
Total New Vehicle Trips		239	223	462	246	270	516		

Site Access

Vehicular access to the site is anticipated to be primarily via Lake Shore Drive and other local streets for most local and City trips and via I-90/I-94 and the Ohio Street feeder ramp for longer distance trips. Appendix B illustrates the likely travel patterns to and from the temporary casino for vehicle trips using I-90/I-94 and Lake Shore Drive.



Trip Distribution and Assignment

The direction from which traffic approaches and departs a site is a function of numerous variables, including location of residences, location of employment centers, location of commercial/retail centers, available roadway systems, location and number of access points, and level of congestion on adjacent road systems. The directional distribution of traffic generated by the site is assigned differently for self-drive/park trips and taxi/rideshare trips.

The directional distribution of all vehicle trips is assigned primarily based on existing traffic patterns in the area, with adjustments made for the likely sources of trips to and from the temporary casino and the one-way roadway network. Additionally, a market study was completed that forecasted locations of revenue sources around the Chicagoland area.

The highest percentage of self-drive/park trips is assigned Ohio Street and Ontario Street as these are categorized as principal arterial roadways and provide direct east/west access to the regional freeway network. A smaller portion of trips are assigned to the south on State Street, which provides connectivity to several residential, commercial/retail, and entertainment areas. The taxi/rideshare trips are distributed more evenly throughout the roadway network as drivers will be traveling to the site from various areas of the city and departing throughout the area looking for the next fare.

Table 2 provides a summary of the trip distribution for the self-drive and taxi traffic.

Table 2: Trip Distribution

1000 21 1110 2100110011							
Direction	Self-Drive/Park Distribution	Taxi/Rideshare Distribution					
North: State Street & Wabash Avenue	5%	30%					
East: Ontario Street & Ohio Street	20%	20%					
South: State Street & Wabash Avenue	10%	30%					
West: Ontario Street & Ohio Street	65%	20%					

The directional distributions and assignment of new self-drive and valet traffic volumes are illustrated in Figure 9. For this analysis, it was assumed that all drop off valet operations would occur at the Ohio Street valet area per the trip distribution, travel through the Wabash Avenue intersection, and enter the garage. The pick-up trip would exit the garage at the Wabash Avenue garage driveway, travel around the block to the valet area, pick up the patron, and then exit the study area per the trip distribution.

The directional distributions and assignment of new self-drive and park traffic volume is illustrated in Figure 10. For this analysis, it was assumed that a majority of eastbound Ohio Street and southbound and northbound State Street traffic would us the 50 East Ohio Street garage (50 percent) and a portion would use the 10 East Grand Avenue garage (30 percent) which has an entrance along Ohio Street east of State Street. The westbound Ontario Street traffic is assumed to park in the 10 East Ontario Street garage (20 percent). It should be noted that vehicles entering



the 10 East Grand Avenue parking garage would have to exit at the Grand Avenue driveway, resulting in additional westbound traffic along Grand Avenue. The additional traffic is projected to be minimal, with an additional 29 vehicles during the weekday pm peak hour (approximately one every two minutes) and 38 vehicles during the Friday night casino peak hour (approximately one every 1.5 minutes) being added to the intersection at State Street.

The directional distributions and assignment of new rideshare and taxi traffic volume traffic volume is illustrated in Figure 11. While the operations of taxi and rideshare drop off and pick up trips are challenging to force at a certain location due to driver and patron tendencies, it was assumed that all rideshare and taxi trips will circulate through the intersections per the inbound trip distribution to the drop off curb along Ohio Street and then exit in the eastbound direction per the outbound trip distribution. It is assumed that all rideshare and taxi trips will only drop off patrons and not pick up another fare while waiting on the curb.

The total projects trips are added to the existing traffic volumes to obtain the future with project traffic volumes for the study area intersections. Future with project traffic volumes are depicted in Figure 12.

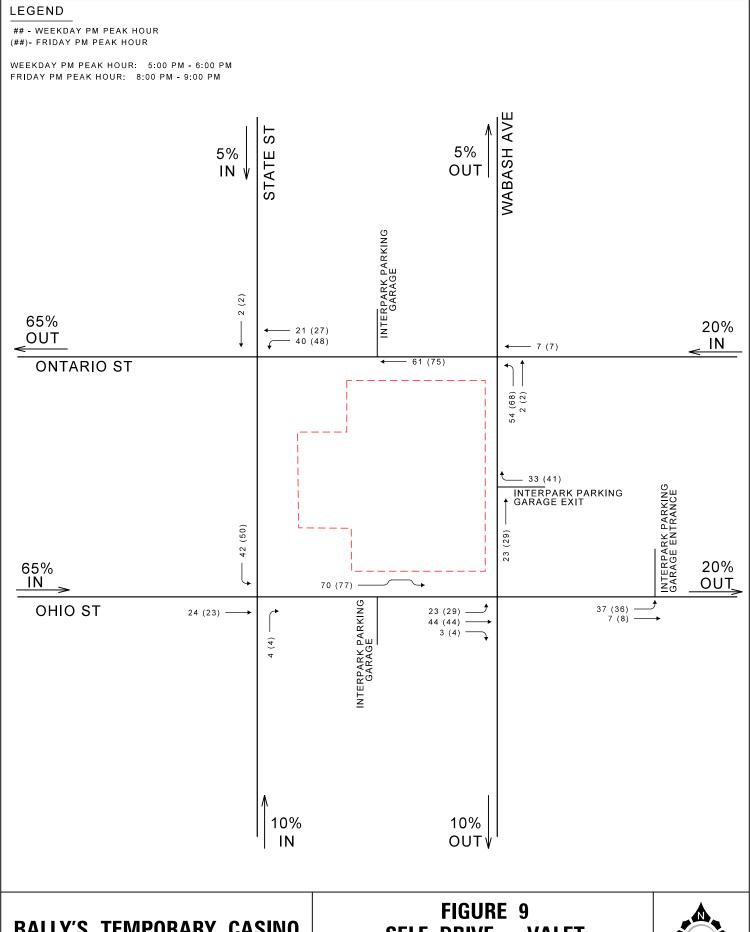


FIGURE 9
SELF DRIVE - VALET
TRAFFIC VOLUMES



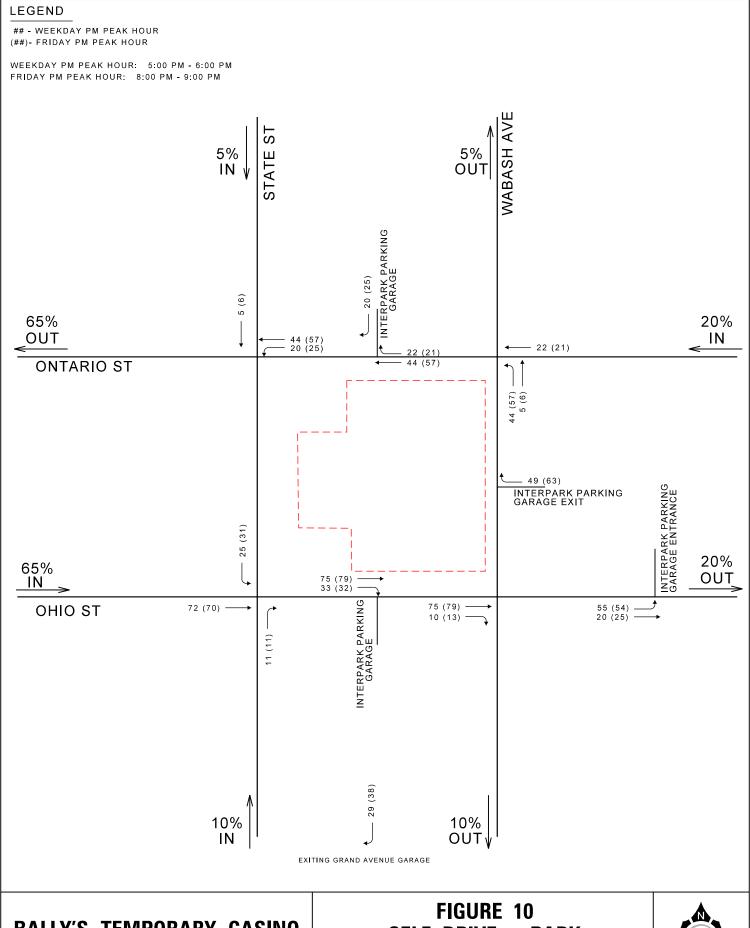
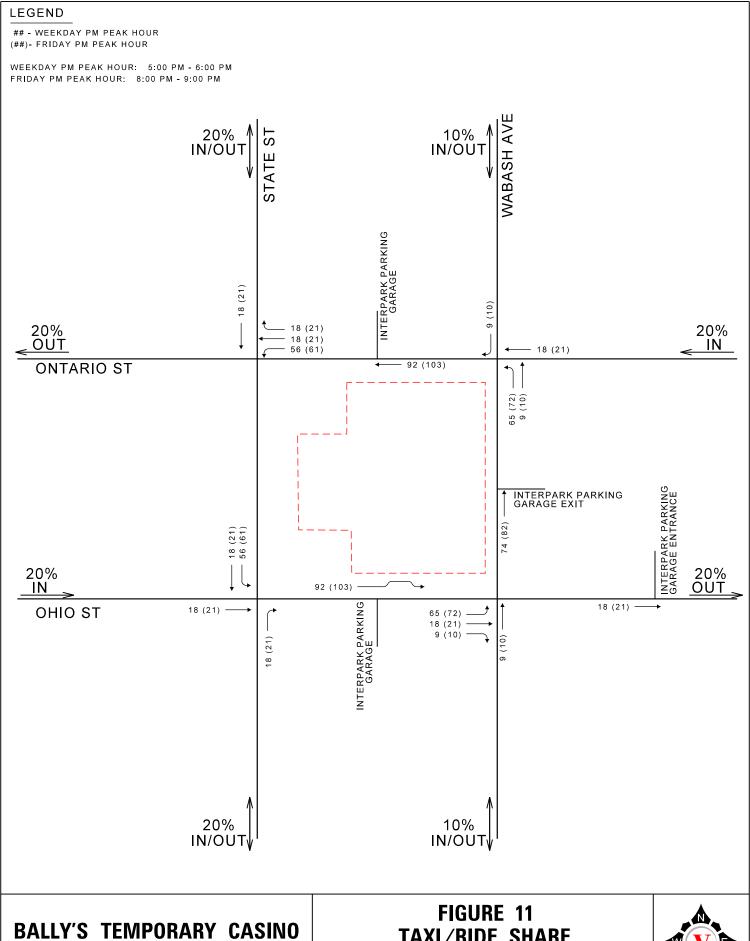


FIGURE 10
SELF DRIVE - PARK
TRAFFIC VOLUMES





MEDINAH TEMPLE

TAXI/RIDE SHARE TRAFFIC VOLUMES



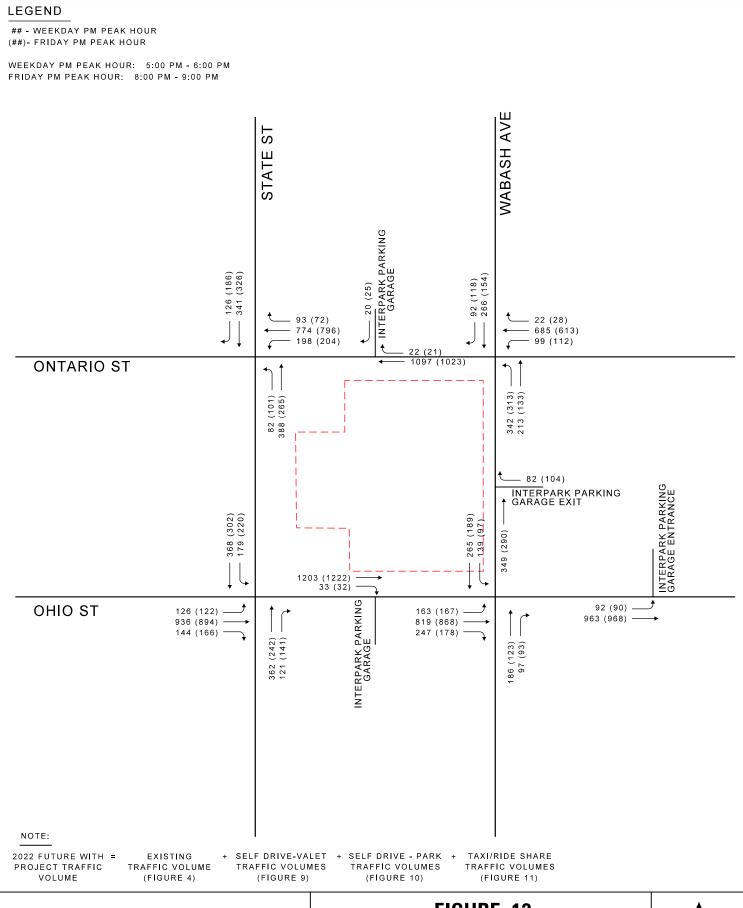


FIGURE 12 FUTURE WITH PROJECT TRAFFIC VOLUMES



CHICAGO

ILLINOIS



IV. TRAFFIC ANALYSIS

Capacity Analysis

The operation of a facility is evaluated based on level of service (LOS) calculations obtained by analytical methods defined in the Transportation Research Board's *Highway Capacity Manual (HCM)*, 6th Edition. The concept of LOS is defined as a quality measure describing operational conditions within a traffic stream, generally in terms of such service measures as speed and travel time, freedom to maneuver, traffic interruptions, and comfort and convenience.

There are six LOS letter designations, from A to F, with LOS A representing the best operating conditions and LOS F the worst.

The LOS of an intersection is based on the average control delay per vehicle. For a signalized intersection, the delay is calculated for each lane group and then aggregated for each approach and for the intersection as a whole. Generally, the LOS is reported for the overall intersection. For an unsignalized intersection, the delay is only calculated and reported for each minor movement. An overall intersection LOS is not calculated.

There are different LOS criteria for signalized and unsignalized intersections primarily due to driver perceptions of transportation facilities. The perception is that a signalized intersection is expected to carry higher traffic volumes and experience a greater average delay than an unsignalized intersection. The LOS criteria for signalized and unsignalized intersections are provided in Table 3.

Table 3: Level of Service Definitions for Signalized and Unsignalized Intersections

Level of Service	Signalized Intersection Control Delay (seconds/vehicle)	Unsignalized Intersection Control Delay (seconds/vehicle)
А	<u><</u> 10	≤ 10.0
В	> 10.0 and ≤ 20.0	> 10.0 and ≤ 15.0
С	> 20.0 and ≤ 35.0	> 15.0 and ≤ 25.0
D	> 35.0 and ≤ 55.0	> 25.0 and ≤ 35.0
E	> 55.0 and ≤ 80.0	> 35.0 and ≤ 50.0
F	> 80.0	> 50.0

Source: Transportation Research Board, *Highway Capacity Manual 6th Edition*, National Research Council, 2016.

Typically, various state and local governments adopt standards varying between LOS C and LOS E, depending on the area's size and roadway characteristics.

The study area consists of the signalized intersections along Ontario Street at State Street and Wabash Avenue and along Ohio Street at State Street and Wabash Avenue. A capacity analysis



was performed with Synchro 11. Models were created for the weekday pm commuter peak hour and the Friday pm casino peak hour for the existing and future with project scenarios.

The capacity analysis results at the signalized intersections are summarized in Table 4. The traffic signal timing schedule were obtained from the City of Chicago Department of Transportation (CDOT) and utilized for this analysis and are included in Appendix A. Supporting capacity analysis worksheets for the existing and future with project scenarios are provided in Appendix C and D, respectively.

Table 4: Capacity Analysis of Signalized Intersections

		Tubio ii Supudity / (Eastbound		Westbound		Northbound		Southbound		Intersection	
Intersection	Peak Hour	Scenario	Delay (sec)	LOS								
	Weekday PM	Existing (2022)	-	ı	11.3	В	22.2	С	13.7	В	14.8	В
Ontario Street		Future with Project (2023)	-	1	17.2	В	22.7	С	13.9	В	17.7	В
& State Street	Friday Casino PM	Existing (2022)	-	1	10.3	В	20.6	С	14.4	В	13.7	В
	(8-11 pm)	Future with Project (2023)	-	1	17.4	В	21.2	С	14.6	В	17.4	В
	Weekday PM	Existing (2022)	25.9	С	-	-	21.2	С	29.1	С	25.5	С
State Street &	(4-6 pm)	Future with Project (2023)	30.8	С	-	-	23.4	С	33.8	С	30.0	С
Ohio Street	Friday Casino PM	Existing (2022)	20.9	С	-	-	19.0	В	17.1	В	19.7	В
	(8-11 pm)	Future with Project (2023)	22.3	С	1	-	20.9	С	30.7	С	24.1	С
	Weekday	Existing (2022)	5.9	Α	-	-	11.1	В	13.5	В	8.4	Α
Wabash	PM (4-6 pm)	Future with Project (2023)	13.2	В	-	-	11.2	В	13.3	В	12.9	В
Avenue & Ohio Street	Friday	Existing (2022)	9.0	Α	-	-	11.2	В	8.2	Α	9.2	Α
	Casino PM (8-11 pm)	F	14.3	В	1	-	11.3	В	8.2	Α	12.8	В
	Weekday PM (4-6 pm)	Existing (2022)	-	-	20.7	С	10.2	В	20.5	С	18.0	В
Ontario Street		Future with Project (2023)	-	-	21.0	С	16.0	В	20.2	С	19.2	В
& Wabash Avenue	Friday	Existing (2022)	-	-	20.8	С	14.3	В	13.7	В	18.0	В
	Casino PM (8-11 pm)		-	·	21.2	С	13.2	В	16.3	В	17.9	В

At each signalized intersection during the two peak hours, each approach currently operates at LOS C or better and the overall intersections also operate at LOS C or better. It should be noted that the traffic model evaluates the vehicular volumes by approach and movement, the intersection lane configuration, the number of pedestrian crossings in conflict with turning vehicles, and the traffic signal phasing and timing plan for each intersection. The traffic model does not take into account the residual vehicle queues for each movement from downstream intersections not in the traffic model or additional delays created from double parked vehicles and loading/unloading trucks.

The addition of the projected temporary casino trips during the weekday pm commuter peak hour and the Friday pm casino peak hour result in slight increases in delay but all approaches and the overall intersections still operating at LOS C or better. Similar to the existing analysis, the traffic



model evaluates the traffic volumes by movement, the intersection lane configuration, pedestrian crossings, and signal timings.

Proposed Curb Management Plan

Valet Parking

In addition to parking at the adjacent garages or using a non-automotive option to access the temporary casino, valet parking is an important function for casinos. There are currently several valet drop off/pick up zones in the immediate area around the Medinah Temple, including at the mid-block location on Ohio Street between State Street and Wabash Avenue. This section of Ohio Street currently prohibits parking.

There were several options that were evaluated for the potential location of the valet drop off and pick up area:

- On street along Ohio Street adjacent to the Medinah Temple
- On street along Ohio Street west of the driveway to the 50 East Ohio Street parking garage
- On street adjacent to the driveways accessing the 10 East Ontario Street or 10 East Grand Avenue parking garages
- Within a parking garage at the entrance/exit driveways
- Within a parking garage parking area

Valet parking cannot occur at the street level adjacent to the 50 East Ohio Street or 10 East Ontario Street parking garages due to lack of curb space for drop off and pick up operations. Backups could occur at these locations and backup into signalized intersections impacting pedestrian crossings and vehicle operations. Similarly, there is a bus stop adjacent to the driveway on Ohio Street for the entrance ramp to the 10 East Grand Avenue parking garage.

Valet parking cannot occur at entrances and exits to the parking garages in vicinity of Medinah Temple due to gates immediately at the street level entrance (10 East Ontario Garage) or steep ramps up and down (50 East Ohio Street, 10 East Grand Avenue parking garages) directly adjacent to the roadways.

If valet parking within the garage, operations of the valet drop off and pick up would have to occur within existing parking spaces adjacent to the garage driveways which results in a loss of parking for the garage. Additionally, while parking in the garage may only be available at the higher floors, there is less benefit for patron valet as they will still have to walk from the garage to the casino. Additionally, it is our understanding that the Illinois Gaming Board requires valet operators to be licensed, so casino valet personnel will be operating within a private garage, which will have liability and insurance challenges.

Therefore, it is recommended that valet operations be provided along the Ohio Street frontage adjacent to the Medinah Temple. An existing valet area already exists for the Ivy Room directly west of the casino. Including this existing valet area, there is approximately 150 feet of street



frontage for valet drop off and pick up, which can accommodate six to eight vehicles. Based on the projected 70 weekday pm peak hour (37 drop off, 33 pick-up) and 77 Friday night casino peak hour (33 drop off, 41 pick-up) valet movements, it is anticipated that this area should be able to accommodate that demand. Drop off should be quick and any delay for pick-ups will be for patrons waiting on the curb, not vehicles queueing on the street. Additionally, the valet operators will be instructed to not allow parking or staging within this area.

The following recommendations must be implemented to provide adequate valet operations along Ohio Street:

- Vehicles arriving for valet drop off or pick up shall not be double-parked, staged, or loaded in/out from any travel lane
- Vehicles arriving for valet drop off shall not dwell unattended at the curb for more than 60 seconds
- All parking of valet vehicles shall occur in off-street garages/lots. Vehicles shall not be
 parked or staged by valet attendants at any location on the public way, including but not
 limited to the street frontages near the site (e.g., south side of Ohio Street, east side of
 Wabash Avenue, etc.).
- The valet operator shall develop a monitoring and compliance plan to these terms with regular reporting to the City of Chicago on adherence to these terms. The valet operator shall promptly notify the City of any recurring operational issues including but not limited to queue spillback of vehicles arriving for valet drop off.
- If the valet operator is found in non-compliance of the conditions, valet operation will be suspended. Adequate opportunity to address the issue(s) will be granted twice before the ability to valet on-street will be revoked.

While Bally's has not yet determined parking pricing for valet operations, they would be open to discussions with CDOT staff about developing a pricing differential between self-park and valet to encourage self-park to minimize the curbside valet volumes.

It is recommended that the parking garage at 50 East Ohio Street be utilized for valet parking operations. After dropping off a vehicle at the valet zone, it can continue to travel east through the Wabash Avenue intersection and enter the parking garage via a left turn and park within the garage. To pick up the casino patron, the vehicle can exit the garage at the Wabash Avenue driveway, travel around the block, and pick up the patron at the same location.

Charter Bus and Shuttle

Additionally, patrons may visit the temporary casino via charter bus or smaller-type shuttle bus. It is recommended that the curb space along the west side Wabash Avenue be utilized for loading and unloading charter and shuttle buses due to the primary building entrance and two other building entrances along Wabash Avenue. There is approximately 180 feet of available curb space that currently prohibits parking that could be utilized for the short-term bus loading and unloading. This curb space would provide access for approximately four to five charter buses or more shuttle buses. After unloading patrons, the charter buses could then travel to a Cityapproved charter bus parking area or could also park at the south end of the Tribune Freedom Plaza via Grand Avenue, if allowed. While the exact number of arriving buses at any given time



is difficult to quantify as local charters may not coordinate with the casino, this entire Wabash Avenue frontage should provide adequate area for these operations.

The recommended bus routing from I-94 would be Ohio Street to Rush Street to Ontario Street to Wabash Avenue. Similarly, the routing to the Tribune Freedom Plaza or to I-94 would be westbound Grand Avenue. It is recommended that Bally's work with the drivers and companies of known bus operators and to provide this information on the casino website.

Taxi / Rideshare

Taxi and rideshare/transportation network providers (TNP's), such as Lyft and Uber, are recommended to use the curb space along Ohio Street west of the valet parking area. This area provides approximately 100 feet for drop off and pick up activities. Vehicles should not linger in the zone to maximize efficiency of the curb. As previously stated, the operations of taxi and rideshare drop off and pick up trips are challenging to force at a certain location due to driver and patron tendencies. It is likely that rideshare and taxi patrons will be dropped off or picked up along the adjacent roadways around the Medinah Temple.

Traffic Control Aides

In order to provide safe and efficient access for casino patrons as well as to limit any roadway impacts to the local businesses and neighborhood, it is recommended that Traffic Control Aides (TCA's) be present on site during the peak casino periods to keep traffic flowing around the site and limit double parking along the roadways. The specific number and location of the TCA's should be coordinated with the Chicago Department of Transportation and the Office of Emergency Management and Communications (OEMC).

The roles of the TCA's are to enforce the no parking rules, keep rideshare and taxi from backing up onto the street, enforce no double parking, move pedestrians across the streets during the pedestrian phases, and minimize dwell time and delays for buses, valet, and rideshare vehicles. It is recommended that the operations of the TCA's be continuously reviewed to verify that adequate TCA coverage is provided to efficiently serve all casino patrons and adjacent modes of transportation.

Figure 13 illustrates the proposed curb management plan around the Medinah Temple site.

Opening Conditions

It is anticipated that the first months of the temporary casino opening will generate more peak patron and vehicular activity than during the typical casino operations over the long run. The casino opening will be critical to the perceived access to the site so is critical to everyone.

Prior to opening the temporary casino, Bally's will coordinate with the Office of Emergency Management and Communications (OEMC), CDOT, and other stakeholders to develop a transportation management strategy that addresses elevated attendance and traffic during the initial weeks of the casino being open. Potential strategies that may be considered include:



- Soft opening with controlled invites
- Enhanced promotion of walk, bike, and transit access
- An expanded radius of actively managed intersections with traffic control personnel
- Variable message signs directing approaching traffic to alternate parking locations if the normal garages are full
- Alternate TNP/rideshare and bus pick-up locations further from the site using geofencing

Traffic conditions will be monitored during this initial period and adjusted accordingly as traffic activity at the casino normalizes.

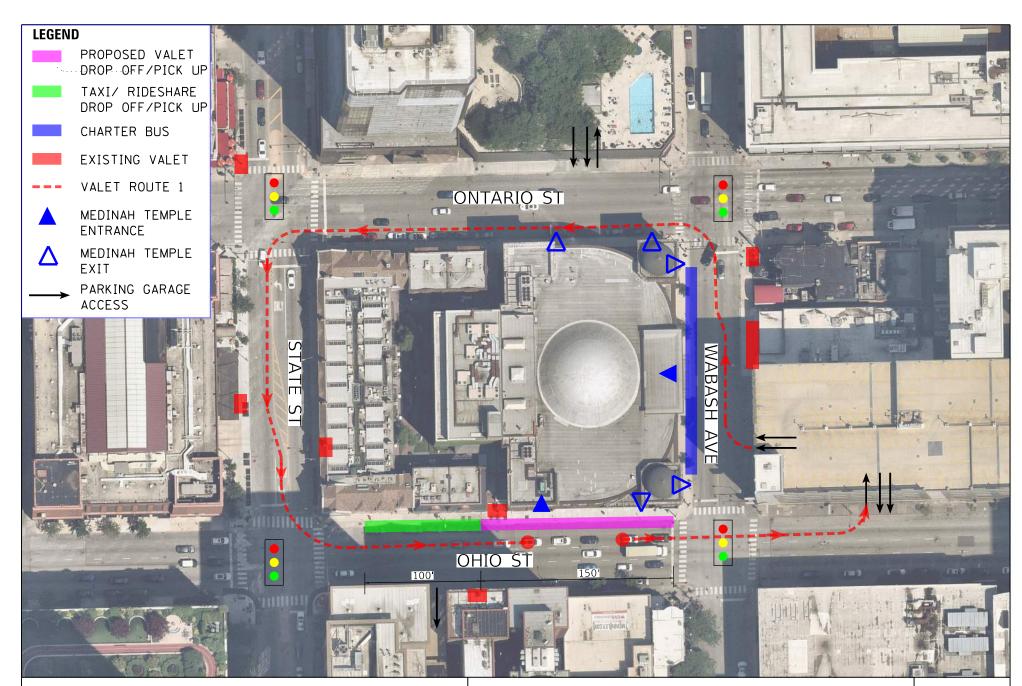


FIGURE 13
PROPOSED CURB MANAGMENT PLAN
VALET & CHARTER BUS



CHICAGO

ILLINOIS



V. CONCLUSIONS

The purpose of this report is to conduct a traffic impact study for the temporary casino located at the Medinah Temple at 600 North Wabash Avenue. The site is currently vacant and provides approximately 130,000 square feet and is bound by Ontario Street to the north, Wabash Avenue to the east, Ohio Street to the south, and existing office and retail buildings and State Street to the west. The study includes the existing signalized intersections along State Street at Ontario Street and Ohio Street and along Wabash Avenue at Ontario Street and Ohio Street.

It is our understanding that the proposed temporary casino will be constructed within the existing building on the site and that no new buildings will be constructed. The program for the proposed redevelopment with the temporary casino will include up to a total of 1,100 gaming positions. Any restaurant, bar space, or retail would be ancillary to the casino and not be destination-type facilities.

The Medinah Temple is situated within an area of nearby dense commercial and residential uses including substantial amounts of entertainment and dining. As such, the temporary casino would be a very complimentary land use in the area generating a cross-traffic capture of patrons between the temporary casino and nearby restaurants, bars, and other entertainment establishments. The area is served by roadways and parking adjacent to the site as well as transit, pedestrian, and bicycle infrastructure.

A traffic model was created using Synchro 11 to conduct a capacity analysis at the study area intersections. Traffic models were created for the weekday pm commuter peak hour and the Friday evening pm casino peak hour. Based on the results of the capacity analysis, the signalized intersections and each approach operate at LOS C or better for the existing and future with project scenarios for each peak hour evaluated. It should be noted that the traffic model evaluates the vehicular volumes by approach and movement, the intersection lane configuration, the number of pedestrian crossings in conflict with turning vehicles, and the traffic signal phasing and timing plan for each intersection. The traffic model does not take into account the residual vehicle queues for each movement or additional delays created from double parked vehicles and loading/unloading trucks.

In addition to parking at the adjacent garages or using a non-automotive option to access the temporary casino, valet parking is an important function for casinos. There were several options that were evaluated for the potential location of the valet drop off and pick up area, including on street and within adjacent parking garages. It is recommended that valet operations be provided along the Ohio Street frontage adjacent to the Medinah Temple. An existing valet area already exists for the Ivy Room directly west of the casino. Including this existing valet area, there is approximately 150 feet of street frontage for valet drop off and pick up, which can accommodate six to eight vehicles. Based on the projected 70 weekday pm peak hour (37 drop off, 33 pick-up) and 77 Friday night casino peak hour (33 drop off, 41 pick-up) valet movements, it is anticipated that this area should be able to accommodate that demand. Drop off should be quick and any



delay for pick-ups will be for patrons waiting on the curb, not vehicles queueing on the street. Additionally, the valet operators will be instructed to not allow parking or staging within this area.

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The roles of the TCA's are to enforce the no parking rules, keep rideshare and taxi from backing up onto the street, enforce no double parking, move pedestrians across the streets during the pedestrian phases, and minimize dwell time and delays for buses, valet, and rideshare vehicles. It is recommended that the operations of the TCA's be continuously reviewed to verify that adequate TCA coverage is provided to efficiently serve all casino patrons and adjacent modes of transportation.



APPENDIX A

EXISTING TRAFFIC COUNTS

AND

EXISTING TRAFFIC SIGNAL TIMING PLANS

Thu May 12, 2022

Full Length (5 PM-9 PM)

All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks, Pedestrians, Bicycles on Road, Bicycles on Crosswalk)

All Movements

ID: 949358, Location: 41.892453, -87.628089



Leg	Ohio						Ohic						State						State						
Direction	Eastbo	und					Wes	tbou	ınd				Northb	ound					Southbo	ound					
Time	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	Int
2022-05-12 5:00PM	I 30	198	35	0	263	184	0	0	0	0	0	99	0	83	23	0	106	105	14	93	0	0	107	49	470
5:15PM	I 31	179	32	0	242	164	0	0	1	0	1	106	0	107	15	0	122	105	10	83	0	0	93	25	45
5:30PM	1 39	178	36	0	253	139	0	0	1	0	1	112	0	90	27	0	117	68	17	76	0	0	93	58	464
5:45PM	1 26	267	41	0	334	142	0	0	2	0	2	104	0	82	23	0	105	67	15	98	0	0	113	90	554
Hourly Tota	l 126	822	144	0	1092	629	0	0	4	0	4	421	0	362	88	0	450	345	56	350	0	0	406	222	1952
6:00PM	I 29	211	39	0	279	158	0	0	0	0	0	98	1	81	16	0	98	101	18	89	0	0	107	60	484
6:15PM	1 28	182	49	0	259	189	0	0	1	0	1	78	0	68	22	0	90	67	15	86	0	0	101	53	45
6:30PM	I 23	195	42	0	260	125	0	0	1	0	1	95	0	75	18	0	93	103	14	81	0	0	95	50	449
6:45PM	I 41	187	31	0	259	181	0	0	1	0	1	104	0	64	24	0	88	95	14	92	0	0	106	72	45
Hourly Tota	l 121	775	161	0	1057	653	0	0	3	0	3	375	1	288	80	0	369	366	61	348	0	0	409	235	183
7:00PM	31	207	53	0	291	126	0	0	2	0	2	116	0	65	27	0	92	85	19	71	0	0	90	87	47
7:15PM	I 27	241	45	0	313	164	0	0	0	0	0	113	0	73	22	0	95	93	16	80	0	0	96	57	50
7:30PM	33	197	41	0	271	144	0	0	0	0	0	91	2	61	18	0	81	89	15	76	0	0	91	48	44
7:45PM	I 34	193	47	0	274	138	0	0	0	0	0	98	0	65	14	0	79	117	17	80	1	0	98	54	45
Hourly Tota	125	838	186	0	1149	572	0	0	2	0	2	418	2	264	81	0	347	384	67	307	1	0	375	246	187
8:00PM	34	194	40	0	268	172	0	0	0	0	0	79	0	57	20	0	77	84	12	92	0	0	104	53	44
8:15PM	1 39	197	45	0	281	185	0	0	0	0	0	88	0	57	17	0	74	74	11	81	0	0	92	50	44
8:30PM	33	165	36	0	234	132	0	0	0	0	0	87	0	58	18	0	76	81	22	64	0	0	86	72	39
8:45PM	34	189	43	0	266	98	0	0	0	0	0	62	0	52	19	0	71	87	15	62	0	0	77	36	414
Hourly Tota	140	745	164	0	1049	587	0	0	0	0	0	316	0	224	74	0	298	326	60	299	0	0	359	211	170
Tota	512	3180	655	0	4347	2441	0	0	9	0	9	1530	3	1138	323	0	1464	1421	244	1304	1	0	1549	914	736
% Approach	11.8%	73.2%	15.1%	0%	-	-	0% ()% 1	100% (0%	-	-	0.2%	77.7%	22.1%	0%	-	-	15.8%	84.2%	0.1%	0%	-	-	
% Tota	6.9%	43.2%	8.9%	0% !	59.0%	-	0% ()% (0.1% (0%	0.1%	-	0%	15.4%	4.4%	0% 1	19.9%	-	3.3%	17.7%	0%	0% 2	21.0%	-	
Lights	501	3115	645	0	4261	-	0	0	0	0	0	-	0	1036	311	0	1347	-	243	1208	0	0	1451	-	705
% Lights	97.9%	98.0%	98.5%	0% 9	98.0%	-	0% ()%	0% (0%	0%	-	0%	91.0%	96.3%	0% 9	92.0%	-	99.6%	92.6%	0%	0% 9	93.7%	-	95.89
Articulated Trucks	1	7	0	0	8	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	
% Articulated Trucks	0.2%	0.2%	0%	0%	0.2%	-	0% ()%	0% (0%	0%	-	0%	0%	0%	0%	0%	-	0%	0%	0% (0%	0%	-	0.19
Buses and Single-Uni	t																								
Trucks	10	22	8	0	40	-	0	0	0	0	0	-	0	37	0	0	37	-	1	28	0	0	29	-	10
% Buses and Single-Unit	1																								
Trucks		0.7%	1.2%			-	0% (0% (0%	-	0%	3.3%			2.5%	-	0.4%	2.1%			1.9%		1.49
Bicycles on Road	+	36	2	0	38		0	0	9	0	9	-	3	65	12	0	80		0	68	1	0	69		19
% Bicycles on Road			0.3%		0.9%		-		100% (J% :		-	100%	5.7%	3.7%		5.5%	-	0%		100%		4.5%	-	2.79
Pedestrians	+	-	-	-	-	2422	-	-	-			1526	-	-	-	-		1411	-	-	-	-	-	891	
% Pedestrians	+	-	-	-	- 6	99.2%	-	-	-	-	-	99.7%	-	-	-	-	- 9	99.3%	-	-	-	-	- 9	97.5%	
Bicycles on Crosswalk		-	-	-	-	19	-	-	-		-	4	-	-	-	-	-	10	-	-		-	-	23	
% Bicycles on Crosswalk	-	-	-	-	-	0.8%	-	-	-	-	-	0.3%	-	-	-	-	-	0.7%	-	-	-	-	-	2.5%	

^{*}Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

Thu May 12, 2022

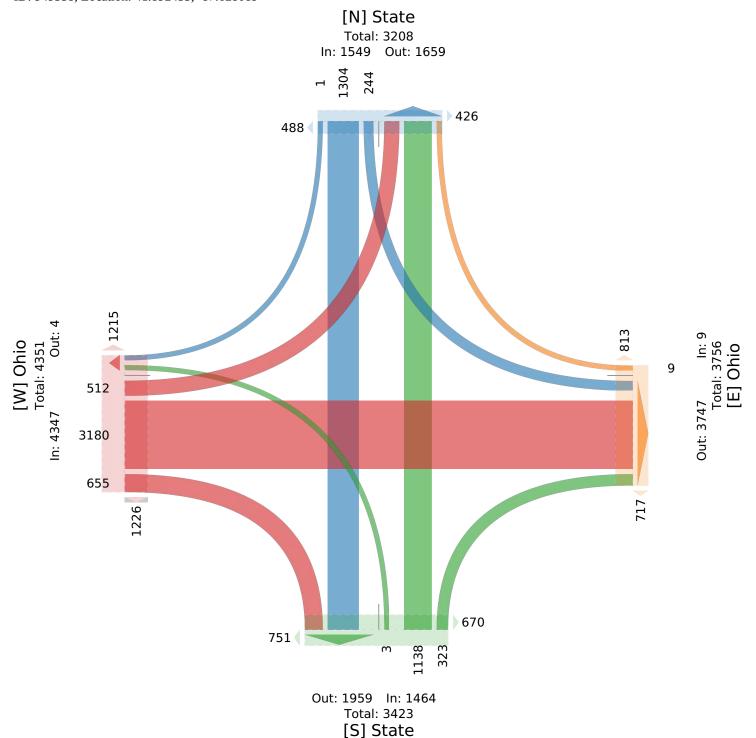
Full Length (5 PM-9 PM)

All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks, Pedestrians, Bicycles on Road, Bicycles on Crosswalk)

All Movements

ID: 949358, Location: 41.892453, -87.628089

G A GEWALT HAMILTON ASSOCIATES, INC. Provided by: Gewalt Hamilton Associates Inc.



Thu May 12, 2022

PM Peak (5:15 PM - 6:15 PM) - Overall Peak Hour

All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks,

Pedestrians, Bicycles on Road, Bicycles on Crosswalk)

All Movements

ID: 949358, Location: 41.892453, -87.628089



Leg	Ohio						Ohio)					State						State						
Direction	Eastbou	ınd					Wes	tbou	nd				Northb	ound					Southb	ound					
Time	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	Int
2022-05-12 5:15PM	31	179	32	0	242	164	0	0	1	0	1	106	0	107	15	0	122	105	10	83	0	0	93	25	458
5:30PM	39	178	36	0	253	139	0	0	1	0	1	112	0	90	27	0	117	68	17	76	0	0	93	58	464
5:45PM	26	267	41	0	334	142	0	0	2	0	2	104	0	82	23	0	105	67	15	98	0	0	113	90	554
6:00PM	29	211	39	0	279	158	0	0	0	0	0	98	1	81	16	0	98	101	18	89	0	0	107	60	484
Total	125	835	148	0	1108	603	0	0	4	0	4	420	1	360	81	0	442	341	60	346	0	0	406	233	1960
% Approach	11.3%	75.4%	13.4%	0%	-	-	0% ()% 1	00%	0%	-	-	0.2%	81.4%	18.3%	0%	-	-	14.8%	85.2%	0% (0%	-	-	-
% Total	6.4%	42.6%	7.6%	0% !	56.5%	-	0% ()%	0.2%	0%	0.2%	-	0.1%	18.4%	4.1%	0% 2	22.6%	-	3.1%	17.7%	0% (0% 2	20.7%	-	-
PHF	0.801	0.802	0.902	-	0.847	-	-	-	-	-	-	-	-	0.825	0.760	-	0.888	-	0.833	0.906	-	-	0.919	-	0.903
Lights	125	812	146	0	1083	-	0	0	0	0	0	-	0	318	79	0	397	-	59	320	0	0	379	-	1859
% Lights	100%	97.2%	98.6%	0% 9	97.7%	-	0% ()%	0% (0%	0%	-	0% 8	88.3%	97.5%	0% 8	39.8%	-	98.3%	92.5%	0% (0% 9	93.3%	-	94.8%
Articulated Trucks	0	2	0	0	2	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	2
% Articulated Trucks	0%	0.2%	0%	0%	0.2%	-	0% ()%	0% (0%	0%	-	0%	0%	0%	0%	0%	-	0%	0%	0% (0%	0%	-	0.1%
Buses and Single-Unit Trucks	0	4	2	0	6	-	0	0	0	0	0	-	0	22	0	0	22	-	1	6	0	0	7	-	35
% Buses and Single-Unit																									
Trucks	0%	0.5%	1.4%	0%	0.5%	-	0% ()%	0% (0%	0%	-	0%	6.1%	0%	0%	5.0%	-	1.7%	1.7%	0% (0%	1.7%	-	1.8%
Bicycles on Road	0	17	0	0	17	-	0	0	4	0	4	-	1	20	2	0	23	-	0	20	0	0	20	-	64
% Bicycles on Road	0%	2.0%	0%	0%	1.5%	-	0% ()% 1	00%	0% 1	100%	-	100%	5.6%	2.5%	0%	5.2%	-	0%	5.8%	0% (0%	4.9%	-	3.3%
Pedestrians	-	-	-	-	-	595	-	-	-	-	-	418	-	-	-	-	-	339	-	-	-	-	-	230	
% Pedestrians	-	-	-	-	- !	98.7%	-	-	-	-	- !	99.5%	-	-	-	-	-	99.4%	-	-	-	-	- 9	98.7%	-
Bicycles on Crosswalk	-	-	-	-	-	8	-	-	-	-	-	2	-	-	-	-	-	2	-	-	-	-	-	3	
% Bicycles on Crosswalk	-	-	-	-	-	1.3%	-	-	-	-	-	0.5%	-	-	-	-	-	0.6%	-	-	-	-	-	1.3%	-

^{*}Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

Thu May 12, 2022

PM Peak (5:15 PM - 6:15 PM) - Overall Peak Hour

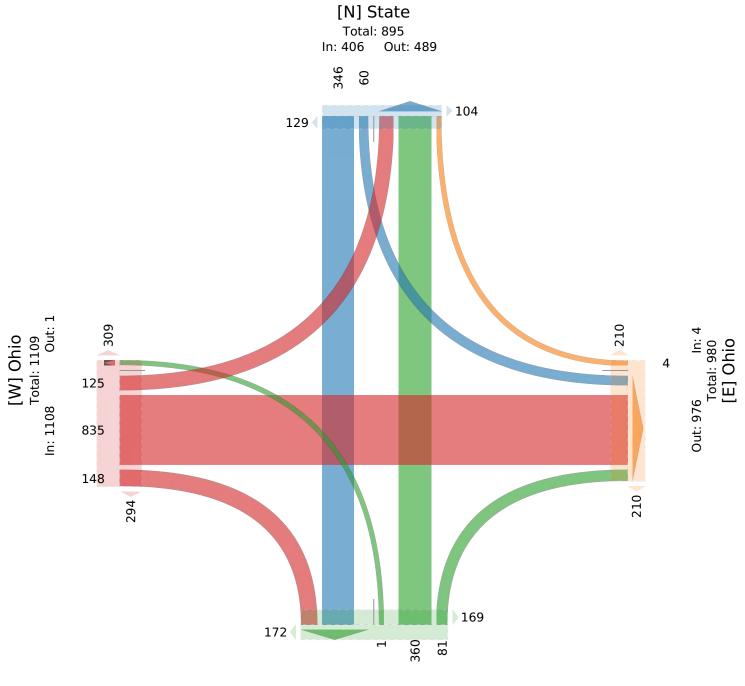
All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks,

Pedestrians, Bicycles on Road, Bicycles on Crosswalk)

All Movements

ID: 949358, Location: 41.892453, -87.628089

G A GEWALT HAMILTON ASSOCIATES, INC. Provided by: Gewalt Hamilton Associates Inc.



Out: 494 In: 442 Total: 936 [S] State

Fri May 13, 2022

Full Length (5 PM-9 PM)

All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks, Pedestrians, Bicycles on Road, Bicycles on Crosswalk)

All Movements

ID: 949362, Location: 41.892453, -87.628089



Leg	Ohio						Ohio						Stat						State						
Direction	Eastbou	und					Westbo	und					Nor	thbound	l				Southbo	ound					
Time	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	Int
2022-05-13 5:00PM	25	192	22	0	239	173	0	0	0	0	0	154	0	65	25	0	90	100	13	65	0	0	78	56	407
5:15PM	39	215	33	0	287	177	0	0	0	0	0	138	0	82	30	0	112	114	20	58	0	0	78	49	477
5:30PM	39	218	33	0	290	118	0	0	0	0	0	88	0	82	23	0	105	99	23	68	0	0	91	44	486
5:45PM	43	217	28	0	288	136	0	0	0	0	0	149	0	78	28	0	106	101	16	92	0	0	108	69	502
Hourly Total	146	842	116	0	1104	604	0	0	0	0	0	529	0	307	106	0	413	414	72	283	0	0	355	218	1872
6:00PM	46	235	43	0	324	216	0	1	0	0	1	103	0	58	30	0	88	95	22	89	0	0	111	47	524
6:15PM	30	235	37	0	302	220	0	0	0	0	0	127	0	69	26	0	95	96	23	90	0	0	113	86	510
6:30PM	39	216	44	0	299	167	1	0	0	0	1	113	0	55	26	0	81	101	14	74	0	0	88	100	469
6:45PM	25	207	38	0	270	179	0	0	0	0	0	85	0	84	20	0	104	142	20	76	0	0	96	74	470
Hourly Total	140	893	162	0	1195	782	1	1	0	0	2	428	0	266	102	0	368	434	79	329	0	0	408	307	1973
7:00PM	29	229	50	0	308	143	0	0	0	0	0	114	0	63	23	0	86	72	12	76	0	0	88	85	482
7:15PM	29	200	55	0	284	172	0	0	0	0	0	147	0	66	22	0	88	96	23	71	0	1	95	86	467
7:30PM	31	196	46	0	273	209	1	0	0	0	1	126	0	63	41	0	104	115	19	66	0	0	85	71	463
7:45PM	26	220	45	0	291	165	0	0	0	0	0	147	0	60	30	0	90	129	24	75	0	0	99	76	480
Hourly Total	115	845	196	0	1156	689	1	0	0	0	1	534	0	252	116	0	368	412	78	288	0	1	367	318	1892
8:00PM	30	190	49	0	269	214	0	0	0	0	0	106	0	55	35	0	90	102	16	77	0	1	94	40	453
8:15PM	36	179	42	0	257	191	0	0	0	0	0	121	0	54	29	0	83	124	19	71	0	0	90	59	430
8:30PM	28	203	39	0	270	171	0	1	0	0	1	127	0	59	20	0	79	54	20	65	0	0	85	54	435
8:45PM	28	208	36	0	272	226	0	1	0	0	1	108	0	74	21	0	95	117	23	68	0	0	91	98	459
Hourly Total	122	780	166	0	1068	802	0	2	0	0	2	462	0	242	105	0	347	397	78	281	0	1	360	251	1777
Total	523	3360	640	0	4523	2877	2	3	0	0	5	1953	0	1067	429	0	1496	1657	307	1181	0	2	1490	1094	7514
% Approach	11.6%	74.3%	14.1%	0%	-	-	40.0% (60.0% (0% ()%	-	-	0%	71.3%	28.7% (0%	-	-	20.6%	79.3%	0%	0.1%	-	-	-
% Total	7.0%	44.7%	8.5%	0% (60.2%	-	0%	0% (0% ()%	0.1%	-	0%	14.2%	5.7%	0% :	19.9%	-	4.1%	15.7%	0%	0% :	19.8%	-	-
Lights	512	3298	629	0	4439	-	0	0	0	0	0	-	0	993	414	0	1407	-	299	1115	0	2	1416	-	7262
% Lights	97.9%	98.2%	98.3%	0% 9	98.1%	-	0%	0% (0% ()%	0%	-	0%	93.1% :	96.5% (0% 9	94.1%	-	97.4%	94.4%	0%	100% 9	95.0%	-	96.6%
Articulated Trucks	0	3	1	0	4	-	0	0	0	0	0	-	0	2	0	0	2	-	0	2	0	0	2	-	8
% Articulated Trucks	0%	0.1%	0.2%	0%	0.1%	-	0%	0% (0% ()%	0%	-	0%	0.2%	0% (0%	0.1%	-	0%	0.2%	0%	0%	0.1%	-	0.1%
Buses and Single-Unit	_																		_						
Trucks	2	23	3	0	28	-	0	0	0	0	0	-	0	32	1	0	33	-	2	23	0	0	25	-	86
% Buses and Single-Unit Trucks	0.4%	0.7%	0.5%	በ%	0.6%		0%	0% (ገ% (1%	0%	_	0%	3.0%	0.2% (1 %	2 2%	_	0.7%	1.9%	0%	0%	1.7%		1.1%
Bicycles on Road	9	36	7	0	52		2	3	0	0	5		0,0	40	14	0	54		6	41	0	0,0	47	_	158
% Bicycles on Road	1.7%	1.1%	1.1%		1.1%		100%		_		_		0%		3.3% (_	3.6%		2.0%	3.5%			3.2%	-	2.1%
Pedestrians	-	_	_	-	_	2853	-	_	-	_	_	1942	-	_	_	-	_	1650	-	_	-	_	_	1090	
% Pedestrians	-	-	-	_	- 9	99.2%	-	-	_	_		99.4%	-	_	-	_	-	99.6%	-	-	_	-		99.6%	_
Bicycles on Crosswalk	-	_	-	-		24	-	_	-	-	-	11	-	_	_	-	-	7	_	-		_	-	4	
% Bicycles on Crosswalk	-	-	-	_	-	0.8%	-	-	_	_	-	0.6%	-	_	-	_	-	0.4%	-	-	_	-	-	0.4%	_
	ь					5,5						2.570	Ь—					/ 0							

^{*}Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

Fri May 13, 2022

Full Length (5 PM-9 PM)

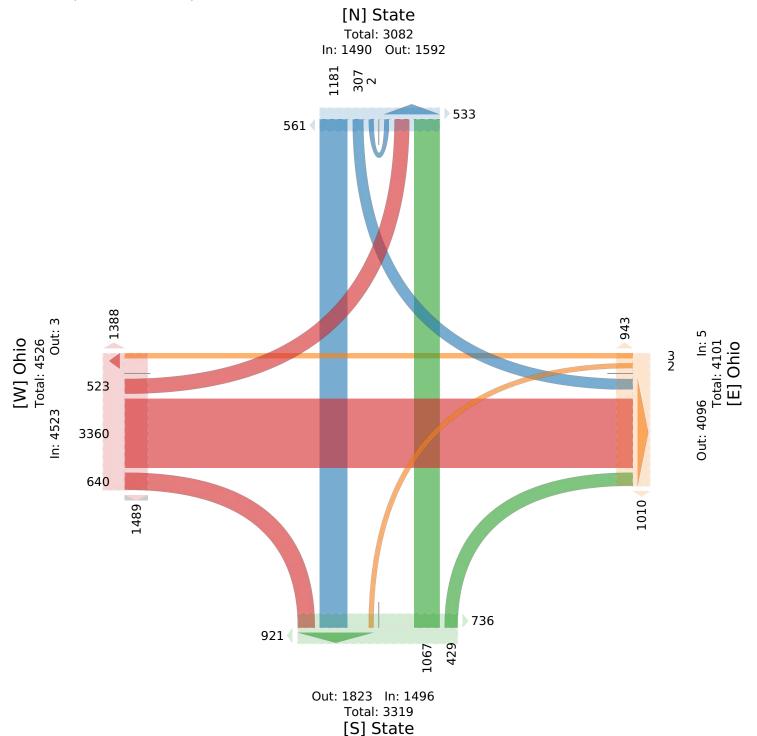
All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks,

Pedestrians, Bicycles on Road, Bicycles on Crosswalk)

All Movements

ID: 949362, Location: 41.892453, -87.628089





Fri May 13, 2022

PM Peak (5:30 PM - 6:30 PM) - Overall Peak Hour

All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks,

Pedestrians, Bicycles on Road, Bicycles on Crosswalk)

All Movements

ID: 949362, Location: 41.892453, -87.628089



Leg	Ohio						Ohio)					State	2					State						
Direction	Eastbou	ınd					Wes	tbound	1				Nor	hbounc	l				Southb	ound					
Time	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	Int
2022-05-13 5:30PM	39	218	33	0	290	118	0	0	0	0	0	88	0	82	23	0	105	99	23	68	0	0	91	44	486
5:45PM	43	217	28	0	288	136	0	0	0	0	0	149	0	78	28	0	106	101	16	92	0	0	108	69	502
6:00PM	46	235	43	0	324	216	0	1	0	0	1	103	0	58	30	0	88	95	22	89	0	0	111	47	524
6:15PM	30	235	37	0	302	220	0	0	0	0	0	127	0	69	26	0	95	96	23	90	0	0	113	86	510
Total	158	905	141	0	1204	690	0	1	0	0	1	467	0	287	107	0	394	391	84	339	0	0	423	246	2022
% Approach	13.1%	75.2%	11.7%	0%	-	-	0%	100% ()% ()%	-	-	0%	72.8%	27.2%	0%	-	-	19.9%	80.1%)%()%	-	-	-
% Total	7.8%	44.8%	7.0%	0% 5	59.5%	-	0%	0% ()% ()%	0%	-	0%	14.2%	5.3%	0% 1	19.5%	-	4.2%	16.8%)%()% 2	20.9%	-	-
PHF	0.859	0.955	0.820	-	0.923	-	-	-	-	-	-	-	-	0.858	0.929	-	0.918	-	0.891	0.894	-	- (0.953	-	0.964
Lights	157	888	139	0	1184	-	0	0	0	0	0	-	0	268	104	0	372	-	80	316	0	0	396	-	1952
% Lights	99.4%	98.1%	98.6%	0% 9	98.3%	-	0%	0% ()% ()%	0%	-	0%	93.4% 9	97.2%	0% 9	94.4%	-	95.2%	93.2% ()%()% 9	3.6%	-	96.5%
Articulated Trucks	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0
% Articulated Trucks	0%	0%	0%	0%	0%	-	0%	0% ()% ()%	0%	-	0%	0%	0%	0%	0%	-	0%	0% ()%()%	0%	-	0%
Buses and Single-Unit																									
Trucks	1	6	2	0	9	-	0	0	0	0	0	-	0	10	0	0	10	-	2	6	0	0	8	-	27
% Buses and Single-Unit	0.00/	0.70/	1 40/	00/	0.70/		00/	00//	20/ 6	NO /	00/		00/	2.50/	00/	00/	2 50/		2.40/	1.00/	20/ /	20/	1.00/		1.20/
Trucks		0.7%					0%	0% (-	0%		_	3.5%			2.5%	-		1.8%				-	1.3%
Bicycles on Road		11		0	11	-	0	1	0	_	1	-	0	9		0	12	-	2	17	0	_	19	-	43
% Bicycles on Road	0%	1.2%	0%	0%	0.9%		0%	100% ()% ()% 1	100%		0%	3.1%	2.8%	0%	3.0%	-	2.4%	5.0%)%()%	4.5%	-	2.1%
Pedestrians	-	-	-	-	-	680	-	-	-	-	-	460		-	-	-	-	389	-	-	-	-	-	245	
% Pedestrians	-	-	-	-	- !	98.6%	-	-	-	-	- 9	98.5%	-	-	-	-	-	99.5%	-	-	-	-	- 9	99.6%	-
Bicycles on Crosswalk	-	-	-	-	-	10	-	-	-	-	-	7	-	-	-	-	-	2	-	-	-	-	-	1	
% Bicycles on Crosswalk	-	-	-	-	-	1.4%	-	-	-	-	-	1.5%	-	-	-	-	-	0.5%	-	-	-	-	-	0.4%	-

^{*}Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

Fri May 13, 2022

PM Peak (5:30 PM - 6:30 PM) - Overall Peak Hour

All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks,

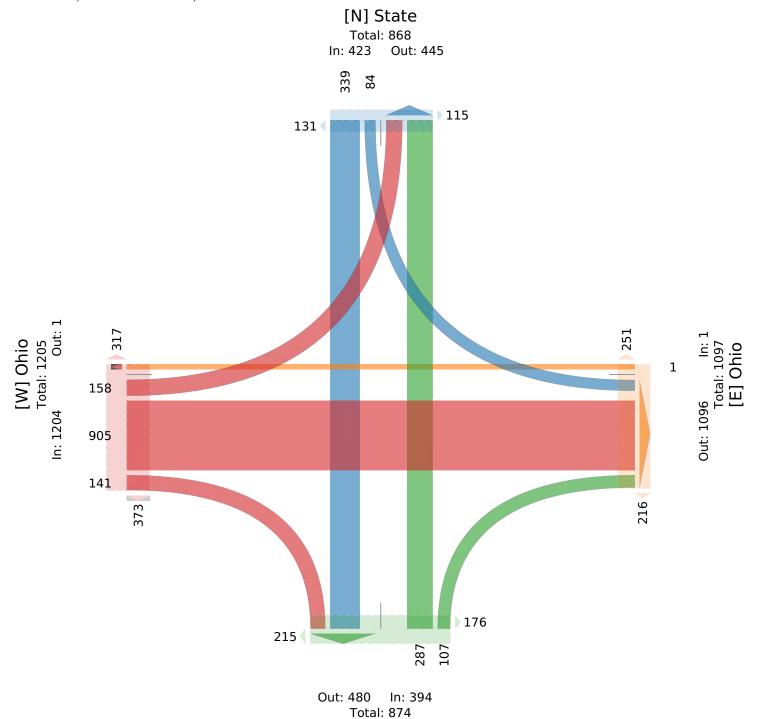
Pedestrians, Bicycles on Road, Bicycles on Crosswalk)

All Movements

ID: 949362, Location: 41.892453, -87.628089



Provided by: Gewalt Hamilton Associates Inc. 625 Forest Edge Drive, Vernon Hills, IL, 60061, US



[S] State

Thu May 12, 2022

Full Length (5 PM-9 PM)

All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks, Pedestrians, Bicycles on Road, Bicycles on Crosswalk)

All Movements

ID: 949359, Location: 41.892499, -87.626729



625 Forest Edge Drive, Vernon Hills, IL, 60061, US

Leg	Ohio						Ohio						Wabas						Wabash						
Direction	Eastbo						Westbo						Northb						Southbo						
Time	L	T	R		App	Ped*	L		R		App	Ped*	L	T	R	_	App	Ped*	L	T			App	Ped*	_
2022-05-12 5:00PM	18	178	59	0	255	80	0	0	0	0	0	113	0	34	20	0	54	130	34	63		0	97	61	406
5:15PM	15	138	54	0	207	74	2		0	0	2	106	0	44	26	0	70	121	36	67	0	0	103	52	382
5:30PM	16	157	51	0	224	70	1	0	0	0	1	61	0	49	18	0	67	99	34	71	0	0	105	59	397
5:45PM	26	209	61	0	296	87	0	0	1	0	1	115	1	50	33	0	84	104	35	64	2	0	101	65	482
Hourly Total	75	682	225	0	982	311	3		1	0	4	395	1	177	97	0	275	454	139	265	2	0	406	237	1667
6:00PM	19	171	50	0	240	83	0	0	0	0	0	82	0	39	33	0	72	100	24	57	0	0	81	60	393
6:15PM	14	157	45	0	216	47	0	0	0	0	0	104	0	38	23	0	61	86	36	67	1	0	104	48	381
6:30PM	16	170	33	0	219	58	0	0	0	0	0	96	0	38	20	0	58	121	37	56		0	93	53	370
6:45PM	19	167	34	0	220	59	0	0	0	0	0	109	0	33	23	0	56	121	25	53	0	0	78	76	354
Hourly Total	68	665	162	0	895	247	0	0	0	0	0	391	0	148	99	0	247	428	122	233	1	0	356	237	1498
7:00PM	18	165	52	0	235	61	0	0	1	0	1	88	0	31	25	0	56	122	17	63	0	0	80	60	372
7:15PM	20	214	38	0	272	52	1	0	0	0	1	86	0	37	30	0	67	124	17	53	0	0	70	73	410
7:30PM	9	191	32	0	232	41	0	0	1	0	1	71	0	32	37	0	69	139	22	50	0	0	72	64	374
7:45PM	22	164	37	0	223	59	0	0	1	0	1	60	0	26	16	0	42	146	25	50	0	0	75	48	34:
Hourly Total	69	734	159	0	962	213	1	0	3	0	4	305	0	126	108	0	234	531	81	216	0	0	297	245	149
8:00PM	14	150	45	0	209	73	0	0	0	0	0	58	0	26	20	0	46	99	29	45	0	0	74	52	329
8:15PM	18	163	43	0	224	42	0	0	0	0	0	74	0	23	10	0	33	76	19	40	1	0	60	56	31
8:30PM	18	154	24	0	196	74	0	0	0	0	0	82	0	23	16	0	39	87	31	31	0	0	62	89	29
8:45PM	25	158	30	0	213	51	0	0	2	0	2	56	0	27	17	0	44	114	28	56	1	0	85	46	344
Hourly Total	75	625	142	0	842	240	0	0	2	0	2	270	0	99	63	0	162	376	107	172	2	0	281	243	1287
Total	287	2706	688	0	3681	1011	4	0	6	0	10	1361	1	550	367	0	918	1789	449	886	5	0	1340	962	5949
% Approach	7.8%	73.5%	18.7%	0%	-	-	40.0% (0% 6	0.0% ()%	-	-	0.1%	59.9%	40.0%	0%	-	-	33.5%	66.1%	0.4%	0%	-	-	
% Total	4.8%	45.5%	11.6%	0% 6	1.9%	-	0.1% ()%	0.1% ()% (0.2%	-	0%	9.2%	6.2%	0% 1	15.4%	-	7.5%	14.9%	0.1%	0% 2	22.5%	-	
Lights	285	2645	677	0	3607	-	0	0	0	0	0	-	0	515	340	0	855	-	434	825	0	0	1259	-	572
% Lights	99.3%	97.7%	98.4% (0% 9	8.0%	-	0% ()%	0% 0)%	0%	-	0% 9	93.6%	92.6%)% 9	93.1%	-	96.7%	93.1%	0%	0% 9	94.0%	-	96.2%
Articulated Trucks	1	5	0	0	6	-	0	0	0	0	0	-	0	0	1	0	1	-	0	0	0	0	0	-	
% Articulated Trucks	0.3%	0.2%	0% (0%	0.2%	-	0% ()%	0% 0)%	0%	-	0%	0%	0.3%	0%	0.1%	-	0%	0%	0%	0%	0%	-	0.1%
Buses and Single-Unit																									
Trucks	1	17	3	0	21	-	0	0	0	0	0	-	0	2	3	0	5		4	14	0	0	18		4
% Buses and Single-Unit																									
Trucks	0.3%	0.6%	0.4%	0%	0.6%	-	0% ()%	0% 0)%	0%	-	0%	0.4%	0.8%	0%		-	0.9%	1.6%	0%	0%	1.3%	-	0.79
Bicycles on Road	0	39	8	0	47	-	4	0	6	0	10	-	1	33	23	0	57	-	11	47	5	0	63	-	17
% Bicycles on Road	0%	1.4%	1.2%	0%	1.3%	-	100% ()% :	100% ()% 1	00%	-	100%	6.0%	6.3%)%	6.2%	-	2.4%	5.3%	100%	0%	4.7%	-	3.0%
Pedestrians	-	-	-	-	-	1001	-	-	-	-	-	1349	-	-	-	-	-	1779	-	_	_	-	-	958	
% Pedestrians	-	-	-	-	-	99.0%	-	-	-	-	- 9	99.1%	-	-	-	-	-	99.4%	-	-	-	-	- !	99.6%	
Bicycles on Crosswalk	-	-	-	-	-	10	-	-	-	-	-	12	-	-	-	-	-	10	-	-	-	-	-	4	
% Bicycles on Crosswalk	-	-	-	-	-	1.0%	-	-	-	-	-	0.9%	-	-	-	-	-	0.6%	-	-	-	-	-	0.4%	

^{*}Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

Thu May 12, 2022

Full Length (5 PM-9 PM)

All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks, Pedestrians, Bicycles on Road, Bicycles on Crosswalk)

All Movements

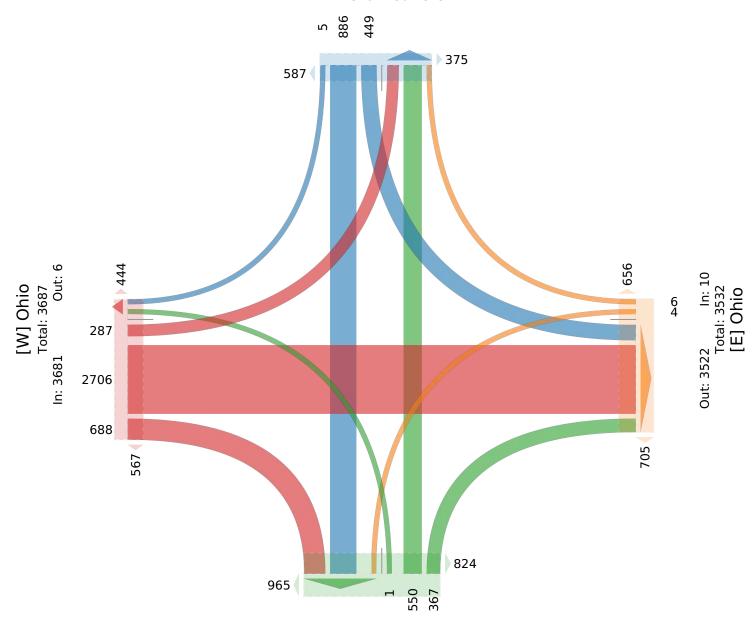
ID: 949359, Location: 41.892499, -87.626729

GEWALT HAMILTON ASSOCIATES, INC. Provided by: Gewalt Hamilton Associates Inc.

Provided by: Gewalt Hamilton Associates Inc. 625 Forest Edge Drive, Vernon Hills, IL, 60061, US

[N] Wabash

Total: 2183 In: 1340 Out: 843



Out: 1578 In: 918 Total: 2496 [S] Wabash

Thu May 12, 2022

PM Peak (5 PM - 6 PM) - Overall Peak Hour

All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks, Pedestrians, Bicycles on Road, Bicycles on Crosswalk)

All Movements

ID: 949359, Location: 41.892499, -87.626729



Leg	Ohio						Ohio						Wabas	h					Wabasl	h					
Direction	Eastbo	und					Westbo	und					Northb	ound					Southbo	ound					
Time	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	Int
2022-05-12 5:00PM	18	178	59	0	255	80	0	0	0	0	0	113	0	34	20		54	130	34	63	0	0	97	61	406
5:15PM	15	138	54	0	207	74	2	0	0	0	2	106	0	44	26	0	70	121	36	67	0	0	103	52	382
5:30PM	16	157	51	0	224	70	1	0	0	0	1	61	0	49	18	0	67	99	34	71	0	0	105	59	397
5:45PM	26	209	61	0	296	87	0	0	1	0	1	115	1	50	33	0	84	104	35	64	2	0	101	65	482
Total	75	682	225	0	982	311	3	0	1	0	4	395	1	177	97	0	275	454	139	265	2	0	406	237	1667
% Approach	7.6%	69.5%	22.9%	0%	-	-	75.0%	0% 2	25.0% ()%	-	-	0.4% (64.4%	35.3%	0%	-	-	34.2%	65.3%	0.5%	0%	-	-	-
% Total	4.5%	40.9%	13.5%	0% 5	58.9%	-	0.2%	0%	0.1% ()%	0.2%	-	0.1%	10.6%	5.8%	0% 1	16.5%	-	8.3%	15.9%	0.1%	0% 2	24.4%	-	-
PHF	0.721	0.824	0.936	-	0.838	-	-	-	-	-	-	-	-	0.894	0.724	-	0.851	-	0.993	0.926	-	-	0.958	-	0.879
Lights	75	663	220	0	958	-	0	0	0	0	0	-	0	168	83	0	251	-	132	245	0	0	377	-	1586
% Lights	100%	97.2%	97.8%	0% 9	97.6%	-	0%	0%	0% ()%	0%	-	0% 9	94.9%	85.6%	0% 9	91.3%	-	95.0%	92.5%	0%	0% 9	92.9%	-	95.1%
Articulated Trucks	0	2	0	0	2	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	2
% Articulated Trucks	0%	0.3%	0%	0%	0.2%	-	0%	0%	0% ()%	0%	-	0%	0%	0%	0%	0%	-	0%	0%	0%	0%	0%	-	0.1%
Buses and Single-Unit																									
Trucks	0	4	1	0	5	-	0	0	0	0	0	-	0	0	1	0	1	-	3	7	0	0	10	-	16
% Buses and Single-Unit																									
Trucks			0.4%			-	0%		0% (0%	-	0%		1.0%			-	2.2%	2.6%			2.5%	-	1.0%
Bicycles on Road	0	13		0	17	-		0	1		4	-	1	9	13		23	-	4	13		0	19	-	63
% Bicycles on Road	0%	1.9%	1.8%	0%	1.7%	-	100%	0%	100% ()% 1	100%	-	100%	5.1%	13.4%	0%	8.4%	-	2.9%	4.9%	100%	0%	4.7%	-	3.8%
Pedestrians	-	-	-	-	-	308	-	-	-	-	-	391	-	-	-	-	-	448	-	-	-	-	-	237	
% Pedestrians	-	-	-	-	- 1	99.0%	-	-	-	-	- !	99.0%	-	-	-	-	- 1	98.7%	-	-	-	-	- 1	100%	-
Bicycles on Crosswalk	-	-	-	-	-	3	-	-	-	-	-	4	-	-	-	-	-	6	-	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	-	1.0%	-	-	-	-	-	1.0%	-	-	-	-	-	1.3%	-	-	-	-	-	0%	-

^{*}Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

Thu May 12, 2022

PM Peak (5 PM - 6 PM) - Overall Peak Hour

All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks,

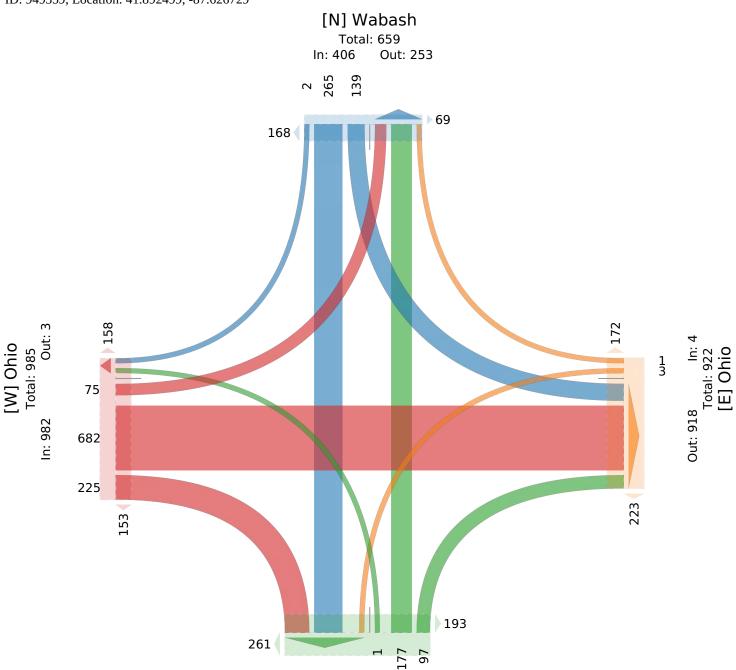
Pedestrians, Bicycles on Road, Bicycles on Crosswalk)

All Movements

ID: 949359, Location: 41.892499, -87.626729

G FA GEWALT HAMILTON ASSOCIATES, INC. Provided by: Gewalt Hamilton Associates Inc.

Provided by: Gewalt Hamilton Associates Inc. 625 Forest Edge Drive, Vernon Hills, IL, 60061, US



Out: 493 In: 275 Total: 768 [S] Wabash

Fri May 13, 2022

Full Length (5 PM-9 PM)

All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks, Pedestrians, Bicycles on Road, Bicycles on Crosswalk)

All Movements

ID: 949363, Location: 41.892499, -87.626729



Leg	Ohio						Ohio						Wabas	h					Wabash	1					
Direction	Eastbo	und					Westbo	und					Northb	ound					Southbo	ound					
Time	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	Int
2022-05-13 5:00PM	14	152	41	0	207	104	0	0	2	0	2	119	0	42	28	0	70	120	27	66	0	0	93	85	372
5:15PM	14	187	48	0	249	114	0	0	0	0	0	125	0	41	32	0	73	117	33	79	0	0	112	73	434
5:30PM	19	170	49	0	238	76	0	0	0	0	0	106	0	50	31	0	81	129	30	81	1	0	112	62	431
5:45PM	25	175	48	0	248	99	0	0	0	0	0	109	0	38	31	0	69	130	31	92	0	0	123	64	440
Hourly Total	72	684	186	0	942	393	0	0	2	0	2	459	0	171	122	0	293	496	121	318	1	0	440	284	1677
6:00PM	21	196	43	0	260	65	0	0	0	0	0	90	0	50	29	0	79	111	40	66	0	0	106	72	445
6:15PM	23	201	49	0	273	97	0	0	0	0	0	104	0	46	27	0	73	161	38	71	0	0	109	76	455
6:30PM	11	184	50	0	245	92	0	0	0	0	0	105	0	40	49	0	89	131	29	60	0	0	89	72	423
6:45PM	15	187	40	0	242	93	0	0	0	0	0	97	0	44	25	0	69	161	32	57	0	0	89	61	400
Hourly Total	70	768	182	0	1020	347	0	0	0	0	0	396	0	180	130	0	310	564	139	254	0	0	393	281	1723
7:00PM	13	177	49	0	239	81	0	0	0	0	0	105	0	37	33	0	70	109	35	57	0	0	92	77	401
7:15PM	20	181	38	0	239	89	0	0	0	0	0	119	0	38	23	0	61	112	42	54	0	0	96	98	396
7:30PM	27	177	37	0	241	81	1	0	0	0	1	112	0	31	34	0	65	119	40	56	0	0	96	78	403
7:45PM	20	188	49	0	257	65	0	0	0	0	0	112	0	32	34	0	66	126	45	49	0	0	94	67	417
Hourly Total	80	723	173	0	976	316	1	0	0	0	1	448	0	138	124	0	262	466	162	216	0	0	378	320	1617
8:00PM	17	184	42	0	243	52	0	0	0	0	0	84	0	28	22	0	50	134	30	49	0	0	79	74	372
8:15PM	20	173	24	0	217	62	0	0	2	0	2	87	0	26	24	0	50	112	30	48	1	0	79	66	348
8:30PM	11	173	46	0	230	84	0	0	0	0	0	90	0	28	19	0	47	90	19	42	0	0	61	68	338
8:45PM	18	194	39	0	251	79	0	0	1	0	1	72	1	31	28	0	60	134	18	50	0	0	68	69	380
Hourly Total	66	724	151	0	941	277	0	0	3	0	3	333	1	113	93	0	207	470	97	189	1	0	287	277	1438
Total	288	2899	692	0	3879	1333	1	0	5	0	6	1636	1	602	469	0	1072	1996	519	977	2	0	1498	1162	6455
% Approach	7.4%	74.7%	17.8%	0%	-	-	16.7% (0% 8	3.3% ()%	-	-	0.1%	56.2% 4	43.8%	0%	-	-	34.6%	65.2%	0.1%	0%	-	-	
% Total	4.5%	44.9%	10.7%	0% (60.1%	-	0% (0% (0.1% ()%	0.1%	-	0%	9.3%	7.3%	0% 1	16.6%	-	8.0%	15.1%	0%	0% 2	23.2%	-	
Lights	286	2844	689	0	3819	-	0	0	0	0	0	-	0	558	451	0	1009	-	501	914	0	0	1415	-	6243
% Lights	99.3%	98.1%	99.6%	0% 9	98.5%	-	0% (0%	0% ()%	0%	-	0%	92.7%	96.2%	0% 9	94.1%	-	96.5%	93.6%	0%	0% 9	94.5%	-	96.7%
Articulated Trucks	0	3	0	0	3	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	3
% Articulated Trucks	0%	0.1%	0%	0%	0.1%	-	0% (0%	0% ()%	0%	-	0%	0%	0%	0%	0%	-	0%	0%	0%	0%	0%	-	0%
Buses and Single-Unit																									
Trucks	1	25	1	0	27	-	0	0	1	0	1	-	0	6	0	0	6	-	7	12	0	0	19	-	53
% Buses and Single-Unit																									
Trucks	_	0.9%	0.1%			-			0.0% (-		1.0%			0.6%	-	1.3%	1.2%			1.3%	-	0.8%
Bicycles on Road	1	27	2	_	30	-	1	0	4	0	5	-	1	38	18	0	57	-	11	51	2	0	64	-	156
% Bicycles on Road	0.3%	0.9%	0.3%		0.8%	400:	100% (4.000	100%	6.3%	3.8%		5.3%	4000	2.1%	5.2%			4.3%	- 4450	2.4%
Pedestrians	-	-	-	_	-	1324	-	_	-	-	-	1629	-	-		_	-	1002	-			_		1159	
% Pedestrians	-	-		-	-	99.3%		-		-	- '	99.6%	-	-		-	- 5	99.3%		-		-	- '	99.7%	
Bicycles on Crosswalk	-	-	-		-	9	-	-	-	-	-	7	-	-	-	-	-	14	-	-		-	-	3	
% Bicycles on Crosswalk	-	-	-	-	-	0.7%	-	-	-	-	-	0.4%	-	-	-	-	-	0.7%	-	-	-	-	-	0.3%	

^{*}Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

Fri May 13, 2022

Full Length (5 PM-9 PM)

All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks, Pedestrians, Bicycles on Road, Bicycles on Crosswalk)

All Movements

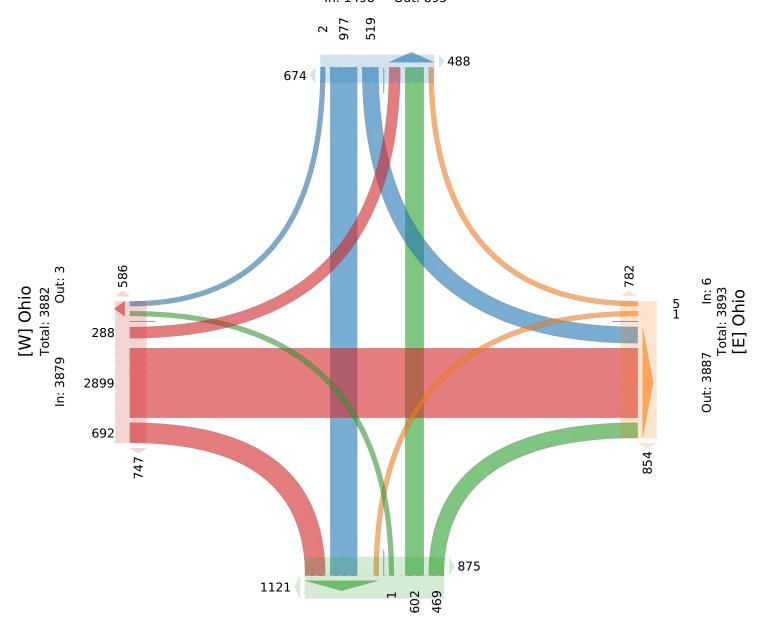
ID: 949363, Location: 41.892499, -87.626729

G FA GEWALT HAMILTON ASSOCIATES, INC.
Provided by: Gewalt Hamilton Associates Inc.

Provided by: Gewalt Hamilton Associates Inc. 625 Forest Edge Drive, Vernon Hills, IL, 60061, US

[N] Wabash

Total: 2393 In: 1498 Out: 895



Out: 1670 In: 1072 Total: 2742 [S] Wabash

Fri May 13, 2022

PM Peak (5:30 PM - 6:30 PM) - Overall Peak Hour

All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks,

Pedestrians, Bicycles on Road, Bicycles on Crosswalk)

All Movements

ID: 949363, Location: 41.892499, -87.626729



625 Forest Edge Drive, Vernon Hills, IL, 60061, US

Leg	Ohio						Ohio)					Wab	ash					Wabasł	n					
Direction	Eastbo	und					Wes	tbou	ınd				Nort	hbound	i				Southbo	ound					
Time	L	T	R	U	App	Ped*	L	T	R	U A	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	Int
2022-05-13 5:30PM	19	170	49	0	238	76	0	0	0	0	0	106	0	50	31	0	81	129	30	81	1	0	112	62	431
5:45PM	25	175	48	0	248	99	0	0	0	0	0	109	0	38	31	0	69	130	31	92	0	0	123	64	440
6:00PM	21	196	43	0	260	65	0	0	0	0	0	90	0	50	29	0	79	111	40	66	0	0	106	72	445
6:15PM	23	201	49	0	273	97	0	0	0	0	0	104	0	46	27	0	73	161	38	71	0	0	109	76	455
Total	88	742	189	0	1019	337	0	0	0	0	0	409	0	184	118	0	302	531	139	310	1	0	450	274	1771
% Approach	8.6%	72.8%	18.5%	0%	-	-	0% ()%(0% (0%	-	-	0%	60.9%	39.1%	0%	-	-	30.9%	68.9%	0.2% (0%	-	-	-
% Total	5.0%	41.9%	10.7%	0% 5	57.5%	-	0% ()%(0% (0%	0%	-	0%	10.4%	6.7%	0% 1	17.1%	-	7.8%	17.5%	0.1% (0% 2	25.4%	-	-
PHF	0.880	0.921	0.959	-	0.931	-	-	-	-	-	-	-	-	0.899	0.944	-	0.929	-	0.878	0.853	-	-	0.927	-	0.967
Lights	88	725	188	0	1001	-	0	0	0	0	0	-	0	166	117	0	283	-	136	291	0	0	427	-	1711
% Lights	100%	97.7%	99.5% (0% 9	98.2%	-	0% ()%(0% (0%	-	-	0% 9	90.2%	99.2% (0% 9	93.7%	-	97.8%	93.9%	0% (0% 9	94.9%	-	96.6%
Articulated Trucks	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0
% Articulated Trucks	0%	0%	0% (0%	0%	-	0% ()%(0% (0%	-	-	0%	0%	0% (0%	0%	-	0%	0%	0% (0%	0%	-	0%
Buses and Single-Unit Trucks	0	8	0	0	8	-	0	0	0	0	0	-	0	3	0	0	3	-	1	6	0	0	7	-	18
% Buses and Single-Unit																									
Trucks	0%	1.1%	0% (0%	0.8%	-	0% ()%(0% (0%	-	-	0%	1.6%	0% (0%	1.0%	-	0.7%	1.9%	0% (0%	1.6%	-	1.0%
Bicycles on Road	0	9	1	0	10	-	0	0	0	0	0	-	0	15	1	0	16	-	2	13	1	0	16	-	42
% Bicycles on Road	0%	1.2%	0.5%	0%	1.0%	-	0% ()%(0% (0%	-	-	0%	8.2%	0.8%	0%	5.3%	-	1.4%	4.2%	100% (0%	3.6%	-	2.4%
Pedestrians	-	-	-	-	-	336	-	-	-	-	-	407	-	-	-	-	-	525	-	-	-	-	-	273	
% Pedestrians	-	-	-	-	- 9	99.7%	-	-	-	-	- !	99.5%	-	-	-	-	-	98.9%	-	-	-	-	- 9	99.6%	-
Bicycles on Crosswalk	-	-	-	-	-	1	-	-	-	-	-	2	-	-	-	-	-	6	-	-	-	-	-	1	
% Bicycles on Crosswalk	-	-	-	-	-	0.3%	-	-	-	-	-	0.5%	-	-	-	-	-	1.1%	-	-	-	-	-	0.4%	-

^{*}Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

Fri May 13, 2022

PM Peak (5:30 PM - 6:30 PM) - Overall Peak Hour

All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks,

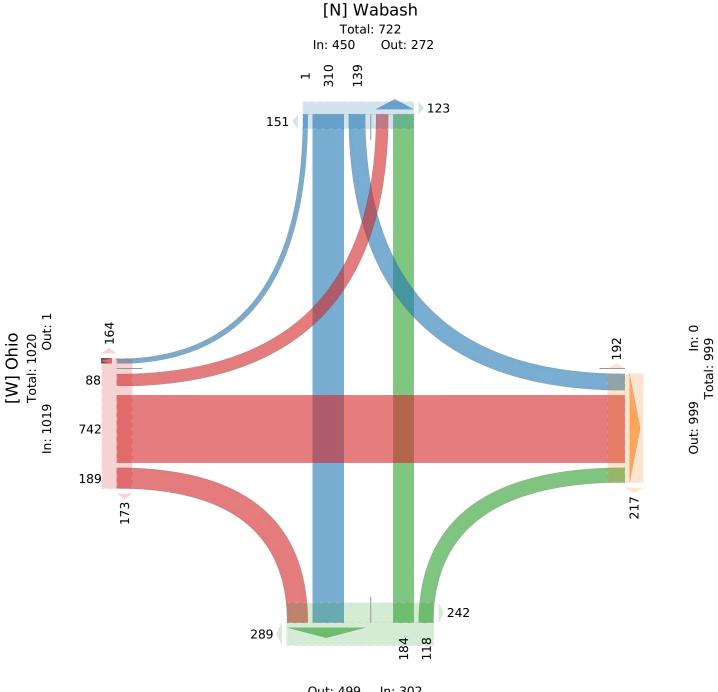
Pedestrians, Bicycles on Road, Bicycles on Crosswalk)

All Movements

ID: 949363, Location: 41.892499, -87.626729



Provided by: Gewalt Hamilton Associates Inc. 625 Forest Edge Drive, Vernon Hills, IL, 60061, US



Out: 499 In: 302 Total: 801 [S] Wabash

Thu May 12, 2022

Full Length (5 PM-9 PM)

All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks, Pedestrians,

Bicycles on Road, Bicycles on Crosswalk)

All Movements

ID: 949356, Location: 41.893263, -87.628108



Leg	Onta	ario					Ontario						State						State						
Direction	East	bound					Westbo	und					Northb	ound					Southb	ound					
Time	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	Int
2022-05-12 5:00PM	0	1	0	0	1	155	19	187	14	0	220	76	22	89	0	0	111	79	0	79	33	0	112	59	444
5:15PM	0	0	4	0	4	153	27	167	18	0	212	90	16	108	1	0	125	61	0	72	31	0	103	91	444
5:30PM	0	0	0	0	0	106	15	190	20	0	225	103	28	99	0	0	127	70	0	78	32	0	110	80	462
5:45PM	0	0	1	0	1	122	21	147	23	0	191	99	16	92	0	0	108	62	1	87	30	0	118	105	418
Hourly Total	. 0	1	5	0	6	536	82	691	75	0	848	368	82	388	1	0	471	272	1	316	126	0	443	335	1768
6:00PM	0	0	0	0	0	121	23	192	9	0	224	92	15	90	0	0	105	57	0	78	46	0	124	69	45
6:15PM	0	0	0	0	0	117	19	182	17	0	218	98	23	71	0	1	95	60	0	84	44	0	128	88	44
6:30PM	0	0	1	0	1	114	17	159	17	0	193	93	18	70	0	0	88	47	0	71	49	0	120	92	40
6:45PM	0	0	0	0	0	126	17	192	15	0	224	114	26	75	0	0	101	38	0	89	31	0	120	82	44
Hourly Total	. 0	0	1	0	1	478	76	725	58	0	859	397	82	306	0	1	389	202	0	322	170	0	492	331	174
7:00PM	0	0	0	0	0	108	12	196	18	0	226	116	27	77	0	0	104	57	0	81	42	0	123	95	45
7:15PM	0	0	0	0	0	144	19	198	19	0	236	105	20	76	0	0	96	59	0	78	47	0	125	79	45
7:30PM	0	0	0	0	0	154	19	188	14	0	221	98	19	69	0	0	88	59	1	72	49	0	122	71	43
7:45PM	0	0	0	0	0	105	16	203	15	0	234	102	36	63	0	1	100	85	1	68	49	0	118	66	45
Hourly Total	. 0	0	0	0	0	511	66	785	66	0	917	421	102	285	0	1	388	260	2	299	187	0	488	311	179
8:00PM	0	0	2	0	2	146	18	189	14	0	221	118	26	69	0	1	96	78	0	84	46	0	130	84	44
8:15PM	0	0	2	0	2	129	25	165	9	0	199	102	27	71	0	0	98	57	0	69	29	0	98	108	39
8:30PM	0	0	2	0	2	147	13	152	6	0	171	85	32	61	0	0	93	96	0	64	33	0	97	77	363
8:45PM	0	0	0	0	0	114	9	150	13	1	173	84	23	65	0	0	88	61	0	70	30	0	100	80	36
Hourly Total	. 0	0	6	0	6	536	65	656	42	1	764	389	108	266	0	1	375	292	0	287	138	0	425	349	1570
Total	. 0	1	12	0	13	2061	289	2857	241	1	3388	1575	374	1245	1	3	1623	1026	3	1224	621	0	1848	1326	687
% Approach	0%	7.7% 9	92.3% (0%	-	-	8.5%	34.3%	7.1%	0%	-	-	23.0%	76.7%	0.1%	0.2%	-	-	0.2% 6	66.2%	33.6%	0%	-	-	
% Total	0%	0%	0.2%	0%	0.2%	-	4.2%	41.6%	3.5%	0%	49.3%	-	5.4%	18.1%	0%	0% 2	23.6%	-	0% :	17.8%	9.0%	0% 2	26.9%	-	
Lights	0	0	0	0	0	-	284	2789	221	1	3295	-	365	1145	0	3	1513	-	0	1152	593	0	1745	-	655
% Lights	0%	0%	0% (0%	0%	-	98.3%	97.6%	91.7%	100%	97.3%	-	97.6%	92.0%	0%	100% 9	93.2%	-	0% 9	94.1%	95.5%	0% 9	94.4%	-	95.4%
Articulated Trucks	0	0	0	0	0	-	0	4	0	0	4	-	0	2	0	0	2	-	0	0	1	0	1	-	
% Articulated Trucks	0%	0%	0% (0%	0%	-	0%	0.1%	0%	0%	0.1%	-	0%	0.2%	0%	0%	0.1%	-	0%	0%	0.2%	0%	0.1%	-	0.1%
Buses and Single-Unit																									
Trucks	0	0	0	0	0	-	0	35	1	0	36	-	3	42	0	0	45	-	0	30	10	0	40	-	12
% Buses and Single-Unit	1																								
Trucks	-	0%	0% (0%	-		1.2%	0.4%		1.1%	-	0.8%	3.4%	0%		2.8%	-	0%	2.5%				-	1.89
Bicycles on Road	-	1	12	0	13	-	5	29	19	0	53	-	6	56	1	0	63	-	3	42	17	0	62	-	19
% Bicycles on Road	0%	100%	100% (0% 1	100%	-	1.7%	1.0%	7.9%	0%	1.6%	-	1.6%	4.5%	100%	0%	3.9%	-	100%	3.4%	2.7%	0%		-	2.89
Pedestrians	-	-	-	-	-	2028	-	-	-	-	-	1559	-	-	-	-	-	1009	-	-	-	-		1314	
% Pedestrians	-	-	-	-	- (98.4%	-	-	-	-	- 9	99.0%	-	-	-	-	-	98.3%	-	-	-	-	- !	99.1%	
Bicycles on Crosswalk	-	-	-	-	-	33	-	-	-	-	-	16	-	-	-	-	-	17	-	-	-	-	-	12	
% Bicycles on Crosswalk	-	-	-	-	-	1.6%	-	-	-	-	-	1.0%	-	-	-	-	-	1.7%	-	-	-	-	-	0.9%	

^{*}Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

Thu May 12, 2022

Full Length (5 PM-9 PM)

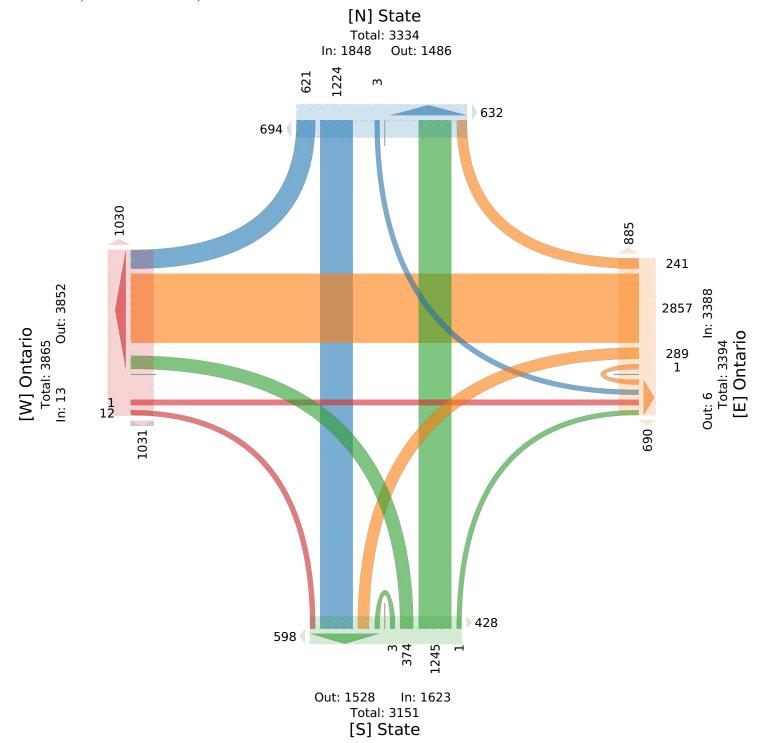
All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks,

Pedestrians, Bicycles on Road, Bicycles on Crosswalk)

All Movements

ID: 949356, Location: 41.893263, -87.628108





Thu May 12, 2022

PM Peak (7:15 PM - 8:15 PM) - Overall Peak Hour

All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks,

Pedestrians, Bicycles on Road, Bicycles on Crosswalk)

All Movements

ID: 949356, Location: 41.893263, -87.628108



Leg	Onta	ario					Ontario						State						State						
Direction	East	bour	nd				Westbo	und					Northbo	ound					Southb	ound					
Time	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	Int
2022-05-12 7:15PM	0	0	0	0	0	144	19	198	19	0	236	105	20	76	0	0	96	59	0	78	47	0	125	79	457
7:30PM	0	0	0	0	0	154	19	188	14	0	221	98	19	69	0	0	88	59	1	72	49	0	122	71	431
7:45PM	0	0	0	0	0	105	16	203	15	0	234	102	36	63	0	1	100	85	1	68	49	0	118	66	452
8:00PM	0	0	2	0	2	146	18	189	14	0	221	118	26	69	0	1	96	78	0	84	46	0	130	84	449
Total	0	0	2	0	2	549	72	778	62	0	912	423	101	277	0	2	380	281	2	302	191	0	495	300	1789
% Approach	0%	0% 1	100%	0%	-	-	7.9%	35.3%	6.8%)%	-	-	26.6%	72.9% (0% (0.5%	-	-	0.4%	61.0%	38.6%	0%	-	-	-
% Total	0%	0%	0.1%	0% (0.1%	-	4.0%	43.5%	3.5% ()% !	51.0%	-	5.6%	15.5% (0% (0.1% 2	21.2%	-	0.1%	16.9%	10.7%	0% 2	27.7%	-	-
PHF	-	-	-	-	-	-	0.934	0.950	0.859	-	0.962	-	0.688	0.902	- 0	.500	0.929	-	-	0.901	0.969	-	0.956	-	0.977
Lights	0	0	0	0	0	-	71	766	55	0	892	-	99	260	0	2	361	-	0	287	184	0	471	-	1724
% Lights	0%	0%	0% (0%	0%	-	98.6% !	98.5%	88.7% ()% 9	97.8%	-	98.0%	93.9% (0% 1	.00% 9	95.0%	-	0% 9	95.0%	96.3%	0% 9	95.2%	-	96.4%
Articulated Trucks	0	0	0	0	0	-	0	1	0	0	1	-	0	0	0	0	0	-	0	0	1	0	1	-	2
% Articulated Trucks	0%	0%	0%	0%	0%	-	0%	0.1%	0% ()%	0.1%	-	0%	0% (0%	0%	0%	-	0%	0%	0.5%	0%	0.2%	-	0.1%
Buses and Single-Unit	1																								
Trucks	0	0	0	0	0	-	0	4	0	0	4	-	0	7	0	0	7	-	0	5	1	0	6	-	17
% Buses and Single-Unit	00/	00/	00/	007	00/		00/	0.50/	00/ /	20/	0.40/		00/	2.50/ /	00/	00/	1.00/		00/	1 70/	0.50/	20/	1 20/		1.00/
Trucks		0%	0%		0%		1	0.5%	7		0.4%	-		2.5% (0%	1.8%	-			0.5%	0	1.2%		1.0%
Bicycles on Road	-	-		0	2		1.4%		/ 11.3% (0	15	-	2.0%	3.6%			3.2%		100%	3.3%			3.4%		2.6%
% Bicycles on Road	0%	U% I	100%	U% I	100%	-		0.9%	11.3% (J%	1.0%	417		3.6% (0%	0%		270	100%	3.3%	2.6%	J%	3.4%	200	2.6%
Pedestrians	-	_		_	-	533	-			_		417	-		_		-	279	-			_	-	298	
% Pedestrians	-	-		-	- 5	97.1%	-			-	- :	98.6%	-		-		-	99.3%	-			-		99.3%	-
Bicycles on Crosswalk	+	-		-		16	-			-		1 40/	-		-			2	-			-		2	
% Bicycles on Crosswalk	-	-	-	-	-	2.9%	-	-		-	-	1.4%	-	-	-	-	-	0.7%	-	-	_	-	-	0.7%	-

^{*}Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

Thu May 12, 2022

PM Peak (7:15 PM - 8:15 PM) - Overall Peak Hour

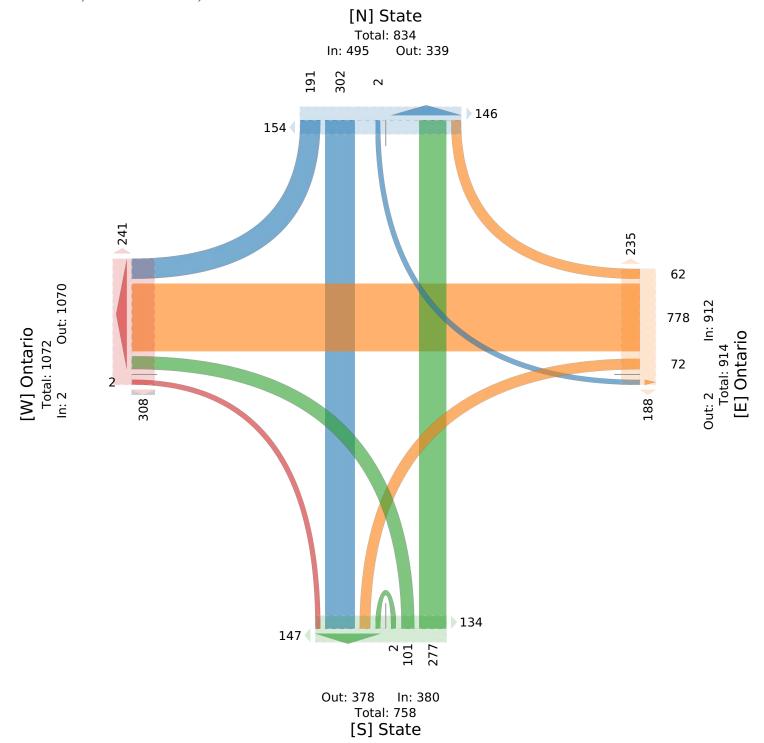
All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks,

Pedestrians, Bicycles on Road, Bicycles on Crosswalk)

All Movements

ID: 949356, Location: 41.893263, -87.628108





Fri May 13, 2022

Full Length (5 PM-9 PM)

All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks, Pedestrians, Bicycles on Road, Bicycles on Crosswalk)

All Movements

ID: 949360, Location: 41.893263, -87.628108



Leg	Ontario					Ontario						State						State						
Direction	Eastbound					Westbo	und					Northbo	ound					Southb	ound					
Time	L T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	Int
2022-05-13 5:00PM	0 0	0	1	1	147	18	206	18	0	242	123	21	75	0	0	96	77	0	70	29	0	99	97	438
5:15PM	0 0	0	0	0	162	21	201	23	0	245	100	27	82	0	0	109	61	0	59	30	1	90	72	44
5:30PM	0 0	1	0	1	132	18	228	14	0	260	92	20	101	0	0	121	56	0	68	42	0	110	90	492
5:45PM	0 0	0	0	0	180	16	189	21	0	226	98	22	103	0	0	125	70	0	92	38	0	130	109	48
Hourly Total	0 0	1	1	2	621	73	824	76	0	973	413	90	361	0	0	451	264	0	289	139	1	429	368	185
6:00PM	0 0	0	0	0	178	15	181	22	0	218	93	29	77	0	0	106	71	0	104	40	1	145	78	469
6:15PM	0 0	0	0	0	158	14	187	14	0	215	107	21	72	0	0	93	80	0	97	38	0	135	69	44
6:30PM	0 0	0	0	0	160	15	188	14	0	217	91	30	64	0	0	94	61	0	69	39	0	108	106	419
6:45PM	0 0	0	0	0	126	16	171	15	0	202	98	28	80	0	0	108	67	0	85	38	0	123	102	43
Hourly Total	0 0	0	0	0	622	60	727	65	0	852	389	108	293	0	0	401	279	0	355	155	1	511	355	1764
7:00PM	0 0	0	0	0	153	19	194	21	0	234	93	24	68	0	1	93	66	0	83	58	0	141	83	46
7:15PM	0 0	0	0	0	139	15	216	15	0	246	109	29	65	0	0	94	77	0	74	40	0	114	90	45
7:30PM	1 0	0	0	1	166	19	197	14	0	230	96	24	68	0	1	93	92	1	78	41	0	120	97	44
7:45PM	1 0	0	0	1	151	13	193	22	0	228	140	25	58	0	0	83	71	0	84	40	0	124	145	43
Hourly Total	2 0	0	0	2	609	66	800	72	0	938	438	102	259	0	2	363	306	1	319	179	0	499	415	180
8:00PM	0 0	0	0	0	155	14	198	22	1	235	103	24	57	0	0	81	77	0	80	43	0	123	73	439
8:15PM	0 0	0	0	0	155	19	149	6	0	174	112	26	64	0	0	90	84	0	69	51	0	120	125	38
8:30PM	0 0	0	0	0	132	19	169	9	0	197	119	22	67	0	0	89	67	0	70	46	1	117	118	40
8:45PM	0 0	0	0	0	156	18	175	14	0	207	96	29	77	0	0	106	75	0	78	46	0	124	96	43
Hourly Total	0 0	0	0	0	598	70	691	51	1	813	430	101	265	0	0	366	303	0	297	186	1	484	412	166
Total	2 0	1	1	4	2450	269	3042	264	1	3576	1670	401	1178	0	2	1581	1152	1	1260	659	3	1923	1550	708
% Approach	50.0% 0% 2	25.0%	25.0%	-	-	7.5% 8	35.1%	7.4%	0%	-	-	25.4%	74.5%	0% 0	0.1%	-	-	0.1%	65.5%	34.3%	0.2%	-	-	
% Total	0% 0%	0%	0%	0.1%	-	3.8%	12.9%	3.7%	0% !	50.5%	-	5.7%	16.6%	0%	0% 2	22.3%	-	0%	17.8%	9.3%	0% 2	27.1%	-	
Lights	0 0	0	1	1	-	263	2964	245	1	3473	-	393	1099	0	2	1494	-	0	1162	645	1	1808	-	677
% Lights	0% 0%	0%	100%	25.0%	-	97.8%	97.4%	92.8% 1	00% 9	97.1%	-	98.0%	93.3%	0% 1	00% 9	94.5%	-	0% 9	92.2%	97.9% 3	33.3%	94.0%	-	95.79
Articulated Trucks	0 0	0	0	0	-	0	6	0	0	6	-	0	0	0	0	0	-	0	0	0	0	0	-	
% Articulated Trucks	0% 0%	0%	0%	0%	-	0%	0.2%	0%	0%	0.2%	-	0%	0% (0%	0%	0%	-	0%	0%	0%	0%	0%	-	0.19
Buses and Single-Unit																								
Trucks	0 0	0	0	0	-	4	48	7	0	59	-	3	30	0	0	33	-	0	25	10	0	35	-	12
% Buses and Single-Unit																								
Trucks	0% 0%	0%	0%	0%	-	1.5%	1.6%	2.7%	0%	1.6%	-	0.7%	2.5%	0%	0%	2.1%	-	0%	2.0%	1.5%		1.8%	-	1.89
Bicycles on Road	2 0	1	0	3	-	2	24	12	0	38	-	5	49	0	0	54	-	1	73	4	2	80	-	17
% Bicycles on Road	100% 0%	100%	0%	75.0%	-	0.7%	0.8%	4.5%	0%	1.1%	-	1.2%	4.2%	0%	0%	3.4%	-	100%	5.8%	0.6% 6	66.7%	4.2%	-	2.5%
Pedestrians		-	-	-	2430	-	-	-	-	-	1661	-	-	-	-	-	1147	-	-	-	-	-	1546	
% Pedestrians		-	-	-	99.2%	-	-	-	-	-	99.5%	-	-	-	-	- !	99.6%	-	-	-	-	- 9	99.7%	
Bicycles on Crosswalk		-	-	-	20	-	-	-	-	-	9	-	-	-	-	-	5	-	-	-	-	-	4	
% Bicycles on Crosswalk			-	-	0.8%	-	-		-	_	0.5%	-	-	-	-	-	0.4%	-	-	-	-		0.3%	

^{*}Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

Fri May 13, 2022

Full Length (5 PM-9 PM)

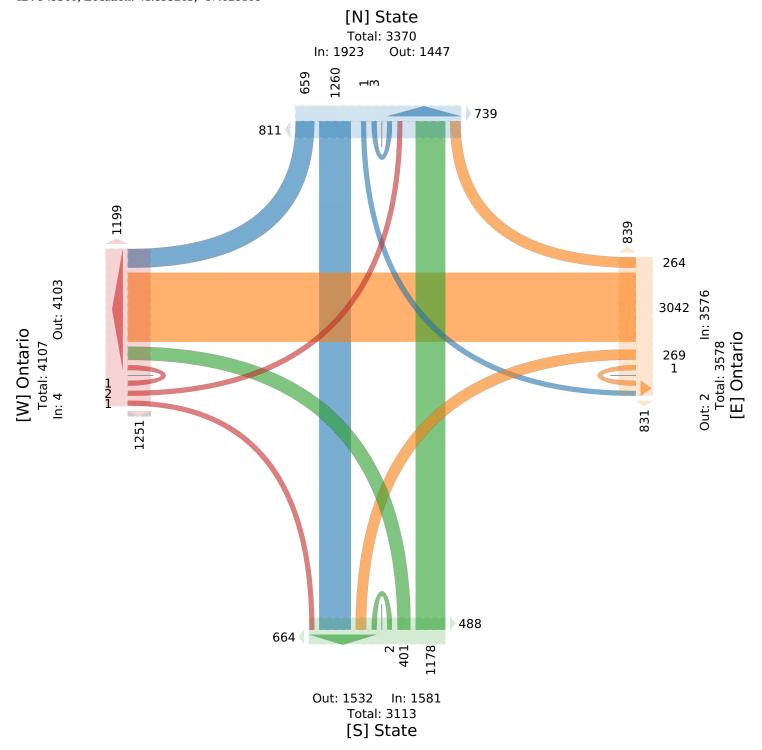
All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks,

Pedestrians, Bicycles on Road, Bicycles on Crosswalk)

All Movements

ID: 949360, Location: 41.893263, -87.628108





Fri May 13, 2022

PM Peak (5:15 PM - 6:15 PM) - Overall Peak Hour

All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks,

Pedestrians, Bicycles on Road, Bicycles on Crosswalk)

All Movements

ID: 949360, Location: 41.893263, -87.628108



Leg	Ont	ario					Ontario						State						State	2					
Direction	Eas	tbou	ınd				Westbo	und					Northbo	ound					Sout	hbound	i				
Time	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	Int
2022-05-13 5:15PM	0	0	0	0	0	162	21	201	23	0	245	100	27	82	0	0	109	61	0	59	30	1	90	72	444
5:30PM	0	0	1	0	1	132	18	228	14	0	260	92	20	101	0	0	121	56	0	68	42	0	110	90	492
5:45PM	0	0	0	0	0	180	16	189	21	0	226	98	22	103	0	0	125	70	0	92	38	0	130	109	481
6:00PM	0	0	0	0	0	178	15	181	22	0	218	93	29	77	0	0	106	71	0	104	40	1	145	78	469
Total	0	0	1	0	1	652	70	799	80	0	949	383	98	363	0	0	461	258	0	323	150	2	475	349	1886
% Approach	0%	0%	100%	0%	-	-	7.4%	84.2%	8.4%	0%	-	-	21.3%	78.7% (0% ()%	-	-	0% (68.0%	31.6%	0.4%	-	-	-
% Total	0%	0%	0.1%	0%	0.1%	-	3.7%	42.4%	4.2%	0%	50.3%	-	5.2%	19.2% (0% ()% 2	24.4%	-	0% :	17.1%	8.0%	0.1%	25.2%	-	-
PHF	-	-	-	-	-	-	0.833	0.871	0.898	-	0.907	-	0.845	0.893	-	-	0.941	-	-	0.826	0.909	0.250	0.860	-	0.951
Lights	0	0	0	0	0	-	67	773	75	0	915	-	96	340	0	0	436	-	0	298	145	1	444	-	1795
% Lights	0%	0%	0%	0%	0%	-	95.7%	96.7%	93.8%	0%	96.4%	-	98.0%	93.7% (0% ()% 9	94.6%	-	0% 9	92.3%	96.7%	50.0% 9	93.5%	-	95.2%
Articulated Trucks	0	0	0	0	0	-	0	3	0	0	3	-	0	0	0	0	0	-	0	0	0	0	0	-	3
% Articulated Trucks	0%	0%	0%	0%	0%	-	0%	0.4%	0%	0%	0.3%	-	0%	0% (0% ()%	0%	-	0%	0%	0%	0%	0%	-	0.2%
Buses and Single-Unit Trucks	0	0	0	0	0	_	3	15	4	0	22	_	2	10	0	0	12	_	0	6	4	0	10	_	44
% Buses and Single-Unit	Ť							10	•				_								•				
Trucks	0%	0%	0%	0%	0%	-	4.3%	1.9%	5.0%	0%	2.3%	-	2.0%	2.8%	0% ()%	2.6%	-	0%	1.9%	2.7%	0%	2.1%	-	2.3%
Bicycles on Road	0	0	1	0	1	-	0	8	1	0	9	-	0	13	0	0	13	-	0	19	1	1	21	-	44
% Bicycles on Road	0%	0%	100%	0%	100%	-	0%	1.0%	1.3%	0%	0.9%	-	0%	3.6% (0% ()%	2.8%	-	0%	5.9%	0.7%	50.0%	4.4%	-	2.3%
Pedestrians	-	-	-	-	-	650	-	-	-	-	-	380	-	-	-	-	-	257	-	-	-	-	-	348	
% Pedestrians	-	-	-	-	- 9	99.7%	-	-	-	-	- 1	99.2%	-	-	-	-	-	99.6%	-	-	-	-	- 9	99.7%	
Bicycles on Crosswalk	-	-	-	-	-	2	-	-	-	-	-	3	-	-	-	-	-	1	-	-	-	-	-	1	
% Bicycles on Crosswalk	-	-	-	-	-	0.3%	-	-	-	-	-	0.8%	-	-	-	-	-	0.4%	-	-	-	-	-	0.3%	-

 $^{^*}$ Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

Fri May 13, 2022

PM Peak (5:15 PM - 6:15 PM) - Overall Peak Hour

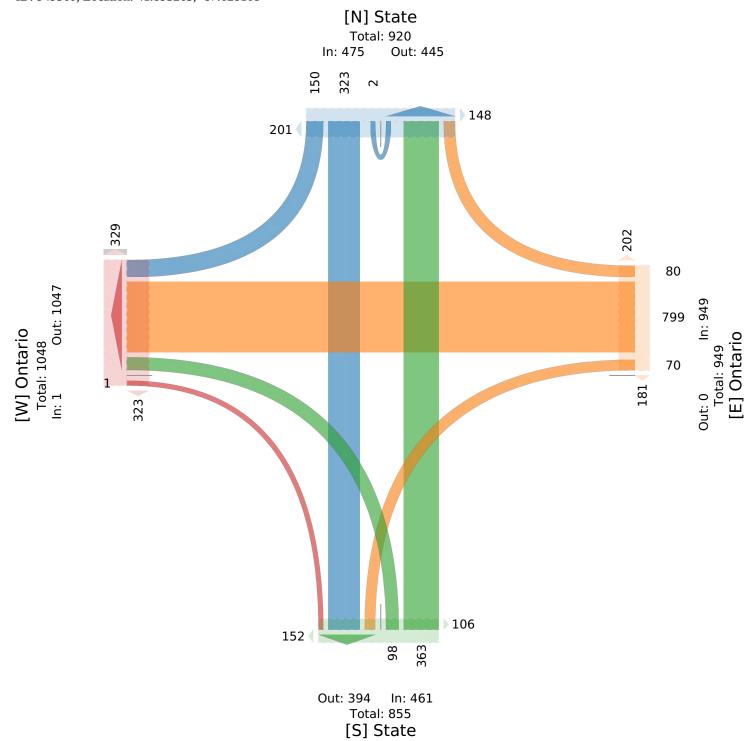
All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks,

Pedestrians, Bicycles on Road, Bicycles on Crosswalk)

All Movements

ID: 949360, Location: 41.893263, -87.628108





Thu May 12, 2022

Full Length (5 PM-9 PM)

All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks, Pedestrians, Bicycles on Road, Bicycles on Crosswalk)

All Movements

ID: 949357, Location: 41.893283, -87.626778



625 Forest Edge Drive, Vernon Hills, IL, 60061, US

Leg	Onta	ario					Ontario)					Wabasl	n					Wabas	h					
Direction	East	bound					Westbo	ound					Northb	ound					Southb	ound					
Time	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	Int
2022-05-12 5:00PM	0	0	0	0	0	43	29	173	4	0	206	80	35	36	0	0	71	47	0	63	19	0	82	43	359
5:15PM	0	0	0	0	0	40	21	146	7	0	174	81	50	59	0	0	109	74	1	66	25	0	92	73	375
5:30PM	0	0	0	0	0	53	23	175	8	0	206	77	39	57	0	0	96	53	0	70	23	0	93	85	39
5:45PM	0	0	0	0	0	49	26	144	3	0	173	90	55	45	0	0	100	56	0	67	16	0	83	118	356
Hourly Total	0	0	0	0	0	185	99	638	22	0	759	328	179	197	0	0	376	230	1	266	83	0	350	319	1485
6:00PM	0	0	0	0	0	49	23	152	9	0	184	91	45	56	0	0	101	73	0	58	21	0	79	57	364
6:15PM	0	0	1	0	1	42	30	153	5	0	188	80	48	31	0	0	79	82	0	68	15	0	83	96	35
6:30PM	0	1	0	0	1	51	24	146	9	0	179	92	32	37	0	0	69	58	0	57	20	0	77	80	320
6:45PM	0	0	2	0	2	37	20	158	12	0	190	100	39	29	0	0	68	74	0	59	30	0	89	75	349
Hourly Total	0	1	3	0	4	179	97	609	35	0	741	363	164	153	0	0	317	287	0	242	86	0	328	308	1390
7:00PM	0	0	0	0	0	50	25	158	2	0	185	74	38	24	0	0	62	72	0	50	33	0	83	64	330
7:15PM	0	0	0	0	0	35	14	171	8	0	193	76	39	36	0	0	75	54	0	50	32	0	82	87	35
7:30PM	0	0	1	0	1	26	19	153	4	0	176	61	34	27	0	0	61	55	0	50	26	0	76	68	314
7:45PM	0	1	0	0	1	32	24	188	1	0	213	93	33	35	0	0	68	77	0	43	35	0	78	77	36
Hourly Total	0	1	1	0	2	143	82	670	15	0	767	304	144	122	0	0	266	258	0	193	126	0	319	296	135
8:00PM	0	0	0	0	0	46	26	152	6	0	184	76	32	20	1	0	53	60	0	45	26	0	71	79	30
8:15PM	0	0	0	0	0	23	24	153	2	0	179	80	25	24	0	0	49	59	0	34	24	0	58	82	28
8:30PM	0	0	0	0	0	44	26	118	9	0	153	48	23	31	0	0	54	54	0	40	15	0	55	78	26
8:45PM	0	0	0	0	0	38	33	125	5	0	163	48	25	32	0	0	57	60	0	43	22	0	65	69	28
Hourly Total	0	0	0	0	0	151	109	548	22	0	679	252	105	107	1	0	213	233	0	162	87	0	249	308	114
Total	0	2	4	0	6	658	387	2465	94	0	2946	1247	592	579	1	0	1172	1008	1	863	382	0	1246	1231	537
% Approach	0% 3	33.3%	66.7%	0%	-	-	13.1%	83.7%	3.2%	0%	-	-	50.5%	49.4%	0.1%	0%	-	-	0.1%	69.3%	30.7%	0%	-	-	
% Total	0%	0%	0.1%	0%	0.1%	-	7.2%	45.9%	1.8%	0% 5	54.9%	-	11.0%	10.8%	0%	0% 2	21.8%	-	0%	16.1%	7.1%	0% 2	23.2%	-	
Lights	0	0	0	0	0	-	376	2396	85	0	2857	-	583	541	0	0	1124	-	0	799	368	0	1167	-	514
% Lights	0%	0%	0%	0%	0%	-	97.2%	97.2%	90.4%	0% 9	97.0%	-	98.5%	93.4%	0%	0% 9	95.9%	-	0%	92.6%	96.3%	0% 9	3.7%	-	95.9%
Articulated Trucks	0	0	0	0	0	-	0	3	0	0	3	-	0	1	0	0	1	-	0	0	1	0	1	-	
% Articulated Trucks	0%	0%	0%	0%	0%	-	0%	0.1%	0%	0%	0.1%	-	0%	0.2%	0%	0%	0.1%	-	0%	0%	0.3%	0%	0.1%	-	0.1%
Buses and Single-Unit																									
Trucks	0	0	0	0	0	-	4	33	1	0	38	-	0	2	1	0	3	-	0	14	2	0	16	-	57
% Buses and Single-Unit																									
Trucks	-	0%	0%		0%	-	1.0%	1.3%	1.1%		1.3%	-	0%	0.3%			0.3%	-	0%	1.6%	0.5%			-	1.19
Bicycles on Road	0	2	4		6	-	7	33	8	0	48	-	9	35	0	0	44	-	1	50	11	0	62	-	160
% Bicycles on Road	0%	100%	100%	0%	100%	-	1.8%	1.3%	8.5%	0%	1.6%	-	1.5%	6.0%	0%		3.8%	-	100%	5.8%	2.9%	0%		-	3.09
Pedestrians	-	-	-	-	-	656	-	-	-	-	-	1240	-	-	-	-	-	998	-	-	-	-		1229	
% Pedestrians	-	-	-	-	-	99.7%	-	-	-	-	-	99.4%	-	-	-	-	- !	99.0%	-	-	-	-	- !	99.8%	
Bicycles on Crosswalk	-	-	-	-	-	2	-	-	-	-	-	7	-	-	-	-	-	10	-	-	-	-	-	2	
% Bicycles on Crosswalk	-	-	-	-	-	0.3%	-	-	-	-	-	0.6%	-	-	-	-	-	1.0%	-	-	-	-	-	0.2%	

^{*}Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

Thu May 12, 2022

Full Length (5 PM-9 PM)

All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks,

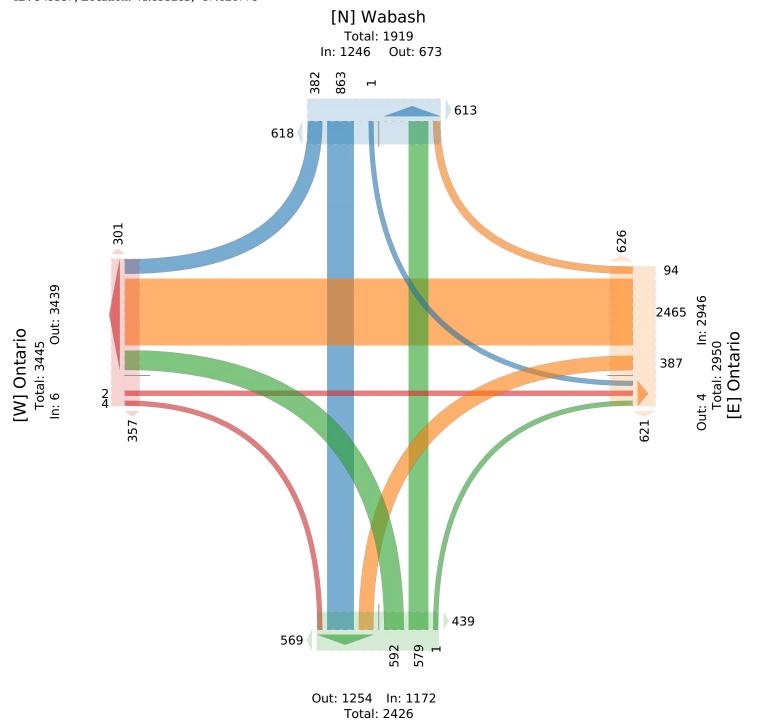
Pedestrians, Bicycles on Road, Bicycles on Crosswalk)

All Movements

ID: 949357, Location: 41.893283, -87.626778



Provided by: Gewalt Hamilton Associates Inc. 625 Forest Edge Drive, Vernon Hills, IL, 60061, US



[S] Wabash

Thu May 12, 2022

PM Peak (5:15 PM - 6:15 PM) - Overall Peak Hour

All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks,

Pedestrians, Bicycles on Road, Bicycles on Crosswalk)

All Movements

ID: 949357, Location: 41.893283, -87.626778



Leg	Ont	ario)					Ontario						Wabasł	1					Wabas	h					
Direction	Eas	tbo	und					Westbo	und					Northbo	ound					Southb	ound					
Time	L	Т	R	. 1	U A j	pp	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	Int
2022-05-12 5:15PM	0	0	0)	0	0	40	21	146	7	0	174	81	50	59	0	0	109	74	1	66	25	0	92	73	375
5:30PM	0	0	0)	0	0	53	23	175	8	0	206	77	39	57	0	0	96	53	0	70	23	0	93	85	395
5:45PM	0	0	0)	0	0	49	26	144	3	0	173	90	55	45	0	0	100	56	0	67	16	0	83	118	356
6:00PM	0	0	0)	0	0	49	23	152	9	0	184	91	45	56	0	0	101	73	0	58	21	0	79	57	364
Total	0	0	0)	0	0	191	93	617	27	0	737	339	189	217	0	0	406	256	1	261	85	0	347	333	1490
% Approach	0%	0%	0%	09	%	-	-	12.6%	33.7%	3.7% ()%	-	-	46.6%	53.4%	0% (0%	-	-	0.3%	75.2%	24.5%	0%	-	-	-
% Total	0%	0%	0%	09	% 0	%	-	6.2%	41.4%	1.8% ()% 4	49.5%	-	12.7%	14.6%	0% (0% 2	7.2%	-	0.1%	17.5%	5.7%	0% 2	23.3%	-	-
PHF	-	-		-	-	-	-	0.894	0.872	0.667	-	0.887	-	0.870	0.940	-	- 1	0.940	-	-	0.932	0.880	- (0.940	-	0.939
Lights	0	0	0)	0	0	-	90	595	23	0	708	-	188	203	0	0	391	-	0	241	81	0	322	-	1421
% Lights	0%	0%	0%	09	%	-	-	96.8%	96.4%	85.2% ()% 9	96.1%	-	99.5%	93.5%	0% (0% 9	6.3%	-	0% 9	92.3%	95.3% (0% 9	2.8%	-	95.4%
Articulated Trucks	0	0	0)	0	0	-	0	1	0	0	1	-	0	0	0	0	0	-	0	0	0	0	0	-	1
% Articulated Trucks	0%	0%	0%	09	%	-	-	0%	0.2%	0% ()%	0.1%	-	0%	0%	0% (0%	0%	-	0%	0%	0% (0%	0%	-	0.1%
Buses and Single-Unit Trucks		0	0		0	0		3	11	1	0	15		0	0	0	0	0		0	5	0	0	5		20
% Buses and Single-Unit	_				U	-	-	3	11	1	U	15		U	U	0	U	U	-	U	3	U	U	3	_	20
% buses and Single-Unit		0%	0%	09	%	_	_	3.2%	1.8%	3.7% ()%	2.0%	_	0%	0%	0% (0%	0%	_	0%	1.9%	0% (0%	1.4%	_	1.3%
Bicycles on Road			0		0	0	-	0	10	3		13	-	1	14		0	15	-	1	15		0	20	-	48
% Bicycles on Road	_	0%	0%	09	%	-	-	0%	1.6%	11.1% ()%	1.8%	-	0.5%	6.5%	0% (0%	3.7%	-	100%	5.7%	4.7%	0%	5.8%	-	3.2%
Pedestrians	-	-		-	-	-	191	-	-	-	-	-	335	-	-	-	-	-	253	-	-	-	-	-	333	
% Pedestrians	-	-		-	-	- 1	100%	-	-	-	-	- !	98.8%	-	-	-	-	-	98.8%	-	-	-	-	-	100%	-
Bicycles on Crosswalk	-	_		_	-	-	0	-	-	-	-	-	4	-	-	-	-	-	3	-	-	-	-	-	0	
% Bicycles on Crosswalk	-				-	-	0%	-	-	-	-	-	1.2%	-	-	-	-	-	1.2%	-	-	-	-	-	0%	-

^{*}Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

Thu May 12, 2022

PM Peak (5:15 PM - 6:15 PM) - Overall Peak Hour

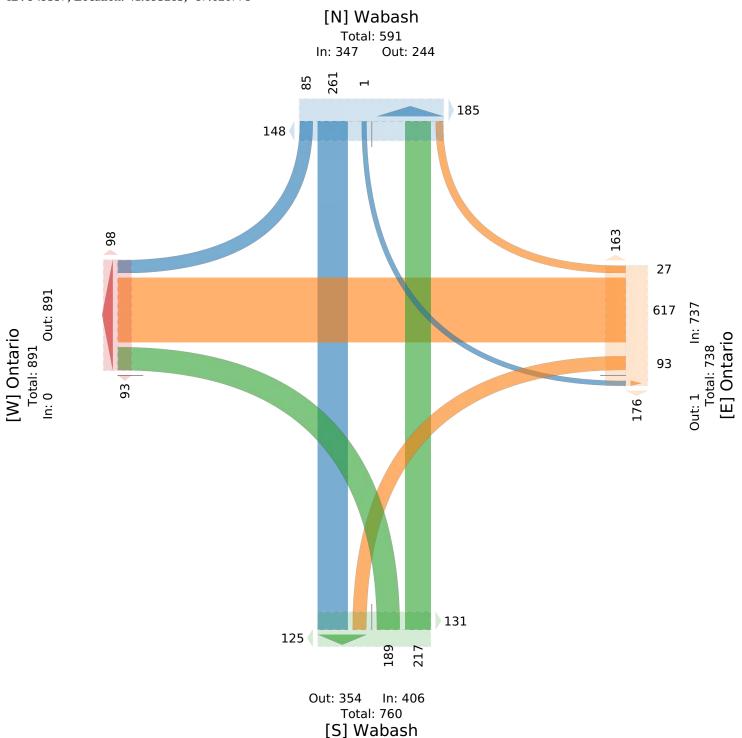
All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks,

Pedestrians, Bicycles on Road, Bicycles on Crosswalk)

All Movements

ID: 949357, Location: 41.893283, -87.626778





Fri May 13, 2022

Full Length (5 PM-9 PM)

All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks, Pedestrians, Bicycles on Road, Bicycles on Crosswalk)

All Movements

ID: 949361, Location: 41.893283, -87.626778



625 Forest Edge Drive, Vernon Hills, IL, 60061, US

Leg	Ontari	0				Ontario						Wabash	1					Wabas	h					
Direction	Eastbo	und				Westbo	und					Northbo	ound					Southb	ound					
Time	L 7	ΓR	U	App	Ped*	L	Т	R	U	Арр	Ped*	L	Т	R	U	Арр	Ped*	L	Т	R	U	Арр	Ped*	Int
2022-05-13 5:00PM	0 (0 0	0	0	53	30	179	9	0	218	96	38	50	0	0	88	49	0	58	20	0	78	100	384
5:15PM	0 (0 0	0	0	71	29	176	6	0	211	119	34	44	0	0	78	57	0	79	24	0	103	101	392
5:30PM	0 (0 (1	1	57	22	190	5	0	217	113	52	52	0	0	104	65	0	78	32	0	110	83	432
5:45PM	0 (0 (0	0	67	24	167	10	0	201	83	46	36	0	0	82	76	0	83	24	0	107	74	390
Hourly Total	0 (0 0	1	1	248	105	712	30	0	847	411	170	182	0	0	352	247	0	298	100	0	398	358	1598
6:00PM	0 (0 0	0	0	53	31	188	5	0	224	97	38	49	0	0	87	70	0	70	28	0	98	112	40
6:15PM	0 (0 0	0	0	52	31	169	8	0	208	79	39	57	0	0	96	100	0	68	22	0	90	77	39
6:30PM	0 (0 0	0	0	57	27	173	4	0	204	109	35	35	1	0	71	87	0	53	39	0	92	98	36
6:45PM	0 (0 0	0	0	53	26	169	9	0	204	103	37	29	0	0	66	82	0	58	26	0	84	102	35
Hourly Total	0 (0 0	0	0	215	115	699	26	0	840	388	149	170	1	0	320	339	0	249	115	0	364	389	152
7:00PM	0 (0 0	0	0	53	24	171	8	0	203	84	36	21	0	0	57	49	0	54	31	0	85	96	34
7:15PM	0 (0 0	0	0	40	35	179	5	0	219	101	45	31	0	0	76	84	1	56	38	0	95	113	39
7:30PM	0 (0 0	0	0	51	42	169	6	0	217	138	39	35	0	1	75	104	0	55	26	0	81	102	37
7:45PM	0 () 1	0	1	53	37	165	5	0	207	91	34	40	1	0	75	80	1	55	28	0	84	110	36
Hourly Total	0 () 1	0	1	197	138	684	24	0	846	414	154	127	1	1	283	317	2	220	123	0	345	421	147
8:00PM	0 (0 0	0	0	47	25	173	10	0	208	88	32	31	0	1	64	75	0	43	25	0	68	100	34
8:15PM	0 (0 0	0	0	39	33	126	7	0	166	82	23	36	0	0	59	92	0	40	23	2	65	102	29
8:30PM	0 (0 0	0	0	47	29	137	3	0	169	96	25	24	0	0	49	85	0	31	28	0	59	116	27
8:45PM	0 (0 0	0	0	27	25	128	8	0	161	69	36	24	0	0	60	63	0	40	32	0	72	75	29
Hourly Total	0 (0 0	0	0	160	112	564	28	0	704	335	116	115	0	1	232	315	0	154	108	2	264	393	120
Total	0 () 1	1	2	820	470	2659	108	0	3237	1548	589	594	2	2	1187	1218	2	921	446	2	1371	1561	579
% Approach	0% 0%	6 50.0%	50.0%	-	-	14.5% 8	32.1%	3.3% (0%	-	-	49.6%	50.0%	0.2%	0.2%	-	-	0.1% 6	57.2%	32.5%	0.1%	-	-	
% Total	0% 0%	6 0%	0%	0%	-	8.1%	15.9%	1.9% (0% 5	55.8%	-	10.2%	10.2%	0%	0% 2	20.5%	-	0% 1	15.9%	7.7%	0% 2	23.7%	-	
Lights	0 (0 0	1	1	-	455	2568	99	0	3122	-	581	538	1	2	1122	-	0	868	431	2	1301	-	554
% Lights	0% 0%	6 0%	100%	50.0%	-	96.8%	96.6%	91.7% (0% 9	96.4%	-	98.6% 9	90.6%	50.0%	100% 9	94.5%	-	0% 9	94.2%	96.6%	100% 9	94.9%	-	95.79
Articulated Trucks	0 (0 0	0	0	-	0	1	0	0	1	-	0	0	0	0	0	-	0	0	1	0	1	-	
% Articulated Trucks	0% 0%	6 0%	0%	0%	-	0%	0%	0% (0%	0%	-	0%	0%	0%	0%	0%	-	0%	0%	0.2%	0%	0.1%	-	09
Buses and Single-Unit																								
Trucks	0 (0 0	0	0	-	5	51	0	0	56	-	5	2	0	0	7	-	0	14	4	0	18	-	8
% Buses and Single-Unit	00/ 00	/ oc/	001	00/		1.10/	1.00/	007	00/	1.70/		0.00/	0.207	001	00/	0.00/		00/	1.50/	0.00/	00/	1 20/		1 40
Trucks			0%	0%	-	1.1%	1.9%	0% (1.7%	-	0.8%	0.3%	0%		0.6%	-	0%	1.5%	0.9%		1.3%	-	1.49
Bicycles on Road	0 (0	1	-	10	39	9	0	58	-	3	54	1	0	58		2	39	10	0	51	-	16
% Bicycles on Road	+		U% :	50.0%	- 00.4	2.1%	1.5%	8.3% (1.8%	1525	0.5%	9.1%	50.0%	0%	4.9%	1015	100%	4.2%	2.2%		3.7%	1550	2.99
Pedestrians	-			-	804	-			-	-	1535	-			-	-	1215	-		-			1558	
% Pedestrians	-		-		98.0%	-	-	-	-		99.2%	-	-	-	-		99.8%	-	-	-	-	- :	99.8%	
Bicycles on Crosswalk	-		-	-	16	-	-	-	-	-	13	-	-	-	-	-	3	-	-	-	-	-	3	
% Bicycles on Crosswalk	-		-	-	2.0%	_	-	-	-	-	0.8%	_	-	-	-	-	0.2%	-	-	-	-	-	0.2%	

^{*}Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

Fri May 13, 2022

Full Length (5 PM-9 PM)

All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks,

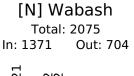
Pedestrians, Bicycles on Road, Bicycles on Crosswalk)

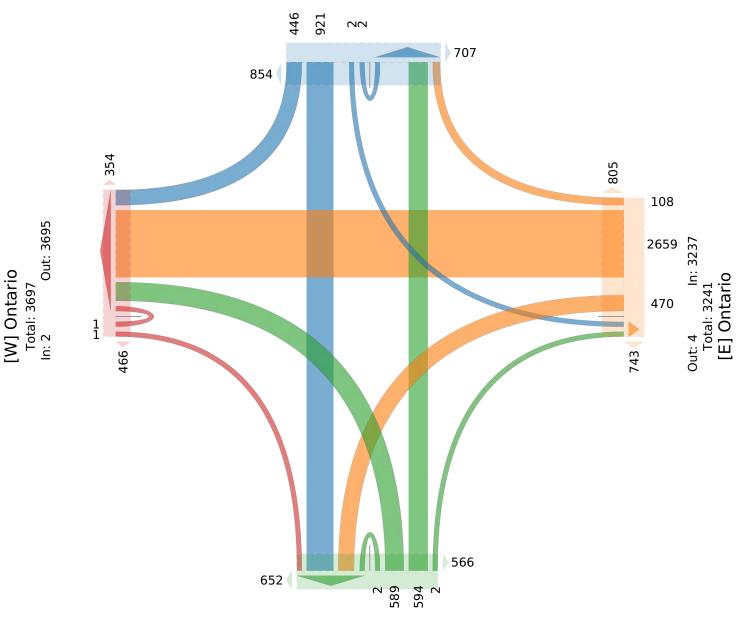
All Movements

ID: 949361, Location: 41.893283, -87.626778



Provided by: Gewalt Hamilton Associates Inc. 625 Forest Edge Drive, Vernon Hills, IL, 60061, US





Out: 1394 In: 1187 Total: 2581 [S] Wabash

Fri May 13, 2022

PM Peak (5:15 PM - 6:15 PM) - Overall Peak Hour

All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks,

Pedestrians, Bicycles on Road, Bicycles on Crosswalk)

All Movements

ID: 949361, Location: 41.893283, -87.626778



625 Forest Edge Drive, Vernon Hills, IL, 60061, US

Leg	Onta	ario					Ontario						Wabasl	h					Wab	ash					
Direction	East	bou	ınd				Westbo	und					Northb	ound					Sout	hbound	i				
Time	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	Int
2022-05-13 5:15PM	0	0	0	0	0	71	29	176	6	0	211	119	34	44	0	0	78	57	0	79	24	0	103	101	392
5:30PM	0	0	0	1	1	57	22	190	5	0	217	113	52	52	0	0	104	65	0	78	32	0	110	83	432
5:45PM	0	0	0	0	0	67	24	167	10	0	201	83	46	36	0	0	82	76	0	83	24	0	107	74	390
6:00PM	0	0	0	0	0	53	31	188	5	0	224	97	38	49	0	0	87	70	0	70	28	0	98	112	409
Total	0	0	0	1	1	248	106	721	26	0	853	412	170	181	0	0	351	268	0	310	108	0	418	370	1623
% Approach	0% (0%	0%	100%	-	-	12.4% 8	34.5%	3.0%	0%	-	-	48.4%	51.6%	0% (0%	-	-	0% 7	74.2%	25.8% (0%	-	-	-
% Total	0% (0%	0%	0.1%	0.1%	-	6.5%	44.4%	1.6%	0% 5	2.6%	-	10.5%	11.2%	0% (0% 2	21.6%	-	0% 1	19.1%	6.7%	0% 2	5.8%	-	-
PHF	-	-	-	0.250	0.250	-	0.855	0.942	0.650	-	0.963	-	0.817	0.846	-	-	0.831	-	-	0.944	0.858	-	0.946	-	0.933
Lights	0	0	0	1	1	-	105	690	26	0	821	-	168	158	0	0	326	-	0	297	102	0	399	-	1547
% Lights	0% (0%	0%	100%	100%	-	99.1% 9	95.7%	100%	0% 9	6.2%	-	98.8%	87.3%	0% (0% 9	92.9%	-	0% 9	95.8%	94.4% (0% 9	5.5%	-	95.3%
Articulated Trucks	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0
% Articulated Trucks	0%	0%	0%	0%	0%	-	0%	0%	0%	0%	0%	-	0%	0%	0% (0%	0%	-	0%	0%	0% (0%	0%	-	0%
Buses and Single-Unit Trucks		0	0	0	0	-	1	22	0	0	23	-	2	1	0	0	3	-	0	5	1	0	6	-	32
% Buses and Single-Unit Trucks		0%	0%	0%	0%	-	0.9%	3.1%	0%	0%	2.7%	-	1.2%	0.6%	0% (0%	0.9%	-	0%	1.6%	0.9%	0%	1.4%	-	2.0%
Bicycles on Road	0	0	0	0	0	-	0	9	0	0	9	-	0	22	0	0	22	-	0	8	5	0	13	-	44
% Bicycles on Road	0%	0%	0%	0%	0%	-	0%	1.2%	0%	0%	1.1%	-	0%	12.2%	0% (0%	6.3%	-	0%	2.6%	4.6%	0%	3.1%	-	2.7%
Pedestrians	-	-	-	-	-	238	-	-	-	-	-	409	-	-	-	-	-	268	-	-	-	-	-	368	
% Pedestrians	-	-	-	-	-	96.0%	-	-	-	-	- 9	99.3%	-	-	-	-	-	100%	-	-	-	-	- 9	99.5%	-
Bicycles on Crosswalk	-	-	-	-	-	10	-	-	-	-	-	3	-	-	-	-	-	0	-	-	-	-	-	2	
% Bicycles on Crosswalk	-	-	-	-	-	4.0%	-	-	-	-	-	0.7%	-	-	-	-	-	0%	-	-	-	-	-	0.5%	-

^{*}Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

Fri May 13, 2022

PM Peak (5:15 PM - 6:15 PM) - Overall Peak Hour

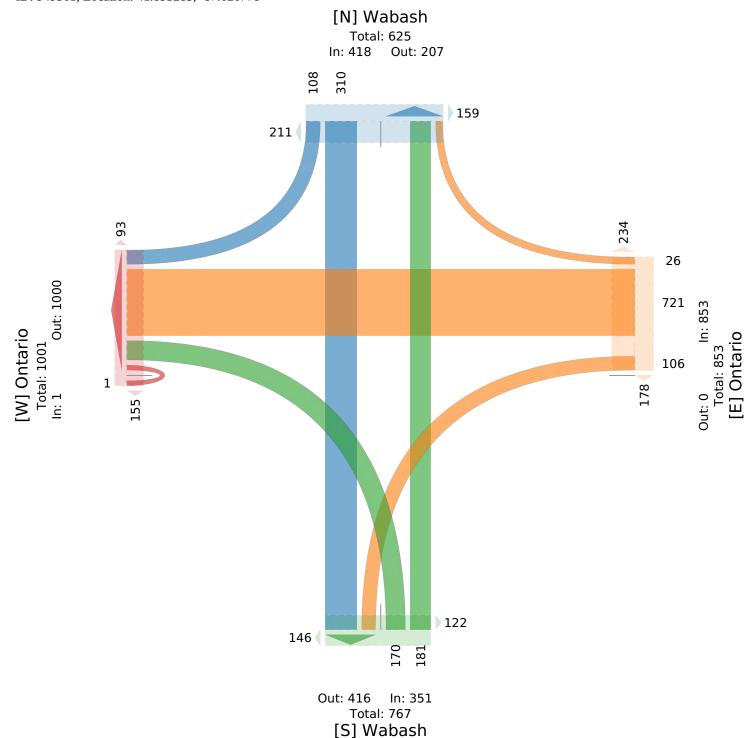
All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks,

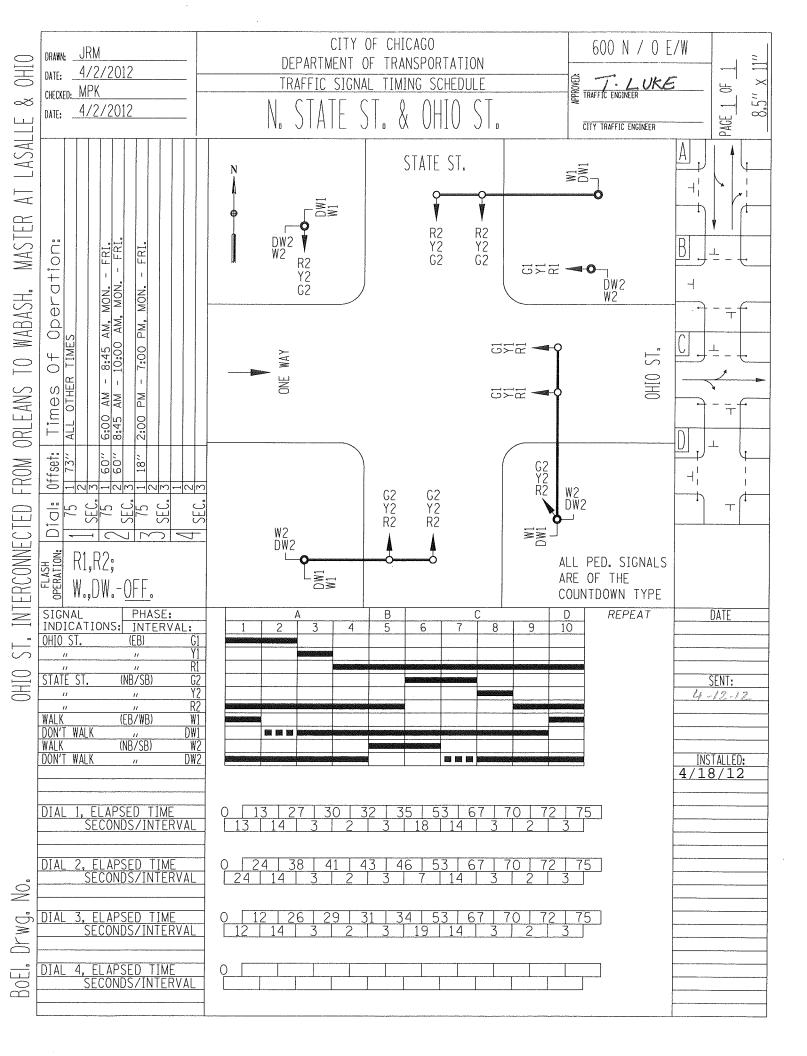
Pedestrians, Bicycles on Road, Bicycles on Crosswalk)

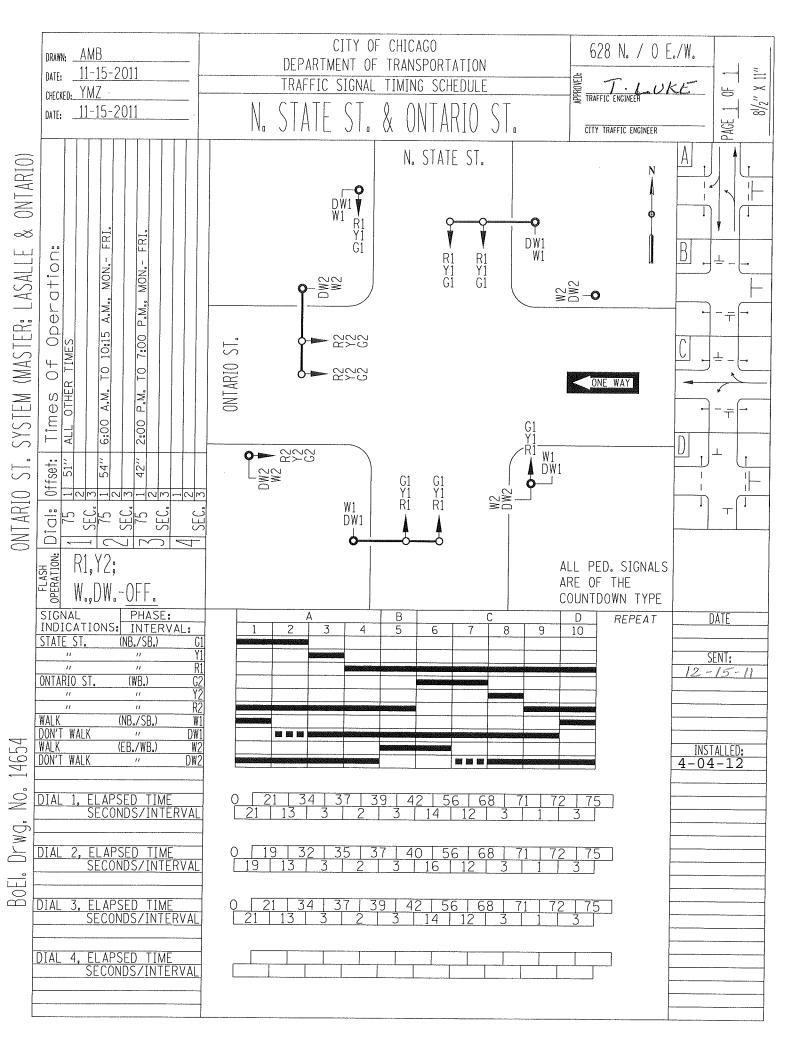
All Movements

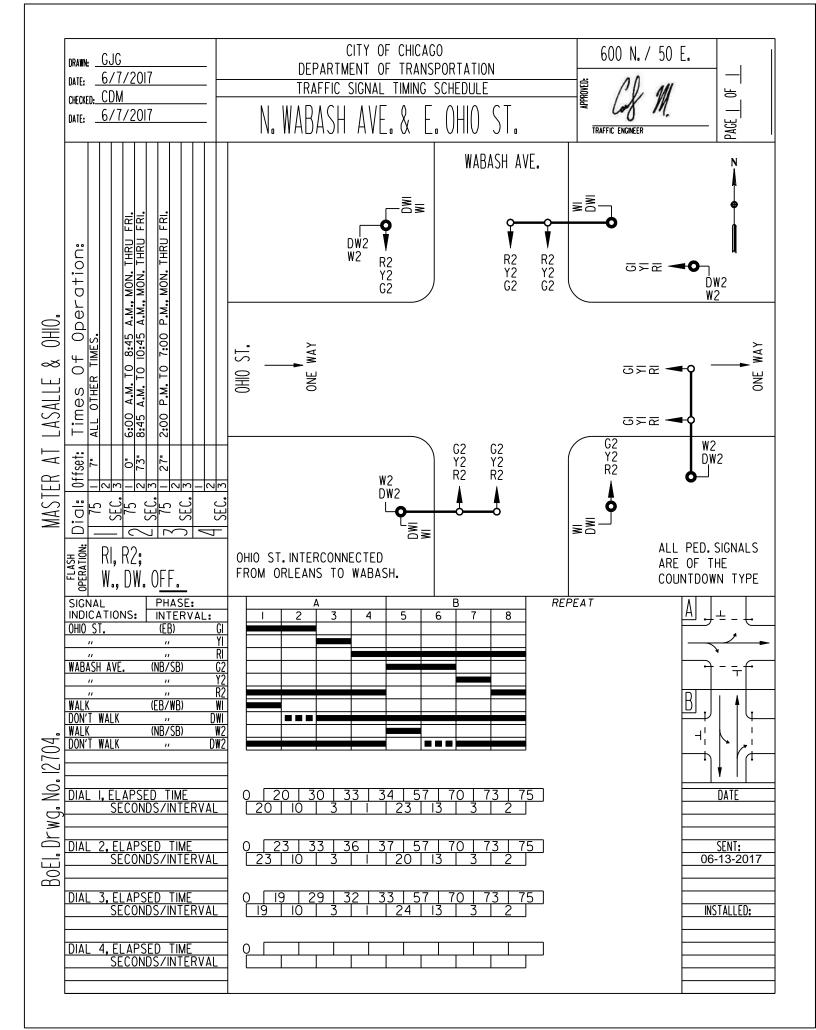
ID: 949361, Location: 41.893283, -87.626778

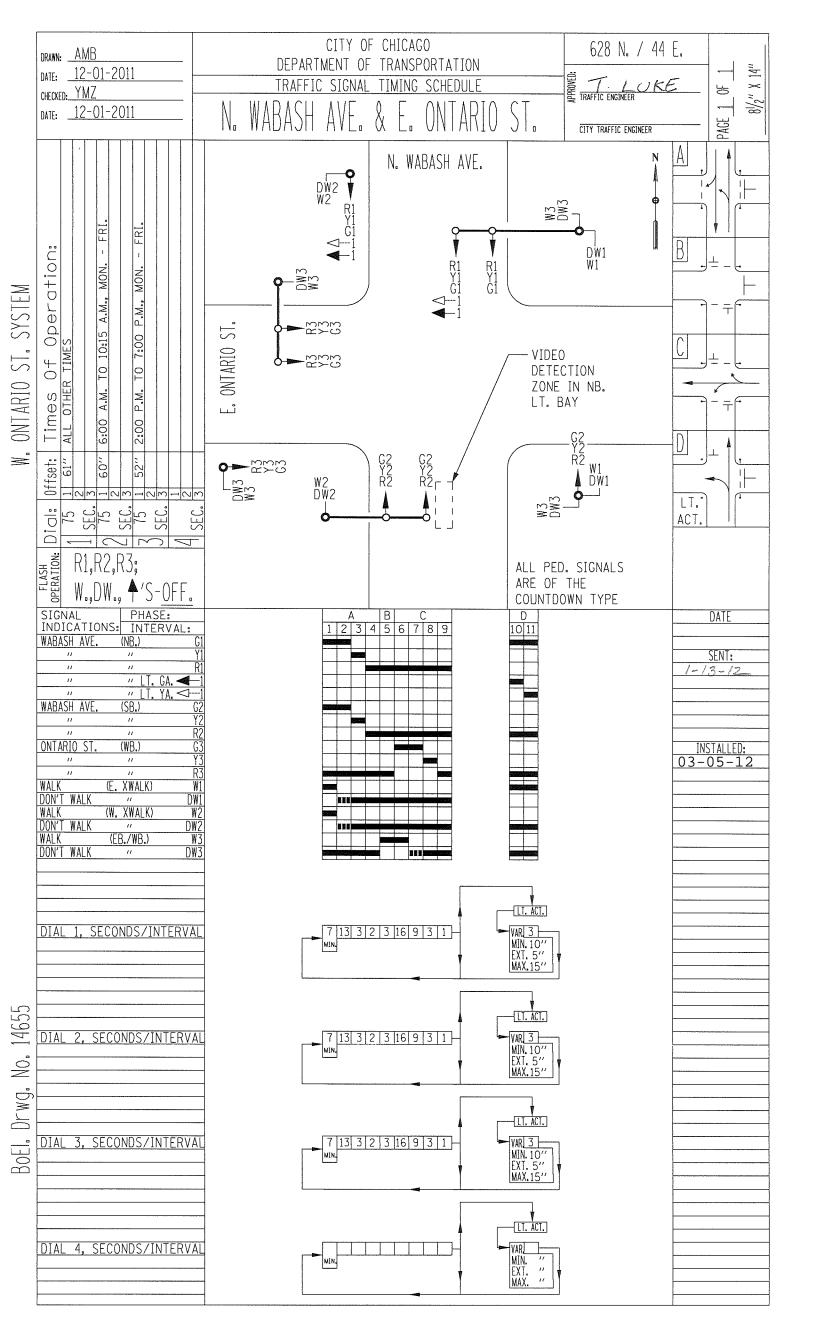








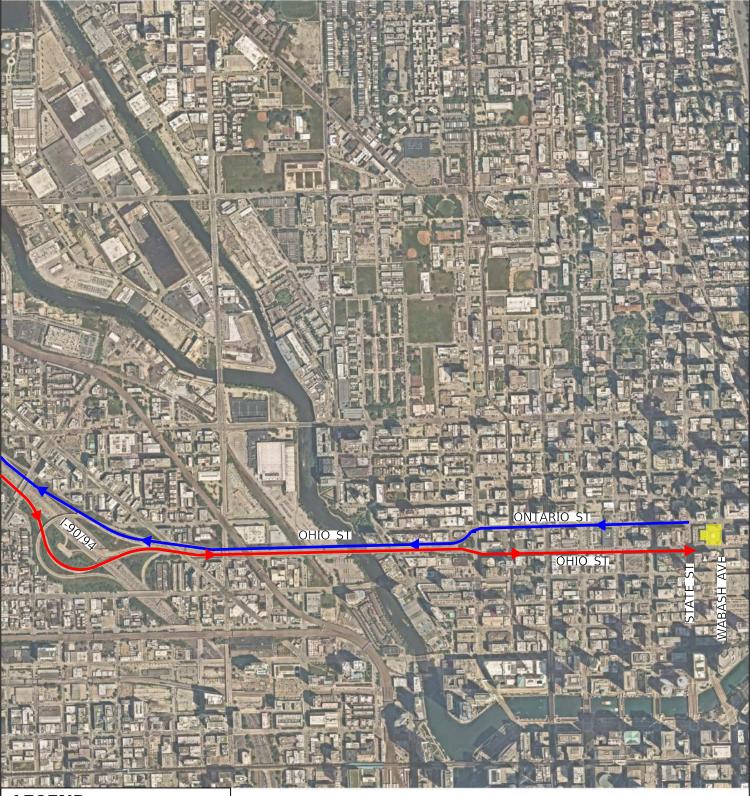






APPENDIX B

SITE ACCESS



LEGEND



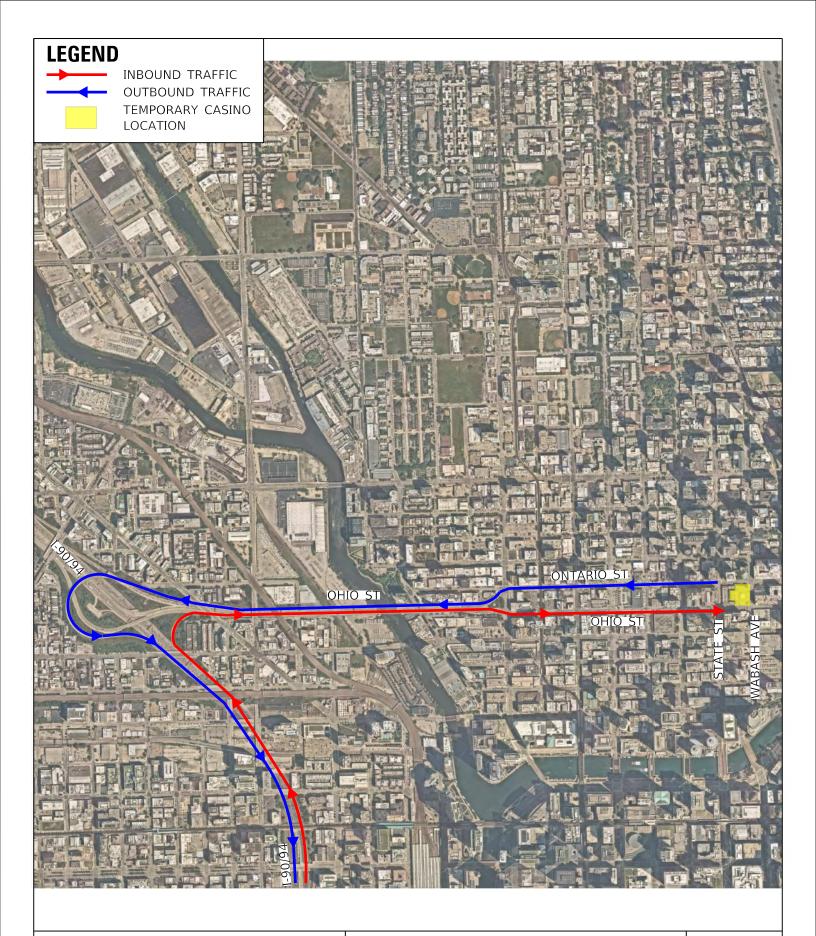
INBOUND TRAFFIC OUTBOUND TRAFFIC TEMPORARY CASINO LOCATION

TEMPORARY CASINO MEDINAH TEMPLE

SITE ACCESS I-90/94 FROM THE NORTH



CHICAGO ILLINOIS



TEMPORARY CASINO MEDINAH TEMPLE

SITE ACCESS I-90/94 FROM THE SOUTH



CHICAGO ILLINOIS

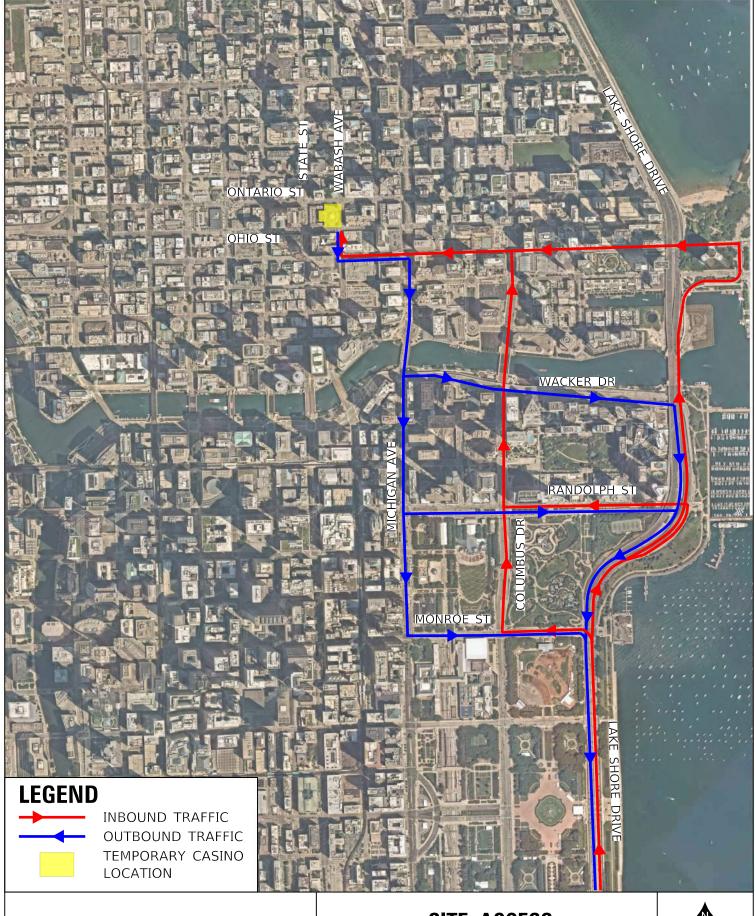


TEMPORARY CASINO MEDINAH TEMPLE

SITE ACCESS LAKE SHORE DRIVE FROM THE NORTH



CHICAGO



TEMPORARY CASINO MEDINAH TEMPLE

SITE ACCESS LAKE SHORE DRIVE FROM THE SOUTH





APPENDIX C

CAPACITY ANALYSIS WORKSHEETS 2022 EXISTING

	٠	-	•	1	-	•	1	1	1	/	1	1
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations					414		1	^			1	
Traffic Volume (vph)	0	0	0	82	691	75	82	388	0	0	316	126
Future Volume (vph)	0	0	0	82	691	75	82	388	0	0	316	126
Ideal Flow (vphpl)	1900	2000	1900	1900	2000	1900	1900	2000	1900	1900	2000	1900
Storage Length (ft)	0		0	0		0	60		0	0		0
Storage Lanes	0		0	0		0	1		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	0.91	0.91	0.91	1.00	1.00	1.00	1.00	0.95	0.95
Ped Bike Factor					0.92		0.84				0.91	
Frt					0.987						0.957	
Flt Protected					0.995		0.950					
Satd. Flow (prot)	0	0	0	0	5087	0	1787	1942	0	0	3221	0
Flt Permitted	•	-	•	-	0.995	-	0.487				V	•
Satd. Flow (perm)	0	0	0	0	4895	0	766	1942	0	0	3221	0
Right Turn on Red	· ·	•	Yes		1000	Yes	100	1012	Yes		ULL !	Yes
Satd. Flow (RTOR)					23	. 00			. 00		4	. 00
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		370			370			295			295	
Travel Time (s)		8.4			8.4			6.7			6.7	
Confl. Peds. (#/hr)		0.1		272	0.1	335	536	0.1			0.7	536
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	0%	0.30	0%	1%	0%	1%	3%	0.30	0.50	3%	2%
Adj. Flow (vph)	0	0	0	85	720	78	85	404	0	0	329	131
Shared Lane Traffic (%)					720	, ,		101			020	101
Lane Group Flow (vph)	0	0	0	0	883	0	85	404	0	0	460	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)	Loit	0	rtigit	Loit	0	rtigit	Loit	12	rtigit	Loit	12	ragne
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane		10			10			10			10	
Headway Factor	1.00	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00
Turning Speed (mph)	15	0.01	9	15	0.01	9	15	0.01	9	15	0.01	9
Turn Type	10		J	Perm	NA	<u> </u>	Perm	NA	J	10	NA	J
Protected Phases				1 01111	8		1 01111	2			6	
Permitted Phases				8	U		2				- U	
Minimum Split (s)				33.0	33.0		42.0	42.0			42.0	
Total Split (s)				33.0	33.0		42.0	42.0			42.0	
Total Split (%)				44.0%	44.0%		56.0%	56.0%			56.0%	
Maximum Green (s)				26.0	26.0		34.0	34.0			34.0	
Yellow Time (s)				3.0	3.0		3.0	3.0			3.0	
All-Red Time (s)				4.0	4.0		5.0	5.0			5.0	
Lost Time Adjust (s)				4.0	0.0		0.0	0.0			0.0	
Total Lost Time (s)					7.0		8.0	8.0			8.0	
\					7.0		0.0	0.0			0.0	
Lead/Lag Lead-Lag Optimize?												
				14.0	14.0		24.0	21.0			21.0	
Walk Time (s)							21.0					
Flash Dont Walk (s)				12.0	12.0		13.0	13.0			13.0	
Pedestrian Calls (#/hr)				0	0		0	0			0	

1: Ontario Street & State Street

			*	1	4	*	1	1	1	1	↓	1
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Act Effct Green (s)					26.0		34.0	34.0			34.0	
Actuated g/C Ratio					0.35		0.45	0.45			0.45	
v/c Ratio					0.52		0.24	0.46			0.31	
Control Delay					11.2		14.4	16.3			13.7	
Queue Delay					0.1		0.0	7.6			0.0	
Total Delay					11.3		14.4	23.9			13.7	
LOS					В		В	С			В	
Approach Delay					11.3			22.2			13.7	
Approach LOS					В			С			В	
Queue Length 50th (ft)					51		31	162			67	
Queue Length 95th (ft)					64		m45	m246			100	
Internal Link Dist (ft)		290			290			215			215	
Turn Bay Length (ft)							60					
Base Capacity (vph)					1711		347	880			1462	
Starvation Cap Reductn					0		0	425			0	
Spillback Cap Reductn					116		0	0			0	
Storage Cap Reductn					0		0	0			0	
Reduced v/c Ratio					0.55		0.24	0.89			0.31	

Intersection Summary

Area Type: Other

Intersection Capacity Utilization 73.7%

Cycle Length: 75

Actuated Cycle Length: 75

Offset: 42 (56%), Referenced to phase 2:NBTL and 6:SBT, Start of Green

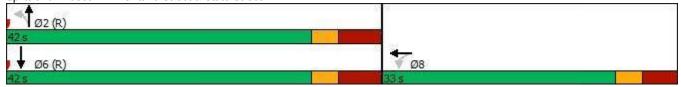
Natural Cycle: 75 Control Type: Pretimed Maximum v/c Ratio: 0.52 Intersection Signal Delay: 14.8

Intersection LOS: B
ICU Level of Service D

Analysis Period (min) 15

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 1: Ontario Street & State Street



Lane Group		١		7	1		•	1		~	1	ţ	1
Traffic Volume (vph)	Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Traffic Volume (vph)	Lane Configurations		44t						b		1	*	
Future Volume (vph) 126		126		144	0	0	0	0		88			0
Ideal Flow (ryphp 1900 2000 1900 1900 2000 1900 1900 2000 1900 2000 1900 2000 1900 2000 1900 2000 1900 2000 1900 2000 2000 1900 2000	· · /												
Storage Langth (ft)	,												
Storage Lanes 0	,												
Taper Length (ff)													
Lane Util. Factor										•			~
Ped Bike Factor			0.91	0.91		1 00	1 00		1 00	1 00		1 00	1 00
Fith		0.01		0.01	1.00	1.00	1.00	1.00		1.00		1.00	1.00
Fit Protected											0.01		
Satd. Flow (prot) 0 4907 0 0 0 0 0 1791 0 1805 1961 0									0.010		0.950		
Fit Permitted Satd. Flow (perm) O 4726 O O O O O O O O O		0		0	0	0	0	0	1791	0		1961	0
Satd. Flow (perm)		•		•			•		1101	, and the second		1001	•
Right Turn on Red		0		0	0	0	0	0	1791	0		1961	0
Satd. Flow (RTOR)		U	4720		· ·	U		0	1751		010	1001	
Link Speed (mph)			41	100			100		1	100			100
Link Distance (ft)	,					30						30	
Travel Time (s)													
Confil Peds. (#/hr) 222 345 222 0.88 0.88 0.88 0.92 0.92 0.92 0.90 0.													
Peak Hour Factor		222	0.4	3/15		0.4			0.1	//21	121	0.7	
Heavy Vehicles (%)	,		0.82		0.88	0.88	0.88	0.92	0.92			0 90	0.90
Adj. Flow (vph) 154 1002 176 0 0 0 393 96 62 389 0 Shared Lane Traffic (%) Lane Group Flow (vph) 0 1332 0 0 0 0 489 0 62 389 0 Enter Blocked Intersection No													
Shared Lane Traffic (%) Lane Group Flow (yph) 0 1332 0 0 0 0 0 0 489 0 62 389 0 62 389 0 62 64 64 64 64 64 64 64													
Lane Group Flow (vph)		104	1002	170	U	U	U	0	000	30	02	000	J
Enter Blocked Intersection No No No No No No No		0	1332	0	0	0	0	0	489	0	62	389	0
Left Left Right Right Left Right Right Left Right													-
Median Width(ft) 0 0 12 12 Link Offset(ft) 0 0 0 0 Crosswalk Width(ft) 16 16 16 16 Two way Left Turn Lane 1.00 0.94 1.00 1.00 0.94 1.00 1.00 0.94 1.00 Headway Factor 1.00 0.94 1.00 1.00 0.94 1.00 0.94 1.00 0.94 1.00 Turn Type Perm NA 14.0 41.0 41.0 41.0 41.0 41.0 41.0													
Link Offset(ft) 0 0 0 0 Crosswalk Width(ft) 16 16 16 16 Two way Left Turn Lane 1.00 0.94 1.00 1.00 0.94 1.00 1.0		2010		, agait	ZOIC		1 (1911)	20.0		rugiic	20.0		rugiit
Crosswalk Width(ft) 16 16 16 16 16 Two way Left Turn Lane Headway Factor 1.00 0.94 1.00 1.00 0.94 1.00 0.41 0.00 0.00 0.00 0.00 0.00 0.00 0.00													
Two way Left Turn Lane Headway Factor 1.00 0.94 1.00 1.00 0.94 1.00 1.00 0.94 1.00 1.00 0.94 1.00 1.00 0.94 1.00 Turning Speed (mph) 15 9 15 9 15 9 15 9 15 9 15 9 15 9 15													
Headway Factor 1.00 0.94 1.00 1.00 0.94 1.00 1.00 0.94 1.00 1.00 0.94 1.00 1.00 0.94 1.00 1.00 0.94 1.00 1.00 0.94 1.00 1.00 0.94 1.00 1.00 0.94 1.00 1.00 0.94 1.00 1.00 0.94 1.00 1.00 0.94 1.00 1.00 0.94 1.00 1.00 0.94 1.00 1.00 0.94 1.00 1.00 0.94 1.00 1.00 0.94 1.00 1.00 1.00 0.94 1.00 1.00 1.00 0.94 1.00 1.00 1.00 1.00 0.94 1.00	\								. •				
Turning Speed (mph) 15 9 15 9 15 9 15 9 Turn Type Perm NA Perm NA Protected Phases 4 2 6 Permitted Phases 4 6 6 Minimum Split (s) 41.0 41.0 41.0 41.0 Total Split (s) 34.0 34.0 41.0 41.0 41.0 Total Split (%) 45.3% 45.3% 54.7% 54.7% 54.7% Maximum Green (s) 26.0 26.0 33.0 33.0 33.0 33.0 Yellow Time (s) 3.0		1.00	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00
Turn Type Perm NA Perm NA Protected Phases 4 2 6 Permitted Phases 4 6 6 Minimum Split (s) 41.0 41.0 41.0 41.0 Total Split (s) 34.0 34.0 41.0 41.0 41.0 Total Split (%) 45.3% 45.3% 54.7% 54.7% 54.7% Maximum Green (s) 26.0 26.0 33.0 33.0 33.0 33.0 30.0 3													
Protected Phases 4 6 Permitted Phases 4 6 Minimum Split (s) 41.0 41.0 41.0 41.0 Total Split (s) 34.0 34.0 41.0 41.0 41.0 Total Split (%) 45.3% 45.3% 54.7% 54.7% 54.7% Maximum Green (s) 26.0 26.0 33.0 33.0 33.0 33.0 33.0 30.0			NA						NA			NA	
Permitted Phases 4 6 Minimum Split (s) 41.0 41.0 41.0 41.0 Total Split (s) 34.0 34.0 41.0 41.0 41.0 Total Split (%) 45.3% 45.3% 54.7% 54.7% 54.7% Maximum Green (s) 26.0 26.0 33.0 33.0 33.0 33.0 Yellow Time (s) 3.0 3.0 3.0 3.0 3.0 3.0 All-Red Time (s) 5.0 5.0 5.0 5.0 5.0 5.0 Lost Time Adjust (s) 0.0 0.0 0.0 0.0 0.0 0.0 Total Lost Time (s) 8.0 8.0 8.0 8.0 8.0 8.0 Lead/Lag Lead-Lag Optimize? Valk Time (s) 12.0 19.0 19.0 19.0 19.0 19.0 19.0 14.0 <td>•</td> <td></td>	•												
Minimum Split (s) 41.0 41.0 41.0 41.0 41.0 Total Split (s) 34.0 34.0 41.0 41.0 41.0 Total Split (%) 45.3% 45.3% 54.7% 54.7% 54.7% Maximum Green (s) 26.0 26.0 33.0 33.0 33.0 33.0 Yellow Time (s) 3.0 3.0 3.0 3.0 3.0 3.0 All-Red Time (s) 5.0 5.0 5.0 5.0 5.0 5.0 Lost Time Adjust (s) 0.0 0.0 0.0 0.0 0.0 0.0 Total Lost Time (s) 8.0 8.0 8.0 8.0 8.0 8.0 Lead/Lag Lead/Lag Optimize? 41.0 19.0 19.0 19.0 19.0 19.0 19.0 19.0 19.0 14		4									6		
Total Split (s) 34.0 34.0 41.0 41.0 41.0 Total Split (%) 45.3% 45.3% 54.7% 54.7% 54.7% Maximum Green (s) 26.0 26.0 33.0 33.0 33.0 33.0 Yellow Time (s) 3.0 3.0 3.0 3.0 3.0 3.0 All-Red Time (s) 5.0			41.0						41.0			41.0	
Total Split (%) 45.3% 45.3% 54.7% 54.7% 54.7% Maximum Green (s) 26.0 26.0 33.0 33.0 33.0 33.0 Yellow Time (s) 3.0 3.0 3.0 3.0 3.0 3.0 All-Red Time (s) 5.0	. , ,												
Maximum Green (s) 26.0 26.0 33.0 33.0 33.0 33.0 33.0 33.0 30													
Yellow Time (s) 3.0 5.0 5.0 5.0 5.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 8.0													
All-Red Time (s) 5.0 5.0 5.0 5.0 5.0 Lost Time Adjust (s) 0.0 0.0 0.0 0.0 Total Lost Time (s) 8.0 8.0 8.0 8.0 Lead/Lag Lead-Lag Optimize? Walk Time (s) 12.0 12.0 19.0 19.0 19.0 19.0 Flash Dont Walk (s) 14.0 14.0 14.0													
Lost Time Adjust (s) 0.0													
Total Lost Time (s) 8.0 8.0 8.0 8.0 Lead/Lag Lead-Lag Optimize? Walk Time (s) 12.0 12.0 19.0 19.0 19.0 19.0 Flash Dont Walk (s) 14.0 14.0 14.0 14.0													
Lead/Lag Lead-Lag Optimize? Walk Time (s) 12.0 12.0 19.0 19.0 19.0 Flash Dont Walk (s) 14.0 14.0 14.0 14.0													
Lead-Lag Optimize? Walk Time (s) 12.0 12.0 19.0 19.0 Flash Dont Walk (s) 14.0 14.0 14.0 14.0													
Walk Time (s) 12.0 12.0 19.0 19.0 19.0 Flash Dont Walk (s) 14.0 14.0 14.0 14.0 14.0													
Flash Dont Walk (s) 14.0 14.0 14.0 14.0		12.0	12.0						19.0		19.0	19.0	
\mathcal{N}	. ,												
	Pedestrian Calls (#/hr)	0	0						0				

Synchro 11 Report Page 3

Timing Plan: Thursday PM Peak Hour

	•	-	7	1	-	•	1	1	1	1	Į.	1
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Act Effct Green (s)		26.0						33.0		33.0	33.0	
Actuated g/C Ratio		0.35						0.44		0.44	0.44	
v/c Ratio		0.80						0.62		0.23	0.45	
Control Delay		25.9						20.4		25.3	25.8	
Queue Delay		0.0						0.8		0.0	3.9	
Total Delay		25.9						21.2		25.3	29.7	
LOS		С						С		С	С	
Approach Delay		25.9						21.2			29.1	
Approach LOS		С						С			С	
Queue Length 50th (ft)		195						168		20	145	
Queue Length 95th (ft)		217						265		m54	237	
Internal Link Dist (ft)		290			290			215			215	
Turn Bay Length (ft)										40		
Base Capacity (vph)		1665						788		271	862	
Starvation Cap Reductn		0						0		0	379	
Spillback Cap Reductn		0						100		0	0	
Storage Cap Reductn		0						0		0	0	
Reduced v/c Ratio		0.80						0.71		0.23	0.81	

Intersection Summary

Area Type: Other

Cycle Length: 75

Actuated Cycle Length: 75

Offset: 18 (24%), Referenced to phase 2:NBT and 6:SBTL, Start of Green

Natural Cycle: 85 Control Type: Pretimed Maximum v/c Ratio: 0.80 Intersection Signal Delay: 25.5

Intersection LOS: C
ICU Level of Service D

Analysis Period (min) 15

Intersection Capacity Utilization 73.7%

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 2: State Street & Ohio Street



	Þ	-	•	~		~	1	1	~	1	1	1
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		414						1			414	
Traffic Volume (vph)	75	682	225	0	0	0	0	177	97	139	265	0
Future Volume (vph)	75	682	225	0	0	0	0	177	97	139	265	0
Ideal Flow (vphpl)	1900	2000	1900	1900	2000	1900	1900	2000	1900	1900	2000	1900
Lane Util. Factor	0.91	0.91	0.91	1.00	1.00	1.00	1.00	0.95	0.95	0.95	0.95	1.00
Ped Bike Factor		0.91						0.91			0.95	
Frt		0.966						0.947				
Flt Protected		0.996									0.983	
Satd. Flow (prot)	0	4839	0	0	0	0	0	3273	0	0	3675	0
Flt Permitted		0.996		-						-	0.723	
Satd. Flow (perm)	0	4771	0	0	0	0	0	3273	0	0	2562	0
Right Turn on Red			Yes			Yes	•	02.0	Yes			Yes
Satd. Flow (RTOR)		117						2				. 00
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		370			370			295			295	
Travel Time (s)		8.4			8.4			6.7			6.7	
Confl. Peds. (#/hr)	237	0.4	454		0.4			0.7	395	395	0.7	
Peak Hour Factor	0.83	0.83	0.83	0.86	0.86	0.86	0.82	0.82	0.82	0.97	0.97	0.97
Heavy Vehicles (%)	0.00	1%	0.00	0.00	0.00	0.00	0.02	0%	1%	1%	2%	0.37
Adj. Flow (vph)	90	822	271	0 / 0	0 /0	0 /0	0 / 0	216	118	143	273	0 70
Shared Lane Traffic (%)	30	UZZ	211	U	U	U	U	210	110	170	210	U
Lane Group Flow (vph)	0	1183	0	0	0	0	0	334	0	0	416	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)	Loit	0	rtigit	Loit	0	rtigit	Loit	0	rugiit	Loit	0	rtigitt
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane		10			10			10			10	
Headway Factor	1.00	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00
Turning Speed (mph)	15	0.54	9	15	0.54	9	15	0.54	9	15	0.04	9
Turn Type	Perm	NA	3	10		J	10	NA	J	Perm	NA	J
Protected Phases	1 Cilli	4						2		1 Cilli	6	
Permitted Phases	4	7								6	U	
Minimum Split (s)	34.0	34.0						42.0		42.0	42.0	
Total Split (s)	33.0	33.0						42.0		42.0	42.0	
Total Split (%)	44.0%	44.0%						56.0%		56.0%	56.0%	
Maximum Green (s)	29.0	29.0						37.0		37.0	37.0	
Yellow Time (s)	3.0	3.0						3.0		3.0	3.0	
All-Red Time (s)	1.0	1.0						2.0		2.0	2.0	
Lost Time Adjust (s)	1.0	0.0						0.0		2.0	0.0	
Total Lost Time (s)		4.0						5.0			5.0	
Lead/Lag		٦.٥						5.0			3.0	
Lead-Lag Optimize?												
Walk Time (s)	19.0	19.0						24.0		24.0	24.0	
Flash Dont Walk (s)	10.0	10.0						13.0		13.0	13.0	
Pedestrian Calls (#/hr)	0	0.0						0		0	0	
Act Effct Green (s)	- 0	29.0						37.0		U	37.0	
Actuated g/C Ratio		0.39						0.49			0.49	
v/c Ratio		0.62						0.49			0.49	
V/G I (all)		0.02						V.Z.I			0.00	

Synchro 11 Report Page 5

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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBF
Control Delay		5.5						11.1			13.5	
Queue Delay		0.4						0.0			0.0	
Total Delay		5.9						11.1			13.5	
LOS		Α						В			В	
Approach Delay		5.9						11.1			13.5	
Approach LOS		Α						В			В	
Queue Length 50th (ft)		22						43			52	
Queue Length 95th (ft)		26						60			100	
Internal Link Dist (ft)		290			290			215			215	
Turn Bay Length (ft)												
Base Capacity (vph)		1916						1615			1263	
Starvation Cap Reductn		266						0			0	
Spillback Cap Reductn		0						0			0	
Storage Cap Reductn		0						0			0	
Reduced v/c Ratio		0.72						0.21			0.33	
Intersection Summary												
Area Type:	Other											
Cycle Length: 75												
Actuated Cycle Length: 75												
Offset: 27 (36%), Reference	ced to phase	2:NBT ar	nd 6:SBTI	L, Start of	Green							
Natural Cycle: 80												
Control Type: Pretimed												
Maximum v/c Ratio: 0.62												
Intersection Signal Delay:					tersection							
Intersection Capacity Utiliz	zation 77.5%			IC	CU Level	of Service	D D					
Analysis Period (min) 15												
Splits and Phases: 3: W	abash Aveni	ue & Ohio	Street									
↑ ↑ Ø2 (R)						1	14					7.
42 s						33's	100					
						12 11-						- 0
▼ Ø6 (R)												
42 c						46						

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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations					414			414			1	
Traffic Volume (vph)	0	0	0	99	638	22	179	197	0	0	266	83
Future Volume (vph)	0	0	0	99	638	22	179	197	0	0	266	83
Ideal Flow (vphpl)	1900	2000	1900	1900	2000	1900	1900	2000	1900	1900	2000	1900
Lane Util. Factor	1.00	1.00	1.00	0.91	0.91	0.91	0.95	0.95	1.00	1.00	0.95	0.95
Ped Bike Factor					0.96			0.95			0.95	
Frt					0.996						0.964	
Flt Protected					0.994			0.977				
Satd. Flow (prot)	0	0	0	0	5307	0	0	3713	0	0	3415	0
FIt Permitted					0.994			0.639				
Satd. Flow (perm)	0	0	0	0	5164	0	0	2296	0	0	3415	0
Right Turn on Red			Yes			Yes			No			Yes
Satd. Flow (RTOR)					6						54	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		370			370			295			295	
Travel Time (s)		8.4			8.4			6.7			6.7	
Confl. Peds. (#/hr)		•		230	.	319	185	•			•	185
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	0%	1%	1%	1%	0%	0%	100%	0%	2%	1%
Adj. Flow (vph)	0	0	0	105	679	23	190	210	0	0	283	88
Shared Lane Traffic (%)	· ·	•	V	100	010	20	100	210	J	· ·	200	00
Lane Group Flow (vph)	0	0	0	0	807	0	0	400	0	0	371	0
Enter Blocked Intersection	No	No	No	No	No.	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00
Turning Speed (mph)	15	0.0.	9	15	0.0.	9	15	0.0.	9	15	V.U.	9
Turn Type				Perm	NA		pm+pt	NA			NA	
Protected Phases					8		5	2			6	
Permitted Phases				8			2	_			-	
Minimum Split (s)				31.0	31.0		9.5	49.0			35.0	
Total Split (s)				29.0	29.0		18.0	46.0			28.0	
Total Split (%)				38.7%	38.7%		24.0%	61.3%			37.3%	
Maximum Green (s)				25.0	25.0		15.0	35.0			20.0	
Yellow Time (s)				3.0	3.0		3.0	6.0			3.0	
All-Red Time (s)				1.0	1.0		0.0	5.0			5.0	
Lost Time Adjust (s)					0.0		0.0	0.0			0.0	
Total Lost Time (s)					4.0			11.0			8.0	
Lead/Lag					1.0		Lead				Lag	
Lead-Lag Optimize?							Yes				Yes	
Walk Time (s)				16.0	16.0			25.0			7.0	
Flash Dont Walk (s)				9.0	9.0			13.0			13.0	
Pedestrian Calls (#/hr)				0	0			0			0	
Act Effct Green (s)					25.0			35.0			20.0	
Actuated g/C Ratio					0.33			0.47			0.27	
v/c Ratio					0.47			0.33			0.39	
7,071000					V.TI			0.00			0.00	

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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Control Delay					20.7			10.2			20.5	
Queue Delay					0.0			0.0			0.0	
Total Delay					20.7			10.2			20.5	
LOS					С			В			С	
Approach Delay					20.7			10.2			20.5	
Approach LOS					С			В			С	
Queue Length 50th (ft)					106			37			62	
Queue Length 95th (ft)					141			54			100	
Internal Link Dist (ft)		290			290			215			215	
Turn Bay Length (ft)												
Base Capacity (vph)					1725			1203			950	
Starvation Cap Reductn					0			0			0	
Spillback Cap Reductn					0			0			0	
Storage Cap Reductn					0			0			0	
Reduced v/c Ratio					0.47			0.33			0.39	
Intersection Summary												
71	Other											
Cycle Length: 75												
Actuated Cycle Length: 75												
Offset: 52 (69%), Reference	d to phase	2:NBTL a	and 6:SB	T, Start of	Green							
Natural Cycle: 80												
Control Type: Pretimed												
Maximum v/c Ratio: 0.47												
Intersection Signal Delay: 18	3.0			In	tersection	n LOS: B						
Intersection Capacity Utilizat	tion 66.8%			IC	U Level	of Service	C					
Analysis Period (min) 15												
Splits and Phases: 4: Ont	ario Street	& Wabas	h Avenue)								
↑ Ø2 (R)	- N											7,
46 s	000				- 17	1	6 2 - 858					
•												

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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations					414		7	^			1	
Traffic Volume (vph)	0	0	0	70	691	51	101	265	0	0	297	186
Future Volume (vph)	0	0	0	70	691	51	101	265	0	0	297	186
Ideal Flow (vphpl)	1900	2000	1900	1900	2000	1900	1900	2000	1900	1900	2000	1900
Storage Length (ft)	0		0	0		0	60		0	0		0
Storage Lanes	0		0	0		0	1		0	0		0
Taper Length (ft)	25			25			25		•	25		-
Lane Util. Factor	1.00	1.00	1.00	0.91	0.91	0.91	1.00	1.00	1.00	1.00	0.95	0.95
Ped Bike Factor				0.0.	0.93	0.0.	0.84				0.87	0.00
Frt					0.991		0.0				0.942	
Flt Protected					0.996		0.950				0.0	
Satd. Flow (prot)	0	0	0	0	5104	0	1787	1961	0	0	3071	0
Flt Permitted	· ·			· ·	0.996		0.465	1001	•	•	0011	J
Satd. Flow (perm)	0	0	0	0	4911	0	737	1961	0	0	3071	0
Right Turn on Red		•	Yes	J	1011	Yes	101	1001	Yes	•	0011	Yes
Satd. Flow (RTOR)			100		15	100			100		2	100
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		370			370			295			295	
Travel Time (s)		8.4			8.4			6.7			6.7	
Confl. Peds. (#/hr)		0.4		303	0.4	412	598	0.1			0.1	598
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	0%	0%	0.30	2%	2%	3%	1%	2%	0%	0%	2%	2%
Adj. Flow (vph)	0	0	0	74	727	54	106	279	0	0	313	196
Shared Lane Traffic (%)				, ,	121	01	100	210			0.10	100
Lane Group Flow (vph)	0	0	0	0	855	0	106	279	0	0	509	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane		. •									. •	
Headway Factor	1.00	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type				Perm	NA		Perm	NA			NA	J
Protected Phases					8		. •	2			6	
Permitted Phases				8			2	_				
Minimum Split (s)				33.0	33.0		42.0	42.0			42.0	
Total Split (s)				33.0	33.0		42.0	42.0			42.0	
Total Split (%)				44.0%	44.0%		56.0%	56.0%			56.0%	
Maximum Green (s)				26.0	26.0		34.0	34.0			34.0	
Yellow Time (s)				3.0	3.0		3.0	3.0			3.0	
All-Red Time (s)				4.0	4.0		5.0	5.0			5.0	
Lost Time Adjust (s)					0.0		0.0	0.0			0.0	
Total Lost Time (s)					7.0		8.0	8.0			8.0	
Lead/Lag					7.0		0.0	0.0			0.0	
Lead-Lag Optimize?												
Walk Time (s)				14.0	14.0		21.0	21.0			21.0	
Flash Dont Walk (s)				12.0	12.0		13.0	13.0			13.0	
Pedestrian Calls (#/hr)				0	0		0	0			0	
Todoulari odilo (milli)				0	U		U	U			U	

1: Ontario Street & State Street

	•	-	*	1	4	•	1	1	1	1	1	1
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Act Effct Green (s)					26.0		34.0	34.0			34.0	
Actuated g/C Ratio					0.35		0.45	0.45			0.45	
v/c Ratio					0.50		0.32	0.31			0.37	
Control Delay					10.3		21.7	18.9			14.3	
Queue Delay					0.0		0.0	1.3			0.0	
Total Delay					10.3		21.7	20.1			14.4	
LOS					В		С	С			В	
Approach Delay					10.3			20.6			14.4	
Approach LOS					В			С			В	
Queue Length 50th (ft)					47		33	86			77	
Queue Length 95th (ft)					60		m74	155			113	
Internal Link Dist (ft)		290			290			215			215	
Turn Bay Length (ft)							60					
Base Capacity (vph)					1712		334	888			1393	
Starvation Cap Reductn					0		0	410			0	
Spillback Cap Reductn					0		0	0			51	
Storage Cap Reductn					0		0	0			0	
Reduced v/c Ratio					0.50		0.32	0.58			0.38	

Intersection Summary

Area Type: Other

Cycle Length: 75

Actuated Cycle Length: 75

Offset: 51 (68%), Referenced to phase 2:NBTL and 6:SBT, Start of Green

Natural Cycle: 75
Control Type: Pretimed
Maximum v/c Ratio: 0.50

Intersection Signal Delay: 13.7 Intersection LOS: B
Intersection Capacity Utilization 74.8% ICU Level of Service D

Analysis Period (min) 15

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 1: Ontario Street & State Street



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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		414						f.		1	↑	
Traffic Volume (vph)	122	780	166	0	0	0	0	242	105	78	281	0
Future Volume (vph)	122	780	166	0	0	0	0	242	105	78	281	0
Ideal Flow (vphpl)	1900	2000	1900	1900	2000	1900	1900	2000	1900	1900	2000	1900
Storage Length (ft)	0		0	0		0	0		0	40		0
Storage Lanes	0		0	0		0	0		0	1		0
Taper Length (ft)	25			25		•	25			25		J
Lane Util. Factor	0.91	0.91	0.91	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor	0.01	0.88	0.01	1.00	1.00	1.00	1.00	0.91	1.00	0.83	1.00	1.00
Frt		0.977						0.959		0.00		
Flt Protected		0.994						0.000		0.950		
Satd. Flow (prot)	0	4839	0	0	0	0	0	1702	0	1787	1961	0
Flt Permitted		0.994	•	•	•	•	J	1702		0.476	1001	J
Satd. Flow (perm)	0	4647	0	0	0	0	0	1702	0	743	1961	0
Right Turn on Red	U	7077	Yes	U	U	Yes	U	1702	Yes	740	1301	Yes
Satd. Flow (RTOR)		55	103			103		2	103			103
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		370			370			295			295	
Travel Time (s)		8.4			8.4			6.7			6.7	
Confl. Peds. (#/hr)	251	0.4	397		0.4			0.7	462	462	0.7	
Peak Hour Factor	0.98	0.98	0.98	0.97	0.97	0.97	0.91	0.91	0.91	0.95	0.95	0.95
Heavy Vehicles (%)	0.90	1%	0.90	0.97	0.97	0.97	0.91	3%	0.91	1%	2%	0.95
` ,	124	796	169	0%	0%	0%	0%	266	115	82	296	0 %
Adj. Flow (vph)	124	790	109	U	U	U	U	200	110	02	290	U
Shared Lane Traffic (%)	0	1089	٥	0	0	0	0	381	0	82	296	0
Lane Group Flow (vph)			0 No	No		No	No	No	No	No	No	No
Enter Blocked Intersection	No Left	No Left		Left	No			Left		Left	Left	
Lane Alignment Median Width(ft)	Leit	0	Right	Leit	Left 0	Right	Left	12	Right	Leit	12	Right
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane		10			10			10			10	
Headway Factor	1.00	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00
	1.00	0.94	9	1.00	0.94	9	1.00	0.94	1.00	1.00	0.94	
Turning Speed (mph) Turn Type		NA	9	15		9	15	NΙΛ	9	Perm	NΙΛ	9
	Perm	NA 4						NA 2		Pellii	NA 6	
Protected Phases Permitted Phases	4	4								6	0	
	40.0	40.0						40.0		6 40.0	40.0	
Minimum Split (s)												
Total Split (s)	35.0	35.0						40.0		40.0	40.0 53.3%	
Total Split (%)	46.7%	46.7%						53.3%		53.3%		
Maximum Green (s)	27.0 3.0	27.0						32.0		32.0	32.0	
Yellow Time (s)	5.0	3.0						3.0		3.0	3.0	
All-Red Time (s)	5.0	5.0						5.0		5.0	5.0	
Lost Time Adjust (s)		0.0						0.0		0.0	0.0	
Total Lost Time (s)		8.0						8.0		8.0	8.0	
Lead/Lag												
Lead-Lag Optimize?	40.0	40.0						40.0		40.0	40.0	
Walk Time (s)	13.0	13.0						18.0		18.0	18.0	
Flash Dont Walk (s)	14.0	14.0						14.0		14.0	14.0	
Pedestrian Calls (#/hr)	0	0						0		0	0	

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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Act Effct Green (s)		27.0						32.0		32.0	32.0	
Actuated g/C Ratio		0.36						0.43		0.43	0.43	
v/c Ratio		0.64						0.52		0.26	0.35	
Control Delay		20.9						19.0		16.1	15.7	
Queue Delay		0.0						0.0		0.0	1.6	
Total Delay		20.9						19.0		16.1	17.4	
LOS		С						В		В	В	
Approach Delay		20.9						19.0			17.1	
Approach LOS		С						В			В	
Queue Length 50th (ft)		143						126		31	117	
Queue Length 95th (ft)		187						204		m71	190	
Internal Link Dist (ft)		290			290			215			215	
Turn Bay Length (ft)										40		
Base Capacity (vph)		1708						727		317	836	
Starvation Cap Reductn		0						0		0	370	
Spillback Cap Reductn		0						0		0	0	
Storage Cap Reductn		0						0		0	0	
Reduced v/c Ratio		0.64						0.52		0.26	0.64	

Intersection Summary

Area Type: Other

Cycle Length: 75

Actuated Cycle Length: 75

Offset: 73 (97%), Referenced to phase 2:NBT and 6:SBTL, Start of Green

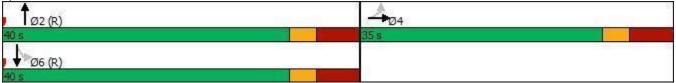
Natural Cycle: 80 Control Type: Pretimed Maximum v/c Ratio: 0.64 Intersection Signal Delay:

Intersection Signal Delay: 19.7 Intersection LOS: B
Intersection Capacity Utilization 74.8% ICU Level of Service D

Analysis Period (min) 15

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 2: State Street & Ohio Street



	٨	-	•	1		•	1	1	1	/	1	1
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		414						†			414	
Traffic Volume (vph)	66	724	151	0	0	0	0	113	93	97	189	0
Future Volume (vph)	66	724	151	0	0	0	0	113	93	97	189	0
	1900	2000	1900	1900	2000	1900	1900	2000	1900	1900	2000	1900
	0.91	0.91	0.91	1.00	1.00	1.00	1.00	0.95	0.95	0.95	0.95	1.00
Ped Bike Factor		0.94						0.90			0.95	
Frt		0.976						0.932				
Flt Protected		0.997									0.983	
Satd. Flow (prot)	0	5004	0	0	0	0	0	3179	0	0	3698	0
FIt Permitted		0.997									0.772	
Satd. Flow (perm)	0	4931	0	0	0	0	0	3179	0	0	2757	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		63						3				
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		370			370			295			295	
Travel Time (s)		8.4			8.4			6.7			6.7	
Confl. Peds. (#/hr)	277		470						333	333		
Peak Hour Factor	0.94	0.94	0.94	0.95	0.95	0.95	0.86	0.86	0.86	0.91	0.91	0.91
Heavy Vehicles (%)	0%	1%	0%	0%	0%	20%	0%	1%	0%	1%	1%	0%
Adj. Flow (vph)	70	770	161	0	0	0	0	131	108	107	208	0
Shared Lane Traffic (%)				-	-	-	-					
Lane Group Flow (vph)	0	1001	0	0	0	0	0	239	0	0	315	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0	J		0			0			0	J
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type F	Perm	NA						NA		Perm	NA	
Protected Phases		4						2			6	
Permitted Phases	4									6		
Minimum Split (s)	35.0	35.0						41.0		41.0	41.0	
Total Split (s)	34.0	34.0						41.0		41.0	41.0	
Total Split (%) 4	5.3%	45.3%						54.7%		54.7%	54.7%	
Maximum Green (s)	30.0	30.0						36.0		36.0	36.0	
Yellow Time (s)	3.0	3.0						3.0		3.0	3.0	
All-Red Time (s)	1.0	1.0						2.0		2.0	2.0	
Lost Time Adjust (s)		0.0						0.0			0.0	
Total Lost Time (s)		4.0						5.0			5.0	
Lead/Lag												
Lead-Lag Optimize?												
Walk Time (s)	20.0	20.0						23.0		23.0	23.0	
Flash Dont Walk (s)	10.0	10.0						13.0		13.0	13.0	
Pedestrian Calls (#/hr)	0	0						0		0	0	
Act Effct Green (s)		30.0						36.0			36.0	
Actuated g/C Ratio		0.40						0.48			0.48	
v/c Ratio		0.50						0.16			0.24	

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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Control Delay		9.0						11.2			8.2	
Queue Delay		0.0						0.0			0.0	
Total Delay		9.0						11.2			8.2	
LOS		Α						В			Α	
Approach Delay		9.0						11.2			8.2	
Approach LOS		Α						В			Α	
Queue Length 50th (ft)		35						30			37	
Queue Length 95th (ft)		43						47			62	
Internal Link Dist (ft)		290			290			215			215	
Turn Bay Length (ft)												
Base Capacity (vph)		2010						1527			1323	
Starvation Cap Reductn		0						0			0	
Spillback Cap Reductn		0						0			0	
Storage Cap Reductn		0						0			0	
Reduced v/c Ratio		0.50						0.16			0.24	
Intersection Summary												
Area Type:	Other											
Cycle Length: 75												
Actuated Cycle Length: 75												
Offset: 7 (9%), Referenced	to phase 2:	NBT and	6:SBTL,	Start of G	reen							
Natural Cycle: 80												
Control Type: Pretimed												
Maximum v/c Ratio: 0.50												
Intersection Signal Delay: 9				In	itersection	n LOS: A						
Intersection Capacity Utiliz	ation 74.3%			IC	CU Level	of Service	D D					
Analysis Period (min) 15												
Splits and Phases: 3: W	abash Aven	ua & Ohia	Stroot									
A	abasii Aveii	uc a Onio	, on eer		8	- 1						75
Ø2 (R)						704	8					
41s						34 s					, i	
Ø6 (R)												
41 s												

	A		7	1	-	•	1	1	1	•	1	1
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations					444			414			1	
Traffic Volume (vph)	0	0	0	112	564	28	116	115	0	0	154	108
Future Volume (vph)	0	0	0	112	564	28	116	115	0	0	154	108
Ideal Flow (vphpl)	1900	2000	1900	1900	2000	1900	1900	2000	1900	1900	2000	1900
Lane Util. Factor	1.00	1.00	1.00	0.91	0.91	0.91	0.95	0.95	1.00	1.00	0.95	0.95
Ped Bike Factor					0.94			0.94			0.92	
Frt					0.994						0.938	
Flt Protected					0.992			0.976				
Satd. Flow (prot)	0	0	0	0	5224	0	0	3690	0	0	3236	0
FIt Permitted	-			-	0.992		-	0.653	-			
Satd. Flow (perm)	0	0	0	0	4989	0	0	2333	0	0	3236	0
Right Turn on Red			Yes		1000	Yes		2000	No		0200	Yes
Satd. Flow (RTOR)			100		9	100			110		123	100
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		370			370			295			295	
Travel Time (s)		8.4			8.4			6.7			6.7	
Confl. Peds. (#/hr)		0.4		315	0.4	393	160	0.1			0.7	160
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Heavy Vehicles (%)	0.00	0.88	0.88	1%	2%	0.88	1%	0.00	0.00	0.00	2%	1%
Adj. Flow (vph)	0 /8	0 /0	0 /0	127	641	32	132	131	0 %	0 %	175	123
, , ,	U	U	U	121	041	32	132	131	U	U	173	123
Shared Lane Traffic (%)	0	0	0	0	800	0	0	263	0	0	298	0
Lane Group Flow (vph)	No		No	No		No	No	No	No	No		No
Enter Blocked Intersection		No			No						No	
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane	4.00	0.04	4.00	4.00	0.04	4.00	4.00	0.04	4.00	4.00	0.04	4.00
Headway Factor	1.00	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type				Perm	NA		pm+pt	NA			NA	
Protected Phases				_	8		5	2			6	
Permitted Phases				8	00.0		2	40.0			00.0	
Minimum Split (s)				29.0	29.0		9.5	49.0			28.0	
Total Split (s)				29.0	29.0		18.0	46.0			28.0	
Total Split (%)				38.7%	38.7%		24.0%	61.3%			37.3%	
Maximum Green (s)				25.0	25.0		15.0	35.0			20.0	
Yellow Time (s)				3.0	3.0		3.0	6.0			3.0	
All-Red Time (s)				1.0	1.0		0.0	5.0			5.0	
Lost Time Adjust (s)					0.0			0.0			0.0	
Total Lost Time (s)					4.0			11.0			8.0	
Lead/Lag							Lead				Lag	
Lead-Lag Optimize?							Yes				Yes	
Walk Time (s)				16.0	16.0			25.0			7.0	
Flash Dont Walk (s)				9.0	9.0			13.0			13.0	
Pedestrian Calls (#/hr)				0	0			0			0	
Act Effct Green (s)					25.0			35.0			20.0	
Actuated g/C Ratio					0.33			0.47			0.27	
v/c Ratio					0.48			0.22			0.31	

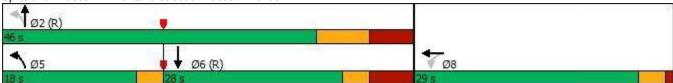
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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Control Delay					20.8			14.3			13.7	
Queue Delay					0.0			0.0			0.0	
Total Delay					20.8			14.3			13.7	
LOS					С			В			В	
Approach Delay					20.8			14.3			13.7	
Approach LOS					С			В			В	
Queue Length 50th (ft)					105			40			33	
Queue Length 95th (ft)					136			62			62	
Internal Link Dist (ft)		290			290			215			215	
Turn Bay Length (ft)												
Base Capacity (vph)					1669			1215			953	
Starvation Cap Reductn					0			0			0	
Spillback Cap Reductn					0			0			0	
Storage Cap Reductn					0			0			0	
Reduced v/c Ratio					0.48			0.22			0.31	
Intersection Summary												
Area Type:	Other											
Cycle Length: 75												
Actuated Cycle Length: 75												
Offset: 61 (81%), Reference	ced to phase	e 2:NBTL a	and 6:SB	Γ, Start of	Green							
Natural Cycle: 80												
Control Type: Pretimed												
Maximum v/c Ratio: 0.48												
	400											

Analysis Period (min) 15

Intersection Signal Delay: 18.0

Intersection Capacity Utilization 63.1%

Splits and Phases: 4: Ontario Street & Wabash Avenue



Intersection LOS: B

ICU Level of Service B



APPENDIX D

CAPACITY ANALYSIS WORKSHEETS FUTURE WITH PROJECT

	٠		7	1	-	•	1	1	1	/	1	1
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations					444		1	*			1	
Traffic Volume (vph)	0	0	0	198	774	93	82	388	0	0	341	126
Future Volume (vph)	0	0	0	198	774	93	82	388	0	0	341	126
Ideal Flow (vphpl)	1900	2000	1900	1900	2000	1900	1900	2000	1900	1900	2000	1900
Storage Length (ft)	0		0	0		0	60		0	0		0
Storage Lanes	0		0	0		0	1		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	0.91	0.91	0.91	1.00	1.00	1.00	1.00	0.95	0.95
Ped Bike Factor					0.89		0.84				0.91	
Frt					0.987						0.960	
Flt Protected					0.991		0.950					
Satd. Flow (prot)	0	0	0	0	5073	0	1787	1942	0	0	3248	0
Flt Permitted					0.991		0.475					
Satd. Flow (perm)	0	0	0	0	4703	0	749	1942	0	0	3248	0
Right Turn on Red	-	•	Yes	-		Yes			Yes		02.10	Yes
Satd. Flow (RTOR)					23						3	. 90
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		370			370			295			295	
Travel Time (s)		8.4			8.4			6.7			6.7	
Confl. Peds. (#/hr)		<u> </u>		272	.	335	536	V. .				536
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	0%	0%	0%	1%	0%	1%	3%	0%	0%	3%	2%
Adj. Flow (vph)	0	0	0	206	806	97	85	404	0	0	355	131
Shared Lane Traffic (%)						<u> </u>				•		
Lane Group Flow (vph)	0	0	0	0	1109	0	85	404	0	0	486	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane		. •										
Headway Factor	1.00	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00
Turning Speed (mph)	15	0.01	9	15	0.0 1	9	15	0.01	9	15	0.01	9
Turn Type	10			Perm	NA		Perm	NA		.0	NA	J
Protected Phases				1 01111	8		1 01111	2			6	
Permitted Phases				8			2					
Minimum Split (s)				33.0	33.0		42.0	42.0			42.0	
Total Split (s)				33.0	33.0		42.0	42.0			42.0	
Total Split (%)				44.0%	44.0%		56.0%	56.0%			56.0%	
Maximum Green (s)				26.0	26.0		34.0	34.0			34.0	
Yellow Time (s)				3.0	3.0		3.0	3.0			3.0	
All-Red Time (s)				4.0	4.0		5.0	5.0			5.0	
Lost Time Adjust (s)				7.0	0.0		0.0	0.0			0.0	
Total Lost Time (s)					7.0		8.0	8.0			8.0	
Lead/Lag					7.0		0.0	0.0			0.0	
Lead-Lag Optimize?												
				14.0	14.0		21.0	21.0			21.0	
Walk Time (s)				12.0	12.0		13.0	13.0			13.0	
Flash Dont Walk (s)												
Pedestrian Calls (#/hr)				0	0		0	0			0	

1: Ontario Street & State Street

			*	1	4	•	1	Î	1	1	Į.	1
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Act Effct Green (s)					26.0		34.0	34.0			34.0	
Actuated g/C Ratio					0.35		0.45	0.45			0.45	
v/c Ratio					0.67		0.25	0.46			0.33	
Control Delay					17.0		14.1	16.0			13.9	
Queue Delay					0.1		0.0	8.5			0.0	
Total Delay					17.2		14.1	24.5			13.9	
LOS					В		В	С			В	
Approach Delay					17.2			22.7			13.9	
Approach LOS					В			С			В	
Queue Length 50th (ft)					84		31	164			72	
Queue Length 95th (ft)					103		m36	m234			106	
Internal Link Dist (ft)		290			290			215			215	
Turn Bay Length (ft)							60					
Base Capacity (vph)					1645		339	880			1474	
Starvation Cap Reductn					0		0	431			0	
Spillback Cap Reductn					70		0	0			0	
Storage Cap Reductn					0		0	0			0	
Reduced v/c Ratio					0.70		0.25	0.90			0.33	

Intersection Summary

Area Type: Other

Intersection Capacity Utilization 115.9%

Cycle Length: 75

Actuated Cycle Length: 75

Offset: 42 (56%), Referenced to phase 2:NBTL and 6:SBT, Start of Green

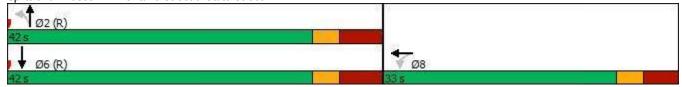
Natural Cycle: 75 Control Type: Pretimed Maximum v/c Ratio: 0.67 Intersection Signal Delay: 17.7

Intersection LOS: B
ICU Level of Service H

Analysis Period (min) 15

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 1: Ontario Street & State Street



	•	-	\rightarrow	•		•	1		1	1	1	1
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		444						1		1	↑	
Traffic Volume (vph)	126	936	144	0	0	0	0	362	121	179	368	0
Future Volume (vph)	126	936	144	0	0	0	0	362	121	179	368	0
Ideal Flow (vphpl)	1900	2000	1900	1900	2000	1900	1900	2000	1900	1900	2000	1900
Storage Length (ft)	0		0	0		0	0		0	40		0
Storage Lanes	0		0	0		0	0		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	0.91	0.91	0.91	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		0.91						0.93		0.88		
Frt		0.982						0.966				
Flt Protected		0.995								0.950		
Satd. Flow (prot)	0	4956	0	0	0	0	0	1750	0	1805	1961	0
Flt Permitted		0.995								0.337		
Satd. Flow (perm)	0	4790	0	0	0	0	0	1750	0	564	1961	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		36						1				
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		370			370			295			295	
Travel Time (s)		8.4			8.4			6.7			6.7	
Confl. Peds. (#/hr)	222		345						421	421		
Peak Hour Factor	0.82	0.82	0.82	0.88	0.88	0.88	0.92	0.92	0.92	0.90	0.90	0.90
Heavy Vehicles (%)	2%	1%	1%	0%	0%	0%	0%	3%	0%	0%	2%	0%
Adj. Flow (vph)	154	1141	176	0	0	0	0	393	132	199	409	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	1471	0	0	0	0	0	525	0	199	409	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Perm	NA						NA		Perm	NA	
Protected Phases		4						2			6	
Permitted Phases	4									6		
Minimum Split (s)	41.0	41.0						41.0		41.0	41.0	
Total Split (s)	34.0	34.0						41.0		41.0	41.0	
Total Split (%)	45.3%	45.3%						54.7%		54.7%	54.7%	
Maximum Green (s)	26.0	26.0						33.0		33.0	33.0	
Yellow Time (s)	3.0	3.0						3.0		3.0	3.0	
All-Red Time (s)	5.0	5.0						5.0		5.0	5.0	
Lost Time Adjust (s)		0.0						0.0		0.0	0.0	
Total Lost Time (s)		8.0						8.0		8.0	8.0	
Lead/Lag												
Lead-Lag Optimize?												
Walk Time (s)	12.0	12.0						19.0		19.0	19.0	
Flash Dont Walk (s)	14.0	14.0						14.0		14.0	14.0	
Pedestrian Calls (#/hr)	0	0						0		0	0	

	•	-	*	1		•	1	†	1	1	1	1
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Act Effct Green (s)		26.0						33.0		33.0	33.0	
Actuated g/C Ratio		0.35						0.44		0.44	0.44	
v/c Ratio		0.87						0.68		0.80	0.47	
Control Delay		29.7						22.3		50.5	21.7	
Queue Delay		1.1						1.0		0.0	4.0	
Total Delay		30.8						23.4		50.5	25.8	
LOS		С						С		D	С	
Approach Delay		30.8						23.4			33.8	
Approach LOS		С						С			С	
Queue Length 50th (ft)		226						187		91	135	
Queue Length 95th (ft)		247						297		m#183	224	
Internal Link Dist (ft)		290			290			215			215	
Turn Bay Length (ft)										40		
Base Capacity (vph)		1684						770		248	862	
Starvation Cap Reductn		0						0		0	362	
Spillback Cap Reductn		72						84		0	0	
Storage Cap Reductn		0						0		0	0	
Reduced v/c Ratio		0.91						0.77		0.80	0.82	

Intersection Summary

Area Type: Other

Cycle Length: 75

Actuated Cycle Length: 75

Offset: 18 (24%), Referenced to phase 2:NBT and 6:SBTL, Start of Green

Natural Cycle: 85 Control Type: Pretimed Maximum v/c Ratio: 0.87 Intersection Signal Delay: 30.0 Intersection Capacity Utilization 115.9%

Intersection LOS: C
ICU Level of Service H

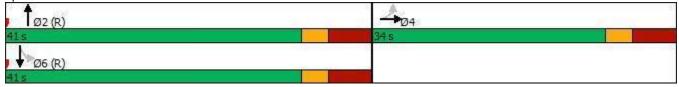
Analysis Period (min) 15

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 2: State Street & Ohio Street



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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		414						1			414	
Traffic Volume (vph)	163	819	247	0	0	0	0	186	97	139	265	0
Future Volume (vph)	163	819	247	0	0	0	0	186	97	139	265	0
Ideal Flow (vphpl)	1900	2000	1900	1900	2000	1900	1900	2000	1900	1900	2000	1900
Lane Util. Factor	0.91	0.91	0.91	1.00	1.00	1.00	1.00	0.95	0.95	0.95	0.95	1.00
Ped Bike Factor		0.91						0.92			0.95	
Frt		0.970						0.949				
Flt Protected		0.993									0.983	
Satd. Flow (prot)	0	4892	0	0	0	0	0	3290	0	0	3675	0
FIt Permitted		0.993									0.720	
Satd. Flow (perm)	0	4773	0	0	0	0	0	3290	0	0	2554	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		96						1				
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		370			370			295			295	
Travel Time (s)		8.4			8.4			6.7			6.7	
Confl. Peds. (#/hr)	237	0.1	454		0.1			0.1	395	395	0.,	
Peak Hour Factor	0.83	0.83	0.83	0.86	0.86	0.86	0.82	0.82	0.82	0.97	0.97	0.97
Heavy Vehicles (%)	0%	1%	0%	0%	0%	0%	0%	0%	1%	1%	2%	0%
Adj. Flow (vph)	196	987	298	0	0	0	0	227	118	143	273	0
Shared Lane Traffic (%)	100	301	200	U	U	U	U	221	110	140	210	U
Lane Group Flow (vph)	0	1481	0	0	0	0	0	345	0	0	416	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)	LOIL	0	rtigitt	Lon	0	ragiit	LUIT	0	rtigitt	LOIL	0	rtigitt
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane		10			10			10			10	
Headway Factor	1.00	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00
Turning Speed (mph)	1.00	0.34	9	1.00	0.54	9	1.00	0.54	9	1.00	0.54	9
Turn Type	Perm	NA	9	10		3	10	NA	3	Perm	NA	3
Protected Phases	I GIIII	4						2		I GIIII	6	
Permitted Phases	4	7						2		6	U	
Minimum Split (s)	34.0	34.0						42.0		42.0	42.0	
Total Split (s)	33.0	33.0						42.0		42.0	42.0	
Total Split (%)	44.0%	44.0%						56.0%		56.0%	56.0%	
Maximum Green (s)	29.0	29.0						37.0		37.0	37.0	
Yellow Time (s)	3.0	3.0						3.0		3.0	3.0	
All-Red Time (s)	1.0	1.0						2.0		2.0	2.0	
Lost Time Adjust (s)	1.0	0.0						0.0		2.0	0.0	
Total Lost Time (s)		4.0						5.0			5.0	
Lead/Lag		4.0						5.0			5.0	
Lead-Lag Optimize?												
Walk Time (s)	19.0	19.0						24.0		24.0	24.0	
Flash Dont Walk (s)	10.0	10.0						13.0		13.0	13.0	
Pedestrian Calls (#/hr)	0.0	0						13.0		13.0	13.0	
Act Effet Green (s)	U	29.0						37.0		U	37.0	
Actuated g/C Ratio		0.39						0.49			0.49	
v/c Ratio		0.39						0.49			0.49	
V/C RAIIO		0.70						U.Z I			บ.งง	

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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBF
Control Delay		11.2						11.2			13.3	
Queue Delay		1.9						0.0			0.0	
Total Delay		13.2						11.2			13.3	
LOS		В						В			В	
Approach Delay		13.2						11.2			13.3	
Approach LOS		В						В			В	
Queue Length 50th (ft)		72						44			52	
Queue Length 95th (ft)		86						62			101	
Internal Link Dist (ft)		290			290			215			215	
Turn Bay Length (ft)												
Base Capacity (vph)		1904						1623			1259	
Starvation Cap Reductn		267						0			0	
Spillback Cap Reductn		0						0			0	
Storage Cap Reductn		0						0			0	
Reduced v/c Ratio		0.90						0.21			0.33	
Intersection Summary												
, i	Other											
Cycle Length: 75												
Actuated Cycle Length: 75												
Offset: 27 (36%), Reference	ed to phase	2:NBT ar	d 6:SBTL	₋, Start of	Green							
Natural Cycle: 80												
Control Type: Pretimed												
Maximum v/c Ratio: 0.78				_								
Intersection Signal Delay: 12					tersection		_					
Intersection Capacity Utiliza	tion 78.6%			IC	U Level o	of Service	D					
Analysis Period (min) 15												
Splits and Phases: 3: Wal	bash Avenu	ıe & Ohio	Street									
1 Ø2 (R)				40	4					à		
42 s				33 s					- 1			
Ø6 (R)						12 12						-

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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations					444			414			†	
Traffic Volume (vph)	0	0	0	99	685	22	342	213	0	0	266	92
Future Volume (vph)	0	0	0	99	685	22	342	213	0	0	266	92
Ideal Flow (vphpl)	1900	2000	1900	1900	2000	1900	1900	2000	1900	1900	2000	1900
Lane Util. Factor	1.00	1.00	1.00	0.91	0.91	0.91	0.95	0.95	1.00	1.00	0.95	0.95
Ped Bike Factor					0.97			0.93			0.94	
Frt					0.996						0.961	
Flt Protected					0.994			0.970				
Satd. Flow (prot)	0	0	0	0	5310	0	0	3686	0	0	3390	0
Flt Permitted					0.994			0.610				
Satd. Flow (perm)	0	0	0	0	5175	0	0	2156	0	0	3390	0
Right Turn on Red			Yes			Yes			No			Yes
Satd. Flow (RTOR)					6						62	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		370			370			295			295	
Travel Time (s)		8.4			8.4			6.7			6.7	
Confl. Peds. (#/hr)		0.1		230	0.1	319	185	0.1			0.1	185
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	0%	1%	1%	1%	0%	0%	100%	0%	2%	1%
Adj. Flow (vph)	0	0	0	105	729	23	364	227	0	0	283	98
Shared Lane Traffic (%)	•	· ·	•	100	720		001				200	
Lane Group Flow (vph)	0	0	0	0	857	0	0	591	0	0	381	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)	Loit	0	rugiit	Loit	0	rugiit	Loit	0	rugiit	Loit	0	rugiit
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane		10			10			10			10	
Headway Factor	1.00	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00
Turning Speed (mph)	15	0.01	9	15	0.01	9	15	0.01	9	15	0.01	9
Turn Type	10			Perm	NA		pm+pt	NA	· ·	10	NA	
Protected Phases				. 0	8		5	2			6	
Permitted Phases				8	•		2	_			•	
Minimum Split (s)				31.0	31.0		9.5	49.0			35.0	
Total Split (s)				29.0	29.0		18.0	46.0			28.0	
Total Split (%)				38.7%	38.7%		24.0%	61.3%			37.3%	
Maximum Green (s)				25.0	25.0		15.0	35.0			20.0	
Yellow Time (s)				3.0	3.0		3.0	6.0			3.0	
All-Red Time (s)				1.0	1.0		0.0	5.0			5.0	
Lost Time Adjust (s)				1.0	0.0		0.0	0.0			0.0	
Total Lost Time (s)					4.0			11.0			8.0	
Lead/Lag					4.0		Lead	11.0			Lag	
Lead-Lag Optimize?							Yes				Yes	
Walk Time (s)				16.0	16.0		163	25.0			7.0	
Flash Dont Walk (s)				9.0	9.0			13.0			13.0	
Pedestrian Calls (#/hr)				9.0	9.0			13.0			13.0	
Act Effct Green (s)				U	25.0			35.0			20.0	
. ,					0.33			0.47			0.27	
Actuated g/C Ratio					0.50			0.47			0.40	
v/c Ratio					0.50			0.51			0.40	

	•		7	1	2000	•	1	24.5	1	-	↓	4
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Control Delay					21.0			15.2			20.2	
Queue Delay					0.0			0.8			0.0	
Total Delay					21.0			16.0			20.2	
LOS					С			В			С	
Approach Delay					21.0			16.0			20.2	
Approach LOS					С			В			С	
Queue Length 50th (ft)					113			82			63	
Queue Length 95th (ft)					150			m140			101	
Internal Link Dist (ft)		290			290			215			215	
Turn Bay Length (ft)												
Base Capacity (vph)					1729			1148			949	
Starvation Cap Reductn					0			273			0	
Spillback Cap Reductn					0			0			0	
Storage Cap Reductn					0			0			0	
Reduced v/c Ratio					0.50			0.68			0.40	
Intersection Summary												

Area Type: Other

Cycle Length: 75

Actuated Cycle Length: 75

Offset: 52 (69%), Referenced to phase 2:NBTL and 6:SBT, Start of Green

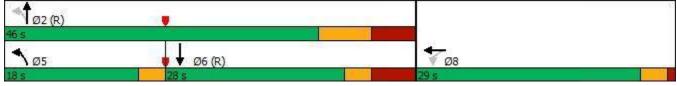
Natural Cycle: 80 Control Type: Pretimed Maximum v/c Ratio: 0.51

Intersection Signal Delay: 19.2 Intersection LOS: B Intersection Capacity Utilization 75.6% ICU Level of Service D

Analysis Period (min) 15

m Volume for 95th percentile queue is metered by upstream signal.





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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations					444		1	*			1	
Traffic Volume (vph)	0	0	0	204	796	72	101	265	0	0	326	186
Future Volume (vph)	0	0	0	204	796	72	101	265	0	0	326	186
Ideal Flow (vphpl)	1900	2000	1900	1900	2000	1900	1900	2000	1900	1900	2000	1900
Storage Length (ft)	0		0	0		0	60		0	0		0
Storage Lanes	0		0	0		0	1		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	0.91	0.91	0.91	1.00	1.00	1.00	1.00	0.95	0.95
Ped Bike Factor					0.88		0.85				0.88	
Frt					0.990						0.945	
Flt Protected					0.991		0.950					
Satd. Flow (prot)	0	0	0	0	5062	0	1787	1961	0	0	3105	0
Flt Permitted					0.991		0.451					
Satd. Flow (perm)	0	0	0	0	4640	0	720	1961	0	0	3105	0
Right Turn on Red	-	•	Yes	-		Yes			Yes			Yes
Satd. Flow (RTOR)					17						1	. 90
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		370			370			295			295	
Travel Time (s)		8.4			8.4			6.7			6.7	
Confl. Peds. (#/hr)		<u> </u>		303	<u> </u>	412	598	V. .				598
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	0%	0%	0%	2%	2%	3%	1%	2%	0%	0%	2%	2%
Adj. Flow (vph)	0	0	0	215	838	76	106	279	0	0	343	196
Shared Lane Traffic (%)								•			0.0	
Lane Group Flow (vph)	0	0	0	0	1129	0	106	279	0	0	539	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane		. •										
Headway Factor	1.00	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00
Turning Speed (mph)	15	0.01	9	15	0.01	9	15	0.01	9	15	0.01	9
Turn Type	10			Perm	NA		Perm	NA		.0	NA	J
Protected Phases				1 01111	8		1 01111	2			6	
Permitted Phases				8			2					
Minimum Split (s)				33.0	33.0		42.0	42.0			42.0	
Total Split (s)				33.0	33.0		42.0	42.0			42.0	
Total Split (%)				44.0%	44.0%		56.0%	56.0%			56.0%	
Maximum Green (s)				26.0	26.0		34.0	34.0			34.0	
Yellow Time (s)				3.0	3.0		3.0	3.0			3.0	
All-Red Time (s)				4.0	4.0		5.0	5.0			5.0	
Lost Time Adjust (s)				7.0	0.0		0.0	0.0			0.0	
Total Lost Time (s)					7.0		8.0	8.0			8.0	
Lead/Lag					7.0		0.0	0.0			0.0	
Lead-Lag Optimize?												
Walk Time (s)				14.0	14.0		21.0	21.0			21.0	
				12.0	12.0		13.0	13.0			13.0	
Flash Dont Walk (s)												
Pedestrian Calls (#/hr)				0	0		0	0			0	

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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Act Effct Green (s)					26.0		34.0	34.0			34.0	
Actuated g/C Ratio					0.35		0.45	0.45			0.45	
v/c Ratio					0.70		0.33	0.31			0.38	
Control Delay					17.4		22.2	19.5			14.5	
Queue Delay					0.0		0.0	1.4			0.1	
Total Delay					17.4		22.2	20.9			14.6	
LOS					В		С	С			В	
Approach Delay					17.4			21.2			14.6	
Approach LOS					В			С			В	
Queue Length 50th (ft)					90		34	89			83	
Queue Length 95th (ft)					110		m64	m153			120	
Internal Link Dist (ft)		290			290			215			215	
Turn Bay Length (ft)							60					
Base Capacity (vph)					1619		326	888			1408	
Starvation Cap Reductn					0		0	420			0	
Spillback Cap Reductn					0		0	0			115	
Storage Cap Reductn					0		0	0			0	
Reduced v/c Ratio					0.70		0.33	0.60			0.42	
Intersection Summary												
Area Type: Oth	ner											
Cycle Length: 75												
Actuated Cycle Length: 75												
Offset: 51 (68%), Referenced to	o phase	2:NBTL a	nd 6:SB1	, Start of	Green							
Natural Cycle: 75												
Control Type: Pretimed												
Maximum v/c Ratio: 0.70												
Intersection Signal Delay: 17.4				In	tersection	LOS: B						
Intersection Capacity Utilization	114.9%	0		IC	U Level c	f Service	Н					

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 1: Ontario Street & State Street

Analysis Period (min) 15



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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		414						f)		7	*	
Traffic Volume (vph)	122	894	166	0	0	0	0	242	141	220	302	0
Future Volume (vph)	122	894	166	0	0	0	0	242	141	220	302	0
Ideal Flow (vphpl)	1900	2000	1900	1900	2000	1900	1900	2000	1900	1900	2000	1900
Storage Length (ft)	0		0	0		0	0		0	40		0
Storage Lanes	0		0	0		0	0		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	0.91	0.91	0.91	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		0.89						0.89		0.84		
Frt		0.979						0.950				
Flt Protected		0.995								0.950		
Satd. Flow (prot)	0	4894	0	0	0	0	0	1651	0	1787	1961	0
Flt Permitted		0.995								0.434		
Satd. Flow (perm)	0	4718	0	0	0	0	0	1651	0	689	1961	0
Right Turn on Red	•		Yes	•	•	Yes	-	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	Yes		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	Yes
Satd. Flow (RTOR)		47						1				
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		370			370			295			295	
Travel Time (s)		8.4			8.4			6.7			6.7	
Confl. Peds. (#/hr)	251	0.1	397		0.1			U. 1	462	462	0.7	
Peak Hour Factor	0.98	0.98	0.98	0.97	0.97	0.97	0.91	0.91	0.91	0.95	0.95	0.95
Heavy Vehicles (%)	0%	1%	0%	0%	0%	0%	0%	3%	0%	1%	2%	0%
Adj. Flow (vph)	124	912	169	0	0	0	0	266	155	232	318	0
Shared Lane Traffic (%)		V . -									0.0	
Lane Group Flow (vph)	0	1205	0	0	0	0	0	421	0	232	318	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00
Turning Speed (mph)	15	0.01	9	15	0.01	9	15	0.01	9	15	0.01	9
Turn Type	Perm	NA						NA		Perm	NA	
Protected Phases	1 01111	4						2		1 01111	6	
Permitted Phases	4	•								6		
Minimum Split (s)	40.0	40.0						40.0		40.0	40.0	
Total Split (s)	35.0	35.0						40.0		40.0	40.0	
Total Split (%)	46.7%	46.7%						53.3%		53.3%	53.3%	
Maximum Green (s)	27.0	27.0						32.0		32.0	32.0	
Yellow Time (s)	3.0	3.0						3.0		3.0	3.0	
All-Red Time (s)	5.0	5.0						5.0		5.0	5.0	
Lost Time Adjust (s)	0.0	0.0						0.0		0.0	0.0	
Total Lost Time (s)		8.0						8.0		8.0	8.0	
Lead/Lag		0.0						0.0		0.0	0.0	
Lead-Lag Optimize?												
Walk Time (s)	13.0	13.0						18.0		18.0	18.0	
Flash Dont Walk (s)	14.0	14.0						14.0		14.0	14.0	
` ,												
Pedestrian Calls (#/hr)	0	0						0		0	0	

	•		*	1		•	1	†	-	1	1	1
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Act Effct Green (s)		27.0						32.0		32.0	32.0	
Actuated g/C Ratio		0.36						0.43		0.43	0.43	
v/c Ratio		0.70						0.60		0.79	0.38	
Control Delay		22.3						20.9		43.1	19.6	
Queue Delay		0.0						0.0		0.0	2.0	
Total Delay		22.3						20.9		43.1	21.6	
LOS		С						С		D	С	
Approach Delay		22.3						20.9			30.7	
Approach LOS		С						С			С	
Queue Length 50th (ft)		165						145		104	126	
Queue Length 95th (ft)		213						236		m#202	m200	
Internal Link Dist (ft)		290			290			215			215	
Turn Bay Length (ft)										40		
Base Capacity (vph)		1728						705		293	836	
Starvation Cap Reductn		0						0		0	367	
Spillback Cap Reductn		0						0		0	0	
Storage Cap Reductn		0						0		0	0	
Reduced v/c Ratio		0.70						0.60		0.79	0.68	

Intersection Summary

Area Type: Other

Cycle Length: 75

Actuated Cycle Length: 75

Offset: 73 (97%), Referenced to phase 2:NBT and 6:SBTL, Start of Green

Natural Cycle: 80 Control Type: Pretimed Maximum v/c Ratio: 0.79 Intersection Signal Delay: 24.1 Intersection Capacity Utilization 114.9%

Intersection LOS: C
ICU Level of Service H

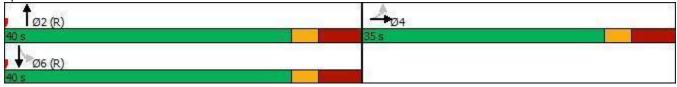
Analysis Period (min) 15

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 2: State Street & Ohio Street



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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		414						†			414	
Traffic Volume (vph)	167	868	178	0	0	0	0	123	93	97	189	0
Future Volume (vph)	167	868	178	0	0	0	0	123	93	97	189	0
Ideal Flow (vphpl)	1900	2000	1900	1900	2000	1900	1900	2000	1900	1900	2000	1900
Lane Util. Factor	0.91	0.91	0.91	1.00	1.00	1.00	1.00	0.95	0.95	0.95	0.95	1.00
Ped Bike Factor		0.93						0.91			0.95	
Frt		0.978						0.935				
Flt Protected		0.993									0.983	
Satd. Flow (prot)	0	5021	0	0	0	0	0	3205	0	0	3698	0
Flt Permitted		0.993									0.768	
Satd. Flow (perm)	0	4877	0	0	0	0	0	3205	0	0	2745	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		53						2				
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		370			370			295			295	
Travel Time (s)		8.4			8.4			6.7			6.7	
Confl. Peds. (#/hr)	277		470						333	333		
Peak Hour Factor	0.94	0.94	0.94	0.95	0.95	0.95	0.86	0.86	0.86	0.91	0.91	0.91
Heavy Vehicles (%)	0%	1%	0%	0%	0%	20%	0%	1%	0%	1%	1%	0%
Adj. Flow (vph)	178	923	189	0	0	0	0	143	108	107	208	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	1290	0	0	0	0	0	251	0	0	315	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0	<u> </u>		0			0	J
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Perm	NA						NA		Perm	NA	
Protected Phases		4						2			6	
Permitted Phases	4									6		
Minimum Split (s)	35.0	35.0						41.0		41.0	41.0	
Total Split (s)	34.0	34.0						41.0		41.0	41.0	
Total Split (%)	45.3%	45.3%						54.7%		54.7%	54.7%	
Maximum Green (s)	30.0	30.0						36.0		36.0	36.0	
Yellow Time (s)	3.0	3.0						3.0		3.0	3.0	
All-Red Time (s)	1.0	1.0						2.0		2.0	2.0	
		0.0						0.0			0.0	
• ,		4.0						5.0			5.0	
Lead/Lag												
Lead-Lag Optimize?												
Walk Time (s)	20.0	20.0						23.0		23.0	23.0	
()	10.0	10.0										
	0	0						0		0	0	
Act Effct Green (s)		30.0						36.0			36.0	
Actuated g/C Ratio		0.40						0.48			0.48	
v/c Ratio		0.65						0.16			0.24	
Turn Type Protected Phases Permitted Phases Minimum Split (s) Total Split (%) Maximum Green (s) Yellow Time (s) All-Red Time (s) Lost Time Adjust (s) Total Lost Time (s) Lead/Lag Lead-Lag Optimize? Walk Time (s) Flash Dont Walk (s) Pedestrian Calls (#/hr) Act Effct Green (s) Actuated g/C Ratio	4 35.0 34.0 45.3% 30.0 3.0 1.0	35.0 34.0 45.3% 30.0 3.0 1.0 0.0 4.0 20.0 10.0 0 30.0 0.40						2 41.0 41.0 54.7% 36.0 3.0 2.0 0.0 5.0 23.0 13.0 0 36.0 0.48		6 41.0 41.0 54.7% 36.0 3.0 2.0	41.0 41.0 54.7% 36.0 3.0 2.0 0.0 5.0 23.0 13.0 0 36.0 0.48	

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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBF
Control Delay		13.7						11.3			8.2	
Queue Delay		0.6						0.0			0.0	
Total Delay		14.3						11.3			8.2	
LOS		В						В			Α	
Approach Delay		14.3						11.3			8.2	
Approach LOS		В						В			Α	
Queue Length 50th (ft)		117						32			40	
Queue Length 95th (ft)		152						50			64	
Internal Link Dist (ft)		290			290			215			215	
Turn Bay Length (ft)												
Base Capacity (vph)		1982						1539			1317	
Starvation Cap Reductn		317						0			0	
Spillback Cap Reductn		0						0			0	
Storage Cap Reductn		0						0			0	
Reduced v/c Ratio		0.77						0.16			0.24	
Intersection Summary												
Area Type: (Other											
Cycle Length: 75												
Actuated Cycle Length: 75												
Offset: 7 (9%), Referenced to	phase 2:1	NBT and	6:SBTL, S	Start of G	reen							
Natural Cycle: 80												
Control Type: Pretimed												
Maximum v/c Ratio: 0.65												
Intersection Signal Delay: 12	.8			ln	tersectior	LOS: B						
Intersection Capacity Utilizat	ion 74.3%			IC	U Level	of Service	D					
Analysis Period (min) 15												
Splits and Phases: 3: Wab	ash Avenu	ıa (Obia	Ctroot									
Spills and Friases. 3. Wal	asii Aveiil	ie a Uillo	Slittel		6	- A -						- 23
Tø2 (R)						→ Ø4						
41s						34 s						
		·			- 0					·		- 6
▼ Ø6 (R)												

	•		•	1		•	1		1	1	1	1
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations					414			414			1	
Traffic Volume (vph)	0	0	0	112	613	28	313	133	0	0	154	118
Future Volume (vph)	0	0	0	112	613	28	313	133	0	0	154	118
Ideal Flow (vphpl)	1900	2000	1900	1900	2000	1900	1900	2000	1900	1900	2000	1900
Lane Util. Factor	1.00	1.00	1.00	0.91	0.91	0.91	0.95	0.95	1.00	1.00	0.95	0.95
Ped Bike Factor					0.95			0.92			0.92	
Frt					0.994						0.935	
Flt Protected					0.993			0.966				
Satd. Flow (prot)	0	0	0	0	5233	0	0	3645	0	0	3212	0
FIt Permitted					0.993			0.615				
Satd. Flow (perm)	0	0	0	0	5012	0	0	2144	0	0	3212	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					8						94	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		370			370			295			295	
Travel Time (s)		8.4			8.4			6.7			6.7	
Confl. Peds. (#/hr)		.		315	.	393	160	•			•	160
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Heavy Vehicles (%)	0%	0%	0%	1%	2%	0%	1%	0%	0%	0%	2%	1%
Adj. Flow (vph)	0	0	0	127	697	32	356	151	0	0	175	134
Shared Lane Traffic (%)		· ·	· ·		001	02	000	101	•		110	101
Lane Group Flow (vph)	0	0	0	0	856	0	0	507	0	0	309	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)	Loit	0	rugiit	Loit	0	rugiit	Loit	0	rugiit	Lon	0	rugiit
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane								.,				
Headway Factor	1.00	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00
Turning Speed (mph)	15	0.01	9	15	0.01	9	15	0.0 .	9	15	0.0 .	9
Turn Type				Perm	NA		pm+pt	NA			NA	
Protected Phases				. 0	8		5	2			6	
Permitted Phases				8			2	_			J	
Minimum Split (s)				31.0	31.0		13.0	49.0			28.0	
Total Split (s)				29.0	29.0		18.0	46.0			28.0	
Total Split (%)				38.7%	38.7%		24.0%	61.3%			37.3%	
Maximum Green (s)				25.0	25.0		15.0	35.0			20.0	
Yellow Time (s)				3.0	3.0		3.0	6.0			3.0	
All-Red Time (s)				1.0	1.0		0.0	5.0			5.0	
Lost Time Adjust (s)				1.0	0.0		0.0	0.0			0.0	
Total Lost Time (s)					4.0			11.0			8.0	
Lead/Lag					7.0		Lead	11.0			Lag	
Lead-Lag Optimize?							Yes				Yes	
Walk Time (s)				16.0	16.0		100	25.0			7.0	
Flash Dont Walk (s)				9.0	9.0			13.0			13.0	
Pedestrian Calls (#/hr)				0	0			0			0	
Act Effct Green (s)					25.0			35.0			20.0	
Actuated g/C Ratio					0.33			0.47			0.27	
v/c Ratio					0.51			0.44			0.27	
v/o i tatio					0.01			V. TT			0.00	

	•		7	1		•	1	1	1	1	1	1
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Control Delay					21.2			12.6			16.3	
Queue Delay					0.0			0.7			0.0	
Total Delay					21.2			13.2			16.3	
LOS					С			В			В	
Approach Delay					21.2			13.2			16.3	
Approach LOS					С			В			В	
Queue Length 50th (ft)					114			63			41	
Queue Length 95th (ft)					146			87			71	
Internal Link Dist (ft)		290			290			215			215	
Turn Bay Length (ft)												
Base Capacity (vph)					1676			1140			925	
Starvation Cap Reductn					0			315			0	
Spillback Cap Reductn					0			0			0	
Storage Cap Reductn					0			0			0	
Reduced v/c Ratio					0.51			0.61			0.33	
Intersection Summary												
Area Type:	Other											
Cycle Length: 75												
Actuated Cycle Length: 75												
Offset: 61 (81%), Reference	ed to phase	2:NBTL a	and 6:SBT	Γ, Start of	Green							
Natural Cycle: 80												
Control Type: Pretimed												
Maximum v/c Ratio: 0.51												
Intersection Signal Delay: 1					tersection							
Intersection Capacity Utiliza	ntion 74.0%			IC	U Level c	of Service	D					

Splits and Phases: 4: Ontario Street & Wabash Avenue

Analysis Period (min) 15

