ROUTE 44 ENHANCEMENTS STUDY

Traffic Analysis Report

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INTRODUCTION

The Route 44 Enhancement Study is intended to explore and evaluate the potential applicability of additional transit priority features serving King County Metro Route 44 within Seattle's University District. Route 44 traverses NE 45th Street and 15th Avenue NE in the University District along its route between Montlake and Ballard. Average bus speeds on these streets are below 10 mph during the commute peak hours, limiting the competitiveness of transit in serving east-west crosstown trips. An area map of Route 44 is shown in Figure 1.

In an earlier study (*NW Market/NE 45th Street Transit Priority Corridor Improvement Project*, February 19, 2010), a series of corridor-wide improvements were evaluated for the Route 44 between Montlake and Ballard. Promising bus priority strategies were refined and advanced to design and implementation. Projects implemented during 2011 and 2012 include:

- Repaving 15th Avenue NE, together with bus stop consolidation, and transit signal priority
- Bus queue jump lane on Midvale Place
- Bus bulbs in Wallingford and Ballard on N 45th Street and NW Market Street
- Reconstruction of the NW Market Street/24th Avenue NW intersection
- Installation of transit signal priority equipment at many intersections
- PM peak-hour restriction of the northbound left turn on 15th Avenue NE at NE 45th Street to transit only

The previous effort considered the feasibility of a westbound Business Access and Transit (BAT) lane on NE 45th Street within the University District. That project would have required a prohibition of east-west left turns from NE 45th Street onto intersecting cross streets. Sensitivity to the issue of business access led to a reappraisal of the scope of alternatives needed for bus speed and reliability improvements in the University District, between I-5 and 15th Avenue NE.

The current study also was informed by several earlier transportation planning analyses of University District traffic conditions. The University Area Transportation Study (SDOT, 2001), *University Area Transportation Strategy* (SDOT, 2002), the *University Area Transportation Action Strategy* (SDOT, 2008), the *U District Urban Design Framework* (DPD, 2013) and the *Transit Master Plan* (SDOT, 2012) have all considered a wide range of alternatives for traffic relief, freight mobility, pedestrian and bicycle connectivity and safety, and improvement of transit speed and reliability.

An *Alternatives Descriptions Memorandum (November 12, 2014)* provided a screening of about 30 alternatives for potential detailed study using multimodal modeling. The alternatives include some identified in the previous studies and some developed specifically for the current effort. Many alternatives are directed at the interface between City streets and the I-5 interchanges at NE 45th and NE 50th Streets. The alternatives address travel demand management, intersection and ramp geometric features, and operational options for the NE 45th Street corridor between 5th Avenue NE and 17th Avenue NE. The Alternatives Descriptions Memorandum is Appendix A to this report.

Alternatives that showed promise in reducing transit travel times were assembled in two packages for study using the VISSIM simulation software. The results of those initial model studies led to a third recommended package of transit speed and reliability measures in the University District.

Spot improvements were identified at three choke points west of I-5. Traffic signal revisions at the N 45th Street / Wallingford Avenue N intersection will reduce delays experienced by all travelers. An extension of the westbound Midvale Place queue jump lane, back to the N 45th Street / Stone Way N intersection will provide additional transit travel time savings. Rechannelization of N 46th Street between Linden Avenue N and Greenwood Avenue N, to provide left-turn lanes at the signalized intersections at Fremont and Phinney Avenues N, will reduce delays experienced by all travelers, and will enhance transit reliability.

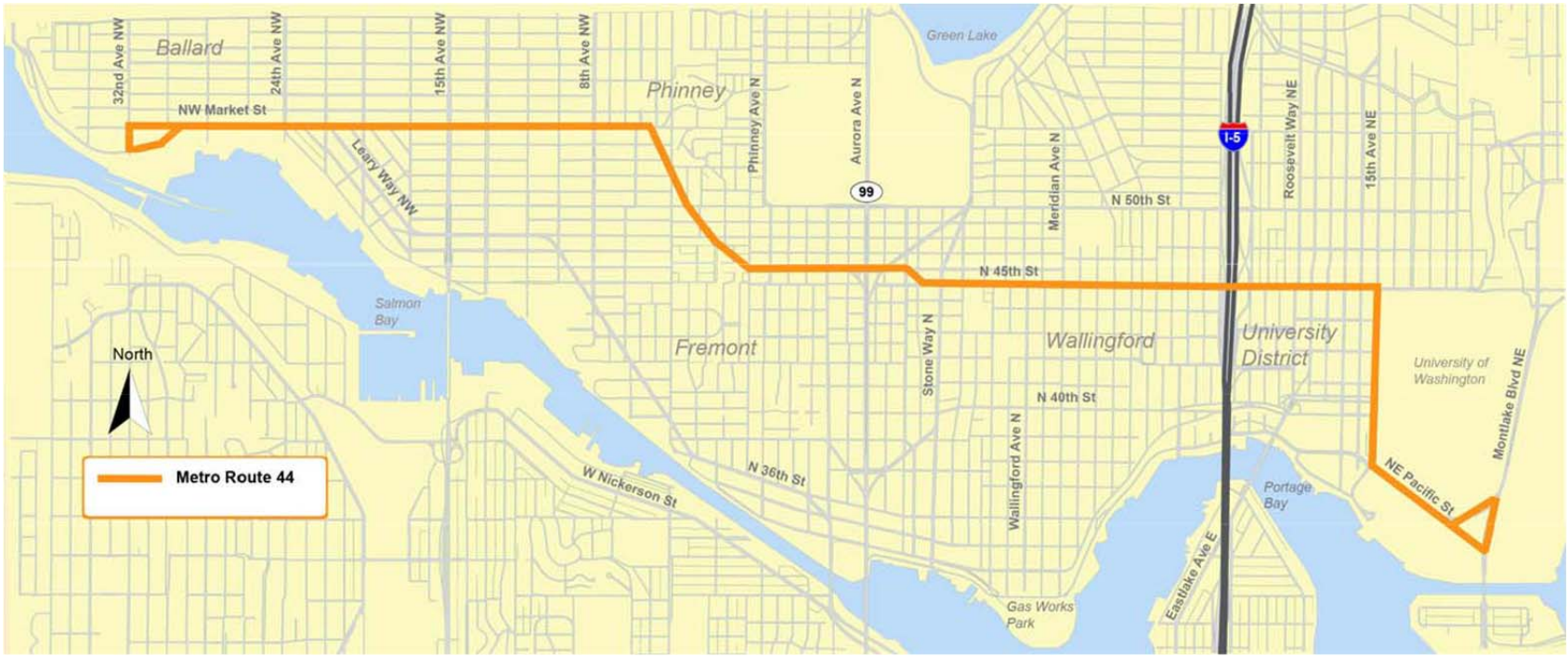


Figure 1:
Route 44 Area Map

EXISTING CONDITIONS UPDATE

The Route 44 Enhancement Study required the collection of updated bus travel times on Route 44 because several projects have been implemented since the 2009 baseline condition used in the *Corridor Improvement Project* (2010). Additional traffic counts were collected in the form of intersection turning movement counts and vehicle occupancy counts at the I-5 ramps. These data elements will facilitate the analysis of travel demand management measures, and the associated diversions of traffic.

Route 44 Travel Times

Travel times on Route 44 were determined with an on-board survey conducted during November 2014, and a sample of Metro On-Board Systems (OBS) data from spring 2014. The on-board survey covered the portion of Route 44 between Montlake and Wallingford Avenue, including the University District. The survey tabulated dwell time at transit stops and delay at intersections in the inbound (eastbound) and outbound (westbound) directions of travel. Multiple observations were conducted during the AM, midday, and PM periods. Observed travel times were within one minute of the average values calculated from Metro's spring 2014 data. Average travel time, and speed from the OBS data are presented in Table 1. Travel time, dwell and delay data is included in Appendix B. Baseline VISSIM models are calibrated to these average travel time values.

Table 1:
2014 Route 44 Average Travel Time and Speed

Time	Direction	Travel Time (min:sec)	Travel Speed (mph)
AM Peak	Eastbound – end to end	36:50	8.5
	Westbound – end to end	33:20	9.5
	Eastbound – University District	5:20	6.8
	Westbound – University District	4:10	8.2
Midday	Eastbound – end to end	35:10	9.0
	Westbound – end to end	36:10	8.7
	Eastbound – University District	4:50	7.7
	Westbound – University District	4:40	7.3
PM Peak	Eastbound – end to end	37:50	8.3
	Westbound – end to end	41:50	7.5
	Eastbound – University District	5:30	6.6
	Westbound – University District	5:20	6.3

Note: University District travel time segment includes NE 45th St / Thackeray Pl NE to NE 45th St / University Way NE (eastbound) and NE 45th St / Brooklyn Ave NE to NE 45th St / Latona Ave NE (westbound)

Traffic Volumes

A program of intersection turning movement counts was undertaken at 25 intersections on NE 50th Street, NE 47th Street, NE 45th Street and NE 43rd Street during October 2014. The counts covered two-hour periods for each of the AM peak period, midday hours, and PM peak period, by 15-minute increments. This effort also included pedestrian crosswalk counts, bicycle counts and truck counts. Turn movement counts are included in Appendix C.

Vehicle occupancy counts at the NE 45th Street and NE 50th Street I-5 freeway ramps in October 2014. Occupancy counts were used to estimate high occupancy vehicle (HOV) volumes in the study area. HOV volumes were used to determine traffic composition input values in VISSIM. Vehicle occupancy count data is included in Appendix D.

The updated traffic volumes are shown in Table 2 and Figure 2. During the AM peak hour, traffic flow on NE 45th Street east of I-5 is primarily eastbound, with 1,200 vehicles per hour (vph) compared to 660 vph in the westbound direction. East of University Way NE on NE 45th Street, the directional volumes are 870 vph westbound and 650 vph eastbound. These patterns suggest that traffic destined to the University District and the main University of Washington (UW) campus use Roosevelt Way and other north-south streets between 7th Avenue NE and 15th Avenue NE to reach their destinations. In the PM peak hour, volumes on NE 45th Street are also higher in the eastbound direction. Volumes on NE 50th Street are typical of a commute pattern, with higher eastbound volumes in the AM peak and higher westbound volumes in the PM peak.

On-ramps to I-5 from NE 45th and 50th Streets are metered. All ramps have an HOV bypass lane and one metered lane, except the NE 50th Street southbound on-ramp, which does not have an HOV bypass lane due to geometric constraints. On-ramp capacity is metered to approximately 800 vph in both of these locations. Off-ramp volumes range from 450 vph to 850 vph during the AM and PM peak hours. The off-ramps to NE 45th and 50th Streets exit from I-5 at a single location in each direction. The total exiting traffic in the peak direction is 1,400 to 1,600 vph, which is near the capacity for a single lane freeway exit.

Table 2:
2014 Peak Hour Traffic Volumes

Street / Direction	AM Peak (vph)	PM Peak (vph)
NE 45th St – east of 7th Ave NE / Eastbound	1,200	1,220
NE 45th St – east of 7th Ave NE / Westbound	660	1,070
NE 45th St – east of University Way NE / Eastbound	650	830
NE 45th St – east of University Way NE / Westbound	870	710
NE 50th St – east of 7th Ave NE / Eastbound	1,000	800
NE 50th St – east of 7th Ave NE / Westbound	630	970
NE 50th St – east of University Way NE / Eastbound	500	470
NE 50th St – east of University Way NE / Westbound	340	560
I-5 – NE 45th St off-ramp / Southbound	850	650
I-5 – NE 45th St on-ramp / Southbound	570	580
I-5 – NE 45th St off-ramp / Northbound	840	780
I-5 – NE 45th St on-ramp / Northbound	550	800
I-5 – NE 50th St off-ramp / Southbound	540	450
I-5 – NE 50th St on-ramp / Southbound	630	380
I-5 – NE 50th St off-ramp / Northbound	490	780
I-5 – NE 50th St on-ramp / Northbound	450	790

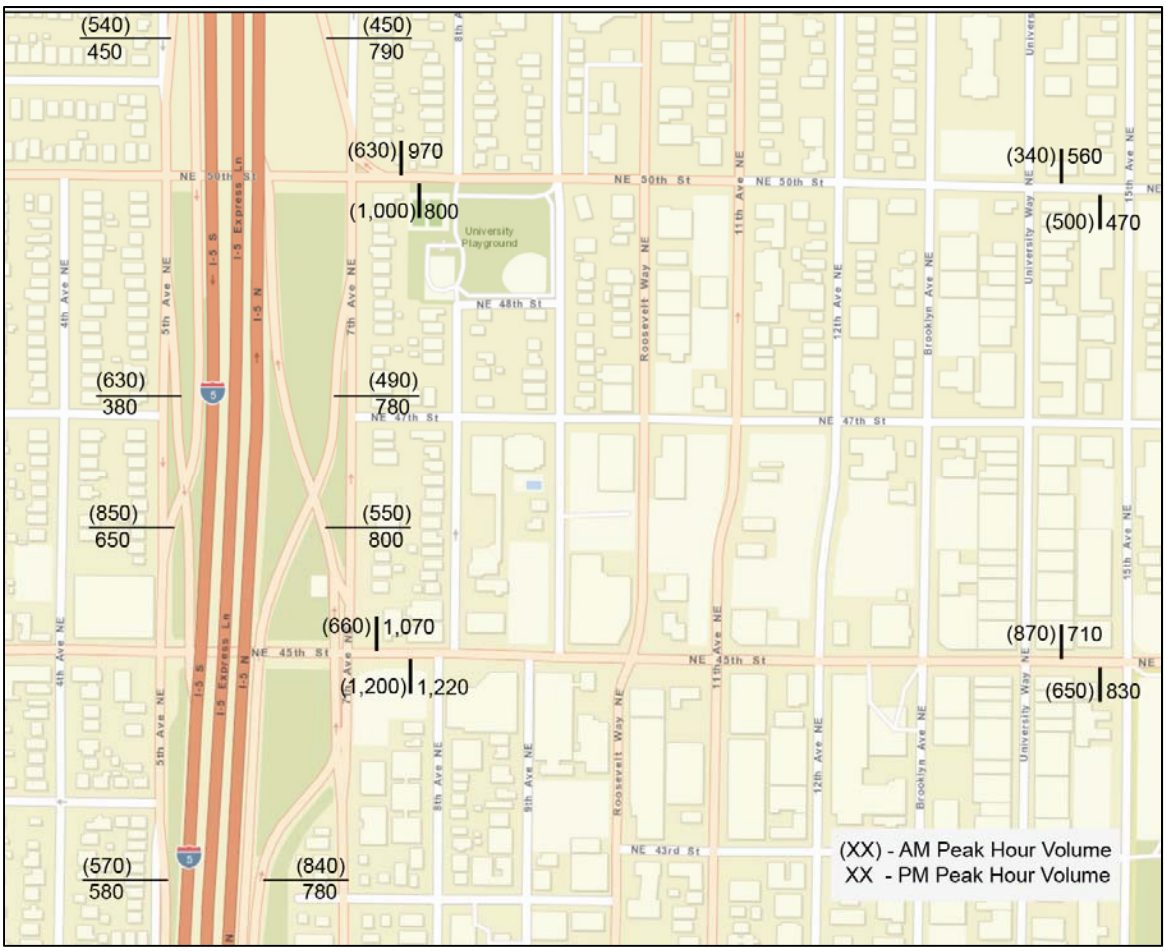


Figure 2:
2014 Peak Hour Traffic Volumes (vph)

Street Inventory

NE 45th Street in the University District provides four lanes with sections of two-way left turn lane and left-turn lanes at several intersections. Parking is prohibited in this area and a 30 mph speed limit is posted. Sidewalks are present throughout this section of NE 45th Street, as are crosswalks at all signalized intersections. Bike lanes are not provided. A cross-section view of NE 45th Street, showing the existing lane widths is provided in Figure 3.

Fifteen transit routes (Metro, Sound Transit and Community Transit) operate on NE 45th Street between 5th Avenue NE and 17th Avenue NE. An additional fourteen transit routes cross NE 45th Street between 5th Avenue NE and 15th Avenue NE. A transit queue jump lane is provided in the eastbound direction at 7th Avenue NE. Transit stops occur in the curb lane throughout the corridor, except at 7th Avenue NE where bus pullouts are present.

NE 50th Street in the University District provides four lanes without left-turn lanes. Left-turn lanes are provided at the intersections of 5th Avenue NE and 7th Avenue NE. Parking is prohibited on NE 50th Street and a 30 mph speed limit is posted. Sidewalks and crosswalks are provided throughout this section of NE 50th Street. Five transit routes operate on sections of

NE 50th Street. NE 50th Street through Wallingford and the University District is not served by a continuous transit route. Deadheading buses to/from the UW campus are also routed on NE 50th Street.

SDOT is currently designing a rechannelization project for Roosevelt Way NE and 11th Avenue NE to reduce the number of vehicular travel lanes and add bicycle lanes.

Brooklyn Avenue NE between NE 45th Street and NE 43rd Street is currently closed for construction of the Sound Transit Northgate Link Extension U District Station.

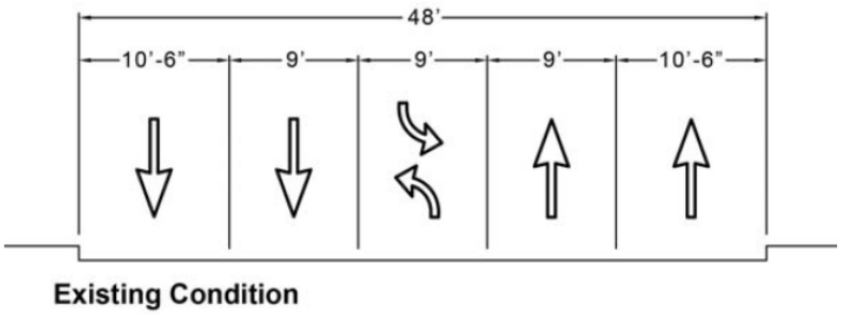


Figure 3:
NE 45th Street Existing Lane Widths

TRAFFIC ANALYSIS METHODOLOGY

Route 44 enhancements outside the University District were analyzed using Synchro software. The proposed enhancements can be evaluated based on average intersection delay values and movement delays corresponding to transit operations.

Average intersection delay values correspond to level of service (LOS) categories as described in the *2010 Highway Capacity Manual*. The vehicle delay associated with level of service is shown in Table 3.

Table 3:
Intersection Level-of-Service Criteria

	Control Delay* (seconds per vehicle)	
Level of Service	**Signalized**	**Unsignalized**
A	≤10	0 to 10
B	>10 to 20	>10 to 15
C	>20 to 35	>15 to 25
D	>35 to 55	>25 to 35
E	>55 to 80	>35 to 50
F	>80	>50

Source: Transportation Research Board. Highway Capacity Manual 2010. Exhibit 18-4 and Exhibit 19-1.

* Control delay is time spent slowing, stopping, moving up in a queue, and accelerating back to desired speed.

The Route 44 enhancements in the University District were analyzed using VISSIM microsimulation software. Interactions between transit, general traffic, HOV traffic, trucks and pedestrians are simulated and measured.

The VISSIM network includes the intersections bounded by Latona Avenue NE, 17th Avenue NE, NE 50th Street and NE 43rd Street. Turn movement counts for each intersection were used to calculate an origin-destination trip table for the study area. Signal timing values provided by SDOT were entered into VISSIM for each intersection, and transit routes were coded into the network according to scheduled arrival times. Average dwell times from Metro's OBS data were used for Route 44 stops.

The baseline VISSIM model was calibrated to replicate vehicle turn movement volumes and Route 44 travel times. Confidence intervals ranging from 35 seconds to 60 seconds for the AM and PM peak hours were found to be appropriate for the target travel times using the calibration methodology in WSDOT's *Protocol for VISSIM Simulation (September 2014)*. Simulated travel times were within 15 seconds of the average travel times from Metro's OBS data for the AM peak hour and 40 seconds for the PM peak hour.

The calibration process showed that vehicle queuing in the VISSIM simulations was less than what would be experienced on an average weekday. As the project design progresses, additional traffic modeling should be performed to refine the project improvements with updated existing conditions traffic counts, traffic signal timing, ramp meter rates and saturation flow rate data.

VISSIM baseline model calibration results are included in Appendix E.

Route 44 enhancement scenarios will be evaluated based on travel time savings, and any impacts to signalized intersection operations.

ENHANCEMENT ALTERNATIVES AND TRAFFIC ANALYSIS

Enhancements to improve the speed and reliability of Route 44 have been identified in the University District and the Wallingford area. These enhancements focus on opportunities to reserve lane space for buses, strategies to reduce queue spillback from freeway on-ramps that block travel lanes on NE 45th Street, and strategies to reduce traffic signal delay.

Enhancements to the existing transit stop facilities are also recommended. A typical layout for all Route 44 stops in the University District is shown in Figure 4.

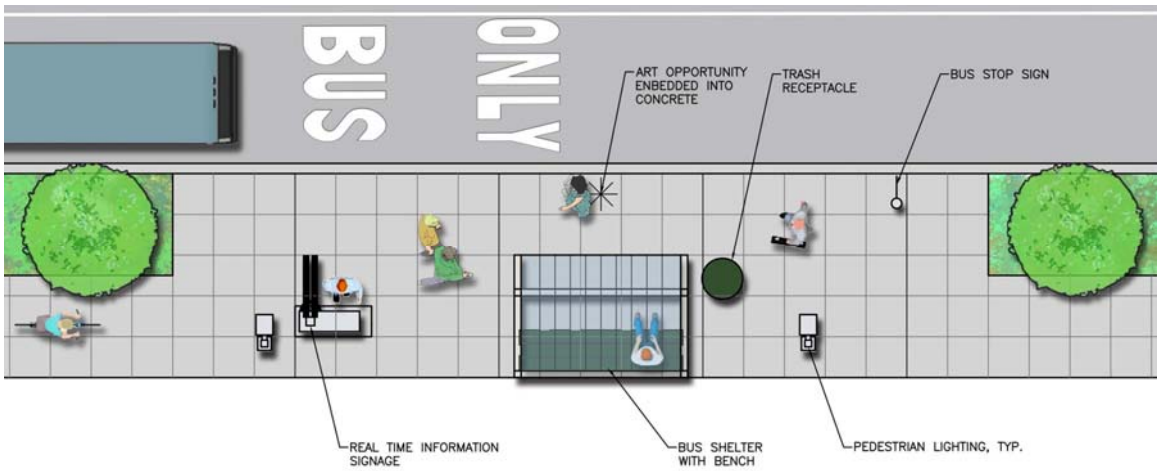


Figure 4:
Recommended Route 44 Stop Amenities

During the project development and implementation process, stop amenity enhancements will be coordinated with the Metro Transit Route Facilities Group.

Stop consolidation in the University District is not being considered at this time. Current stop locations serve as transfer points between east/west and north/south bus routes. A restructuring of routes will be implemented when Northgate Link Extension light rail service begins in 2021.

University District Alternatives Development

A series of 24 alternatives were developed and presented in the *Alternatives Descriptions Memorandum (November 12, 2014)*. Alternatives included strategies to limit I-5 ramps at NE 45th Street to HOV and transit use, providing additional queue storage space at freeway ramp meters, curb lane BAT lanes between Latona Avenue NE and 15th Avenue NE, and pedestrian scramble signal phases to eliminate the conflicts between right-turning vehicles and pedestrians.

Alternatives were combined to form two scenarios for VISSIM modeling: Scenario A, which included I-5 ramp revisions, and Scenario B, which included channelization revisions on NE 45th

Street. Elements of Scenarios A and B were combined to form Scenario C, the preferred Alternative.

Scenario A

The elements in Scenario A are:

1. Conversion of the southbound off-ramp at NE 45th Street to serve only HOV/bus movements onto eastbound NE 45th Street (with optional through movement for express buses). The southbound left lane at the NE 45th Street / 5th Avenue NE intersection would be physically separated from the two right lanes. Southbound through and right-turn movements would be routed to the southbound off-ramp at NE 50th Street, using 5th Avenue NE to reach NE 45th Street

2. Closure of the general purpose connection from 7th Avenue NE to the NE 45th Street on-ramp to northbound I-5. Traffic entering the freeway would be routed north on 7th Avenue NE to the NE 50th Street on-ramp to northbound I-5. HOV and bus access would be maintained at the NE 45th Street northbound on-ramp.

3. Restriping the west leg of the NE 45th Street / 7th Avenue NE intersection, east of the I-5 overcrossing to eight lanes. The added lane will provide queue storage for the westbound movement onto southbound I-5.

4. Restripe side-by-side left-turn lanes on NE 45th Street between 5th and 7th Avenues NE.

5. Reserve a westbound bus lane on NE 45th Street from 7th Avenue NE to Latona Avenue NE.

6. Restripe NE 50th Street between 5th and 7th Avenues NE for six lanes to provide side-by-side left-turn lanes for movements entering the freeway. Add a northbound approach lane on the south leg of the NE 50th Street / 7th Avenue NE intersection to provide a left-turn lane, a shared through-left lane, a through lane, and a right-turn lane.

7. Provide additional queue storage using the right shoulder on the I-5 northbound on-ramp from NE 50th Street, with two-lane alternating metering.

8. Provide pedestrian scramble signal phases at the Roosevelt Way NE and University Way NE intersections with NE 45th Street.

9. Add north/south left-turn lanes and protected-permissive signal phasing at the NE 50th Street / 15th Avenue NE intersection to accommodate turning vehicles on 15th Avenue NE at NE 50th Street.

VISSIM modeling of Scenario A for the PM peak hour resulted in a travel time savings of up to 20 seconds. Impacts to signalized intersection operations were moderate. VISSIM modeling results are included in Appendix F.

Traffic diverted away from NE 45th Street due to the I-5 ramp restrictions was shifted to NE 50th Street. Traffic flow on NE 50th Street became more turbulent, with volumes approaching the

roadway capacity. Eastbound left-turns on NE 50th Street at 9th Avenue NE were prohibited to increase traffic throughput between 7th and 9th Avenues NE.

The traffic diversions associated with the I-5 ramp restrictions to and from the north at NE 45th Street represent the maximum traffic diversions that can be shifted to NE 50th Street. Similar ramp restrictions to and from the south at NE 45th Street were presented in the *Alternatives Descriptions Memorandum*, but were not carried forward because of the additional vehicle-miles of travel that would be generated. An HOV and transit restriction for all of the NE 45th Street ramps is not recommended because the cumulative traffic volumes on NE 50th Street would exceed the available capacity.

Scenario B

The elements in Scenario B are:

1. Additional queue storage on the I-5 northbound on-ramp from NE 45th Street, and two-lane alternating metering. The on-ramp would be widened downstream of the bridge crossing the NE 50th Street ramp.

2. Restriping the west leg of the NE 45th Street / 7th Avenue NE intersection, east of the I-5 overcrossing to eight lanes. The added lane will provide queue storage for the westbound movement onto southbound I-5.

3. Restripe side-by-side left-turn lanes on NE 45th Street between 5th and 7th Avenues NE.

4. Restriping the east leg of the NE 45th Street / 7th Avenue NE intersection for five lanes with three westbound approach lanes. The westbound curb lane would be used as a right-turn only lane. The existing roadway cross-section width of 48-feet would be maintained with 10.5-foot curb lanes, and 9-foot travel lanes.

5. Use the eastbound curb lane as a right-turn drop lane on the west leg of the 15th Avenue NE/NE 45th Street intersection, and provide an overlap signal phase with the northbound left turn.

6. Provide pedestrian scramble signal phases at the Roosevelt Way NE and University Way NE intersections with NE 45th Street.

7. Use the curb lanes for Business Access and Transit (BAT) lanes between 7th and 15th Avenues NE on NE 45th Street.

VISSIM modeling of Scenario B for the PM peak hour resulted in a travel time savings of up to 14 seconds. Impacts to signalized intersection operations were moderate. The BAT lanes between 7th Avenue NE and 15th Avenue NE resulted in unacceptable queuing of general purpose traffic. Queuing of general purpose traffic impacted transit operations. Scenario B did not include a reduction in traffic volumes on NE 45th Street. Pedestrian scramble signal phases at Roosevelt Way NE and University Way NE were abandoned due to poor traffic operations. VISSIM modeling results are included in Appendix F.

Restriping the east leg of NE 45th Street / 7th Avenue NE intersection for five lanes with three westbound approach lanes was abandoned due to safety concerns of the 9-foot wide travel lanes.

Scenario C

The elements in Scenario C are:

1. Conversion of the southbound off-ramp at NE 45th Street to serve only HOV/bus movements onto eastbound NE 45th Street (with optional through movement for express buses). The southbound left lane at the NE 45th Street / 5th Avenue NE intersection would be physically separated from the two right lanes using c-curb or similar channelization device. Southbound through and right-turn movements would be routed to the southbound off-ramp at NE 50th Street, using 5th Avenue NE to reach NE 45th Street

2. Closure of the general purpose connection from 7th Avenue NE to the NE 45th Street on-ramp to northbound I-5. Traffic entering the freeway would be routed north on 7th Avenue NE to the NE 50th Street on-ramp to northbound I-5. HOV and bus access would be maintained at the NE 45th Street northbound on-ramp.

3. Restriping the west leg of the NE 45th Street / 7th Avenue NE intersection, east of the I-5 overcrossing to eight lanes. The added lane will provide queue storage for the westbound movement onto southbound I-5.

4. Restripe side-by-side left-turn lanes on NE 45th Street between 5th and 7th Avenues NE. This restriping is accomplished by providing one eastbound left-turn lane at 7th Avenue NE, and one eastbound through lane. At 5th Avenue NE, one eastbound through lane and one right-turn lane will be provided.

5. Reserve a westbound BAT lane on NE 45th Street from 15th Avenue NE to Latona Avenue NE. Reserve an eastbound BAT lane on NE 45th Street from Roosevelt Way NE to 15th Avenue NE.

6. Use the eastbound curb lane as a right-turn drop lane on the west leg of the 15th Avenue NE/NE 45th Street intersection, and provide an overlap signal phase with the northbound left turn

7. Restripe NE 50th Street between 5th and 7th Avenues NE for six lanes to provide side-by-side left-turn lanes for movements entering the freeway. Add a northbound approach lane on the south leg of the NE 50th Street / 7th Avenue NE intersection to provide a left-turn lane, a shared through-left lane, a through lane, and a right-turn lane.

8. Provide additional queue storage using the right shoulder on the I-5 northbound on-ramp from NE 50th Street, with two-lane alternating metering.

9. Add north/south left-turn lanes and protected-permissive signal phasing at the NE 50th Street / 15th Avenue NE intersection to accommodate turning vehicles on 15th Avenue NE at NE 50th Street.

All of the elements from Scenarios A and B that were feasible were included in Scenario C, except for the widening of the NE 45th Street northbound on-ramp to I-5. This element was not necessary in Scenario C because of the HOV/transit ramp restriction.

Eastbound left-turns were prohibited at the intersection of NE 50th Street / 9th Avenue NE to maintain traffic flow in the eastbound direction.

Transit signal priority is recommended to be utilized at all signalized intersections. Transit signal priority was not explicitly modeled in Scenario C because of limited availability during peak hours for additional green-time to be assigned to east-west movements. Traffic signal timing on NE 45th Street was optimized to accommodate BAT lanes. Transit signal priority will provide additional time savings and reliability benefits outside the peak hours. Coordination with Metro will be necessary to implement Metro's next generation transit signal priority equipment.

The proposed channelization of NE 45th Street in the University District is included in Appendix G.

Preferred Alternative Analysis Results

VISSIM modeling of Scenario C for the AM and PM peak hours produced travel time savings of 26 to 52 seconds in the University District, representing a 9% to 18% savings. Modeled travel time results are shown in Table 4.

Table 4:
University District - Route 44 Travel Times

	AM Peak Hour		PM Peak Hour	
Scenario	**Eastbound (sec)**	**Westbound (sec)**	**Eastbound (sec)**	**Westbound (sec)**
Baseline	323	261	317	357
Scenario C	297	213	280	305
Travel Time Savings (sec)	-26	-48	-37	-52
Travel Time Savings (%)	9 %	18 %	12 %	15 %

Note: travel times were collected from NE 45th St / Thackeray Pl NE to NE 45th St / University Way NE (eastbound) and NE 45th St / Brooklyn Ave NE to NE 45th St / Latona Ave NE (westbound)

Peak hour traffic volumes on NE 45th Street and NE 50th Street as a result of the I-5 HOV/transit ramp restrictions are shown in Figure 5. These hourly volumes approach the capacity of NE 50th Street.

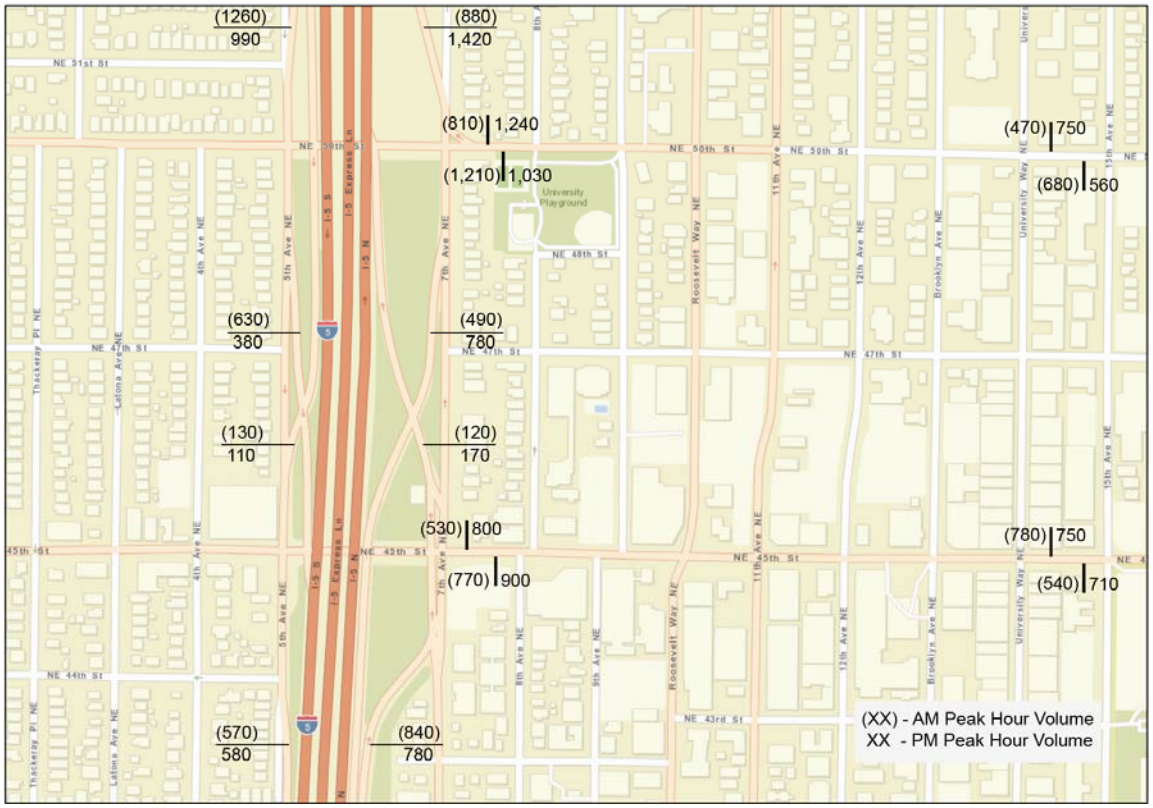


Figure 5:
University District Scenario C – Peak Hour Traffic Volumes (vph)

AM and PM peak hour intersection delay and Level of Service values are included in Table 5. All signalized intersections on NE 45th and NE 50th Streets are shown to operate at LOS D or better in the baseline (existing) condition and in Scenario C.

Intersection delay increases on NE 45th Street in Scenario C are modest. The highest delay increases were measured at NE 45th Street / 7th Avenue N, and NE 45th Street / Roosevelt Way NE. Delays increased 14 to 15 seconds, resulting in average delay values of 53.7 and 42.7 seconds, respectively. Both of those values correspond to LOS D.

Signalized intersections on NE 50th Street would operate at LOS C or better in Scenario C. Higher northbound left-turn volumes at the NE 50th Street / 15th Avenue NE intersection increased intersection delay values by 15 to 20 seconds in the AM and PM peak hours. Intersection LOS values deteriorated from B to C.

Table 5:
University District - Intersection LOS and Average Delay (sec)

Intersection	AM Peak Hour		PM Peak Hour	
	Baseline	Scenario C	Baseline	Scenario C
NE 45th St / Latona Ave NE	A 5.0	A 5.3	B 11.5	A 8.2
NE 45th St / 5th Ave NE	D 39.9	C 24.3	C 34.5	C 21.2
NE 45th St / 7th Ave NE	C 28.5	C 27.9	D 39.5	D 53.7
NE 45th St / Roosevelt Way NE	C 32.1	C 34.2	C 27.4	D 42.7
NE 45th St / 11th Ave NE	B 14.5	B 14.3	C 21.8	C 29.7
NE 45th St / 12th Ave NE	B 12.2	B 14.0	B 15.7	B 15.7
NE 45th St / Brooklyn Ave NE	A 6.1	A 7.7	B 12.9	B 13.4
NE 45th St / University Way NE	B 10.1	B 10.8	B 15.1	C 21.2
NE 45th St / 15th Ave NE	C 34.3	D 37.7	D 38.4	D 41.7
NE 50th St / 5th Ave NE	C 24.6	C 31.0	B 15.9	C 25.8
NE 50th St / 7th Ave NE	B 15.5	B 16.6	C 20.3	C 26.9
NE 50th St / 9th Ave NE	B 18.7	B 11.0	B 16.9	C 20.6
NE 50th St / Roosevelt Way NE	B 17.8	C 20.4	B 18.8	C 21.9
NE 50th St / 11th Ave NE	B 15.8	B 13.6	B 14.2	C 28.0
NE 50th St / Brooklyn Ave NE	A 6.4	A 8.6	B 18.2	B 13.6
NE 50th St / University Way NE	B 13.5	B 14.6	B 13.8	B 18.8
NE 50th St / 15th Ave NE	B 12.7	C 32.8	B 16.9	C 31.9

Note: average delay values were calculated using VISSIM output

Cumulative person-hours of delay for east-west travel on NE 45th and 50th Streets was reduced with Scenario C, compared to existing conditions, indicating an overall improvement in network traffic operations. The following values are the summation of the average signalized delay experienced by all transit and personal vehicle travelers for the east-west through movements at all intersections on NE 45th and 50th Streets between 5th Avenue NE and University Way NE.

The increased traffic volumes on NE 50th Street associated with Scenario C resulted in an additional 390 person-hours of delay in the AM peak hour and 890 person-hours of delay in the PM peak hour. These increased delays on NE 50th Street were offset by decreases in delay on NE 45th Street. During the AM peak hour, 1,130 fewer person-hours of delay were experienced. During the PM peak hour, 1,080 fewer person-hours of delay were measured on NE 45th Street. The net result for both streets was a decrease of 740 person-hours of delay in the AM peak hour, and 190 person-hours of delay in the PM peak hour.

VISSIM output for Scenario C are included in Appendix H of this report.

Wallingford Area Enhancements

Beyond the University District, Route 44 enhancements were identified at three locations in the Wallingford area:

- N 45th Street / Wallingford Avenue N
- N 45th Street / N Midvale Place
- N 46th Street / Fremont Avenue N

N 45th Street / Wallingford Avenue N

N 45th Street through the Wallingford neighborhood provides a single travel lane in each direction, with a center two-way left turn lane and parking on both sides of the street. Travel speeds on N 45th Street are limited by turning traffic, parking maneuvers and pedestrian crossings. Traffic signal delays at the N 45th Street / Wallingford Avenue N intersection result in rolling queues in both directions of N 45th Street.

Split-phase signal control at the Wallingford Avenue N / N 45th Street intersection, due to the offset configuration of north-south roadway, limits the time available to serve east-west traffic. Fifty (50) percent of the signal cycle time serves east-west traffic, which accounts for 70 percent of the traffic entering the intersection.

Strategies identified in the *Alternatives Descriptions Memorandum* to provide additional east-west green time by providing a single north-south signal phase include:

1. Convert Wallingford Avenue N to one-way northbound, north of N 45th Street.

2. Close Wallingford Avenue north of N 45th Street and construct a signalized driveway access directly opposite south intersection leg.

3. Realign Wallingford Avenue across N 45th Street (would require right-of-way) and prohibit north-south left turns at N 45th Street.

4. Median C-curb could be installed on Wallingford Avenue N (north leg), and southbound traffic could be limited to right-turn only. The turn prohibition would be implemented in combination with relocation of the western crosswalk to eliminate the north-south split phase. See Figure 6.

VISSIM analysis performed in the earlier *Corridor Improvements Project* showed the potential for up to 30 seconds of travel time savings in each direction of travel for Route 44 buses with relocation of the western crosswalk and the southbound left-turn prohibition.

Synchro analysis summarized in Table 6 also shows improved intersection operations with the revised configuration (Preferred Alternative) of the N 45th Street / Wallingford Avenue N intersection. Prohibition of the southbound left-turn and through movements would shift traffic to Meridian Avenue N. Intersection delays at N 45th Street / Meridian Avenue N increase 3 to 4 seconds, producing LOS B during the AM peak hour and LOS C during the PM peak hour.

A pedestrian scramble signal phase could be implemented at this location, to improve pedestrian connections across this intersection. This was not included in the preferred alternative because it limits transit travel time savings. Intersection operations with a pedestrian scramble phase are similar to baseline conditions. Synchro analysis of the pedestrian scramble is included in Appendix I.

Table 6:
Wallingford Avenue N - Intersection LOS and Average Delay (sec)

Intersection	AM Peak Hour		PM Peak Hour	
	Baseline	Preferred Alternative	Baseline	Preferred Alternative
N 45th St / Wallingford Ave N	C 28.9	B 11.1	D 37.7	B 19.1
N 45th St / Meridian Ave N	A 8.4	B 11.2	B 16.0	C 20.4

Note: average delay values are from Synchro 8.

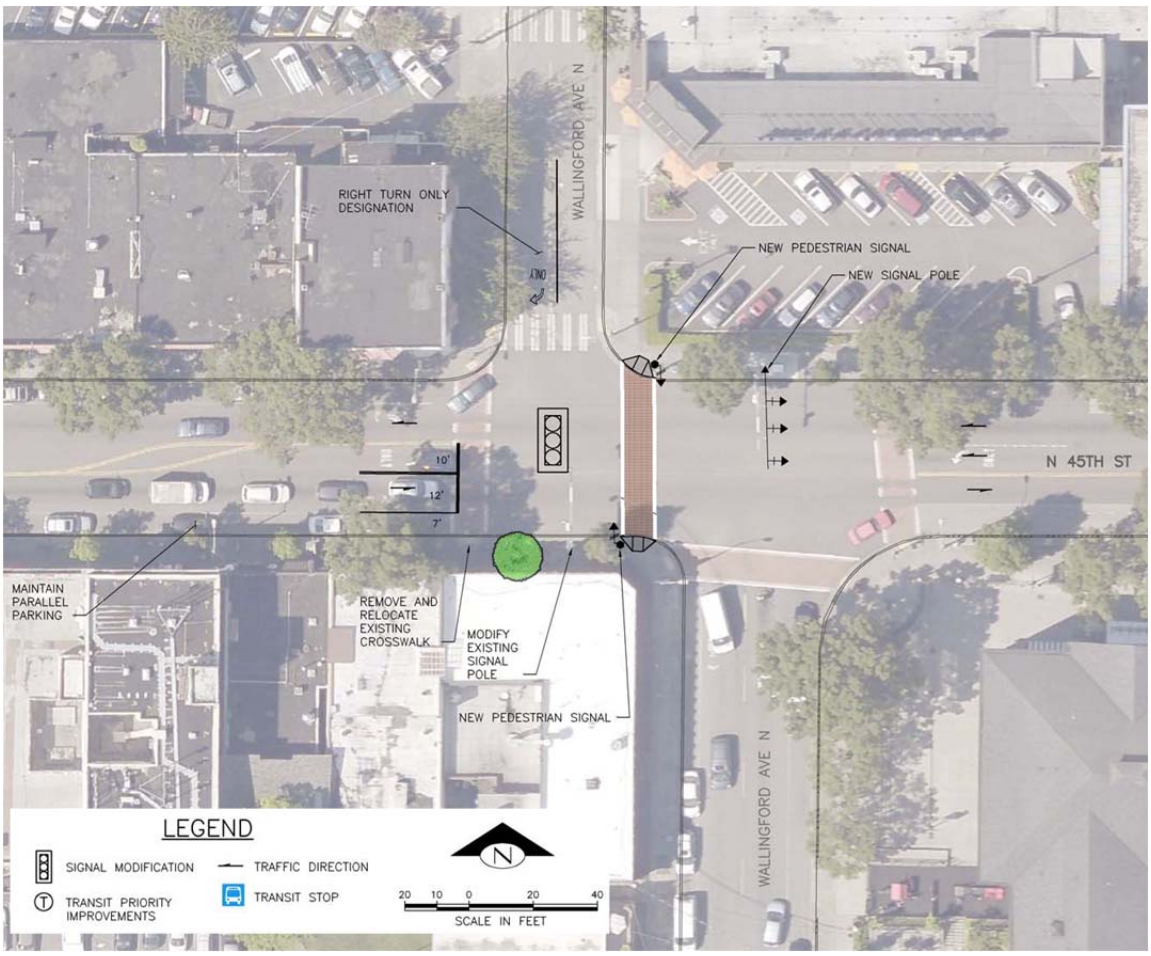


Figure 6:
Wallingford Avenue N Enhancements

N 45th Street / N Midvale Place

A westbound transit-only lane was constructed along N Midvale Place in 2012. Route 44 would experience further travel time savings by extending this lane onto N 45th Street, west of Stone Way N.

Three options for extension of the westbound transit lane were presented in the *Alternatives Descriptions Memorandum*.

1. Restripe two westbound lanes on N Midvale Place west of Stone Way N and prohibit westbound left turns onto N 45th Street. The existing pedestrian crossing island would need to be removed.

2. Widen the north side of N 45th Street to provide a second westbound lane onto N Midvale Place (requires right-of-way).

3. Realign N 45th Street to intersect N Midvale Place in the area of the existing triangular planted island. Provide five lanes with a westbound left-turn lane onto N 45th Street.

The triangular planted island is City property owned by the Department of Finance and Administrative Services. The option of realigning the N 45th Street / N Midvale Place intersection would improve pedestrian connections and provide an additional eastbound approach lane to the intersection with Stone Way N. Route 44 buses currently use the right-turn only lane to proceed through this intersection.

The realignment of N Midvale Place and N 45th Street is the preferred alternative at this location. Proposed improvements are shown in Figure 7.

An estimate of the potential travel time savings associated with an extension of the N Midvale Place transit-only lane was derived from Metro's spring 2014 OBS data. Comparing actual travel times to an ideal travel time between Stone Way N and Green Lake Way N for the PM peak period showed potential savings of 5-10 seconds for an average trip, and over 30 seconds for trips during congested conditions.

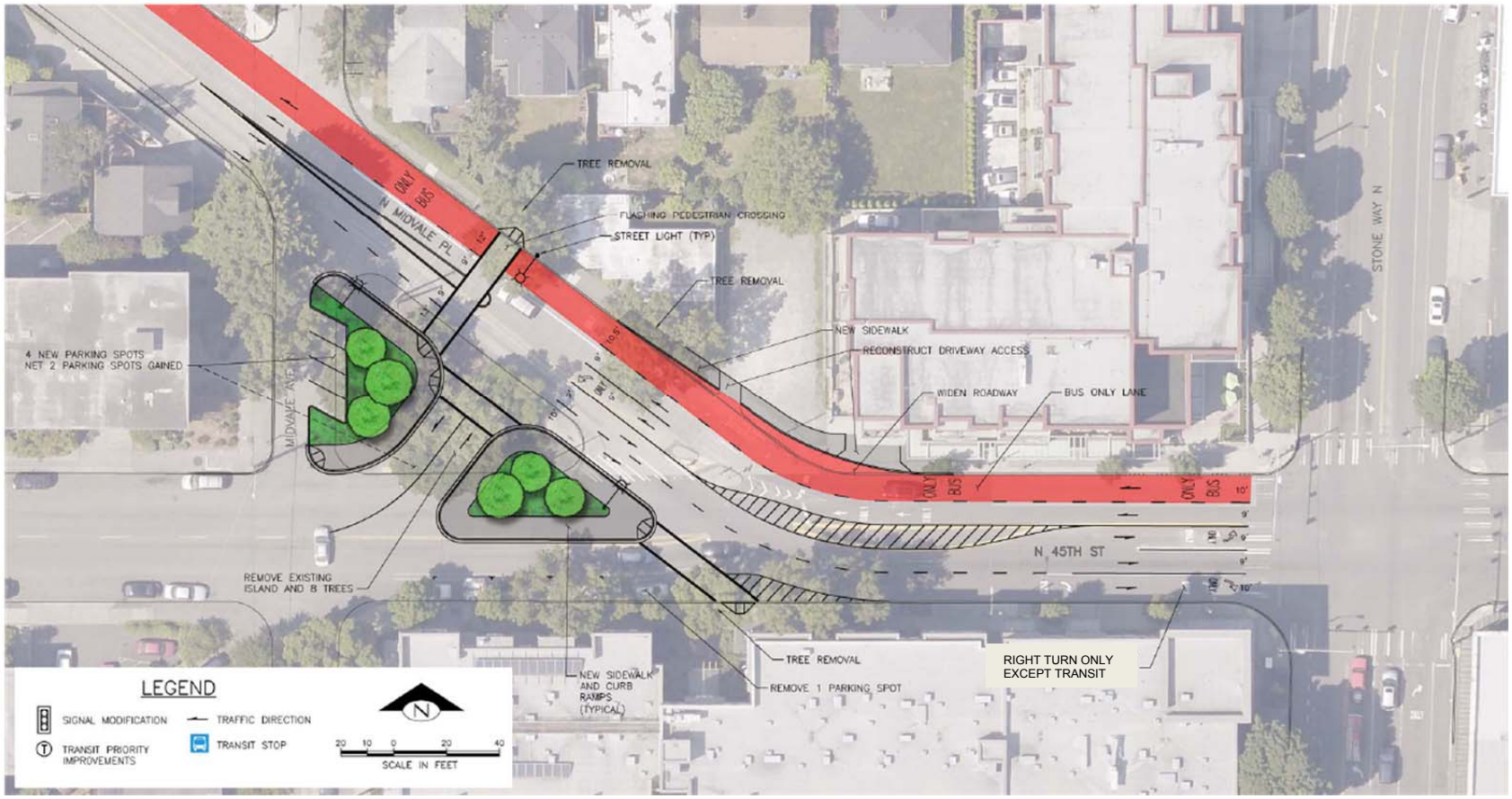


Figure 7:
N Midvale Place Realignment

N 46th Street / Fremont Avenue N

The intersection of N 46th Street / Fremont Avenue N is another source of traffic signal delay for Route 44. N 46th Street provides four lanes, with no turn lanes. Split-phase signal control is used on the east-west legs of the intersection to accommodate left-turns onto Fremont Avenue N.

In the earlier *Corridor Improvements Project*, a prohibition of east-west left turns was investigated but was not implemented. Two new alternatives have been developed to improve east-west traffic operations on N 46th Street:

1. Allow east-west permissive left turns within the existing four-lane undivided cross-section

2. Provide left-turn lanes on N 46th Street by reducing the number of westbound travel lanes from two to one. Left-turn lanes would be provided at the signalized intersections of Fremont Avenue N and Phinney Avenue N. A center two-way left-turn lane would be provided between these intersections.

Permissive left-turns on N 46th Street are not recommended because the high volumes of opposing traffic will not provide sufficient gaps for left-turning traffic.

The rechannelization of N 46th Street to provide left-turn lanes is recommended. Protected-permissive left-turn phasing is also recommended at N 46th Street / Fremont Avenue N and N 46th Street / Phinney Avenue N. Additional east-west green time will be available with the rechannelization, mitigating the reduction in the number of westbound travel lanes.

The rechannelization between Fremont Avenue N and Linden Avenue N is shown in Figure 8.

Synchro analysis of the N 46th Street rechannelization is summarized in Table 7. Intersection operations at N 46th Street / Fremont Avenue N would improve from LOS D to B in the AM peak hour and from LOS D to C in the PM peak hour.

Estimates of queue lengths from SimTraffic indicate that westbound queues in the AM peak would be unaffected, and queues during the PM peak hour would decrease. During the PM peak hour queues routinely extend back through the Greenlake Way N intersection, a distance of over 1,300 feet. Queue lengths in the preferred alternative extended less than 900 feet. Operating speeds in the westbound direction on N 46th Street between Greenlake Way N and Phinney Avenue N increased from 12 mph to 19 mph with the rechannelization.

Table 7:
N 46th Street - Intersection LOS and Average Delay (sec)

Intersection	AM Peak Hour		PM Peak Hour	
	Baseline	Preferred Alternative	Baseline	Preferred Alternative
N 46th St / Fremont Ave N	D 36.5	B 16.0	D 54.3	C 24.7
N 46th St / Phinney Ave N	B 11.6	B 14.4	B 14.3	B 17.1

Note: average delay values are from Synchro 8.

Figure 8:
N 46th Street Rechannelization

RECOMMENDATIONS

A program of enhancements for King County Metro Route 44 has been identified for the University District and the Wallingford area.

Enhancements in the Wallingford area include traffic signal modifications and southbound turn prohibitions at the intersection of N 45th Street / Wallingford Avenue N. See Figure 6.

The existing Midvale Place bus queue jump lane will be extended by realigning N Midvale Place and N 45th Street. The queue jump lane will extend back to the west side of Stone Way N. See Figure 7.

Rechannelization of N 46th Street between Linden Avenue N and Greenwood Avenue N to provide left-turn lanes will remove the split-phase traffic signal control at the N 46th Street / Fremont Avenue N intersection. Additional green time will be provided for east-west traffic, improving transit operations. See Figure 8.

In the University District, the preferred alternative includes BAT lanes on NE 45th Street, west of 15th Avenue NE. BAT lanes are made feasible by reducing traffic on NE 45th Street with HOV/Transit restrictions on the I-5 ramps to and from the north at NE 45th Street. Higher traffic volumes on NE 50th Street are accommodated with left-turn lane revisions at 5th and 7th Avenues NE, the addition of north-south left-turn lanes on 15th Avenue NE at NE 50th Street, and the use of the shoulder on the NE 50th Street northbound on-ramp to I-5 as a second metered lane.

As the project definition and design progresses for improvements in the University District, additional VISSIM analysis should be performed to refine the recommended improvements.

APPENDIX A – ALTERNATIVES DESCRIPTIONS MEMORANDUM

Alternatives Proposed for Evaluation: Route 44 Speed and Reliability Measures

I-5 Freeway Interchanges at NE 45th and NE 50th Streets: Demand Management

These strategies would restrict the use of some ramps at the NE 45th St interchange to carpools and buses, diverting SOV traffic to the NE 50th St interchange. These measures would address the current issues associated with queue spillback from the I-5 ramp meters at the NE 45th St interchange.

1. Restrict southbound left turns at the 5th Ave NE/NE 45th St intersection to carpools and buses only. Southbound general traffic continuing through or turning right would continue to be eligible to use the southbound off-ramp to NE 45th St.
2. Restrict NE 45th St on-ramp onto southbound I-5 to carpools and buses only. General traffic would continue to be eligible to enter onto southbound 5th Ave NE.
3. Restrict NE 45th St off-ramp from northbound I-5 to carpools and buses only. General traffic would be directed to the NE 50th St northbound off-ramp.
4. Restrict NE 45th St on-ramp onto northbound I-5 to carpools and buses only. General traffic turning onto northbound 7th Ave NE would be routed to the NE 50th St northbound on-ramp.

I-5 Freeway Interchanges at NE 45th and NE 50th Streets: Geometric Revisions

These strategies would reconfigure ramps or rechannelize intersections within the WSDOT Limited Access area, with the objective of reducing the impact of queue spillback from the I-5 ramp meters at the NE 45th St interchange.

5. Convert the I-5 southbound off-ramp at NE 45th St to serve only movements onto eastbound NE 45th St. The southbound left lane at the 5th Ave NE/NE 45th St intersection would be physically separated from the two right lanes. Southbound through movements and right turns would be routed to the southbound off-ramp at NE 50th St, and use 5th Ave NE to reach NE 45th St.
6. Close the general-purpose connection from 7th Ave NE to the NE 45th St on-ramp to northbound I-5. Traffic entering the freeway would be routed north on 7th Ave NE to the NE 50th St northbound on-ramp. (Effectively converts NE 45th St northbound on-ramp to HOV only).
7. Provide additional queue storage lane on the I-5 northbound on-ramp from NE 45th St, and two-lane alternating metering for general purpose traffic (UATS Project #35). Requires bridge widening.
8. Provide additional queue storage lane on the I-5 southbound on-ramp from NE 45th St, and two-lane alternating metering for general purpose traffic (UATS Project #33).
9. Restrict to carpools and buses one of two existing westbound left-turn lanes from NE 45th St onto southbound I-5 on-ramp.
10. Restripe for eight lanes on the west leg of 7th Ave NE/NE 45th St intersection, and east of the I-5 bridge. Added lane will provide additional queue storage for westbound movement onto southbound I-5. Current striping provides seven lanes within 86-foot width.

11. Use side-by side single left-turn lanes on NE 45th St between 5th and 7th Aves NE.
12. Restripe east leg of 7th Ave NE/NE 45th St intersection for five lanes, with three westbound approach lanes.
13. Reserve curb lane on westbound NE 45th St for right turns only at 7th Ave NE.
14. Reserve a westbound bus lane on NE 45th St from 7th Ave NE to Latona Ave
15. Add one northbound approach lane on the south leg of the7th Ave NE/NE 45th St intersection (UATS Project #36). Provides a transit queue bypass lane.
16. Restripe NE 50th St between 5th and 7th Aves NE for six lanes, to provide side-by-side single, or back-to-back dual left–turn lanes.
17. Provide additional queue storage lane on the I-5 northbound on-ramp from NE 50th St, and two-lane alternating metering. Potential for shoulder use.

NE 45th St Channelization

18. Restripe for four lanes/prohibit left turns between 7th Ave NE and 15th Ave NE. Redistribute left turns, restripe NE 47th St to provide westbound turning lane between 11th and Roosevelt Aves NE.
19. Provide eastbound right-turn drop lane on west leg of NE 45th St/15th Ave NE intersection, add signal overlap with northbound left turn.
20. Provide pedestrian scramble at selected intersections to reduce right-turn delays associated with travel in the curb lanes.
21. Use curb lanes for Business Access and Transit (BAT) lanes between 7th and 15th Aves NE.
22. Use dynamic lane assignment to provide three lanes in peak direction of travel (eastbound AM, westbound PM). Requires split-phase signal control on NE 45th St to maintain left turns.

NE 50th St Channelization

23. Add northbound left-turn lane at the 15th Ave NE/NE 50th St intersection. Prohibit parking on east side of 15th Ave NE.
24. Provide eastbound right-turn drop lane on west leg of 15th Ave NE/NE 50th St intersection, add signal overlap with northbound left turn.

N 45th St/Wallingford Ave Intersection

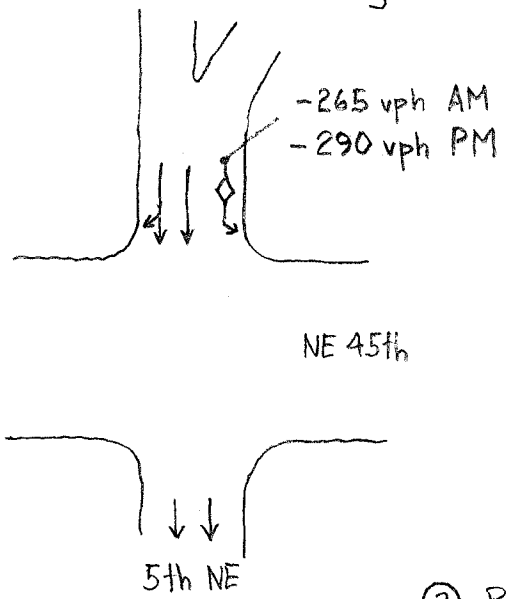
25. Install median c-curb on Wallingford Ave (north leg) to reduce potential for blockage at driveway.
26. Convert Wallingford Avenue to one-way northbound north of N 45th St.
27. Close Wallingford Avenue north of N 45th St; open a signalized driveway access directly opposite south intersection leg.
28. Convert south leg of Wallingford Ave to northbound right-turn only.
29. Realign Wallingford Avenue across N 45th St (requires right-of-way). Prohibit north-south left turns at N 45th St.

N Midvale Place at N 45th St

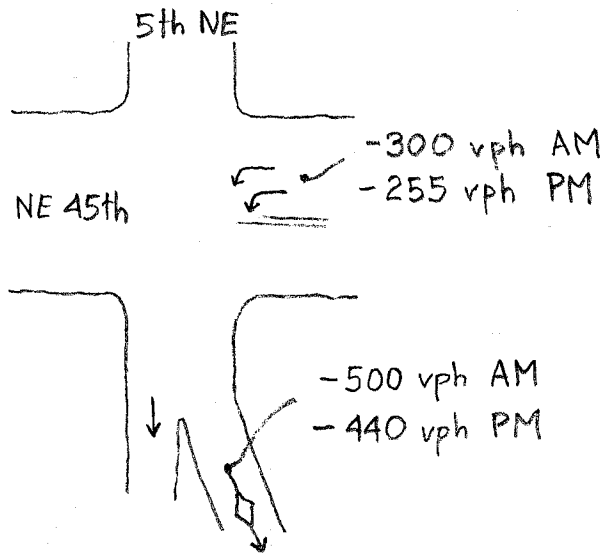
30. Restripe for two westbound lanes on N Midvale Place west of Stone Way, prohibit westbound left turn onto N 45th St.
31. Widen north side of N 45th St to provide second westbound lane onto N Midvale Place (requires right-of-way).
32. Realign N 45th St to intersect Midvale Place in the area of the existing triangular planted island. Provide five lanes with westbound left-turn lane onto N 45th St.

Demand Management Options for NE 45th St I-5 Ramps

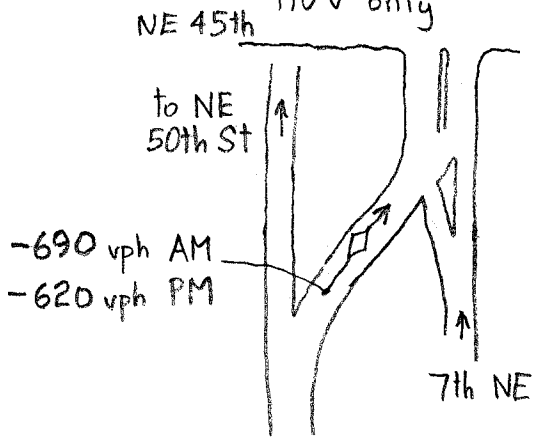
① Restrict SB left turn at 5th NE/NE 45th intersection to HOV only



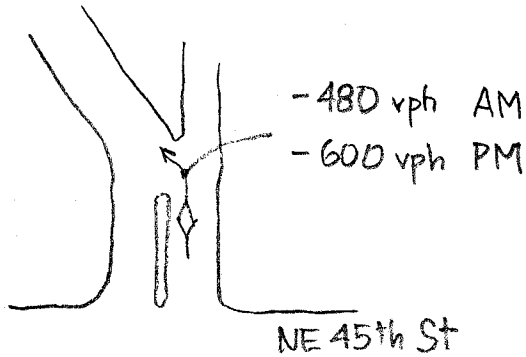
② Restrict SB on-ramp to I-5 from NE 45th St to HOV only



③ Restrict NB off-ramp to NE 45th St to HOV only



④ Restrict NB on-ramp to I-5 from NE 45th St to HOV only



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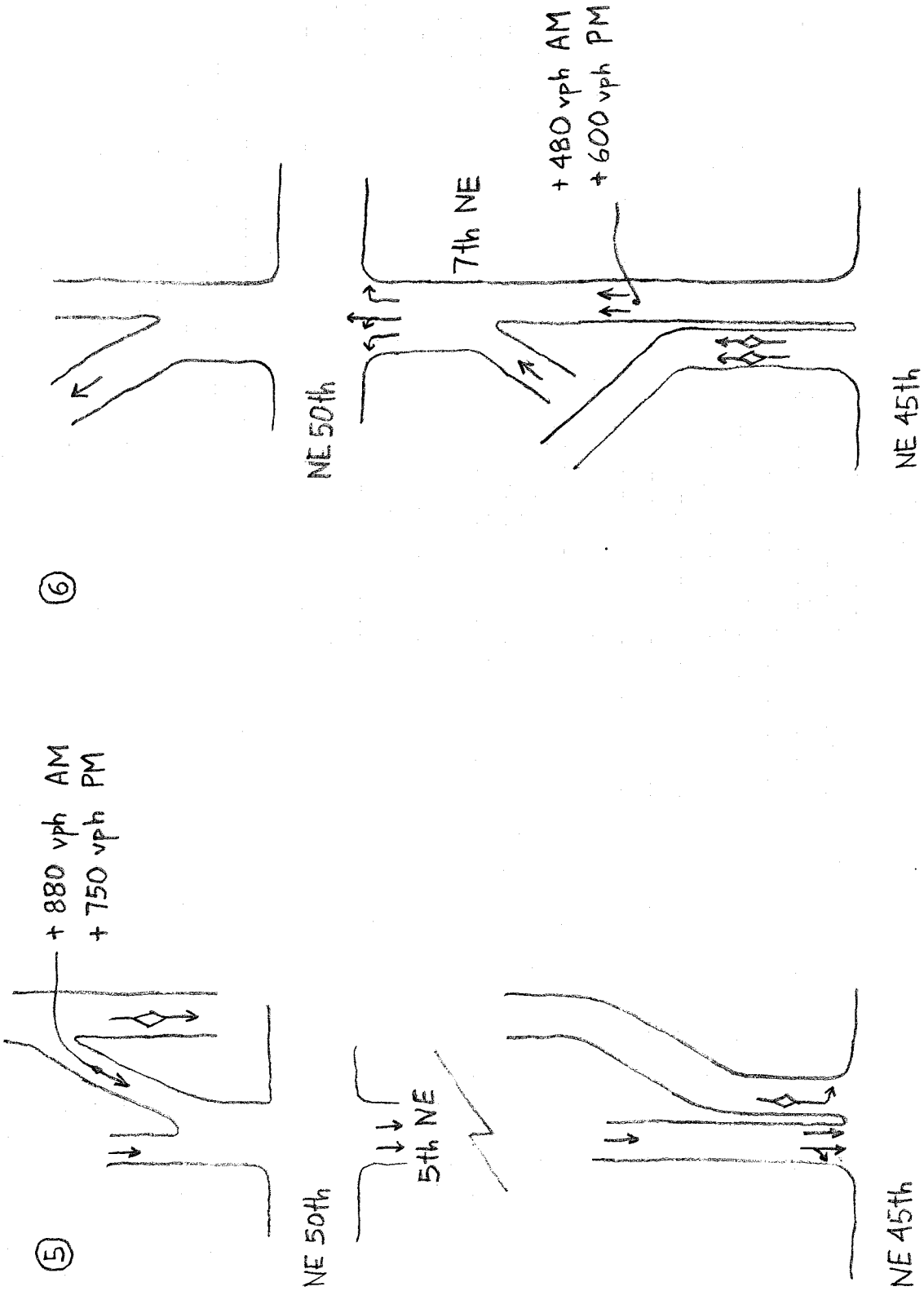
Geometric Options for NE 45th St I-5 Ramps



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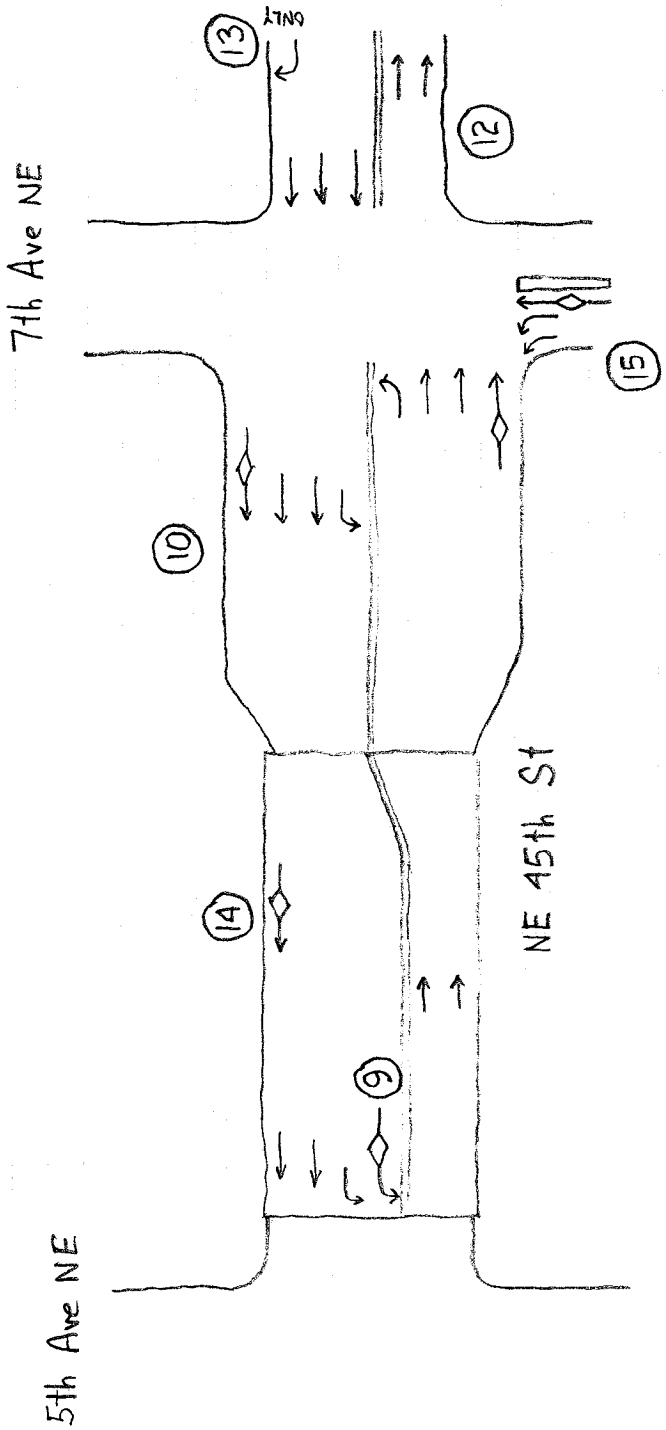
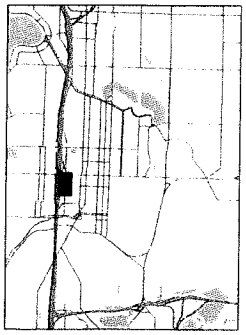


SDOT

University Area Transportation Action Strategy

Project # 36



7th Ave NE/I-5 off-ramp at NE 45th St

Transit Speed & Reliability

Provide transit queue bypass lane to improve transit speeds & reliability.

Partnership Project
Cost Estimate: TBD

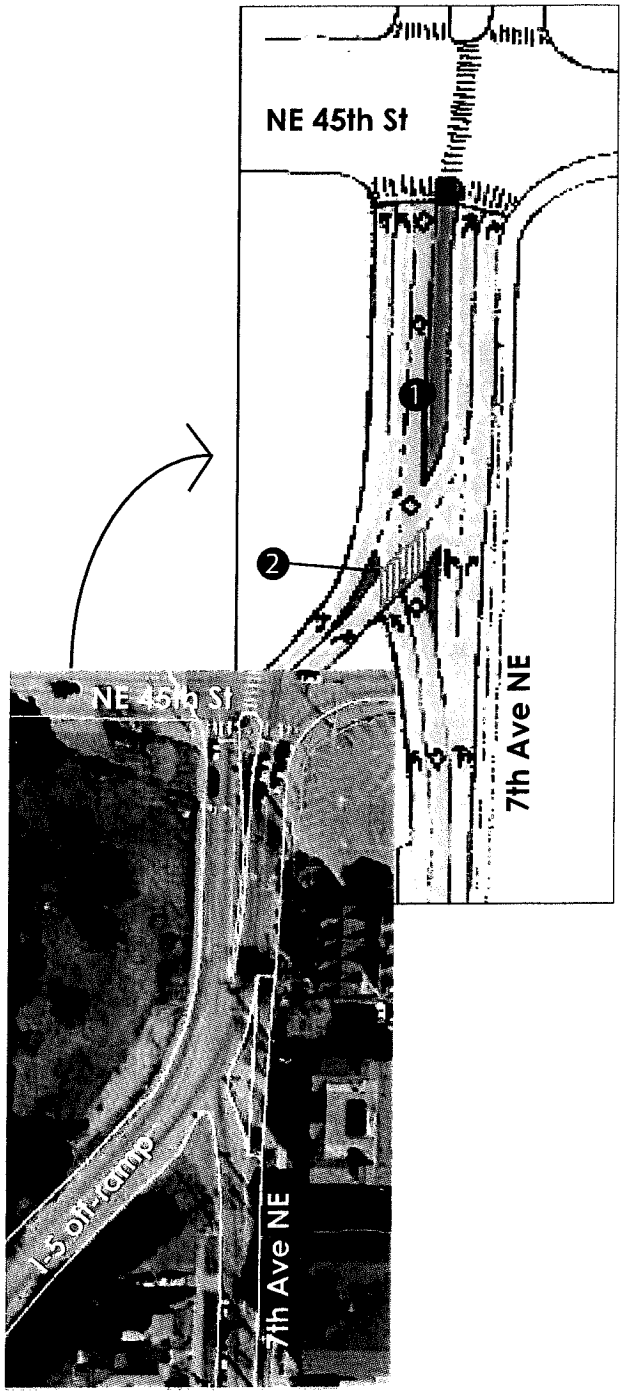
Problems and Issues

- 7th Ave NE is a northbound one-way arterial street. The I-5 northbound off-ramp approaching NE 45th St is not signalized as it crosses 7th Ave, while 7th Ave is controlled by a stop sign. This intersection performs poorly in the peak periods.
- Traffic backups on the NE 45th St I-5 off-ramp sometimes block the intersection with 7th Ave.
- Transit vehicles (28 buses in the AM peak and 22 in the PM peak) experience severe delays getting through this intersection and the intersection at NE 45th St.

Recommended Actions

1. Construct a transit queue bypass lane on northbound 7th Ave NE south of NE 45th St.
2. Create a clearly delineated intersection with the I-5 northbound off-ramp, improving pavement markings and signage that indicate to drivers not to block the intersection.

- This project will provide significant time savings to peak period transit. Potential negative impacts include increased I-5 off-ramp congestion and some parking removal along 7th Ave.
- The need for this project will greatly diminish once light rail service is established to and from Northgate. WSDOT and the City should prioritize the implementation of this project in order to maximize the accrued benefit to existing transit service.



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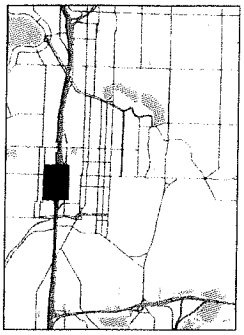
University Area Transportation Action Strategy



I-5/NE 45th St Interchange

Congestion Management

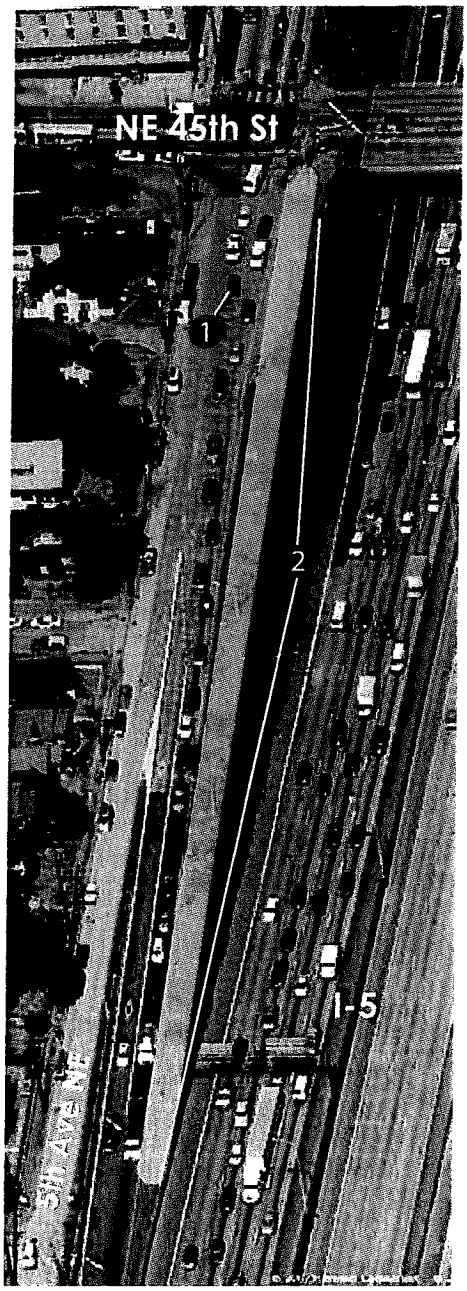
Project # 33

Provide additional lane on southbound I-5 on-ramp at NE 45th St to reduce vehicle delay.

Partnership Project
Cost Estimate: TBD

Problems and Issues

- The lack of adequate vehicle storage capacity on the I-5 on-ramp causes significant delays to traffic on NE 45th St.
- 1 Because there is only one general purpose lane on the I-5 on-ramp, single-occupant drivers do not use both westbound left turn lanes onto I-5 from NE 45th St. When they do, they turn into the HOV bypass lane and must merge left, blocking the lane for carpoolers.
- There is sufficient right-of-way so that an additional on-ramp lane can be added relatively easily.



Recommended Actions

- 2 Add a lane to the southbound I-5 on-ramp from NE 45th St. This would provide two general prupose on-ramp lanes and an HOV bypass lane.
- Modify the ramp meter to accommodate the 2 general purpose lane approach.

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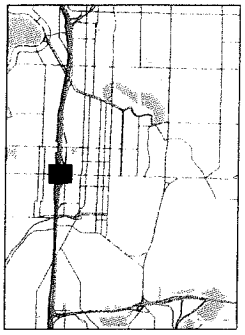
University Area Transportation Action Strategy



I-5/NE 45th St Interchange

Congestion Management

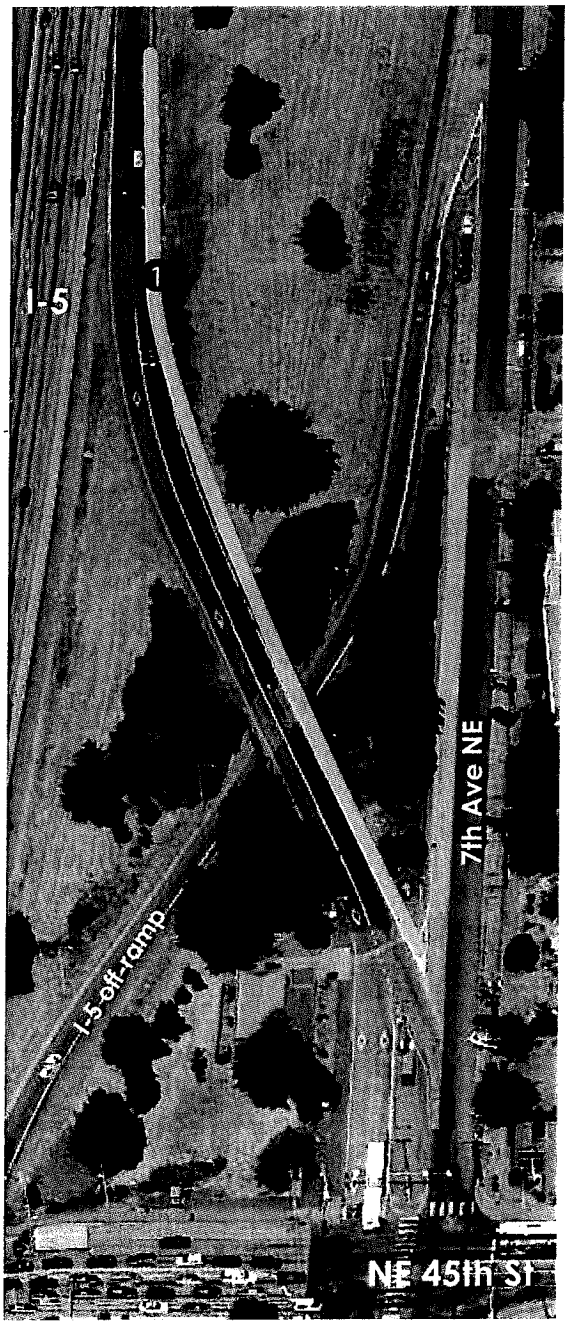
Project # 35

Provide additional northbound on-ramp from 7th Ave NE to reduce vehicle delay.

Partnership Project
Cost Estimate: TBD

Problems and Issues

- NE 45th St, a key east-west vehicle and transit corridor, is heavily-congested during most of the day. A significant source of delay are vehicles looking to access Interstate 5.
- Inadequate vehicle storage capacity of the I-5 northbound on-ramp forces traffic spillovers back onto NE 45th St. Vehicles waiting to access I-5 from the westbound 45th St curb lane often slow east-west through traffic.
- There is sufficient right-of-way to provide additional storage capacity for the north-bound I-5 on-ramp, which would reduce spillovers onto NE 45th St and improve levels-of-service.



Recommended Actions

1. Add a lane to the northbound I-5 on-ramp from NE 45th St.
- Modify ramp meter to accommodate a two-lane ramp approach.

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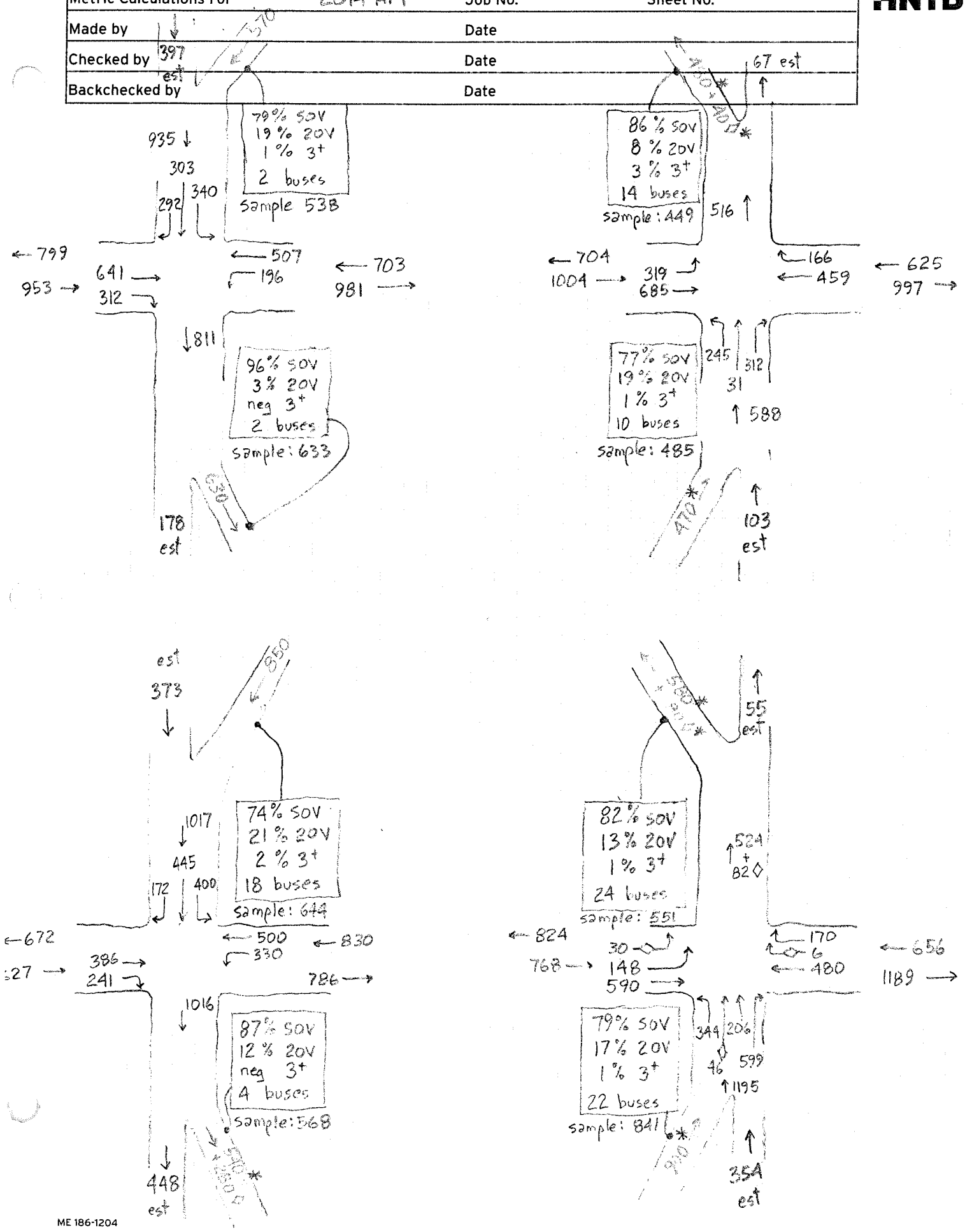

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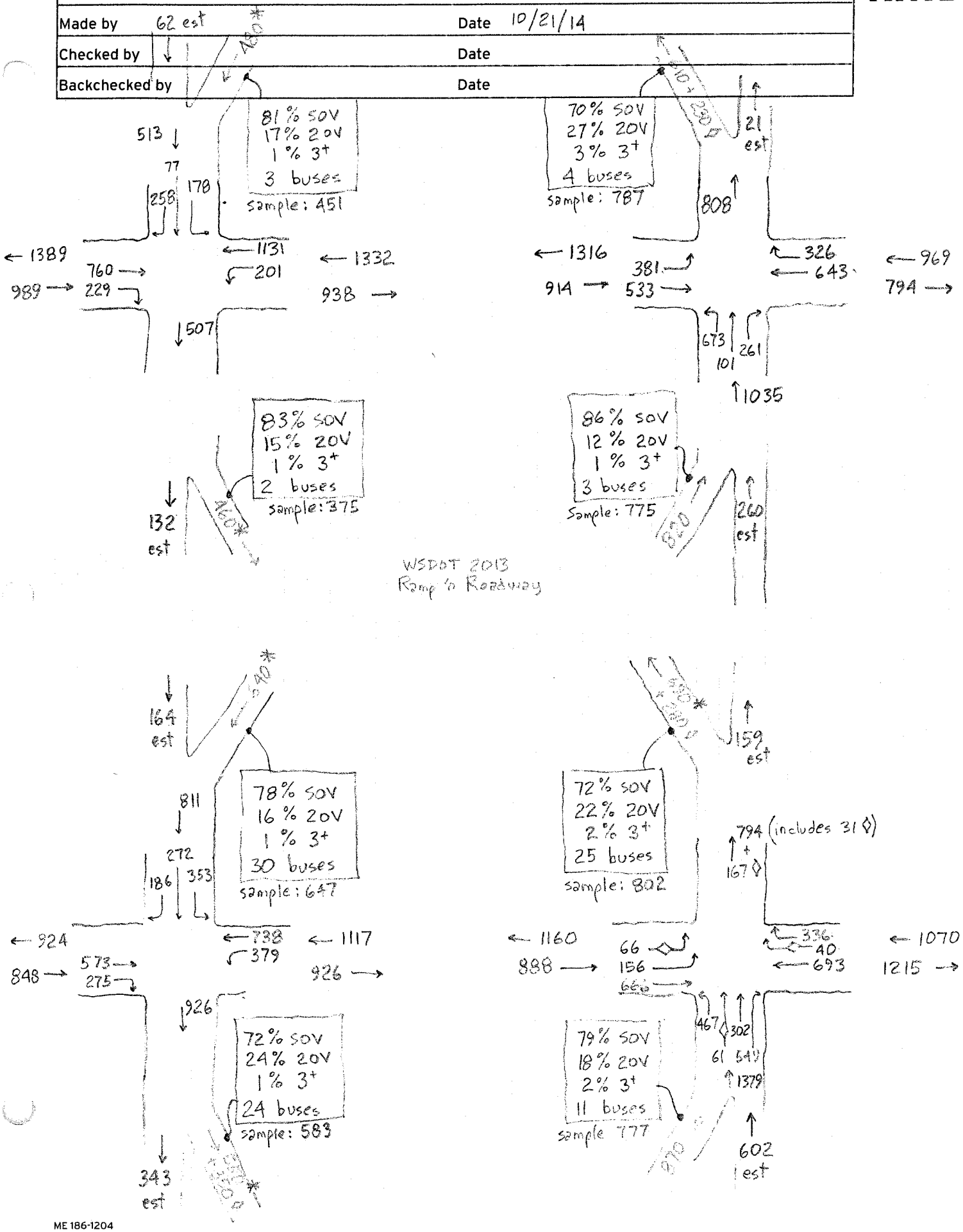

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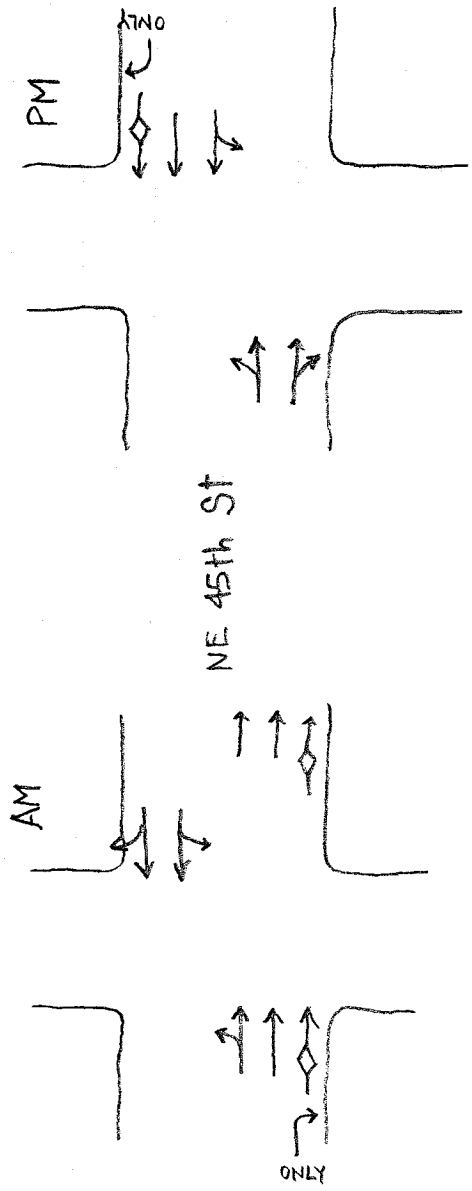
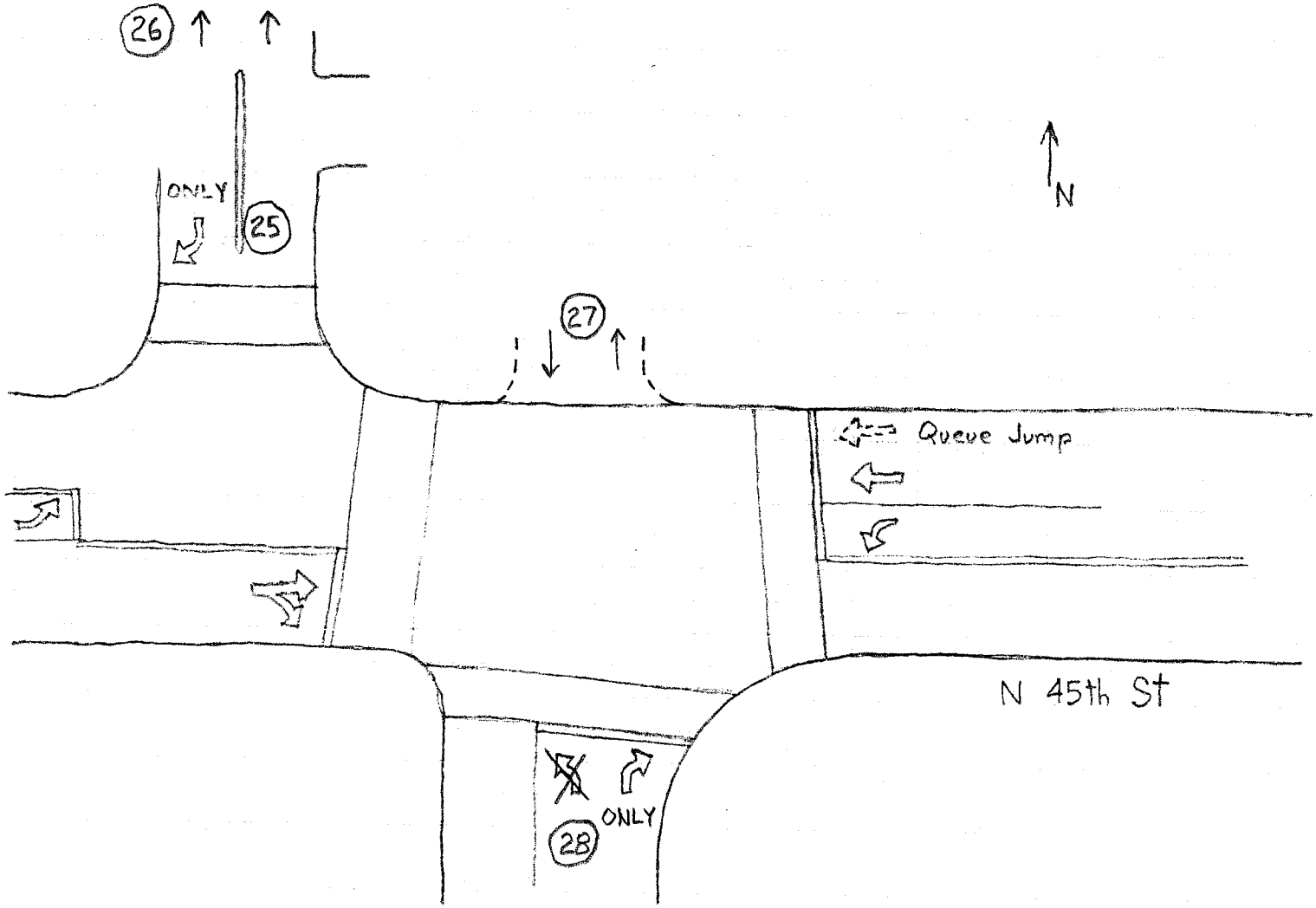
(22) NE 45th Dynamic Lane Assignment
7th Ave NE to University Ave



Requires split-phase signal control



Channelization / Signalization
Modifications at N 45th St/
Wallingford Ave N Intersection

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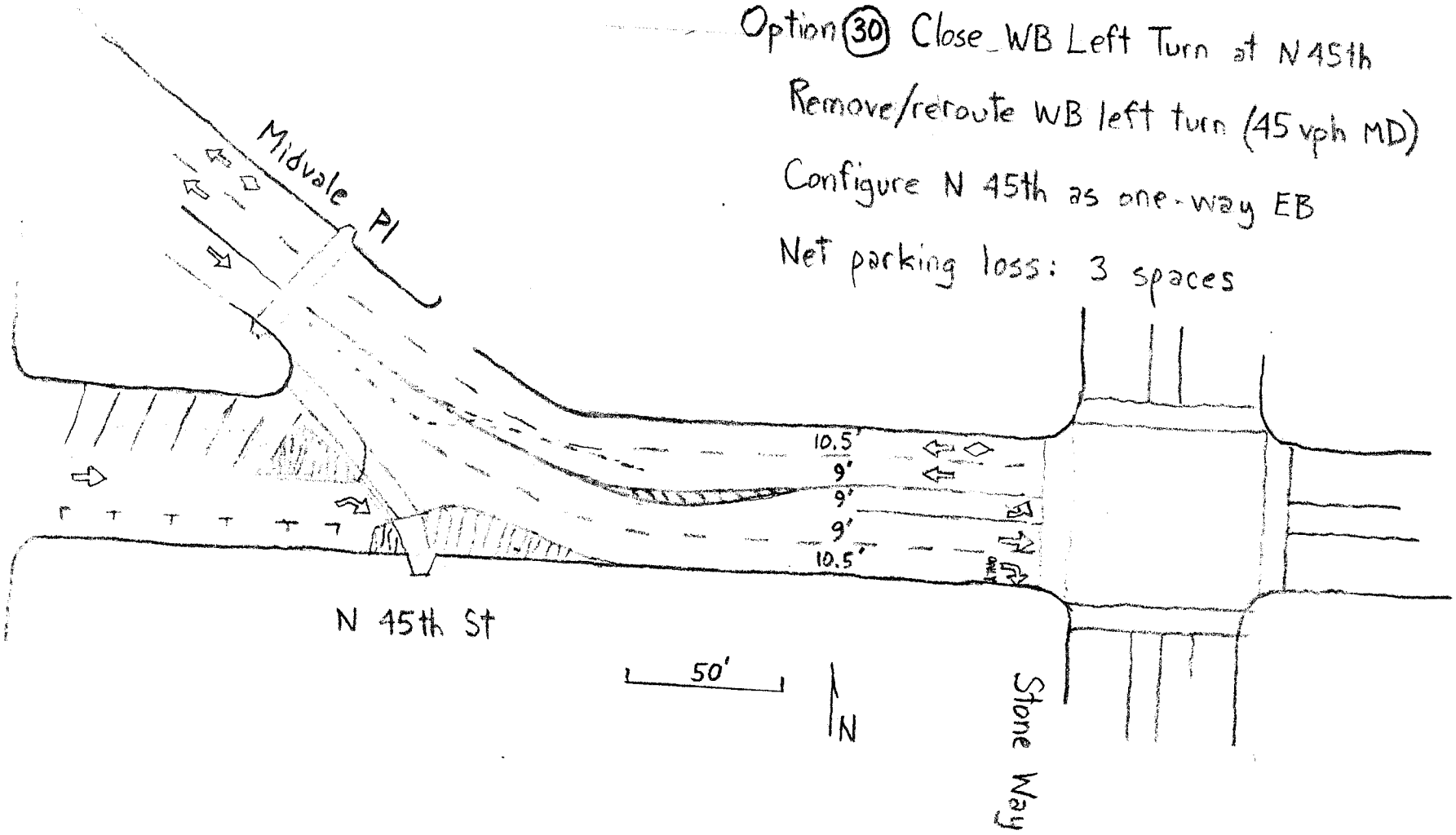
Option (30) Close WB Left Turn at N 45th

Remove/reroute WB left turn (45 vph MD)

Configure N 45th as one-way EB

Net parking loss: 3 spaces

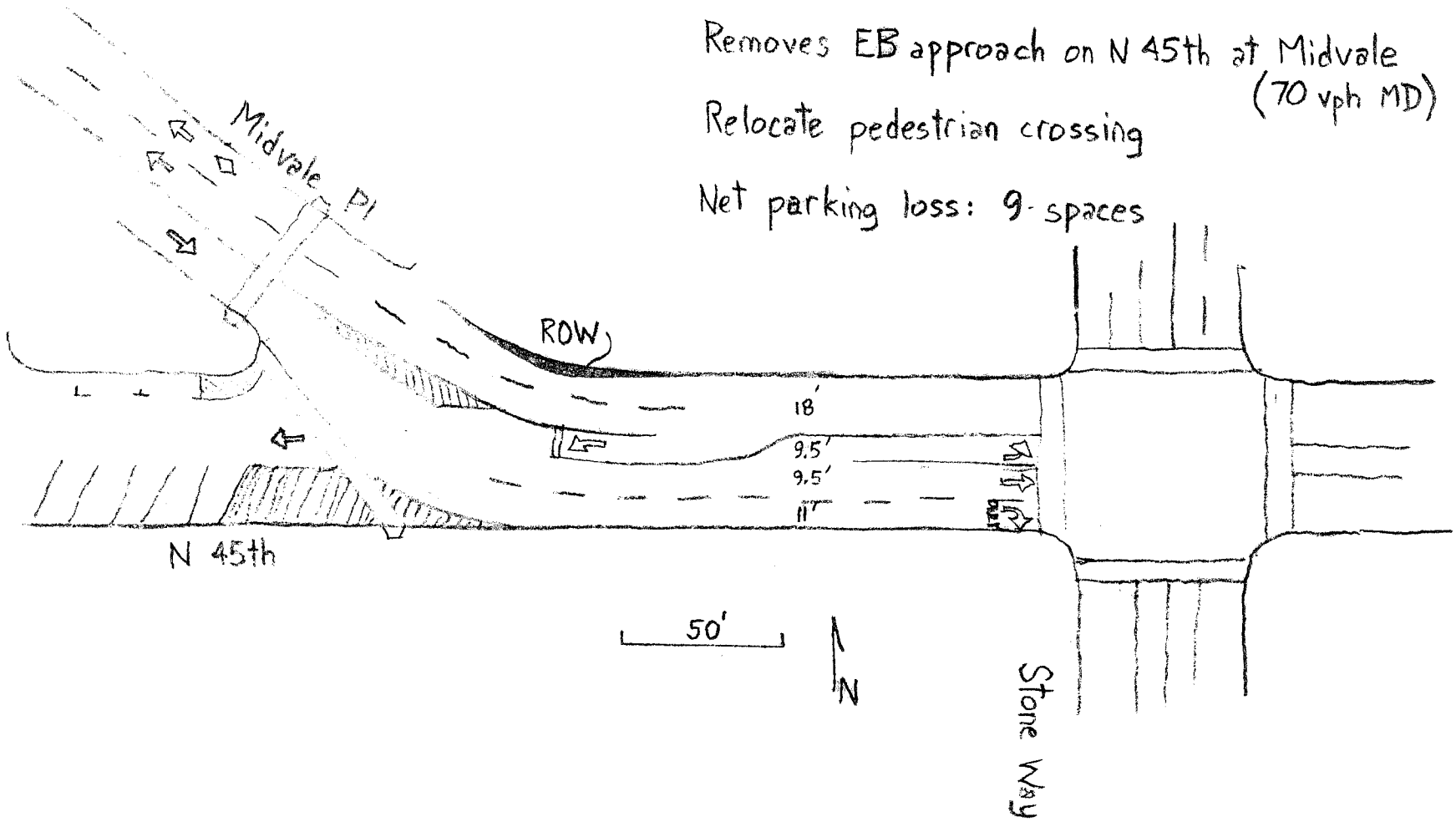


Option (31) Major Restripe

Removes EB approach on N 45th at Midvale (70 vph MD)

Relocate pedestrian crossing

Net parking loss: 9 spaces

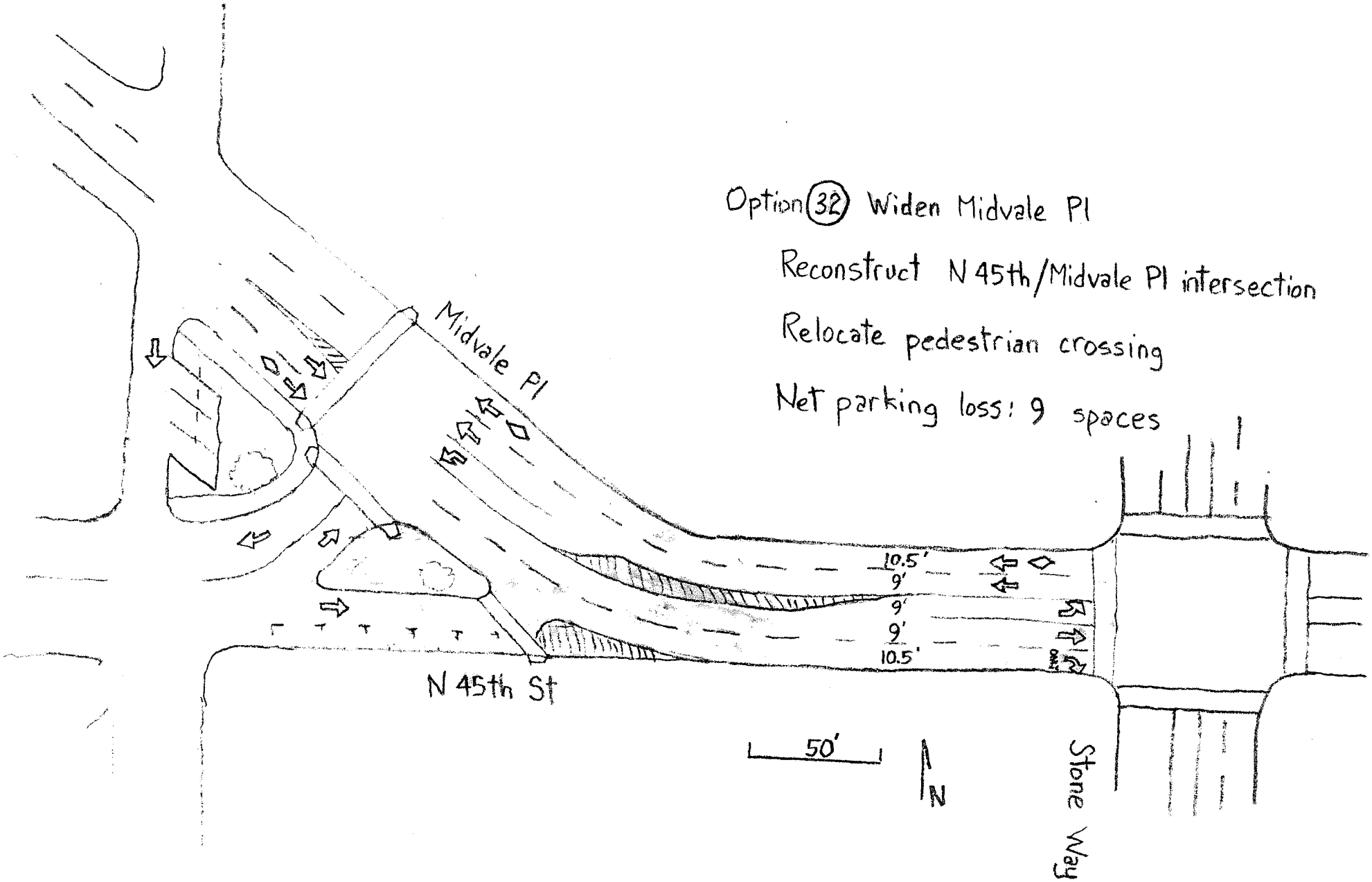


Option (32) Widen Midvale Pl

Reconstruct N 45th/Midvale Pl intersection

Relocate pedestrian crossing

Net parking loss: 9 spaces



APPENDIX B – 2014 ROUTE 44 TRAVEL TIME DATA

Spring 2014 - Route 44 APC Travel Time Data

	Inbound - Eastbound	Travel time (hh:mm:ss)				dist.	Travel Speed (mph)				Dwell Time (sec)		
		AVG	5th	95th		(mi.)	AVG	5th %	95th %		AVG	5th %	95th %
AM	Route TT	0:36:53	0:30:54	0:42:15		5.25	8.5	10.2	7.5		614.0	200.3	1186.2
	28th/Market to 15th/Market	0:05:39	0:04:04	0:07:22		0.78	8.3	11.5	6.3		74.0	30.5	116.9
	15th/Market to 6th/Market	0:03:26	0:02:45	0:04:27		0.61	10.7	13.3	8.2		72.5	23.1	127.3
	6th/Market to Phinney/46th	0:03:08	0:02:27	0:04:22		0.67	12.8	16.4	9.2		52.0	0.0	90.6
	Phinney/46th to Stone/45th	0:05:34	0:04:12	0:07:43		0.57	6.1	8.1	4.4		86.5	33.7	203.9
	Stone/45th to Thackeray/45th	0:04:14	0:02:57	0:06:52		0.81	11.5	16.5	7.1		85.7	20.6	146.1
	Thackeray/45th to 43rd/15th Ave	0:07:39	0:05:20	0:09:32		0.76	6.0	8.5	4.8		118.5	28.2	270.8
	43rd/15th Ave to Pacific/15th Ave	0:04:27	0:02:56	0:05:45		0.46	6.2	9.4	4.8		63.3	39.3	116.3
	Thackeray to University Way TT	0:05:24	0:03:38	0:07:09		0.61	6.8	10.1	5.1		79.5	14.2	183.2
	Thackeray to 7th	0:01:48	0:00:57	0:03:03		0.25	8.3	15.7	4.9		28.9	1.2	50.9
	7th to Roosevelt	0:02:13	0:01:13	0:04:05		0.15	4.1	7.4	2.2		27.7	0.0	74.1
	Roosevelt to University	0:01:23	0:00:50	0:02:09		0.21	9.1	15.1	5.9		23.0	13.0	58.2
	University to 43rd	0:02:15	0:01:28	0:03:25		0.16	4.3	6.6	2.8		38.9	14.0	87.6
Midday	Route TT	0:35:06	0:30:58	0:39:59		5.25	9.0	10.2	7.9		672.8	136.6	1261.4
	28th/Market to 15th/Market	0:06:17	0:04:38	0:08:12		0.78	7.4	10.1	5.7		85.9	17.1	156.6
	15th/Market to 6th/Market	0:03:10	0:02:24	0:04:15		0.61	11.6	15.3	8.6		72.1	11.5	122.3
	6th/Market to Phinney/46th	0:02:29	0:01:45	0:04:03		0.67	16.1	23.0	9.9		59.1	0.0	62.9
	Phinney/46th to Stone/45th	0:05:08	0:03:52	0:06:34		0.57	6.7	8.8	5.2		91.5	30.0	220.2
	Stone/45th to Thackeray/45th	0:04:23	0:03:25	0:05:29		0.81	11.1	14.2	8.9		98.6	12.0	190.1
	Thackeray/45th to 43rd/15th Ave	0:06:50	0:04:47	0:08:39		0.76	6.7	9.5	5.3		125.0	24.4	241.5
	43rd/15th Ave to Pacific/15th Ave	0:04:08	0:02:50	0:05:07		0.46	6.7	9.7	5.4		67.9	31.6	137.6
	Thackeray to University Way TT	0:04:47	0:03:16	0:07:02		0.61	7.7	11.2	5.2		82.5	7.9	162.9
	Thackeray to 7th	0:01:37	0:00:52	0:02:37		0.25	9.3	17.3	5.7		29.1	0.0	55.0
	7th to Roosevelt	0:01:31	0:01:02	0:02:24		0.15	5.9	8.7	3.7		31.5	0.0	73.2
	Roosevelt to University	0:01:38	0:00:53	0:03:06		0.21	7.7	14.3	4.1		21.9	7.9	34.7
	University to 43rd	0:02:04	0:01:10	0:02:47		0.16	4.7	8.3	3.4		42.5	16.6	78.6
PM	Route TT	0:37:54	0:32:44	0:43:36		5.25	8.3	9.6	7.2		689.1	31.0	1328.8
	28th/Market to 15th/Market	0:07:06	0:04:33	0:10:57		0.78	6.6	10.3	4.3		91.4	0.9	168.5
	15th/Market to 6th/Market	0:03:35	0:02:40	0:04:39		0.61	10.2	13.7	7.9		85.3	7.5	179.9
	6th/Market to Phinney/46th	0:02:35	0:01:41	0:03:37		0.67	15.5	23.8	11.1		65.7	0.0	83.0
	Phinney/46th to Stone/45th	0:05:12	0:03:34	0:06:51		0.57	6.6	9.6	5.0		96.2	7.6	238.2
	Stone/45th to Thackeray/45th	0:04:38	0:03:04	0:06:22		0.81	10.5	15.8	7.6		104.4	0.0	200.7
	Thackeray/45th to 43rd/15th Ave	0:07:49	0:05:18	0:10:37		0.76	5.8	8.6	4.3		123.2	15.0	236.6
	43rd/15th Ave to Pacific/15th Ave	0:04:27	0:03:08	0:05:54		0.46	6.2	8.8	4.7		58.8	0.0	105.0
	Thackeray to University Way TT	0:05:32	0:03:48	0:08:26		0.61	6.6	9.6	4.3		84.4	0.0	164.8
	Thackeray to 7th	0:01:49	0:01:06	0:02:53		0.25	8.2	13.7	5.2		28.7	0.0	55.9
	7th to Roosevelt	0:01:38	0:00:56	0:03:01		0.15	5.5	9.7	3.0		30.0	0.0	47.0
	Roosevelt to University	0:02:05	0:01:23	0:03:18		0.21	6.1	9.1	3.8		25.7	0.0	61.9
	University to 43rd	0:02:17	0:01:06	0:03:31		0.16	4.2	8.8	2.7		38.8	15.0	71.9

Spring 2014 - Route 44 APC Travel Time Data

	Outbound - Westbound	Travel time (hh:mm:ss)				dist.	Travel Speed (mph)				Dwell Time (sec)		
		AVG	5th	95th		(mi.)	AVG	5th %	95th %		AVG	5th %	95th %
AM	Route TT	0:33:19	0:27:35	0:42:10		5.25	9.5	11.4	7.5		524.4	23.0	1027.5
	Pacific/15th Ave to 42nd/15th Ave	0:02:59	0:02:18	0:03:46		0.36	7.2	9.4	5.7		40.5	0.0	72.4
	42nd/15th Ave to Latona/45th	0:06:23	0:05:11	0:07:45		0.82	7.7	9.5	6.4		102.4	23.0	173.9
	Latona/45th to Stone/45th	0:04:06	0:02:46	0:05:37		0.86	12.6	18.6	9.2		66.3	0.0	101.6
	Stone/45th to Phinney/46th	0:03:32	0:02:16	0:05:11		0.57	9.7	15.1	6.6		66.8	0.0	136.7
	Phinney/46th to 5th/Market	0:02:28	0:01:50	0:03:11		0.67	16.3	22.0	12.7		43.7	0.0	65.6
	5th/Market to 15th/Market	0:03:28	0:02:27	0:04:39		0.62	10.7	15.2	8.0		52.1	0.0	67.3
	15th/Market to 28th/Market	0:04:46	0:03:26	0:08:28		0.78	9.8	13.6	5.5		103.8	0.0	329.9
	Brooklyn Ave to Latona TT	0:04:07	0:03:45	0:05:20		0.56	8.2	9.0	6.3		83.2	23.0	141.1
	42nd to Brooklyn	0:02:16	0:01:07	0:02:50		0.26	6.9	14.0	5.5		19.2	0.0	32.9
	Brooklyn to 9th Ave	0:01:32	0:01:02	0:02:20		0.21	8.2	12.2	5.4		41.8	23.0	68.7
	9th to 7th	0:01:29	0:00:42	0:01:57		0.15	6.0	12.7	4.6		22.3	0.0	34.7
	7th to Latona	0:01:05	0:00:50	0:01:21		0.20	11.0	14.3	8.8		19.1	0.0	37.7
Midday	Route TT	0:36:10	0:29:49	0:46:41		5.25	8.7	10.6	6.7		689.1	98.1	1261.9
	Pacific/15th Ave to 42nd/15th Ave	0:03:27	0:02:38	0:04:33		0.36	6.3	8.2	4.8		67.8	6.0	112.5
	42nd/15th Ave to Latona/45th	0:07:30	0:05:57	0:09:18		0.82	6.6	8.3	5.3		132.5	53.6	246.2
	Latona/45th to Stone/45th	0:05:07	0:03:43	0:07:08		0.86	10.1	13.9	7.2		105.6	14.3	230.0
	Stone/45th to Phinney/46th	0:04:01	0:03:04	0:06:01		0.57	8.5	11.2	5.7		87.6	1.7	202.1
	Phinney/46th to 5th/Market	0:02:30	0:01:53	0:03:20		0.67	16.0	21.3	12.1		69.5	13.0	105.5
	5th/Market to 15th/Market	0:03:28	0:02:19	0:04:32		0.62	10.7	16.1	8.2		50.2	0.0	85.1
	15th/Market to 28th/Market	0:05:05	0:03:35	0:06:44		0.78	9.2	13.1	7.0		75.2	9.6	171.6
	Brooklyn Ave to Latona TT	0:04:35	0:03:48	0:05:50		0.56	7.3	8.8	5.8		104.6	38.6	197.2
	42nd to Brooklyn	0:02:55	0:02:00	0:04:01		0.26	5.4	7.8	3.9		27.8	15.0	49.0
	Brooklyn to 9th Ave	0:01:52	0:01:04	0:02:36		0.21	6.7	11.9	4.8		54.2	22.0	88.5
	9th to 7th	0:01:35	0:00:55	0:02:47		0.15	5.7	9.7	3.2		29.7	13.0	68.0
	7th to Latona	0:01:07	0:00:50	0:01:56		0.20	10.7	14.3	6.2		20.7	3.6	40.7
PM	Route TT	0:41:47	0:34:02	0:53:21		5.25	7.5	9.3	5.9		671.8	166.2	1206.7
	Pacific/15th Ave to 42nd/15th Ave	0:04:19	0:03:04	0:06:36		0.36	5.0	7.0	3.3		81.5	33.4	120.4
	42nd/15th Ave to Latona/45th	0:09:12	0:06:54	0:13:12		0.82	5.3	7.1	3.7		161.9	70.0	252.9
	Latona/45th to Stone/45th	0:05:22	0:03:53	0:07:24		0.86	9.6	13.3	7.0		88.8	24.9	170.8
	Stone/45th to Phinney/46th	0:04:50	0:02:54	0:06:33		0.57	7.1	11.8	5.2		95.5	11.1	223.8
	Phinney/46th to 5th/Market	0:03:09	0:02:10	0:04:21		0.67	12.7	18.5	9.2		65.3	12.7	99.1
	5th/Market to 15th/Market	0:04:13	0:02:59	0:05:32		0.62	8.8	12.5	6.7		44.7	4.2	77.1
	15th/Market to 28th/Market	0:05:33	0:03:54	0:07:01		0.78	8.4	12.0	6.7		62.4	10.0	128.8
	Brooklyn Ave to Latona TT	0:05:19	0:03:48	0:08:25		0.56	6.3	8.9	4.0		129.0	51.0	203.0
	42nd to Brooklyn	0:03:53	0:02:25	0:07:22		0.26	4.0	6.5	2.1		32.8	19.0	49.9
	Brooklyn to 9th Ave	0:02:22	0:01:27	0:04:26		0.21	5.3	8.7	2.8		73.5	29.0	100.0
	9th to 7th	0:01:44	0:01:09	0:02:49		0.15	5.2	7.8	3.2		36.5	14.0	69.0
	7th to Latona	0:01:13	0:00:46	0:02:03		0.20	9.8	15.7	5.9		19.0	8.0	34.0

Speed Summary - 44 Bus Route

		Wallingford to Montlake				15th/43rd to 5th/45th*		
		End to End (min)	Dwell Delay (sec)	Queue & Control Delay (sec)	Top 5 Intersections by Delay (sec)	End to End (min)	Dwell Delay (sec)	Queue & Control Delay (sec)
Inbound	AM	17.5	164.7	467.8	312.3	6.3	62.7	168.8
	MD	19.2	165.0	218.3	127.3	8.9	102.0	113.0
	PM	17.0	125.5	453.5	267.0	8.1	48.0	172.0

* Includes "end point" intersections

Top 5 Intersections By Delay

Inbound		
AM	MD	PM
NE 45th St & Thackeray Pl NE 207 / 112	N 45th St & Wallingford Ave N 59 / 27	N 45th St & Sunnyside Ave N 72 / 45.0
NE 45th St & 5th Ave NE 77 / 47	NE 45th St & University Way NE 53 / 25	NE 45th St & Thackeray Pl NE 98 / 81
NE 45th St & Roosevelt Way NE 120 / 53	15th Ave NE & NE 45th St 45 / 25	NE 45th St & 5th Ave NE 83 / 58
15th Ave NE & NE 45th St 97 / 34	15th Ave NE & NE 40th St 46 / 26	NE 45th St & 11th Ave NE 39 / 38
NE Pacific St & NE 15th Ave 158 / 66	NE Pacific St & NE 15th Ave 74 / 25	15th Ave NE & NE 45th St 81 / 46.0

		Montlake to Wallingford				15th/43rd to 5th/45th		
		End to End (min)	Dwell Delay	Queue & Control Delay	Top 5 Intersections by Delay	End to End (min)	Dwell Delay	Queue & Control Delay
Outbound	AM	15.0	183.0	231.3	160.3	9.2	68.3	124.5
	MD	12.4	244.0	174.3	110.7	9.5	54.3	70.7
	PM	16.7	376.0	212.0	182.0	9.9	79.0	166.5

Top 5 Intersection By Delay

	Outbound	
AM	**MD**	**PM**
NE Pacific St Ped 60 / 18	15th Ave NE & NE Campus Parkway 30 / 17	15th Ave NE & NE 45th St 64 / 61
NE Pacific St & NE 15th Ave 71 / 24	15th Ave NE & NE 45th St 37 / 15	NE 45th St & Brooklyn Ave NE 50 / 39
15th Ave NE & NE 40th St 50 / 26	NE 45th St & Brooklyn Ave NE 30 / 22	NE 45th St & 7th Ave NE 89 / 45
15th Ave NE & NE 45th St 51 / 36	NE 45th St & Roosevelt Way NE 30 / 18	NE 45th St & Thackeray Pl NE 25 / 21
NE 45th St & 7th Ave NE 141 / 57	N 45th St & Wallingford Ave N 96 / 38	N 45th St & Wallingford Ave N 20 / 18

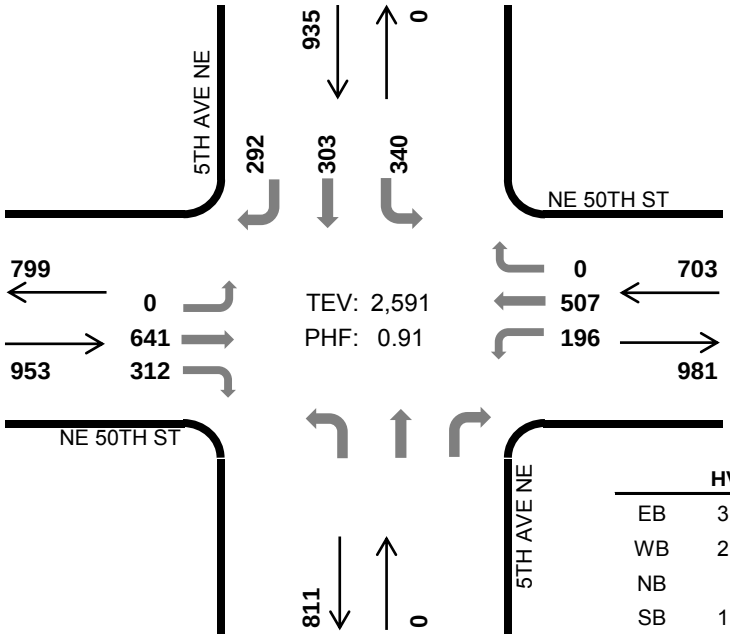
APPENDIX C – 2014 TURN MOVEMENT VOLUMES

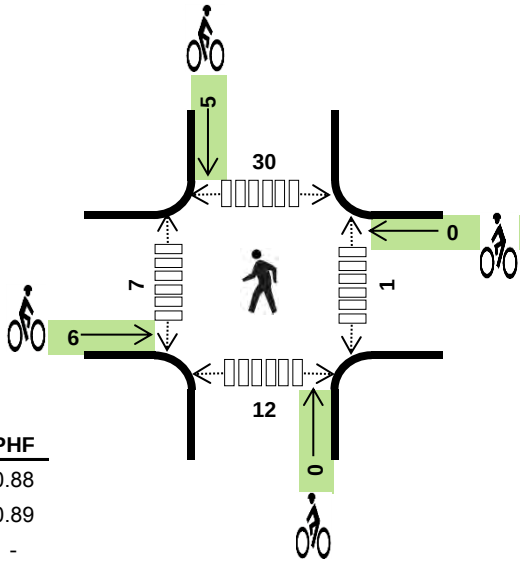
5TH AVE NE
NE 50TH ST

Date: Tue, Oct 14, 2014
Count Period: 7:00 AM to 9:00 AM
Peak Hour: 8:00 AM to 9:00 AM

N

Peak Hour





	HV %:	PHF
EB	3.0%	0.88
WB	2.1%	0.89
NB	-	-
SB	1.5%	0.87
TOTAL	2.2%	0.91

Two-Hour Count Summaries

Interval Start	NE 50TH ST Eastbound			NE 50TH ST Westbound			5TH AVE NE Northbound			5TH AVE NE Southbound			15-min Total	Rolling One Hour
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
7:00 AM	0	106	111	49	68	0	0	0	0	53	29	46	462	
7:15 AM	0	113	104	38	86	0	0	0	0	34	57	46	478	
7:30 AM	0	140	58	41	107	0	0	0	0	59	75	38	518	
7:45 AM	0	151	56	58	115	0	0	0	0	71	72	40	563	2,021
8:00 AM	**0**	**133**	**71**	**47**	**105**	**0**	**0**	**0**	**0**	**74**	**76**	**56**	**562**	2,121
8:15 AM	**0**	**138**	**74**	**44**	**135**	**0**	**0**	**0**	**0**	**73**	**80**	**75**	**619**	2,262
8:30 AM	**0**	**184**	**82**	**49**	**149**	**0**	**0**	**0**	**0**	**84**	**82**	**66**	**696**	2,440
8:45 AM	**0**	**186**	**85**	**56**	**118**	**0**	**0**	**0**	**0**	**109**	**65**	**95**	**714**	**2,591**
Count Total	0	1,151	641	382	883	0	0	0	0	557	536	462	4,612	
Peak Hr	**0**	**641**	**312**	**196**	**507**	**0**	**0**	**0**	**0**	**340**	**303**	**292**	**2,591**	

Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
7:00 AM	2	6	0	3	*11*	0	0	0	2	*2*	0	0	3	2	*5*
7:15 AM	0	3	0	2	*5*	0	0	0	0	*0*	0	3	6	4	*13*
7:30 AM	0	6	0	2	*8*	0	0	0	0	*0*	0	1	10	1	*12*
7:45 AM	0	3	0	2	*5*	0	0	0	0	*0*	0	2	12	2	*16*
8:00 AM	**3**	**1**	**0**	**2**	***6***	**0**	**0**	**0**	**2**	***2***	**0**	**2**	**5**	**2**	***9***
8:15 AM	**7**	**3**	**0**	**2**	***12***	**5**	**0**	**0**	**2**	***7***	**1**	**2**	**11**	**5**	***19***
8:30 AM	**6**	**7**	**0**	**4**	***17***	**0**	**0**	**0**	**1**	***1***	**0**	**0**	**7**	**1**	***8***
8:45 AM	**13**	**4**	**0**	**6**	***23***	**1**	**0**	**0**	**0**	***1***	**0**	**3**	**7**	**4**	***14***
Count Total	31	33	0	23	*87*	6	0	0	7	*13*	1	13	61	21	*96*
Peak Hr	**29**	**15**	**0**	**14**	***58***	**6**	**0**	**0**	**5**	***11***	**1**	**7**	**30**	**12**	***50***

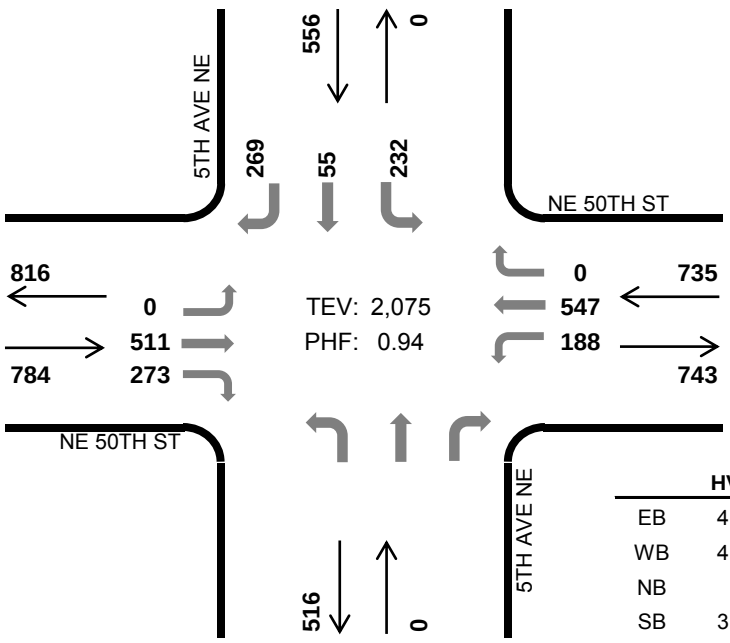
Mark Skaggs: 425 - 250 - 0777 mark.skaggs@idaxdata.com

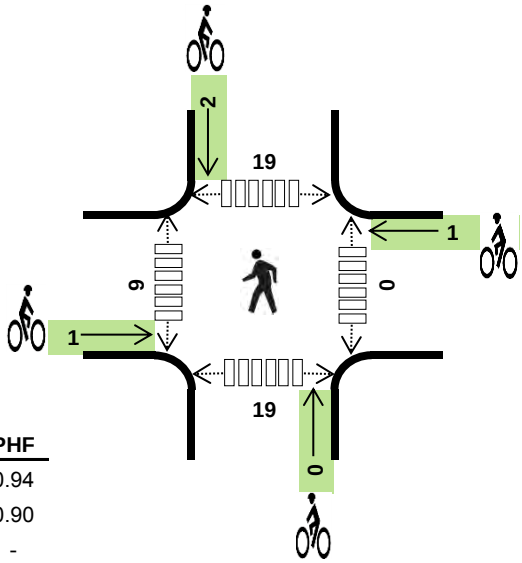
5TH AVE NE
NE 50TH ST

Date: Tue, Oct 14, 2014
Count Period: 11:00 AM to 1:00 PM
Peak Hour: 11:45 AM to 12:45 PM

N

Peak Hour





	HV %:	PHF
EB	4.3%	0.94
WB	4.4%	0.90
NB	-	-
SB	3.4%	0.91
TOTAL	4.1%	0.94

Two-Hour Count Summaries

Interval Start	NE 50TH ST Eastbound			NE 50TH ST Westbound			5TH AVE NE Northbound			5TH AVE NE Southbound			15-min Total	Rolling One Hour
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
11:00 AM	0	117	76	39	105	0	0	0	0	59	21	49	466	
11:15 AM	0	116	67	52	109	0	0	0	0	58	14	73	489	
11:30 AM	0	131	70	32	110	0	0	0	0	45	12	61	461	
11:45 AM	**0**	**133**	**71**	**54**	**151**	**0**	**0**	**0**	**0**	**59**	**17**	**66**	**551**	1,967
12:00 PM	**0**	**125**	**73**	**41**	**112**	**0**	**0**	**0**	**0**	**68**	**5**	**56**	**480**	1,981
12:15 PM	**0**	**115**	**59**	**53**	**139**	**0**	**0**	**0**	**0**	**52**	**17**	**84**	**519**	2,011
12:30 PM	**0**	**138**	**70**	**40**	**145**	**0**	**0**	**0**	**0**	**53**	**16**	**63**	**525**	**2,075**
12:45 PM	0	147	64	47	117	0	0	0	0	56	9	70	510	2,034
Count Total	0	1,022	550	358	988	0	0	0	0	450	111	522	4,001	
Peak Hr	**0**	**511**	**273**	**188**	**547**	**0**	**0**	**0**	**0**	**232**	**55**	**269**	**2,075**	

Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
11:00 AM	13	6	0	2	*21*	1	0	0	1	*2*	0	2	1	4	*7*
11:15 AM	4	12	0	5	*21*	2	0	0	0	*2*	0	6	2	3	*11*
11:30 AM	15	8	0	3	*26*	2	0	0	0	*2*	0	4	6	3	*13*
11:45 AM	**16**	**14**	**0**	**7**	***37***	**0**	**0**	**0**	**0**	***0***	**0**	**4**	**1**	**3**	***8***
12:00 PM	**7**	**3**	**0**	**5**	***15***	**0**	**0**	**0**	**2**	***2***	**0**	**1**	**4**	**2**	***7***
12:15 PM	**7**	**8**	**0**	**5**	***20***	**1**	**1**	**0**	**0**	***2***	**0**	**3**	**8**	**8**	***19***
12:30 PM	**4**	**7**	**0**	**2**	***13***	**0**	**0**	**0**	**0**	***0***	**0**	**1**	**6**	**6**	***13***
12:45 PM	6	1	0	7	*14*	1	0	0	0	*1*	0	3	4	3	*10*
Count Total	72	59	0	36	*167*	7	1	0	3	*11*	0	24	32	32	*88*
Peak Hr	**34**	**32**	**0**	**19**	***85***	**1**	**1**	**0**	**2**	***4***	**0**	**9**	**19**	**19**	***47***

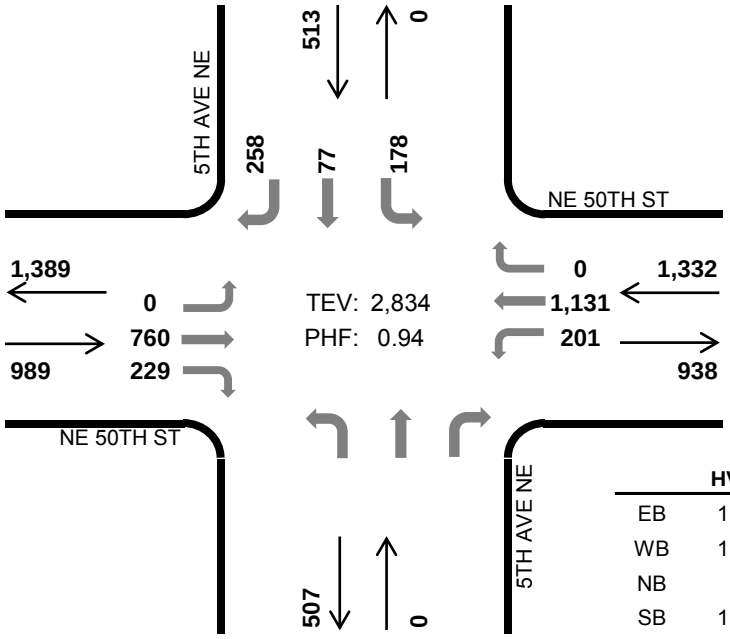
Mark Skaggs: 425 - 250 - 0777 mark.skaggs@idaxdata.com

5TH AVE NE
NE 50TH ST

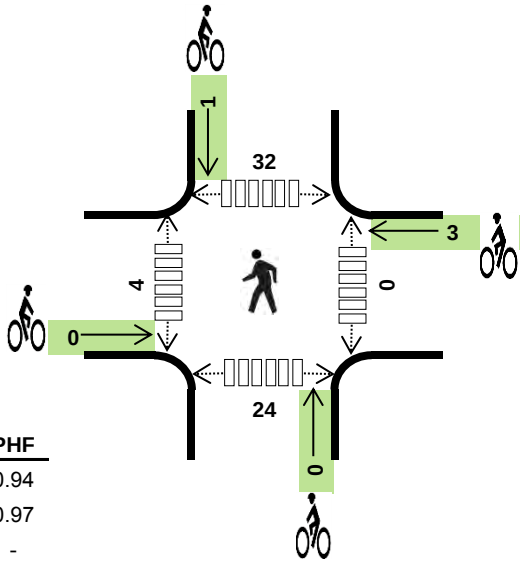
Date: Tue, Oct 14, 2014
Count Period: 4:00 PM to 6:00 PM
Peak Hour: 4:45 PM to 5:45 PM

N

Peak Hour



	HV %:	PHF
EB	1.6%	0.94
WB	1.3%	0.97
NB	-	-
SB	1.2%	0.91
TOTAL	1.4%	0.94



Two-Hour Count Summaries

Interval Start	NE 50TH ST Eastbound			NE 50TH ST Westbound			5TH AVE NE Northbound			5TH AVE NE Southbound			15-min Total	Rolling One Hour
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
4:00 PM	0	179	53	57	268	0	0	0	0	38	14	85	694	
4:15 PM	0	180	45	40	237	0	0	0	0	46	15	62	625	
4:30 PM	0	140	57	56	249	0	0	0	0	39	20	65	626	
4:45 PM	**0**	**177**	**54**	**43**	**297**	**0**	**0**	**0**	**0**	**44**	**26**	**65**	**706**	2,651
5:00 PM	**0**	**183**	**52**	**55**	**268**	**0**	**0**	**0**	**0**	**42**	**21**	**49**	**670**	2,627
5:15 PM	**0**	**191**	**68**	**43**	**281**	**0**	**0**	**0**	**0**	**44**	**15**	**66**	**708**	2,710
5:30 PM	**0**	**209**	**55**	**60**	**285**	**0**	**0**	**0**	**0**	**48**	**15**	**78**	**750**	**2,834**
5:45 PM	0	196	44	47	256	0	0	0	0	49	24	65	681	2,809
Count Total	0	1,455	428	401	2,141	0	0	0	0	350	150	535	5,460	
Peak Hr	**0**	**760**	**229**	**201**	**1,131**	**0**	**0**	**0**	**0**	**178**	**77**	**258**	**2,834**	

Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
4:00 PM	6	3	0	4	*13*	0	0	0	0	*0*	0	2	2	2	*6*
4:15 PM	6	3	0	3	*12*	0	2	0	0	*2*	0	1	3	2	*6*
4:30 PM	4	7	0	4	*15*	0	1	0	0	*1*	0	2	4	3	*9*
4:45 PM	**6**	**6**	**0**	**0**	***12***	**0**	**1**	**0**	**0**	***1***	**0**	**1**	**6**	**4**	***11***
5:00 PM	**2**	**3**	**0**	**1**	***6***	**0**	**1**	**0**	**0**	***1***	**0**	**1**	**3**	**8**	***12***
5:15 PM	**4**	**4**	**0**	**2**	***10***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**13**	**2**	***15***
5:30 PM	**4**	**4**	**0**	**3**	***11***	**0**	**1**	**0**	**1**	***2***	**0**	**2**	**10**	**10**	***22***
5:45 PM	1	2	0	1	*4*	0	1	0	0	*1*	0	0	5	2	*7*
Count Total	33	32	0	18	*83*	0	7	0	1	*8*	0	9	46	33	*88*
Peak Hr	**16**	**17**	**0**	**6**	***39***	**0**	**3**	**0**	**1**	***4***	**0**	**4**	**32**	**24**	***60***

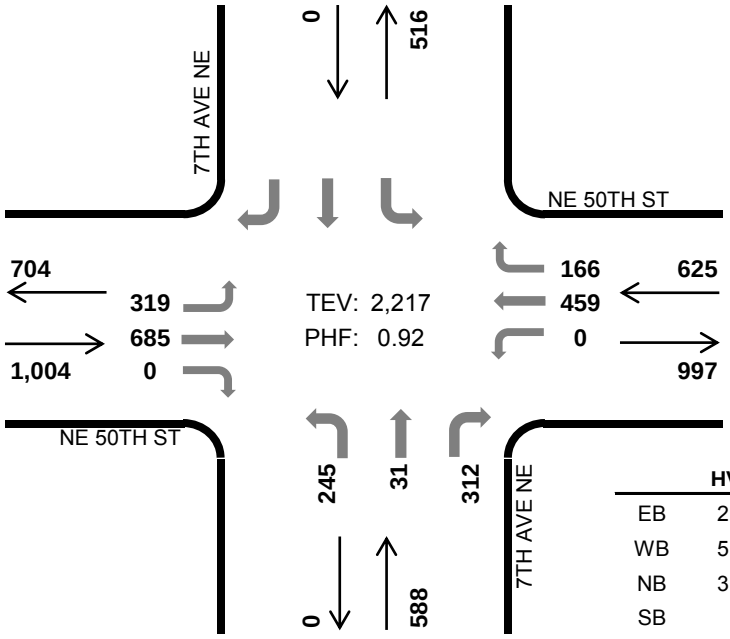
Mark Skaggs: 425 - 250 - 0777 mark.skaggs@idaxdata.com

7TH AVE NE
NE 50TH ST

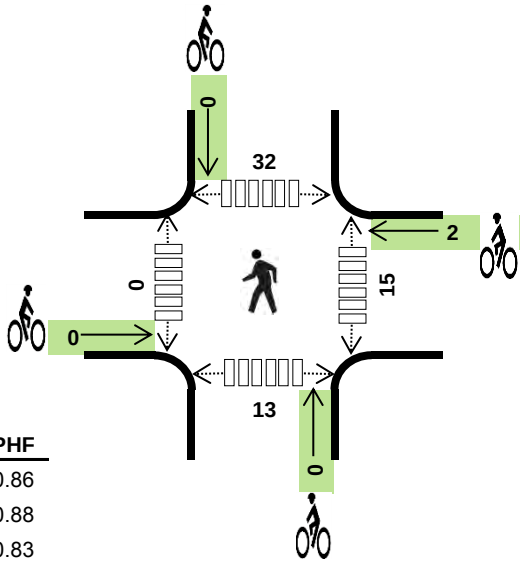
Date: Tue, Oct 14, 2014
Count Period: 7:00 AM to 9:00 AM
Peak Hour: 8:00 AM to 9:00 AM

N

Peak Hour



	HV %:	PHF
EB	2.4%	0.86
WB	5.3%	0.88
NB	3.7%	0.83
SB	-	-
TOTAL	3.6%	0.92



Two-Hour Count Summaries

Interval Start	NE 50TH ST Eastbound			NE 50TH ST Westbound			7TH AVE NE Northbound			7TH AVE NE Southbound			15-min Total	Rolling One Hour
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
7:00 AM	77	74	0	0	65	20	46	6	43	0	0	0	331	
7:15 AM	73	87	0	0	80	21	52	3	26	0	0	0	342	
7:30 AM	75	109	0	0	101	43	68	9	32	0	0	0	437	
7:45 AM	91	144	0	0	107	42	45	7	52	0	0	0	488	1,598
8:00 AM	**67**	**132**	**0**	**0**	**94**	**39**	**54**	**5**	**63**	**0**	**0**	**0**	**454**	1,721
8:15 AM	**65**	**165**	**0**	**0**	**115**	**40**	**73**	**13**	**91**	**0**	**0**	**0**	**562**	1,941
8:30 AM	**100**	**183**	**0**	**0**	**138**	**39**	**55**	**9**	**76**	**0**	**0**	**0**	**600**	2,104
8:45 AM	**87**	**205**	**0**	**0**	**112**	**48**	**63**	**4**	**82**	**0**	**0**	**0**	**601**	**2,217**
Count Total	635	1,099	0	0	812	292	456	56	465	0	0	0	3,815	
Peak Hr	**319**	**685**	**0**	**0**	**459**	**166**	**245**	**31**	**312**	**0**	**0**	**0**	**2,217**	

Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
7:00 AM	4	5	7	0	*16*	0	2	0	0	*2*	2	0	1	4	*7*
7:15 AM	3	6	3	0	*12*	1	3	1	0	*5*	0	0	5	3	*8*
7:30 AM	2	5	8	0	*15*	0	0	0	0	*0*	1	0	8	1	*10*
7:45 AM	2	8	3	0	*13*	0	0	0	0	*0*	4	0	11	1	*16*
8:00 AM	**2**	**7**	**1**	**0**	***10***	**0**	**1**	**0**	**0**	***1***	**2**	**0**	**4**	**3**	***9***
8:15 AM	**4**	**11**	**5**	**0**	***20***	**0**	**1**	**0**	**0**	***1***	**9**	**0**	**13**	**6**	***28***
8:30 AM	**4**	**7**	**6**	**0**	***17***	**0**	**0**	**0**	**0**	***0***	**3**	**0**	**6**	**2**	***11***
8:45 AM	**14**	**8**	**10**	**0**	***32***	**0**	**0**	**0**	**0**	***0***	**1**	**0**	**9**	**2**	***12***
Count Total	35	57	43	0	*135*	1	7	1	0	*9*	22	0	57	22	*101*
Peak Hr	**24**	**33**	**22**	**0**	***79***	**0**	**2**	**0**	**0**	***2***	**15**	**0**	**32**	**13**	***60***

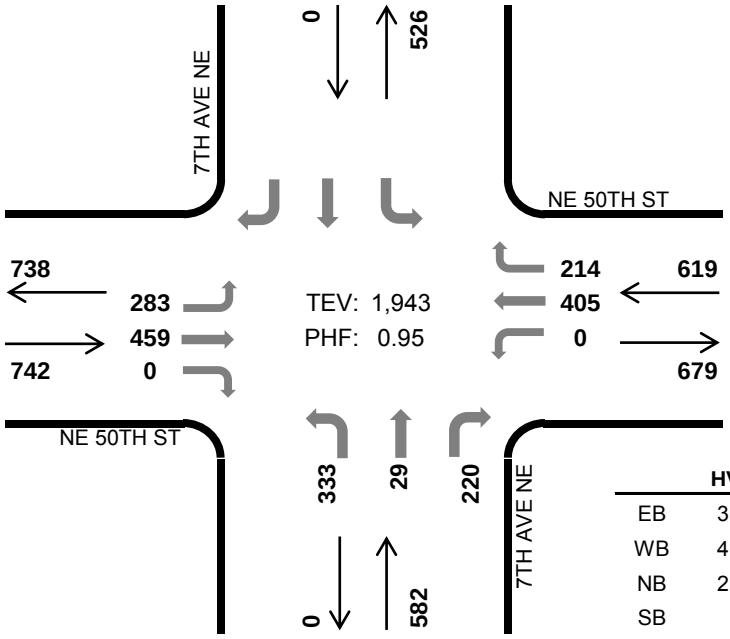
Mark Skaggs: 425 - 250 - 0777 mark.skaggs@idaxdata.com

7TH AVE NE
NE 50TH ST

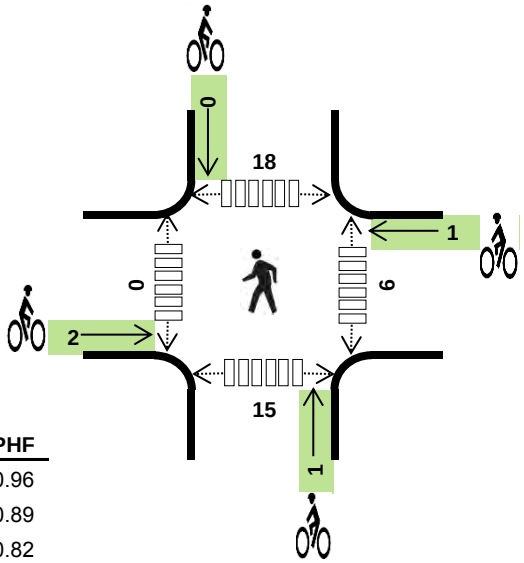
Date: Tue, Oct 14, 2014
Count Period: 11:00 AM to 1:00 PM
Peak Hour: 11:45 AM to 12:45 PM

N

Peak Hour



	HV %:	PHF
EB	3.2%	0.96
WB	4.7%	0.89
NB	2.4%	0.82
SB	-	-
TOTAL	3.4%	0.95



Two-Hour Count Summaries

Interval Start	NE 50TH ST Eastbound			NE 50TH ST Westbound			7TH AVE NE Northbound			7TH AVE NE Southbound			15-min Total	Rolling One Hour
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
11:00 AM	59	111	0	0	80	49	59	9	44	0	0	0	411	
11:15 AM	74	99	0	0	94	59	63	5	51	0	0	0	445	
11:30 AM	76	100	0	0	78	44	78	3	43	0	0	0	422	
11:45 AM	**64**	**129**	**0**	**0**	**94**	**34**	**108**	**5**	**64**	**0**	**0**	**0**	**498**	1,776
12:00 PM	**70**	**111**	**0**	**0**	**103**	**48**	**58**	**4**	**51**	**0**	**0**	**0**	**445**	1,810
12:15 PM	**80**	**102**	**0**	**0**	**110**	**56**	**71**	**10**	**57**	**0**	**0**	**0**	**486**	1,851
12:30 PM	**69**	**117**	**0**	**0**	**98**	**76**	**96**	**10**	**48**	**0**	**0**	**0**	**514**	**1,943**
12:45 PM	76	115	0	0	102	50	58	8	59	0	0	0	468	1,913
Count Total	568	884	0	0	759	416	591	54	417	0	0	0	3,689	
Peak Hr	**283**	**459**	**0**	**0**	**405**	**214**	**333**	**29**	**220**	**0**	**0**	**0**	**1,943**	

Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
11:00 AM	6	4	10	0	*20*	3	0	0	0	*3*	0	0	1	5	*6*
11:15 AM	6	8	9	0	*23*	2	0	0	0	*2*	1	0	2	4	*7*
11:30 AM	9	6	6	0	*21*	1	0	0	0	*1*	2	0	5	3	*10*
11:45 AM	**11**	**10**	**9**	**0**	***30***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**1**	**4**	***5***
12:00 PM	**5**	**4**	**2**	**0**	***11***	**1**	**0**	**1**	**0**	***2***	**1**	**0**	**4**	**3**	***8***
12:15 PM	**4**	**7**	**0**	**0**	***11***	**1**	**1**	**0**	**0**	***2***	**1**	**0**	**8**	**4**	***13***
12:30 PM	**4**	**8**	**3**	**0**	***15***	**0**	**0**	**0**	**0**	***0***	**4**	**0**	**5**	**4**	***13***
12:45 PM	5	4	1	0	*10*	1	1	3	0	*5*	2	0	4	4	*10*
Count Total	50	51	40	0	*141*	9	2	4	0	*15*	11	0	30	31	*72*
Peak Hr	**24**	**29**	**14**	**0**	***67***	**2**	**1**	**1**	**0**	***4***	**6**	**0**	**18**	**15**	***39***

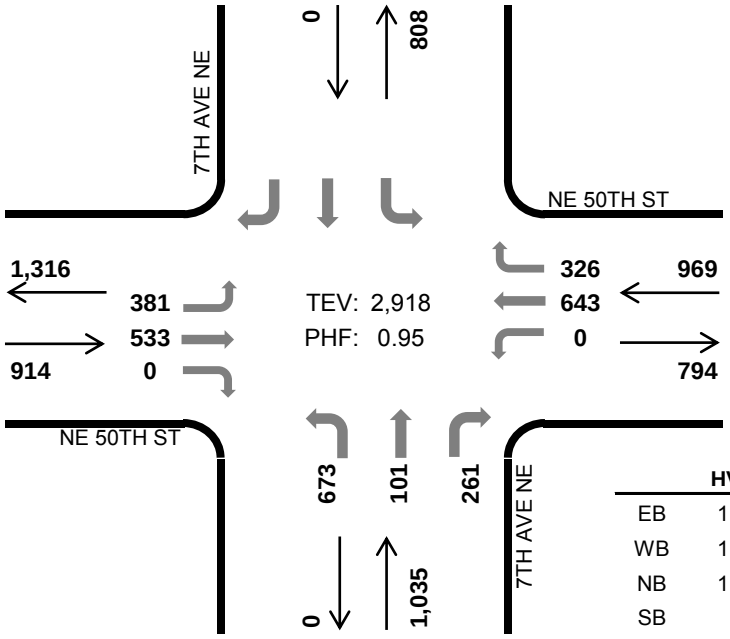
Mark Skaggs: 425 - 250 - 0777 mark.skaggs@idaxdata.com

7TH AVE NE
NE 50TH ST

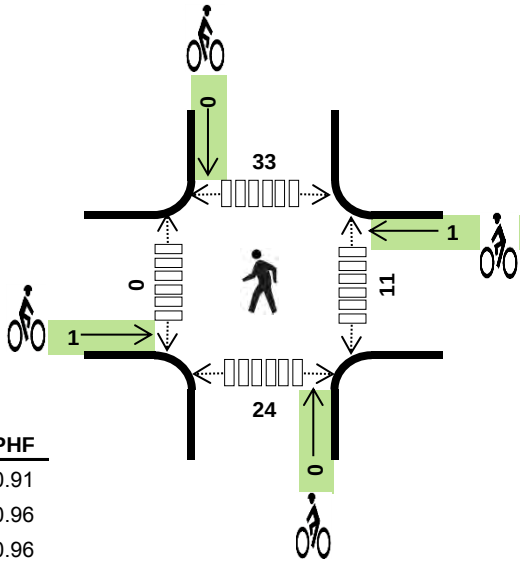
Date: Tue, Oct 14, 2014
Count Period: 4:00 PM to 6:00 PM
Peak Hour: 4:45 PM to 5:45 PM

N

Peak Hour



	HV %:	PHF
EB	1.9%	0.91
WB	1.0%	0.96
NB	1.4%	0.96
SB	-	-
TOTAL	1.4%	0.95



Two-Hour Count Summaries

Interval Start	NE 50TH ST Eastbound			NE 50TH ST Westbound			7TH AVE NE Northbound			7TH AVE NE Southbound			15-min Total	Rolling One Hour
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
4:00 PM	92	129	0	0	174	117	143	16	62	0	0	0	733	
4:15 PM	94	126	0	0	139	66	140	17	60	0	0	0	642	
4:30 PM	89	108	0	0	159	93	145	14	57	0	0	0	665	
4:45 PM	**103**	**110**	**0**	**0**	**163**	**72**	**180**	**24**	**57**	**0**	**0**	**0**	**709**	2,749
5:00 PM	**97**	**129**	**0**	**0**	**156**	**81**	**157**	**29**	**56**	**0**	**0**	**0**	**705**	2,721
5:15 PM	**91**	**134**	**0**	**0**	**151**	**93**	**172**	**22**	**76**	**0**	**0**	**0**	**739**	2,818
5:30 PM	**90**	**160**	**0**	**0**	**173**	**80**	**164**	**26**	**72**	**0**	**0**	**0**	**765**	**2,918**
5:45 PM	89	136	0	0	148	82	159	16	68	0	0	0	698	2,907
Count Total	745	1,032	0	0	1,263	684	1,260	164	508	0	0	0	5,656	
Peak Hr	**381**	**533**	**0**	**0**	**643**	**326**	**673**	**101**	**261**	**0**	**0**	**0**	**2,918**	

Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
4:00 PM	5	3	2	0	*10*	0	3	0	0	*3*	2	0	2	2	*6*
4:15 PM	5	3	3	0	*11*	0	1	0	0	*1*	1	0	3	2	*6*
4:30 PM	3	5	4	0	*12*	0	1	0	0	*1*	1	0	6	3	*10*
4:45 PM	**6**	**5**	**5**	**0**	***16***	**0**	**1**	**0**	**0**	***1***	**4**	**0**	**6**	**6**	***16***
5:00 PM	**6**	**0**	**4**	**0**	***10***	**0**	**0**	**0**	**0**	***0***	**1**	**0**	**5**	**5**	***11***
5:15 PM	**3**	**4**	**1**	**0**	***8***	**1**	**0**	**0**	**0**	***1***	**4**	**0**	**13**	**7**	***24***
5:30 PM	**2**	**1**	**4**	**0**	***7***	**0**	**0**	**0**	**0**	***0***	**2**	**0**	**9**	**6**	***17***
5:45 PM	1	2	0	0	*3*	1	0	0	0	*1*	2	0	2	8	*12*
Count Total	31	23	23	0	*77*	2	6	0	0	*8*	17	0	46	39	*102*
Peak Hr	**17**	**10**	**14**	**0**	***41***	**1**	**1**	**0**	**0**	***2***	**11**	**0**	**33**	**24**	***68***

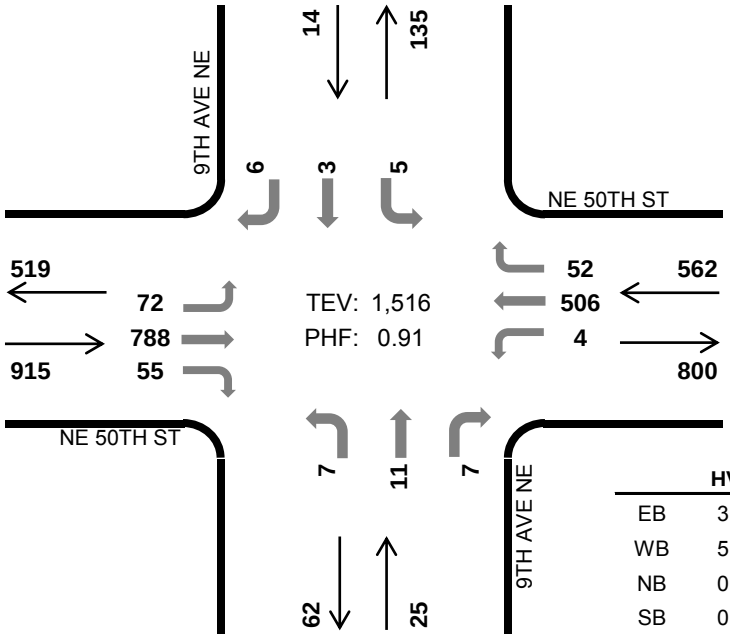
Mark Skaggs: 425 - 250 - 0777 mark.skaggs@idaxdata.com

9TH AVE NE
NE 50TH ST

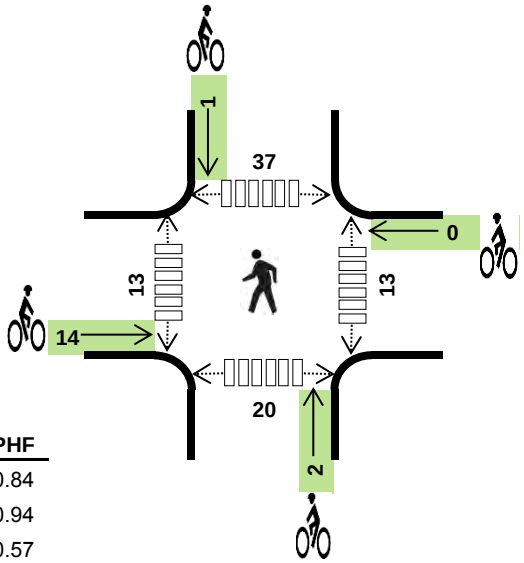
Date: Tue, Oct 14, 2014
Count Period: 7:00 AM to 9:00 AM
Peak Hour: 8:00 AM to 9:00 AM

N

Peak Hour



	HV %:	PHF
EB	3.1%	0.84
WB	5.7%	0.94
NB	0.0%	0.57
SB	0.0%	0.50
TOTAL	4.0%	0.91



Two-Hour Count Summaries

Interval Start	NE 50TH ST Eastbound			NE 50TH ST Westbound			9TH AVE NE Northbound			9TH AVE NE Southbound			15-min Total	Rolling One Hour
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
7:00 AM	3	103	4	0	78	3	0	1	2	2	0	2	198	
7:15 AM	0	90	2	1	83	0	4	2	0	0	0	2	184	
7:30 AM	2	131	9	0	132	0	3	0	0	1	0	7	285	
7:45 AM	3	159	10	2	132	2	2	0	4	0	1	0	315	982
8:00 AM	**13**	**172**	**10**	**1**	**119**	**8**	**1**	**0**	**3**	**2**	**0**	**1**	**330**	1,114
8:15 AM	**26**	**169**	**11**	**0**	**126**	**22**	**3**	**7**	**1**	**1**	**0**	**0**	**366**	1,296
8:30 AM	**27**	**203**	**13**	**2**	**130**	**18**	**3**	**3**	**1**	**0**	**1**	**2**	**403**	1,414
8:45 AM	**6**	**244**	**21**	**1**	**131**	**4**	**0**	**1**	**2**	**2**	**2**	**3**	**417**	**1,516**
Count Total	80	1,271	80	7	931	57	16	14	13	8	4	17	2,498	
Peak Hr	**72**	**788**	**55**	**4**	**506**	**52**	**7**	**11**	**7**	**5**	**3**	**6**	**1,516**	

Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
7:00 AM	6	6	0	1	*13*	1	0	0	0	*1*	4	0	2	4	*10*
7:15 AM	1	9	0	0	*10*	0	1	0	0	*1*	2	2	10	6	*20*
7:30 AM	3	5	0	0	*8*	1	0	0	0	*1*	4	5	8	4	*21*
7:45 AM	4	9	0	0	*13*	0	1	0	2	*3*	3	1	10	5	*19*
8:00 AM	**2**	**7**	**0**	**0**	***9***	**1**	**0**	**0**	**0**	***1***	**6**	**7**	**8**	**8**	***29***
8:15 AM	**3**	**9**	**0**	**0**	***12***	**6**	**0**	**0**	**0**	***6***	**0**	**3**	**4**	**6**	***13***
8:30 AM	**6**	**7**	**0**	**0**	***13***	**3**	**0**	**1**	**1**	***5***	**4**	**1**	**12**	**4**	***21***
8:45 AM	**17**	**9**	**0**	**0**	***26***	**4**	**0**	**1**	**0**	***5***	**3**	**2**	**13**	**2**	***20***
Count Total	42	61	0	1	*104*	16	2	2	3	*23*	26	21	67	39	*153*
Peak Hr	**28**	**32**	**0**	**0**	***60***	**14**	**0**	**2**	**1**	***17***	**13**	**13**	**37**	**20**	***83***

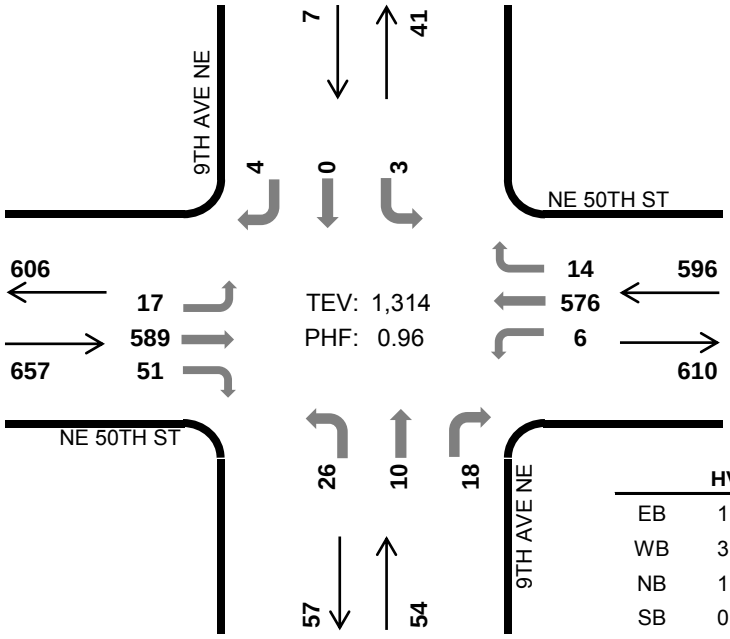
Mark Skaggs: 425 - 250 - 0777 mark.skaggs@idaxdata.com

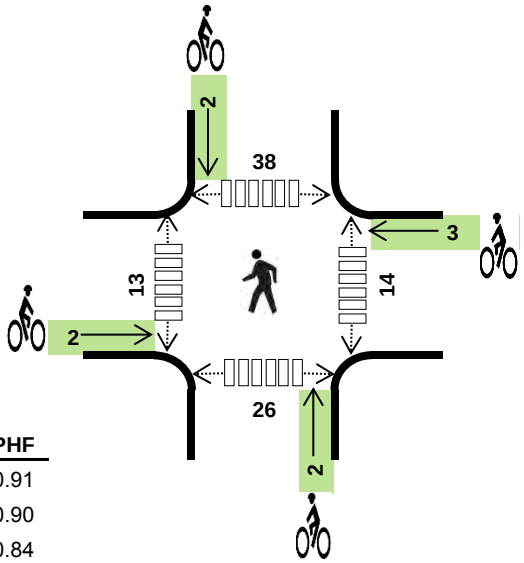
9TH AVE NE
NE 50TH ST

Date: Tue, Oct 14, 2014
Count Period: 11:00 AM to 1:00 PM
Peak Hour: 12:00 PM to 1:00 PM

N

Peak Hour





	HV %:	PHF
EB	1.7%	0.91
WB	3.0%	0.90
NB	1.9%	0.84
SB	0.0%	0.44
TOTAL	2.3%	0.96

Two-Hour Count Summaries

Interval Start	NE 50TH ST Eastbound			NE 50TH ST Westbound			9TH AVE NE Northbound			9TH AVE NE Southbound			15-min Total	Rolling One Hour
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
11:00 AM	4	139	6	0	108	6	7	1	2	0	0	3	276	
11:15 AM	1	133	13	0	140	6	5	1	4	1	1	3	308	
11:30 AM	2	128	5	1	117	2	3	1	2	0	1	1	263	
11:45 AM	9	149	14	0	109	1	5	1	4	0	2	3	297	1,144
12:00 PM	**3**	**156**	**7**	**0**	**132**	**3**	**8**	**4**	**2**	**0**	**0**	**0**	**315**	1,183
12:15 PM	**6**	**129**	**11**	**0**	**160**	**5**	**3**	**1**	**7**	**2**	**0**	**0**	**324**	1,199
12:30 PM	**3**	**148**	**13**	**3**	**147**	**2**	**9**	**2**	**2**	**1**	**0**	**3**	**333**	1,269
12:45 PM	**5**	**156**	**20**	**3**	**137**	**4**	**6**	**3**	**7**	**0**	**0**	**1**	**342**	**1,314**
Count Total	33	1,138	89	7	1,050	29	46	14	30	4	4	14	2,458	
Peak Hr	**17**	**589**	**51**	**6**	**576**	**14**	**26**	**10**	**18**	**3**	**0**	**4**	**1,314**	

Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
11:00 AM	8	4	0	0	*12*	0	0	1	0	*1*	5	1	8	4	*18*
11:15 AM	5	7	0	1	*13*	3	0	0	0	*3*	5	1	4	3	*13*
11:30 AM	4	5	0	0	*9*	1	2	0	1	*4*	4	4	7	9	*24*
11:45 AM	9	6	1	0	*16*	0	0	0	0	*0*	4	1	4	3	*12*
12:00 PM	**4**	**3**	**0**	**0**	***7***	**1**	**0**	**0**	**0**	***1***	**1**	**7**	**6**	**11**	***25***
12:15 PM	**1**	**5**	**1**	**0**	***7***	**1**	**1**	**0**	**1**	***3***	**5**	**2**	**20**	**5**	***32***
12:30 PM	**1**	**7**	**0**	**0**	***8***	**0**	**1**	**1**	**1**	***3***	**5**	**1**	**7**	**6**	***19***
12:45 PM	**5**	**3**	**0**	**0**	***8***	**0**	**1**	**1**	**0**	***2***	**3**	**3**	**5**	**4**	***15***
Count Total	37	40	2	1	*80*	6	5	3	3	*17*	32	20	61	45	*158*
Peak Hr	**11**	**18**	**1**	**0**	***30***	**2**	**3**	**2**	**2**	***9***	**14**	**13**	**38**	**26**	***91***

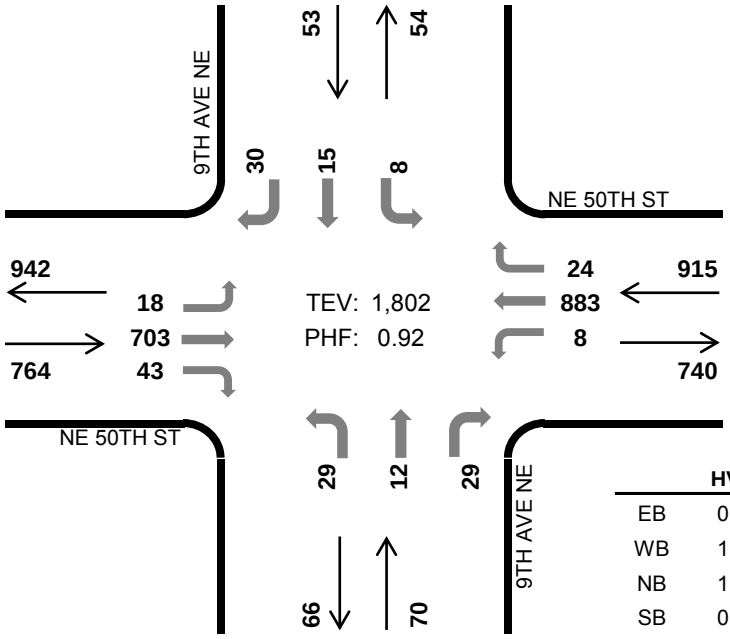
Mark Skaggs: 425 - 250 - 0777 mark.skaggs@idaxdata.com

9TH AVE NE
NE 50TH ST

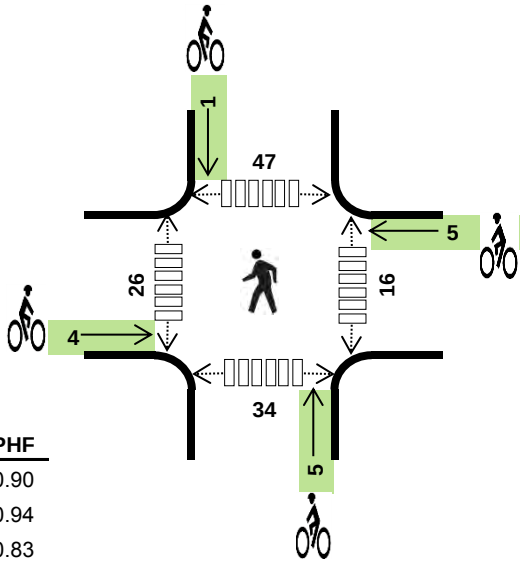
Date: Tue, Oct 14, 2014
Count Period: 4:00 PM to 6:00 PM
Peak Hour: 4:45 PM to 5:45 PM

N

Peak Hour



	HV %:	PHF
EB	0.9%	0.90
WB	1.0%	0.94
NB	1.4%	0.83
SB	0.0%	0.78
TOTAL	0.9%	0.92



Two-Hour Count Summaries

Interval Start	NE 50TH ST Eastbound			NE 50TH ST Westbound			9TH AVE NE Northbound			9TH AVE NE Southbound			15-min Total	Rolling One Hour
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
4:00 PM	6	173	9	1	259	4	7	5	10	5	1	5	485	
4:15 PM	7	147	9	2	185	6	5	3	5	3	1	2	375	
4:30 PM	11	137	10	4	215	9	16	6	3	6	1	6	424	
4:45 PM	**2**	**151**	**10**	**3**	**226**	**4**	**3**	**1**	**8**	**3**	**6**	**7**	**424**	1,708
5:00 PM	**5**	**167**	**8**	**2**	**205**	**7**	**10**	**1**	**7**	**1**	**3**	**6**	**422**	1,645
5:15 PM	**5**	**186**	**17**	**2**	**212**	**10**	**7**	**5**	**7**	**2**	**2**	**13**	**468**	1,738
5:30 PM	**6**	**199**	**8**	**1**	**240**	**3**	**9**	**5**	**7**	**2**	**4**	**4**	**488**	**1,802**
5:45 PM	3	172	5	0	174	5	6	2	8	8	1	4	388	1,766
Count Total	45	1,332	76	15	1,716	48	63	28	55	30	19	47	3,474	
Peak Hr	**18**	**703**	**43**	**8**	**883**	**24**	**29**	**12**	**29**	**8**	**15**	**30**	**1,802**	

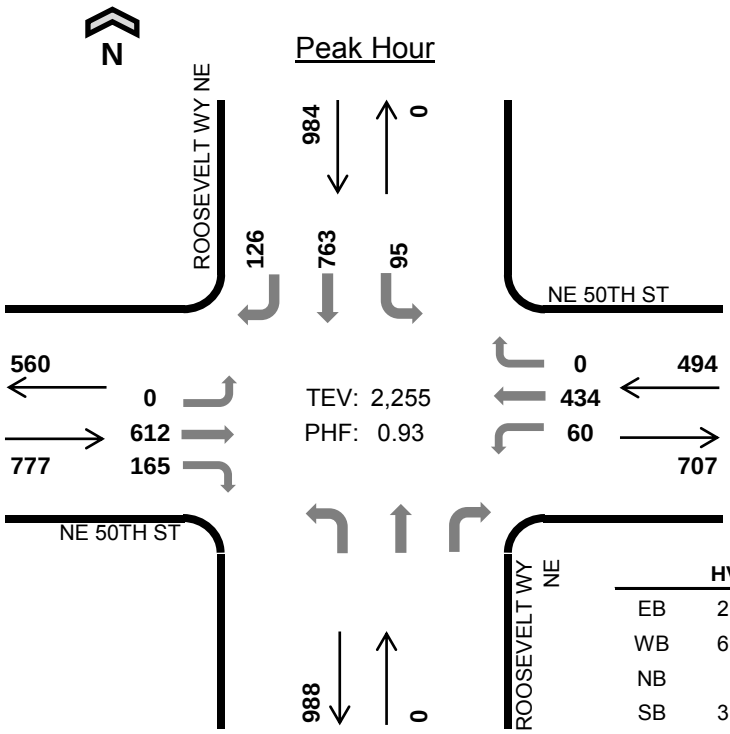
Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
4:00 PM	4	2	0	0	*6*	0	2	1	0	*3*	7	5	6	5	*23*
4:15 PM	3	2	0	0	*5*	0	3	0	0	*3*	1	3	5	7	*16*
4:30 PM	1	3	1	0	*5*	0	1	1	0	*2*	3	6	15	4	*28*
4:45 PM	**2**	**4**	**1**	**0**	***7***	**1**	**1**	**1**	**1**	***4***	**6**	**4**	**15**	**8**	***33***
5:00 PM	**1**	**0**	**0**	**0**	***1***	**0**	**1**	**1**	**0**	***2***	**4**	**8**	**11**	**10**	***33***
5:15 PM	**3**	**4**	**0**	**0**	***7***	**2**	**2**	**1**	**0**	***5***	**5**	**6**	**13**	**6**	***30***
5:30 PM	**1**	**1**	**0**	**0**	***2***	**1**	**1**	**2**	**0**	***4***	**1**	**8**	**8**	**10**	***27***
5:45 PM	0	2	0	0	*2*	1	0	1	0	*2*	12	2	2	3	*19*
Count Total	15	18	2	0	*35*	5	11	8	1	*25*	39	42	75	53	*209*
Peak Hr	**7**	**9**	**1**	**0**	***17***	**4**	**5**	**5**	**1**	***15***	**16**	**26**	**47**	**34**	***123***

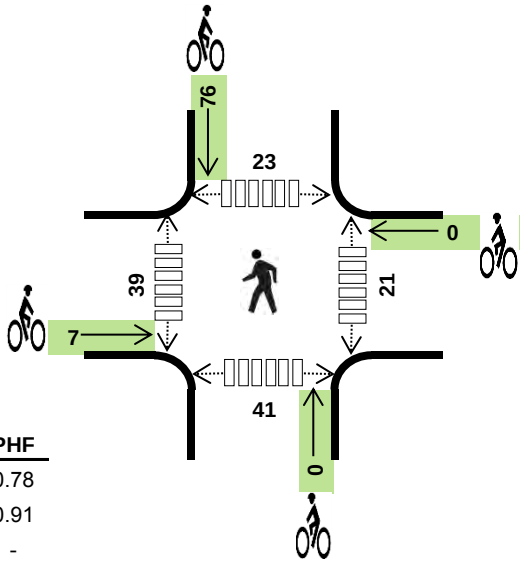
Mark Skaggs: 425 - 250 - 0777 mark.skaggs@idaxdata.com

ROOSEVELT WY NE
NE 50TH ST

Date: Tue, Oct 14, 2014
Count Period: 7:00 AM to 9:00 AM
Peak Hour: 8:00 AM to 9:00 AM



	HV %:	PHF
EB	2.6%	0.78
WB	6.7%	0.91
NB	-	-
SB	3.3%	0.85
TOTAL	3.8%	0.93



Two-Hour Count Summaries

Interval Start	NE 50TH ST Eastbound			NE 50TH ST Westbound			ROOSEVELT WY NE Northbound			ROOSEVELT WY NE Southbound			15-min Total	Rolling One Hour
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
7:00 AM	0	87	20	6	62	0	0	0	0	5	93	17	290	
7:15 AM	0	74	18	8	65	0	0	0	0	6	154	21	346	
7:30 AM	0	101	28	22	89	0	0	0	0	10	187	35	472	
7:45 AM	0	126	40	19	109	0	0	0	0	15	202	31	542	1,650
8:00 AM	**0**	**132**	**37**	**22**	**104**	**0**	**0**	**0**	**0**	**18**	**221**	**22**	**556**	1,916
8:15 AM	**0**	**130**	**38**	**17**	**118**	**0**	**0**	**0**	**0**	**23**	**170**	**29**	**525**	2,095
8:30 AM	**0**	**153**	**39**	**14**	**109**	**0**	**0**	**0**	**0**	**28**	**218**	**44**	**605**	2,228
8:45 AM	**0**	**197**	**51**	**7**	**103**	**0**	**0**	**0**	**0**	**26**	**154**	**31**	**569**	**2,255**
Count Total	0	1,000	271	115	759	0	0	0	0	131	1,399	230	3,905	
Peak Hr	**0**	**612**	**165**	**60**	**434**	**0**	**0**	**0**	**0**	**95**	**763**	**126**	**2,255**	

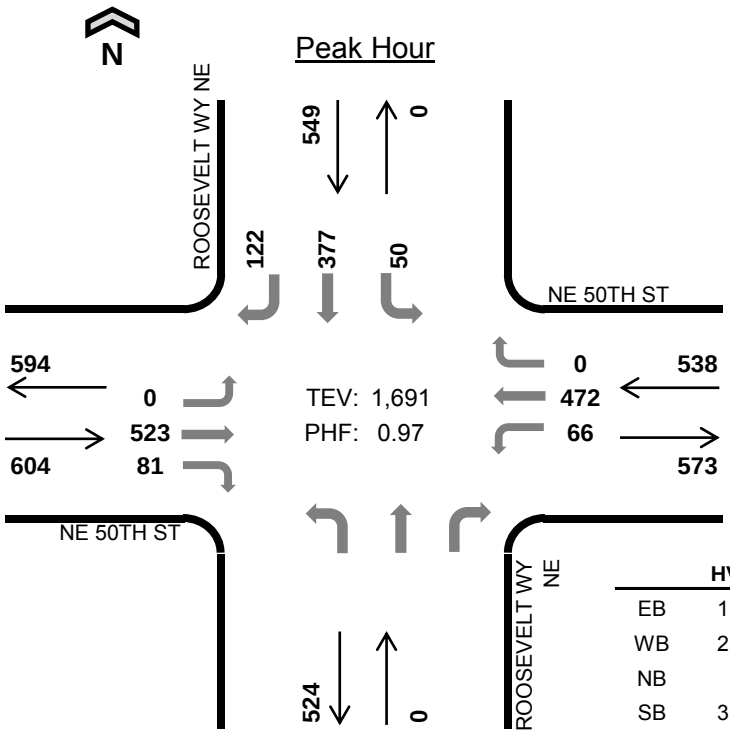
Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
7:00 AM	6	5	0	3	*14*	0	0	0	12	*12*	9	4	9	7	*29*
7:15 AM	1	9	0	6	*16*	2	1	0	20	*23*	13	7	6	5	*31*
7:30 AM	3	4	0	2	*9*	1	0	0	22	*23*	11	7	8	7	*33*
7:45 AM	5	9	0	8	*22*	0	1	0	23	*24*	8	16	11	12	*47*
8:00 AM	**2**	**7**	**0**	**10**	***19***	**0**	**0**	**0**	**14**	***14***	**9**	**15**	**5**	**12**	***41***
8:15 AM	**3**	**10**	**0**	**8**	***21***	**3**	**0**	**0**	**23**	***26***	**1**	**4**	**2**	**7**	***14***
8:30 AM	**5**	**6**	**0**	**9**	***20***	**3**	**0**	**0**	**19**	***22***	**4**	**9**	**8**	**13**	***34***
8:45 AM	**10**	**10**	**0**	**5**	***25***	**1**	**0**	**0**	**20**	***21***	**7**	**11**	**8**	**9**	***35***
Count Total	35	60	0	51	*146*	10	2	0	153	*165*	62	73	57	72	*264*
Peak Hr	**20**	**33**	**0**	**32**	***85***	**7**	**0**	**0**	**76**	***83***	**21**	**39**	**23**	**41**	***124***

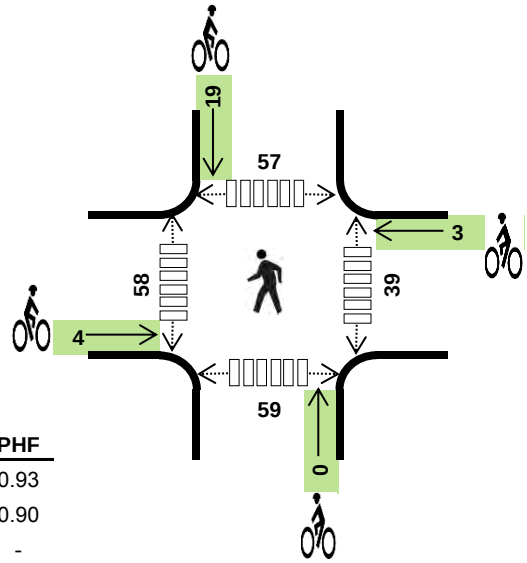
Mark Skaggs: 425 - 250 - 0777 mark.skaggs@idaxdata.com

ROOSEVELT WY NE
NE 50TH ST

Date: Tue, Oct 14, 2014
Count Period: 11:00 AM to 1:00 PM
Peak Hour: 12:00 PM to 1:00 PM



	HV %:	PHF
EB	1.7%	0.93
WB	2.0%	0.90
NB	-	-
SB	3.5%	0.97
TOTAL	2.4%	0.97



Two-Hour Count Summaries

Interval Start	NE 50TH ST Eastbound			NE 50TH ST Westbound			ROOSEVELT WY NE Northbound			ROOSEVELT WY NE Southbound			15-min Total	Rolling One Hour
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
11:00 AM	0	127	22	16	93	0	0	0	0	7	91	22	378	
11:15 AM	0	116	22	8	104	0	0	0	0	23	83	38	394	
11:30 AM	0	108	24	12	103	0	0	0	0	14	83	18	362	
11:45 AM	0	128	26	19	85	0	0	0	0	14	83	27	382	1,516
12:00 PM	**0**	**140**	**22**	**18**	**98**	**0**	**0**	**0**	**0**	**16**	**95**	**30**	**419**	1,557
12:15 PM	**0**	**126**	**14**	**11**	**133**	**0**	**0**	**0**	**0**	**7**	**92**	**34**	**417**	1,580
12:30 PM	**0**	**124**	**22**	**21**	**129**	**0**	**0**	**0**	**0**	**13**	**98**	**27**	**434**	1,652
12:45 PM	**0**	**133**	**23**	**16**	**112**	**0**	**0**	**0**	**0**	**14**	**92**	**31**	**421**	**1,691**
Count Total	0	1,002	175	121	857	0	0	0	0	108	717	227	3,207	
Peak Hr	**0**	**523**	**81**	**66**	**472**	**0**	**0**	**0**	**0**	**50**	**377**	**122**	**1,691**	

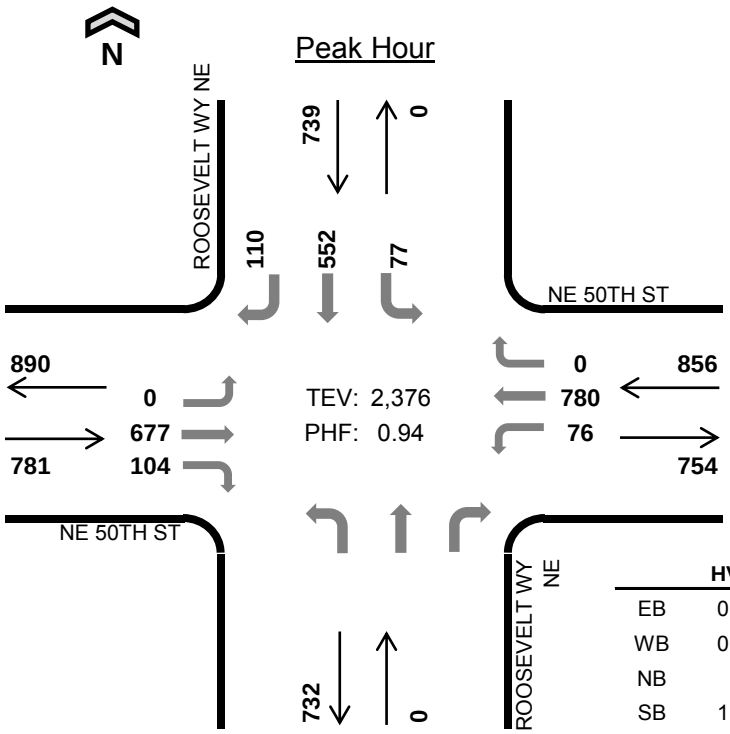
Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
11:00 AM	7	4	0	5	*16*	0	0	0	3	*3*	4	8	10	10	*32*
11:15 AM	4	6	0	3	*13*	3	0	0	4	*7*	11	6	9	6	*32*
11:30 AM	5	6	0	6	*17*	1	2	0	2	*5*	6	4	12	12	*34*
11:45 AM	6	8	0	2	*16*	0	0	0	4	*4*	3	10	6	11	*30*
12:00 PM	**4**	**2**	**0**	**3**	***9***	**1**	**0**	**0**	**10**	***11***	**10**	**7**	**8**	**14**	***39***
12:15 PM	**1**	**1**	**0**	**8**	***10***	**2**	**0**	**0**	**3**	***5***	**12**	**20**	**17**	**22**	***71***
12:30 PM	**1**	**5**	**0**	**4**	***10***	**1**	**2**	**0**	**2**	***5***	**12**	**15**	**15**	**15**	***57***
12:45 PM	**4**	**3**	**0**	**4**	***11***	**0**	**1**	**0**	**4**	***5***	**5**	**16**	**17**	**8**	***46***
Count Total	32	35	0	35	*102*	8	5	0	32	*45*	63	86	94	98	*341*
Peak Hr	**10**	**11**	**0**	**19**	***40***	**4**	**3**	**0**	**19**	***26***	**39**	**58**	**57**	**59**	***213***

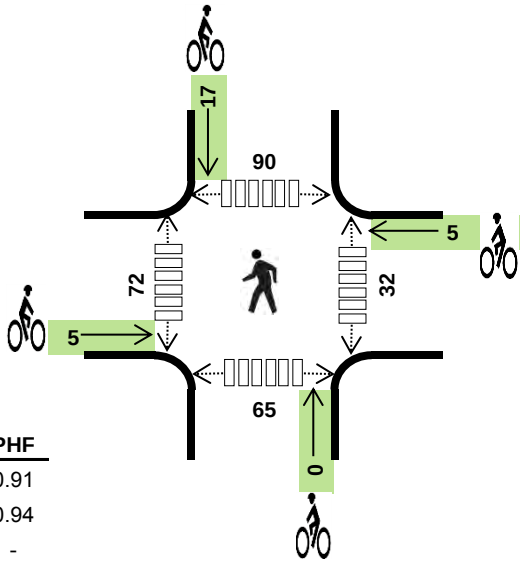
Mark Skaggs: 425 - 250 - 0777 mark.skaggs@idaxdata.com

ROOSEVELT WY NE
NE 50TH ST

Date: Tue, Oct 14, 2014
Count Period: 4:00 PM to 6:00 PM
Peak Hour: 5:00 PM to 6:00 PM



	HV %:	PHF
EB	0.8%	0.91
WB	0.8%	0.94
NB	-	-
SB	1.4%	0.92
TOTAL	1.0%	0.94



Two-Hour Count Summaries

Interval Start	NE 50TH ST Eastbound			NE 50TH ST Westbound			ROOSEVELT WY NE Northbound			ROOSEVELT WY NE Southbound			15-min Total	Rolling One Hour
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
4:00 PM	0	155	36	32	219	0	0	0	0	21	142	43	648	
4:15 PM	0	127	30	36	160	0	0	0	0	28	123	30	534	
4:30 PM	0	118	29	31	193	0	0	0	0	18	125	37	551	
4:45 PM	0	143	20	13	195	0	0	0	0	14	147	31	563	2,296
5:00 PM	**0**	**144**	**24**	**22**	**188**	**0**	**0**	**0**	**0**	**22**	**152**	**26**	**578**	2,226
5:15 PM	**0**	**165**	**25**	**18**	**206**	**0**	**0**	**0**	**0**	**19**	**144**	**23**	**600**	2,292
5:30 PM	**0**	**179**	**30**	**20**	**208**	**0**	**0**	**0**	**0**	**24**	**135**	**37**	**633**	2,374
5:45 PM	**0**	**189**	**25**	**16**	**178**	**0**	**0**	**0**	**0**	**12**	**121**	**24**	**565**	**2,376**
Count Total	0	1,220	219	188	1,547	0	0	0	0	158	1,089	251	4,672	
Peak Hr	**0**	**677**	**104**	**76**	**780**	**0**	**0**	**0**	**0**	**77**	**552**	**110**	**2,376**	

Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
4:00 PM	3	6	0	4	*13*	0	2	0	6	*8*	10	13	18	10	*51*
4:15 PM	3	1	0	8	*12*	1	2	0	3	*6*	19	23	37	20	*99*
4:30 PM	1	3	0	6	*10*	0	1	0	5	*6*	12	21	27	11	*71*
4:45 PM	1	2	0	6	*9*	1	1	0	6	*8*	11	31	20	17	*79*
5:00 PM	**1**	**0**	**0**	**3**	***4***	**0**	**0**	**0**	**4**	***4***	**8**	**23**	**25**	**14**	***70***
5:15 PM	**3**	**3**	**0**	**3**	***9***	**0**	**2**	**0**	**8**	***10***	**7**	**17**	**23**	**17**	***64***
5:30 PM	**2**	**2**	**0**	**2**	***6***	**3**	**1**	**0**	**4**	***8***	**7**	**21**	**30**	**20**	***78***
5:45 PM	**0**	**2**	**0**	**2**	***4***	**2**	**2**	**0**	**1**	***5***	**10**	**11**	**12**	**14**	***47***
Count Total	14	19	0	34	*67*	7	11	0	37	*55*	84	160	192	123	*559*
Peak Hr	**6**	**7**	**0**	**10**	***23***	**5**	**5**	**0**	**17**	***27***	**32**	**72**	**90**	**65**	***259***

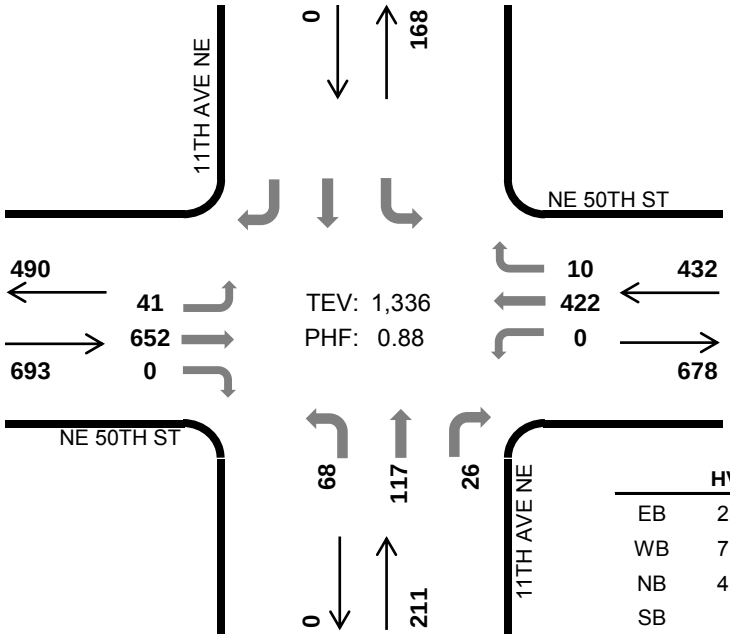
Mark Skaggs: 425 - 250 - 0777 mark.skaggs@idaxdata.com

11TH AVE NE
NE 50TH ST

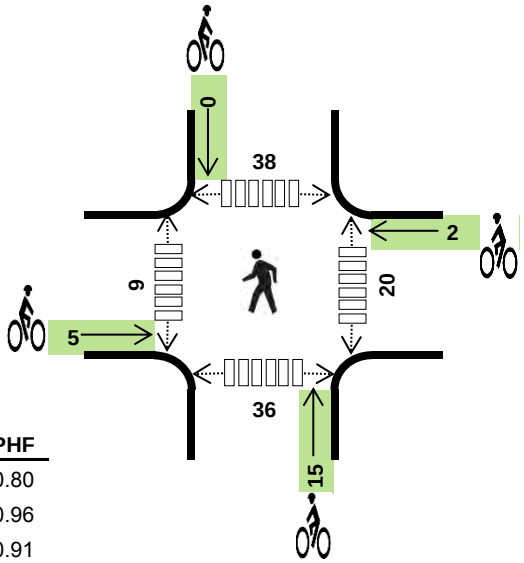
Date: Tue, Oct 14, 2014
Count Period: 7:00 AM to 9:00 AM
Peak Hour: 8:00 AM to 9:00 AM

N

Peak Hour



	HV %:	PHF
EB	2.6%	0.80
WB	7.6%	0.96
NB	4.3%	0.91
SB	-	-
TOTAL	4.5%	0.88



Two-Hour Count Summaries

Interval Start	NE 50TH ST Eastbound			NE 50TH ST Westbound			11TH AVE NE Northbound			11TH AVE NE Southbound			15-min Total	Rolling One Hour
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
7:00 AM	8	85	0	0	61	2	10	13	2	0	0	0	181	
7:15 AM	9	77	0	0	65	1	10	16	0	0	0	0	178	
7:30 AM	15	97	0	0	96	1	12	23	5	0	0	0	249	
7:45 AM	9	122	0	0	118	2	11	19	3	0	0	0	284	892
8:00 AM	**13**	**135**	**0**	**0**	**103**	**3**	**21**	**30**	**7**	**0**	**0**	**0**	**312**	1,023
8:15 AM	**7**	**139**	**0**	**0**	**111**	**1**	**20**	**23**	**8**	**0**	**0**	**0**	**309**	1,154
8:30 AM	**6**	**176**	**0**	**0**	**104**	**2**	**15**	**29**	**3**	**0**	**0**	**0**	**335**	1,240
8:45 AM	**15**	**202**	**0**	**0**	**104**	**4**	**12**	**35**	**8**	**0**	**0**	**0**	**380**	**1,336**
Count Total	82	1,033	0	0	762	16	111	188	36	0	0	0	2,228	
Peak Hr	**41**	**652**	**0**	**0**	**422**	**10**	**68**	**117**	**26**	**0**	**0**	**0**	**1,336**	

Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
7:00 AM	8	5	2	0	*15*	0	0	0	0	*0*	3	6	3	9	*21*
7:15 AM	2	10	2	0	*14*	0	0	1	0	*1*	0	2	5	5	*12*
7:30 AM	4	2	3	0	*9*	1	0	5	0	*6*	3	2	4	5	*14*
7:45 AM	6	8	2	0	*16*	0	1	3	0	*4*	4	3	2	12	*21*
8:00 AM	**4**	**7**	**3**	**0**	***14***	**0**	**0**	**2**	**0**	***2***	**3**	**1**	**16**	**9**	***29***
8:15 AM	**5**	**11**	**2**	**0**	***18***	**1**	**2**	**3**	**0**	***6***	**8**	**1**	**5**	**6**	***20***
8:30 AM	**6**	**6**	**1**	**0**	***13***	**2**	**0**	**6**	**0**	***8***	**6**	**1**	**12**	**12**	***31***
8:45 AM	**3**	**9**	**3**	**0**	***15***	**2**	**0**	**4**	**0**	***6***	**3**	**6**	**5**	**9**	***23***
Count Total	38	58	18	0	*114*	6	3	24	0	*33*	30	22	52	67	*171*
Peak Hr	**18**	**33**	**9**	**0**	***60***	**5**	**2**	**15**	**0**	***22***	**20**	**9**	**38**	**36**	***103***

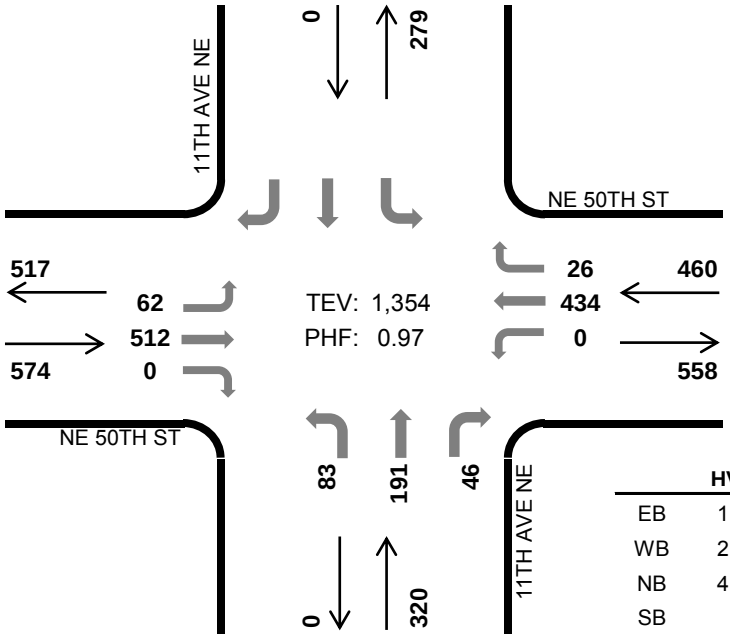
Mark Skaggs: 425 - 250 - 0777 mark.skaggs@idaxdata.com

11TH AVE NE
NE 50TH ST

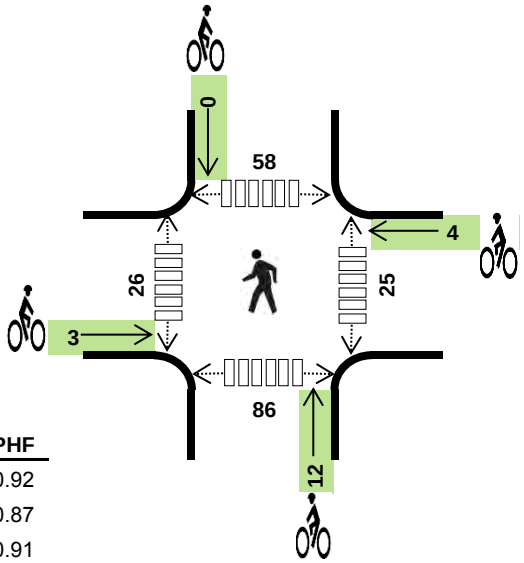
Date: Tue, Oct 14, 2014
Count Period: 11:00 AM to 1:00 PM
Peak Hour: 12:00 PM to 1:00 PM

N

Peak Hour



	HV %:	PHF
EB	1.0%	0.92
WB	2.0%	0.87
NB	4.1%	0.91
SB	-	-
TOTAL	2.1%	0.97



Two-Hour Count Summaries

Interval Start	NE 50TH ST Eastbound			NE 50TH ST Westbound			11TH AVE NE Northbound			11TH AVE NE Southbound			15-min Total	Rolling One Hour
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
11:00 AM	11	111	0	0	92	10	15	42	13	0	0	0	294	
11:15 AM	22	122	0	0	90	7	21	51	13	0	0	0	326	
11:30 AM	12	102	0	0	93	6	17	43	5	0	0	0	278	
11:45 AM	15	132	0	0	90	8	18	48	7	0	0	0	318	1,216
12:00 PM	**18**	**135**	**0**	**0**	**89**	**5**	**23**	**43**	**9**	**0**	**0**	**0**	**322**	1,244
12:15 PM	**11**	**119**	**0**	**0**	**118**	**11**	**23**	**47**	**18**	**0**	**0**	**0**	**347**	1,265
12:30 PM	**15**	**120**	**0**	**0**	**125**	**7**	**21**	**51**	**11**	**0**	**0**	**0**	**350**	1,337
12:45 PM	**18**	**138**	**0**	**0**	**102**	**3**	**16**	**50**	**8**	**0**	**0**	**0**	**335**	**1,354**
Count Total	122	979	0	0	799	57	154	375	84	0	0	0	2,570	
Peak Hr	**62**	**512**	**0**	**0**	**434**	**26**	**83**	**191**	**46**	**0**	**0**	**0**	**1,354**	

Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
11:00 AM	5	5	4	0	*14*	0	0	0	0	*0*	6	6	14	11	*37*
11:15 AM	5	6	1	0	*12*	3	0	0	0	*3*	1	6	8	9	*24*
11:30 AM	5	4	1	0	*10*	1	2	2	0	*5*	2	3	23	7	*35*
11:45 AM	6	8	1	0	*15*	1	1	3	0	*5*	2	4	5	11	*22*
12:00 PM	**2**	**2**	**3**	**0**	***7***	**1**	**0**	**5**	**0**	***6***	**4**	**11**	**14**	**26**	***55***
12:15 PM	**2**	**1**	**4**	**0**	***7***	**1**	**1**	**1**	**0**	***3***	**7**	**5**	**16**	**27**	***55***
12:30 PM	**1**	**4**	**4**	**0**	***9***	**1**	**2**	**3**	**0**	***6***	**5**	**5**	**11**	**16**	***37***
12:45 PM	**1**	**2**	**2**	**0**	***5***	**0**	**1**	**3**	**0**	***4***	**9**	**5**	**17**	**17**	***48***
Count Total	27	32	20	0	*79*	8	7	17	0	*32*	36	45	108	124	*313*
Peak Hr	**6**	**9**	**13**	**0**	***28***	**3**	**4**	**12**	**0**	***19***	**25**	**26**	**58**	**86**	***195***

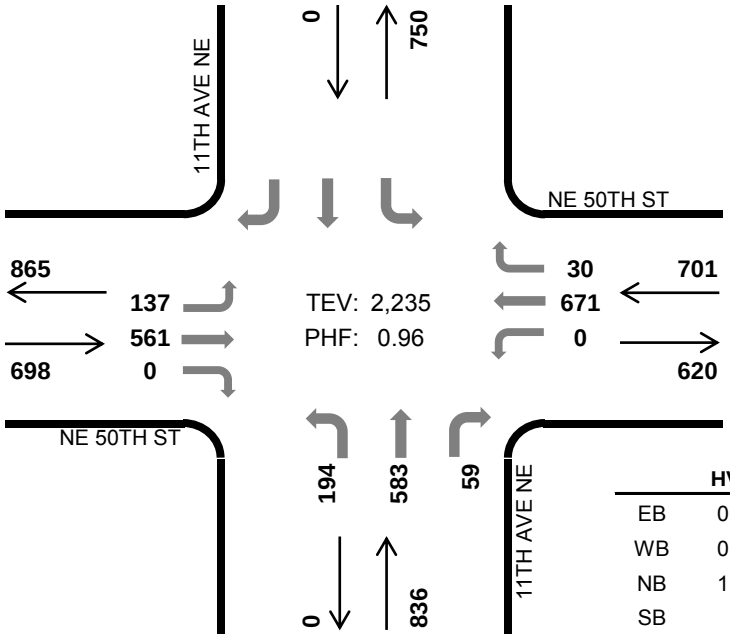
Mark Skaggs: 425 - 250 - 0777 mark.skaggs@idaxdata.com

11TH AVE NE
NE 50TH ST

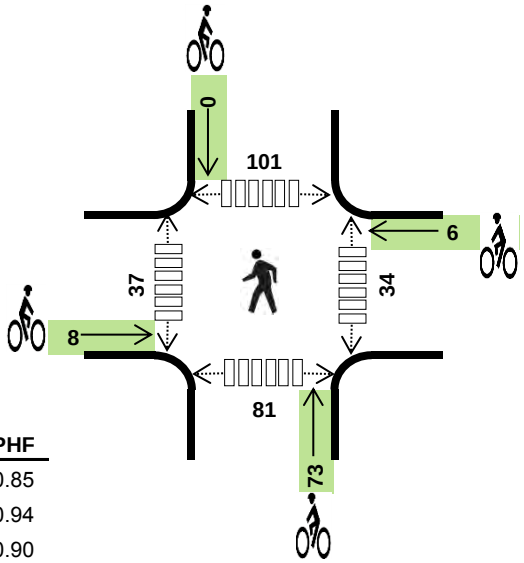
Date: Tue, Oct 14, 2014
Count Period: 4:00 PM to 6:00 PM
Peak Hour: 4:45 PM to 5:45 PM

N

Peak Hour



	HV %:	PHF
EB	0.9%	0.85
WB	0.9%	0.94
NB	1.3%	0.90
SB	-	-
TOTAL	1.0%	0.96



Two-Hour Count Summaries

Interval Start	NE 50TH ST Eastbound			NE 50TH ST Westbound			11TH AVE NE Northbound			11TH AVE NE Southbound			15-min Total	Rolling One Hour
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
4:00 PM	32	144	0	0	204	7	52	103	15	0	0	0	557	
4:15 PM	25	129	0	0	163	5	37	115	17	0	0	0	491	
4:30 PM	19	111	0	0	169	9	49	143	22	0	0	0	522	
4:45 PM	**31**	**122**	**0**	**0**	**155**	**9**	**52**	**160**	**20**	**0**	**0**	**0**	**549**	2,119
5:00 PM	**32**	**126**	**0**	**0**	**160**	**8**	**46**	**137**	**10**	**0**	**0**	**0**	**519**	2,081
5:15 PM	**30**	**151**	**0**	**0**	**175**	**7**	**50**	**154**	**15**	**0**	**0**	**0**	**582**	2,172
5:30 PM	**44**	**162**	**0**	**0**	**181**	**6**	**46**	**132**	**14**	**0**	**0**	**0**	**585**	**2,235**
5:45 PM	28	155	0	0	145	7	31	109	14	0	0	0	489	2,175
Count Total	241	1,100	0	0	1,352	58	363	1,053	127	0	0	0	4,294	
Peak Hr	**137**	**561**	**0**	**0**	**671**	**30**	**194**	**583**	**59**	**0**	**0**	**0**	**2,235**	

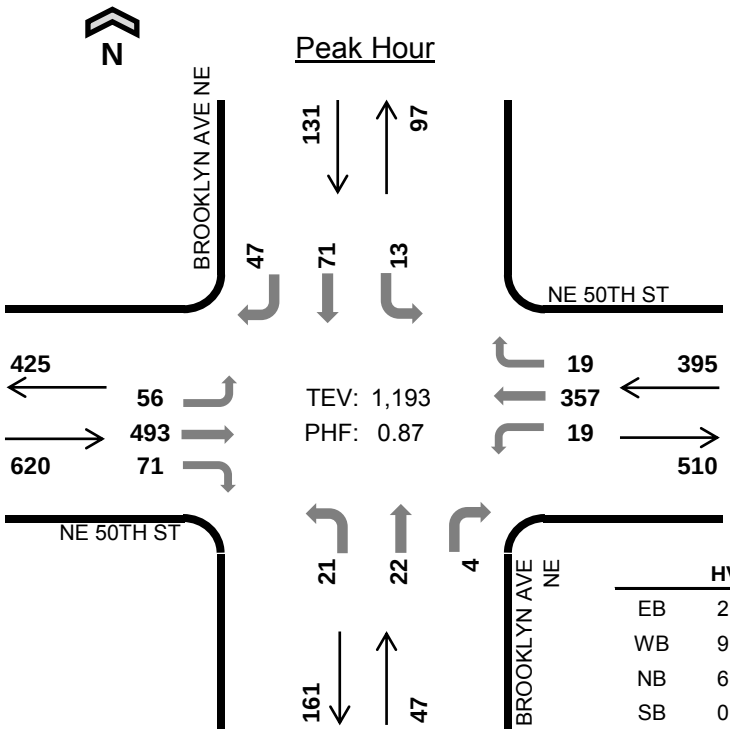
Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
4:00 PM	5	8	1	0	*14*	2	3	8	0	*13*	2	4	13	10	*29*
4:15 PM	4	0	3	0	*7*	0	3	6	0	*9*	7	8	33	24	*72*
4:30 PM	2	3	2	0	*7*	1	0	12	0	*13*	6	6	28	24	*64*
4:45 PM	**2**	**2**	**4**	**0**	***8***	**2**	**1**	**16**	**0**	***19***	**13**	**4**	**24**	**18**	***59***
5:00 PM	**1**	**0**	**2**	**0**	***3***	**2**	**0**	**19**	**0**	***21***	**7**	**13**	**25**	**18**	***63***
5:15 PM	**3**	**2**	**3**	**0**	***8***	**1**	**3**	**20**	**0**	***24***	**8**	**6**	**20**	**20**	***54***
5:30 PM	**0**	**2**	**2**	**0**	***4***	**3**	**2**	**18**	**0**	***23***	**6**	**14**	**32**	**25**	***77***
5:45 PM	1	2	1	0	*4*	3	1	23	0	*27*	7	9	18	14	*48*
Count Total	18	19	18	0	*55*	14	13	122	0	*149*	56	64	193	153	*466*
Peak Hr	**6**	**6**	**11**	**0**	***23***	**8**	**6**	**73**	**0**	***87***	**34**	**37**	**101**	**81**	***253***

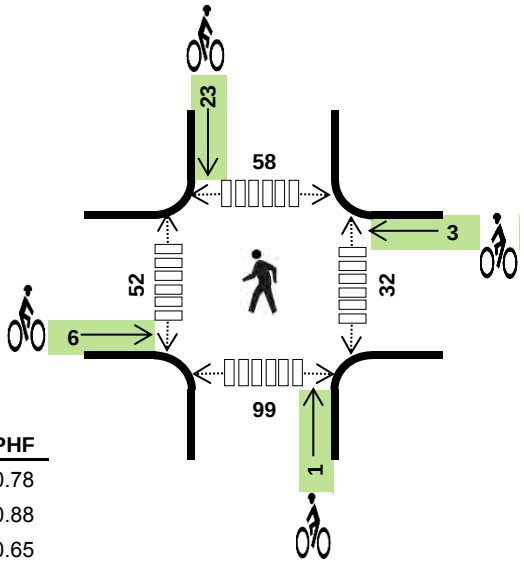
Mark Skaggs: 425 - 250 - 0777 mark.skaggs@idaxdata.com

BROOKLYN AVE NE
NE 50TH ST

Date: Tue, Oct 14, 2014
Count Period: 7:00 AM to 9:00 AM
Peak Hour: 8:00 AM to 9:00 AM



	HV %:	PHF
EB	2.4%	0.78
WB	9.6%	0.88
NB	6.4%	0.65
SB	0.8%	0.94
TOTAL	4.8%	0.87



Two-Hour Count Summaries

Interval Start	NE 50TH ST Eastbound			NE 50TH ST Westbound			BROOKLYN AVE NE Northbound			BROOKLYN AVE NE Southbound			15-min Total	Rolling One Hour
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
7:00 AM	3	58	12	1	45	4	5	1	0	0	2	6	137	
7:15 AM	2	63	7	0	46	2	7	2	2	0	3	6	140	
7:30 AM	3	73	14	1	86	5	7	4	0	1	12	8	214	
7:45 AM	8	93	12	5	96	5	6	3	2	1	10	9	250	741
8:00 AM	**7**	**100**	**18**	**4**	**84**	**3**	**5**	**5**	**1**	**2**	**14**	**16**	**259**	863
8:15 AM	**14**	**102**	**17**	**4**	**102**	**6**	**4**	**2**	**0**	**3**	**18**	**9**	**281**	1,004
8:30 AM	**12**	**137**	**13**	**7**	**89**	**4**	**6**	**4**	**2**	**3**	**27**	**5**	**309**	1,099
8:45 AM	**23**	**154**	**23**	**4**	**82**	**6**	**6**	**11**	**1**	**5**	**12**	**17**	**344**	**1,193**
Count Total	72	780	116	26	630	35	46	32	8	15	98	76	1,934	
Peak Hr	**56**	**493**	**71**	**19**	**357**	**19**	**21**	**22**	**4**	**13**	**71**	**47**	**1,193**	

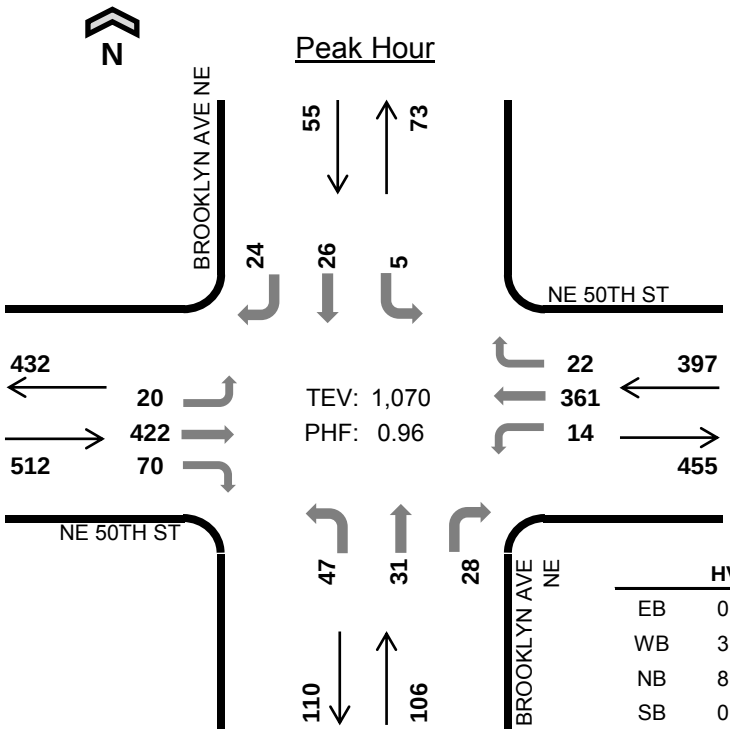
Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
7:00 AM	6	7	1	0	*14*	0	0	0	2	*2*	7	5	8	7	*27*
7:15 AM	2	7	4	0	*13*	3	1	0	2	*6*	6	6	7	8	*27*
7:30 AM	3	4	0	2	*9*	1	0	0	2	*3*	7	7	5	17	*36*
7:45 AM	5	8	2	0	*15*	1	0	0	5	*6*	14	2	8	10	*34*
8:00 AM	**4**	**11**	**0**	**0**	***15***	**0**	**1**	**0**	**9**	***10***	**3**	**18**	**16**	**35**	***72***
8:15 AM	**3**	**9**	**1**	**0**	***13***	**3**	**2**	**0**	**5**	***10***	**7**	**12**	**9**	**21**	***49***
8:30 AM	**6**	**10**	**1**	**1**	***18***	**1**	**0**	**0**	**6**	***7***	**6**	**11**	**14**	**23**	***54***
8:45 AM	**2**	**8**	**1**	**0**	***11***	**2**	**0**	**1**	**3**	***6***	**16**	**11**	**19**	**20**	***66***
Count Total	31	64	10	3	*108*	11	4	1	34	*50*	66	72	86	141	*365*
Peak Hr	**15**	**38**	**3**	**1**	***57***	**6**	**3**	**1**	**23**	***33***	**32**	**52**	**58**	**99**	***241***

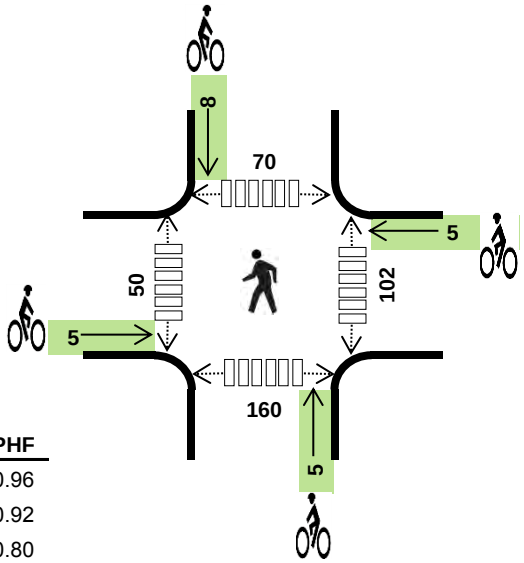
Mark Skaggs: 425 - 250 - 0777 mark.skaggs@idaxdata.com

BROOKLYN AVE NE
NE 50TH ST

Date: Tue, Oct 14, 2014
Count Period: 11:00 AM to 1:00 PM
Peak Hour: 12:00 PM to 1:00 PM



	HV %:	PHF
EB	0.8%	0.96
WB	3.3%	0.92
NB	8.5%	0.80
SB	0.0%	0.69
TOTAL	2.4%	0.96



Two-Hour Count Summaries

Interval Start	NE 50TH ST Eastbound			NE 50TH ST Westbound			BROOKLYN AVE NE Northbound			BROOKLYN AVE NE Southbound			15-min Total	Rolling One Hour
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
11:00 AM	4	90	12	2	63	3	9	5	3	2	6	10	209	
11:15 AM	5	97	10	4	73	2	11	8	10	3	7	8	238	
11:30 AM	9	77	11	8	78	4	11	6	7	2	5	12	230	
11:45 AM	5	111	15	5	80	5	6	9	6	5	6	9	262	939
12:00 PM	**4**	**117**	**13**	**3**	**80**	**6**	**12**	**12**	**9**	**1**	**4**	**4**	**265**	995
12:15 PM	**7**	**106**	**19**	**6**	**95**	**3**	**7**	**8**	**7**	**1**	**11**	**8**	**278**	1,035
12:30 PM	**5**	**87**	**22**	**1**	**103**	**4**	**16**	**7**	**8**	**0**	**3**	**7**	**263**	1,068
12:45 PM	**4**	**112**	**16**	**4**	**83**	**9**	**12**	**4**	**4**	**3**	**8**	**5**	**264**	**1,070**
Count Total	43	797	118	33	655	36	84	59	54	17	50	63	2,009	
Peak Hr	**20**	**422**	**70**	**14**	**361**	**22**	**47**	**31**	**28**	**5**	**26**	**24**	**1,070**	

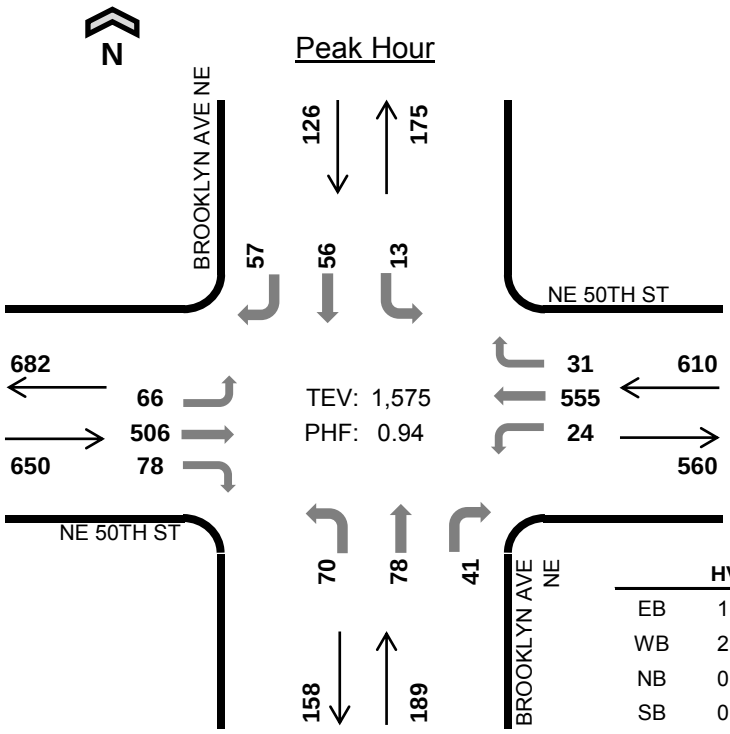
Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
11:00 AM	3	4	2	0	*9*	2	0	0	0	*2*	16	7	22	23	*68*
11:15 AM	6	5	3	3	*17*	2	0	0	1	*3*	14	9	11	16	*50*
11:30 AM	5	8	0	1	*14*	1	1	0	2	*4*	20	7	14	35	*76*
11:45 AM	5	5	1	2	*13*	0	0	1	1	*2*	13	13	9	31	*66*
12:00 PM	**2**	**6**	**2**	**0**	***10***	**1**	**1**	**1**	**1**	***4***	**20**	**14**	**19**	**41**	***94***
12:15 PM	**0**	**1**	**3**	**0**	***4***	**2**	**1**	**2**	**5**	***10***	**26**	**7**	**14**	**32**	***79***
12:30 PM	**1**	**2**	**3**	**0**	***6***	**2**	**1**	**2**	**2**	***7***	**36**	**7**	**16**	**40**	***99***
12:45 PM	**1**	**4**	**1**	**0**	***6***	**0**	**2**	**0**	**0**	***2***	**20**	**22**	**21**	**47**	***110***
Count Total	23	35	15	6	*79*	10	6	6	12	*34*	165	86	126	265	*642*
Peak Hr	**4**	**13**	**9**	**0**	***26***	**5**	**5**	**5**	**8**	***23***	**102**	**50**	**70**	**160**	***382***

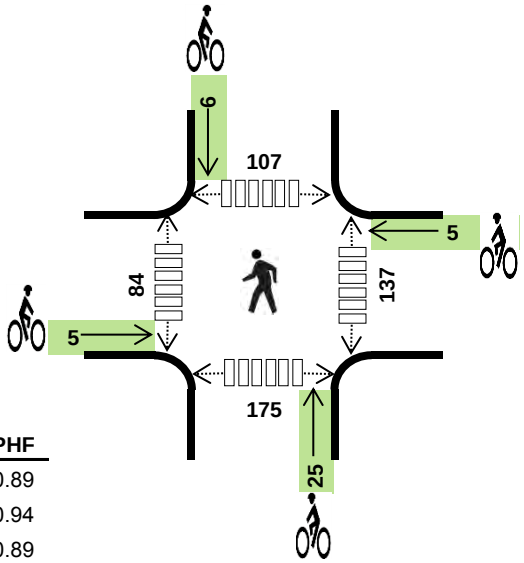
Mark Skaggs: 425 - 250 - 0777 mark.skaggs@idaxdata.com

BROOKLYN AVE NE
NE 50TH ST

Date: Tue, Oct 14, 2014
Count Period: 4:00 PM to 6:00 PM
Peak Hour: 5:00 PM to 6:00 PM



	HV %:	PHF
EB	1.1%	0.89
WB	2.5%	0.94
NB	0.5%	0.89
SB	0.0%	0.83
TOTAL	1.5%	0.94



Two-Hour Count Summaries

Interval Start	NE 50TH ST Eastbound			NE 50TH ST Westbound			BROOKLYN AVE NE Northbound			BROOKLYN AVE NE Southbound			15-min Total	Rolling One Hour
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
4:00 PM	13	111	22	8	166	8	19	18	13	4	11	26	419	
4:15 PM	10	125	12	10	137	5	14	25	9	2	15	17	381	
4:30 PM	5	102	20	7	129	6	14	18	14	4	17	11	347	
4:45 PM	5	114	10	3	147	5	22	26	8	6	18	6	370	1,517
5:00 PM	**6**	**115**	**17**	**5**	**131**	**6**	**18**	**17**	**6**	**4**	**14**	**11**	**350**	1,448
5:15 PM	**13**	**126**	**20**	**3**	**145**	**6**	**17**	**22**	**10**	**2**	**16**	**14**	**394**	1,461
5:30 PM	**17**	**135**	**18**	**5**	**148**	**10**	**15**	**17**	**14**	**2**	**17**	**19**	**417**	1,531
5:45 PM	**30**	**130**	**23**	**11**	**131**	**9**	**20**	**22**	**11**	**5**	**9**	**13**	**414**	**1,575**
Count Total	99	958	142	52	1,134	55	139	165	85	29	117	117	3,092	
Peak Hr	**66**	**506**	**78**	**24**	**555**	**31**	**70**	**78**	**41**	**13**	**56**	**57**	**1,575**	

Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
4:00 PM	2	10	1	2	*15*	2	3	1	2	*8*	42	14	23	48	*127*
4:15 PM	4	3	0	0	*7*	0	2	1	0	*3*	29	17	22	48	*116*
4:30 PM	2	5	0	0	*7*	0	0	3	1	*4*	34	36	46	48	*164*
4:45 PM	3	4	1	1	*9*	2	3	2	2	*9*	26	18	20	34	*98*
5:00 PM	**1**	**3**	**0**	**0**	***4***	**3**	**0**	**10**	**1**	***14***	**28**	**20**	**36**	**48**	***132***
5:15 PM	**4**	**3**	**1**	**0**	***8***	**0**	**3**	**7**	**1**	***11***	**29**	**27**	**17**	**41**	***114***
5:30 PM	**1**	**4**	**0**	**0**	***5***	**0**	**1**	**3**	**2**	***6***	**45**	**22**	**27**	**36**	***130***
5:45 PM	**1**	**5**	**0**	**0**	***6***	**2**	**1**	**5**	**2**	***10***	**35**	**15**	**27**	**50**	***127***
Count Total	18	37	3	3	*61*	9	13	32	11	*65*	268	169	218	353	*1,008*
Peak Hr	**7**	**15**	**1**	**0**	***23***	**5**	**5**	**25**	**6**	***41***	**137**	**84**	**107**	**175**	***503***

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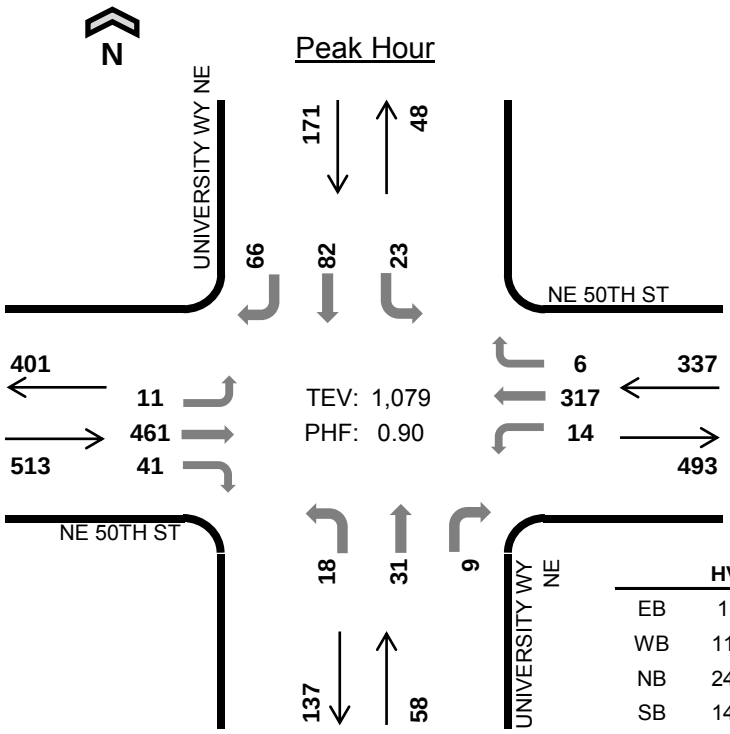
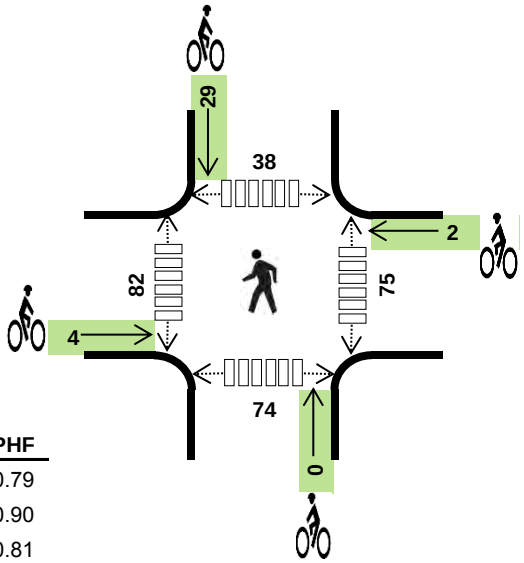
UNIVERSITY WY NE
NE 50TH ST

Date: Tue, Oct 14, 2014
Count Period: 7:00 AM to 9:00 AM
Peak Hour: 8:00 AM to 9:00 AM



	HV %:	PHF
EB	1.9%	0.79
WB	11.0%	0.90
NB	24.1%	0.81
SB	14.0%	0.89
TOTAL	7.9%	0.90



Two-Hour Count Summaries

Interval Start	NE 50TH ST Eastbound			NE 50TH ST Westbound			UNIVERSITY WY NE Northbound			UNIVERSITY WY NE Southbound			15-min Total	Rolling One Hour
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
7:00 AM	4	48	1	2	37	0	3	7	0	2	11	11	126	
7:15 AM	0	51	6	2	37	1	2	1	1	2	9	11	123	
7:30 AM	2	65	2	2	81	0	2	3	0	2	11	9	179	
7:45 AM	5	79	7	2	90	0	4	3	1	3	18	16	228	656
8:00 AM	**2**	**91**	**8**	**4**	**73**	**1**	**5**	**5**	**3**	**7**	**23**	**16**	**238**	768
8:15 AM	**0**	**96**	**9**	**2**	**92**	**0**	**9**	**3**	**1**	**3**	**23**	**11**	**249**	894
8:30 AM	**3**	**128**	**13**	**5**	**84**	**2**	**1**	**13**	**4**	**5**	**16**	**19**	**293**	1,008
8:45 AM	**6**	**146**	**11**	**3**	**68**	**3**	**3**	**10**	**1**	**8**	**20**	**20**	**299**	**1,079**
Count Total	22	704	57	22	562	7	29	45	11	32	131	113	1,735	
Peak Hr	**11**	**461**	**41**	**14**	**317**	**6**	**18**	**31**	**9**	**23**	**82**	**66**	**1,079**	

Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
7:00 AM	5	8	2	3	*18*	0	0	0	6	*6*	6	16	4	7	*33*
7:15 AM	1	7	2	4	*14*	2	1	0	0	*3*	9	11	9	12	*41*
7:30 AM	3	5	2	5	*15*	2	0	0	8	*10*	6	7	10	14	*37*
7:45 AM	3	8	2	6	*19*	0	0	0	5	*5*	13	20	13	12	*58*
8:00 AM	**2**	**10**	**3**	**7**	***22***	**0**	**0**	**0**	**8**	***8***	**24**	**23**	**14**	**18**	***79***
8:15 AM	**2**	**8**	**4**	**6**	***20***	**1**	**2**	**0**	**8**	***11***	**17**	**21**	**6**	**18**	***62***
8:30 AM	**5**	**12**	**4**	**6**	***27***	**1**	**0**	**0**	**7**	***8***	**19**	**22**	**12**	**17**	***70***
8:45 AM	**1**	**7**	**3**	**5**	***16***	**2**	**0**	**0**	**6**	***8***	**15**	**16**	**6**	**21**	***58***
Count Total	22	65	22	42	*151*	8	3	0	48	*59*	109	136	74	119	*438*
Peak Hr	**10**	**37**	**14**	**24**	***85***	**4**	**2**	**0**	**29**	***35***	**75**	**82**	**38**	**74**	***269***

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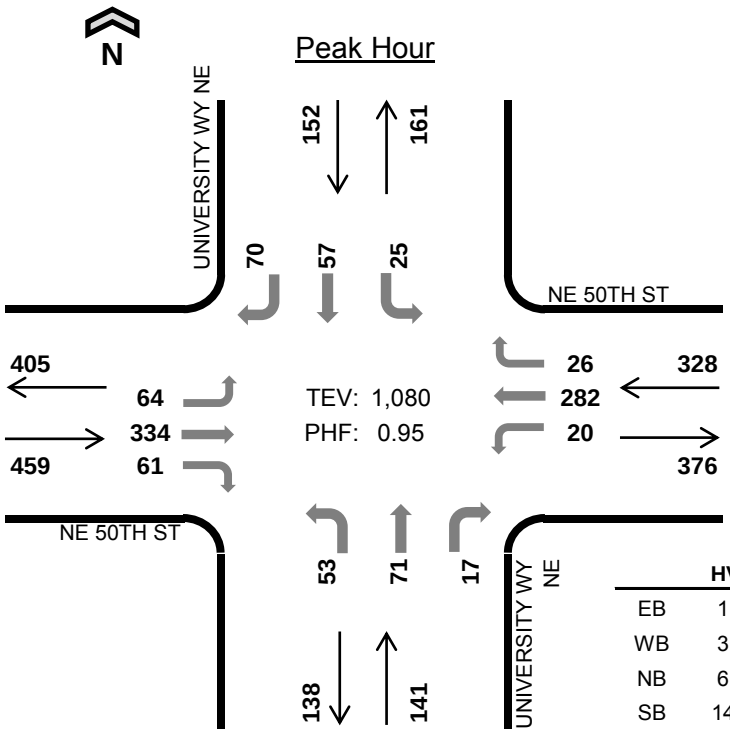
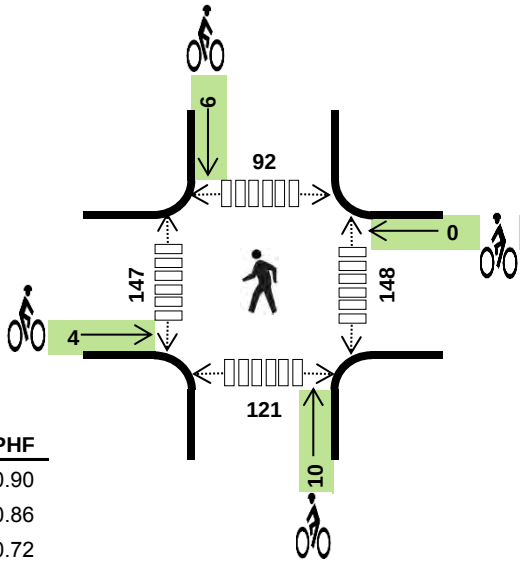
UNIVERSITY WY NE
NE 50TH ST

Date: Tue, Oct 14, 2014
Count Period: 11:00 AM to 1:00 PM
Peak Hour: 12:00 PM to 1:00 PM



	HV %:	PHF
EB	1.1%	0.90
WB	3.7%	0.86
NB	6.4%	0.72
SB	14.5%	0.84
TOTAL	4.4%	0.95



Two-Hour Count Summaries

Interval Start	NE 50TH ST Eastbound			NE 50TH ST Westbound			UNIVERSITY WY NE Northbound			UNIVERSITY WY NE Southbound			15-min Total	Rolling One Hour
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
11:00 AM	11	76	9	4	52	2	9	13	5	6	8	12	207	
11:15 AM	14	81	13	2	63	2	5	13	5	3	7	15	223	
11:30 AM	9	65	11	1	62	5	14	18	4	4	11	15	219	
11:45 AM	13	94	10	4	66	4	16	12	7	2	19	12	259	908
12:00 PM	**21**	**88**	**18**	**6**	**53**	**6**	**11**	**15**	**2**	**6**	**19**	**20**	**265**	966
12:15 PM	**15**	**85**	**12**	**9**	**81**	**5**	**13**	**19**	**2**	**8**	**15**	**20**	**284**	1,027
12:30 PM	**14**	**70**	**18**	**2**	**72**	**9**	**19**	**24**	**6**	**5**	**13**	**15**	**267**	1,075
12:45 PM	**14**	**91**	**13**	**3**	**76**	**6**	**10**	**13**	**7**	**6**	**10**	**15**	**264**	**1,080**
Count Total	111	650	104	31	525	39	97	127	38	40	102	124	1,988	
Peak Hr	**64**	**334**	**61**	**20**	**282**	**26**	**53**	**71**	**17**	**25**	**57**	**70**	**1,080**	

Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
11:00 AM	4	3	2	3	*12*	2	1	1	6	*10*	25	34	18	23	*100*
11:15 AM	4	1	2	7	*14*	2	3	1	4	*10*	20	27	15	23	*85*
11:30 AM	4	9	2	4	*19*	2	1	2	5	*10*	23	29	18	19	*89*
11:45 AM	4	1	5	6	*16*	0	2	1	3	*6*	25	23	15	28	*91*
12:00 PM	**2**	**5**	**1**	**5**	***13***	**1**	**0**	**0**	**2**	***3***	**51**	**39**	**22**	**32**	***144***
12:15 PM	**1**	**1**	**3**	**7**	***12***	**3**	**0**	**3**	**0**	***6***	**24**	**37**	**19**	**24**	***104***
12:30 PM	**1**	**3**	**4**	**3**	***11***	**0**	**0**	**4**	**1**	***5***	**38**	**27**	**24**	**35**	***124***
12:45 PM	**1**	**3**	**1**	**7**	***12***	**0**	**0**	**3**	**3**	***6***	**35**	**44**	**27**	**30**	***136***
Count Total	21	26	20	42	*109*	10	7	15	24	*56*	241	260	158	214	*873*
Peak Hr	**5**	**12**	**9**	**22**	***48***	**4**	**0**	**10**	**6**	***20***	**148**	**147**	**92**	**121**	***508***

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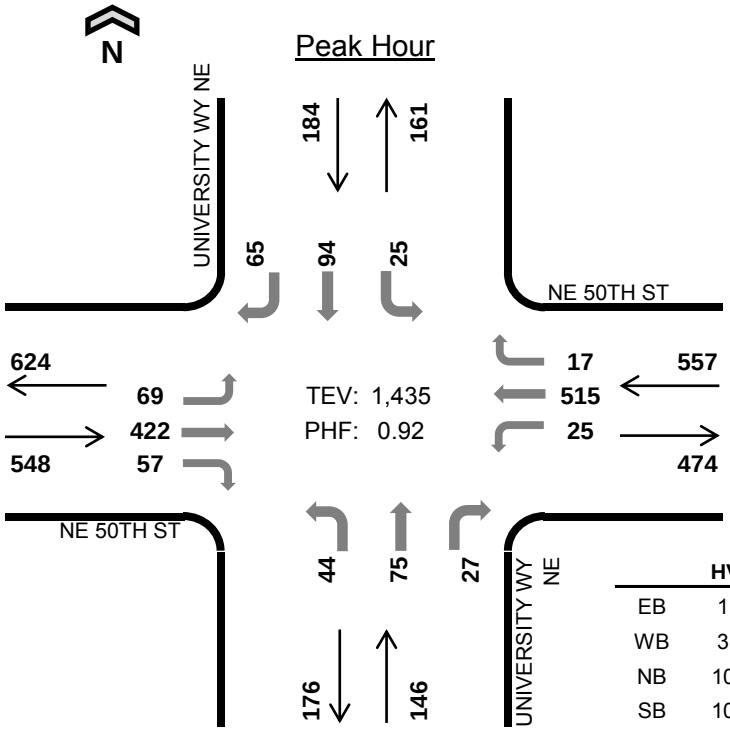
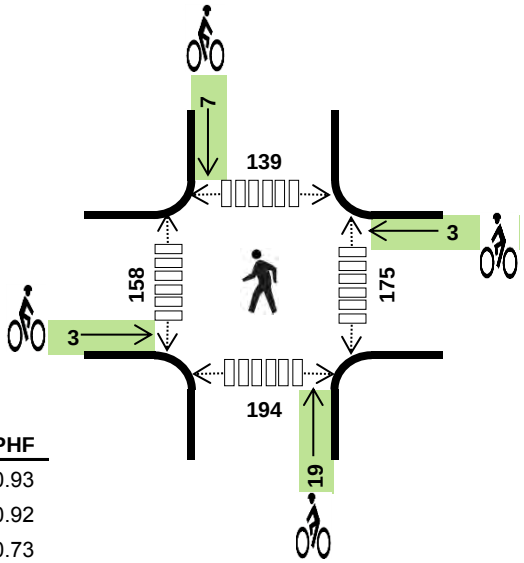
UNIVERSITY WY NE
NE 50TH ST

Date: Tue, Oct 14, 2014
Count Period: 4:00 PM to 6:00 PM
Peak Hour: 4:45 PM to 5:45 PM



	HV %:	PHF
EB	1.5%	0.93
WB	3.1%	0.92
NB	10.3%	0.73
SB	10.3%	0.90
TOTAL	4.1%	0.92



Two-Hour Count Summaries

Interval Start	NE 50TH ST Eastbound			NE 50TH ST Westbound			UNIVERSITY WY NE Northbound			UNIVERSITY WY NE Southbound			15-min Total	Rolling One Hour
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
4:00 PM	17	102	13	6	149	2	16	20	9	5	24	13	376	
4:15 PM	14	104	19	5	131	2	10	19	2	4	18	11	339	
4:30 PM	18	74	15	4	109	2	11	14	5	6	18	21	297	
4:45 PM	**20**	**98**	**11**	**5**	**123**	**6**	**11**	**13**	**2**	**7**	**23**	**17**	**336**	1,348
5:00 PM	**20**	**94**	**18**	**11**	**122**	**3**	**10**	**17**	**3**	**6**	**18**	**12**	**334**	1,306
5:15 PM	**15**	**108**	**17**	**5**	**127**	**4**	**11**	**27**	**12**	**8**	**24**	**18**	**376**	1,343
5:30 PM	**14**	**122**	**11**	**4**	**143**	**4**	**12**	**18**	**10**	**4**	**29**	**18**	**389**	**1,435**
5:45 PM	13	110	8	3	95	3	19	16	4	4	15	16	306	1,405
Count Total	131	812	112	43	999	26	100	144	47	44	169	126	2,753	
Peak Hr	**69**	**422**	**57**	**25**	**515**	**17**	**44**	**75**	**27**	**25**	**94**	**65**	**1,435**	

Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
4:00 PM	2	10	4	5	*21*	1	2	2	4	*9*	37	49	35	40	*161*
4:15 PM	4	2	6	5	*17*	0	4	1	3	*8*	39	38	32	37	*146*
4:30 PM	1	5	4	5	*15*	0	0	3	2	*5*	50	42	35	54	*181*
4:45 PM	**3**	**4**	**2**	**6**	***15***	**0**	**0**	**4**	**3**	***7***	**40**	**32**	**29**	**44**	***145***
5:00 PM	**1**	**3**	**3**	**4**	***11***	**3**	**1**	**2**	**2**	***8***	**57**	**47**	**32**	**58**	***194***
5:15 PM	**4**	**3**	**6**	**5**	***18***	**0**	**2**	**5**	**1**	***8***	**39**	**38**	**42**	**49**	***168***
5:30 PM	**0**	**7**	**4**	**4**	***15***	**0**	**0**	**8**	**1**	***9***	**39**	**41**	**36**	**43**	***159***
5:45 PM	1	3	3	5	*12*	3	3	8	4	*18*	36	44	32	61	*173*
Count Total	16	37	32	39	*124*	7	12	33	20	*72*	337	331	273	386	*1,327*
Peak Hr	**8**	**17**	**15**	**19**	***59***	**3**	**3**	**19**	**7**	***32***	**175**	**158**	**139**	**194**	***666***

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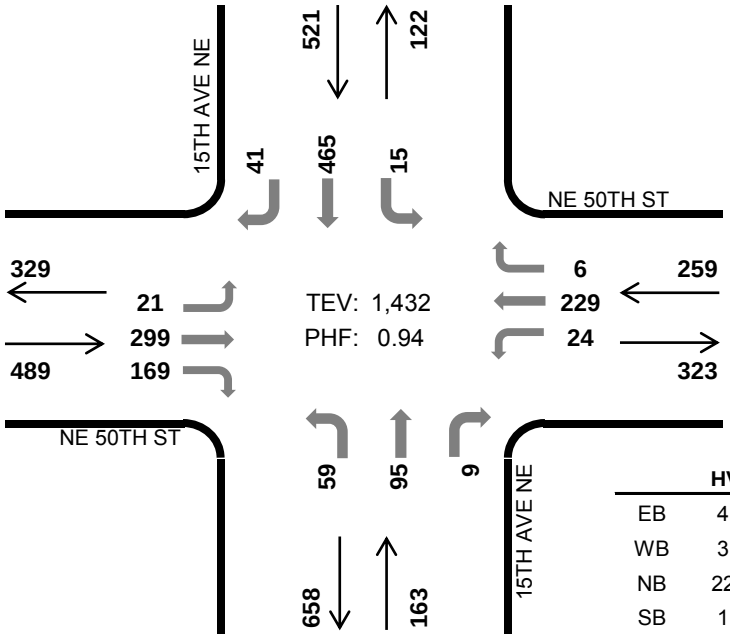
15TH AVE NE
NE 50TH ST

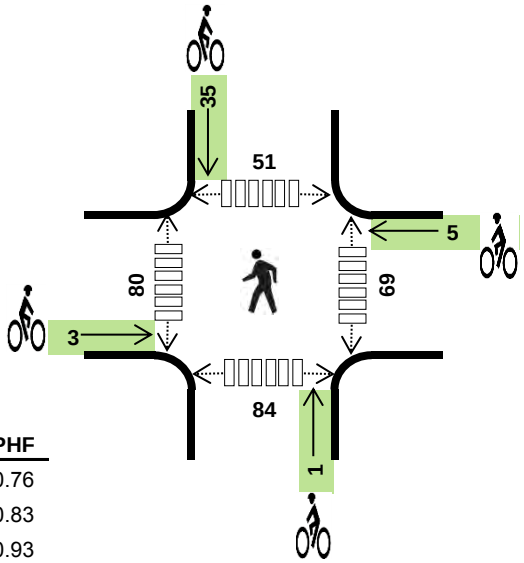
Date: Tue, Oct 14, 2014
Count Period: 7:00 AM to 9:00 AM
Peak Hour: 8:00 AM to 9:00 AM

N

Peak Hour



	HV %:	PHF
EB	4.7%	0.76
WB	3.5%	0.83
NB	22.7%	0.93
SB	1.9%	0.95
TOTAL	5.5%	0.94



Two-Hour Count Summaries

Interval Start	NE 50TH ST Eastbound			NE 50TH ST Westbound			15TH AVE NE Northbound			15TH AVE NE Southbound			15-min Total	Rolling One Hour
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
7:00 AM	5	25	22	2	28	4	9	9	1	0	45	2	152	
7:15 AM	4	27	21	2	26	2	9	13	1	2	68	5	180	
7:30 AM	5	32	32	7	67	1	8	28	0	2	116	8	306	
7:45 AM	4	43	37	8	65	2	14	24	0	2	121	13	333	971
8:00 AM	**3**	**62**	**25**	**6**	**51**	**1**	**16**	**26**	**2**	**6**	**120**	**11**	**329**	1,148
8:15 AM	**1**	**65**	**41**	**9**	**62**	**0**	**13**	**23**	**3**	**5**	**118**	**12**	**352**	1,320
8:30 AM	**6**	**82**	**44**	**5**	**70**	**3**	**15**	**26**	**3**	**2**	**117**	**8**	**381**	1,395
8:45 AM	**11**	**90**	**59**	**4**	**46**	**2**	**15**	**20**	**1**	**2**	**110**	**10**	**370**	**1,432**
Count Total	39	426	281	43	415	15	99	169	11	21	815	69	2,403	
Peak Hr	**21**	**299**	**169**	**24**	**229**	**6**	**59**	**95**	**9**	**15**	**465**	**41**	**1,432**	

Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
7:00 AM	7	3	7	2	*19*	0	1	1	2	*4*	3	5	2	11	*21*
7:15 AM	4	1	7	1	*13*	0	1	0	1	*2*	7	11	17	6	*41*
7:30 AM	5	1	7	3	*16*	3	0	0	3	*6*	7	14	2	25	*48*
7:45 AM	7	1	8	3	*19*	0	0	0	6	*6*	14	13	8	13	*48*
8:00 AM	**6**	**2**	**10**	**3**	***21***	**0**	**0**	**1**	**4**	***5***	**23**	**17**	**15**	**19**	***74***
8:15 AM	**6**	**3**	**8**	**2**	***19***	**0**	**2**	**0**	**10**	***12***	**20**	**20**	**16**	**15**	***71***
8:30 AM	**8**	**2**	**12**	**2**	***24***	**3**	**2**	**0**	**7**	***12***	**17**	**18**	**11**	**25**	***71***
8:45 AM	**3**	**2**	**7**	**3**	***15***	**0**	**1**	**0**	**14**	***15***	**9**	**25**	**9**	**25**	***68***
Count Total	46	15	66	19	*146*	6	7	2	47	*62*	100	123	80	139	*442*
Peak Hr	**23**	**9**	**37**	**10**	***79***	**3**	**5**	**1**	**35**	***44***	**69**	**80**	**51**	**84**	***284***

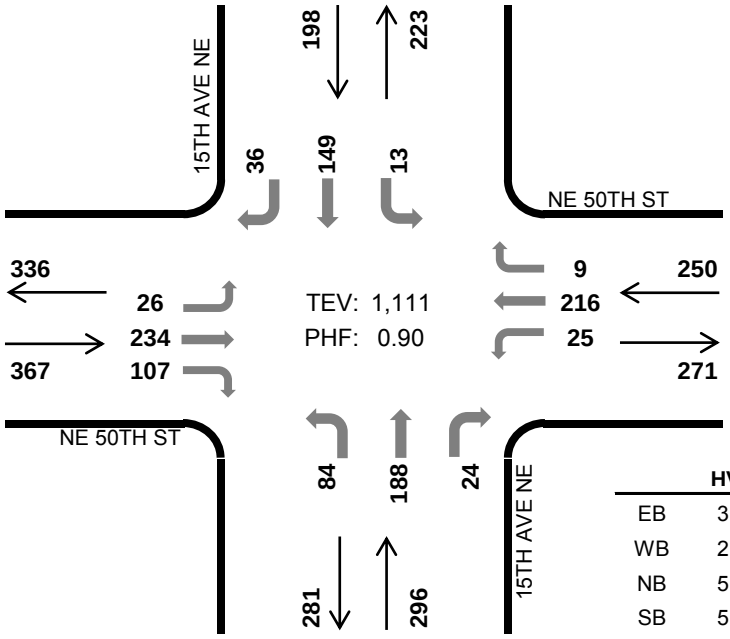
Mark Skaggs: 425 - 250 - 0777 mark.skaggs@idaxdata.com

15TH AVE NE
NE 50TH ST

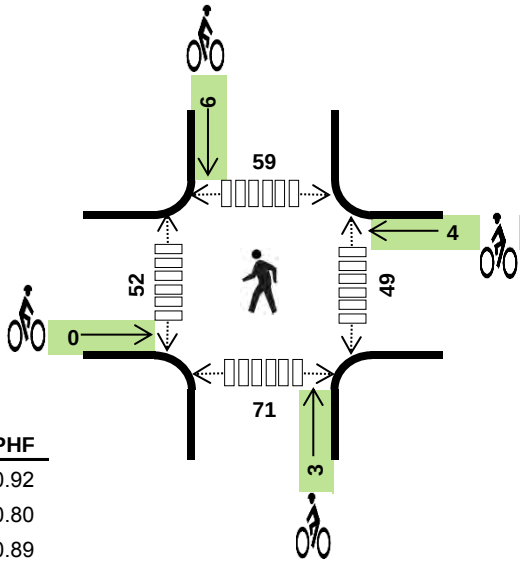
Date: Tue, Oct 14, 2014
Count Period: 11:00 AM to 1:00 PM
Peak Hour: 12:00 PM to 1:00 PM

N

Peak Hour



	HV %:	PHF
EB	3.3%	0.92
WB	2.0%	0.80
NB	5.7%	0.89
SB	5.6%	0.83
TOTAL	4.1%	0.90



Two-Hour Count Summaries

Interval Start	NE 50TH ST Eastbound			NE 50TH ST Westbound			15TH AVE NE Northbound			15TH AVE NE Southbound			15-min Total	Rolling One Hour
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
11:00 AM	9	56	26	5	36	3	16	29	3	2	36	6	227	
11:15 AM	10	55	22	4	47	3	15	34	4	1	31	4	230	
11:30 AM	5	57	12	7	37	3	22	48	5	6	37	7	246	
11:45 AM	6	69	26	5	48	4	15	40	4	6	24	11	258	961
12:00 PM	**4**	**65**	**25**	**10**	**39**	**1**	**26**	**46**	**11**	**3**	**35**	**6**	**271**	1,005
12:15 PM	**9**	**55**	**30**	**6**	**67**	**5**	**22**	**52**	**4**	**4**	**45**	**11**	**310**	1,085
12:30 PM	**6**	**54**	**19**	**5**	**47**	**1**	**25**	**47**	**5**	**1**	**38**	**8**	**256**	1,095
12:45 PM	**7**	**60**	**33**	**4**	**63**	**2**	**11**	**43**	**4**	**5**	**31**	**11**	**274**	**1,111**
Count Total	56	471	193	46	384	22	152	339	40	28	277	64	2,072	
Peak Hr	**26**	**234**	**107**	**25**	**216**	**9**	**84**	**188**	**24**	**13**	**149**	**36**	**1,111**	

Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
11:00 AM	6	0	5	3	*14*	2	0	2	1	*5*	19	13	12	28	*72*
11:15 AM	4	1	2	2	*9*	2	2	2	4	*10*	10	13	10	17	*50*
11:30 AM	5	3	12	1	*21*	0	1	2	1	*4*	6	12	17	11	*46*
11:45 AM	6	1	3	1	*11*	0	2	1	0	*3*	17	11	13	22	*63*
12:00 PM	**1**	**2**	**6**	**4**	***13***	**0**	**0**	**1**	**1**	***2***	**15**	**20**	**20**	**25**	***80***
12:15 PM	**5**	**1**	**4**	**4**	***14***	**0**	**1**	**0**	**2**	***3***	**11**	**13**	**15**	**13**	***52***
12:30 PM	**3**	**0**	**4**	**3**	***10***	**0**	**0**	**1**	**0**	***1***	**9**	**8**	**10**	**18**	***45***
12:45 PM	**3**	**2**	**3**	**0**	***8***	**0**	**3**	**1**	**3**	***7***	**14**	**11**	**14**	**15**	***54***
Count Total	33	10	39	18	*100*	4	9	10	12	*35*	101	101	111	149	*462*
Peak Hr	**12**	**5**	**17**	**11**	***45***	**0**	**4**	**3**	**6**	***13***	**49**	**52**	**59**	**71**	***231***

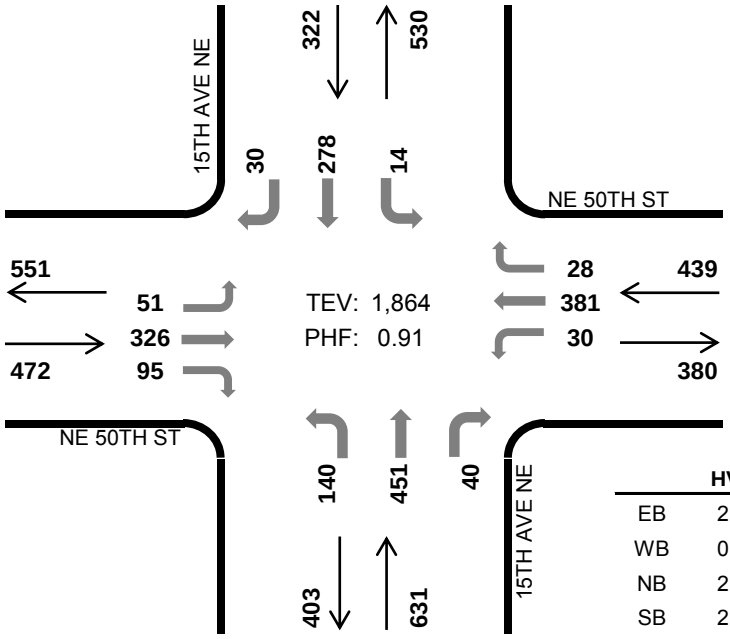
Mark Skaggs: 425 - 250 - 0777 mark.skaggs@idaxdata.com

15TH AVE NE
NE 50TH ST

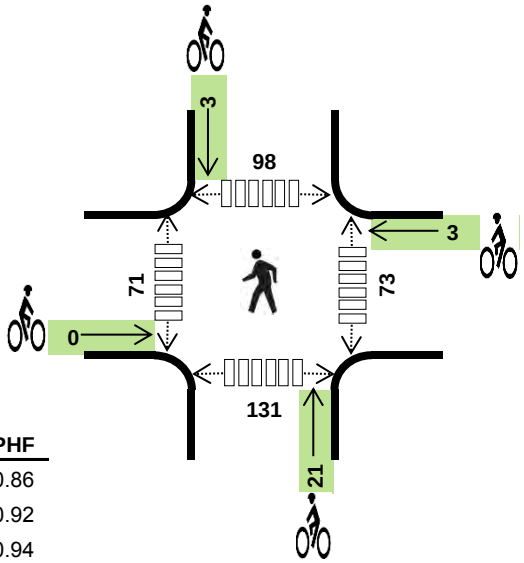
Date: Tue, Oct 14, 2014
Count Period: 4:00 PM to 6:00 PM
Peak Hour: 4:45 PM to 5:45 PM

N

Peak Hour



	HV %:	PHF
EB	2.5%	0.86
WB	0.7%	0.92
NB	2.2%	0.94
SB	2.5%	0.90
TOTAL	2.0%	0.91



Two-Hour Count Summaries

Interval Start	NE 50TH ST Eastbound			NE 50TH ST Westbound			15TH AVE NE Northbound			15TH AVE NE Southbound			15-min Total	Rolling One Hour
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
4:00 PM	9	79	27	10	116	7	30	82	11	5	50	15	441	
4:15 PM	10	70	27	4	97	5	27	93	14	7	47	14	415	
4:30 PM	11	49	24	2	89	5	32	104	8	1	62	7	394	
4:45 PM	**7**	**78**	**19**	**11**	**87**	**4**	**32**	**119**	**7**	**7**	**72**	**10**	**453**	1,703
5:00 PM	**15**	**63**	**22**	**9**	**104**	**6**	**26**	**109**	**6**	**5**	**61**	**10**	**436**	1,698
5:15 PM	**17**	**87**	**27**	**6**	**84**	**9**	**43**	**110**	**11**	**1**	**67**	**3**	**465**	1,748
5:30 PM	**12**	**98**	**27**	**4**	**106**	**9**	**39**	**113**	**16**	**1**	**78**	**7**	**510**	**1,864**
5:45 PM	6	91	18	6	70	5	22	79	12	1	59	11	380	1,791
Count Total	87	615	191	52	753	50	251	809	85	28	496	77	3,494	
Peak Hr	**51**	**326**	**95**	**30**	**381**	**28**	**140**	**451**	**40**	**14**	**278**	**30**	**1,864**	

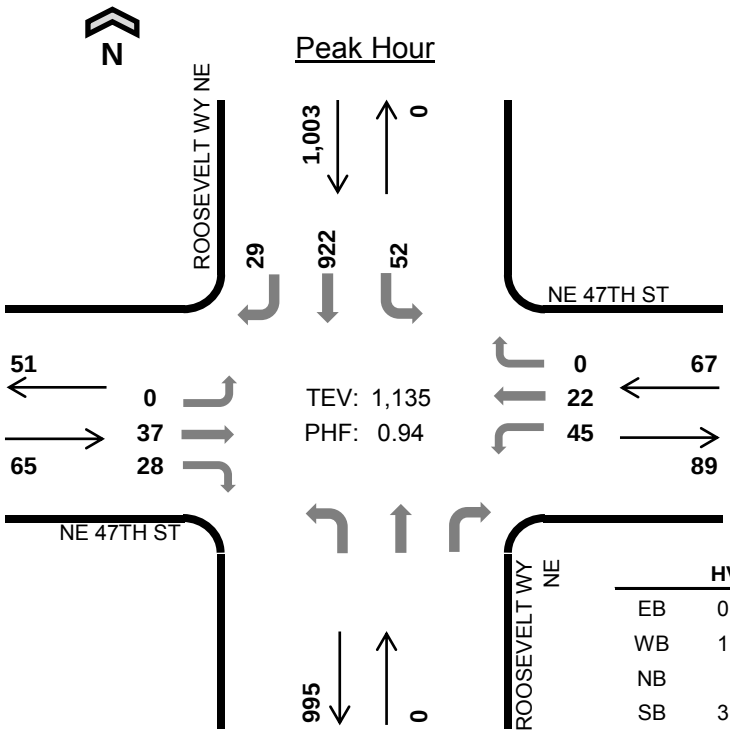
Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
4:00 PM	6	6	5	2	*19*	2	3	3	1	*9*	12	18	26	22	*78*
4:15 PM	7	0	4	5	*16*	0	4	6	0	*10*	6	19	23	30	*78*
4:30 PM	5	2	5	3	*15*	0	5	1	1	*7*	15	18	24	23	*80*
4:45 PM	**8**	**0**	**7**	**5**	***20***	**0**	**2**	**3**	**1**	***6***	**15**	**22**	**26**	**39**	***102***
5:00 PM	**1**	**1**	**2**	**1**	***5***	**0**	**0**	**7**	**0**	***7***	**17**	**15**	**26**	**27**	***85***
5:15 PM	**3**	**0**	**1**	**1**	***5***	**0**	**1**	**7**	**2**	***10***	**21**	**21**	**21**	**32**	***95***
5:30 PM	**0**	**2**	**4**	**1**	***7***	**0**	**0**	**4**	**0**	***4***	**20**	**13**	**25**	**33**	***91***
5:45 PM	4	3	1	2	*10*	1	1	2	0	*4*	16	16	22	38	*92*
Count Total	34	14	29	20	*97*	3	16	33	5	*57*	122	142	193	244	*701*
Peak Hr	**12**	**3**	**14**	**8**	***37***	**0**	**3**	**21**	**3**	***27***	**73**	**71**	**98**	**131**	***373***

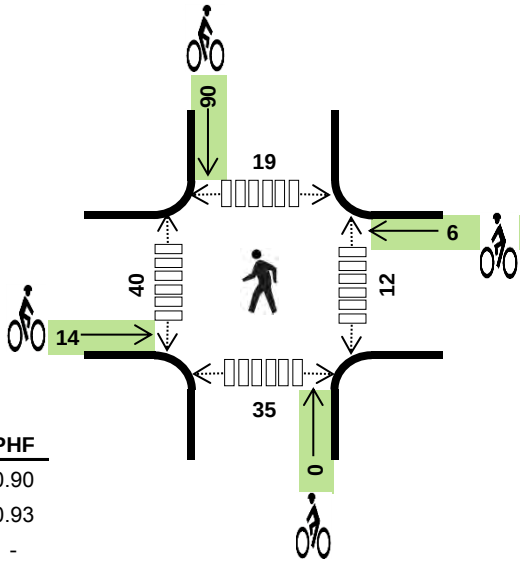
Mark Skaggs: 425 - 250 - 0777 mark.skaggs@idaxdata.com

ROOSEVELT WY NE
NE 47TH ST

Date: Tue, Oct 14, 2014
Count Period: 7:00 AM to 9:00 AM
Peak Hour: 7:45 AM to 8:45 AM



	HV %:	PHF
EB	0.0%	0.90
WB	1.5%	0.93
NB	-	-
SB	3.3%	0.94
TOTAL	3.0%	0.94



Two-Hour Count Summaries

Interval Start	NE 47TH ST Eastbound			NE 47TH ST Westbound			ROOSEVELT WY NE Northbound			ROOSEVELT WY NE Southbound			15-min Total	Rolling One Hour
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
7:00 AM	0	3	2	7	0	0	0	0	0	8	115	5	140	
7:15 AM	0	3	3	10	6	0	0	0	0	10	178	2	212	
7:30 AM	0	7	7	10	3	0	0	0	0	8	216	6	257	
7:45 AM	**0**	**6**	**9**	**10**	**8**	**0**	**0**	**0**	**0**	**17**	**237**	**6**	**293**	902
8:00 AM	**0**	**12**	**6**	**14**	**2**	**0**	**0**	**0**	**0**	**12**	**247**	**9**	**302**	1,064
8:15 AM	**0**	**9**	**6**	**9**	**6**	**0**	**0**	**0**	**0**	**12**	**200**	**10**	**252**	1,104
8:30 AM	**0**	**10**	**7**	**12**	**6**	**0**	**0**	**0**	**0**	**11**	**238**	**4**	**288**	**1,135**
8:45 AM	0	11	13	13	6	0	0	0	0	10	187	3	243	1,085
Count Total	0	61	53	85	37	0	0	0	0	88	1,618	45	1,987	
Peak Hr	**0**	**37**	**28**	**45**	**22**	**0**	**0**	**0**	**0**	**52**	**922**	**29**	**1,135**	

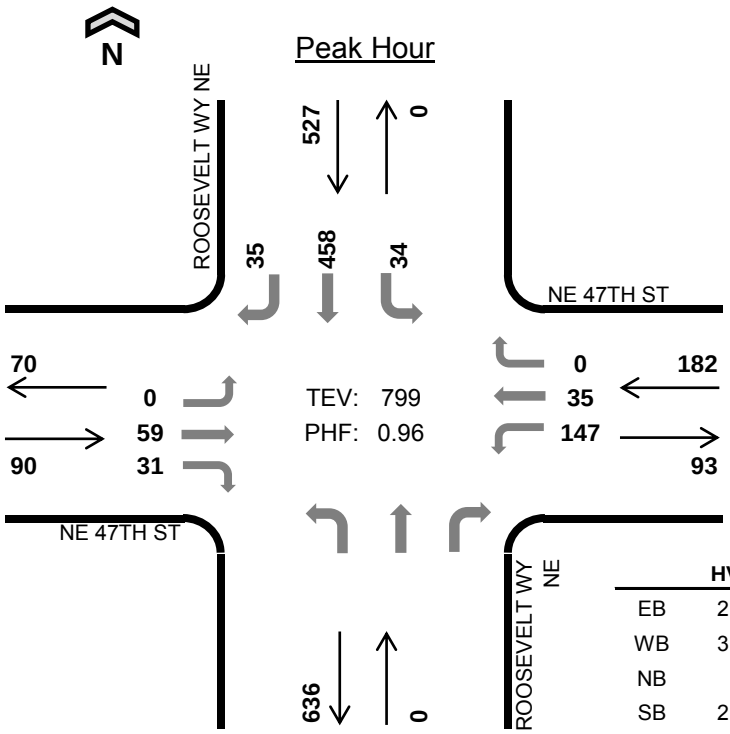
Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
7:00 AM	0	0	0	3	*3*	1	2	0	14	*17*	1	4	1	7	*13*
7:15 AM	0	1	0	7	*8*	0	2	0	20	*22*	0	6	3	4	*13*
7:30 AM	0	1	0	2	*3*	2	0	0	26	*28*	4	9	4	5	*22*
7:45 AM	**0**	**0**	**0**	**4**	***4***	**6**	**2**	**0**	**22**	***30***	**3**	**11**	**3**	**9**	***26***
8:00 AM	**0**	**1**	**0**	**11**	***12***	**4**	**0**	**0**	**19**	***23***	**3**	**16**	**9**	**8**	***36***
8:15 AM	**0**	**0**	**0**	**7**	***7***	**2**	**2**	**0**	**29**	***33***	**3**	**6**	**3**	**9**	***21***
8:30 AM	**0**	**0**	**0**	**11**	***11***	**2**	**2**	**0**	**20**	***24***	**3**	**7**	**4**	**9**	***23***
8:45 AM	0	0	0	7	*7*	9	3	0	27	*39*	4	7	1	6	*18*
Count Total	0	3	0	52	*55*	26	13	0	177	*216*	21	66	28	57	*172*
Peak Hr	**0**	**1**	**0**	**33**	***34***	**14**	**6**	**0**	**90**	***110***	**12**	**40**	**19**	**35**	***106***

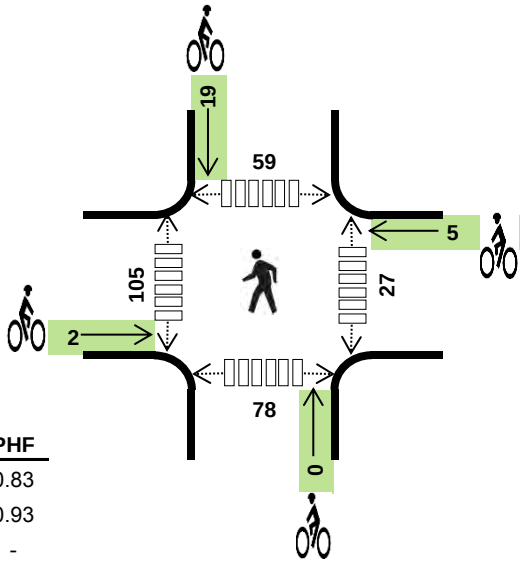
Mark Skaggs: 425 - 250 - 0777 mark.skaggs@idaxdata.com

ROOSEVELT WY NE
NE 47TH ST

Date: Tue, Oct 14, 2014
Count Period: 11:00 AM to 1:00 PM
Peak Hour: 12:00 PM to 1:00 PM



	HV %:	PHF
EB	2.2%	0.83
WB	3.3%	0.93
NB	-	-
SB	2.7%	0.88
TOTAL	2.8%	0.96



Two-Hour Count Summaries

Interval Start	NE 47TH ST Eastbound			NE 47TH ST Westbound			ROOSEVELT WY NE Northbound			ROOSEVELT WY NE Southbound			15-min Total	Rolling One Hour
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
11:00 AM	0	6	12	17	2	0	0	0	0	6	113	6	162	
11:15 AM	0	12	12	29	9	0	0	0	0	7	108	1	178	
11:30 AM	0	10	9	34	5	0	0	0	0	12	97	6	173	
11:45 AM	0	15	11	31	7	0	0	0	0	9	105	6	184	697
12:00 PM	**0**	**12**	**8**	**38**	**7**	**0**	**0**	**0**	**0**	**10**	**113**	**8**	**196**	731
12:15 PM	**0**	**16**	**11**	**39**	**10**	**0**	**0**	**0**	**0**	**5**	**107**	**9**	**197**	750
12:30 PM	**0**	**15**	**4**	**31**	**9**	**0**	**0**	**0**	**0**	**9**	**130**	**10**	**208**	785
12:45 PM	**0**	**16**	**8**	**39**	**9**	**0**	**0**	**0**	**0**	**10**	**108**	**8**	**198**	**799**
Count Total	0	102	75	258	58	0	0	0	0	68	881	54	1,496	
Peak Hr	**0**	**59**	**31**	**147**	**35**	**0**	**0**	**0**	**0**	**34**	**458**	**35**	**799**	

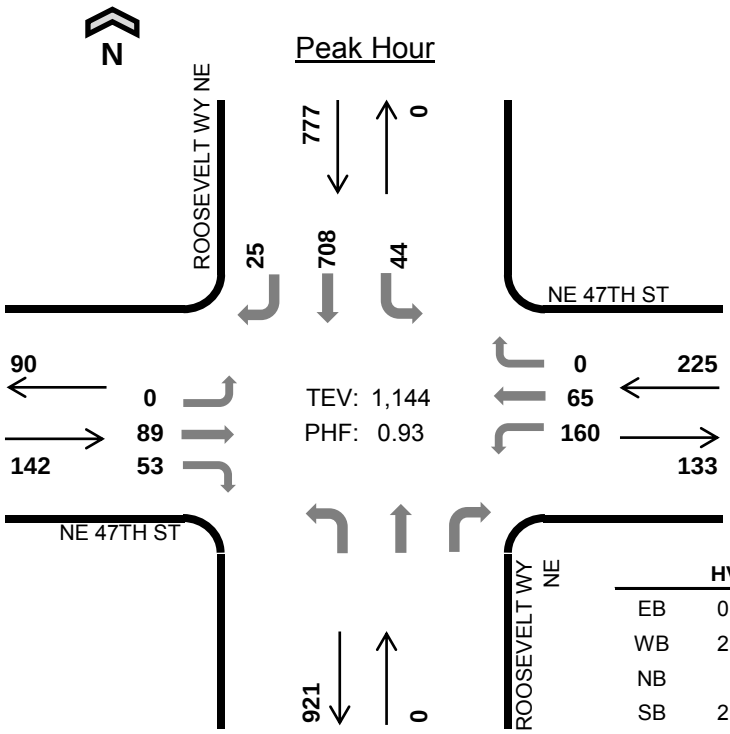
Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
11:00 AM	0	0	0	5	*5*	2	2	1	4	*9*	5	15	8	20	*48*
11:15 AM	1	1	0	2	*4*	0	3	0	5	*8*	8	15	11	12	*46*
11:30 AM	0	0	0	5	*5*	2	0	2	6	*10*	1	15	7	15	*38*
11:45 AM	0	1	0	4	*5*	0	1	0	4	*5*	9	17	13	12	*51*
12:00 PM	**0**	**1**	**0**	**2**	***3***	**0**	**0**	**0**	**10**	***10***	**5**	**24**	**12**	**14**	***55***
12:15 PM	**1**	**1**	**0**	**5**	***7***	**0**	**2**	**0**	**2**	***4***	**5**	**29**	**19**	**13**	***66***
12:30 PM	**1**	**2**	**0**	**3**	***6***	**1**	**1**	**0**	**3**	***5***	**6**	**26**	**10**	**25**	***67***
12:45 PM	**0**	**2**	**0**	**4**	***6***	**1**	**2**	**0**	**4**	***7***	**11**	**26**	**18**	**26**	***81***
Count Total	3	8	0	30	*41*	6	11	3	38	*58*	50	167	98	137	*452*
Peak Hr	**2**	**6**	**0**	**14**	***22***	**2**	**5**	**0**	**19**	***26***	**27**	**105**	**59**	**78**	***269***

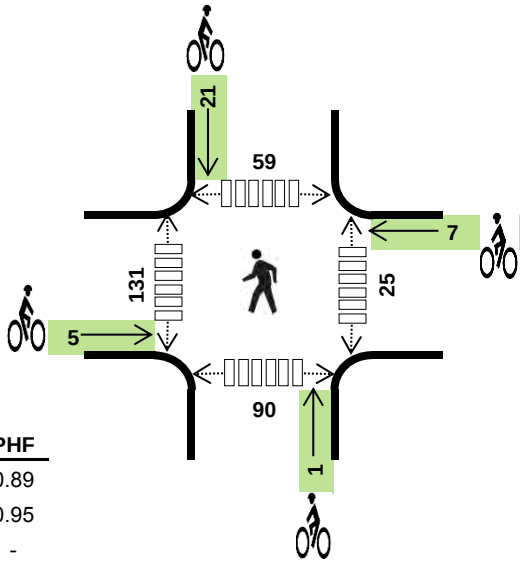
Mark Skaggs: 425 - 250 - 0777 mark.skaggs@idaxdata.com

ROOSEVELT WY NE
NE 47TH ST

Date: Tue, Oct 14, 2014
Count Period: 4:00 PM to 6:00 PM
Peak Hour: 4:00 PM to 5:00 PM



	HV %:	PHF
EB	0.0%	0.89
WB	2.7%	0.95
NB	-	-
SB	2.2%	0.89
TOTAL	2.0%	0.93



Two-Hour Count Summaries

Interval Start	NE 47TH ST Eastbound			NE 47TH ST Westbound			ROOSEVELT WY NE Northbound			ROOSEVELT WY NE Southbound			15-min Total	Rolling One Hour
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
4:00 PM	**0**	**21**	**11**	**42**	**14**	**0**	**0**	**0**	**0**	**12**	**200**	**6**	**306**	
4:15 PM	**0**	**16**	**17**	**36**	**20**	**0**	**0**	**0**	**0**	**11**	**161**	**9**	**270**	
4:30 PM	**0**	**28**	**12**	**44**	**10**	**0**	**0**	**0**	**0**	**14**	**173**	**5**	**286**	
4:45 PM	**0**	**24**	**13**	**38**	**21**	**0**	**0**	**0**	**0**	**7**	**174**	**5**	**282**	**1,144**
5:00 PM	0	29	17	29	10	0	0	0	0	8	176	6	275	1,113
5:15 PM	0	20	12	31	12	0	0	0	0	11	176	2	264	1,107
5:30 PM	0	23	12	45	10	0	0	0	0	5	176	6	277	1,098
5:45 PM	0	17	17	26	16	0	0	0	0	13	144	8	241	1,057
Count Total	0	178	111	291	113	0	0	0	0	81	1,380	47	2,201	
Peak Hr	**0**	**89**	**53**	**160**	**65**	**0**	**0**	**0**	**0**	**44**	**708**	**25**	**1,144**	

Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
4:00 PM	**0**	**1**	**0**	**6**	***7***	**0**	**1**	**0**	**6**	***7***	**4**	**29**	**16**	**18**	***67***
4:15 PM	**0**	**2**	**0**	**2**	***4***	**0**	**3**	**1**	**4**	***8***	**10**	**34**	**14**	**17**	***75***
4:30 PM	**0**	**2**	**0**	**7**	***9***	**1**	**2**	**0**	**6**	***9***	**8**	**28**	**17**	**30**	***83***
4:45 PM	**0**	**1**	**0**	**2**	***3***	**4**	**1**	**0**	**5**	***10***	**3**	**40**	**12**	**25**	***80***
5:00 PM	0	0	0	4	*4*	1	4	0	1	*6*	4	36	22	26	*88*
5:15 PM	0	0	0	2	*2*	0	1	0	8	*9*	3	25	10	23	*61*
5:30 PM	1	0	0	1	*2*	2	3	0	5	*10*	7	29	17	26	*79*
5:45 PM	0	1	0	2	*3*	2	2	0	2	*6*	5	26	10	18	*59*
Count Total	1	7	0	26	*34*	10	17	1	37	*65*	44	247	118	183	*592*
Peak Hr	**0**	**6**	**0**	**17**	***23***	**5**	**7**	**1**	**21**	***34***	**25**	**131**	**59**	**90**	***305***

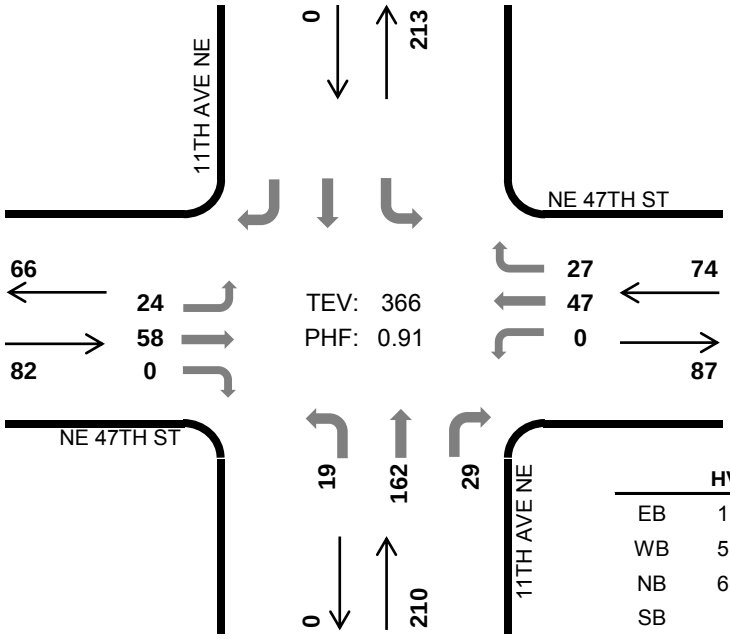
Mark Skaggs: 425 - 250 - 0777 mark.skaggs@idaxdata.com

11TH AVE NE
NE 47TH ST

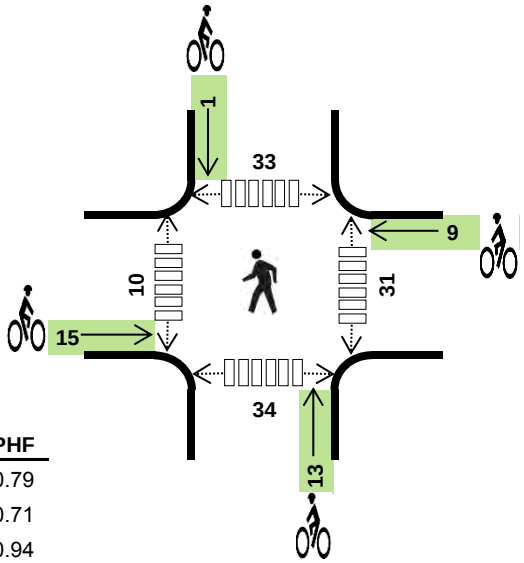
Date: Tue, Oct 14, 2014
Count Period: 7:00 AM to 9:00 AM
Peak Hour: 8:00 AM to 9:00 AM

N

Peak Hour



	HV %:	PHF
EB	1.2%	0.79
WB	5.4%	0.71
NB	6.2%	0.94
SB	-	-
TOTAL	4.9%	0.91



Two-Hour Count Summaries

Interval Start	NE 47TH ST Eastbound			NE 47TH ST Westbound			11TH AVE NE Northbound			11TH AVE NE Southbound			15-min Total	Rolling One Hour
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
7:00 AM	5	7	0	0	7	8	2	18	2	0	0	0	49	
7:15 AM	3	5	0	0	9	6	3	28	5	0	0	0	59	
7:30 AM	2	11	0	0	8	5	4	28	5	0	0	0	63	
7:45 AM	6	12	0	0	11	4	3	28	4	0	0	0	68	239
8:00 AM	**8**	**18**	**0**	**0**	**10**	**6**	**6**	**45**	**5**	**0**	**0**	**0**	**98**	288
8:15 AM	**5**	**12**	**0**	**0**	**10**	**2**	**4**	**37**	**7**	**0**	**0**	**0**	**77**	306
8:30 AM	**5**	**13**	**0**	**0**	**13**	**7**	**3**	**40**	**9**	**0**	**0**	**0**	**90**	333
8:45 AM	**6**	**15**	**0**	**0**	**14**	**12**	**6**	**40**	**8**	**0**	**0**	**0**	**101**	**366**
Count Total	40	93	0	0	82	50	31	264	45	0	0	0	605	
Peak Hr	**24**	**58**	**0**	**0**	**47**	**27**	**19**	**162**	**29**	**0**	**0**	**0**	**366**	

Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
7:00 AM	0	0	3	0	*3*	0	3	1	0	*4*	2	1	3	4	*10*
7:15 AM	0	1	4	0	*5*	0	1	2	0	*3*	4	1	5	4	*14*
7:30 AM	0	1	4	0	*5*	2	0	4	0	*6*	4	1	7	5	*17*
7:45 AM	0	1	3	0	*4*	5	2	4	0	*11*	3	5	2	9	*19*
8:00 AM	**0**	**2**	**3**	**0**	***5***	**4**	**0**	**1**	**1**	***6***	**6**	**5**	**11**	**11**	***33***
8:15 AM	**0**	**0**	**3**	**0**	***3***	**3**	**3**	**4**	**0**	***10***	**9**	**2**	**6**	**8**	***25***
8:30 AM	**0**	**0**	**3**	**0**	***3***	**2**	**3**	**5**	**0**	***10***	**8**	**1**	**12**	**8**	***29***
8:45 AM	**1**	**2**	**4**	**0**	***7***	**6**	**3**	**3**	**0**	***12***	**8**	**2**	**4**	**7**	***21***
Count Total	1	7	27	0	*35*	22	15	24	1	*62*	44	18	50	56	*168*
Peak Hr	**1**	**4**	**13**	**0**	***18***	**15**	**9**	**13**	**1**	***38***	**31**	**10**	**33**	**34**	***108***

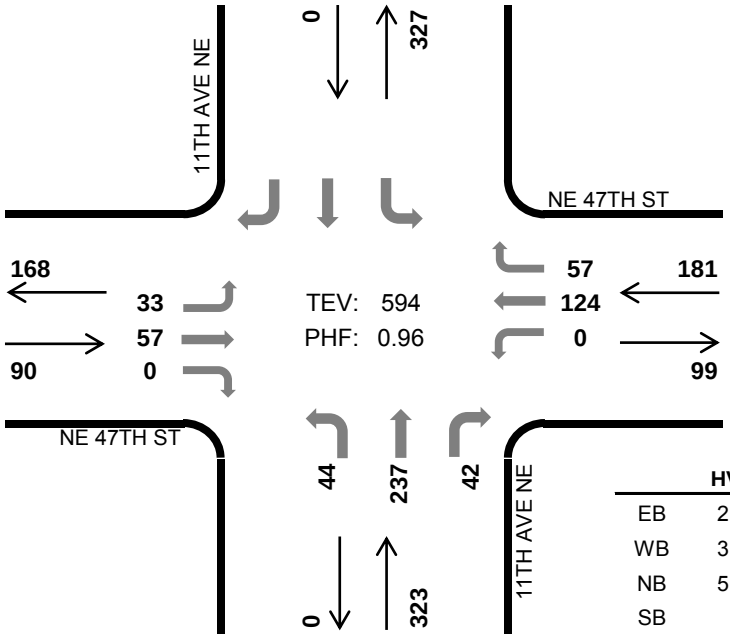
Mark Skaggs: 425 - 250 - 0777 mark.skaggs@idaxdata.com

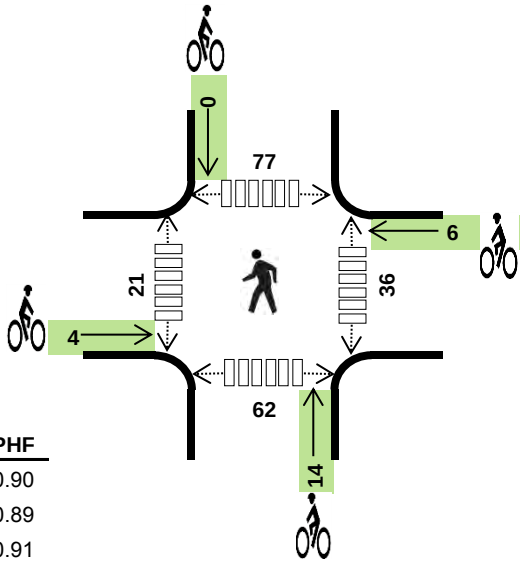
11TH AVE NE
NE 47TH ST

Date: Tue, Oct 14, 2014
Count Period: 11:00 AM to 1:00 PM
Peak Hour: 12:00 PM to 1:00 PM

N

Peak Hour





	HV %:	PHF
EB	2.2%	0.90
WB	3.9%	0.89
NB	5.9%	0.91
SB	-	-
TOTAL	4.7%	0.96

Two-Hour Count Summaries

Interval Start	NE 47TH ST Eastbound			NE 47TH ST Westbound			11TH AVE NE Northbound			11TH AVE NE Southbound			15-min Total	Rolling One Hour
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
11:00 AM	4	9	0	0	12	11	7	60	8	0	0	0	111	
11:15 AM	13	8	0	0	23	12	12	56	12	0	0	0	136	
11:30 AM	8	10	0	0	22	13	12	52	7	0	0	0	124	
11:45 AM	8	12	0	0	22	10	18	48	4	0	0	0	122	493
12:00 PM	**8**	**11**	**0**	**0**	**30**	**14**	**10**	**59**	**8**	**0**	**0**	**0**	**140**	522
12:15 PM	**7**	**15**	**0**	**0**	**33**	**18**	**12**	**58**	**12**	**0**	**0**	**0**	**155**	541
12:30 PM	**8**	**17**	**0**	**0**	**31**	**14**	**6**	**63**	**6**	**0**	**0**	**0**	**145**	562
12:45 PM	**10**	**14**	**0**	**0**	**30**	**11**	**16**	**57**	**16**	**0**	**0**	**0**	**154**	**594**
Count Total	66	96	0	0	203	103	93	453	73	0	0	0	1,087	
Peak Hr	**33**	**57**	**0**	**0**	**124**	**57**	**44**	**237**	**42**	**0**	**0**	**0**	**594**	

Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
11:00 AM	0	0	4	0	*4*	2	0	0	0	*2*	7	4	5	24	*40*
11:15 AM	1	0	4	0	*5*	0	2	1	0	*3*	5	4	7	11	*27*
11:30 AM	0	0	2	0	*2*	4	1	1	0	*6*	6	6	5	19	*36*
11:45 AM	0	2	4	0	*6*	0	0	6	0	*6*	10	6	14	15	*45*
12:00 PM	**0**	**2**	**5**	**0**	***7***	**0**	**0**	**3**	**0**	***3***	**13**	**6**	**17**	**16**	***52***
12:15 PM	**1**	**2**	**4**	**0**	***7***	**1**	**2**	**3**	**0**	***6***	**5**	**5**	**20**	**18**	***48***
12:30 PM	**1**	**2**	**5**	**0**	***8***	**1**	**3**	**3**	**0**	***7***	**9**	**8**	**16**	**16**	***49***
12:45 PM	**0**	**1**	**5**	**0**	***6***	**2**	**1**	**5**	**0**	***8***	**9**	**2**	**24**	**12**	***47***
Count Total	3	9	33	0	*45*	10	9	22	0	*41*	64	41	108	131	*344*
Peak Hr	**2**	**7**	**19**	**0**	***28***	**4**	**6**	**14**	**0**	***24***	**36**	**21**	**77**	**62**	***196***

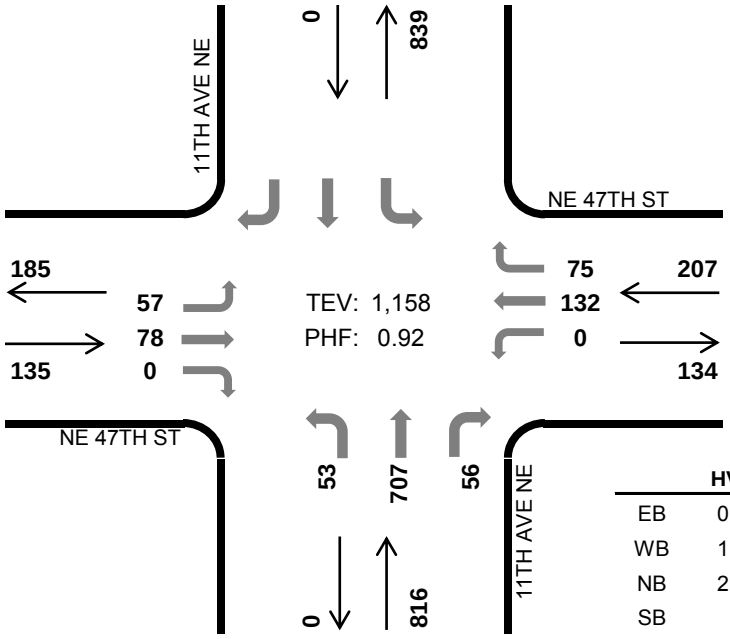
Mark Skaggs: 425 - 250 - 0777 mark.skaggs@idaxdata.com

11TH AVE NE
NE 47TH ST

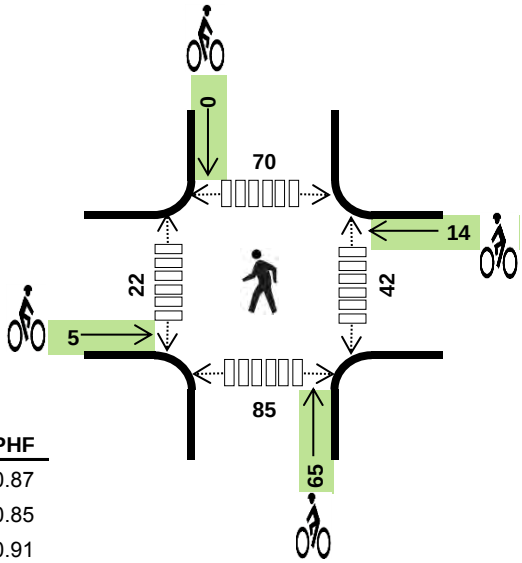
Date: Tue, Oct 14, 2014
Count Period: 4:00 PM to 6:00 PM
Peak Hour: 4:30 PM to 5:30 PM

N

Peak Hour



	HV %:	PHF
EB	0.7%	0.87
WB	1.0%	0.85
NB	2.1%	0.91
SB	-	-
TOTAL	1.7%	0.92



Two-Hour Count Summaries

Interval Start	NE 47TH ST Eastbound			NE 47TH ST Westbound			11TH AVE NE Northbound			11TH AVE NE Southbound			15-min Total	Rolling One Hour
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
4:00 PM	13	22	0	0	38	16	17	137	14	0	0	0	257	
4:15 PM	15	15	0	0	36	24	13	143	13	0	0	0	259	
4:30 PM	**20**	**19**	**0**	**0**	**44**	**17**	**16**	**165**	**13**	**0**	**0**	**0**	**294**	
4:45 PM	**11**	**22**	**0**	**0**	**35**	**19**	**16**	**168**	**12**	**0**	**0**	**0**	**283**	1,093
5:00 PM	**12**	**18**	**0**	**0**	**22**	**13**	**14**	**176**	**13**	**0**	**0**	**0**	**268**	1,104
5:15 PM	**14**	**19**	**0**	**0**	**31**	**26**	**7**	**198**	**18**	**0**	**0**	**0**	**313**	**1,158**
5:30 PM	10	23	0	0	39	21	17	165	17	0	0	0	292	1,156
5:45 PM	14	20	0	0	31	12	13	158	18	0	0	0	266	1,139
Count Total	109	158	0	0	276	148	113	1,310	118	0	0	0	2,232	
Peak Hr	**57**	**78**	**0**	**0**	**132**	**75**	**53**	**707**	**56**	**0**	**0**	**0**	**1,158**	

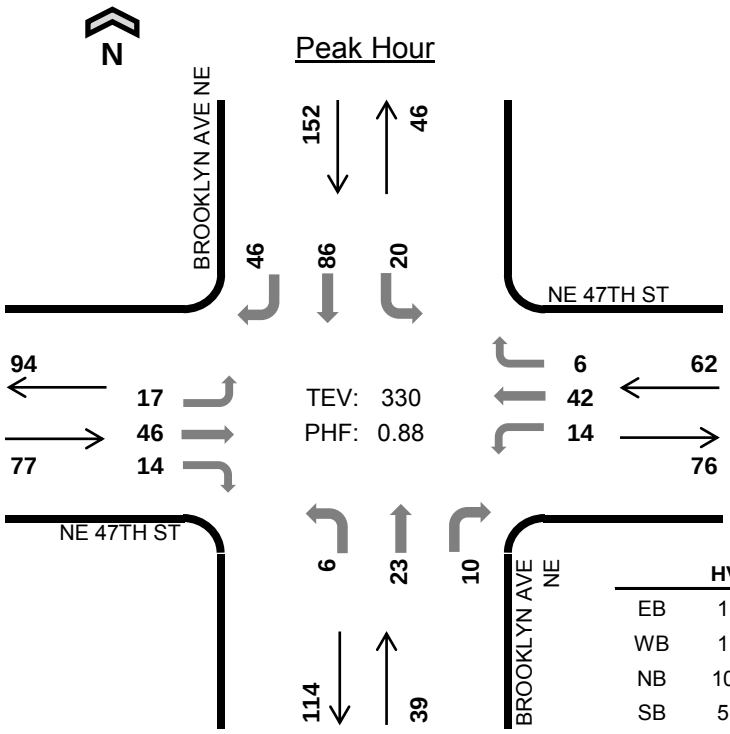
Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
4:00 PM	0	1	5	0	*6*	1	2	10	0	*13*	6	8	25	12	*51*
4:15 PM	0	3	3	0	*6*	2	2	7	0	*11*	5	7	20	12	*44*
4:30 PM	**0**	**0**	**4**	**0**	***4***	**1**	**2**	**10**	**0**	***13***	**12**	**6**	**16**	**18**	***52***
4:45 PM	**0**	**0**	**6**	**0**	***6***	**3**	**4**	**18**	**0**	***25***	**10**	**3**	**19**	**21**	***53***
5:00 PM	**0**	**0**	**3**	**0**	***3***	**1**	**6**	**17**	**0**	***24***	**12**	**9**	**23**	**24**	***68***
5:15 PM	**1**	**2**	**4**	**0**	***7***	**0**	**2**	**20**	**0**	***22***	**8**	**4**	**12**	**22**	***46***
5:30 PM	1	0	3	0	*4*	1	4	22	0	*27*	7	3	19	20	*49*
5:45 PM	0	1	4	0	*5*	1	4	23	1	*29*	12	4	8	18	*42*
Count Total	2	7	32	0	*41*	10	26	127	1	*164*	72	44	142	147	*405*
Peak Hr	**1**	**2**	**17**	**0**	***20***	**5**	**14**	**65**	**0**	***84***	**42**	**22**	**70**	**85**	***219***

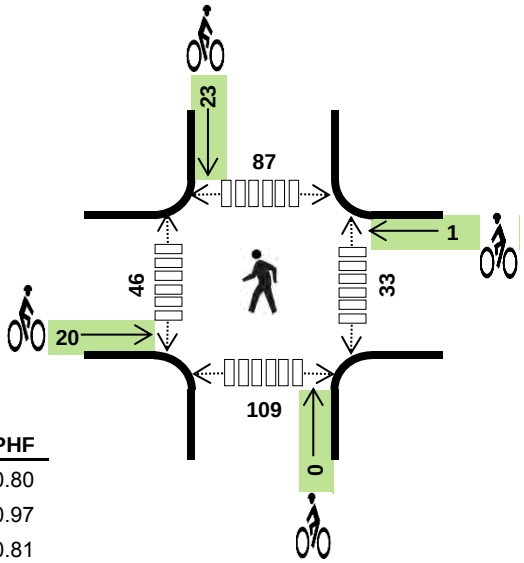
Mark Skaggs: 425 - 250 - 0777 mark.skaggs@idaxdata.com

BROOKLYN AVE NE
NE 47TH ST

Date: Tue, Oct 14, 2014
Count Period: 7:00 AM to 9:00 AM
Peak Hour: 8:00 AM to 9:00 AM



	HV %:	PHF
EB	1.3%	0.80
WB	1.6%	0.97
NB	10.3%	0.81
SB	5.3%	0.90
TOTAL	4.2%	0.88



Two-Hour Count Summaries

Interval Start	NE 47TH ST Eastbound			NE 47TH ST Westbound			BROOKLYN AVE NE Northbound			BROOKLYN AVE NE Southbound			15-min Total	Rolling One Hour
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
7:00 AM	0	2	2	4	6	1	1	5	1	3	6	1	32	
7:15 AM	0	5	2	1	5	0	2	6	0	1	7	1	30	
7:30 AM	3	5	3	6	4	3	0	6	1	2	8	5	46	
7:45 AM	2	10	0	2	10	2	2	3	4	5	11	6	57	165
8:00 AM	**4**	**10**	**5**	**5**	**11**	**0**	**3**	**4**	**0**	**2**	**25**	**10**	**79**	212
8:15 AM	**3**	**10**	**4**	**3**	**8**	**3**	**1**	**4**	**3**	**5**	**20**	**9**	**73**	255
8:30 AM	**3**	**11**	**3**	**4**	**11**	**1**	**2**	**4**	**6**	**5**	**19**	**15**	**84**	293
8:45 AM	**7**	**15**	**2**	**2**	**12**	**2**	**0**	**11**	**1**	**8**	**22**	**12**	**94**	**330**
Count Total	22	68	21	27	67	12	11	43	16	31	118	59	495	
Peak Hr	**17**	**46**	**14**	**14**	**42**	**6**	**6**	**23**	**10**	**20**	**86**	**46**	**330**	

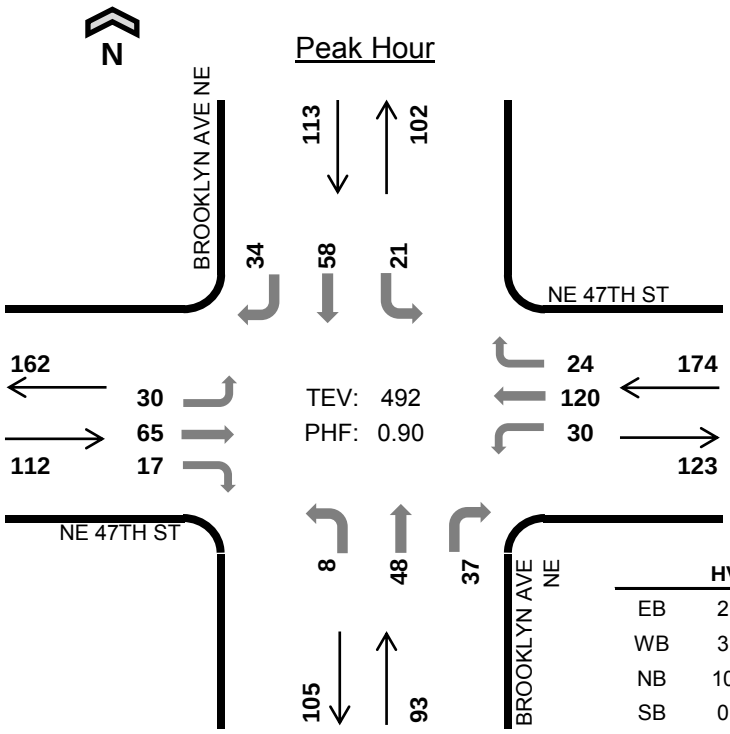
Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
7:00 AM	0	1	1	0	*2*	0	0	0	0	*0*	6	4	4	12	*26*
7:15 AM	0	0	3	0	*3*	1	0	0	2	*3*	4	1	6	3	*14*
7:30 AM	0	0	0	1	*1*	1	2	0	1	*4*	5	4	8	8	*25*
7:45 AM	0	0	2	0	*2*	3	3	0	5	*11*	11	2	9	11	*33*
8:00 AM	**0**	**1**	**1**	**2**	***4***	**7**	**0**	**0**	**8**	***15***	**7**	**16**	**25**	**27**	***75***
8:15 AM	**0**	**0**	**0**	**0**	***0***	**4**	**1**	**0**	**4**	***9***	**6**	**10**	**25**	**30**	***71***
8:30 AM	**0**	**0**	**2**	**2**	***4***	**2**	**0**	**0**	**5**	***7***	**7**	**6**	**17**	**16**	***46***
8:45 AM	**1**	**0**	**1**	**4**	***6***	**7**	**0**	**0**	**6**	***13***	**13**	**14**	**20**	**36**	***83***
Count Total	1	2	10	9	*22*	25	6	0	31	*62*	59	57	114	143	*373*
Peak Hr	**1**	**1**	**4**	**8**	***14***	**20**	**1**	**0**	**23**	***44***	**33**	**46**	**87**	**109**	***275***

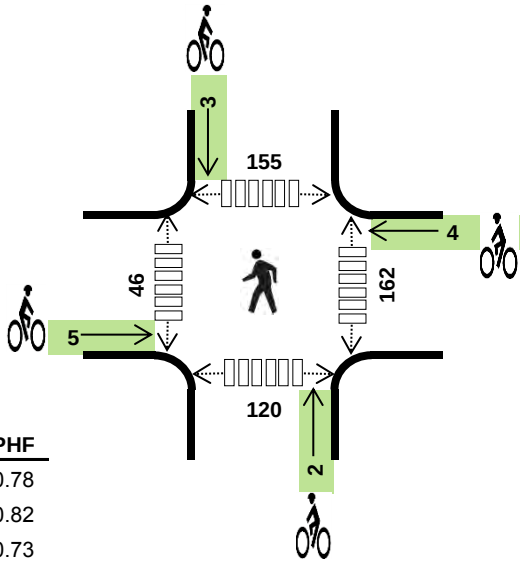
Mark Skaggs: 425 - 250 - 0777 mark.skaggs@idaxdata.com

BROOKLYN AVE NE
NE 47TH ST

Date: Tue, Oct 14, 2014
Count Period: 11:00 AM to 1:00 PM
Peak Hour: 12:00 PM to 1:00 PM



	HV %:	PHF
EB	2.7%	0.78
WB	3.4%	0.82
NB	10.8%	0.73
SB	0.0%	0.86
TOTAL	3.9%	0.90



Two-Hour Count Summaries

Interval Start	NE 47TH ST Eastbound			NE 47TH ST Westbound			BROOKLYN AVE NE Northbound			BROOKLYN AVE NE Southbound			15-min Total	Rolling One Hour
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
11:00 AM	5	17	2	6	9	3	0	9	3	4	6	4	68	
11:15 AM	3	17	2	3	18	8	4	13	7	5	6	7	93	
11:30 AM	4	18	4	9	15	4	1	12	6	2	12	8	95	
11:45 AM	3	16	1	8	15	2	3	12	10	3	19	4	96	352
12:00 PM	**7**	**14**	**6**	**6**	**32**	**12**	**2**	**18**	**12**	**5**	**15**	**7**	**136**	420
12:15 PM	**4**	**20**	**3**	**11**	**24**	**2**	**2**	**11**	**9**	**4**	**19**	**9**	**118**	445
12:30 PM	**13**	**19**	**4**	**8**	**39**	**6**	**3**	**11**	**10**	**3**	**12**	**6**	**134**	484
12:45 PM	**6**	**12**	**4**	**5**	**25**	**4**	**1**	**8**	**6**	**9**	**12**	**12**	**104**	**492**
Count Total	45	133	26	56	177	41	16	94	63	35	101	57	844	
Peak Hr	**30**	**65**	**17**	**30**	**120**	**24**	**8**	**48**	**37**	**21**	**58**	**34**	**492**	

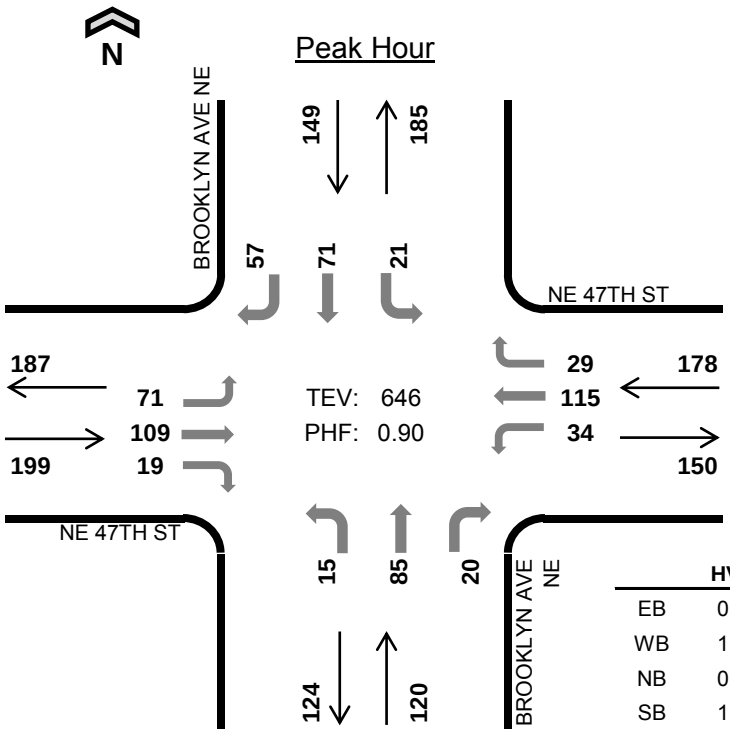
Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
11:00 AM	0	0	3	0	*3*	2	0	1	1	*4*	22	3	20	23	*68*
11:15 AM	1	0	1	2	*4*	3	0	0	2	*5*	27	3	16	41	*87*
11:30 AM	0	1	1	0	*2*	3	1	0	1	*5*	30	9	24	29	*92*
11:45 AM	0	1	0	3	*4*	1	0	1	2	*4*	22	8	18	26	*74*
12:00 PM	**1**	**2**	**3**	**0**	***6***	**0**	**0**	**1**	**1**	***2***	**43**	**14**	**38**	**29**	***124***
12:15 PM	**0**	**1**	**5**	**0**	***6***	**1**	**0**	**1**	**1**	***3***	**47**	**10**	**41**	**28**	***126***
12:30 PM	**0**	**1**	**2**	**0**	***3***	**1**	**1**	**0**	**1**	***3***	**41**	**9**	**30**	**32**	***112***
12:45 PM	**2**	**2**	**0**	**0**	***4***	**3**	**3**	**0**	**0**	***6***	**31**	**13**	**46**	**31**	***121***
Count Total	4	8	15	5	*32*	14	5	4	9	*32*	263	69	233	239	*804*
Peak Hr	**3**	**6**	**10**	**0**	***19***	**5**	**4**	**2**	**3**	***14***	**162**	**46**	**155**	**120**	***483***

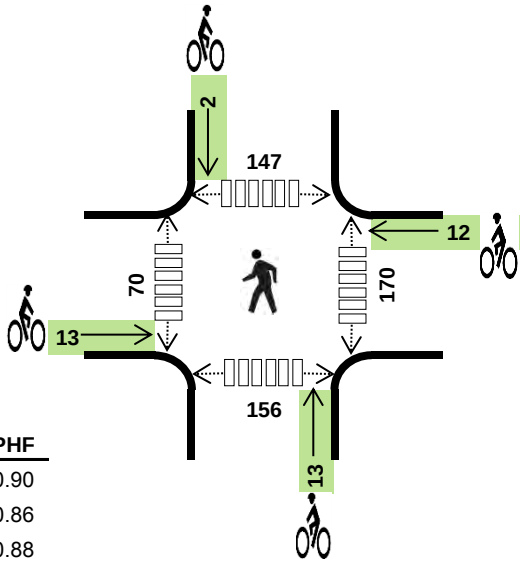
Mark Skaggs: 425 - 250 - 0777 mark.skaggs@idaxdata.com

BROOKLYN AVE NE
NE 47TH ST

Date: Tue, Oct 14, 2014
Count Period: 4:00 PM to 6:00 PM
Peak Hour: 4:45 PM to 5:45 PM



	HV %:	PHF
EB	0.5%	0.90
WB	1.1%	0.86
NB	0.0%	0.88
SB	1.3%	0.81
TOTAL	0.8%	0.90



Two-Hour Count Summaries

Interval Start	NE 47TH ST Eastbound			NE 47TH ST Westbound			BROOKLYN AVE NE Northbound			BROOKLYN AVE NE Southbound			15-min Total	Rolling One Hour
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
4:00 PM	10	28	2	14	24	3	6	22	1	3	23	11	147	
4:15 PM	14	27	2	4	32	12	2	18	2	0	24	8	145	
4:30 PM	9	28	6	12	32	2	3	22	4	4	12	16	150	
4:45 PM	**16**	**31**	**2**	**8**	**36**	**7**	**4**	**23**	**0**	**2**	**12**	**16**	**157**	599
5:00 PM	**15**	**21**	**8**	**10**	**23**	**7**	**5**	**24**	**5**	**7**	**20**	**6**	**151**	603
5:15 PM	**22**	**25**	**4**	**6**	**22**	**7**	**1**	**23**	**9**	**6**	**16**	**18**	**159**	617
5:30 PM	**18**	**32**	**5**	**10**	**34**	**8**	**5**	**15**	**6**	**6**	**23**	**17**	**179**	**646**
5:45 PM	14	27	8	9	29	8	3	17	10	9	14	3	151	640
Count Total	118	219	37	73	232	54	29	164	37	37	144	95	1,239	
Peak Hr	**71**	**109**	**19**	**34**	**115**	**29**	**15**	**85**	**20**	**21**	**71**	**57**	**646**	

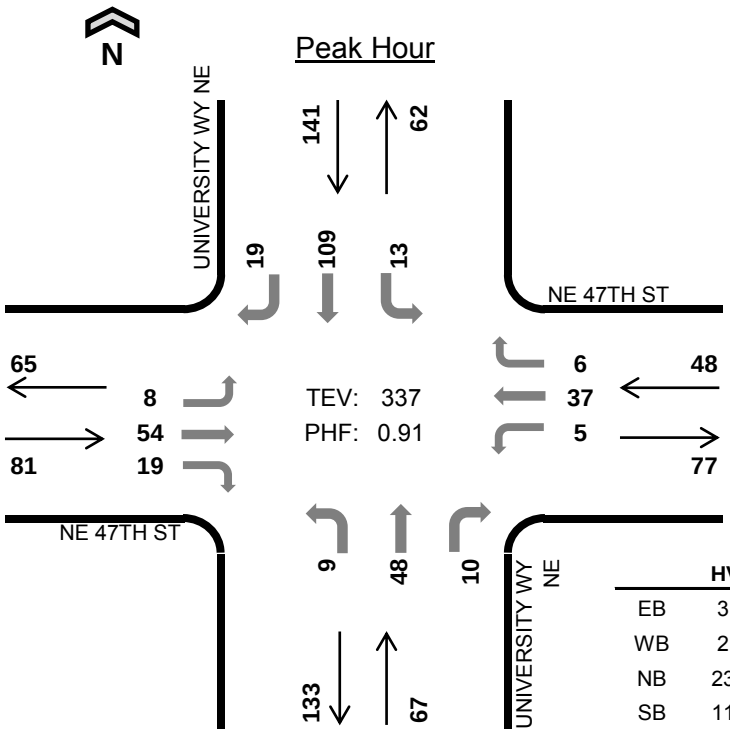
Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
4:00 PM	0	0	0	1	*1*	0	5	0	0	*5*	37	13	34	37	*121*
4:15 PM	0	1	0	0	*1*	1	0	1	1	*3*	44	6	27	24	*101*
4:30 PM	0	0	0	0	*0*	4	1	1	1	*7*	21	18	15	49	*103*
4:45 PM	**0**	**2**	**0**	**1**	***3***	**3**	**1**	**0**	**0**	***4***	**24**	**22**	**20**	**32**	***98***
5:00 PM	**0**	**0**	**0**	**0**	***0***	**2**	**6**	**8**	**1**	***17***	**53**	**17**	**52**	**51**	***173***
5:15 PM	**0**	**0**	**0**	**1**	***1***	**4**	**2**	**4**	**1**	***11***	**50**	**14**	**43**	**36**	***143***
5:30 PM	**1**	**0**	**0**	**0**	***1***	**4**	**3**	**1**	**0**	***8***	**43**	**17**	**32**	**37**	***129***
5:45 PM	0	2	0	0	*2*	2	4	3	2	*11*	52	14	35	37	*138*
Count Total	1	5	0	3	*9*	20	22	18	6	*66*	324	121	258	303	*1,006*
Peak Hr	**1**	**2**	**0**	**2**	***5***	**13**	**12**	**13**	**2**	***40***	**170**	**70**	**147**	**156**	***543***

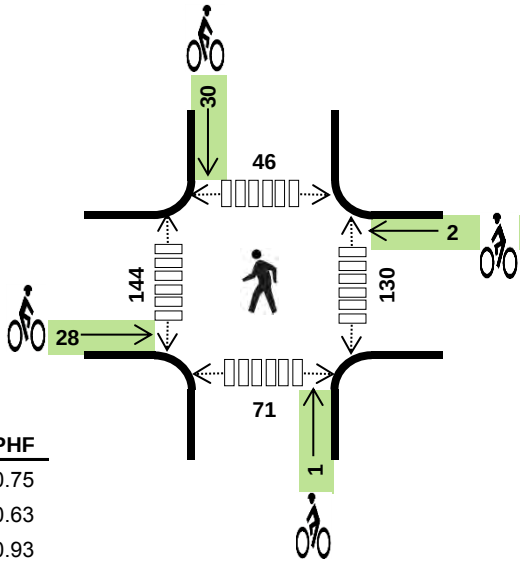
Mark Skaggs: 425 - 250 - 0777 mark.skaggs@idaxdata.com

UNIVERSITY WY NE
NE 47TH ST

Date: Tue, Oct 14, 2014
Count Period: 7:00 AM to 9:00 AM
Peak Hour: 8:00 AM to 9:00 AM



	HV %:	PHF
EB	3.7%	0.75
WB	2.1%	0.63
NB	23.9%	0.93
SB	11.3%	0.88
TOTAL	10.7%	0.91



Two-Hour Count Summaries

Interval Start	NE 47TH ST Eastbound			NE 47TH ST Westbound			UNIVERSITY WY NE Northbound			UNIVERSITY WY NE Southbound			15-min Total	Rolling One Hour
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
7:00 AM	0	2	2	0	4	1	2	6	3	1	13	3	37	
7:15 AM	0	5	2	2	1	0	3	5	0	4	9	3	34	
7:30 AM	0	7	0	4	9	1	1	4	0	0	12	1	39	
7:45 AM	1	9	7	2	4	1	2	7	0	3	21	7	64	174
8:00 AM	**1**	**8**	**3**	**0**	**10**	**1**	**2**	**9**	**3**	**6**	**27**	**7**	**77**	214
8:15 AM	**0**	**14**	**5**	**1**	**4**	**2**	**3**	**14**	**1**	**2**	**30**	**5**	**81**	261
8:30 AM	**5**	**13**	**5**	**4**	**13**	**2**	**1**	**13**	**3**	**1**	**28**	**5**	**93**	315
8:45 AM	**2**	**19**	**6**	**0**	**10**	**1**	**3**	**12**	**3**	**4**	**24**	**2**	**86**	**337**
Count Total	9	77	30	13	55	9	17	70	13	21	164	33	511	
Peak Hr	**8**	**54**	**19**	**5**	**37**	**6**	**9**	**48**	**10**	**13**	**109**	**19**	**337**	

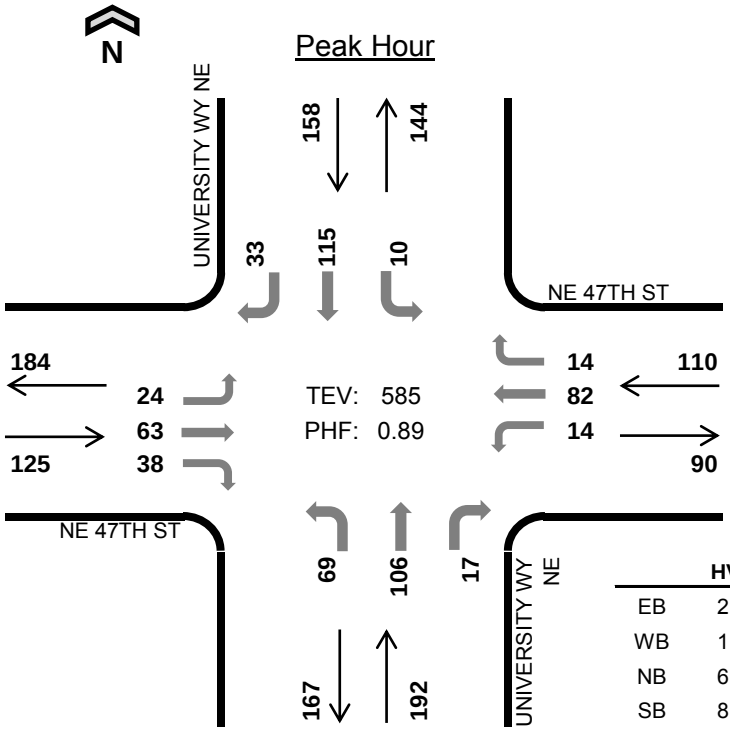
Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
7:00 AM	0	0	4	2	*6*	2	1	0	5	*8*	8	11	4	5	*28*
7:15 AM	0	0	2	2	*4*	1	1	0	0	*2*	8	12	6	2	*28*
7:30 AM	0	0	2	3	*5*	1	1	0	5	*7*	9	17	10	9	*45*
7:45 AM	0	0	2	4	*6*	5	1	0	4	*10*	12	25	6	10	*53*
8:00 AM	**0**	**1**	**2**	**4**	***7***	**8**	**0**	**0**	**8**	***16***	**53**	**32**	**13**	**23**	***121***
8:15 AM	**0**	**0**	**4**	**5**	***9***	**7**	**1**	**0**	**6**	***14***	**27**	**37**	**8**	**21**	***93***
8:30 AM	**1**	**0**	**4**	**4**	***9***	**3**	**0**	**1**	**9**	***13***	**27**	**41**	**13**	**17**	***98***
8:45 AM	**2**	**0**	**6**	**3**	***11***	**10**	**1**	**0**	**7**	***18***	**23**	**34**	**12**	**10**	***79***
Count Total	3	1	26	27	*57*	37	6	1	44	*88*	167	209	72	97	*545*
Peak Hr	**3**	**1**	**16**	**16**	***36***	**28**	**2**	**1**	**30**	***61***	**130**	**144**	**46**	**71**	***391***

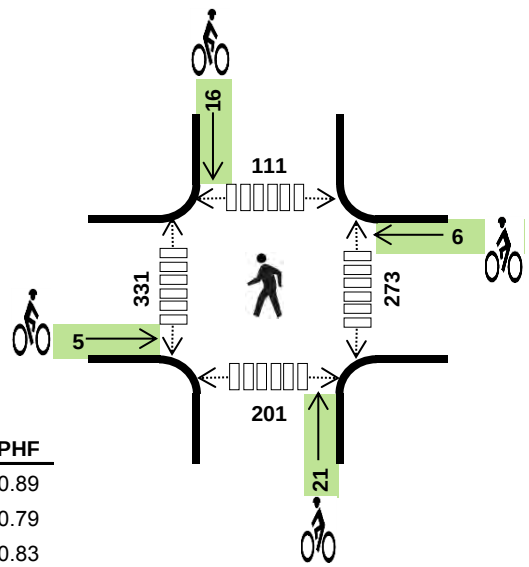
Mark Skaggs: 425 - 250 - 0777 mark.skaggs@idaxdata.com

UNIVERSITY WY NE
NE 47TH ST

Date: Tue, Oct 14, 2014
Count Period: 11:00 AM to 1:00 PM
Peak Hour: 12:00 PM to 1:00 PM



	HV %:	PHF
EB	2.4%	0.89
WB	1.8%	0.79
NB	6.8%	0.83
SB	8.2%	0.88
TOTAL	5.3%	0.89



Two-Hour Count Summaries

Interval Start	NE 47TH ST Eastbound			NE 47TH ST Westbound			UNIVERSITY WY NE Northbound			UNIVERSITY WY NE Southbound			15-min Total	Rolling One Hour
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
11:00 AM	4	12	8	2	9	3	12	12	0	0	16	3	81	
11:15 AM	6	17	9	3	13	2	10	23	2	2	19	5	111	
11:30 AM	3	11	8	3	12	3	14	29	7	4	23	1	118	
11:45 AM	8	15	10	2	10	0	8	26	3	2	24	9	117	427
12:00 PM	**6**	**17**	**7**	**4**	**28**	**2**	**12**	**20**	**4**	**4**	**30**	**11**	**145**	491
12:15 PM	**6**	**20**	**9**	**2**	**16**	**4**	**19**	**30**	**6**	**4**	**31**	**9**	**156**	536
12:30 PM	**6**	**12**	**12**	**3**	**26**	**6**	**20**	**34**	**4**	**1**	**31**	**9**	**164**	582
12:45 PM	**6**	**14**	**10**	**5**	**12**	**2**	**18**	**22**	**3**	**1**	**23**	**4**	**120**	**585**
Count Total	45	118	73	24	126	22	113	196	29	18	197	51	1,012	
Peak Hr	**24**	**63**	**38**	**14**	**82**	**14**	**69**	**106**	**17**	**10**	**115**	**33**	**585**	

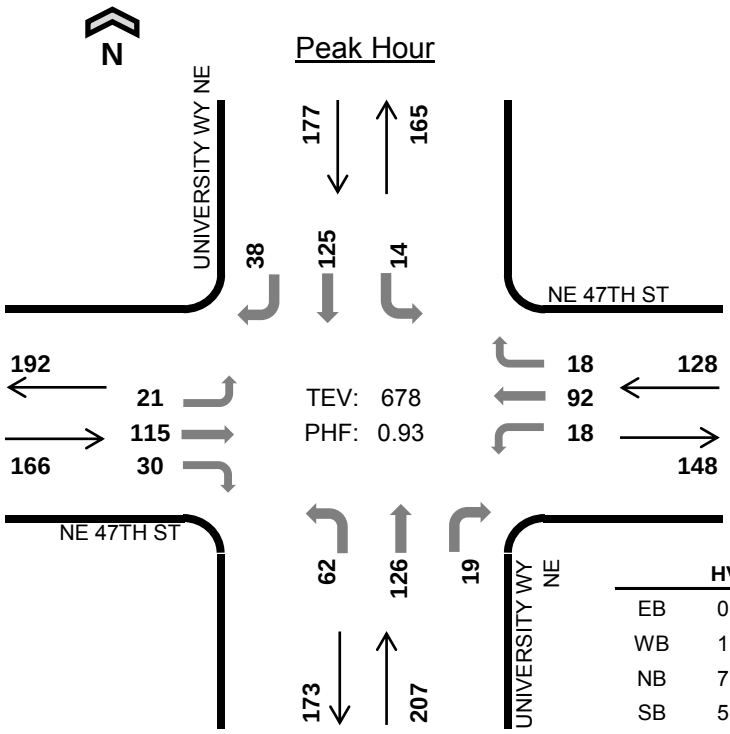
Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
11:00 AM	3	0	1	1	*5*	1	0	2	3	*6*	45	59	16	21	*141*
11:15 AM	1	0	3	3	*7*	2	3	0	4	*9*	48	70	22	22	*162*
11:30 AM	1	4	4	4	*13*	0	1	5	4	*10*	49	60	17	44	*170*
11:45 AM	1	1	5	2	*9*	1	0	1	6	*8*	66	69	30	33	*198*
12:00 PM	**1**	**1**	**1**	**5**	***8***	**1**	**2**	**3**	**4**	***10***	**59**	**75**	**25**	**46**	***205***
12:15 PM	**2**	**0**	**5**	**4**	***11***	**1**	**1**	**5**	**5**	***12***	**69**	**69**	**35**	**42**	***215***
12:30 PM	**0**	**1**	**4**	**1**	***6***	**1**	**3**	**7**	**3**	***14***	**66**	**93**	**23**	**57**	***239***
12:45 PM	**0**	**0**	**3**	**3**	***6***	**2**	**0**	**6**	**4**	***12***	**79**	**94**	**28**	**56**	***257***
Count Total	9	7	26	23	*65*	9	10	29	33	*81*	481	589	196	321	*1,587*
Peak Hr	**3**	**2**	**13**	**13**	***31***	**5**	**6**	**21**	**16**	***48***	**273**	**331**	**111**	**201**	***916***

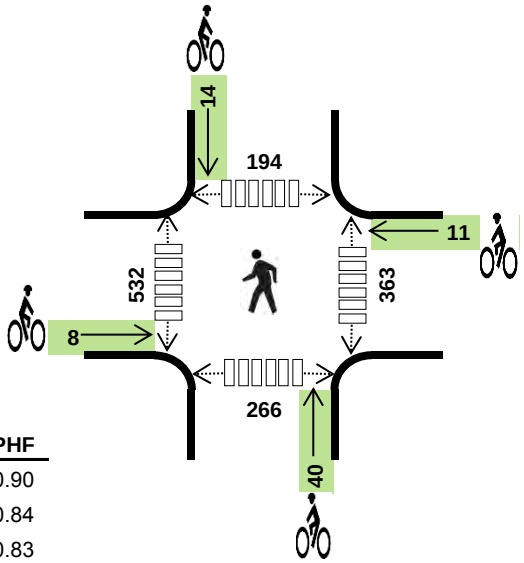
Mark Skaggs: 425 - 250 - 0777 mark.skaggs@idaxdata.com

UNIVERSITY WY NE
NE 47TH ST

Date: Tue, Oct 14, 2014
Count Period: 4:00 PM to 6:00 PM
Peak Hour: 5:00 PM to 6:00 PM



	HV %:	PHF
EB	0.6%	0.90
WB	1.6%	0.84
NB	7.2%	0.83
SB	5.1%	0.90
TOTAL	4.0%	0.93



Two-Hour Count Summaries

Interval Start	NE 47TH ST Eastbound			NE 47TH ST Westbound			UNIVERSITY WY NE Northbound			UNIVERSITY WY NE Southbound			15-min Total	Rolling One Hour
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
4:00 PM	4	29	7	4	19	2	12	19	7	2	35	5	145	
4:15 PM	1	26	12	3	25	2	14	16	5	7	40	7	158	
4:30 PM	2	30	6	1	28	4	25	31	6	3	29	6	171	
4:45 PM	3	27	7	0	24	2	21	18	3	2	32	9	148	622
5:00 PM	**3**	**28**	**6**	**5**	**24**	**4**	**17**	**26**	**4**	**2**	**38**	**5**	**162**	639
5:15 PM	**2**	**32**	**6**	**1**	**23**	**8**	**11**	**44**	**7**	**5**	**38**	**6**	**183**	664
5:30 PM	**10**	**27**	**6**	**6**	**29**	**3**	**18**	**27**	**5**	**3**	**31**	**15**	**180**	673
5:45 PM	**6**	**28**	**12**	**6**	**16**	**3**	**16**	**29**	**3**	**4**	**18**	**12**	**153**	**678**
Count Total	31	227	62	26	188	28	134	210	40	28	261	65	1,300	
Peak Hr	**21**	**115**	**30**	**18**	**92**	**18**	**62**	**126**	**19**	**14**	**125**	**38**	**678**	

Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
4:00 PM	1	1	2	7	*11*	1	3	4	2	*10*	90	109	49	52	*300*
4:15 PM	0	1	3	3	*7*	1	1	7	2	*11*	64	91	31	52	*238*
4:30 PM	0	0	3	4	*7*	0	3	4	3	*10*	101	97	40	53	*291*
4:45 PM	0	0	3	3	*6*	2	1	10	2	*15*	77	108	49	37	*271*
5:00 PM	**0**	**1**	**5**	**3**	***9***	**3**	**6**	**6**	**4**	***19***	**97**	**98**	**40**	**65**	***300***
5:15 PM	**0**	**0**	**4**	**2**	***6***	**2**	**0**	**11**	**3**	***16***	**92**	**139**	**39**	**59**	***329***
5:30 PM	**1**	**0**	**3**	**2**	***6***	**2**	**4**	**13**	**1**	***20***	**100**	**139**	**74**	**79**	***392***
5:45 PM	**0**	**1**	**3**	**2**	***6***	**1**	**1**	**10**	**6**	***18***	**74**	**156**	**41**	**63**	***334***
Count Total	2	4	26	26	*58*	12	19	65	23	*119*	695	937	363	460	*2,455*
Peak Hr	**1**	**2**	**15**	**9**	***27***	**8**	**11**	**40**	**14**	***73***	**363**	**532**	**194**	**266**	***1,355***

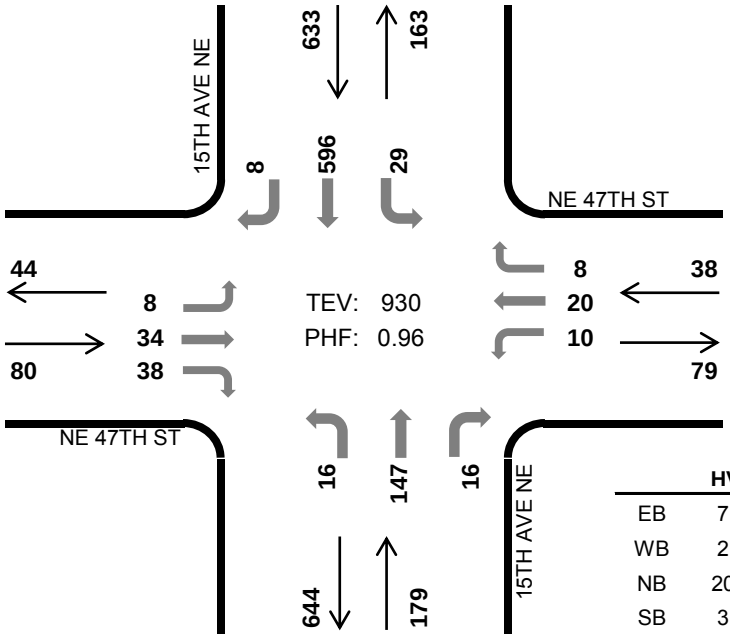
Mark Skaggs: 425 - 250 - 0777 mark.skaggs@idaxdata.com

15TH AVE NE
NE 47TH ST

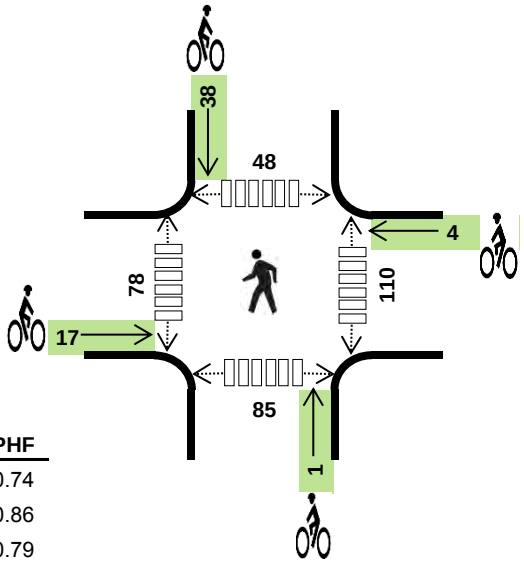
Date: Tue, Oct 14, 2014
Count Period: 7:00 AM to 9:00 AM
Peak Hour: 8:00 AM to 9:00 AM

N

Peak Hour



	HV %:	PHF
EB	7.5%	0.74
WB	2.6%	0.86
NB	20.1%	0.79
SB	3.9%	0.94
TOTAL	7.3%	0.96



Two-Hour Count Summaries

Interval Start	NE 47TH ST Eastbound			NE 47TH ST Westbound			15TH AVE NE Northbound			15TH AVE NE Southbound			15-min Total	Rolling One Hour
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
7:00 AM	0	1	4	3	2	1	1	14	3	7	58	1	95	
7:15 AM	2	4	2	2	0	0	2	21	2	9	82	0	126	
7:30 AM	0	3	4	5	4	5	4	29	0	9	130	2	195	
7:45 AM	2	1	7	2	2	0	3	42	3	8	154	3	227	643
8:00 AM	**1**	**9**	**10**	**3**	**4**	**1**	**3**	**36**	**1**	**5**	**141**	**2**	**216**	764
8:15 AM	**3**	**5**	**7**	**3**	**3**	**2**	**3**	**38**	**4**	**4**	**156**	**1**	**229**	867
8:30 AM	**1**	**9**	**8**	**2**	**6**	**3**	**9**	**42**	**6**	**10**	**143**	**3**	**242**	914
8:45 AM	**3**	**11**	**13**	**2**	**7**	**2**	**1**	**31**	**5**	**10**	**156**	**2**	**243**	**930**
Count Total	12	43	55	22	28	14	26	253	24	62	1,020	14	1,573	
Peak Hr	**8**	**34**	**38**	**10**	**20**	**8**	**16**	**147**	**16**	**29**	**596**	**8**	**930**	

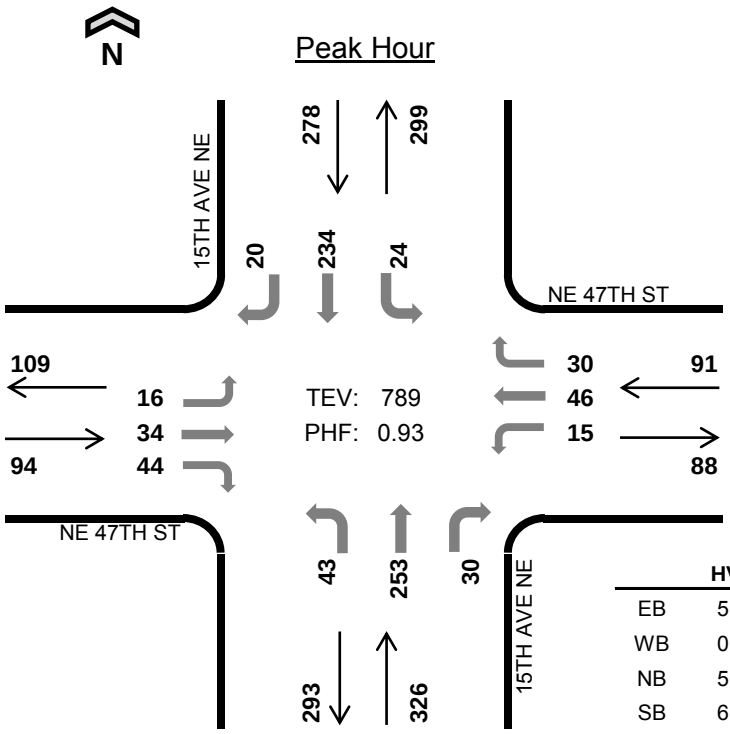
Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

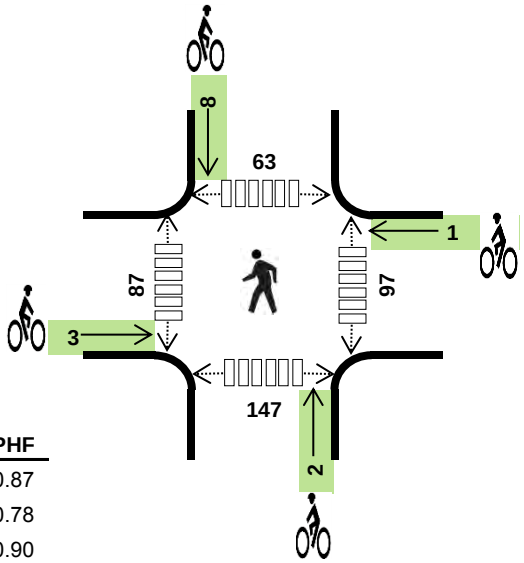
Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
7:00 AM	0	0	7	5	*12*	0	1	1	2	*4*	6	11	5	10	*32*
7:15 AM	0	0	7	4	*11*	0	1	0	2	*3*	6	12	3	7	*28*
7:30 AM	0	0	7	5	*12*	0	1	0	6	*7*	11	11	10	10	*42*
7:45 AM	0	0	10	7	*17*	4	0	0	7	*11*	17	11	5	16	*49*
8:00 AM	**0**	**0**	**8**	**8**	***16***	**3**	**1**	**1**	**6**	***11***	**34**	**23**	**14**	**30**	***101***
8:15 AM	**0**	**0**	**8**	**5**	***13***	**4**	**2**	**0**	**9**	***15***	**29**	**20**	**12**	**29**	***90***
8:30 AM	**2**	**0**	**13**	**7**	***22***	**3**	**0**	**0**	**11**	***14***	**21**	**14**	**11**	**11**	***57***
8:45 AM	**4**	**1**	**7**	**5**	***17***	**7**	**1**	**0**	**12**	***20***	**26**	**21**	**11**	**15**	***73***
Count Total	6	1	67	46	*120*	21	7	2	55	*85*	150	123	71	128	*472*
Peak Hr	**6**	**1**	**36**	**25**	***68***	**17**	**4**	**1**	**38**	***60***	**110**	**78**	**48**	**85**	***321***

Mark Skaggs: 425 - 250 - 0777 mark.skaggs@idaxdata.com

15TH AVE NE
NE 47TH ST

Date: Tue, Oct 14, 2014
Count Period: 11:00 AM to 1:00 PM
Peak Hour: 12:00 PM to 1:00 PM





	HV %:	PHF
EB	5.3%	0.87
WB	0.0%	0.78
NB	5.5%	0.90
SB	6.1%	0.87
TOTAL	5.1%	0.93

Two-Hour Count Summaries

Interval Start	NE 47TH ST Eastbound			NE 47TH ST Westbound			15TH AVE NE Northbound			15TH AVE NE Southbound			15-min Total	Rolling One Hour
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
11:00 AM	3	5	5	1	4	2	5	42	6	4	52	5	134	
11:15 AM	2	5	10	1	5	4	8	51	11	6	51	3	157	
11:30 AM	7	5	8	7	4	3	15	70	6	3	50	0	178	
11:45 AM	5	9	6	0	4	6	7	41	5	2	50	2	137	606
12:00 PM	**5**	**5**	**14**	**1**	**13**	**15**	**17**	**61**	**13**	**4**	**62**	**3**	**213**	685
12:15 PM	**2**	**14**	**11**	**4**	**10**	**6**	**8**	**70**	**5**	**5**	**69**	**6**	**210**	738
12:30 PM	**5**	**5**	**13**	**4**	**13**	**4**	**8**	**73**	**5**	**6**	**52**	**6**	**194**	754
12:45 PM	**4**	**10**	**6**	**6**	**10**	**5**	**10**	**49**	**7**	**9**	**51**	**5**	**172**	**789**
Count Total	33	58	73	24	63	45	78	457	58	39	437	30	1,395	
Peak Hr	**16**	**34**	**44**	**15**	**46**	**30**	**43**	**253**	**30**	**24**	**234**	**20**	**789**	

Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
11:00 AM	1	0	5	6	*12*	1	0	2	2	*5*	29	19	6	20	*74*
11:15 AM	1	0	3	5	*9*	0	2	2	4	*8*	20	10	10	17	*57*
11:30 AM	3	1	13	3	*20*	1	1	4	1	*7*	17	17	15	36	*85*
11:45 AM	2	2	1	5	*10*	0	0	1	0	*1*	26	13	14	36	*89*
12:00 PM	**1**	**0**	**8**	**5**	***14***	**1**	**0**	**0**	**0**	***1***	**41**	**19**	**19**	**34**	***113***
12:15 PM	**2**	**0**	**3**	**5**	***10***	**2**	**1**	**0**	**3**	***6***	**14**	**22**	**13**	**33**	***82***
12:30 PM	**2**	**0**	**4**	**4**	***10***	**0**	**0**	**2**	**0**	***2***	**20**	**33**	**15**	**39**	***107***
12:45 PM	**0**	**0**	**3**	**3**	***6***	**0**	**0**	**0**	**5**	***5***	**22**	**13**	**16**	**41**	***92***
Count Total	12	3	40	36	*91*	5	4	11	15	*35*	189	146	108	256	*699*
Peak Hr	**5**	**0**	**18**	**17**	***40***	**3**	**1**	**2**	**8**	***14***	**97**	**87**	**63**	**147**	***394***

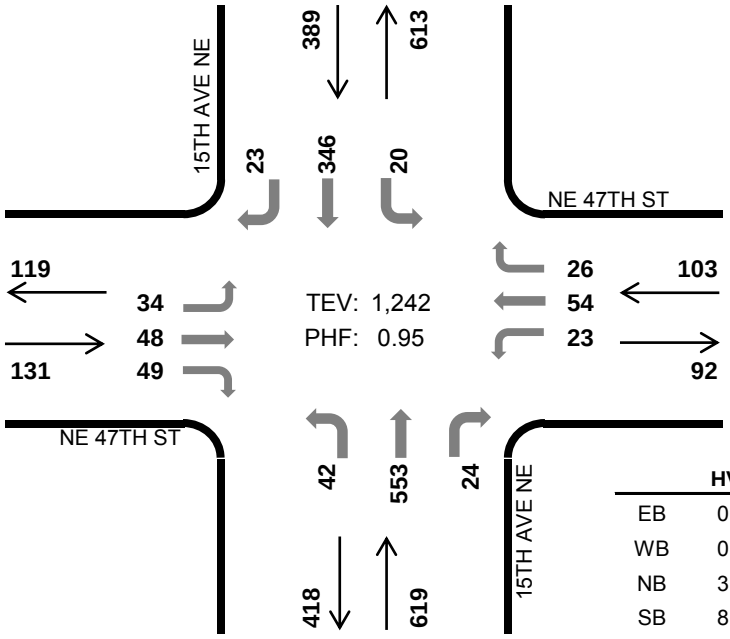
Mark Skaggs: 425 - 250 - 0777 mark.skaggs@idaxdata.com

15TH AVE NE
NE 47TH ST

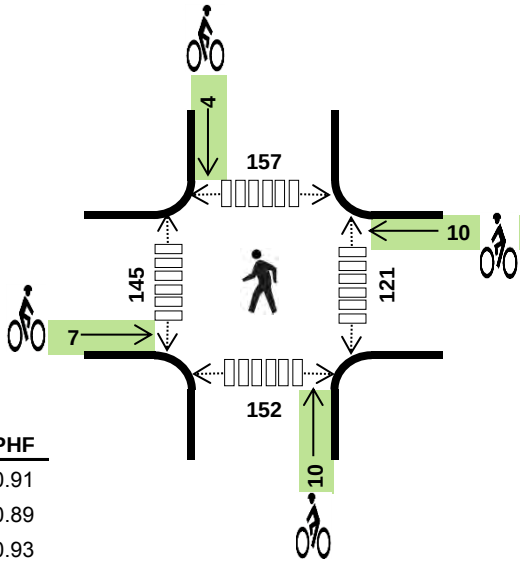
Date: Tue, Oct 14, 2014
Count Period: 4:00 PM to 6:00 PM
Peak Hour: 4:45 PM to 5:45 PM

N

Peak Hour



	HV %:	PHF
EB	0.0%	0.91
WB	0.0%	0.89
NB	3.6%	0.93
SB	8.2%	0.92
TOTAL	4.3%	0.95



Two-Hour Count Summaries

Interval Start	NE 47TH ST Eastbound			NE 47TH ST Westbound			15TH AVE NE Northbound			15TH AVE NE Southbound			15-min Total	Rolling One Hour
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
4:00 PM	6	11	12	4	10	10	14	110	8	7	70	9	271	
4:15 PM	10	13	16	8	15	8	9	112	7	3	65	4	270	
4:30 PM	7	11	16	6	14	8	11	112	9	1	86	7	288	
4:45 PM	**5**	**13**	**13**	**7**	**11**	**8**	**11**	**142**	**3**	**3**	**87**	**5**	**308**	1,137
5:00 PM	**14**	**6**	**12**	**4**	**12**	**5**	**12**	**122**	**5**	**2**	**85**	**6**	**285**	1,151
5:15 PM	**8**	**14**	**14**	**9**	**15**	**5**	**11**	**149**	**6**	**4**	**87**	**4**	**326**	1,207
5:30 PM	**7**	**15**	**10**	**3**	**16**	**8**	**8**	**140**	**10**	**11**	**87**	**8**	**323**	**1,242**
5:45 PM	10	15	8	2	7	6	11	93	9	8	67	7	243	1,177
Count Total	67	98	101	43	100	58	87	980	57	39	634	50	2,314	
Peak Hr	**34**	**48**	**49**	**23**	**54**	**26**	**42**	**553**	**24**	**20**	**346**	**23**	**1,242**	

Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
4:00 PM	0	1	6	6	*13*	0	2	3	1	*6*	21	17	27	39	*104*
4:15 PM	0	0	4	9	*13*	1	2	4	0	*7*	15	23	18	38	*94*
4:30 PM	0	0	4	7	*11*	1	3	4	1	*9*	25	32	45	32	*134*
4:45 PM	**0**	**0**	**7**	**11**	***18***	**3**	**1**	**4**	**2**	***10***	**27**	**20**	**35**	**39**	***121***
5:00 PM	**0**	**0**	**4**	**7**	***11***	**1**	**4**	**2**	**0**	***7***	**26**	**44**	**23**	**29**	***122***
5:15 PM	**0**	**0**	**5**	**9**	***14***	**1**	**1**	**3**	**2**	***7***	**32**	**43**	**37**	**47**	***159***
5:30 PM	**0**	**0**	**6**	**5**	***11***	**2**	**4**	**1**	**0**	***7***	**36**	**38**	**62**	**37**	***173***
5:45 PM	0	0	2	6	*8*	0	1	5	0	*6*	23	34	34	31	*122*
Count Total	0	1	38	60	*99*	9	18	26	6	*59*	205	251	281	292	*1,029*
Peak Hr	**0**	**0**	**22**	**32**	***54***	**7**	**10**	**10**	**4**	***31***	**121**	**145**	**157**	**152**	***575***

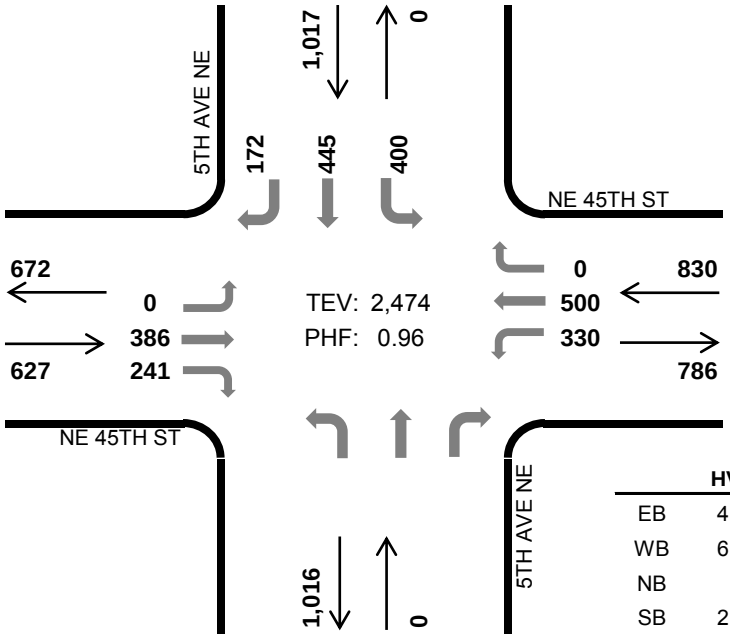
Mark Skaggs: 425 - 250 - 0777 mark.skaggs@idaxdata.com

5TH AVE NE
NE 45TH ST

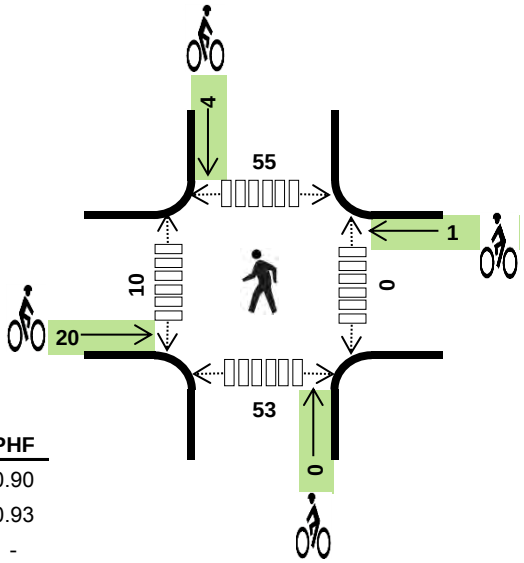
Date: Tue, Oct 14, 2014
Count Period: 7:00 AM to 9:00 AM
Peak Hour: 8:00 AM to 9:00 AM

N

Peak Hour



	HV %:	PHF
EB	4.0%	0.90
WB	6.1%	0.93
NB	-	-
SB	2.9%	0.91
TOTAL	4.2%	0.96



Two-Hour Count Summaries

Interval Start	NE 45TH ST Eastbound			NE 45TH ST Westbound			5TH AVE NE Northbound			5TH AVE NE Southbound			15-min Total	Rolling One Hour
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
7:00 AM	0	63	124	46	79	0	0	0	0	101	76	51	540	
7:15 AM	0	83	102	58	111	0	0	0	0	86	104	45	589	
7:30 AM	0	108	80	69	117	0	0	0	0	87	99	37	597	
7:45 AM	0	112	54	91	121	0	0	0	0	87	129	39	633	2,359
8:00 AM	**0**	**97**	**63**	**93**	**114**	**0**	**0**	**0**	**0**	**95**	**115**	**42**	**619**	2,438
8:15 AM	**0**	**82**	**62**	**83**	**128**	**0**	**0**	**0**	**0**	**87**	**98**	**41**	**581**	2,430
8:30 AM	**0**	**93**	**55**	**81**	**141**	**0**	**0**	**0**	**0**	**109**	**123**	**29**	**631**	2,464
8:45 AM	**0**	**114**	**61**	**73**	**117**	**0**	**0**	**0**	**0**	**109**	**109**	**60**	**643**	**2,474**
Count Total	0	752	601	594	928	0	0	0	0	761	853	344	4,833	
Peak Hr	**0**	**386**	**241**	**330**	**500**	**0**	**0**	**0**	**0**	**400**	**445**	**172**	**2,474**	

Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
7:00 AM	4	10	0	9	*23*	1	1	0	0	*2*	0	7	8	13	*28*
7:15 AM	8	11	0	4	*23*	0	0	0	1	*1*	0	5	9	21	*35*
7:30 AM	6	12	0	7	*25*	6	0	0	0	*6*	0	8	11	16	*35*
7:45 AM	7	9	0	8	*24*	6	0	0	2	*8*	0	5	7	15	*27*
8:00 AM	**7**	**10**	**0**	**3**	***20***	**3**	**1**	**0**	**2**	***6***	**0**	**2**	**14**	**15**	***31***
8:15 AM	**4**	**13**	**0**	**8**	***25***	**4**	**0**	**0**	**1**	***5***	**0**	**1**	**8**	**15**	***24***
8:30 AM	**8**	**16**	**0**	**9**	***33***	**7**	**0**	**0**	**0**	***7***	**0**	**3**	**19**	**15**	***37***
8:45 AM	**6**	**12**	**0**	**9**	***27***	**6**	**0**	**0**	**1**	***7***	**0**	**4**	**14**	**8**	***26***
Count Total	50	93	0	57	*200*	33	2	0	7	*42*	0	35	90	118	*243*
Peak Hr	**25**	**51**	**0**	**29**	***105***	**20**	**1**	**0**	**4**	***25***	**0**	**10**	**55**	**53**	***118***

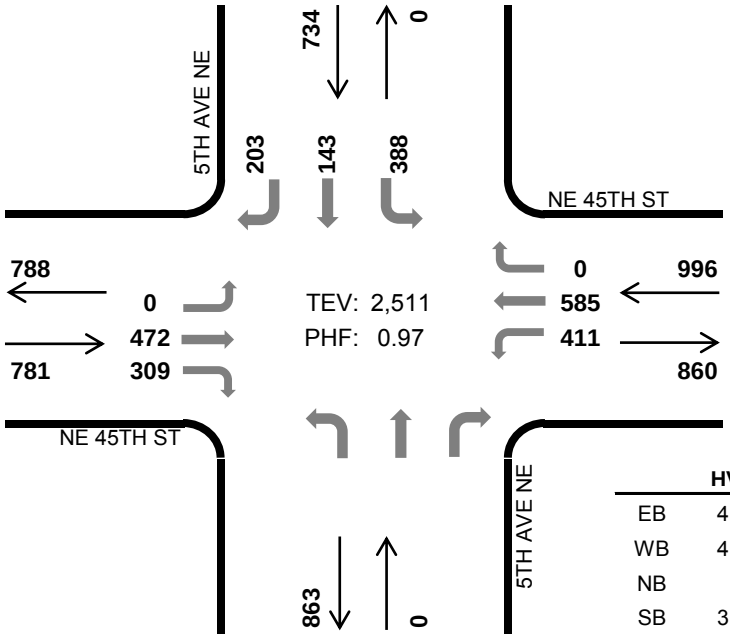
Mark Skaggs: 425 - 250 - 0777 mark.skaggs@idaxdata.com

5TH AVE NE
NE 45TH ST

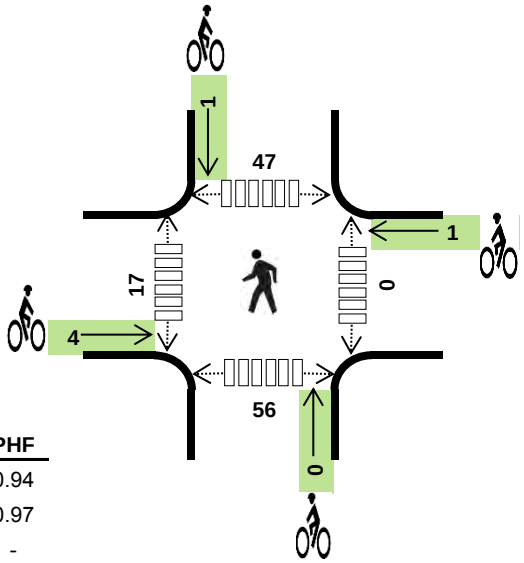
Date: Tue, Oct 14, 2014
Count Period: 11:00 AM to 1:00 PM
Peak Hour: 12:00 PM to 1:00 PM

N

Peak Hour



	HV %:	PHF
EB	4.1%	0.94
WB	4.8%	0.97
NB	-	-
SB	3.8%	0.90
TOTAL	4.3%	0.97



Two-Hour Count Summaries

Interval Start	NE 45TH ST Eastbound			NE 45TH ST Westbound			5TH AVE NE Northbound			5TH AVE NE Southbound			15-min Total	Rolling One Hour
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
11:00 AM	0	101	81	95	126	0	0	0	0	87	26	46	562	
11:15 AM	0	105	103	83	137	0	0	0	0	75	42	53	598	
11:30 AM	0	89	102	100	168	0	0	0	0	94	38	48	639	
11:45 AM	0	102	85	96	164	0	0	0	0	91	33	50	621	2,420
12:00 PM	**0**	**119**	**64**	**99**	**141**	**0**	**0**	**0**	**0**	**93**	**31**	**52**	**599**	2,457
12:15 PM	**0**	**125**	**80**	**104**	**145**	**0**	**0**	**0**	**0**	**87**	**35**	**62**	**638**	2,497
12:30 PM	**0**	**100**	**86**	**101**	**157**	**0**	**0**	**0**	**0**	**113**	**40**	**51**	**648**	2,506
12:45 PM	**0**	**128**	**79**	**107**	**142**	**0**	**0**	**0**	**0**	**95**	**37**	**38**	**626**	**2,511**
Count Total	0	869	680	785	1,180	0	0	0	0	735	282	400	4,931	
Peak Hr	**0**	**472**	**309**	**411**	**585**	**0**	**0**	**0**	**0**	**388**	**143**	**203**	**2,511**	

Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
11:00 AM	10	11	0	8	*29*	1	0	0	1	*2*	0	2	8	16	*26*
11:15 AM	11	7	0	4	*22*	0	1	0	0	*1*	0	4	7	6	*17*
11:30 AM	5	12	0	6	*23*	0	2	0	1	*3*	0	2	6	11	*19*
11:45 AM	13	13	0	8	*34*	4	0	0	0	*4*	0	4	14	11	*29*
12:00 PM	**8**	**13**	**0**	**8**	***29***	**1**	**1**	**0**	**1**	***3***	**0**	**3**	**7**	**14**	***24***
12:15 PM	**8**	**17**	**0**	**7**	***32***	**1**	**0**	**0**	**0**	***1***	**0**	**3**	**9**	**14**	***26***
12:30 PM	**10**	**6**	**0**	**8**	***24***	**0**	**0**	**0**	**0**	***0***	**0**	**6**	**22**	**18**	***46***
12:45 PM	**6**	**12**	**0**	**5**	***23***	**2**	**0**	**0**	**0**	***2***	**0**	**5**	**9**	**10**	***24***
Count Total	71	91	0	54	*216*	9	4	0	3	*16*	0	29	82	100	*211*
Peak Hr	**32**	**48**	**0**	**28**	***108***	**4**	**1**	**0**	**1**	***6***	**0**	**17**	**47**	**56**	***120***

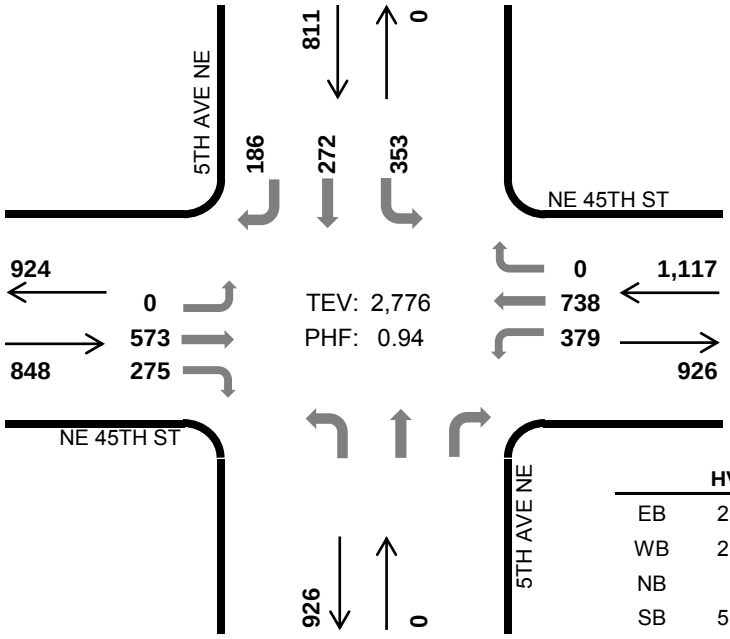
Mark Skaggs: 425 - 250 - 0777 mark.skaggs@idaxdata.com

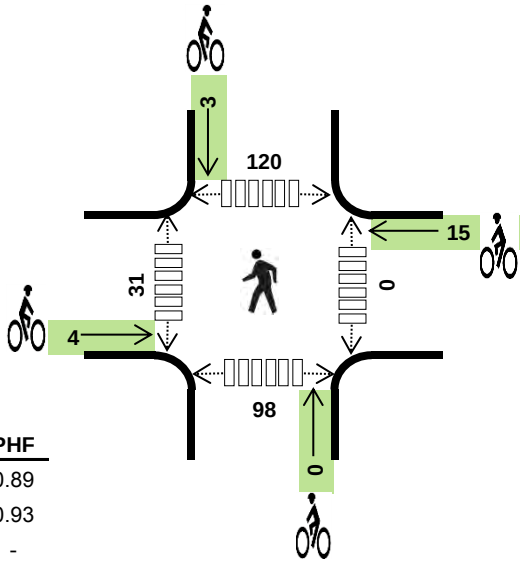
5TH AVE NE
NE 45TH ST

Date: Tue, Oct 14, 2014
Count Period: 4:00 PM to 6:00 PM
Peak Hour: 4:45 PM to 5:45 PM

N

Peak Hour





	HV %:	PHF
EB	2.4%	0.89
WB	2.1%	0.93
NB	-	-
SB	5.2%	0.87
TOTAL	3.1%	0.94

Two-Hour Count Summaries

Interval Start	NE 45TH ST Eastbound			NE 45TH ST Westbound			5TH AVE NE Northbound			5TH AVE NE Southbound			15-min Total	Rolling One Hour
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
4:00 PM	0	131	62	102	161	0	0	0	0	90	65	44	655	
4:15 PM	0	141	65	108	168	0	0	0	0	94	54	48	678	
4:30 PM	0	140	63	112	194	0	0	0	0	77	60	41	687	
4:45 PM	**0**	**126**	**68**	**96**	**169**	**0**	**0**	**0**	**0**	**71**	**69**	**34**	**633**	2,653
5:00 PM	**0**	**157**	**80**	**99**	**201**	**0**	**0**	**0**	**0**	**90**	**65**	**45**	**737**	2,735
5:15 PM	**0**	**142**	**75**	**90**	**180**	**0**	**0**	**0**	**0**	**90**	**64**	**50**	**691**	2,748
5:30 PM	**0**	**148**	**52**	**94**	**188**	**0**	**0**	**0**	**0**	**102**	**74**	**57**	**715**	**2,776**
5:45 PM	0	123	55	96	185	0	0	0	0	63	47	41	610	2,753
Count Total	0	1,108	520	797	1,446	0	0	0	0	677	498	360	5,406	
Peak Hr	**0**	**573**	**275**	**379**	**738**	**0**	**0**	**0**	**0**	**353**	**272**	**186**	**2,776**	

Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
4:00 PM	6	7	0	10	*23*	0	1	0	0	*1*	0	3	9	10	*22*
4:15 PM	7	6	0	10	*23*	0	2	0	0	*2*	0	1	22	15	*38*
4:30 PM	2	8	0	13	*23*	0	2	0	1	*3*	0	3	31	17	*51*
4:45 PM	**7**	**7**	**0**	**8**	***22***	**2**	**5**	**0**	**3**	***10***	**0**	**6**	**20**	**22**	***48***
5:00 PM	**4**	**6**	**0**	**13**	***23***	**0**	**4**	**0**	**0**	***4***	**0**	**8**	**29**	**27**	***64***
5:15 PM	**6**	**9**	**0**	**15**	***30***	**1**	**3**	**0**	**0**	***4***	**0**	**13**	**38**	**26**	***77***
5:30 PM	**3**	**2**	**0**	**6**	***11***	**1**	**3**	**0**	**0**	***4***	**0**	**4**	**33**	**23**	***60***
5:45 PM	4	6	0	5	*15*	2	3	0	0	*5*	0	6	27	19	*52*
Count Total	39	51	0	80	*170*	6	23	0	4	*33*	0	44	209	159	*412*
Peak Hr	**20**	**24**	**0**	**42**	***86***	**4**	**15**	**0**	**3**	***22***	**0**	**31**	**120**	**98**	***249***

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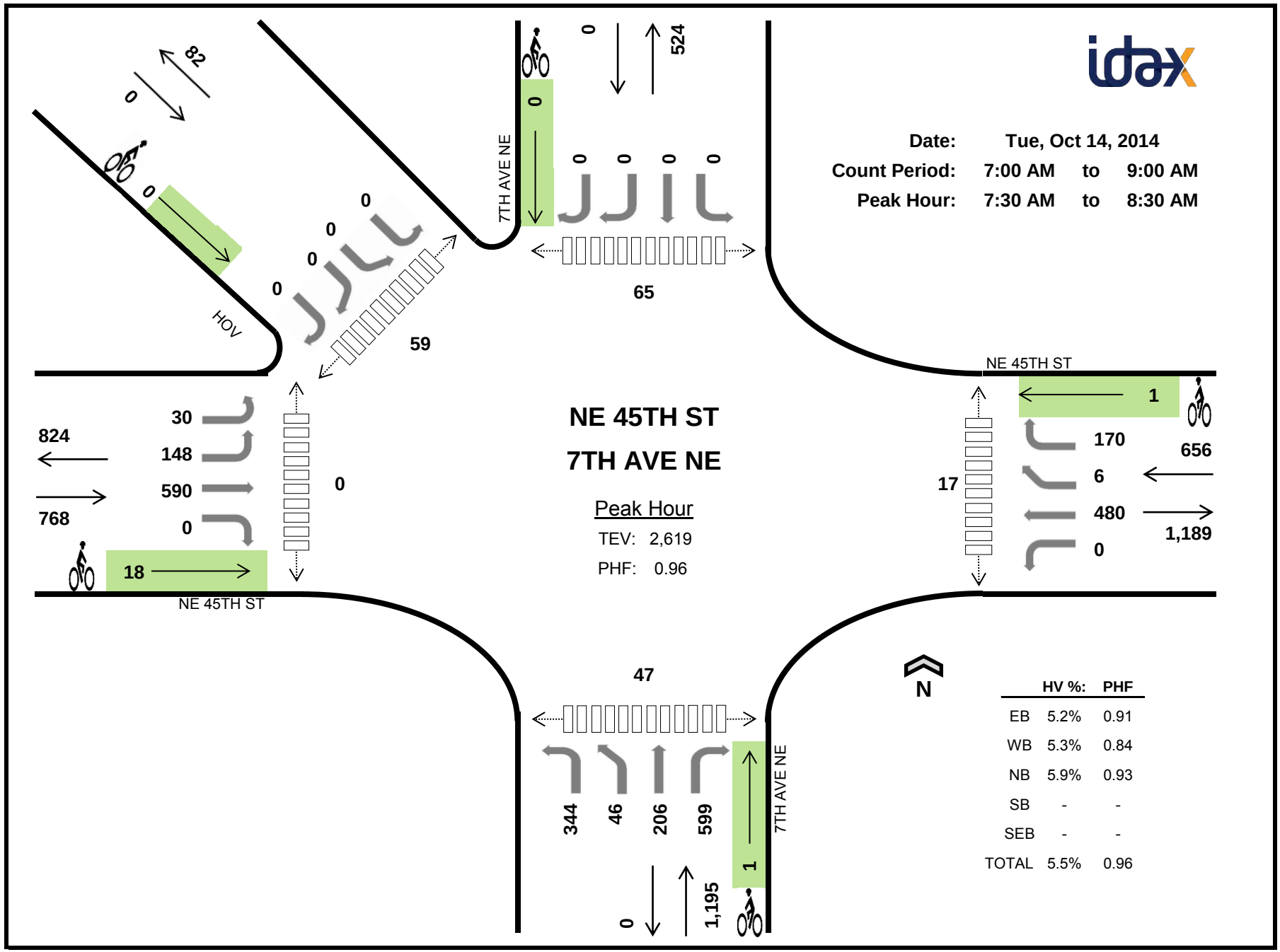

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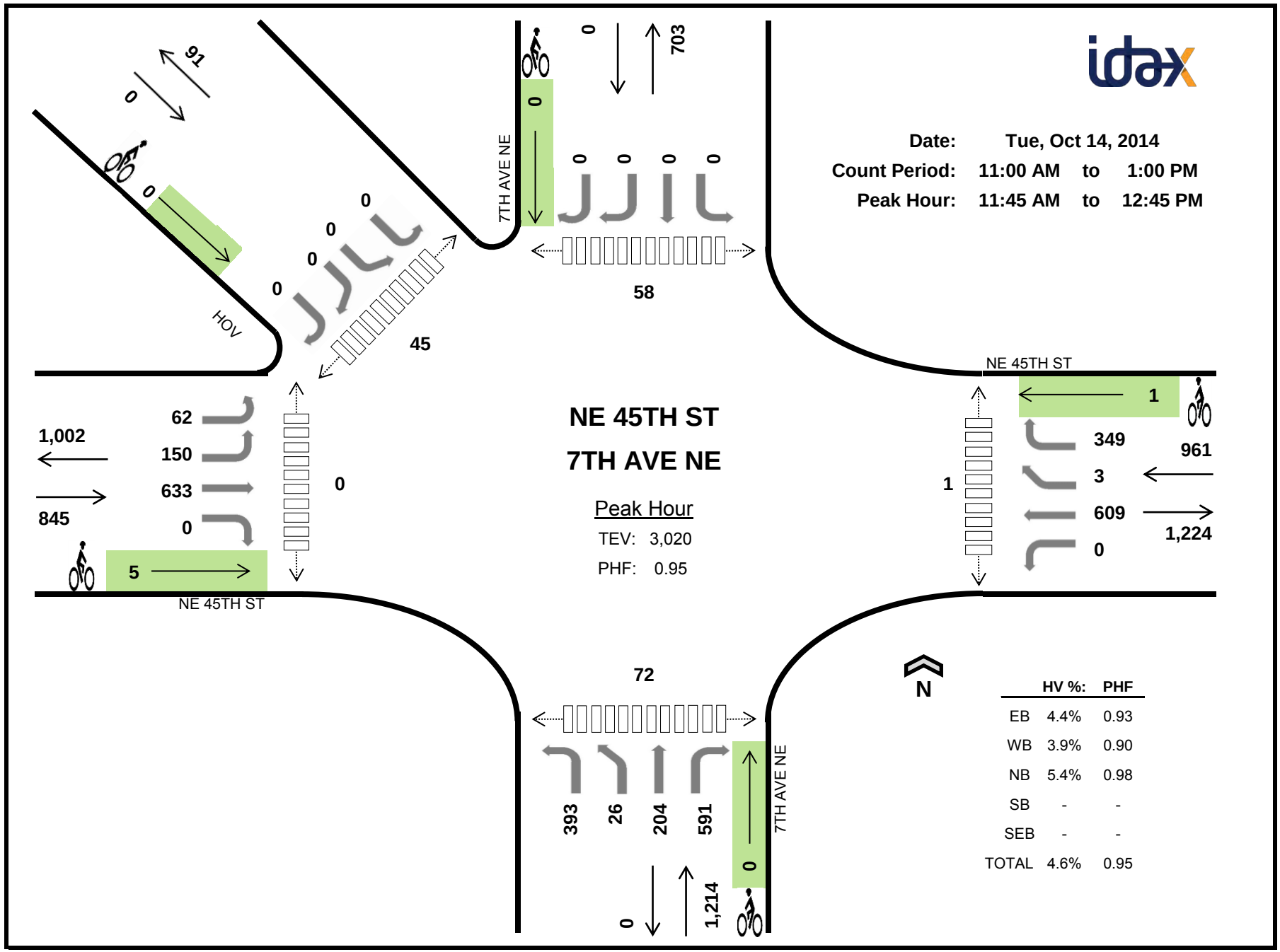
Two-Hour Count Summaries

Interval Start	NE 45TH ST Eastbound				NE 45TH ST Westbound				7TH AVE NE Northbound				7TH AVE NE Southbound				HOV Southeastbound				15-min Total	Rolling One Hour
	HL	LT	TH	RT	LT	TH	BR	RT	LT	BL	TH	RT	LT	TH	RT	HR	HL	BL	BR	HR		
7:00 AM	1	31	137	0	0	55	0	28	68	8	39	112	0	0	0	0	0	0	0	0	479	
7:15 AM	10	26	111	0	0	79	0	33	91	6	47	116	0	0	0	0	0	0	0	0	519	
7:30 AM	**18**	**39**	**153**	**0**	**0**	**107**	**2**	**48**	**76**	**20**	**49**	**152**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**664**	
7:45 AM	**4**	**39**	**159**	**0**	**0**	**134**	**0**	**62**	**91**	**9**	**45**	**142**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**685**	2,347
8:00 AM	**2**	**36**	**141**	**0**	**0**	**105**	**1**	**27**	**100**	**7**	**58**	**155**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**632**	2,500
8:15 AM	**6**	**34**	**137**	**0**	**0**	**134**	**3**	**33**	**77**	**10**	**54**	**150**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**638**	**2,619**
8:30 AM	5	18	166	0	0	126	3	44	89	3	51	135	1	0	0	0	0	0	0	0	641	2,596
8:45 AM	10	24	171	0	1	82	1	47	84	8	43	147	0	0	0	0	0	0	0	0	618	2,529
Count Total	56	247	1,175	0	1	822	10	322	676	71	386	1,109	1	0	0	0	0	0	0	0	4,876	
Peak Hr	**30**	**148**	**590**	**0**	**0**	**480**	**6**	**170**	**344**	**46**	**206**	**599**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2,619**	

Note: Two-hour count summary volumes include heavy vehicles but excludes bicycles in overall count.

Interval Start	Heavy Vehicle Totals						Bicycles						Pedestrians (Crossing Leg)					
	EB	WB	NB	SB	SEB	Total	EB	WB	NB	SB	SEB	Total	East	West	North	South	NW	Total
7:00 AM	12	7	18	0	0	*37*	1	1	0	0	0	*2*	0	0	11	0	8	*19*
7:15 AM	6	7	14	0	0	*27*	1	0	1	0	0	*2*	0	0	17	0	10	*27*
7:30 AM	**11**	**9**	**12**	**0**	**0**	***32***	**7**	**0**	**1**	**0**	**0**	***8***	**0**	**0**	**12**	**0**	**13**	***25***
7:45 AM	**11**	**11**	**13**	**0**	**0**	***35***	**5**	**0**	**0**	**0**	**0**	***5***	**0**	**0**	**13**	**0**	**12**	***25***
8:00 AM	**9**	**6**	**22**	**0**	**0**	***37***	**2**	**1**	**0**	**0**	**0**	***3***	**7**	**0**	**21**	**19**	**16**	***63***
8:15 AM	**9**	**9**	**23**	**0**	**0**	***41***	**4**	**0**	**0**	**0**	**0**	***4***	**10**	**0**	**19**	**28**	**18**	***75***
8:30 AM	12	12	15	0	0	*39*	4	0	0	0	0	*4*	7	0	22	19	18	*66*
8:45 AM	10	10	27	0	0	*47*	9	0	0	0	0	*9*	6	0	29	16	22	*73*
Count Total	80	71	144	0	0	*295*	33	2	2	0	0	*37*	30	0	144	82	117	*373*
Peak Hr	**40**	**35**	**70**	**0**	**0**	***145***	**18**	**1**	**1**	**0**	**0**	***20***	**17**	**0**	**65**	**47**	**59**	*188*



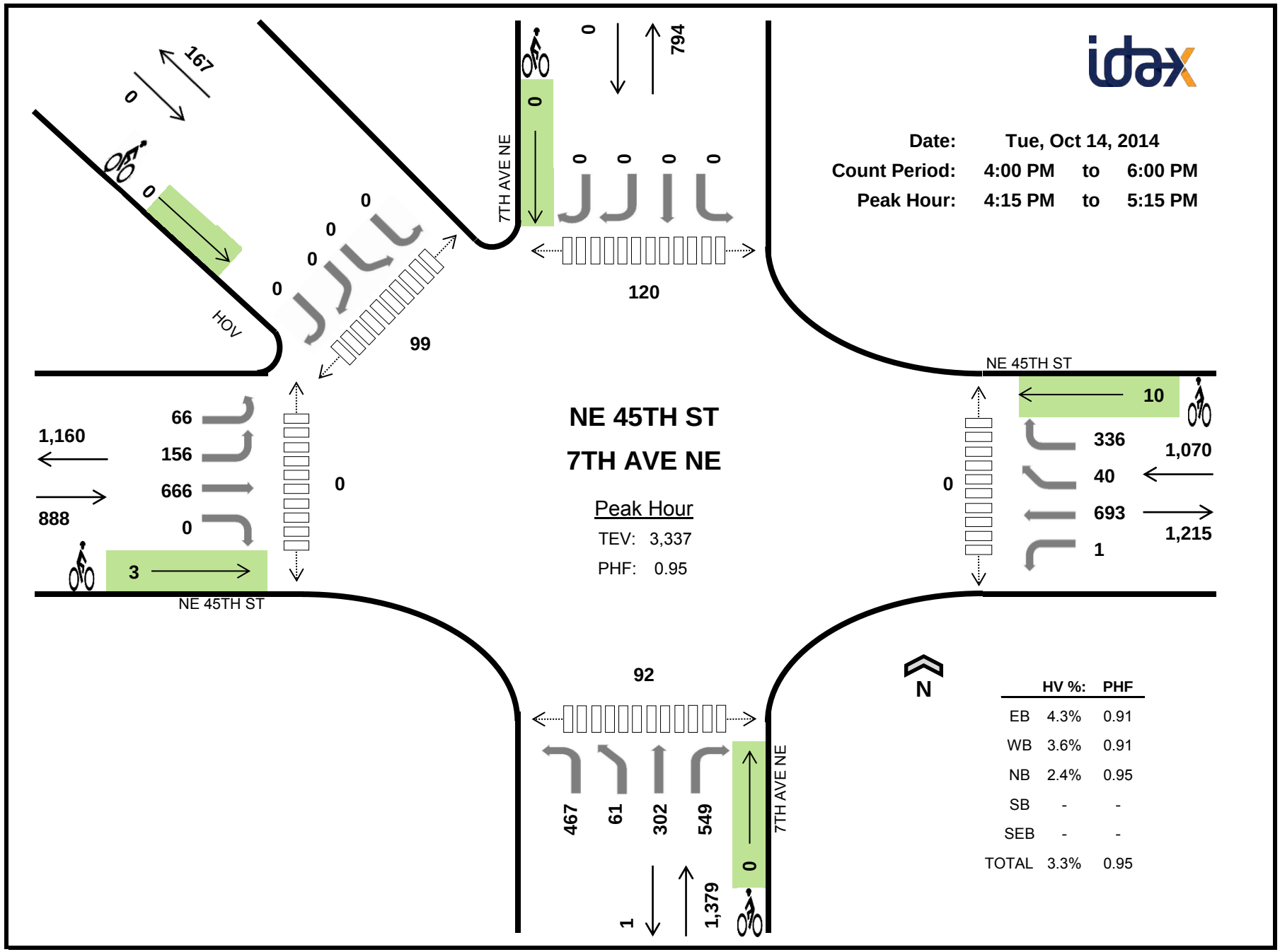
	HV %:	PHF
EB	4.4%	0.93
WB	3.9%	0.90
NB	5.4%	0.98
SB	-	-
SEB	-	-
TOTAL	4.6%	0.95

Two-Hour Count Summaries

Interval Start	NE 45TH ST Eastbound				NE 45TH ST Westbound				7TH AVE NE Northbound				7TH AVE NE Southbound				HOV Southeastbound				15-min Total	Rolling One Hour
	HL	LT	TH	RT	LT	TH	BR	RT	LT	BL	TH	RT	LT	TH	RT	HR	HL	BL	BR	HR		
11:00 AM	12	39	135	0	0	130	0	53	97	8	35	125	0	0	0	0	0	0	0	0	634	
11:15 AM	22	21	137	0	0	107	1	73	109	5	56	144	0	0	0	0	0	0	0	0	675	
11:30 AM	15	25	139	0	0	153	1	90	122	4	61	128	0	0	0	0	0	0	0	0	738	
11:45 AM	**19**	**25**	**155**	**0**	**0**	**155**	**1**	**88**	**105**	**5**	**58**	**143**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**754**	2,801
12:00 PM	**9**	**43**	**175**	**0**	**0**	**128**	**1**	**94**	**101**	**6**	**43**	**145**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**745**	2,912
12:15 PM	**16**	**42**	**146**	**0**	**0**	**155**	**1**	**71**	**99**	**7**	**55**	**138**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**730**	2,967
12:30 PM	**18**	**40**	**157**	**0**	**0**	**171**	**0**	**96**	**88**	**8**	**48**	**165**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**791**	**3,020**
12:45 PM	16	38	172	0	0	135	4	74	108	8	59	113	0	0	0	0	0	0	0	0	727	2,993
Count Total	127	273	1,216	0	0	1,134	9	639	829	51	415	1,101	0	0	0	0	0	0	0	0	5,794	
Peak Hr	**62**	**150**	**633**	**0**	**0**	**609**	**3**	**349**	**393**	**26**	**204**	**591**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**3,020**	

Note: Two-hour count summary volumes include heavy vehicles but excludes bicycles in overall count.

Interval Start	Heavy Vehicle Totals						Bicycles						Pedestrians (Crossing Leg)					
	EB	WB	NB	SB	SEB	Total	EB	WB	NB	SB	SEB	Total	East	West	North	South	NW	Total
11:00 AM	4	10	9	0	0	*23*	3	1	0	0	0	*4*	0	0	10	26	13	*49*
11:15 AM	5	10	14	0	0	*29*	2	1	0	0	0	*3*	0	0	8	8	11	*27*
11:30 AM	5	10	17	0	0	*32*	2	1	0	0	0	*3*	0	0	14	17	15	*46*
11:45 AM	**12**	**9**	**16**	**0**	**0**	***37***	**3**	**1**	**0**	**0**	**0**	***4***	**1**	**0**	**18**	**12**	**12**	***43***
12:00 PM	**9**	**7**	**13**	**0**	**0**	***29***	**1**	**0**	**0**	**0**	**0**	***1***	**0**	**0**	**10**	**19**	**6**	***35***
12:15 PM	**8**	**15**	**18**	**0**	**0**	***41***	**1**	**0**	**0**	**0**	**0**	***1***	**0**	**0**	**13**	**21**	**7**	***41***
12:30 PM	**8**	**6**	**19**	**0**	**0**	***33***	**0**	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**17**	**20**	**20**	***57***
12:45 PM	7	12	19	0	0	*38*	2	0	0	0	0	*2*	0	0	13	14	13	*40*
Count Total	58	79	125	0	0	*262*	14	4	0	0	0	*18*	1	0	103	137	97	*338*
Peak Hr	**37**	**37**	**66**	**0**	**0**	***140***	**5**	**1**	**0**	**0**	**0**	***6***	**1**	**0**	**58**	**72**	**45**	*176*



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Two-Hour Count Summaries

Interval Start	NE 45TH ST Eastbound				NE 45TH ST Westbound				7TH AVE NE Northbound				7TH AVE NE Southbound				HOV Southeastbound				15-min Total	Rolling One Hour
	HL	LT	TH	RT	LT	TH	BR	RT	LT	BL	TH	RT	LT	TH	RT	HR	HL	BL	BR	HR		
4:00 PM	25	45	161	0	0	153	7	56	104	14	75	133	0	0	0	0	0	0	0	0	773	
4:15 PM	**15**	**42**	**164**	**0**	**0**	**167**	**15**	**84**	**114**	**13**	**79**	**144**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**837**	
4:30 PM	**11**	**38**	**175**	**0**	**0**	**184**	**10**	**99**	**124**	**13**	**56**	**116**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**826**	
4:45 PM	**19**	**34**	**146**	**0**	**1**	**153**	**6**	**75**	**114**	**19**	**83**	**148**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**798**	3,234
5:00 PM	**21**	**42**	**181**	**0**	**0**	**189**	**9**	**78**	**115**	**16**	**84**	**141**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**876**	**3,337**
5:15 PM	22	40	172	0	0	154	9	77	115	9	74	153	0	0	0	0	0	0	0	0	825	3,325
5:30 PM	22	38	184	0	0	178	7	65	103	13	67	141	0	0	0	0	0	0	0	0	818	3,317
5:45 PM	10	46	140	0	0	159	4	74	108	10	63	133	0	0	0	0	0	0	0	0	747	3,266
Count Total	145	325	1,323	0	1	1,337	67	608	897	107	581	1,109	0	0	0	0	0	0	0	0	6,500	
Peak Hr	**66**	**156**	**666**	**0**	**1**	**693**	**40**	**336**	**467**	**61**	**302**	**549**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**3,337**	

Note: Two-hour count summary volumes include heavy vehicles but excludes bicycles in overall count.

Interval Start	Heavy Vehicle Totals						Bicycles						Pedestrians (Crossing Leg)					
	EB	WB	NB	SB	SEB	Total	EB	WB	NB	SB	SEB	Total	East	West	North	South	NW	Total
4:00 PM	9	14	8	0	0	*31*	0	0	0	0	0	*0*	0	0	14	23	11	*48*
4:15 PM	**11**	**12**	**4**	**0**	**0**	***27***	**0**	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**27**	**13**	**21**	***61***
4:30 PM	**10**	**10**	**9**	**0**	**0**	***29***	**0**	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**34**	**19**	**28**	***81***
4:45 PM	**8**	**11**	**13**	**0**	**0**	***32***	**3**	**6**	**0**	**0**	**0**	***9***	**0**	**0**	**24**	**24**	**26**	***74***
5:00 PM	**9**	**6**	**7**	**0**	**0**	***22***	**0**	**4**	**0**	**0**	**0**	***4***	**0**	**0**	**35**	**36**	**24**	***95***
5:15 PM	8	10	7	0	0	*25*	0	1	0	0	0	*1*	0	0	55	26	53	*134*
5:30 PM	6	8	9	0	0	*23*	2	3	0	0	0	*5*	0	0	28	36	31	*95*
5:45 PM	3	7	8	0	0	*18*	0	2	0	0	0	*2*	0	0	27	24	23	*74*
Count Total	64	78	65	0	0	*207*	5	16	0	0	0	*21*	0	0	244	201	217	*662*
Peak Hr	**38**	**39**	**33**	**0**	**0**	***110***	**3**	**10**	**0**	**0**	**0**	***13***	**0**	**0**	**120**	**92**	**99**	*311*

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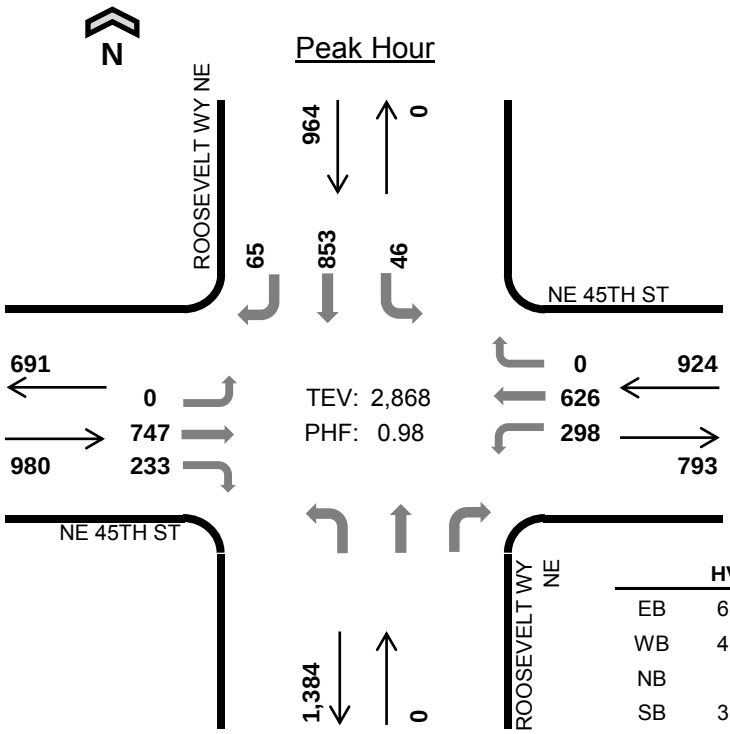
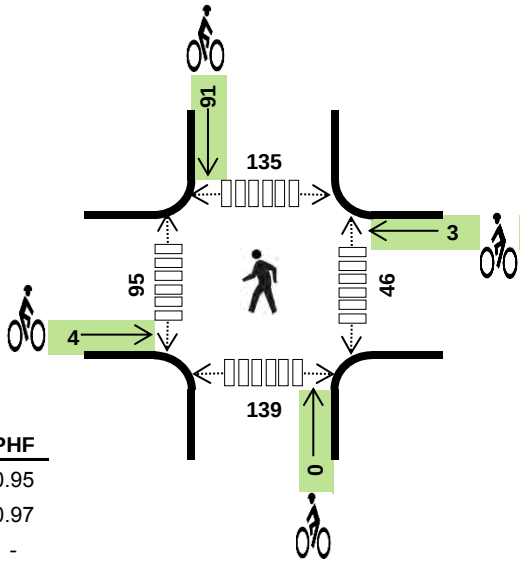
ROOSEVELT WY NE
NE 45TH ST

Date: Tue, Oct 14, 2014
Count Period: 7:00 AM to 9:00 AM
Peak Hour: 7:45 AM to 8:45 AM



	HV %:	PHF
EB	6.3%	0.95
WB	4.4%	0.97
NB	-	-
SB	3.4%	0.96
TOTAL	4.7%	0.98



Two-Hour Count Summaries

Interval Start	NE 45TH ST Eastbound			NE 45TH ST Westbound			ROOSEVELT WY NE Northbound			ROOSEVELT WY NE Southbound			15-min Total	Rolling One Hour
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
7:00 AM	0	149	60	24	68	0	0	0	0	10	84	10	405	
7:15 AM	0	146	44	47	92	0	0	0	0	7	144	13	493	
7:30 AM	0	162	68	41	140	0	0	0	0	10	217	12	650	
7:45 AM	**0**	**187**	**62**	**64**	**174**	**0**	**0**	**0**	**0**	**14**	**216**	**16**	**733**	2,281
8:00 AM	**0**	**193**	**55**	**73**	**149**	**0**	**0**	**0**	**0**	**9**	**219**	**23**	**721**	2,597
8:15 AM	**0**	**179**	**45**	**85**	**141**	**0**	**0**	**0**	**0**	**14**	**203**	**14**	**681**	2,785
8:30 AM	**0**	**188**	**71**	**76**	**162**	**0**	**0**	**0**	**0**	**9**	**215**	**12**	**733**	**2,868**
8:45 AM	0	200	49	52	118	0	0	0	0	21	200	16	656	2,791
Count Total	0	1,404	454	462	1,044	0	0	0	0	94	1,498	116	5,072	
Peak Hr	**0**	**747**	**233**	**298**	**626**	**0**	**0**	**0**	**0**	**46**	**853**	**65**	**2,868**	

Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
7:00 AM	18	9	0	2	*29*	0	1	0	13	*14*	11	13	19	20	*63*
7:15 AM	12	5	0	4	*21*	0	2	0	28	*30*	7	22	23	30	*82*
7:30 AM	14	12	0	5	*31*	1	0	0	21	*22*	21	22	26	24	*93*
7:45 AM	**17**	**11**	**0**	**3**	***31***	**2**	**1**	**0**	**24**	***27***	**14**	**21**	**27**	**27**	***89***
8:00 AM	**14**	**6**	**0**	**12**	***32***	**1**	**1**	**0**	**17**	***19***	**14**	**31**	**37**	**42**	***124***
8:15 AM	**17**	**10**	**0**	**9**	***36***	**1**	**0**	**0**	**25**	***26***	**10**	**23**	**40**	**42**	***115***
8:30 AM	**14**	**14**	**0**	**9**	***37***	**0**	**1**	**0**	**25**	***26***	**8**	**20**	**31**	**28**	***87***
8:45 AM	18	9	0	9	*36*	0	0	0	30	*30*	13	25	31	40	*109*
Count Total	124	76	0	53	*253*	5	6	0	183	*194*	98	177	234	253	*762*
Peak Hr	**62**	**41**	**0**	**33**	***136***	**4**	**3**	**0**	**91**	***98***	**46**	**95**	**135**	**139**	***415***

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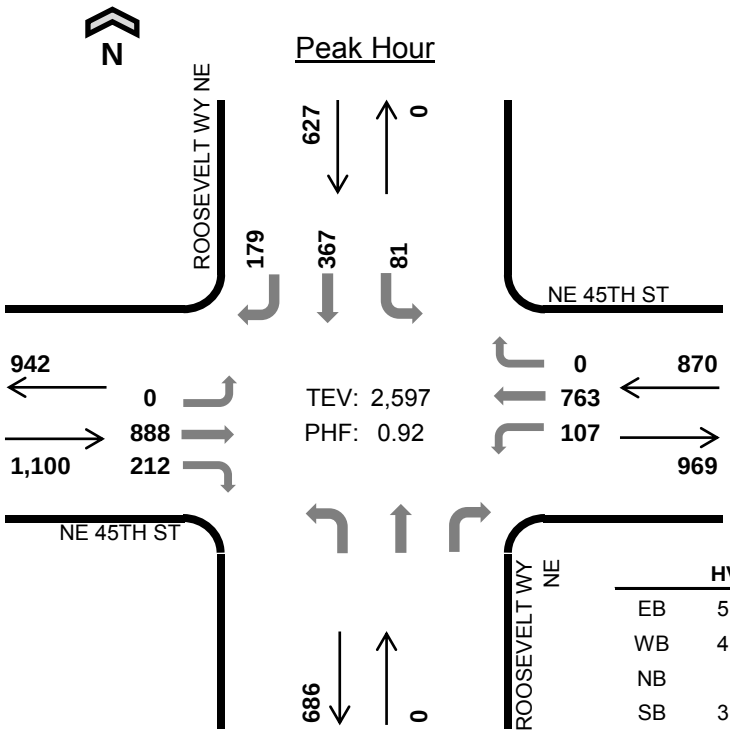
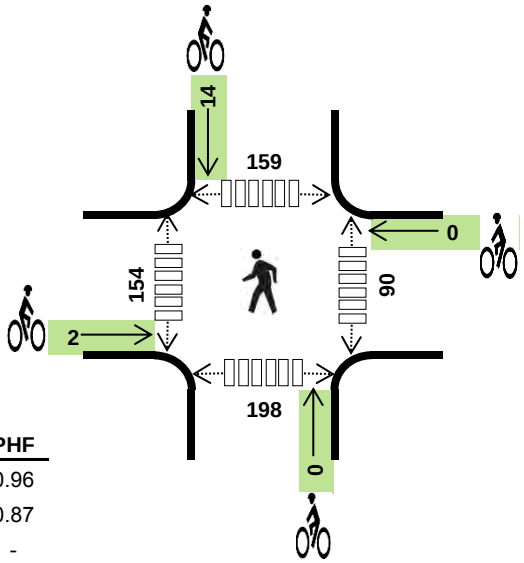
ROOSEVELT WY NE
NE 45TH ST

Date: Tue, Oct 14, 2014
Count Period: 11:00 AM to 1:00 PM
Peak Hour: 12:00 PM to 1:00 PM



	HV %:	PHF
EB	5.1%	0.96
WB	4.4%	0.87
NB	-	-
SB	3.0%	0.91
TOTAL	4.4%	0.92



Two-Hour Count Summaries

Interval Start	NE 45TH ST Eastbound			NE 45TH ST Westbound			ROOSEVELT WY NE Northbound			ROOSEVELT WY NE Southbound			15-min Total	Rolling One Hour
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
11:00 AM	0	187	51	23	156	0	0	0	0	24	86	27	554	
11:15 AM	0	217	52	15	158	0	0	0	0	17	92	29	580	
11:30 AM	0	197	50	19	207	0	0	0	0	15	86	36	610	
11:45 AM	0	211	46	20	197	0	0	0	0	15	85	41	615	2,359
12:00 PM	**0**	**234**	**50**	**27**	**167**	**0**	**0**	**0**	**0**	**26**	**77**	**37**	**618**	2,423
12:15 PM	**0**	**204**	**44**	**20**	**202**	**0**	**0**	**0**	**0**	**21**	**86**	**47**	**624**	2,467
12:30 PM	**0**	**220**	**63**	**31**	**220**	**0**	**0**	**0**	**0**	**16**	**111**	**45**	**706**	2,563
12:45 PM	**0**	**230**	**55**	**29**	**174**	**0**	**0**	**0**	**0**	**18**	**93**	**50**	**649**	**2,597**
Count Total	0	1,700	411	184	1,481	0	0	0	0	152	716	312	4,956	
Peak Hr	**0**	**888**	**212**	**107**	**763**	**0**	**0**	**0**	**0**	**81**	**367**	**179**	**2,597**	

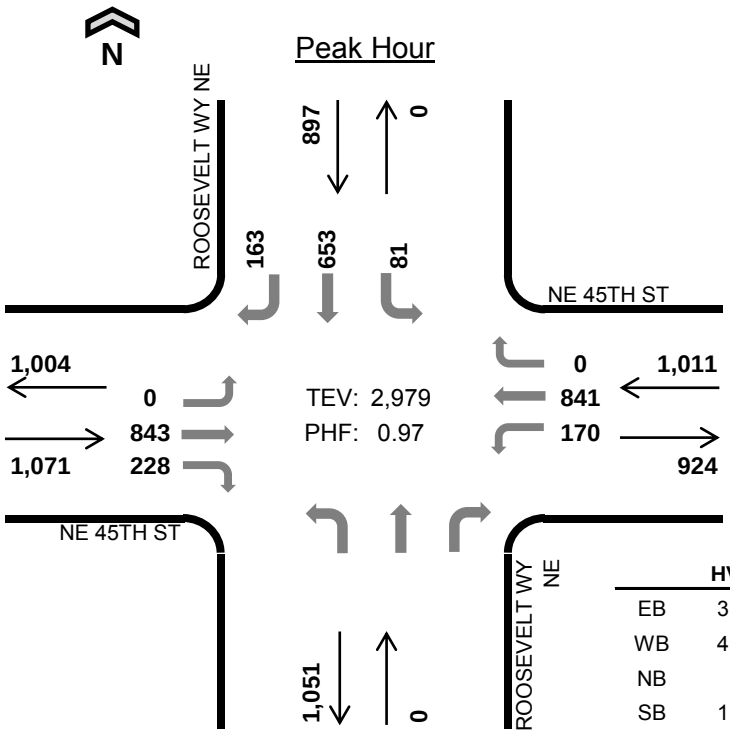
Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
11:00 AM	8	8	0	5	*21*	1	2	0	2	*5*	13	24	30	35	*102*
11:15 AM	11	9	0	2	*22*	1	2	0	6	*9*	6	33	37	22	*98*
11:30 AM	14	10	0	5	*29*	0	2	0	2	*4*	15	38	43	31	*127*
11:45 AM	13	10	0	5	*28*	1	0	0	5	*6*	17	33	36	24	*110*
12:00 PM	**11**	**7**	**0**	**5**	***23***	**0**	**0**	**0**	**7**	***7***	**31**	**36**	**41**	**50**	***158***
12:15 PM	**12**	**17**	**0**	**4**	***33***	**1**	**0**	**0**	**0**	***1***	**22**	**42**	**41**	**53**	***158***
12:30 PM	**21**	**6**	**0**	**5**	***32***	**0**	**0**	**0**	**3**	***3***	**16**	**41**	**45**	**45**	***147***
12:45 PM	**12**	**8**	**0**	**5**	***25***	**1**	**0**	**0**	**4**	***5***	**21**	**35**	**32**	**50**	***138***
Count Total	102	75	0	36	*213*	5	6	0	29	*40*	141	282	305	310	*1,038*
Peak Hr	**56**	**38**	**0**	**19**	***113***	**2**	**0**	**0**	**14**	***16***	**90**	**154**	**159**	**198**	***601***

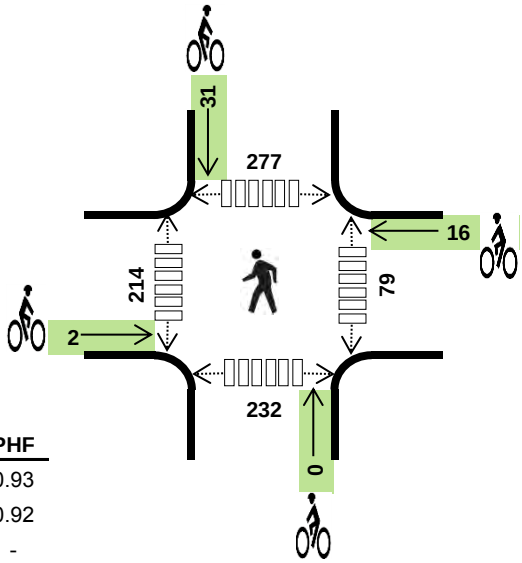
Mark Skaggs: 425 - 250 - 0777 mark.skaggs@idaxdata.com

ROOSEVELT WY NE
NE 45TH ST

Date: Tue, Oct 14, 2014
Count Period: 4:00 PM to 6:00 PM
Peak Hour: 4:45 PM to 5:45 PM



	HV %:	PHF
EB	3.4%	0.93
WB	4.1%	0.92
NB	-	-
SB	1.1%	0.91
TOTAL	2.9%	0.97



Two-Hour Count Summaries

Interval Start	NE 45TH ST Eastbound			NE 45TH ST Westbound			ROOSEVELT WY NE Northbound			ROOSEVELT WY NE Southbound			15-min Total	Rolling One Hour
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
4:00 PM	0	198	60	29	178	0	0	0	0	19	175	34	693	
4:15 PM	0	201	55	50	249	0	0	0	0	12	172	40	779	
4:30 PM	0	187	51	48	226	0	0	0	0	16	146	33	707	
4:45 PM	**0**	**193**	**67**	**43**	**181**	**0**	**0**	**0**	**0**	**21**	**173**	**52**	**730**	2,909
5:00 PM	**0**	**200**	**58**	**44**	**231**	**0**	**0**	**0**	**0**	**15**	**156**	**35**	**739**	2,955
5:15 PM	**0**	**225**	**62**	**37**	**209**	**0**	**0**	**0**	**0**	**22**	**158**	**31**	**744**	2,920
5:30 PM	**0**	**225**	**41**	**46**	**220**	**0**	**0**	**0**	**0**	**23**	**166**	**45**	**766**	**2,979**
5:45 PM	0	222	30	36	189	0	0	0	0	16	132	36	661	2,910
Count Total	0	1,651	424	333	1,683	0	0	0	0	144	1,278	306	5,819	
Peak Hr	**0**	**843**	**228**	**170**	**841**	**0**	**0**	**0**	**0**	**81**	**653**	**163**	**2,979**	

Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
4:00 PM	10	14	0	5	*29*	0	0	0	4	*4*	18	39	46	31	*134*
4:15 PM	10	11	0	6	*27*	0	1	0	4	*5*	26	44	52	31	*153*
4:30 PM	12	13	0	4	*29*	1	3	0	6	*10*	20	68	90	50	*228*
4:45 PM	**8**	**12**	**0**	**5**	***25***	**2**	**5**	**0**	**5**	***12***	**20**	**59**	**52**	**51**	***182***
5:00 PM	**11**	**6**	**0**	**2**	***19***	**0**	**4**	**0**	**3**	***7***	**22**	**45**	**99**	**60**	***226***
5:15 PM	**9**	**15**	**0**	**0**	***24***	**0**	**3**	**0**	**12**	***15***	**13**	**62**	**51**	**55**	***181***
5:30 PM	**8**	**8**	**0**	**3**	***19***	**0**	**4**	**0**	**11**	***15***	**24**	**48**	**75**	**66**	***213***
5:45 PM	5	7	0	2	*14*	0	3	0	1	*4*	17	43	56	36	*152*
Count Total	73	86	0	27	*186*	3	23	0	46	*72*	160	408	521	380	*1,469*
Peak Hr	**36**	**41**	**0**	**10**	***87***	**2**	**16**	**0**	**31**	***49***	**79**	**214**	**277**	**232**	***802***

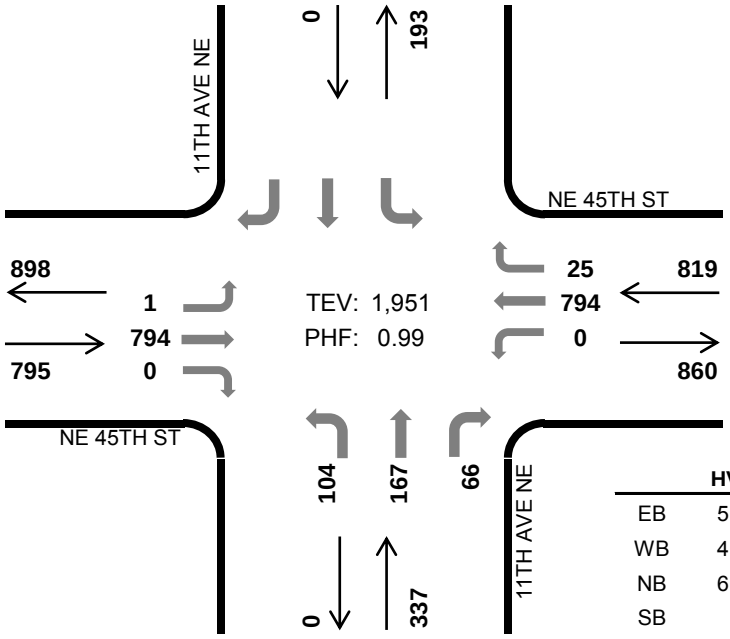
Mark Skaggs: 425 - 250 - 0777 mark.skaggs@idaxdata.com

11TH AVE NE
NE 45TH ST

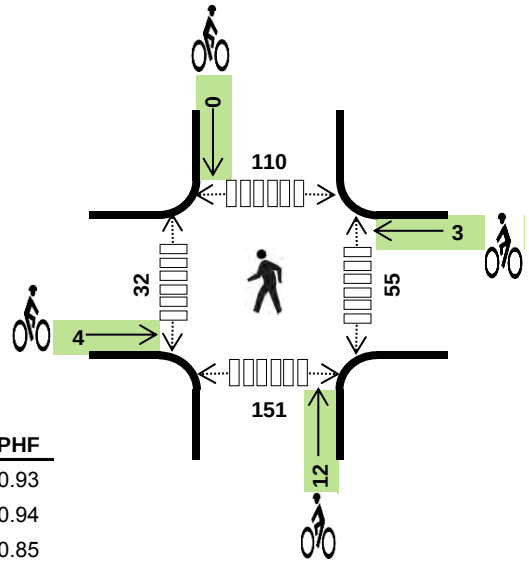
Date: Tue, Oct 14, 2014
Count Period: 7:00 AM to 9:00 AM
Peak Hour: 7:45 AM to 8:45 AM

N

Peak Hour



	HV %:	PHF
EB	5.9%	0.93
WB	4.4%	0.94
NB	6.5%	0.85
SB	-	-
TOTAL	5.4%	0.99



Two-Hour Count Summaries

Interval Start	NE 45TH ST Eastbound			NE 45TH ST Westbound			11TH AVE NE Northbound			11TH AVE NE Southbound			15-min Total	Rolling One Hour
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
7:00 AM	0	156	0	0	76	4	18	20	11	0	0	0	285	
7:15 AM	0	150	0	0	106	5	35	29	11	0	0	0	336	
7:30 AM	0	165	0	0	161	7	28	28	12	0	0	0	401	
7:45 AM	**1**	**195**	**0**	**0**	**213**	**5**	**30**	**32**	**12**	**0**	**0**	**0**	**488**	1,510
8:00 AM	**0**	**213**	**0**	**0**	**191**	**7**	**19**	**49**	**15**	**0**	**0**	**0**	**494**	1,719
8:15 AM	**0**	**194**	**0**	**0**	**202**	**7**	**22**	**45**	**14**	**0**	**0**	**0**	**484**	1,867
8:30 AM	**0**	**192**	**0**	**0**	**188**	**6**	**33**	**41**	**25**	**0**	**0**	**0**	**485**	**1,951**
8:45 AM	0	209	0	0	120	9	44	47	31	0	0	0	460	1,923
Count Total	1	1,474	0	0	1,257	50	229	291	131	0	0	0	3,433	
Peak Hr	**1**	**794**	**0**	**0**	**794**	**25**	**104**	**167**	**66**	**0**	**0**	**0**	**1,951**	

Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
7:00 AM	13	10	4	0	*27*	0	1	2	0	*3*	7	3	7	20	*37*
7:15 AM	7	7	6	0	*20*	0	1	3	0	*4*	5	6	15	32	*58*
7:30 AM	10	13	2	0	*25*	2	0	4	0	*6*	7	7	15	24	*53*
7:45 AM	**10**	**11**	**5**	**0**	***26***	**3**	**2**	**3**	**0**	***8***	**3**	**9**	**18**	**26**	***56***
8:00 AM	**17**	**5**	**4**	**0**	***26***	**1**	**0**	**1**	**0**	***2***	**13**	**4**	**31**	**39**	***87***
8:15 AM	**12**	**9**	**8**	**0**	***29***	**0**	**0**	**0**	**0**	***0***	**27**	**10**	**31**	**52**	***120***
8:30 AM	**8**	**11**	**5**	**0**	***24***	**0**	**1**	**8**	**0**	***9***	**12**	**9**	**30**	**34**	***85***
8:45 AM	9	7	3	0	*19*	1	1	5	0	*7*	16	10	34	32	*92*
Count Total	86	73	37	0	*196*	7	6	26	0	*39*	90	58	181	259	*588*
Peak Hr	**47**	**36**	**22**	**0**	***105***	**4**	**3**	**12**	**0**	***19***	**55**	**32**	**110**	**151**	***348***

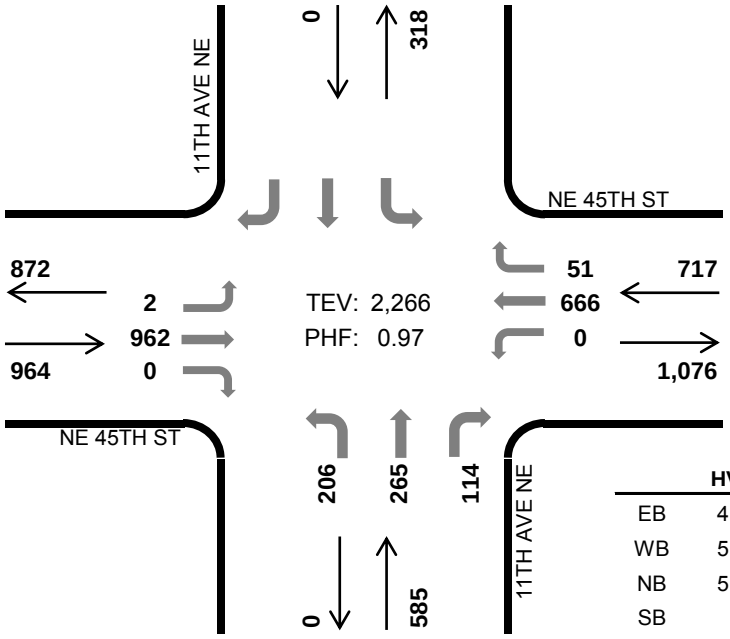
Mark Skaggs: 425 - 250 - 0777 mark.skaggs@idaxdata.com

11TH AVE NE
NE 45TH ST

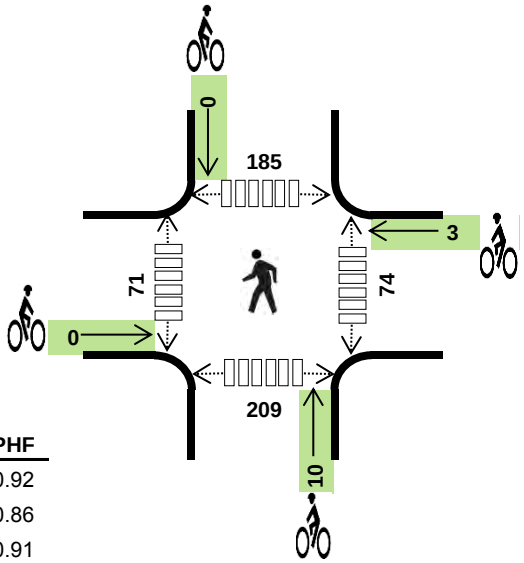
Date: Tue, Oct 14, 2014
Count Period: 11:00 AM to 1:00 PM
Peak Hour: 12:00 PM to 1:00 PM

N

Peak Hour



	HV %:	PHF
EB	4.3%	0.92
WB	5.6%	0.86
NB	5.3%	0.91
SB	-	-
TOTAL	4.9%	0.97



Two-Hour Count Summaries

Interval Start	NE 45TH ST Eastbound			NE 45TH ST Westbound			11TH AVE NE Northbound			11TH AVE NE Southbound			15-min Total	Rolling One Hour
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
11:00 AM	2	210	0	0	139	4	40	63	21	0	0	0	479	
11:15 AM	0	245	0	0	132	15	39	63	19	0	0	0	513	
11:30 AM	1	209	0	0	167	15	58	63	34	0	0	0	547	
11:45 AM	0	225	0	0	169	9	47	58	19	0	0	0	527	2,066
12:00 PM	**1**	**262**	**0**	**0**	**140**	**11**	**51**	**57**	**29**	**0**	**0**	**0**	**551**	2,138
12:15 PM	**0**	**218**	**0**	**0**	**170**	**17**	**52**	**76**	**33**	**0**	**0**	**0**	**566**	2,191
12:30 PM	**1**	**236**	**0**	**0**	**200**	**8**	**52**	**65**	**24**	**0**	**0**	**0**	**586**	2,230
12:45 PM	**0**	**246**	**0**	**0**	**156**	**15**	**51**	**67**	**28**	**0**	**0**	**0**	**563**	**2,266**
Count Total	5	1,851	0	0	1,273	94	390	512	207	0	0	0	4,332	
Peak Hr	**2**	**962**	**0**	**0**	**666**	**51**	**206**	**265**	**114**	**0**	**0**	**0**	**2,266**	

Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
11:00 AM	6	7	9	0	*22*	0	1	0	0	*1*	13	5	30	44	*92*
11:15 AM	5	11	6	0	*22*	0	1	1	0	*2*	21	8	37	32	*98*
11:30 AM	10	10	4	0	*24*	0	1	1	0	*2*	17	5	44	44	*110*
11:45 AM	9	12	6	0	*27*	1	0	4	0	*5*	20	14	40	52	*126*
12:00 PM	**6**	**8**	**7**	**0**	***21***	**0**	**1**	**2**	**0**	***3***	**9**	**21**	**39**	**52**	***121***
12:15 PM	**11**	**13**	**10**	**0**	***34***	**0**	**0**	**2**	**0**	***2***	**30**	**16**	**54**	**57**	***157***
12:30 PM	**16**	**8**	**7**	**0**	***31***	**0**	**1**	**3**	**0**	***4***	**20**	**16**	**47**	**55**	***138***
12:45 PM	**8**	**11**	**7**	**0**	***26***	**0**	**1**	**3**	**0**	***4***	**15**	**18**	**45**	**45**	***123***
Count Total	71	80	56	0	*207*	1	6	16	0	*23*	145	103	336	381	*965*
Peak Hr	**41**	**40**	**31**	**0**	***112***	**0**	**3**	**10**	**0**	***13***	**74**	**71**	**185**	**209**	***539***

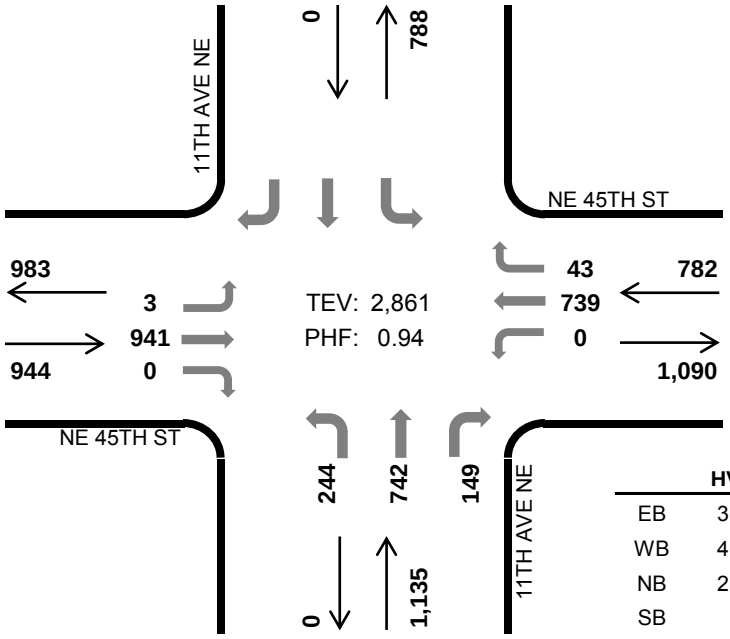
Mark Skaggs: 425 - 250 - 0777 mark.skaggs@idaxdata.com

11TH AVE NE
NE 45TH ST

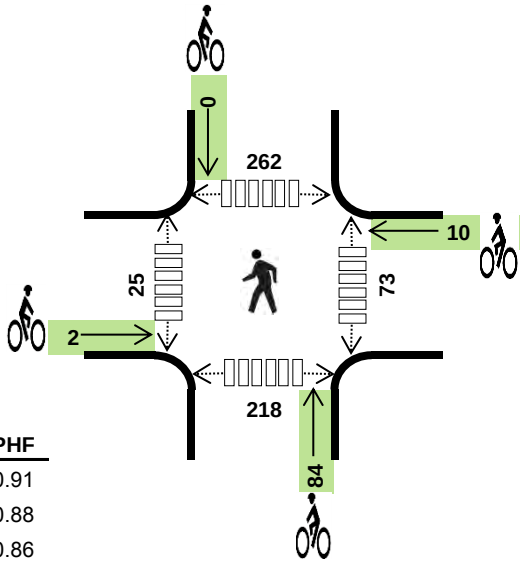
Date: Tue, Oct 14, 2014
Count Period: 4:00 PM to 6:00 PM
Peak Hour: 4:45 PM to 5:45 PM

N

Peak Hour



	HV %:	PHF
EB	3.5%	0.91
WB	4.6%	0.88
NB	2.2%	0.86
SB	-	-
TOTAL	3.3%	0.94



Two-Hour Count Summaries

Interval Start	NE 45TH ST Eastbound			NE 45TH ST Westbound			11TH AVE NE Northbound			11TH AVE NE Southbound			15-min Total	Rolling One Hour
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
4:00 PM	0	218	0	0	146	9	57	147	22	0	0	0	599	
4:15 PM	0	218	0	0	213	13	73	144	29	0	0	0	690	
4:30 PM	0	206	0	0	173	11	94	183	40	0	0	0	707	
4:45 PM	**0**	**222**	**0**	**0**	**152**	**13**	**50**	**170**	**35**	**0**	**0**	**0**	**642**	2,638
5:00 PM	**2**	**214**	**0**	**0**	**203**	**7**	**66**	**176**	**38**	**0**	**0**	**0**	**706**	2,745
5:15 PM	**0**	**246**	**0**	**0**	**171**	**15**	**76**	**214**	**40**	**0**	**0**	**0**	**762**	2,817
5:30 PM	**1**	**259**	**0**	**0**	**213**	**8**	**52**	**182**	**36**	**0**	**0**	**0**	**751**	**2,861**
5:45 PM	0	233	0	0	161	9	64	131	35	0	0	0	633	2,852
Count Total	3	1,816	0	0	1,432	85	532	1,347	275	0	0	0	5,490	
Peak Hr	**3**	**941**	**0**	**0**	**739**	**43**	**244**	**742**	**149**	**0**	**0**	**0**	**2,861**	

Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
4:00 PM	12	13	6	0	*31*	0	0	7	0	*7*	22	9	35	46	*112*
4:15 PM	12	14	4	0	*30*	0	0	5	0	*5*	14	8	44	47	*113*
4:30 PM	10	12	8	0	*30*	0	2	13	0	*15*	18	11	58	51	*138*
4:45 PM	**9**	**11**	**7**	**0**	***27***	**2**	**2**	**18**	**0**	***22***	**9**	**8**	**57**	**46**	***120***
5:00 PM	**9**	**5**	**4**	**0**	***18***	**0**	**2**	**16**	**0**	***18***	**25**	**7**	**92**	**60**	***184***
5:15 PM	**8**	**13**	**9**	**0**	***30***	**0**	**2**	**22**	**0**	***24***	**12**	**4**	**47**	**48**	***111***
5:30 PM	**7**	**7**	**5**	**0**	***19***	**0**	**4**	**28**	**0**	***32***	**27**	**6**	**66**	**64**	***163***
5:45 PM	5	9	3	0	*17*	0	4	23	0	*27*	11	6	45	36	*98*
Count Total	72	84	46	0	*202*	2	16	132	0	*150*	138	59	444	398	*1,039*
Peak Hr	**33**	**36**	**25**	**0**	***94***	**2**	**10**	**84**	**0**	***96***	**73**	**25**	**262**	**218**	***578***

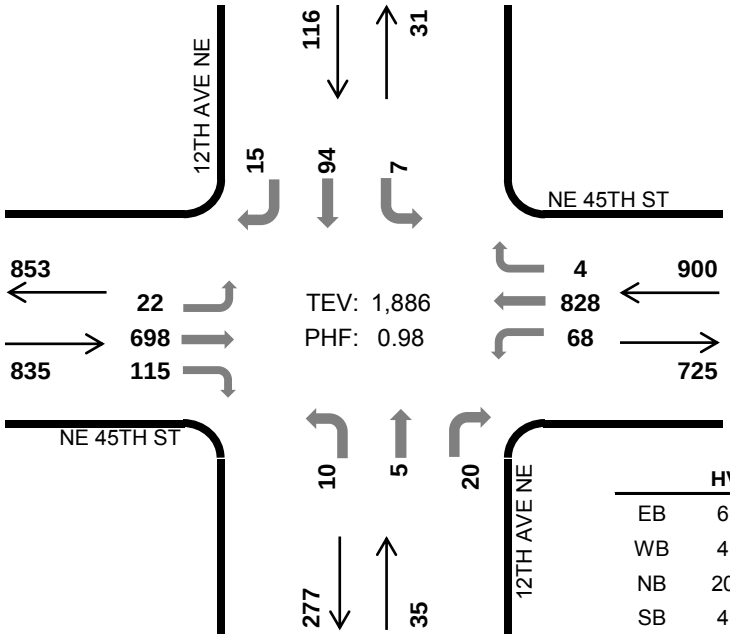
Mark Skaggs: 425 - 250 - 0777 mark.skaggs@idaxdata.com

12TH AVE NE
NE 45TH ST

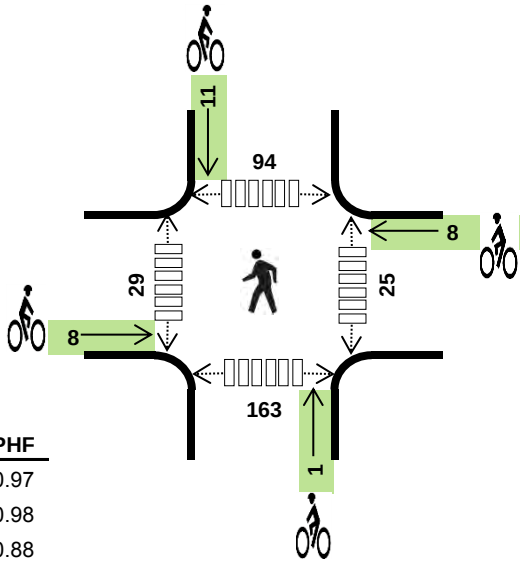
Date: Tue, Oct 14, 2014
Count Period: 7:00 AM to 9:00 AM
Peak Hour: 7:45 AM to 8:45 AM

N

Peak Hour



	HV %:	PHF
EB	6.9%	0.97
WB	4.8%	0.98
NB	20.0%	0.88
SB	4.3%	0.88
TOTAL	6.0%	0.98



Two-Hour Count Summaries

Interval Start	NE 45TH ST Eastbound			NE 45TH ST Westbound			12TH AVE NE Northbound			12TH AVE NE Southbound			15-min Total	Rolling One Hour
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
7:00 AM	2	130	30	4	76	0	1	0	1	1	4	1	250	
7:15 AM	3	127	28	4	111	0	3	0	3	1	10	2	292	
7:30 AM	5	156	25	7	168	0	1	0	3	1	7	5	378	
7:45 AM	**6**	**160**	**32**	**20**	**208**	**1**	**2**	**0**	**7**	**2**	**20**	**3**	**461**	1,381
8:00 AM	**4**	**182**	**30**	**14**	**208**	**0**	**5**	**0**	**5**	**1**	**30**	**2**	**481**	1,612
8:15 AM	**7**	**176**	**22**	**15**	**206**	**1**	**2**	**3**	**4**	**2**	**19**	**4**	**461**	1,781
8:30 AM	**5**	**180**	**31**	**19**	**206**	**2**	**1**	**2**	**4**	**2**	**25**	**6**	**483**	**1,886**
8:45 AM	6	208	38	13	128	1	1	3	8	1	13	3	423	1,848
Count Total	38	1,319	236	96	1,311	5	16	8	35	11	128	26	3,229	
Peak Hr	**22**	**698**	**115**	**68**	**828**	**4**	**10**	**5**	**20**	**7**	**94**	**15**	**1,886**	

Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
7:00 AM	13	10	1	1	*25*	0	1	0	1	*2*	3	1	9	15	*28*
7:15 AM	8	8	2	1	*19*	2	1	0	2	*5*	1	7	16	33	*57*
7:30 AM	13	12	2	1	*28*	2	0	0	5	*7*	4	4	14	24	*46*
7:45 AM	**10**	**11**	**3**	**1**	***25***	**2**	**3**	**0**	**6**	***11***	**9**	**4**	**17**	**25**	***55***
8:00 AM	**15**	**8**	**2**	**1**	***26***	**2**	**2**	**0**	**1**	***5***	**8**	**7**	**38**	**39**	***92***
8:15 AM	**17**	**10**	**1**	**1**	***29***	**4**	**1**	**1**	**4**	***10***	**8**	**11**	**22**	**58**	***99***
8:30 AM	**16**	**14**	**1**	**2**	***33***	**0**	**2**	**0**	**0**	***2***	**0**	**7**	**17**	**41**	***65***
8:45 AM	17	8	1	1	*27*	1	0	0	1	*2*	9	6	46	37	*98*
Count Total	109	81	13	9	*212*	13	10	1	20	*44*	42	47	179	272	*540*
Peak Hr	**58**	**43**	**7**	**5**	***113***	**8**	**8**	**1**	**11**	***28***	**25**	**29**	**94**	**163**	***311***

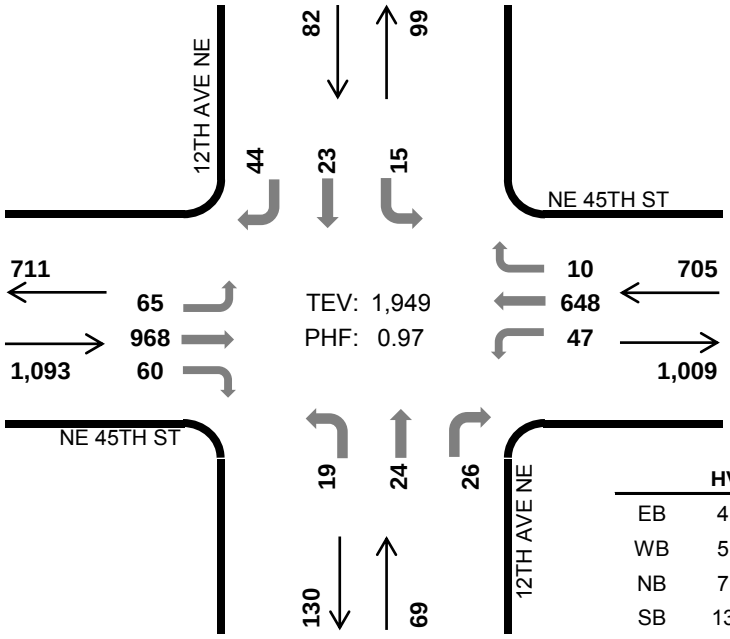
Mark Skaggs: 425 - 250 - 0777 mark.skaggs@idaxdata.com

12TH AVE NE
NE 45TH ST

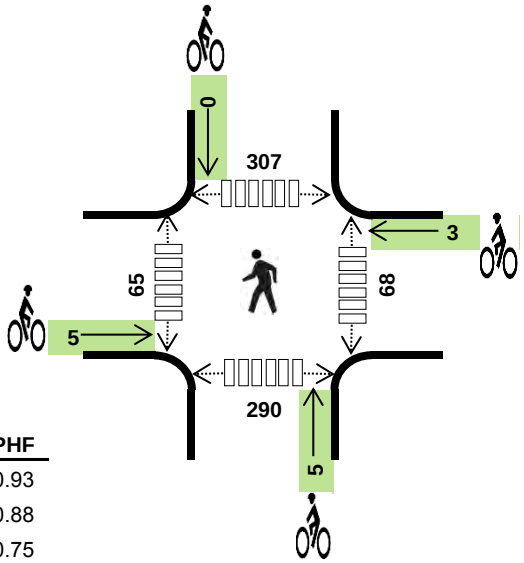
Date: Tue, Oct 14, 2014
Count Period: 11:00 AM to 1:00 PM
Peak Hour: 12:00 PM to 1:00 PM

N

Peak Hour



	HV %:	PHF
EB	4.6%	0.93
WB	5.5%	0.88
NB	7.2%	0.75
SB	13.4%	0.79
TOTAL	5.4%	0.97



Two-Hour Count Summaries

Interval Start	NE 45TH ST Eastbound			NE 45TH ST Westbound			12TH AVE NE Northbound			12TH AVE NE Southbound			15-min Total	Rolling One Hour
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
11:00 AM	14	200	14	3	134	6	3	2	5	2	5	8	396	
11:15 AM	17	222	19	8	137	1	5	3	8	2	3	8	433	
11:30 AM	17	212	16	8	172	3	3	2	8	1	1	7	450	
11:45 AM	12	218	14	12	168	4	4	4	9	2	8	7	462	1,741
12:00 PM	**18**	**260**	**15**	**16**	**133**	**3**	**4**	**5**	**9**	**1**	**4**	**12**	**480**	1,825
12:15 PM	**21**	**225**	**11**	**8**	**165**	**1**	**7**	**9**	**7**	**7**	**9**	**10**	**480**	1,872
12:30 PM	**16**	**231**	**19**	**11**	**186**	**3**	**7**	**7**	**4**	**3**	**7**	**10**	**504**	1,926
12:45 PM	**10**	**252**	**15**	**12**	**164**	**3**	**1**	**3**	**6**	**4**	**3**	**12**	**485**	**1,949**
Count Total	125	1,820	123	78	1,259	24	34	35	56	22	40	74	3,690	
Peak Hr	**65**	**968**	**60**	**47**	**648**	**10**	**19**	**24**	**26**	**15**	**23**	**44**	**1,949**	

Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
11:00 AM	7	8	1	1	*17*	0	0	0	1	*1*	8	5	55	31	*99*
11:15 AM	10	10	1	2	*23*	3	2	2	2	*9*	6	11	64	47	*128*
11:30 AM	11	9	2	2	*24*	0	1	1	0	*2*	7	7	45	66	*125*
11:45 AM	11	14	2	1	*28*	2	0	1	1	*4*	22	13	47	67	*149*
12:00 PM	**9**	**9**	**1**	**5**	***24***	**0**	**1**	**2**	**0**	***3***	**14**	**16**	**62**	**70**	***162***
12:15 PM	**11**	**12**	**2**	**3**	***28***	**2**	**1**	**2**	**0**	***5***	**29**	**18**	**110**	**85**	***242***
12:30 PM	**18**	**8**	**1**	**1**	***28***	**1**	**1**	**0**	**0**	***2***	**14**	**13**	**79**	**77**	***183***
12:45 PM	**12**	**10**	**1**	**2**	***25***	**2**	**0**	**1**	**0**	***3***	**11**	**18**	**56**	**58**	***143***
Count Total	89	80	11	17	*197*	10	6	9	4	*29*	111	101	518	501	*1,231*
Peak Hr	**50**	**39**	**5**	**11**	***105***	**5**	**3**	**5**	**0**	***13***	**68**	**65**	**307**	**290**	***730***

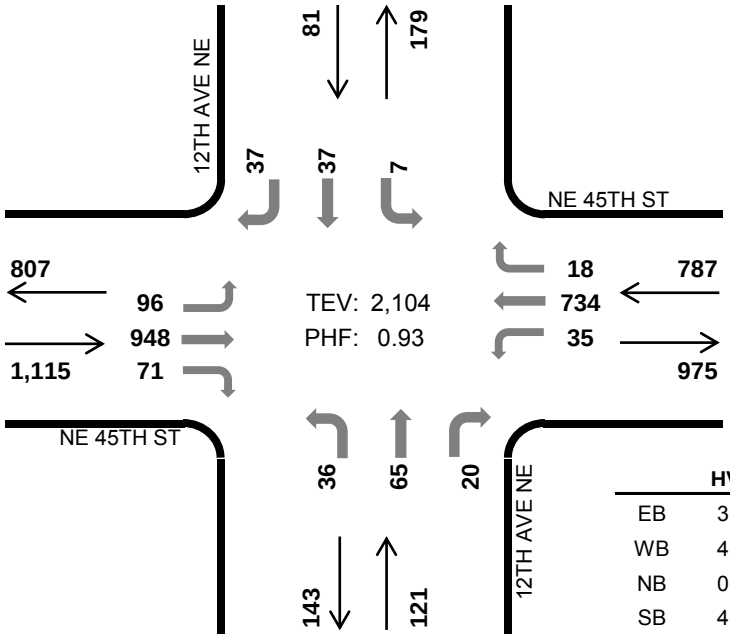
Mark Skaggs: 425 - 250 - 0777 mark.skaggs@idaxdata.com

12TH AVE NE
NE 45TH ST

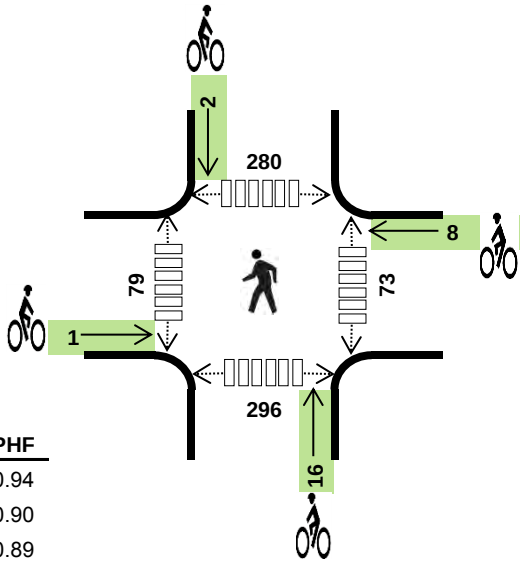
Date: Tue, Oct 14, 2014
Count Period: 4:00 PM to 6:00 PM
Peak Hour: 5:00 PM to 6:00 PM

N

Peak Hour



	HV %:	PHF
EB	3.4%	0.94
WB	4.4%	0.90
NB	0.8%	0.89
SB	4.9%	0.72
TOTAL	3.7%	0.93



Two-Hour Count Summaries

Interval Start	NE 45TH ST Eastbound			NE 45TH ST Westbound			12TH AVE NE Northbound			12TH AVE NE Southbound			15-min Total	Rolling One Hour
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
4:00 PM	17	223	12	16	155	3	8	7	4	2	5	7	459	
4:15 PM	22	211	11	15	217	3	7	10	7	2	5	1	511	
4:30 PM	21	215	12	9	176	0	4	12	8	3	7	5	472	
4:45 PM	17	215	20	7	149	3	8	16	9	1	10	8	463	1,905
5:00 PM	**14**	**226**	**17**	**7**	**178**	**2**	**15**	**16**	**3**	**3**	**13**	**12**	**506**	1,952
5:15 PM	**30**	**238**	**17**	**12**	**180**	**4**	**9**	**15**	**10**	**1**	**5**	**9**	**530**	1,971
5:30 PM	**27**	**250**	**21**	**11**	**202**	**5**	**5**	**18**	**5**	**1**	**13**	**9**	**567**	2,066
5:45 PM	**25**	**234**	**16**	**5**	**174**	**7**	**7**	**16**	**2**	**2**	**6**	**7**	**501**	**2,104**
Count Total	173	1,812	126	82	1,431	27	63	110	48	15	64	58	4,009	
Peak Hr	**96**	**948**	**71**	**35**	**734**	**18**	**36**	**65**	**20**	**7**	**37**	**37**	**2,104**	

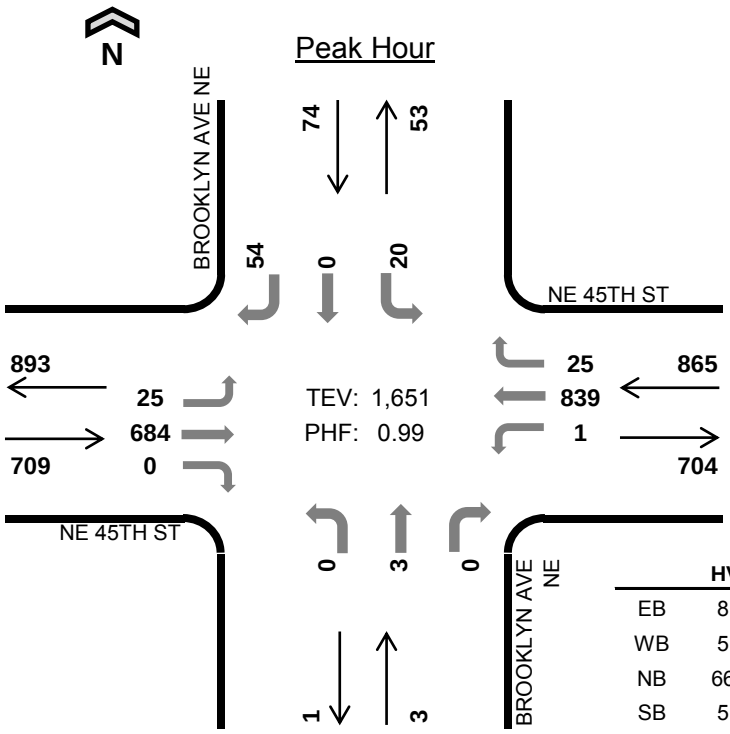
Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
4:00 PM	10	14	0	3	*27*	2	2	1	0	*5*	4	17	52	48	*121*
4:15 PM	13	12	0	2	*27*	0	1	3	0	*4*	11	10	68	73	*162*
4:30 PM	15	11	0	1	*27*	0	2	3	2	*7*	13	20	72	72	*177*
4:45 PM	10	9	0	2	*21*	2	5	5	2	*14*	9	28	55	58	*150*
5:00 PM	**12**	**4**	**1**	**1**	***18***	**0**	**2**	**6**	**0**	***8***	**24**	**23**	**73**	**88**	***208***
5:15 PM	**10**	**14**	**0**	**1**	***25***	**0**	**2**	**5**	**0**	***7***	**14**	**20**	**53**	**58**	***145***
5:30 PM	**10**	**8**	**0**	**1**	***19***	**0**	**3**	**2**	**1**	***6***	**16**	**19**	**108**	**84**	***227***
5:45 PM	**6**	**9**	**0**	**1**	***16***	**1**	**1**	**3**	**1**	***6***	**19**	**17**	**46**	**66**	***148***
Count Total	86	81	1	12	*180*	5	18	28	6	*57*	110	154	527	547	*1,338*
Peak Hr	**38**	**35**	**1**	**4**	***78***	**1**	**8**	**16**	**2**	***27***	**73**	**79**	**280**	**296**	***728***

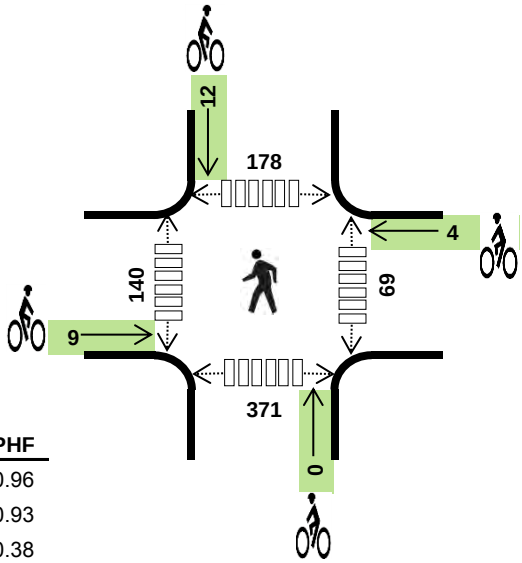
Mark Skaggs: 425 - 250 - 0777 mark.skaggs@idaxdata.com

BROOKLYN AVE NE
NE 45TH ST

Date: Tue, Oct 14, 2014
Count Period: 7:00 AM to 9:00 AM
Peak Hour: 7:45 AM to 8:45 AM



	HV %:	PHF
EB	8.3%	0.96
WB	5.3%	0.93
NB	66.7%	0.38
SB	5.4%	0.88
TOTAL	6.7%	0.99



Two-Hour Count Summaries

Interval Start	NE 45TH ST Eastbound			NE 45TH ST Westbound			BROOKLYN AVE NE Northbound			BROOKLYN AVE NE Southbound			15-min Total	Rolling One Hour
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
7:00 AM	5	126	0	0	76	1	0	1	0	1	0	10	220	
7:15 AM	7	120	0	0	105	0	0	3	0	1	0	7	243	
7:30 AM	11	151	0	0	164	2	0	0	0	1	0	9	338	
7:45 AM	**4**	**163**	**0**	**1**	**225**	**7**	**0**	**1**	**0**	**4**	**0**	**10**	**415**	1,216
8:00 AM	**4**	**175**	**0**	**0**	**202**	**6**	**0**	**0**	**0**	**5**	**0**	**16**	**408**	1,404
8:15 AM	**9**	**169**	**0**	**0**	**213**	**3**	**0**	**0**	**0**	**8**	**0**	**13**	**415**	1,576
8:30 AM	**8**	**177**	**0**	**0**	**199**	**9**	**0**	**2**	**0**	**3**	**0**	**15**	**413**	**1,651**
8:45 AM	11	202	0	0	136	7	0	0	0	5	0	10	371	1,607
Count Total	59	1,283	0	1	1,320	35	0	7	0	28	0	90	2,823	
Peak Hr	**25**	**684**	**0**	**1**	**839**	**25**	**0**	**3**	**0**	**20**	**0**	**54**	**1,651**	

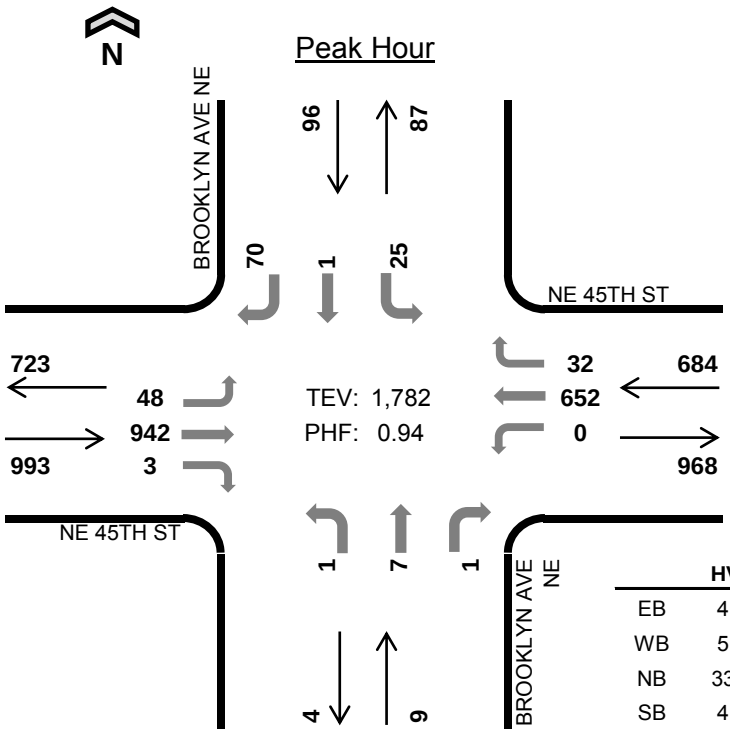
Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
7:00 AM	14	9	1	1	*25*	0	0	0	0	*0*	3	14	15	29	*61*
7:15 AM	8	7	3	0	*18*	0	2	0	0	*2*	5	19	30	57	*111*
7:30 AM	12	11	0	1	*24*	3	0	0	1	*4*	7	31	48	63	*149*
7:45 AM	**15**	**12**	**1**	**0**	***28***	**2**	**2**	**0**	**5**	***9***	**11**	**35**	**36**	**90**	***172***
8:00 AM	**14**	**9**	**0**	**2**	***25***	**3**	**0**	**0**	**3**	***6***	**17**	**46**	**61**	**103**	***227***
8:15 AM	**14**	**9**	**0**	**0**	***23***	**4**	**0**	**0**	**1**	***5***	**21**	**33**	**46**	**103**	***203***
8:30 AM	**16**	**16**	**1**	**2**	***35***	**0**	**2**	**0**	**3**	***5***	**20**	**26**	**35**	**75**	***156***
8:45 AM	19	8	0	2	*29*	0	0	0	0	*0*	9	32	49	81	*171*
Count Total	112	81	6	8	*207*	12	6	0	13	*31*	93	236	320	601	*1,250*
Peak Hr	**59**	**46**	**2**	**4**	***111***	**9**	**4**	**0**	**12**	***25***	**69**	**140**	**178**	**371**	***758***

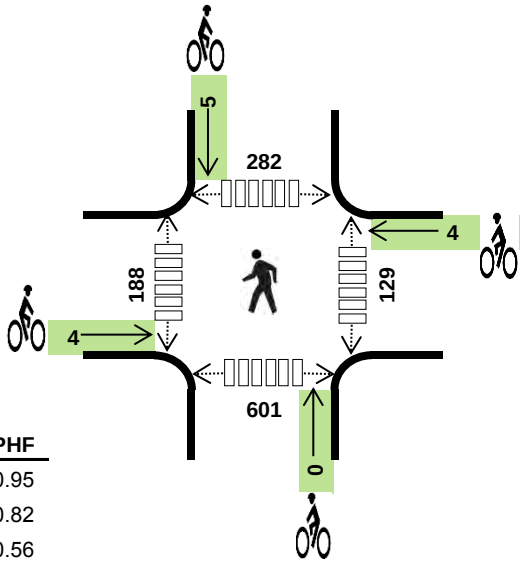
Mark Skaggs: 425 - 250 - 0777 mark.skaggs@idaxdata.com

BROOKLYN AVE NE
NE 45TH ST

Date: Tue, Oct 14, 2014
Count Period: 11:00 AM to 1:00 PM
Peak Hour: 12:00 PM to 1:00 PM



	HV %:	PHF
EB	4.4%	0.95
WB	5.4%	0.82
NB	33.3%	0.56
SB	4.2%	0.96
TOTAL	4.9%	0.94



Two-Hour Count Summaries

Interval Start	NE 45TH ST Eastbound			NE 45TH ST Westbound			BROOKLYN AVE NE Northbound			BROOKLYN AVE NE Southbound			15-min Total	Rolling One Hour
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
11:00 AM	5	200	2	0	128	7	0	2	1	4	0	12	361	
11:15 AM	15	210	1	0	141	7	0	0	0	5	1	5	385	
11:30 AM	13	211	0	0	173	10	2	0	0	9	0	20	438	
11:45 AM	15	210	0	0	149	10	1	1	0	6	0	20	412	1,596
12:00 PM	**14**	**247**	**1**	**0**	**139**	**8**	**0**	**0**	**0**	**6**	**0**	**19**	**434**	1,669
12:15 PM	**16**	**220**	**1**	**0**	**159**	**6**	**0**	**2**	**1**	**8**	**0**	**15**	**428**	1,712
12:30 PM	**12**	**226**	**1**	**0**	**198**	**11**	**1**	**3**	**0**	**5**	**1**	**18**	**476**	1,750
12:45 PM	**6**	**249**	**0**	**0**	**156**	**7**	**0**	**2**	**0**	**6**	**0**	**18**	**444**	**1,782**
Count Total	96	1,773	6	0	1,243	66	4	10	2	49	2	127	3,378	
Peak Hr	**48**	**942**	**3**	**0**	**652**	**32**	**1**	**7**	**1**	**25**	**1**	**70**	**1,782**	

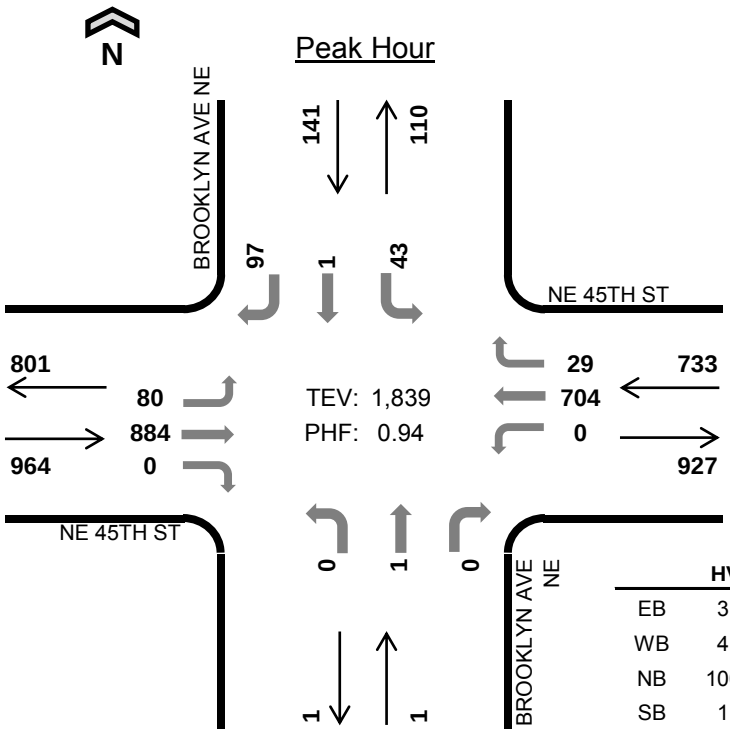
Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
11:00 AM	7	10	2	2	*21*	0	0	0	0	*0*	19	24	42	72	*157*
11:15 AM	11	12	0	0	*23*	2	0	0	1	*3*	22	32	58	99	*211*
11:30 AM	11	9	1	0	*21*	0	1	0	1	*2*	25	22	63	103	*213*
11:45 AM	12	14	0	2	*28*	2	1	0	1	*4*	29	36	47	135	*247*
12:00 PM	**8**	**9**	**0**	**1**	***18***	**0**	**1**	**0**	**0**	***1***	**36**	**33**	**65**	**160**	***294***
12:15 PM	**8**	**12**	**1**	**0**	***21***	**1**	**1**	**0**	**1**	***3***	**24**	**53**	**80**	**158**	***315***
12:30 PM	**17**	**9**	**2**	**0**	***28***	**1**	**1**	**0**	**3**	***5***	**31**	**53**	**85**	**159**	***328***
12:45 PM	**11**	**7**	**0**	**3**	***21***	**2**	**1**	**0**	**1**	***4***	**38**	**49**	**52**	**124**	***263***
Count Total	85	82	6	8	*181*	8	6	0	8	*22*	224	302	492	1,010	*2,028*
Peak Hr	**44**	**37**	**3**	**4**	***88***	**4**	**4**	**0**	**5**	***13***	**129**	**188**	**282**	**601**	***1,200***

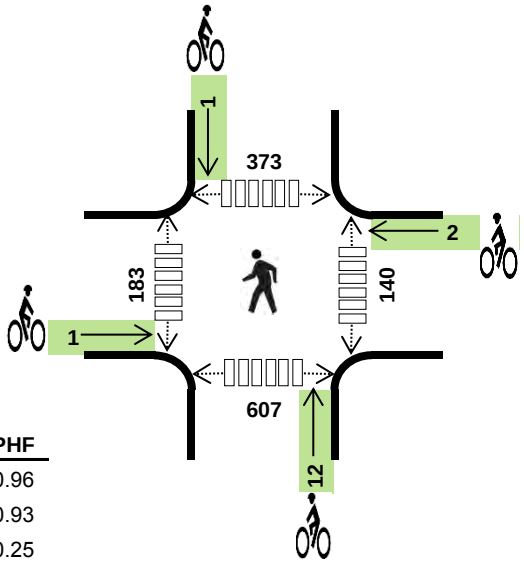
Mark Skaggs: 425 - 250 - 0777 mark.skaggs@idaxdata.com

BROOKLYN AVE NE
NE 45TH ST

Date: Tue, Oct 14, 2014
Count Period: 4:00 PM to 6:00 PM
Peak Hour: 5:00 PM to 6:00 PM



	HV %:	PHF
EB	3.9%	0.96
WB	4.6%	0.93
NB	100.0%	0.25
SB	1.4%	0.78
TOTAL	4.1%	0.94



Two-Hour Count Summaries

Interval Start	NE 45TH ST Eastbound			NE 45TH ST Westbound			BROOKLYN AVE NE Northbound			BROOKLYN AVE NE Southbound			15-min Total	Rolling One Hour
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
4:00 PM	13	213	0	0	155	8	0	1	0	13	0	24	427	
4:15 PM	19	204	0	0	203	5	0	0	0	7	0	25	463	
4:30 PM	21	209	0	0	172	8	0	0	1	6	2	18	437	
4:45 PM	18	208	0	0	150	10	0	0	0	5	0	14	405	1,732
5:00 PM	**16**	**207**	**0**	**0**	**165**	**7**	**0**	**1**	**0**	**18**	**0**	**27**	**441**	1,746
5:15 PM	**23**	**223**	**0**	**0**	**182**	**5**	**0**	**0**	**0**	**8**	**0**	**19**	**460**	1,743
5:30 PM	**14**	**236**	**0**	**0**	**190**	**8**	**0**	**0**	**0**	**9**	**1**	**32**	**490**	1,796
5:45 PM	**27**	**218**	**0**	**0**	**167**	**9**	**0**	**0**	**0**	**8**	**0**	**19**	**448**	**1,839**
Count Total	151	1,718	0	0	1,384	60	0	2	1	74	3	178	3,571	
Peak Hr	**80**	**884**	**0**	**0**	**704**	**29**	**0**	**1**	**0**	**43**	**1**	**97**	**1,839**	

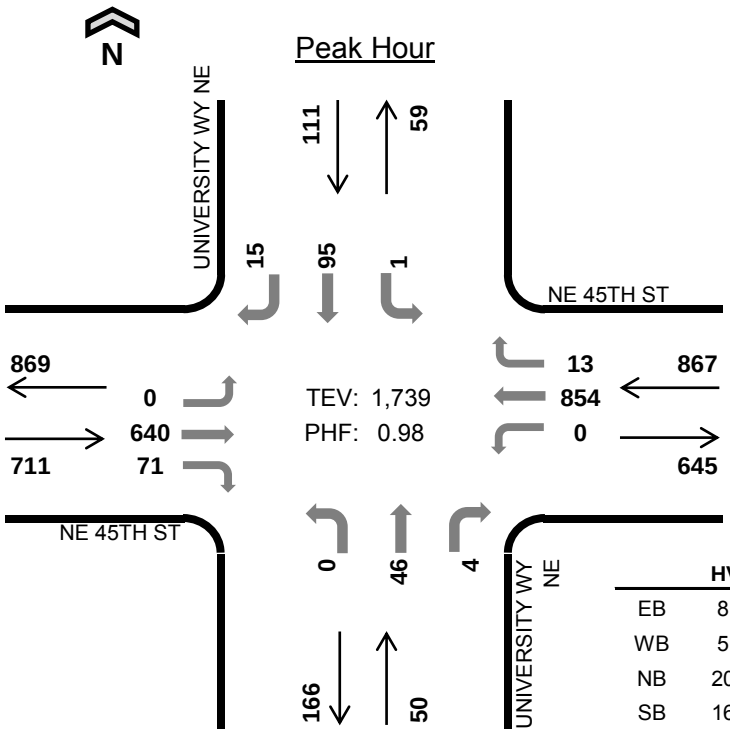
Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
4:00 PM	12	12	1	1	*26*	2	2	0	1	*5*	25	34	61	110	*230*
4:15 PM	12	17	0	0	*29*	0	3	1	1	*5*	35	34	60	139	*268*
4:30 PM	14	9	0	0	*23*	3	2	0	2	*7*	50	24	60	170	*304*
4:45 PM	9	12	0	2	*23*	1	2	1	0	*4*	75	43	81	146	*345*
5:00 PM	**11**	**6**	**1**	**0**	***18***	**0**	**0**	**7**	**0**	***7***	**44**	**52**	**94**	**184**	***374***
5:15 PM	**9**	**12**	**0**	**0**	***21***	**0**	**1**	**3**	**0**	***4***	**33**	**27**	**66**	**125**	***251***
5:30 PM	**10**	**8**	**0**	**1**	***19***	**0**	**1**	**0**	**0**	***1***	**40**	**53**	**136**	**149**	***378***
5:45 PM	**8**	**8**	**0**	**1**	***17***	**1**	**0**	**2**	**1**	***4***	**23**	**51**	**77**	**149**	***300***
Count Total	85	84	2	5	*176*	7	11	14	5	*37*	325	318	635	1,172	*2,450*
Peak Hr	**38**	**34**	**1**	**2**	***75***	**1**	**2**	**12**	**1**	***16***	**140**	**183**	**373**	**607**	***1,303***

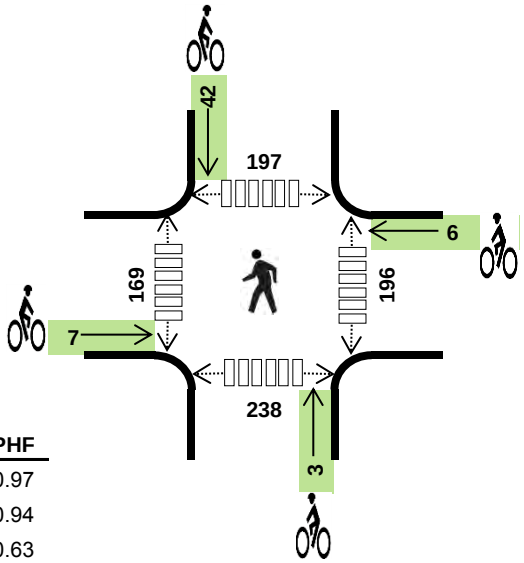
Mark Skaggs: 425 - 250 - 0777 mark.skaggs@idaxdata.com

UNIVERSITY WY NE
NE 45TH ST

Date: Tue, Oct 14, 2014
Count Period: 7:00 AM to 9:00 AM
Peak Hour: 7:45 AM to 8:45 AM



	HV %:	PHF
EB	8.0%	0.97
WB	5.3%	0.94
NB	20.0%	0.63
SB	16.2%	0.90
TOTAL	7.5%	0.98



Two-Hour Count Summaries

Interval Start	NE 45TH ST Eastbound			NE 45TH ST Westbound			UNIVERSITY WY NE Northbound			UNIVERSITY WY NE Southbound			15-min Total	Rolling One Hour
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
7:00 AM	0	117	9	0	67	2	0	9	0	0	14	2	220	
7:15 AM	0	112	16	0	108	1	1	7	0	0	4	3	252	
7:30 AM	0	121	19	0	162	0	0	5	2	0	14	5	328	
7:45 AM	**0**	**161**	**13**	**0**	**229**	**2**	**0**	**7**	**0**	**0**	**23**	**3**	**438**	1,238
8:00 AM	**0**	**171**	**13**	**0**	**209**	**3**	**0**	**11**	**0**	**0**	**22**	**6**	**435**	1,453
8:15 AM	**0**	**146**	**28**	**0**	**213**	**6**	**0**	**16**	**4**	**1**	**28**	**2**	**444**	1,645
8:30 AM	**0**	**162**	**17**	**0**	**203**	**2**	**0**	**12**	**0**	**0**	**22**	**4**	**422**	**1,739**
8:45 AM	0	176	17	0	136	3	1	13	5	0	27	4	382	1,683
Count Total	0	1,166	132	0	1,327	19	2	80	11	1	154	29	2,921	
Peak Hr	**0**	**640**	**71**	**0**	**854**	**13**	**0**	**46**	**4**	**1**	**95**	**15**	**1,739**	

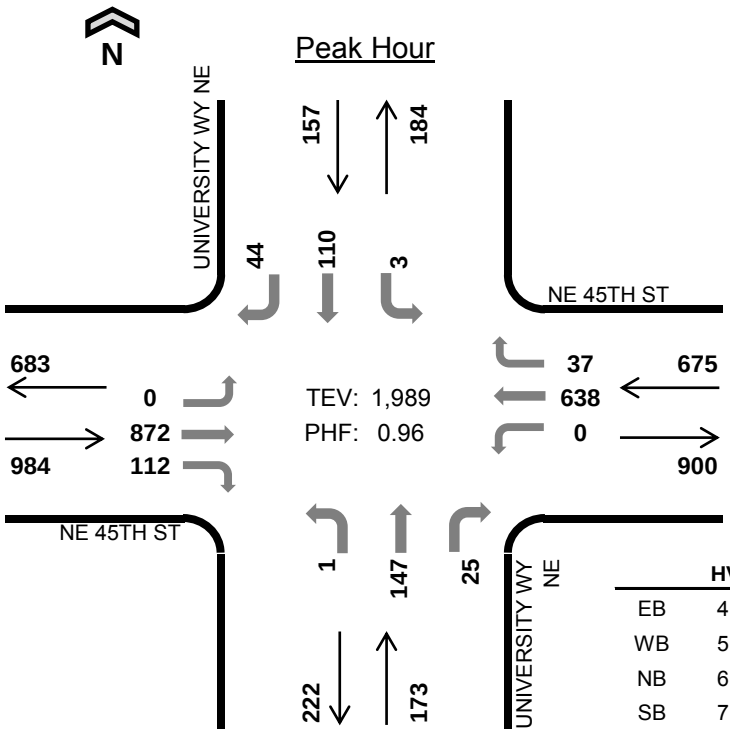
Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
7:00 AM	13	9	3	4	*29*	0	0	0	6	*6*	20	13	23	27	*83*
7:15 AM	10	8	2	1	*21*	1	1	0	0	*2*	16	24	27	33	*100*
7:30 AM	12	10	2	4	*28*	2	0	0	5	*7*	30	30	46	47	*153*
7:45 AM	**14**	**12**	**1**	**4**	***31***	**2**	**3**	**1**	**4**	***10***	**26**	**28**	**32**	**41**	***127***
8:00 AM	**15**	**10**	**3**	**4**	***32***	**2**	**0**	**1**	**13**	***16***	**58**	**54**	**50**	**57**	***219***
8:15 AM	**14**	**9**	**3**	**5**	***31***	**3**	**1**	**0**	**15**	***19***	**67**	**38**	**59**	**86**	***250***
8:30 AM	**14**	**15**	**3**	**5**	***37***	**0**	**2**	**1**	**10**	***13***	**45**	**49**	**56**	**54**	***204***
8:45 AM	17	8	2	2	*29*	0	1	2	12	*15*	57	48	52	69	*226*
Count Total	109	81	19	29	*238*	10	8	5	65	*88*	319	284	345	414	*1,362*
Peak Hr	**57**	**46**	**10**	**18**	***131***	**7**	**6**	**3**	**42**	***58***	**196**	**169**	**197**	**238**	***800***

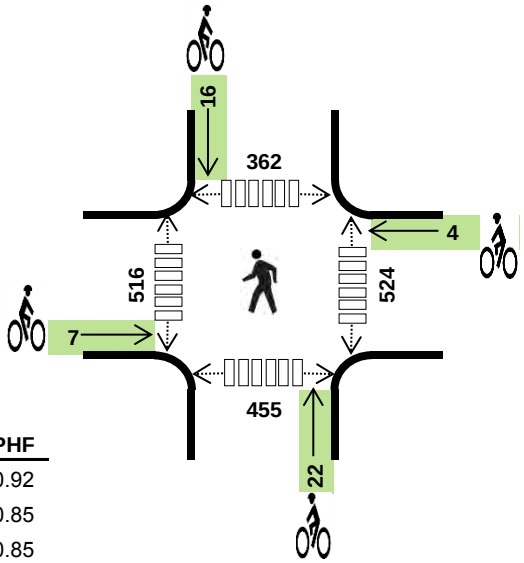
Mark Skaggs: 425 - 250 - 0777 mark.skaggs@idaxdata.com

UNIVERSITY WY NE
NE 45TH ST

Date: Tue, Oct 14, 2014
Count Period: 11:00 AM to 1:00 PM
Peak Hour: 12:00 PM to 1:00 PM



	HV %:	PHF
EB	4.3%	0.92
WB	5.6%	0.85
NB	6.4%	0.85
SB	7.0%	0.98
TOTAL	5.1%	0.96



Two-Hour Count Summaries

Interval Start	NE 45TH ST Eastbound			NE 45TH ST Westbound			UNIVERSITY WY NE Northbound			UNIVERSITY WY NE Southbound			15-min Total	Rolling One Hour
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
11:00 AM	0	181	25	0	130	4	0	25	0	1	18	8	392	
11:15 AM	0	202	26	0	132	5	2	29	0	0	20	9	425	
11:30 AM	0	187	22	0	176	9	0	39	4	0	19	9	465	
11:45 AM	0	196	20	0	146	8	1	28	8	1	26	7	441	1,723
12:00 PM	**0**	**232**	**25**	**0**	**135**	**4**	**0**	**35**	**5**	**1**	**26**	**10**	**473**	1,804
12:15 PM	**0**	**200**	**33**	**0**	**165**	**17**	**0**	**36**	**4**	**0**	**31**	**9**	**495**	1,874
12:30 PM	**0**	**201**	**26**	**0**	**187**	**12**	**0**	**43**	**8**	**1**	**29**	**10**	**517**	1,926
12:45 PM	**0**	**239**	**28**	**0**	**151**	**4**	**1**	**33**	**8**	**1**	**24**	**15**	**504**	**1,989**
Count Total	0	1,638	205	0	1,222	63	4	268	37	5	193	77	3,712	
Peak Hr	**0**	**872**	**112**	**0**	**638**	**37**	**1**	**147**	**25**	**3**	**110**	**44**	**1,989**	

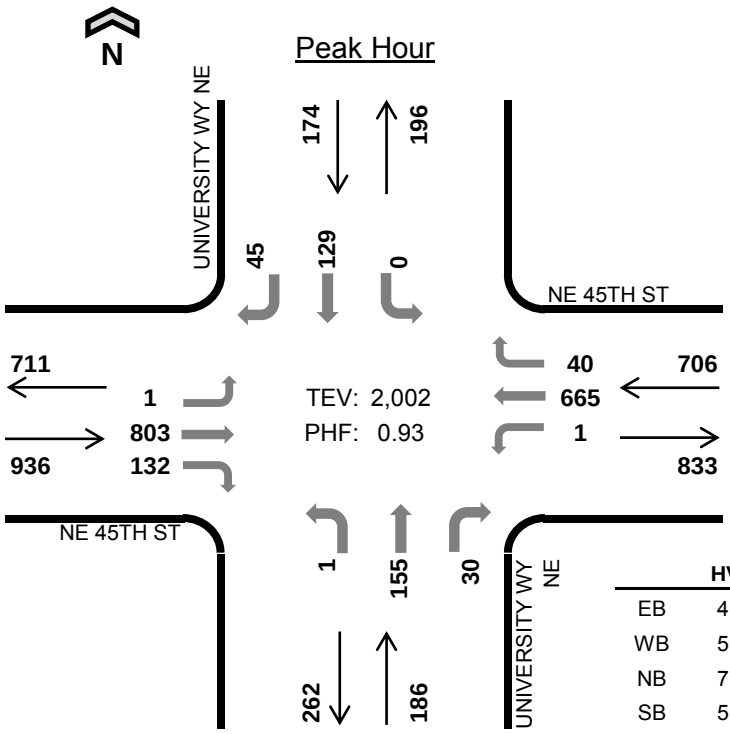
Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
11:00 AM	8	7	2	4	*21*	1	0	2	6	*9*	77	67	64	56	*264*
11:15 AM	8	12	2	3	*25*	3	0	1	9	*13*	106	91	72	81	*350*
11:30 AM	12	9	4	4	*29*	1	0	5	7	*13*	126	113	91	80	*410*
11:45 AM	10	13	4	2	*29*	3	1	2	5	*11*	110	79	59	84	*332*
12:00 PM	**8**	**9**	**3**	**3**	***23***	**0**	**1**	**4**	**3**	***8***	**144**	**112**	**104**	**113**	***473***
12:15 PM	**9**	**13**	**3**	**4**	***29***	**2**	**0**	**5**	**6**	***13***	**119**	**133**	**80**	**119**	***451***
12:30 PM	**14**	**9**	**3**	**1**	***27***	**4**	**2**	**8**	**5**	***19***	**152**	**153**	**93**	**134**	***532***
12:45 PM	**11**	**7**	**2**	**3**	***23***	**1**	**1**	**5**	**2**	***9***	**109**	**118**	**85**	**89**	***401***
Count Total	80	79	23	24	*206*	15	5	32	43	*95*	943	866	648	756	*3,213*
Peak Hr	**42**	**38**	**11**	**11**	***102***	**7**	**4**	**22**	**16**	***49***	**524**	**516**	**362**	**455**	***1,857***

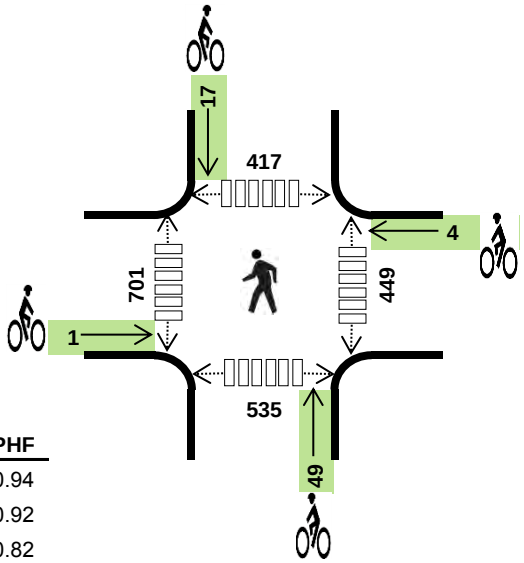
Mark Skaggs: 425 - 250 - 0777 mark.skaggs@idaxdata.com

UNIVERSITY WY NE
NE 45TH ST

Date: Tue, Oct 14, 2014
Count Period: 4:00 PM to 6:00 PM
Peak Hour: 4:45 PM to 5:45 PM



	HV %:	PHF
EB	4.2%	0.94
WB	5.4%	0.92
NB	7.0%	0.82
SB	5.2%	0.84
TOTAL	4.9%	0.93



Two-Hour Count Summaries

Interval Start	NE 45TH ST Eastbound			NE 45TH ST Westbound			UNIVERSITY WY NE Northbound			UNIVERSITY WY NE Southbound			15-min Total	Rolling One Hour
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
4:00 PM	0	195	28	0	149	8	1	40	5	1	28	9	464	
4:15 PM	0	191	18	0	196	6	0	35	6	0	45	8	505	
4:30 PM	0	175	31	0	162	9	3	49	8	0	26	10	473	
4:45 PM	**0**	**194**	**26**	**1**	**149**	**7**	**1**	**37**	**7**	**0**	**31**	**11**	**464**	1,906
5:00 PM	**1**	**195**	**26**	**0**	**162**	**7**	**0**	**34**	**5**	**0**	**38**	**14**	**482**	1,924
5:15 PM	**0**	**196**	**48**	**0**	**173**	**16**	**0**	**40**	**5**	**0**	**35**	**7**	**520**	1,939
5:30 PM	**0**	**218**	**32**	**0**	**181**	**10**	**0**	**44**	**13**	**0**	**25**	**13**	**536**	**2,002**
5:45 PM	0	175	26	0	153	3	0	38	4	0	31	8	438	1,976
Count Total	1	1,539	235	1	1,325	66	5	317	53	1	259	80	3,882	
Peak Hr	**1**	**803**	**132**	**1**	**665**	**40**	**1**	**155**	**30**	**0**	**129**	**45**	**2,002**	

Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
4:00 PM	13	12	5	3	*33*	1	0	8	3	*12*	127	127	88	88	*430*
4:15 PM	12	14	2	4	*32*	0	2	8	1	*11*	91	126	79	89	*385*
4:30 PM	15	10	3	3	*31*	3	2	4	5	*14*	144	138	77	127	*486*
4:45 PM	**10**	**12**	**3**	**2**	***27***	**1**	**1**	**18**	**5**	***25***	**153**	**131**	**108**	**121**	***513***
5:00 PM	**10**	**7**	**4**	**3**	***24***	**0**	**1**	**4**	**3**	***8***	**88**	**150**	**87**	**127**	***452***
5:15 PM	**9**	**12**	**4**	**2**	***27***	**0**	**1**	**10**	**4**	***15***	**104**	**209**	**104**	**134**	***551***
5:30 PM	**10**	**7**	**2**	**2**	***21***	**0**	**1**	**17**	**5**	***23***	**104**	**211**	**118**	**153**	***586***
5:45 PM	5	8	3	1	*17*	1	1	10	5	*17*	108	160	121	100	*489*
Count Total	84	82	26	20	*212*	6	9	79	31	*125*	919	1,252	782	939	*3,892*
Peak Hr	**39**	**38**	**13**	**9**	***99***	**1**	**4**	**49**	**17**	***71***	**449**	**701**	**417**	**535**	***2,102***

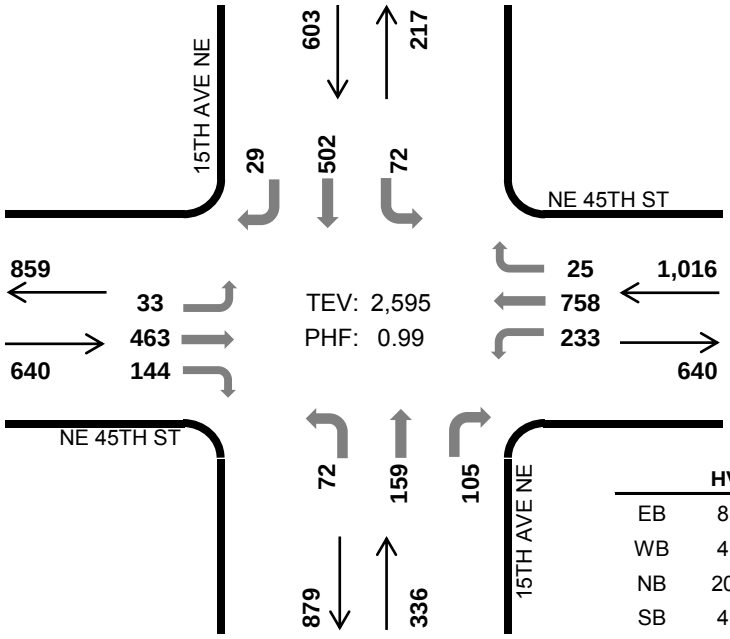
Mark Skaggs: 425 - 250 - 0777 mark.skaggs@idaxdata.com

15TH AVE NE
NE 45TH ST

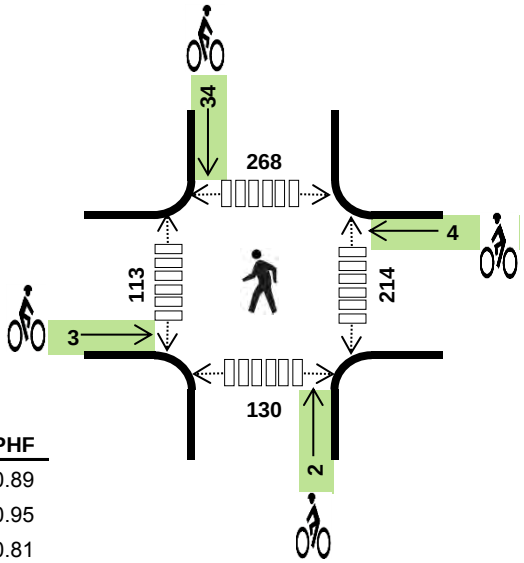
Date: Tue, Oct 14, 2014
Count Period: 7:00 AM to 9:00 AM
Peak Hour: 7:45 AM to 8:45 AM

N

Peak Hour



	HV %:	PHF
EB	8.4%	0.89
WB	4.3%	0.95
NB	20.2%	0.81
SB	4.1%	0.98
TOTAL	7.4%	0.99



Two-Hour Count Summaries

Interval Start	NE 45TH ST Eastbound			NE 45TH ST Westbound			15TH AVE NE Northbound			15TH AVE NE Southbound			15-min Total	Rolling One Hour
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
7:00 AM	5	86	24	17	63	1	9	15	7	3	57	4	291	
7:15 AM	4	83	22	28	89	8	6	19	14	9	72	3	357	
7:30 AM	9	90	31	36	144	5	17	26	21	12	123	7	521	
7:45 AM	**9**	**108**	**35**	**51**	**202**	**7**	**16**	**45**	**21**	**19**	**123**	**4**	**640**	1,809
8:00 AM	**6**	**132**	**41**	**50**	**192**	**3**	**16**	**33**	**27**	**17**	**129**	**7**	**653**	2,171
8:15 AM	**7**	**117**	**28**	**64**	**193**	**9**	**14**	**33**	**27**	**16**	**129**	**9**	**646**	2,460
8:30 AM	**11**	**106**	**40**	**68**	**171**	**6**	**26**	**48**	**30**	**20**	**121**	**9**	**656**	**2,595**
8:45 AM	7	145	37	49	126	7	14	31	24	31	116	4	591	2,546
Count Total	58	867	258	363	1,180	46	118	250	171	127	870	47	4,355	
Peak Hr	**33**	**463**	**144**	**233**	**758**	**25**	**72**	**159**	**105**	**72**	**502**	**29**	**2,595**	

Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
7:00 AM	12	8	13	5	*38*	0	0	0	2	*2*	12	11	25	9	*57*
7:15 AM	9	7	12	4	*32*	0	2	0	1	*3*	18	9	31	22	*80*
7:30 AM	10	8	17	5	*40*	0	0	0	2	*2*	26	15	35	31	*107*
7:45 AM	**12**	**12**	**14**	**5**	***43***	**0**	**3**	**0**	**5**	***8***	**38**	**21**	**44**	**26**	***129***
8:00 AM	**14**	**10**	**14**	**7**	***45***	**1**	**0**	**1**	**7**	***9***	**66**	**31**	**46**	**46**	***189***
8:15 AM	**15**	**12**	**12**	**5**	***44***	**2**	**0**	**0**	**12**	***14***	**68**	**30**	**73**	**58**	***229***
8:30 AM	**13**	**10**	**28**	**8**	***59***	**0**	**1**	**1**	**10**	***12***	**42**	**31**	**105**	**0**	***178***
8:45 AM	16	8	13	7	*44*	0	2	0	13	*15*	41	35	75	0	*151*
Count Total	101	75	123	46	*345*	3	8	2	52	*65*	311	183	434	192	*1,120*
Peak Hr	**54**	**44**	**68**	**25**	***191***	**3**	**4**	**2**	**34**	***43***	**214**	**113**	**268**	**130**	***725***

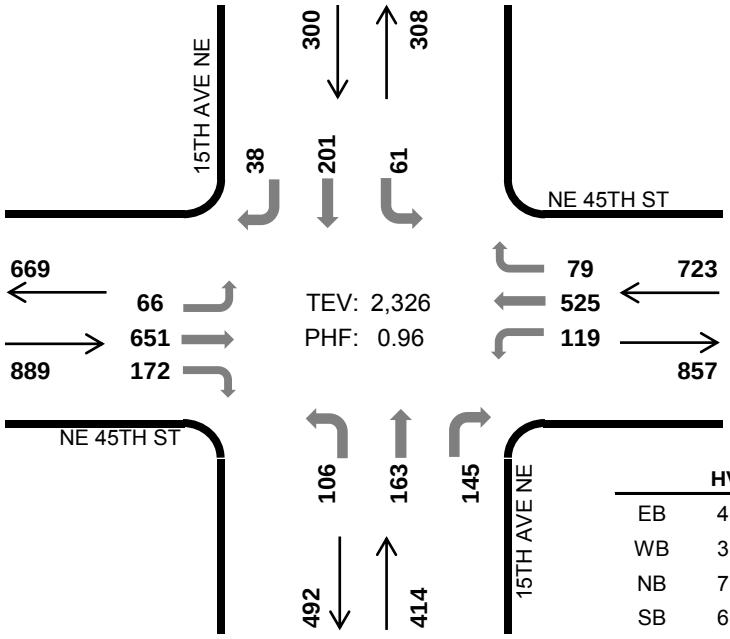
Mark Skaggs: 425 - 250 - 0777 mark.skaggs@idaxdata.com

15TH AVE NE
NE 45TH ST

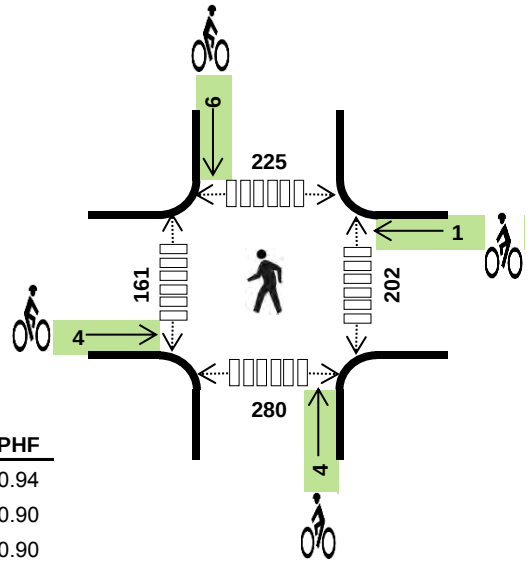
Date: Tue, Oct 14, 2014
Count Period: 11:00 AM to 1:00 PM
Peak Hour: 12:00 PM to 1:00 PM

N

Peak Hour



	HV %:	PHF
EB	4.7%	0.94
WB	3.9%	0.90
NB	7.5%	0.90
SB	6.3%	0.85
TOTAL	5.2%	0.96



Two-Hour Count Summaries

Interval Start	NE 45TH ST Eastbound			NE 45TH ST Westbound			15TH AVE NE Northbound			15TH AVE NE Southbound			15-min Total	Rolling One Hour
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
11:00 AM	18	123	31	26	106	5	24	29	45	18	37	6	468	
11:15 AM	10	145	36	35	112	15	16	47	51	23	38	3	531	
11:30 AM	19	143	37	26	140	12	32	50	36	17	45	9	566	
11:45 AM	9	151	45	30	116	15	22	42	36	18	37	10	531	2,096
12:00 PM	**17**	**174**	**45**	**31**	**108**	**17**	**28**	**43**	**44**	**20**	**52**	**9**	**588**	2,216
12:15 PM	**14**	**148**	**44**	**30**	**143**	**28**	**29**	**46**	**34**	**17**	**59**	**12**	**604**	2,289
12:30 PM	**18**	**154**	**41**	**30**	**148**	**19**	**35**	**44**	**36**	**14**	**48**	**12**	**599**	2,322
12:45 PM	**17**	**175**	**42**	**28**	**126**	**15**	**14**	**30**	**31**	**10**	**42**	**5**	**535**	**2,326**
Count Total	122	1,213	321	236	999	126	200	331	313	137	358	66	4,422	
Peak Hr	**66**	**651**	**172**	**119**	**525**	**79**	**106**	**163**	**145**	**61**	**201**	**38**	**2,326**	

Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
11:00 AM	6	7	10	6	*29*	1	0	1	1	*3*	38	13	41	39	*131*
11:15 AM	8	11	12	5	*36*	1	0	3	0	*4*	52	16	45	57	*170*
11:30 AM	13	8	15	4	*40*	0	0	1	0	*1*	34	27	43	53	*157*
11:45 AM	13	11	6	5	*35*	1	0	0	0	*1*	27	15	25	50	*117*
12:00 PM	**9**	**7**	**11**	**6**	***33***	**1**	**1**	**3**	**0**	***5***	**64**	**43**	**54**	**60**	***221***
12:15 PM	**10**	**9**	**7**	**6**	***32***	**0**	**0**	**0**	**4**	***4***	**40**	**54**	**61**	**89**	***244***
12:30 PM	**14**	**5**	**8**	**5**	***32***	**1**	**0**	**1**	**0**	***2***	**50**	**41**	**64**	**76**	***231***
12:45 PM	**9**	**7**	**5**	**2**	***23***	**2**	**0**	**0**	**2**	***4***	**48**	**23**	**46**	**55**	***172***
Count Total	82	65	74	39	*260*	7	1	9	7	*24*	353	232	379	479	*1,443*
Peak Hr	**42**	**28**	**31**	**19**	***120***	**4**	**1**	**4**	**6**	***15***	**202**	**161**	**225**	**280**	***868***

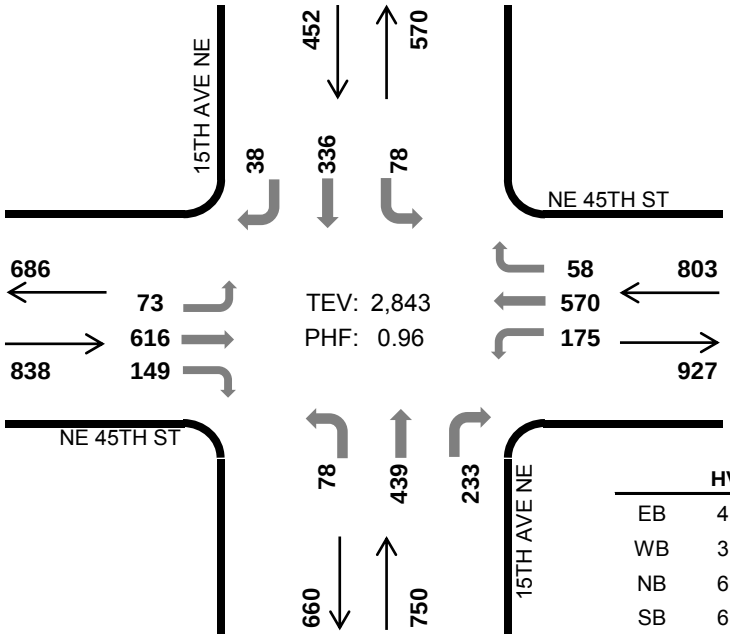
Mark Skaggs: 425 - 250 - 0777 mark.skaggs@idaxdata.com

15TH AVE NE
NE 45TH ST

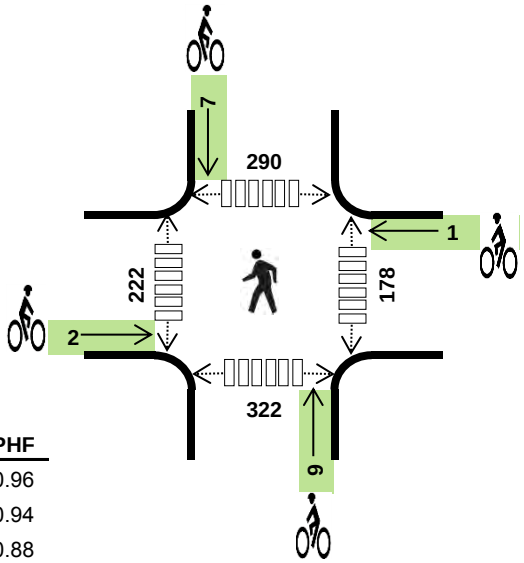
Date: Tue, Oct 14, 2014
Count Period: 4:00 PM to 6:00 PM
Peak Hour: 4:45 PM to 5:45 PM

N

Peak Hour



	HV %:	PHF
EB	4.5%	0.96
WB	3.1%	0.94
NB	6.8%	0.88
SB	6.9%	0.95
TOTAL	5.1%	0.96



Two-Hour Count Summaries

Interval Start	NE 45TH ST Eastbound			NE 45TH ST Westbound			15TH AVE NE Northbound			15TH AVE NE Southbound			15-min Total	Rolling One Hour
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
4:00 PM	15	163	30	30	128	23	20	85	53	14	91	7	659	
4:15 PM	15	138	42	41	153	20	16	92	37	16	66	3	639	
4:30 PM	19	137	34	38	132	23	16	86	48	27	69	5	634	
4:45 PM	**16**	**162**	**35**	**40**	**115**	**13**	**15**	**107**	**58**	**20**	**85**	**6**	**672**	2,604
5:00 PM	**24**	**147**	**37**	**42**	**151**	**20**	**18**	**94**	**61**	**18**	**87**	**11**	**710**	2,655
5:15 PM	**12**	**151**	**36**	**49**	**147**	**12**	**22**	**125**	**65**	**23**	**84**	**12**	**738**	2,754
5:30 PM	**21**	**156**	**41**	**44**	**157**	**13**	**23**	**113**	**49**	**17**	**80**	**9**	**723**	**2,843**
5:45 PM	23	143	22	39	133	15	20	60	52	18	63	4	592	2,763
Count Total	145	1,197	277	323	1,116	139	150	762	423	153	625	57	5,367	
Peak Hr	**73**	**616**	**149**	**175**	**570**	**58**	**78**	**439**	**233**	**78**	**336**	**38**	**2,843**	

Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
4:00 PM	14	3	15	6	*38*	0	0	4	0	*4*	29	31	55	67	*182*
4:15 PM	12	11	14	9	*46*	0	0	1	0	*1*	35	24	48	54	*161*
4:30 PM	15	8	13	6	*42*	0	1	3	1	*5*	38	37	67	88	*230*
4:45 PM	**9**	**5**	**15**	**11**	***40***	**0**	**1**	**3**	**4**	***8***	**43**	**42**	**70**	**71**	***226***
5:00 PM	**11**	**8**	**12**	**6**	***37***	**1**	**0**	**4**	**0**	***5***	**41**	**51**	**71**	**70**	***233***
5:15 PM	**9**	**6**	**13**	**9**	***37***	**1**	**0**	**0**	**3**	***4***	**48**	**71**	**74**	**92**	***285***
5:30 PM	**9**	**6**	**11**	**5**	***31***	**0**	**0**	**2**	**0**	***2***	**46**	**58**	**75**	**89**	***268***
5:45 PM	4	2	10	7	*23*	1	0	2	0	*3*	29	42	64	62	*197*
Count Total	83	49	103	59	*294*	3	2	19	8	*32*	309	356	524	593	*1,782*
Peak Hr	**38**	**25**	**51**	**31**	***145***	**2**	**1**	**9**	**7**	***19***	**178**	**222**	**290**	**322**	***1,012***

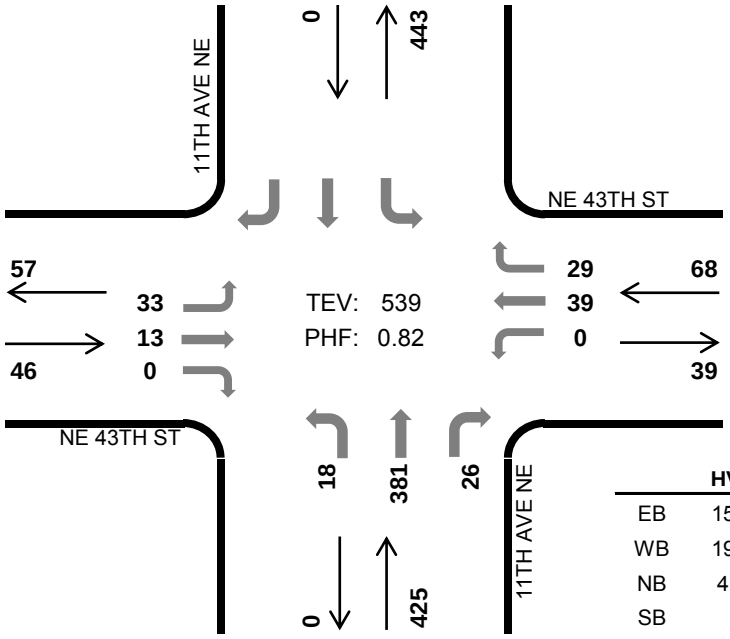
Mark Skaggs: 425 - 250 - 0777 mark.skaggs@idaxdata.com

11TH AVE NE
NE 43TH ST

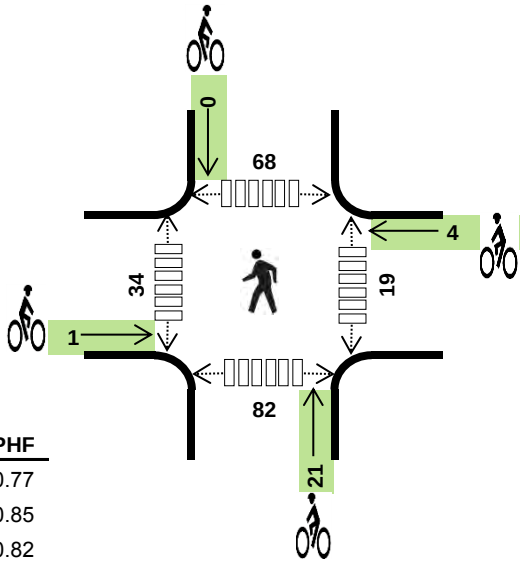
Date: Tue, Oct 14, 2014
Count Period: 7:00 AM to 9:00 AM
Peak Hour: 8:00 AM to 9:00 AM

N

Peak Hour



	HV %:	PHF
EB	15.2%	0.77
WB	19.1%	0.85
NB	4.7%	0.82
SB	-	-
TOTAL	7.4%	0.82



Two-Hour Count Summaries

Interval Start	NE 43TH ST Eastbound			NE 43TH ST Westbound			11TH AVE NE Northbound			11TH AVE NE Southbound			15-min Total	Rolling One Hour
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
7:00 AM	7	4	0	0	2	2	4	39	7	0	0	0	65	
7:15 AM	6	2	0	0	2	7	8	59	12	0	0	0	96	
7:30 AM	6	2	0	0	5	6	9	73	9	0	0	0	110	
7:45 AM	15	6	0	0	13	8	3	81	5	0	0	0	131	402
8:00 AM	**10**	**1**	**0**	**0**	**10**	**6**	**1**	**81**	**4**	**0**	**0**	**0**	**113**	450
8:15 AM	**9**	**2**	**0**	**0**	**7**	**6**	**6**	**78**	**5**	**0**	**0**	**0**	**113**	467
8:30 AM	**6**	**3**	**0**	**0**	**12**	**8**	**5**	**104**	**11**	**0**	**0**	**0**	**149**	506
8:45 AM	**8**	**7**	**0**	**0**	**10**	**9**	**6**	**118**	**6**	**0**	**0**	**0**	**164**	**539**
Count Total	67	27	0	0	61	52	42	633	59	0	0	0	941	
Peak Hr	**33**	**13**	**0**	**0**	**39**	**29**	**18**	**381**	**26**	**0**	**0**	**0**	**539**	

Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
7:00 AM	3	2	3	0	*8*	0	0	1	0	*1*	3	2	11	13	*29*
7:15 AM	1	3	5	0	*9*	1	2	3	0	*6*	3	3	12	15	*33*
7:30 AM	1	2	2	0	*5*	0	2	5	0	*7*	11	7	14	11	*43*
7:45 AM	5	2	7	0	*14*	1	1	7	0	*9*	1	10	14	10	*35*
8:00 AM	**1**	**5**	**2**	**0**	***8***	**0**	**3**	**5**	**0**	***8***	**3**	**7**	**12**	**28**	***50***
8:15 AM	**1**	**2**	**9**	**0**	***12***	**0**	**1**	**4**	**0**	***5***	**5**	**15**	**16**	**24**	***60***
8:30 AM	**1**	**3**	**4**	**0**	***8***	**1**	**0**	**6**	**0**	***7***	**2**	**3**	**12**	**18**	***35***
8:45 AM	**4**	**3**	**5**	**0**	***12***	**0**	**0**	**6**	**0**	***6***	**9**	**9**	**28**	**12**	***58***
Count Total	17	22	37	0	*76*	3	9	37	0	*49*	37	56	119	131	*343*
Peak Hr	**7**	**13**	**20**	**0**	***40***	**1**	**4**	**21**	**0**	***26***	**19**	**34**	**68**	**82**	***203***

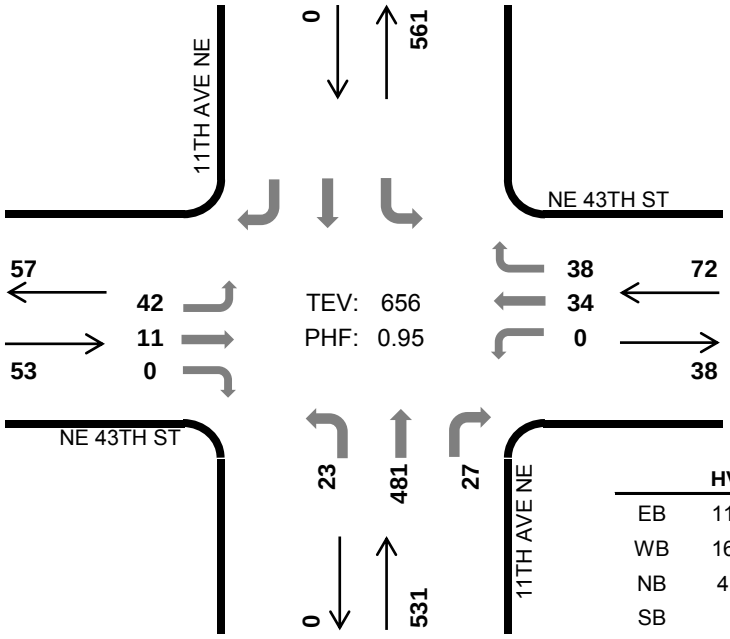
Mark Skaggs: 425 - 250 - 0777 mark.skaggs@idaxdata.com

11TH AVE NE
NE 43TH ST

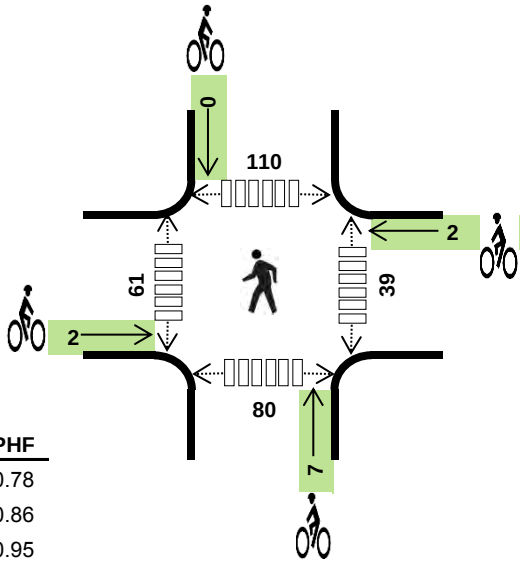
Date: Tue, Oct 14, 2014
Count Period: 11:00 AM to 1:00 PM
Peak Hour: 12:00 PM to 1:00 PM

N

Peak Hour



	HV %:	PHF
EB	11.3%	0.78
WB	16.7%	0.86
NB	4.9%	0.95
SB	-	-
TOTAL	6.7%	0.95



Two-Hour Count Summaries

Interval Start	NE 43TH ST Eastbound			NE 43TH ST Westbound			11TH AVE NE Northbound			11TH AVE NE Southbound			15-min Total	Rolling One Hour
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
11:00 AM	7	5	0	0	7	1	6	122	3	0	0	0	151	
11:15 AM	9	3	0	0	7	4	8	102	7	0	0	0	140	
11:30 AM	9	4	0	0	7	6	2	117	5	0	0	0	150	
11:45 AM	11	5	0	0	8	3	6	105	7	0	0	0	145	586
12:00 PM	**9**	**2**	**0**	**0**	**11**	**10**	**4**	**128**	**8**	**0**	**0**	**0**	**172**	607
12:15 PM	**13**	**4**	**0**	**0**	**6**	**8**	**4**	**120**	**8**	**0**	**0**	**0**	**163**	630
12:30 PM	**12**	**4**	**0**	**0**	**5**	**11**	**7**	**117**	**6**	**0**	**0**	**0**	**162**	642
12:45 PM	**8**	**1**	**0**	**0**	**12**	**9**	**8**	**116**	**5**	**0**	**0**	**0**	**159**	**656**
Count Total	78	28	0	0	63	52	45	927	49	0	0	0	1,242	
Peak Hr	**42**	**11**	**0**	**0**	**34**	**38**	**23**	**481**	**27**	**0**	**0**	**0**	**656**	

Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
11:00 AM	1	3	9	0	*13*	1	0	3	0	*4*	6	7	6	14	*33*
11:15 AM	2	3	5	0	*10*	1	0	3	0	*4*	6	10	15	14	*45*
11:30 AM	1	3	6	0	*10*	0	0	2	0	*2*	13	18	16	18	*65*
11:45 AM	2	4	5	0	*11*	1	1	5	0	*7*	8	18	24	12	*62*
12:00 PM	**1**	**3**	**7**	**0**	***11***	**0**	**1**	**1**	**0**	***2***	**6**	**18**	**35**	**24**	***83***
12:15 PM	**3**	**3**	**7**	**0**	***13***	**1**	**1**	**0**	**0**	***2***	**14**	**18**	**28**	**22**	***82***
12:30 PM	**1**	**3**	**5**	**0**	***9***	**1**	**0**	**1**	**0**	***2***	**13**	**11**	**29**	**18**	***71***
12:45 PM	**1**	**3**	**7**	**0**	***11***	**0**	**0**	**5**	**0**	***5***	**6**	**14**	**18**	**16**	***54***
Count Total	12	25	51	0	*88*	5	3	20	0	*28*	72	114	171	138	*495*
Peak Hr	**6**	**12**	**26**	**0**	***44***	**2**	**2**	**7**	**0**	***11***	**39**	**61**	**110**	**80**	***290***

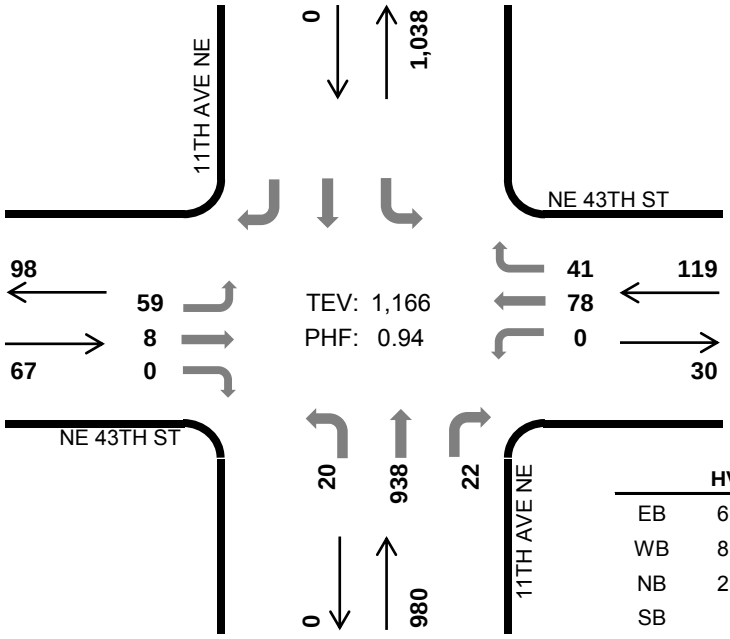
Mark Skaggs: 425 - 250 - 0777 mark.skaggs@idaxdata.com

11TH AVE NE
NE 43TH ST

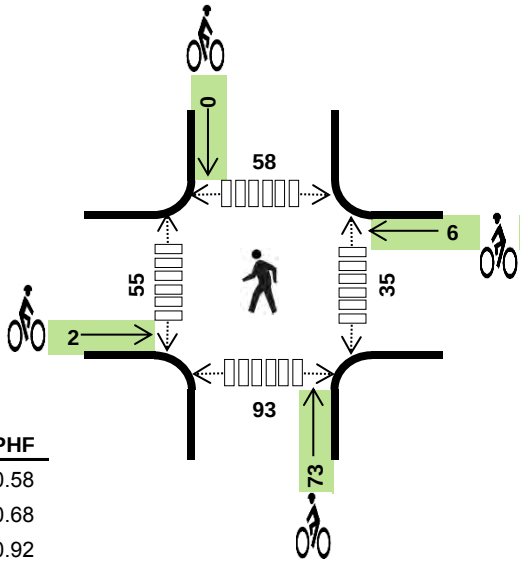
Date: Tue, Oct 14, 2014
Count Period: 4:00 PM to 6:00 PM
Peak Hour: 4:30 PM to 5:30 PM

N

Peak Hour



	HV %:	PHF
EB	6.0%	0.58
WB	8.4%	0.68
NB	2.2%	0.92
SB	-	-
TOTAL	3.1%	0.94



Two-Hour Count Summaries

Interval Start	NE 43TH ST Eastbound			NE 43TH ST Westbound			11TH AVE NE Northbound			11TH AVE NE Southbound			15-min Total	Rolling One Hour
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
4:00 PM	11	3	0	0	15	12	3	161	5	0	0	0	210	
4:15 PM	8	3	0	0	21	6	7	176	7	0	0	0	228	
4:30 PM	**25**	**4**	**0**	**0**	**14**	**8**	**8**	**225**	**5**	**0**	**0**	**0**	**289**	
4:45 PM	**12**	**4**	**0**	**0**	**16**	**7**	**2**	**234**	**7**	**0**	**0**	**0**	**282**	1,009
5:00 PM	**7**	**0**	**0**	**0**	**25**	**19**	**4**	**227**	**3**	**0**	**0**	**0**	**285**	1,084
5:15 PM	**15**	**0**	**0**	**0**	**23**	**7**	**6**	**252**	**7**	**0**	**0**	**0**	**310**	**1,166**
5:30 PM	9	0	0	0	13	6	4	241	6	0	0	0	279	1,156
5:45 PM	10	1	0	0	9	4	9	217	8	0	0	0	258	1,132
Count Total	97	15	0	0	136	69	43	1,733	48	0	0	0	2,141	
Peak Hr	**59**	**8**	**0**	**0**	**78**	**41**	**20**	**938**	**22**	**0**	**0**	**0**	**1,166**	

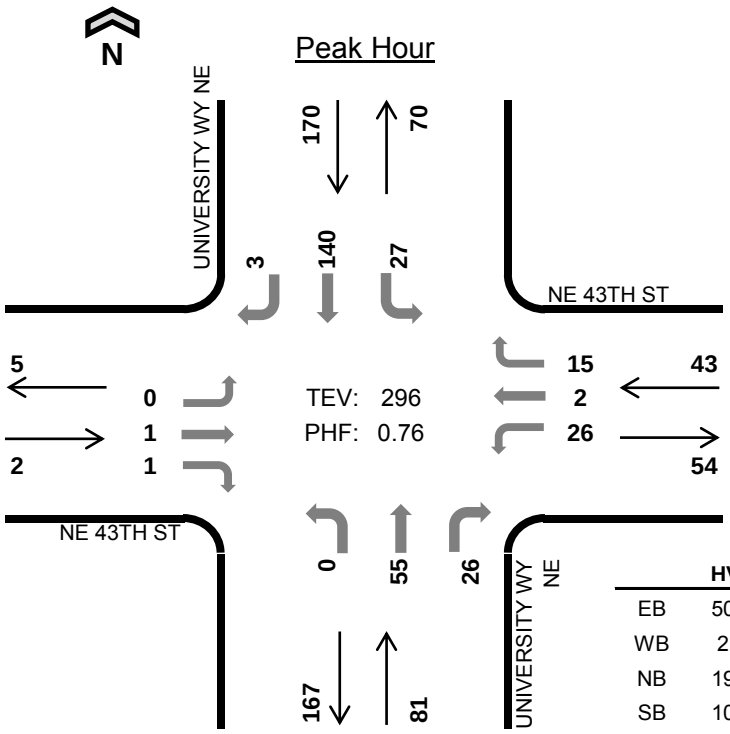
Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
4:00 PM	1	1	2	0	*4*	2	0	11	0	*13*	6	8	15	18	*47*
4:15 PM	1	4	4	0	*9*	1	1	6	0	*8*	0	7	14	16	*37*
4:30 PM	**1**	**2**	**5**	**0**	***8***	**1**	**0**	**14**	**0**	***15***	**4**	**24**	**17**	**28**	***73***
4:45 PM	**1**	**2**	**5**	**0**	***8***	**1**	**1**	**20**	**0**	***22***	**3**	**14**	**18**	**20**	***55***
5:00 PM	**1**	**3**	**7**	**0**	***11***	**0**	**1**	**19**	**0**	***20***	**16**	**13**	**12**	**25**	***66***
5:15 PM	**1**	**3**	**5**	**0**	***9***	**0**	**4**	**20**	**0**	***24***	**12**	**4**	**11**	**20**	***47***
5:30 PM	1	1	5	0	*7*	0	2	27	0	*29*	13	8	14	19	*54*
5:45 PM	1	1	3	0	*5*	0	1	25	0	*26*	7	6	10	18	*41*
Count Total	8	17	36	0	*61*	5	10	142	0	*157*	61	84	111	164	*420*
Peak Hr	**4**	**10**	**22**	**0**	***36***	**2**	**6**	**73**	**0**	***81***	**35**	**55**	**58**	**93**	***241***

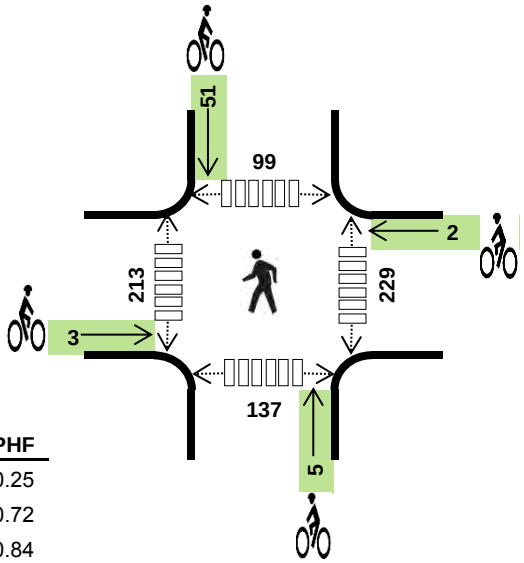
Mark Skaggs: 425 - 250 - 0777 mark.skaggs@idaxdata.com

UNIVERSITY WY NE
NE 43TH ST

Date: Tue, Oct 14, 2014
Count Period: 7:00 AM to 9:00 AM
Peak Hour: 8:00 AM to 9:00 AM



	HV %:	PHF
EB	50.0%	0.25
WB	2.3%	0.72
NB	19.8%	0.84
SB	10.6%	0.75
TOTAL	12.2%	0.76



Two-Hour Count Summaries

Interval Start	NE 43TH ST Eastbound			NE 43TH ST Westbound			UNIVERSITY WY NE Northbound			UNIVERSITY WY NE Southbound			15-min Total	Rolling One Hour
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
7:00 AM	0	0	0	4	0	3	1	5	0	3	20	0	36	
7:15 AM	0	0	0	5	0	4	0	4	2	0	20	1	36	
7:30 AM	0	1	0	1	1	1	0	3	1	5	27	0	40	
7:45 AM	0	1	0	5	0	1	0	5	3	6	30	0	51	163
8:00 AM	**0**	**0**	**0**	**5**	**0**	**3**	**0**	**10**	**8**	**2**	**29**	**0**	**57**	184
8:15 AM	**0**	**1**	**1**	**13**	**0**	**2**	**0**	**16**	**8**	**13**	**43**	**1**	**98**	246
8:30 AM	**0**	**0**	**0**	**5**	**1**	**3**	**0**	**15**	**4**	**7**	**31**	**1**	**67**	273
8:45 AM	**0**	**0**	**0**	**3**	**1**	**7**	**0**	**14**	**6**	**5**	**37**	**1**	**74**	**296**
Count Total	0	3	1	41	3	24	1	72	32	41	237	4	459	
Peak Hr	**0**	**1**	**1**	**26**	**2**	**15**	**0**	**55**	**26**	**27**	**140**	**3**	**296**	

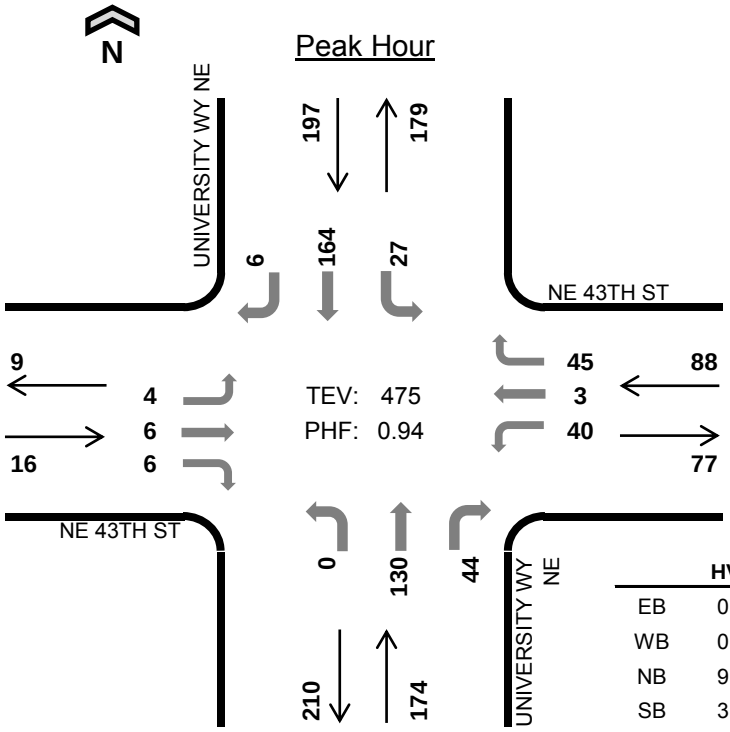
Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
7:00 AM	0	0	2	3	*5*	0	0	0	3	*3*	14	19	10	20	*63*
7:15 AM	0	0	0	2	*2*	0	0	0	1	*1*	14	19	4	19	*56*
7:30 AM	0	0	0	3	*3*	0	0	0	3	*3*	18	28	15	23	*84*
7:45 AM	0	0	0	3	*3*	0	0	0	6	*6*	34	41	18	23	*116*
8:00 AM	**0**	**1**	**4**	**4**	***9***	**0**	**1**	**3**	**14**	***18***	**62**	**46**	**23**	**31**	***162***
8:15 AM	**1**	**0**	**4**	**6**	***11***	**1**	**1**	**0**	**17**	***19***	**65**	**77**	**28**	**43**	***213***
8:30 AM	**0**	**0**	**5**	**5**	***10***	**1**	**0**	**1**	**10**	***12***	**61**	**50**	**30**	**34**	***175***
8:45 AM	**0**	**0**	**3**	**3**	***6***	**1**	**0**	**1**	**10**	***12***	**41**	**40**	**18**	**29**	***128***
Count Total	1	1	18	29	*49*	3	2	5	64	*74*	309	320	146	222	*997*
Peak Hr	**1**	**1**	**16**	**18**	***36***	**3**	**2**	**5**	**51**	***61***	**229**	**213**	**99**	**137**	***678***

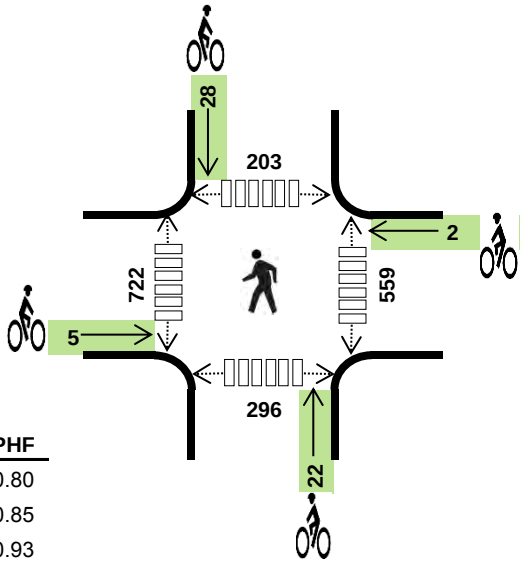
Mark Skaggs: 425 - 250 - 0777 mark.skaggs@idaxdata.com

UNIVERSITY WY NE
NE 43TH ST

Date: Tue, Oct 14, 2014
Count Period: 11:00 AM to 1:00 PM
Peak Hour: 11:45 AM to 12:45 PM



	HV %:	PHF
EB	0.0%	0.80
WB	0.0%	0.85
NB	9.8%	0.93
SB	3.6%	0.90
TOTAL	5.1%	0.94



Two-Hour Count Summaries

Interval Start	NE 43TH ST Eastbound			NE 43TH ST Westbound			UNIVERSITY WY NE Northbound			UNIVERSITY WY NE Southbound			15-min Total	Rolling One Hour
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
11:00 AM	0	3	1	11	1	9	2	22	14	12	30	1	106	
11:15 AM	1	0	1	10	0	6	0	25	6	8	30	0	87	
11:30 AM	1	2	0	5	0	7	1	37	8	3	35	4	103	
11:45 AM	**1**	**1**	**2**	**12**	**2**	**8**	**0**	**31**	**9**	**11**	**34**	**1**	**112**	408
12:00 PM	**0**	**1**	**2**	**6**	**0**	**10**	**0**	**35**	**12**	**8**	**37**	**2**	**113**	415
12:15 PM	**1**	**3**	**1**	**12**	**0**	**12**	**0**	**28**	**14**	**5**	**50**	**0**	**126**	454
12:30 PM	**2**	**1**	**1**	**10**	**1**	**15**	**0**	**36**	**9**	**3**	**43**	**3**	**124**	**475**
12:45 PM	0	2	0	12	0	8	0	31	9	6	38	2	108	471
Count Total	6	13	8	78	4	75	3	245	81	56	297	13	879	
Peak Hr	**4**	**6**	**6**	**40**	**3**	**45**	**0**	**130**	**44**	**27**	**164**	**6**	**475**	

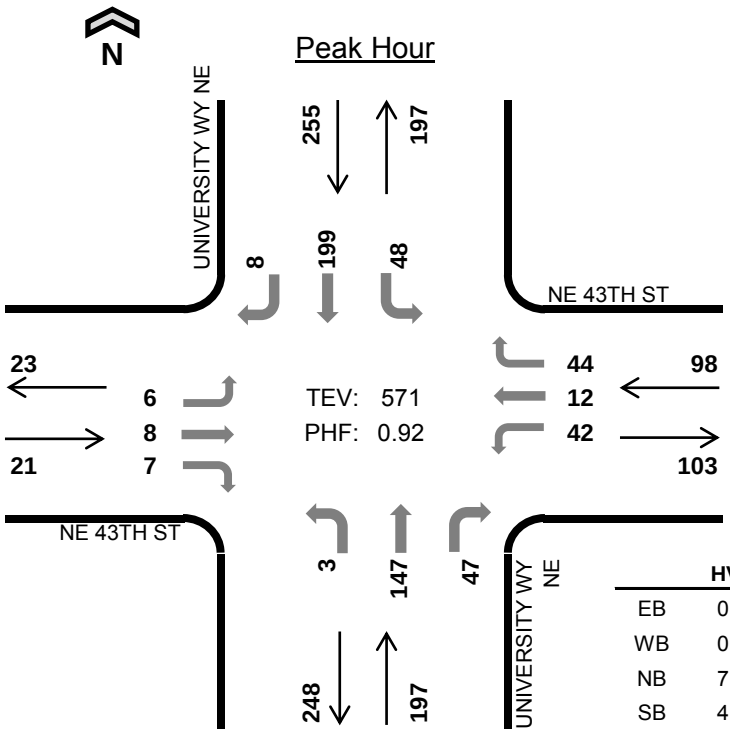
Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
11:00 AM	1	1	6	2	*10*	0	0	3	5	*8*	79	95	33	31	*238*
11:15 AM	0	2	2	3	*7*	0	0	2	9	*11*	111	125	25	45	*306*
11:30 AM	1	0	3	4	*8*	0	1	4	6	*11*	109	146	48	62	*365*
11:45 AM	**0**	**0**	**5**	**1**	***6***	**1**	**0**	**4**	**11**	***16***	**121**	**140**	**32**	**64**	***357***
12:00 PM	**0**	**0**	**8**	**1**	***9***	**2**	**0**	**4**	**2**	***8***	**123**	**167**	**40**	**54**	***384***
12:15 PM	**0**	**0**	**2**	**3**	***5***	**1**	**1**	**10**	**9**	***21***	**149**	**206**	**57**	**86**	***498***
12:30 PM	**0**	**0**	**2**	**2**	***4***	**1**	**1**	**4**	**6**	***12***	**166**	**209**	**74**	**92**	***541***
12:45 PM	0	0	4	3	*7*	1	1	3	5	*10*	117	182	42	66	*407*
Count Total	2	3	32	19	*56*	6	4	34	53	*97*	975	1,270	351	500	*3,096*
Peak Hr	**0**	**0**	**17**	**7**	***24***	**5**	**2**	**22**	**28**	***57***	**559**	**722**	**203**	**296**	***1,780***

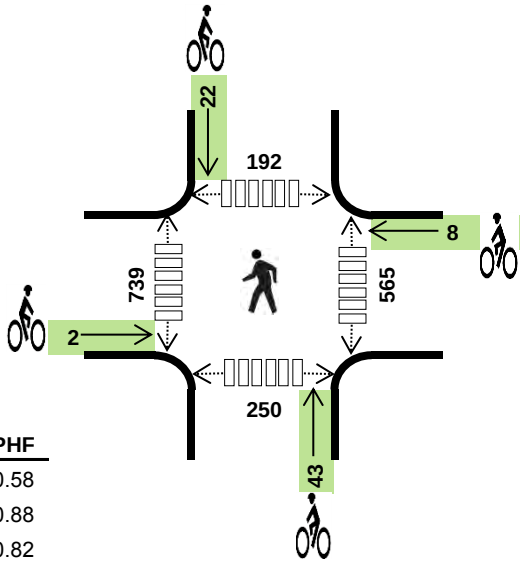
Mark Skaggs: 425 - 250 - 0777 mark.skaggs@idaxdata.com

UNIVERSITY WY NE
NE 43TH ST

Date: Tue, Oct 14, 2014
Count Period: 4:00 PM to 6:00 PM
Peak Hour: 4:45 PM to 5:45 PM



	HV %:	PHF
EB	0.0%	0.58
WB	0.0%	0.88
NB	7.1%	0.82
SB	4.3%	0.84
TOTAL	4.4%	0.92



Two-Hour Count Summaries

Interval Start	NE 43TH ST Eastbound			NE 43TH ST Westbound			UNIVERSITY WY NE Northbound			UNIVERSITY WY NE Southbound			15-min Total	Rolling One Hour
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
4:00 PM	1	3	0	8	0	9	0	28	4	13	41	4	111	
4:15 PM	0	1	1	5	0	11	1	38	6	11	48	2	124	
4:30 PM	1	1	0	5	2	13	0	52	10	5	51	1	141	
4:45 PM	**1**	**2**	**0**	**9**	**11**	**8**	**1**	**30**	**9**	**17**	**42**	**2**	**132**	508
5:00 PM	**2**	**4**	**1**	**15**	**1**	**9**	**1**	**29**	**12**	**10**	**50**	**1**	**135**	532
5:15 PM	**1**	**1**	**0**	**8**	**0**	**10**	**1**	**41**	**18**	**11**	**62**	**3**	**156**	564
5:30 PM	**2**	**1**	**6**	**10**	**0**	**17**	**0**	**47**	**8**	**10**	**45**	**2**	**148**	**571**
5:45 PM	0	0	3	9	0	7	0	31	7	12	41	0	110	549
Count Total	8	13	11	69	14	84	4	296	74	89	380	15	1,057	
Peak Hr	**6**	**8**	**7**	**42**	**12**	**44**	**3**	**147**	**47**	**48**	**199**	**8**	**571**	

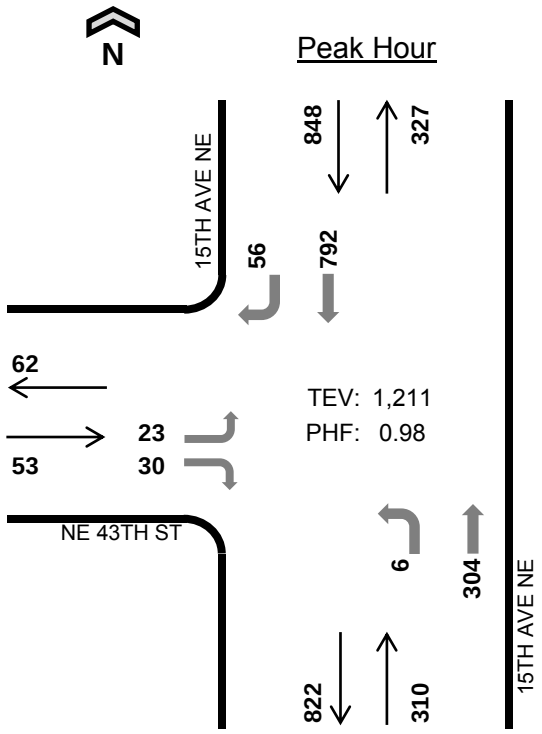
Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

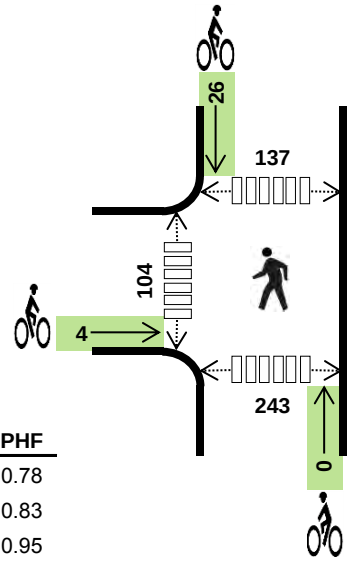
Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
4:00 PM	0	0	5	3	*8*	0	0	7	7	*14*	115	119	48	45	*327*
4:15 PM	0	0	2	4	*6*	0	4	7	0	*11*	117	151	50	37	*355*
4:30 PM	0	0	5	3	*8*	1	1	6	6	*14*	132	136	42	43	*353*
4:45 PM	**0**	**0**	**3**	**3**	***6***	**0**	**0**	**11**	**6**	***17***	**130**	**147**	**45**	**27**	***349***
5:00 PM	**0**	**0**	**4**	**3**	***7***	**1**	**1**	**8**	**8**	***18***	**142**	**199**	**36**	**64**	***441***
5:15 PM	**0**	**0**	**4**	**2**	***6***	**1**	**3**	**11**	**3**	***18***	**135**	**198**	**57**	**73**	***463***
5:30 PM	**0**	**0**	**3**	**3**	***6***	**0**	**4**	**13**	**5**	***22***	**158**	**195**	**54**	**86**	***493***
5:45 PM	0	0	2	2	*4*	1	4	6	3	*14*	118	173	37	55	*383*
Count Total	0	0	28	23	*51*	4	17	69	38	*128*	1,047	1,318	369	430	*3,164*
Peak Hr	**0**	**0**	**14**	**11**	***25***	**2**	**8**	**43**	**22**	***75***	**565**	**739**	**192**	**250**	***1,746***

Mark Skaggs: 425 - 250 - 0777 mark.skaggs@idaxdata.com

15TH AVE NE
NE 43TH ST

Date: Tue, Oct 14, 2014
Count Period: 7:00 AM to 9:00 AM
Peak Hour: 7:45 AM to 8:45 AM





	HV %:	PHF
EB	7.5%	0.78
NB	20.3%	0.83
SB	7.0%	0.95
TOTAL	10.4%	0.98

Two-Hour Count Summaries

Interval Start	NE 43TH ST Eastbound			NE 43TH ST Westbound			15TH AVE NE Northbound			15TH AVE NE Southbound			15-min Total	Rolling One Hour
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
7:00 AM	1	0	2	0	0	0	2	29	0	0	90	5	129	
7:15 AM	2	0	1	0	0	0	0	38	0	0	102	11	154	
7:30 AM	6	0	1	0	0	0	0	57	0	0	167	7	238	
7:45 AM	**4**	**0**	**7**	**0**	**0**	**0**	**0**	**82**	**0**	**0**	**194**	**6**	**293**	814
8:00 AM	**5**	**0**	**6**	**0**	**0**	**0**	**1**	**64**	**0**	**0**	**208**	**16**	**300**	985
8:15 AM	**8**	**0**	**9**	**0**	**0**	**0**	**3**	**67**	**0**	**0**	**206**	**16**	**309**	1,140
8:30 AM	**6**	**0**	**8**	**0**	**0**	**0**	**2**	**91**	**0**	**0**	**184**	**18**	**309**	**1,211**
8:45 AM	7	0	12	0	0	0	2	64	0	0	179	19	283	1,201
Count Total	39	0	46	0	0	0	10	492	0	0	1,330	98	2,015	
Peak Hr	**23**	**0**	**30**	**0**	**0**	**0**	**6**	**304**	**0**	**0**	**792**	**56**	**1,211**	

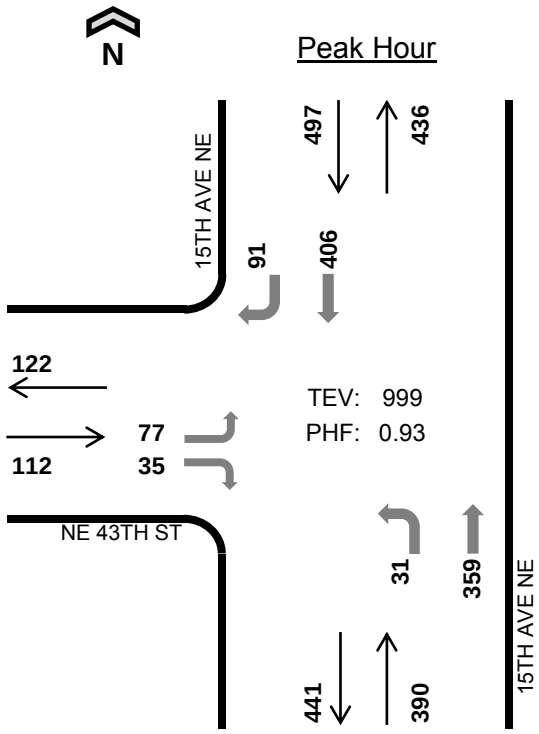
Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

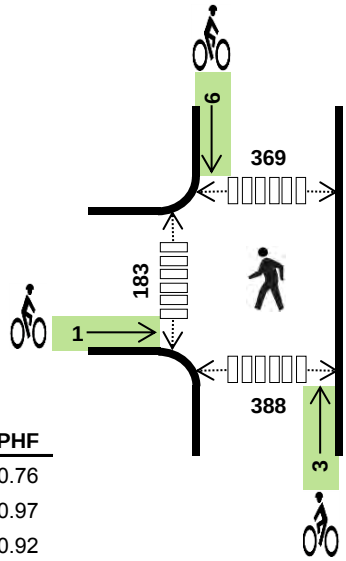
Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
7:00 AM	1	0	12	13	*26*	0	0	0	1	*1*	0	6	6	5	*17*
7:15 AM	0	0	12	6	*18*	0	0	0	0	*0*	0	10	8	21	*39*
7:30 AM	1	0	16	13	*30*	0	0	0	2	*2*	0	11	6	34	*51*
7:45 AM	**0**	**0**	**14**	**13**	***27***	**1**	**0**	**0**	**5**	***6***	**0**	**22**	**22**	**38**	***82***
8:00 AM	**1**	**0**	**14**	**17**	***32***	**2**	**0**	**0**	**6**	***8***	**0**	**26**	**30**	**67**	***123***
8:15 AM	**1**	**0**	**11**	**15**	***27***	**0**	**0**	**0**	**8**	***8***	**0**	**23**	**53**	**67**	***143***
8:30 AM	**2**	**0**	**24**	**14**	***40***	**1**	**0**	**0**	**7**	***8***	**0**	**33**	**32**	**71**	***136***
8:45 AM	0	0	14	11	*25*	0	0	0	7	*7*	0	21	38	49	*108*
Count Total	6	0	117	102	*225*	4	0	0	36	*40*	0	152	195	352	*699*
Peak Hr	**4**	**0**	**63**	**59**	***126***	**4**	**0**	**0**	**26**	***30***	**0**	**104**	**137**	**243**	***484***

Mark Skaggs: 425 - 250 - 0777 mark.skaggs@idaxdata.com

15TH AVE NE
NE 43TH ST

Date: Tue, Oct 14, 2014
Count Period: 11:00 AM to 1:00 PM
Peak Hour: 11:45 AM to 12:45 PM





	HV %:	PHF
EB	3.6%	0.76
NB	9.0%	0.97
SB	7.2%	0.92
TOTAL	7.5%	0.93

Two-Hour Count Summaries

Interval Start	NE 43TH ST Eastbound			NE 43TH ST Westbound			15TH AVE NE Northbound			15TH AVE NE Southbound			15-min Total	Rolling One Hour
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
11:00 AM	15	0	12	0	0	0	13	87	0	0	83	15	225	
11:15 AM	15	0	13	0	0	0	7	107	0	0	84	19	245	
11:30 AM	14	0	5	0	0	0	4	97	0	0	84	24	228	
11:45 AM	**13**	**0**	**9**	**0**	**0**	**0**	**3**	**88**	**0**	**0**	**92**	**22**	**227**	925
12:00 PM	**18**	**0**	**9**	**0**	**0**	**0**	**7**	**94**	**0**	**0**	**110**	**19**	**257**	957
12:15 PM	**25**	**0**	**12**	**0**	**0**	**0**	**11**	**86**	**0**	**0**	**113**	**22**	**269**	981
12:30 PM	**21**	**0**	**5**	**0**	**0**	**0**	**10**	**91**	**0**	**0**	**91**	**28**	**246**	**999**
12:45 PM	11	0	17	0	0	0	8	66	0	0	94	18	214	986
Count Total	132	0	82	0	0	0	63	716	0	0	751	167	1,911	
Peak Hr	**77**	**0**	**35**	**0**	**0**	**0**	**31**	**359**	**0**	**0**	**406**	**91**	**999**	

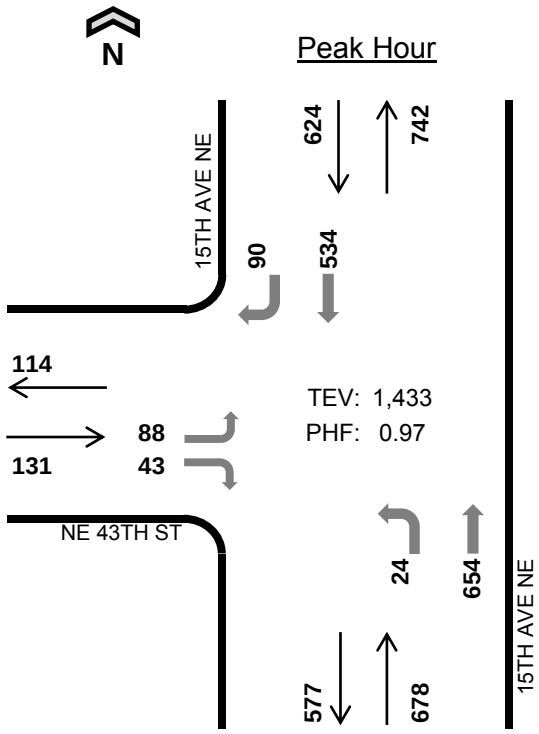
Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

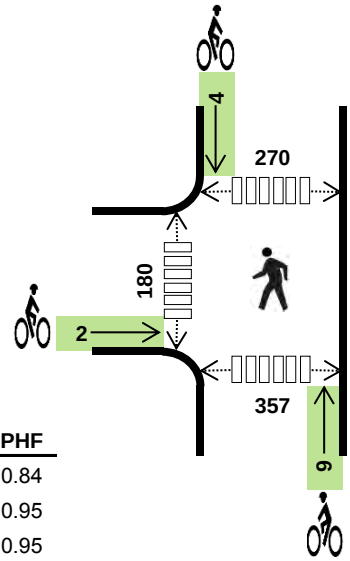
Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
11:00 AM	2	0	11	9	*22*	1	0	0	1	*2*	0	31	39	42	*112*
11:15 AM	1	0	5	12	*18*	0	0	2	0	*2*	0	49	67	48	*164*
11:30 AM	1	0	12	7	*20*	0	0	1	0	*1*	0	42	62	58	*162*
11:45 AM	**0**	**0**	**7**	**8**	***15***	**0**	**0**	**0**	**1**	***1***	**0**	**33**	**42**	**70**	***145***
12:00 PM	**2**	**0**	**9**	**11**	***22***	**0**	**0**	**2**	**1**	***3***	**0**	**40**	**90**	**52**	***182***
12:15 PM	**2**	**0**	**8**	**7**	***17***	**1**	**0**	**0**	**4**	***5***	**0**	**64**	**114**	**164**	***342***
12:30 PM	**0**	**0**	**11**	**10**	***21***	**0**	**0**	**1**	**0**	***1***	**0**	**46**	**123**	**102**	***271***
12:45 PM	1	0	5	6	*12*	3	0	0	4	*7*	0	27	62	69	*158*
Count Total	9	0	68	70	*147*	5	0	6	11	*22*	0	332	599	605	*####*
Peak Hr	**4**	**0**	**35**	**36**	***75***	**1**	**0**	**3**	**6**	***10***	**0**	**183**	**369**	**388**	***940***

Mark Skaggs: 425 - 250 - 0777 mark.skaggs@idaxdata.com

15TH AVE NE
NE 43TH ST

Date: Tue, Oct 14, 2014
Count Period: 4:00 PM to 6:00 PM
Peak Hour: 4:45 PM to 5:45 PM





	HV %:	PHF
EB	0.0%	0.84
NB	8.0%	0.95
SB	8.3%	0.95
TOTAL	7.4%	0.97

Two-Hour Count Summaries

Interval Start	NE 43TH ST Eastbound			NE 43TH ST Westbound			15TH AVE NE Northbound			15TH AVE NE Southbound			15-min Total	Rolling One Hour
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
4:00 PM	15	0	9	0	0	0	3	132	0	0	116	15	290	
4:15 PM	16	0	7	0	0	0	4	130	0	0	125	18	300	
4:30 PM	14	0	8	0	0	0	9	134	0	0	128	16	309	
4:45 PM	**24**	**0**	**8**	**0**	**0**	**0**	**7**	**154**	**0**	**0**	**122**	**18**	**333**	1,232
5:00 PM	**24**	**0**	**15**	**0**	**0**	**0**	**7**	**158**	**0**	**0**	**138**	**24**	**366**	1,308
5:15 PM	**21**	**0**	**12**	**0**	**0**	**0**	**5**	**173**	**0**	**0**	**134**	**23**	**368**	1,376
5:30 PM	**19**	**0**	**8**	**0**	**0**	**0**	**5**	**169**	**0**	**0**	**140**	**25**	**366**	**1,433**
5:45 PM	16	0	9	0	0	0	6	109	0	0	102	14	256	1,356
Count Total	149	0	76	0	0	0	46	1,159	0	0	1,005	153	2,588	
Peak Hr	**88**	**0**	**43**	**0**	**0**	**0**	**24**	**654**	**0**	**0**	**534**	**90**	**1,433**	

Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
4:00 PM	1	0	12	13	*26*	1	0	0	0	*1*	0	28	39	53	*120*
4:15 PM	0	0	12	16	*28*	0	0	1	0	*1*	0	27	56	56	*139*
4:30 PM	0	0	13	11	*24*	1	0	1	1	*3*	0	28	52	62	*142*
4:45 PM	**0**	**0**	**17**	**15**	***32***	**0**	**0**	**1**	**0**	***1***	**0**	**43**	**50**	**54**	***147***
5:00 PM	**0**	**0**	**12**	**16**	***28***	**1**	**0**	**3**	**1**	***5***	**0**	**51**	**51**	**74**	***176***
5:15 PM	**0**	**0**	**13**	**10**	***23***	**1**	**0**	**1**	**3**	***5***	**0**	**41**	**111**	**119**	***271***
5:30 PM	**0**	**0**	**12**	**11**	***23***	**0**	**0**	**4**	**0**	***4***	**0**	**45**	**58**	**110**	***213***
5:45 PM	1	0	10	11	*22*	0	0	1	0	*1*	0	39	47	74	*160*
Count Total	2	0	101	103	*206*	4	0	12	5	*21*	0	302	464	602	*####*
Peak Hr	**0**	**0**	**54**	**52**	***106***	**2**	**0**	**9**	**4**	***15***	**0**	**180**	**270**	**357**	***807***

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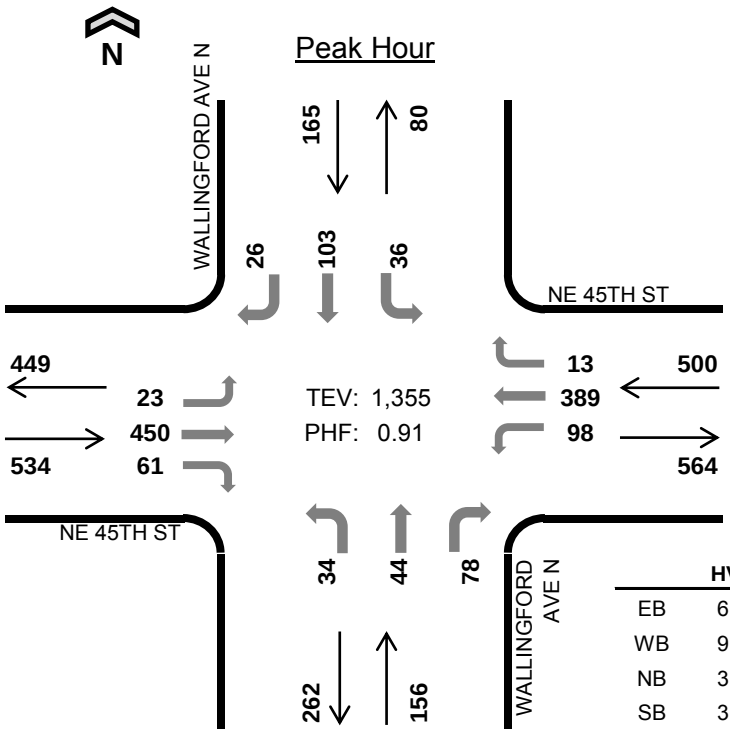
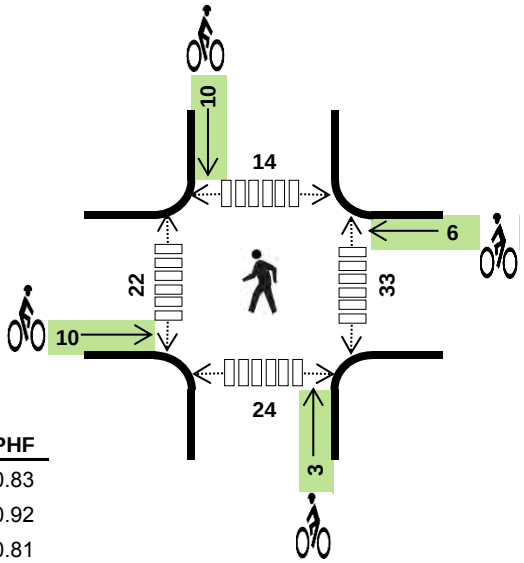
WALLINGFORD AVE N
NE 45TH ST

Date: Tue, Oct 14, 2014
Count Period: 7:00 AM to 9:00 AM
Peak Hour: 7:30 AM to 8:30 AM



	HV %:	PHF
EB	6.7%	0.83
WB	9.2%	0.92
NB	3.8%	0.81
SB	3.0%	0.78
TOTAL	6.9%	0.91



Two-Hour Count Summaries

Interval Start	NE 45TH ST Eastbound			NE 45TH ST Westbound			WALLINGFORD AVE N Northbound			WALLINGFORD AVE N Southbound			15-min Total	Rolling One Hour
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
7:00 AM	2	106	7	23	82	1	4	1	28	2	4	3	263	
7:15 AM	1	112	13	28	99	1	5	6	25	4	26	2	322	
7:30 AM	**10**	**117**	**33**	**26**	**88**	**4**	**8**	**8**	**27**	**4**	**42**	**7**	**374**	
7:45 AM	**6**	**125**	**9**	**28**	**104**	**4**	**5**	**8**	**15**	**6**	**16**	**7**	**333**	1,292
8:00 AM	**2**	**97**	**12**	**23**	**96**	**3**	**14**	**6**	**17**	**11**	**23**	**8**	**312**	1,341
8:15 AM	**5**	**111**	**7**	**21**	**101**	**2**	**7**	**22**	**19**	**15**	**22**	**4**	**336**	**1,355**
8:30 AM	4	117	10	21	108	1	8	7	14	7	32	7	336	1,317
8:45 AM	2	110	14	17	105	4	9	8	20	4	27	9	329	1,313
Count Total	32	895	105	187	783	20	60	66	165	53	192	47	2,605	
Peak Hr	**23**	**450**	**61**	**98**	**389**	**13**	**34**	**44**	**78**	**36**	**103**	**26**	**1,355**	

Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
7:00 AM	4	7	1	0	*12*	1	4	0	1	*6*	5	4	3	3	*15*
7:15 AM	6	9	0	0	*15*	0	1	0	2	*3*	4	14	6	9	*33*
7:30 AM	**12**	**12**	**2**	**2**	***28***	**3**	**3**	**1**	**7**	***14***	**3**	**8**	**3**	**10**	***24***
7:45 AM	**6**	**11**	**0**	**1**	***18***	**1**	**2**	**0**	**2**	***5***	**8**	**6**	**5**	**7**	***26***
8:00 AM	**10**	**10**	**3**	**0**	***23***	**2**	**0**	**1**	**0**	***3***	**11**	**3**	**4**	**0**	***18***
8:15 AM	**8**	**13**	**1**	**2**	***24***	**4**	**1**	**1**	**1**	***7***	**11**	**5**	**2**	**7**	***25***
8:30 AM	11	8	1	2	*22*	3	1	1	2	*7*	13	6	5	4	*28*
8:45 AM	5	7	2	0	*14*	0	2	0	0	*2*	15	4	6	12	*37*
Count Total	62	77	10	7	*156*	14	14	4	15	*47*	70	50	34	52	*206*
Peak Hr	**36**	**46**	**6**	**5**	***93***	**10**	**6**	**3**	**10**	***29***	**33**	**22**	**14**	**24**	***93***

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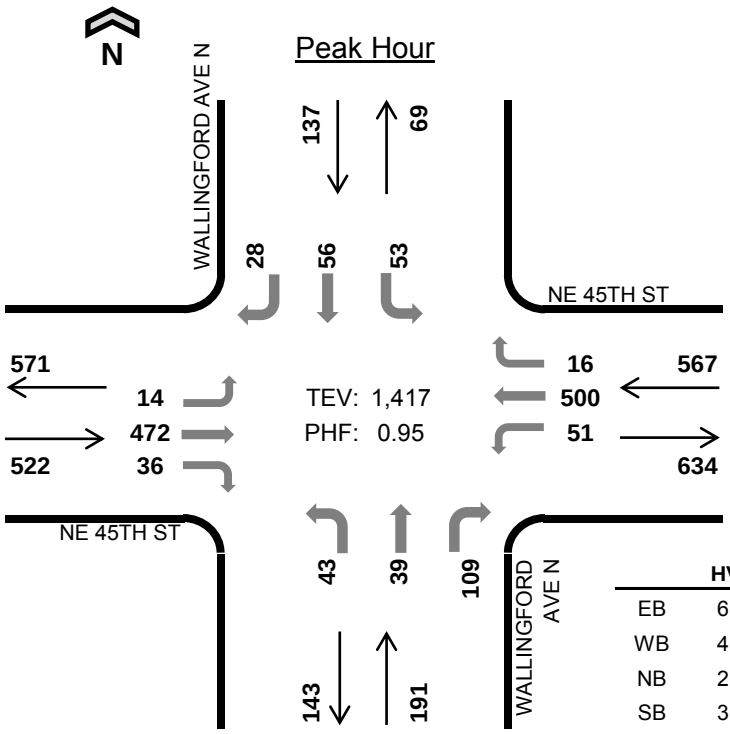
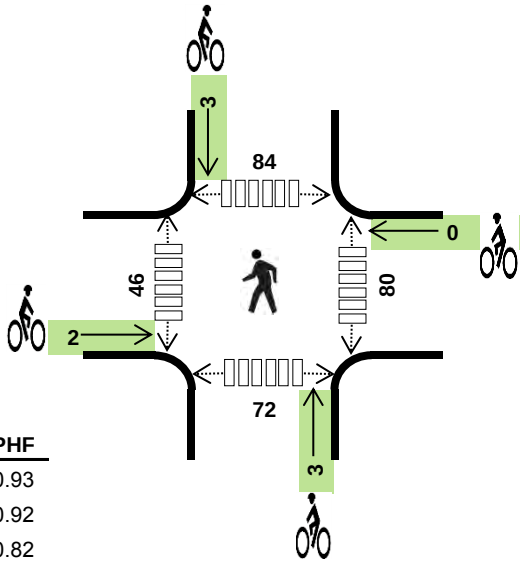
WALLINGFORD AVE N
NE 45TH ST

Date: Tue, Oct 14, 2014
Count Period: 11:00 AM to 1:00 PM
Peak Hour: 12:00 PM to 1:00 PM



	HV %:	PHF
EB	6.7%	0.93
WB	4.8%	0.92
NB	2.1%	0.82
SB	3.6%	0.88
TOTAL	5.0%	0.95



Two-Hour Count Summaries

Interval Start	NE 45TH ST Eastbound			NE 45TH ST Westbound			WALLINGFORD AVE N Northbound			WALLINGFORD AVE N Southbound			15-min Total	Rolling One Hour
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
11:00 AM	4	129	7	15	112	2	10	5	22	9	8	7	330	
11:15 AM	10	102	8	10	120	3	12	8	25	11	11	8	328	
11:30 AM	4	110	7	12	120	5	10	7	21	10	11	8	325	
11:45 AM	4	131	8	13	124	3	7	8	18	6	9	12	343	1,326
12:00 PM	**3**	**117**	**12**	**10**	**126**	**7**	**12**	**10**	**36**	**15**	**15**	**9**	**372**	1,368
12:15 PM	**4**	**118**	**9**	**15**	**116**	**2**	**7**	**10**	**21**	**12**	**12**	**7**	**333**	1,373
12:30 PM	**3**	**106**	**10**	**12**	**122**	**3**	**13**	**10**	**29**	**16**	**15**	**8**	**347**	1,395
12:45 PM	**4**	**131**	**5**	**14**	**136**	**4**	**11**	**9**	**23**	**10**	**14**	**4**	**365**	**1,417**
Count Total	36	944	66	101	976	29	82	67	195	89	95	63	2,743	
Peak Hr	**14**	**472**	**36**	**51**	**500**	**16**	**43**	**39**	**109**	**53**	**56**	**28**	**1,417**	

Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
11:00 AM	8	7	2	1	*18*	0	1	0	0	*1*	9	9	9	11	*38*
11:15 AM	6	5	1	1	*13*	3	0	0	2	*5*	9	14	25	12	*60*
11:30 AM	8	9	0	1	*18*	1	0	0	0	*1*	14	12	14	17	*57*
11:45 AM	11	9	0	0	*20*	1	0	0	0	*1*	19	13	26	19	*77*
12:00 PM	**9**	**9**	**1**	**2**	***21***	**0**	**0**	**1**	**0**	***1***	**18**	**14**	**26**	**16**	***74***
12:15 PM	**6**	**9**	**0**	**1**	***16***	**0**	**0**	**0**	**0**	***0***	**16**	**8**	**14**	**23**	***61***
12:30 PM	**11**	**6**	**1**	**1**	***19***	**0**	**0**	**2**	**2**	***4***	**22**	**15**	**27**	**19**	***83***
12:45 PM	**9**	**3**	**2**	**1**	***15***	**2**	**0**	**0**	**1**	***3***	**24**	**9**	**17**	**14**	***64***
Count Total	68	57	7	8	*140*	7	1	3	5	*16*	131	94	158	131	*514*
Peak Hr	**35**	**27**	**4**	**5**	***71***	**2**	**0**	**3**	**3**	***8***	**80**	**46**	**84**	**72**	***282***

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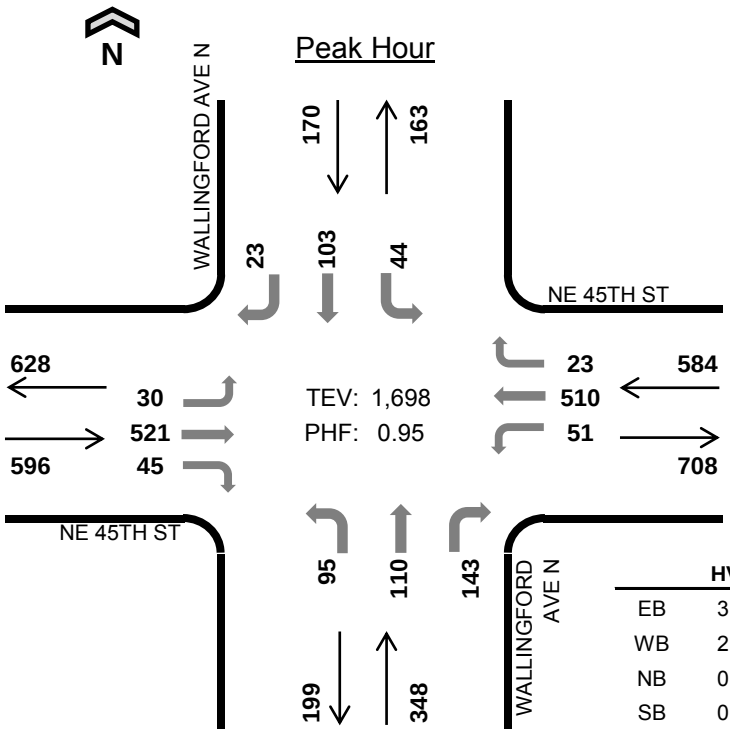
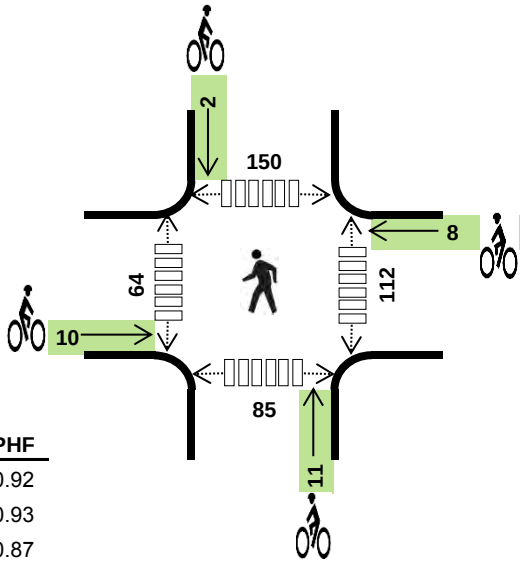
WALLINGFORD AVE N
NE 45TH ST

Date: Tue, Oct 14, 2014
Count Period: 4:00 PM to 6:00 PM
Peak Hour: 4:45 PM to 5:45 PM



	HV %:	PHF
EB	3.0%	0.92
WB	2.9%	0.93
NB	0.6%	0.87
SB	0.6%	0.89
TOTAL	2.2%	0.95



Two-Hour Count Summaries

Interval Start	NE 45TH ST Eastbound			NE 45TH ST Westbound			WALLINGFORD AVE N Northbound			WALLINGFORD AVE N Southbound			15-min Total	Rolling One Hour
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
4:00 PM	7	130	10	14	129	8	11	21	32	9	22	8	401	
4:15 PM	12	112	12	19	126	6	15	16	30	12	20	8	388	
4:30 PM	7	123	8	11	121	10	19	18	41	11	17	5	391	
4:45 PM	**7**	**110**	**15**	**12**	**131**	**7**	**30**	**25**	**33**	**12**	**30**	**6**	**418**	1,598
5:00 PM	**5**	**146**	**9**	**9**	**125**	**6**	**26**	**27**	**47**	**11**	**22**	**7**	**440**	1,637
5:15 PM	**11**	**139**	**12**	**20**	**131**	**6**	**21**	**32**	**31**	**12**	**24**	**8**	**447**	1,696
5:30 PM	**7**	**126**	**9**	**10**	**123**	**4**	**18**	**26**	**32**	**9**	**27**	**2**	**393**	**1,698**
5:45 PM	8	96	7	8	104	3	9	25	27	10	10	11	318	1,598
Count Total	64	982	82	103	990	50	149	190	273	86	172	55	3,196	
Peak Hr	**30**	**521**	**45**	**51**	**510**	**23**	**95**	**110**	**143**	**44**	**103**	**23**	**1,698**	

Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
4:00 PM	4	13	0	4	*21*	2	1	0	0	*3*	19	23	28	17	*87*
4:15 PM	5	6	0	0	*11*	0	0	0	0	*0*	33	18	25	18	*94*
4:30 PM	4	4	2	1	*11*	2	2	2	1	*7*	27	15	35	23	*100*
4:45 PM	**6**	**3**	**0**	**0**	***9***	**1**	**3**	**1**	**0**	***5***	**32**	**21**	**39**	**26**	***118***
5:00 PM	**3**	**8**	**0**	**0**	***11***	**1**	**2**	**3**	**1**	***7***	**29**	**13**	**36**	**20**	***98***
5:15 PM	**7**	**3**	**1**	**1**	***12***	**2**	**0**	**3**	**0**	***5***	**23**	**13**	**35**	**15**	***86***
5:30 PM	**2**	**3**	**1**	**0**	***6***	**6**	**3**	**4**	**1**	***14***	**28**	**17**	**40**	**24**	***109***
5:45 PM	2	6	0	0	*8*	0	5	1	2	*8*	34	15	33	20	*102*
Count Total	33	46	4	6	*89*	14	16	14	5	*49*	225	135	271	163	*794*
Peak Hr	**18**	**17**	**2**	**1**	***38***	**10**	**8**	**11**	**2**	***31***	**112**	**64**	**150**	**85**	***411***

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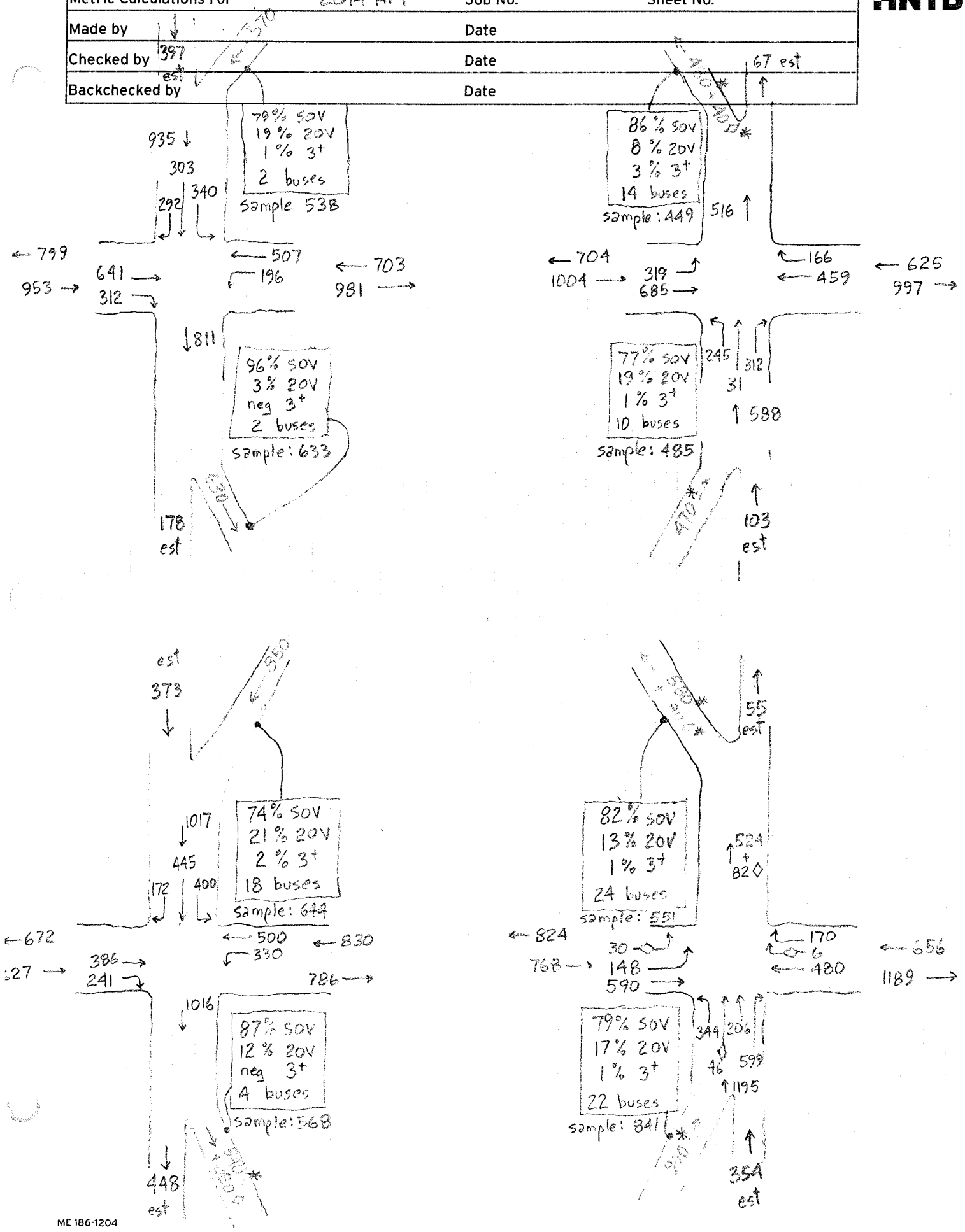
APPENDIX D – 2014 VEHICLE OCCUPANCY COUNTS

Metric Calculations For	2014 AM	Job No.	Sheet No.
Made by		Date	
Checked by		Date	
Backchecked by		Date	

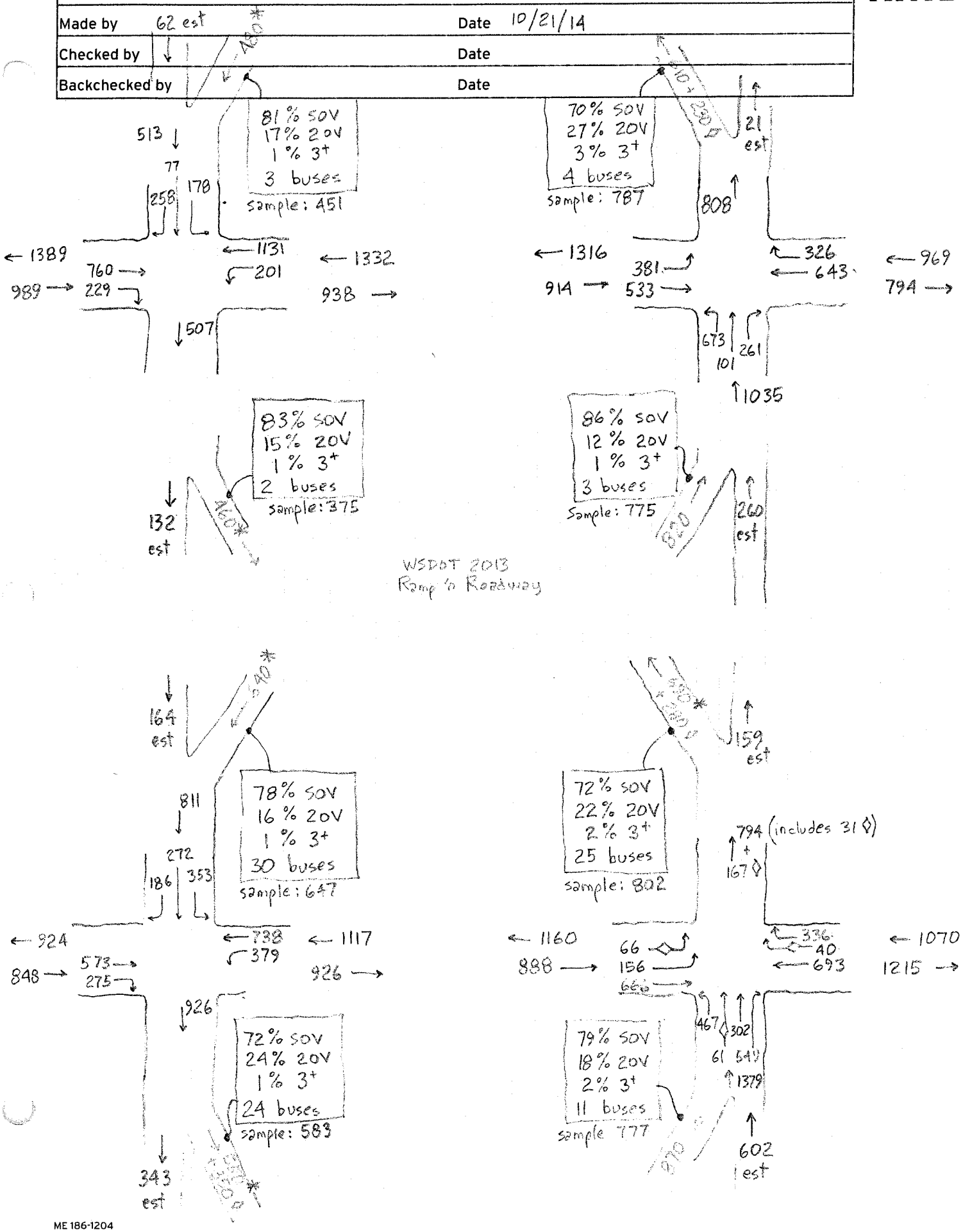
HNTB



ME 186-1204

Metric Calculations For	2014 PM	Job No. 63186	Sheet No.
Made by	62 est	Date 10/21/14	
Checked by		Date	
Backchecked by		Date	

HNTB



ME 186-1204

LOCATION 1 I5 SB OFF RAMP TO 50TH				
	1	2	3+	BUS
7:00	94	11	0	0
7:15	51	16	1	0
7:30	68	13	0	1
7:45	85	11	3	0
8:00	91	28	0	0
8:15	83	16	0	0
8:30	134	33	5	1
8:45	118	27	2	0

LOCATION 2 I-5 SB ON RAMP FROM 50TH				
	1	2	3+	BUS
7:00	132	11	0	0
7:15	138	3	1	0
7:30	131	4	1	0
7:45	129	8	0	0
8:00	144	3	1	0
8:15	146	2	0	0
8:30	163	8	0	2
8:45	156	7	1	0

LOCATION 1 I5 SB OFF RAMP TO 50TH				
	1	2	3+	BUS
11:00	97	17	2	1
11:15	98	20	2	0
11:30	98	18	2	0
11:45	94	22	2	0
12:00	105	20	3	1
12:15	94	21	1	0
12:30	91	23	0	1
12:45	86	28	2	0

LOCATION 2 I-5 SB ON RAMP FROM 50TH				
	1	2	3+	BUS
11:00	103	19	2	0
11:15	89	16	1	0
11:30	89	12	1	0
11:45	86	25	1	1
12:00	95	24	0	1
12:15	81	17	0	1
12:30	92	13	1	0
12:45	85	15	1	0

LOCATION 1 I5 SB OFF RAMP TO 50TH				
	1	2	3+	BUS
16:00	91	23	3	2
16:15	80	16	0	1
16:30	80	21	2	2
16:45	81	17	2	0
17:00	79	19	0	2
17:15	93	18	1	0
17:30	114	23	1	1
17:45	98	23	0	0

LOCATION 2 I-5 SB ON RAMP FROM 50TH				
	1	2	3+	BUS
16:00	79	20	3	1
16:15	52	12	0	0
16:30	76	11	1	1
16:45	70	13	2	0
17:00	78	15	1	0
17:15	69	9	0	0
17:30	94	20	2	2
17:45	81	18	1	0

LOCATION 3 I-5 NB OFF RAMP TO 50TH				
	1	2	3+	BUS
7:00	80	4	0	6
7:15	78	12	0	4
7:30	52	5	1	4
7:45	67	15	1	2
8:00	84	13	1	1
8:15	104	34	2	2
8:30	99	26	2	4
8:45	88	21	1	3

LOCATION 4 I-5 NB ON RAMP FROM 50TH				
	1	2	3+	BUS
7:00	66	3	0	3
7:15	58	12	7	4
7:30	86	7	5	2
7:45	109	16	6	5
8:00	85	9	4	5
8:15	95	9	3	4
8:30	112	6	3	3
8:45	96	11	2	2

LOCATION 3 I-5 NB OFF RAMP TO 50TH				
	1	2	3+	BUS
11:00	83	14	2	4
11:15	80	10	3	3
11:30	81	17	2	0
11:45	110	23	0	3
12:00	88	13	1	0
12:15	86	14	2	0
12:30	98	7	1	0
12:45	81	26	0	0

LOCATION 4 I-5 NB ON RAMP FROM 50TH				
	1	2	3+	BUS
11:00	113	29	7	0
11:15	107	18	5	0
11:30	114	18	1	0
11:45	88	17	2	0
12:00	83	25	1	0
12:15	80	13	1	0
12:30	60	12	2	0
12:45	122	50	11	0

LOCATION 3 I-5 NB OFF RAMP TO 50TH				
	1	2	3+	BUS
16:00	165	25	3	2
16:15	151	22	4	0
16:30	224	31	8	2
16:45	177	26	1	1
17:00	155	19	4	0
17:15	156	22	2	1
17:30	180	28	2	1
17:45	153	21	6	0

LOCATION 4 I-5 NB ON RAMP FROM 50TH				
	1	2	3+	BUS
16:00	122	49	20	2
16:15	66	41	22	0
16:30	119	27	5	1
16:45	140	45	3	1
17:00	122	67	7	1
17:15	135	40	5	1
17:30	150	58	11	1
17:45	75	42	7	0

LOCATION 5 I-5 SB OFF RAMP TO 45TH				
	1	2	3+	BUS
7:00	139	23	1	2
7:15	150	17	0	3
7:30	128	21	1	4
7:45	122	27	3	6
8:00	139	37	1	2
8:15	106	25	3	7
8:30	115	40	4	4
8:45	119	34	3	5

LOCATION 6 I-5 SB ON RAMP FROM 45TH				
	1	2	3+	BUS
7:00	78	9	1	1
7:15	89	7	0	1
7:30	112	12	0	1
7:45	151	22	2	3
8:00	135	26	0	1
8:15	102	20	1	0
8:30	130	10	0	2
8:45	127	12	1	1

LOCATION 5 I-5 SB OFF RAMP TO 45TH				
	1	2	3+	BUS
11:00	126	28	1	3
11:15	121	26	0	1
11:30	118	32	6	1
11:45	105	30	2	1
12:00	134	28	3	2
12:15	131	39	2	2
12:30	149	35	1	1
12:45	149	30	0	1

LOCATION 6 I-5 SB ON RAMP FROM 45TH				
	1	2	3+	BUS
11:00	118	20	0	3
11:15	122	27	1	1
11:30	129	33	0	3
11:45	133	11	0	2
12:00	123	25	1	1
12:15	102	31	0	1
12:30	134	46	2	2
12:45	115	36	0	0

LOCATION 5 I-5 SB OFF RAMP TO 45TH				
	1	2	3+	BUS
16:00	133	37	1	4
16:15	135	19	1	7
16:30	107	21	0	8
16:45	104	25	3	9
17:00	130	25	1	8
17:15	123	21	1	9
17:30	149	31	4	4
17:45	102	15	1	5

LOCATION 6 I-5 SB ON RAMP FROM 45TH				
	1	2	3+	BUS
16:00	85	26	1	1
16:15	108	45	0	6
16:30	133	61	1	7
16:45	92	55	2	4
17:00	119	37	0	10
17:15	86	20	0	8
17:30	120	25	3	2
17:45	105	12	0	4

LOCATION 7 I-5 NB OFF RAMP TO 45TH				
	1	2	3+	BUS
7:00	99	13	1	3
7:15	97	19	2	4
7:30	150	28	2	4
7:45	169	34	0	5
8:00	173	46	3	6
8:15	175	38	1	7
8:30	161	29	1	5
8:45	157	41	2	6

LOCATION 8 I-5 NB ON RAMP				
	1	2	3+	BUS
7:00	71	11	1	3
7:15	76	9	1	2
7:30	108	26	1	4
7:45	131	21	2	6
8:00	120	12	0	7
8:15	95	11	0	7
8:30	107	12	1	5
8:45	102	8	1	3

LOCATION 7 I-5 NB OFF RAMP TO 45TH				
	1	2	3+	BUS
11:00	147	36	1	4
11:15	150	51	0	5
11:30	149	35	0	2
11:45	163	50	0	2
12:00	159	38	4	2
12:15	159	46	4	5
12:30	155	46	2	1
12:45	156	41	3	2

LOCATION 8 I-5 NB ON RAMP				
	1	2	3+	BUS
11:00	107	37	2	3
11:15	110	31	3	2
11:30	37	12	0	0
11:45	122	15	1	1
12:00	216	57	1	3
12:15	127	33	1	2
12:30	138	43	3	0
12:45	128	31	0	5

LOCATION 7 I-5 NB OFF RAMP TO 45TH				
	1	2	3+	BUS
16:00	164	33	1	2
16:15	151	31	2	2
16:30	167	33	4	2
16:45	134	40	3	4
17:00	159	37	5	3
17:15	162	31	1	2
17:30	133	33	3	3
17:45	143	41	1	2

LOCATION 8 I-5 NB ON RAMP				
	1	2	3+	BUS
16:00	125	38	6	9
16:15	153	44	7	5
16:30	142	40	4	4
16:45	137	45	2	10
17:00	147	50	6	6
17:15	145	47	2	4
17:30	134	48	3	7
17:45	112	33	1	8

APPENDIX E –VISSIM CALIBRATION

Route 44 AM Peak Hour Travel Time Calibration

allowable travel time variation:

WB target (sec)	247	WB allowable variation:	35.8
EB target (sec)	324	EB allowable variation:	57.8
WB distance (ft)	2862		
EB distance (ft)	3139		
FFS (mph)	10		

		target diff. (sec)	within Target?
Run 1 WB (sec)	308	61	No
Run 1 EB (sec)	340	16	Yes
Run 2 WB (sec)	264	17	Yes
Run 2 EB (sec)	306	-18	Yes
Run 3 WB (sec)	267	20	Yes
Run 3 EB (sec)	326	2	Yes
Run 4 WB (sec)	269	22	Yes
Run 4 EB (sec)	381	57	Yes
Run 5 WB (sec)	235	-12	Yes
Run 5 EB (sec)	294	-30	Yes
Run 6 WB (sec)	252	5	Yes
Run 6 EB (sec)	292	-32	Yes
Run 7 WB (sec)	256	9	Yes
Run 7 EB (sec)	281	-43	Yes
Run 8 WB (sec)	276	29	Yes
Run 8 EB (sec)	326	2	Yes
Run 9 WB (sec)	248	1	Yes
Run 9 EB (sec)	364	40	Yes
Run 10 WB (sec)	235	-12	Yes
Run 10 EB (sec)	323	-1	Yes
AVG WB (sec)	261	14	Yes
AVG EB (sec)	323	-1	Yes

Movement	Move/ Direction	Veh	2014 Count	% Difference between VISSIM Outputs/Field	Difference between VISSIM Outputs/Field	GEH
5: NE 50th Street & Latona Avenue NE - 70@	E-W	696	699	0.49%	3	0.13
5: NE 50th Street & Latona Avenue NE - 70@	E-N	98	100	2.50%	3	0.25
5: NE 50th Street & Latona Avenue NE - 71@	W-E	852	853	0.15%	1	0.04
5: NE 50th Street & Latona Avenue NE - 100	S-W	10	10	0.00%	0	0.00
5: NE 50th Street & Latona Avenue NE - 100	S-E	30	30	-1.00%	0	0.05
5: NE 50th Street & Latona Avenue NE - 100	S-N	23	25	8.80%	2	0.45
5: NE 50th Street & Latona Avenue NE - 102	N-W	74	75	1.07%	1	0.09
5: NE 50th Street & Latona Avenue NE - 102	N-E	68	70	2.71%	2	0.23
6: NE 50th Street & 5th Avenue NE - 70@304	E-W	508	507	-0.22%	-1	0.05
6: NE 50th Street & 5th Avenue NE - 71@11	W-E	628	634	1.03%	7	0.26
6: NE 50th Street & 5th Avenue NE - 71@11	W-S	322	319	-1.03%	-3	0.18
6: NE 50th Street & 5th Avenue NE - 72@178	E-S	193	189	-1.96%	-4	0.27
6: NE 50th Street & 5th Avenue NE - 74@17	N-W	285	292	2.36%	7	0.41
6: NE 50th Street & 5th Avenue NE - 74@17	N-E	347	341	-1.61%	-6	0.30
6: NE 50th Street & 5th Avenue NE - 74@17	N-S	302	303	0.20%	1	0.03
7: NE 50th Street & 7th Avenue NE - 70@25	E-W	434	432	-0.46%	-2	0.10
7: NE 50th Street & 7th Avenue NE - 71@163	W-E	660	656	-0.58%	-4	0.15
7: NE 50th Street & 7th Avenue NE - 73@156	W-N	313	319	2.01%	6	0.36
7: NE 50th Street & 7th Avenue NE - 87@284	S-W	266	265	-0.42%	-1	0.07
7: NE 50th Street & 7th Avenue NE - 87@284	S-E	294	292	-0.68%	-2	0.12
7: NE 50th Street & 7th Avenue NE - 87@284	S-N	33	31	-5.48%	-2	0.30
7: NE 50th Street & 7th Avenue NE - 10043@	E-N	167	166	-0.66%	-1	0.09
8: NE 50th Street & 9th Avenue NE - 70@195	E-W	589	585	-0.63%	-4	0.15
8: NE 50th Street & 9th Avenue NE - 70@195	E-S	2	2	5.00%	0	0.07
8: NE 50th Street & 9th Avenue NE - 70@195	E-N	32	30	-5.33%	-2	0.29
8: NE 50th Street & 9th Avenue NE - 71@221	W-E	819	813	-0.73%	-6	0.21
8: NE 50th Street & 9th Avenue NE - 71@221	W-S	57	57	-0.18%	0	0.01
8: NE 50th Street & 9th Avenue NE - 71@221	W-N	81	78	-3.46%	-3	0.30
8: NE 50th Street & 9th Avenue NE - 115@59	S-W	7	7	0.00%	0	0.00
8: NE 50th Street & 9th Avenue NE - 115@59	S-E	6	7	12.86%	1	0.35
8: NE 50th Street & 9th Avenue NE - 115@59	S-N	9	11	17.27%	2	0.60
8: NE 50th Street & 9th Avenue NE - 117@52	N-W	5	6	15.00%	1	0.38
8: NE 50th Street & 9th Avenue NE - 117@52	N-E	5	5	10.00%	1	0.23
8: NE 50th Street & 9th Avenue NE - 117@52	N-S	2	3	20.00%	1	0.37
9: NE 50th Street & Roosevelt Way NE - 70@	E-W	488	486	-0.39%	-2	0.09
9: NE 50th Street & Roosevelt Way NE - 70@	E-S	44	43	-2.09%	-1	0.14
9: NE 50th Street & Roosevelt Way NE - 71@	W-E	648	643	-0.79%	-5	0.20
9: NE 50th Street & Roosevelt Way NE - 71@	W-S	181	182	0.55%	1	0.07
9: NE 50th Street & Roosevelt Way NE - 342	N-W	134	131	-2.06%	-3	0.23
9: NE 50th Street & Roosevelt Way NE - 342	N-E	93	90	-3.67%	-3	0.34
9: NE 50th Street & Roosevelt Way NE - 342	N-S	770	763	-0.97%	-7	0.27
10: NE 50th Street & 11th Avenue NE - 70@1	E-W	459	455	-0.97%	-4	0.21
10: NE 50th Street & 11th Avenue NE - 70@1	E-N	5	5	-4.00%	0	0.09
10: NE 50th Street & 11th Avenue NE - 71@2	W-E	695	687	-1.12%	-8	0.29
10: NE 50th Street & 11th Avenue NE - 71@2	W-N	46	46	-0.43%	0	0.03
10: NE 50th Street & 11th Avenue NE - 71@2	W-N	1	1	0.00%	0	0.00
10: NE 50th Street & 11th Avenue NE - 358@	S-W	73	74	1.89%	1	0.16
10: NE 50th Street & 11th Avenue NE - 358@	S-E	19	20	4.00%	1	0.18
10: NE 50th Street & 11th Avenue NE - 358@	S-N	121	117	-3.16%	-4	0.34
10: NE 50th Street & 11th Avenue NE - 358@	S-N	4	4	7.50%	0	0.15

Movement	Move/ Direction	Veh	2014 Count	% Difference between VISSIM Outputs/Field	Difference between VISSIM Outputs/Field	GEH
11: NE 50th Street & Brooklyn Avenue NE - 7	E-W	380	372	-2.07%	-8	0.40
11: NE 50th Street & Brooklyn Avenue NE - 7	E-N	26	16	-61.88%	-10	2.16
11: NE 50th Street & Brooklyn Avenue NE - 7	E-S	11	13	13.08%	2	0.49
11: NE 50th Street & Brooklyn Avenue NE - 7	W-E	516	506	-1.96%	-10	0.44
11: NE 50th Street & Brooklyn Avenue NE - 7	W-N	60	59	-1.53%	-1	0.12
11: NE 50th Street & Brooklyn Avenue NE - 7	W-S	77	77	0.65%	1	0.06
11: NE 50th Street & Brooklyn Avenue NE - 3	S-W	21	21	-0.48%	0	0.02
11: NE 50th Street & Brooklyn Avenue NE - 3	S-E	5	4	-12.50%	-1	0.24
11: NE 50th Street & Brooklyn Avenue NE - 3	S-N	21	22	4.55%	1	0.22
11: NE 50th Street & Brooklyn Avenue NE - 3	N-W	51	53	3.96%	2	0.29
11: NE 50th Street & Brooklyn Avenue NE - 3	N-E	7	7	-1.43%	0	0.04
11: NE 50th Street & Brooklyn Avenue NE - 3	N-S	71	71	-0.42%	0	0.04
12: NE 50th Street & University Way NE - 70(	E-W	329	315	-4.29%	-14	0.75
12: NE 50th Street & University Way NE - 70(	E-N	4	4	-2.50%	0	0.05
12: NE 50th Street & University Way NE - 70(	E-S	15	10	-47.00%	-5	1.34
12: NE 50th Street & University Way NE - 71(	W-E	465	459	-1.39%	-6	0.30
12: NE 50th Street & University Way NE - 71(	W-N	13	13	0.77%	0	0.03
12: NE 50th Street & University Way NE - 71(	W-S	49	45	-8.00%	-4	0.53
12: NE 50th Street & University Way NE - 353	S-W	17	17	2.35%	0	0.10
12: NE 50th Street & University Way NE - 353	S-E	13	10	-31.00%	-3	0.91
12: NE 50th Street & University Way NE - 353	S-N	43	31	-40.00%	-12	2.03
12: NE 50th Street & University Way NE - 354	N-W	70	69	-1.45%	-1	0.12
12: NE 50th Street & University Way NE - 354	N-E	30	20	-51.50%	-10	2.05
12: NE 50th Street & University Way NE - 354	N-S	89	82	-7.93%	-7	0.70
13: NE 50th Street & 15th Avenue NE - 70@3	E-W	232	229	-1.22%	-3	0.18
13: NE 50th Street & 15th Avenue NE - 70@3	E-N	6	6	0.00%	0	0.00
13: NE 50th Street & 15th Avenue NE - 70@3	E-S	24	24	2.08%	1	0.10
13: NE 50th Street & 15th Avenue NE - 71@3	W-E	303	299	-1.34%	-4	0.23
13: NE 50th Street & 15th Avenue NE - 71@3	W-N	21	21	1.90%	0	0.09
13: NE 50th Street & 15th Avenue NE - 71@3	W-S	184	169	-8.93%	-15	1.14
13: NE 50th Street & 15th Avenue NE - 347@	S-W	75	59	-26.61%	-16	1.92
13: NE 50th Street & 15th Avenue NE - 347@	S-E	9	9	1.11%	0	0.03
13: NE 50th Street & 15th Avenue NE - 347@	S-N	105	95	-10.53%	-10	1.00
13: NE 50th Street & 15th Avenue NE - 348@	N-W	41	41	-0.24%	0	0.02
13: NE 50th Street & 15th Avenue NE - 348@	N-E	15	15	3.33%	1	0.13
13: NE 50th Street & 15th Avenue NE - 348@	N-S	471	465	-1.20%	-6	0.26
18: NE 45th Street & Latona Avenue NE - 104	W-N	11	10	-12.00%	-1	0.37
18: NE 45th Street & Latona Avenue NE - 106	S-N	48	46	-4.57%	-2	0.31
18: NE 45th Street & Latona Avenue NE - 106	S-E	87	88	1.25%	1	0.12
18: NE 45th Street & Latona Avenue NE - 106	S-W	10	10	2.00%	0	0.06
18: NE 45th Street & Latona Avenue NE - 31:	W-E	542	539	-0.59%	-3	0.14
18: NE 45th Street & Latona Avenue NE - 418	E-N	9	10	12.00%	1	0.39
18: NE 45th Street & Latona Avenue NE - 418	E-W	676	662	-2.08%	-14	0.53
19: NE 45th Street & 5th Avenue NE - 313: 45	W-E	387	386	-0.36%	-1	0.07
19: NE 45th Street & 5th Avenue NE - 313: 45	W-S	242	241	-0.37%	-1	0.06
19: NE 45th Street & 5th Avenue NE - 319@2	E-W	506	500	-1.10%	-6	0.25
19: NE 45th Street & 5th Avenue NE - 329@2	E-S	328	330	0.58%	2	0.10
19: NE 45th Street & 5th Avenue NE - 338@2	N-E	417	400	-4.13%	-17	0.82
19: NE 45th Street & 5th Avenue NE - 338@2	N-W	179	172	-4.24%	-7	0.55
19: NE 45th Street & 5th Avenue NE - 338@2	N-S	427	445	3.98%	18	0.85

Movement	Move/ Direction	Veh	2014 Count	% Difference between VISSIM Outputs/Field	Difference between VISSIM Outputs/Field	GEH
20: NE 45th Street & 7th Avenue NE - 313: 45	W-E	603	608	0.87%	5	0.22
20: NE 45th Street & 7th Avenue NE - 319@2	E-W	489	490	0.24%	1	0.05
20: NE 45th Street & 7th Avenue NE - 319@2	E-N	178	180	1.22%	2	0.16
20: NE 45th Street & 7th Avenue NE - 319@2	E-N	44	40	-10.75%	-4	0.66
20: NE 45th Street & 7th Avenue NE - 319@2	E-W	6	6	6.67%	0	0.17
20: NE 45th Street & 7th Avenue NE - 325@1	S-W	603	603	-0.05%	0	0.01
20: NE 45th Street & 7th Avenue NE - 325@1	S-N	216	210	-2.95%	-6	0.42
20: NE 45th Street & 7th Avenue NE - 331@4	S-E	342	340	-0.59%	-2	0.11
20: NE 45th Street & 7th Avenue NE - 331@4	S-N	44	42	-5.24%	-2	0.34
20: NE 45th Street & 7th Avenue NE - 361@9	W-N	144	140	-3.00%	-4	0.35
20: NE 45th Street & 7th Avenue NE - 361@9	W-N	38	38	0.79%	0	0.05
20: NE 45th Street & 7th Avenue NE - 20001	W-E	21	21	-0.48%	0	0.02
21: NE 45th Street & Roosevelt Way NE - 1@	E-S	287	289	0.59%	2	0.10
21: NE 45th Street & Roosevelt Way NE - 31	W-E	777	760	-2.22%	-17	0.61
21: NE 45th Street & Roosevelt Way NE - 31	W-S	249	242	-2.77%	-7	0.43
21: NE 45th Street & Roosevelt Way NE - 319	E-W	683	680	-0.49%	-3	0.13
21: NE 45th Street & Roosevelt Way NE - 350	N-S	860	853	-0.84%	-7	0.25
21: NE 45th Street & Roosevelt Way NE - 39	N-E	44	46	5.00%	2	0.34
21: NE 45th Street & Roosevelt Way NE - 104	NE-W	67	65	-2.62%	-2	0.21
22: NE 45th Street & 11th Avenue NE - 313: 4	W-E	821	806	-1.81%	-15	0.51
22: NE 45th Street & 11th Avenue NE - 319@	E-W	871	865	-0.72%	-6	0.21
22: NE 45th Street & 11th Avenue NE - 319@	E-N	27	26	-4.23%	-1	0.21
22: NE 45th Street & 11th Avenue NE - 357@	S-E	64	66	2.42%	2	0.20
22: NE 45th Street & 11th Avenue NE - 357@	S-W	98	104	6.25%	7	0.65
22: NE 45th Street & 11th Avenue NE - 357@	S-N	172	167	-3.11%	-5	0.40
23: NE 45th Street & 12th Avenue NE - 313: 4	W-E	748	729	-2.54%	-19	0.68
23: NE 45th Street & 12th Avenue NE - 313: 4	W-S	118	121	2.73%	3	0.30
23: NE 45th Street & 12th Avenue NE - 319@	E-W	872	866	-0.70%	-6	0.21
23: NE 45th Street & 12th Avenue NE - 319@	E-N	3	4	15.00%	1	0.31
23: NE 45th Street & 12th Avenue NE - 387@	E-S	60	62	3.55%	2	0.28
23: NE 45th Street & 12th Avenue NE - 388@	N-E	10	7	-40.00%	-3	0.97
23: NE 45th Street & 12th Avenue NE - 388@	N-W	15	15	1.33%	0	0.05
23: NE 45th Street & 12th Avenue NE - 388@	N-S	92	94	2.13%	2	0.21
23: NE 45th Street & 12th Avenue NE - 389@	S-E	21	20	-2.50%	-1	0.11
23: NE 45th Street & 12th Avenue NE - 389@	S-W	9	10	9.00%	1	0.29
23: NE 45th Street & 12th Avenue NE - 389@	S-N	4	5	16.00%	1	0.37
23: NE 45th Street & 12th Avenue NE - 390@	W-N	21	22	5.00%	1	0.24
24: NE 45th Street & Brooklyn Avenue NE - 3	N-W	74	74	-0.54%	0	0.05
24: NE 45th Street & Brooklyn Avenue NE - 3	W-E	754	730	-3.27%	-24	0.88
24: NE 45th Street & Brooklyn Avenue NE - 3	E-W	861	858	-0.31%	-3	0.09
24: NE 45th Street & Brooklyn Avenue NE - 3	E-N	29	27	-7.78%	-2	0.40
24: NE 45th Street & Brooklyn Avenue NE - 3	W-N	23	26	10.00%	3	0.52
24: NE 45th Street & Brooklyn Avenue NE - 3	N-E	1	1	0.00%	0	0.00

Movement	Move/ Direction	Veh	2014 Count	% Difference between VISSIM Outputs/Field	Difference between VISSIM Outputs/Field	GEH
25: NE 45th Street & University Way NE - 31:	W-E	682	658	-3.66%	-24	0.93
25: NE 45th Street & University Way NE - 31:	W-S	73	71	-2.82%	-2	0.24
25: NE 45th Street & University Way NE - 31	E-W	876	869	-0.76%	-7	0.22
25: NE 45th Street & University Way NE - 31	E-N	13	12	-10.00%	-1	0.34
25: NE 45th Street & University Way NE - 35:	S-E	5	4	-12.50%	-1	0.24
25: NE 45th Street & University Way NE - 35:	S-N	60	46	-30.00%	-14	1.90
25: NE 45th Street & University Way NE - 35	N-W	15	16	5.63%	1	0.23
25: NE 45th Street & University Way NE - 35	N-S	111	95	-17.05%	-16	1.60
26: NE 45th Street & 15th Avenue NE - 313:	W-E	481	477	-0.82%	-4	0.18
26: NE 45th Street & 15th Avenue NE - 313:	W-S	171	151	-13.05%	-20	1.55
26: NE 45th Street & 15th Avenue NE - 319@	E-W	760	766	0.77%	6	0.21
26: NE 45th Street & 15th Avenue NE - 319@	E-N	26	22	-16.82%	-4	0.76
26: NE 45th Street & 15th Avenue NE - 348@	N-W	45	43	-4.19%	-2	0.27
26: NE 45th Street & 15th Avenue NE - 348@	N-S	529	502	-5.34%	-27	1.18
26: NE 45th Street & 15th Avenue NE - 349@	S-W	82	72	-14.44%	-10	1.18
26: NE 45th Street & 15th Avenue NE - 371@	S-E	116	105	-10.38%	-11	1.04
26: NE 45th Street & 15th Avenue NE - 371@	S-N	180	159	-13.40%	-21	1.64
26: NE 45th Street & 15th Avenue NE - 374@	N-E	55	58	5.52%	3	0.43
26: NE 45th Street & 15th Avenue NE - 384@	E-S	232	226	-2.79%	-6	0.42
26: NE 45th Street & 15th Avenue NE - 385@	W-N	34	34	-1.18%	0	0.07
31: NE 50th Street & 12th Avenue NE - 70@1	E-W	444	437	-1.53%	-7	0.32
31: NE 50th Street & 12th Avenue NE - 70@1	E-S	3	3	3.33%	0	0.06
31: NE 50th Street & 12th Avenue NE - 70@1	E-N	5	6	13.33%	1	0.34
31: NE 50th Street & 12th Avenue NE - 71@2	W-E	645	635	-1.50%	-10	0.38
31: NE 50th Street & 12th Avenue NE - 71@2	W-S	59	61	3.61%	2	0.28
31: NE 50th Street & 12th Avenue NE - 71@2	W-N	10	11	8.18%	1	0.28
31: NE 50th Street & 12th Avenue NE - 388@	N-W	17	18	5.00%	1	0.21
31: NE 50th Street & 12th Avenue NE - 388@	N-E	2	2	-5.00%	0	0.07
31: NE 50th Street & 12th Avenue NE - 388@	N-S	9	10	14.00%	1	0.46
31: NE 50th Street & 12th Avenue NE - 401@	S-W	4	5	18.00%	1	0.42
31: NE 50th Street & 12th Avenue NE - 401@	S-E	5	5	4.00%	0	0.09
31: NE 50th Street & 12th Avenue NE - 401@	S-N	20	20	2.50%	1	0.11
	Totals	36958	36483	-1.30%	-475	2.48

			Target
Sum of all Link Flow Δ%	1.30%	<	5%
% of Links with GEH < 5	100%	>	85%
GEH for Sum of all Link Flows	2.48	<	4

Route 44 PM Peak Hour Travel Time Calibration

allowable travel time variation:

WB target (sec)	319	WB allowable variation:	62.3
EB target (sec)	332	EB allowable variation:	61.0
WB distance (ft)	2862		
EB distance (ft)	3139		
FFS (mph)	10		

		target diff. (sec)	within Target?
Run 1 WB (sec)	331	12	Yes
Run 1 EB (sec)	320	-12	Yes
Run 2 WB (sec)	327	8	Yes
Run 2 EB (sec)	315	-17	Yes
Run 3 WB (sec)	350	31	Yes
Run 3 EB (sec)	293	-39	Yes
Run 4 WB (sec)	354	35	Yes
Run 4 EB (sec)	349	17	Yes
Run 5 WB (sec)	328	9	Yes
Run 5 EB (sec)	303	-29	Yes
Run 6 WB (sec)	446	127	No
Run 6 EB (sec)	298	-34	Yes
Run 7 WB (sec)	320	1	Yes
Run 7 EB (sec)	306	-26	Yes
Run 8 WB (sec)	443	124	No
Run 8 EB (sec)	298	-34	Yes
Run 9 WB (sec)	364	45	Yes
Run 9 EB (sec)	334	2	Yes
Run 10 WB (sec)	310	-9	Yes
Run 10 EB (sec)	351	19	Yes
AVG WB (sec)	357	38	Yes
AVG EB (sec)	317	-15	Yes

Movement	Move/ Direction	Veh	2014 Count	% Difference between VISSIM Outputs/Field	Difference between VISSIM Outputs/Field	GEH
5: NE 50th Street & Latona Avenue NE - 70@	E-W	1211	1220	0.76%	9	0.27
5: NE 50th Street & Latona Avenue NE - 70@	E-N	165	170	2.88%	5	0.38
5: NE 50th Street & Latona Avenue NE - 71@	W-E	886	889	0.30%	3	0.09
5: NE 50th Street & Latona Avenue NE - 100	S-W	21	20	-2.50%	-1	0.11
5: NE 50th Street & Latona Avenue NE - 100	S-E	51	50	-1.20%	-1	0.08
5: NE 50th Street & Latona Avenue NE - 100	S-N	50	50	-0.20%	0	0.01
5: NE 50th Street & Latona Avenue NE - 102	N-W	70	70	0.00%	0	0.00
5: NE 50th Street & Latona Avenue NE - 102	N-E	49	50	2.60%	1	0.19
6: NE 50th Street & 5th Avenue NE - 70@304	E-W	1097	1131	3.00%	34	1.02
6: NE 50th Street & 5th Avenue NE - 71@11	W-E	725	760	4.57%	35	1.27
6: NE 50th Street & 5th Avenue NE - 71@11	W-S	242	261	7.32%	19	1.20
6: NE 50th Street & 5th Avenue NE - 72@178	E-S	180	201	10.40%	21	1.51
6: NE 50th Street & 5th Avenue NE - 74@17	N-W	253	258	1.94%	5	0.31
6: NE 50th Street & 5th Avenue NE - 74@17	N-E	180	178	-1.18%	-2	0.16
6: NE 50th Street & 5th Avenue NE - 74@17	N-S	76	77	0.91%	1	0.08
7: NE 50th Street & 7th Avenue NE - 70@25	E-W	648	643	-0.82%	-5	0.21
7: NE 50th Street & 7th Avenue NE - 71@163	W-E	571	572	0.17%	1	0.04
7: NE 50th Street & 7th Avenue NE - 73@156	W-N	336	349	3.78%	13	0.71
7: NE 50th Street & 7th Avenue NE - 87@284	S-W	628	673	6.75%	45	1.78
7: NE 50th Street & 7th Avenue NE - 87@284	S-E	274	282	2.87%	8	0.49
7: NE 50th Street & 7th Avenue NE - 87@284	S-N	93	101	7.62%	8	0.78
7: NE 50th Street & 7th Avenue NE - 10043@	E-N	362	359	-0.95%	-3	0.18
8: NE 50th Street & 9th Avenue NE - 70@195	E-W	955	963	0.83%	8	0.26
8: NE 50th Street & 9th Avenue NE - 70@195	E-S	9	8	-6.25%	-1	0.17
8: NE 50th Street & 9th Avenue NE - 70@195	E-N	19	24	21.25%	5	1.10
8: NE 50th Street & 9th Avenue NE - 71@221	W-E	787	789	0.22%	2	0.06
8: NE 50th Street & 9th Avenue NE - 71@221	W-S	39	43	9.30%	4	0.62
8: NE 50th Street & 9th Avenue NE - 71@221	W-N	19	18	-7.78%	-1	0.32
8: NE 50th Street & 9th Avenue NE - 115@59	S-W	27	29	5.52%	2	0.30
8: NE 50th Street & 9th Avenue NE - 115@59	S-E	31	29	-6.55%	-2	0.35
8: NE 50th Street & 9th Avenue NE - 115@59	S-N	11	12	8.33%	1	0.29
8: NE 50th Street & 9th Avenue NE - 117@52	N-W	28	30	7.00%	2	0.39
8: NE 50th Street & 9th Avenue NE - 117@52	N-E	8	8	0.00%	0	0.00
8: NE 50th Street & 9th Avenue NE - 117@52	N-S	15	15	-2.67%	0	0.10
9: NE 50th Street & Roosevelt Way NE - 70@	E-W	865	871	0.65%	6	0.19
9: NE 50th Street & Roosevelt Way NE - 70@	E-S	73	76	4.61%	4	0.41
9: NE 50th Street & Roosevelt Way NE - 71@	W-E	719	720	0.17%	1	0.04
9: NE 50th Street & Roosevelt Way NE - 71@	W-S	108	104	-3.75%	-4	0.38
9: NE 50th Street & Roosevelt Way NE - 342	N-W	117	110	-6.55%	-7	0.68
9: NE 50th Street & Roosevelt Way NE - 342	N-E	65	77	15.58%	12	1.42
9: NE 50th Street & Roosevelt Way NE - 342	N-S	618	630	1.94%	12	0.49
10: NE 50th Street & 11th Avenue NE - 70@1	E-W	732	735	0.35%	3	0.10
10: NE 50th Street & 11th Avenue NE - 70@1	E-N	28	30	6.00%	2	0.33
10: NE 50th Street & 11th Avenue NE - 71@2	W-E	654	649	-0.76%	-5	0.19
10: NE 50th Street & 11th Avenue NE - 71@2	W-N	131	137	4.67%	6	0.55
10: NE 50th Street & 11th Avenue NE - 71@2	W-N	1	1	0.00%	0	0.00
10: NE 50th Street & 11th Avenue NE - 358@	S-W	205	194	-5.82%	-11	0.80
10: NE 50th Street & 11th Avenue NE - 358@	S-E	42	43	2.33%	1	0.15
10: NE 50th Street & 11th Avenue NE - 358@	S-N	556	583	4.58%	27	1.12
10: NE 50th Street & 11th Avenue NE - 358@	S-N	7	7	0.00%	0	0.00

Movement	Move/ Direction	Veh	2014 Count	% Difference between VISSIM Outputs/Field	Difference between VISSIM Outputs/Field	GEH
11: NE 50th Street & Brooklyn Avenue NE - 7	E-W	568	569	0.26%	2	0.06
11: NE 50th Street & Brooklyn Avenue NE - 7	E-N	30	32	7.19%	2	0.41
11: NE 50th Street & Brooklyn Avenue NE - 7	E-S	25	24	-5.42%	-1	0.26
11: NE 50th Street & Brooklyn Avenue NE - 7	W-E	513	510	-0.63%	-3	0.14
11: NE 50th Street & Brooklyn Avenue NE - 7	W-N	66	66	-0.45%	0	0.04
11: NE 50th Street & Brooklyn Avenue NE - 7	W-S	80	78	-2.82%	-2	0.25
11: NE 50th Street & Brooklyn Avenue NE - 3	S-W	75	70	-6.86%	-5	0.56
11: NE 50th Street & Brooklyn Avenue NE - 3	S-E	28	31	9.68%	3	0.55
11: NE 50th Street & Brooklyn Avenue NE - 3	S-N	89	89	0.00%	0	0.00
11: NE 50th Street & Brooklyn Avenue NE - 3	N-W	56	57	1.58%	1	0.12
11: NE 50th Street & Brooklyn Avenue NE - 3	N-E	13	13	2.31%	0	0.08
11: NE 50th Street & Brooklyn Avenue NE - 3	N-S	97	98	0.71%	1	0.07
12: NE 50th Street & University Way NE - 70(	E-W	506	515	1.73%	9	0.39
12: NE 50th Street & University Way NE - 70(	E-N	16	17	5.88%	1	0.25
12: NE 50th Street & University Way NE - 70(	E-S	21	25	16.40%	4	0.86
12: NE 50th Street & University Way NE - 71(	W-E	429	422	-1.54%	-7	0.32
12: NE 50th Street & University Way NE - 71(	W-N	66	69	3.77%	3	0.32
12: NE 50th Street & University Way NE - 71(	W-S	60	57	-5.44%	-3	0.41
12: NE 50th Street & University Way NE - 353	S-W	48	50	3.80%	2	0.27
12: NE 50th Street & University Way NE - 353	S-E	22	21	-2.86%	-1	0.13
12: NE 50th Street & University Way NE - 353	S-N	94	94	0.00%	0	0.00
12: NE 50th Street & University Way NE - 354	N-W	67	65	-3.38%	-2	0.27
12: NE 50th Street & University Way NE - 354	N-E	24	25	3.60%	1	0.18
12: NE 50th Street & University Way NE - 354	N-S	140	143	2.38%	3	0.29
13: NE 50th Street & 15th Avenue NE - 70@3	E-W	374	381	1.92%	7	0.38
13: NE 50th Street & 15th Avenue NE - 70@3	E-N	28	28	0.71%	0	0.04
13: NE 50th Street & 15th Avenue NE - 70@3	E-S	31	30	-2.33%	-1	0.13
13: NE 50th Street & 15th Avenue NE - 71@3	W-E	330	326	-1.32%	-4	0.24
13: NE 50th Street & 15th Avenue NE - 71@3	W-N	50	51	1.96%	1	0.14
13: NE 50th Street & 15th Avenue NE - 71@3	W-S	94	95	1.26%	1	0.12
13: NE 50th Street & 15th Avenue NE - 347@	S-W	142	140	-1.29%	-2	0.15
13: NE 50th Street & 15th Avenue NE - 347@	S-E	41	40	-1.50%	-1	0.09
13: NE 50th Street & 15th Avenue NE - 347@	S-N	367	383	4.20%	16	0.83
13: NE 50th Street & 15th Avenue NE - 348@	N-W	27	30	8.67%	3	0.49
13: NE 50th Street & 15th Avenue NE - 348@	N-E	13	14	5.00%	1	0.19
13: NE 50th Street & 15th Avenue NE - 348@	N-S	428	438	2.37%	10	0.50
18: NE 45th Street & Latona Avenue NE - 104	W-N	15	15	-2.67%	0	0.10
18: NE 45th Street & Latona Avenue NE - 106	S-N	71	75	5.33%	4	0.47
18: NE 45th Street & Latona Avenue NE - 106	S-E	100	100	-0.40%	0	0.04
18: NE 45th Street & Latona Avenue NE - 106	S-W	27	30	8.67%	3	0.49
18: NE 45th Street & Latona Avenue NE - 31:	W-E	721	748	3.57%	27	0.99
18: NE 45th Street & Latona Avenue NE - 418	E-N	55	60	8.00%	5	0.63
18: NE 45th Street & Latona Avenue NE - 418	E-W	884	904	2.23%	20	0.68
19: NE 45th Street & 5th Avenue NE - 313: 45	W-E	551	573	3.93%	23	0.95
19: NE 45th Street & 5th Avenue NE - 313: 45	W-S	280	275	-1.93%	-5	0.32
19: NE 45th Street & 5th Avenue NE - 319@2	E-W	770	738	-4.39%	-32	1.18
19: NE 45th Street & 5th Avenue NE - 329@2	E-S	299	289	-3.46%	-10	0.58
19: NE 45th Street & 5th Avenue NE - 338@2	N-E	298	306	2.71%	8	0.48
19: NE 45th Street & 5th Avenue NE - 338@2	N-W	168	186	9.52%	18	1.33
19: NE 45th Street & 5th Avenue NE - 338@2	N-S	335	340	1.62%	6	0.30

Movement	Move/ Direction	Veh	2014 Count	% Difference between VISSIM Outputs/Field	Difference between VISSIM Outputs/Field	GEH
20: NE 45th Street & 7th Avenue NE - 313: 4	W-E	687	666	-3.15%	-21	0.81
20: NE 45th Street & 7th Avenue NE - 319@2	E-W	642	693	7.40%	51	1.99
20: NE 45th Street & 7th Avenue NE - 319@2	E-N	343	336	-2.02%	-7	0.37
20: NE 45th Street & 7th Avenue NE - 319@2	E-N	76	80	5.12%	4	0.46
20: NE 45th Street & 7th Avenue NE - 319@2	E-W	6	6	0.00%	0	0.00
20: NE 45th Street & 7th Avenue NE - 325@1	S-W	534	549	2.71%	15	0.64
20: NE 45th Street & 7th Avenue NE - 325@1	S-N	287	302	4.97%	15	0.87
20: NE 45th Street & 7th Avenue NE - 331@4	S-E	428	452	5.22%	24	1.12
20: NE 45th Street & 7th Avenue NE - 331@4	S-N	50	61	18.20%	11	1.49
20: NE 45th Street & 7th Avenue NE - 361@9	W-N	130	156	16.79%	26	2.19
20: NE 45th Street & 7th Avenue NE - 361@9	W-N	31	30	-2.00%	-1	0.11
20: NE 45th Street & 7th Avenue NE - 20001	W-E	5	5	0.00%	0	0.00
21: NE 45th Street & Roosevelt Way NE - 1@	E-S	176	170	-3.35%	-6	0.43
21: NE 45th Street & Roosevelt Way NE - 31	W-E	841	843	0.28%	2	0.08
21: NE 45th Street & Roosevelt Way NE - 31	W-S	247	228	-8.46%	-19	1.25
21: NE 45th Street & Roosevelt Way NE - 31	E-W	935	949	1.44%	14	0.45
21: NE 45th Street & Roosevelt Way NE - 35	N-S	652	653	0.18%	1	0.05
21: NE 45th Street & Roosevelt Way NE - 39	N-E	102	81	-26.17%	-21	2.22
21: NE 45th Street & Roosevelt Way NE - 10	NE-W	132	137	3.94%	5	0.47
22: NE 45th Street & 11th Avenue NE - 313: 4	W-E	942	941	-0.15%	-1	0.05
22: NE 45th Street & 11th Avenue NE - 319@	E-W	879	899	2.22%	20	0.67
22: NE 45th Street & 11th Avenue NE - 319@	E-N	56	58	3.97%	2	0.31
22: NE 45th Street & 11th Avenue NE - 357@	S-E	148	149	0.54%	1	0.07
22: NE 45th Street & 11th Avenue NE - 357@	S-W	231	244	5.45%	13	0.86
22: NE 45th Street & 11th Avenue NE - 357@	S-N	711	742	4.19%	31	1.15
23: NE 45th Street & 12th Avenue NE - 313: 4	W-E	919	948	3.06%	29	0.95
23: NE 45th Street & 12th Avenue NE - 313: 4	W-S	76	71	-7.61%	-5	0.63
23: NE 45th Street & 12th Avenue NE - 319@	E-W	865	884	2.14%	19	0.64
23: NE 45th Street & 12th Avenue NE - 319@	E-N	26	24	-9.17%	-2	0.44
23: NE 45th Street & 12th Avenue NE - 387@	E-S	47	48	2.71%	1	0.19
23: NE 45th Street & 12th Avenue NE - 388@	N-E	8	7	-12.86%	-1	0.33
23: NE 45th Street & 12th Avenue NE - 388@	N-W	37	37	0.81%	0	0.05
23: NE 45th Street & 12th Avenue NE - 388@	N-S	36	37	3.78%	1	0.23
23: NE 45th Street & 12th Avenue NE - 389@	S-E	20	20	1.00%	0	0.04
23: NE 45th Street & 12th Avenue NE - 389@	S-W	33	36	7.22%	3	0.44
23: NE 45th Street & 12th Avenue NE - 389@	S-N	63	65	2.46%	2	0.20
23: NE 45th Street & 12th Avenue NE - 390@	W-N	96	96	-0.10%	0	0.01
24: NE 45th Street & Brooklyn Avenue NE - 3	N-W	98	97	-0.82%	-1	0.08
24: NE 45th Street & Brooklyn Avenue NE - 3	W-E	858	884	2.98%	26	0.89
24: NE 45th Street & Brooklyn Avenue NE - 3	E-W	840	858	2.07%	18	0.61
24: NE 45th Street & Brooklyn Avenue NE - 3	E-N	46	44	-3.64%	-2	0.24
24: NE 45th Street & Brooklyn Avenue NE - 3	W-N	89	80	-10.63%	-9	0.93
24: NE 45th Street & Brooklyn Avenue NE - 3	N-E	43	43	0.93%	0	0.06

Movement	Move/ Direction	Veh	2014 Count	% Difference between VISSIM Outputs/Field	Difference between VISSIM Outputs/Field	GEH
25: NE 45th Street & University Way NE - 31:	W-E	758	803	5.67%	46	1.63
25: NE 45th Street & University Way NE - 31:	W-S	145	132	-10.00%	-13	1.12
25: NE 45th Street & University Way NE - 31	E-W	845	857	1.42%	12	0.42
25: NE 45th Street & University Way NE - 31	E-N	50	50	0.60%	0	0.04
25: NE 45th Street & University Way NE - 35:	S-E	29	30	5.00%	2	0.28
25: NE 45th Street & University Way NE - 35:	S-N	155	155	0.32%	1	0.04
25: NE 45th Street & University Way NE - 35	N-W	43	45	4.89%	2	0.33
25: NE 45th Street & University Way NE - 35	N-S	130	129	-0.70%	-1	0.08
26: NE 45th Street & 15th Avenue NE - 313:	W-E	586	616	4.94%	30	1.24
26: NE 45th Street & 15th Avenue NE - 313:	W-S	141	149	5.57%	8	0.69
26: NE 45th Street & 15th Avenue NE - 319@	E-W	769	791	2.81%	22	0.79
26: NE 45th Street & 15th Avenue NE - 319@	E-N	71	58	-22.76%	-13	1.64
26: NE 45th Street & 15th Avenue NE - 348@	N-W	48	38	-27.37%	-10	1.58
26: NE 45th Street & 15th Avenue NE - 348@	N-S	427	336	-26.96%	-91	4.64
26: NE 45th Street & 15th Avenue NE - 349@	S-W	78	78	-0.38%	0	0.03
26: NE 45th Street & 15th Avenue NE - 371@	S-E	221	233	5.11%	12	0.79
26: NE 45th Street & 15th Avenue NE - 371@	S-N	423	439	3.58%	16	0.76
26: NE 45th Street & 15th Avenue NE - 374@	N-E	93	78	-19.62%	-15	1.65
26: NE 45th Street & 15th Avenue NE - 384@	E-S	177	175	-0.91%	-2	0.12
26: NE 45th Street & 15th Avenue NE - 385@	W-N	57	73	21.37%	16	1.93
31: NE 50th Street & 12th Avenue NE - 70@1	E-W	679	685	0.85%	6	0.22
31: NE 50th Street & 12th Avenue NE - 70@1	E-S	13	20	37.00%	7	1.83
31: NE 50th Street & 12th Avenue NE - 70@1	E-N	7	10	26.00%	3	0.88
31: NE 50th Street & 12th Avenue NE - 71@2	W-E	582	576	-0.99%	-6	0.24
31: NE 50th Street & 12th Avenue NE - 71@2	W-S	71	67	-6.42%	-4	0.52
31: NE 50th Street & 12th Avenue NE - 71@2	W-N	42	40	-5.75%	-2	0.36
31: NE 50th Street & 12th Avenue NE - 388@	N-W	5	5	-6.00%	0	0.13
31: NE 50th Street & 12th Avenue NE - 388@	N-E	23	25	9.20%	2	0.47
31: NE 50th Street & 12th Avenue NE - 388@	N-S	4	5	14.00%	1	0.32
31: NE 50th Street & 12th Avenue NE - 401@	S-W	77	74	-3.38%	-3	0.29
31: NE 50th Street & 12th Avenue NE - 401@	S-E	54	50	-8.20%	-4	0.57
31: NE 50th Street & 12th Avenue NE - 401@	S-N	23	25	6.80%	2	0.35
	Totals	44963	45590	1.38%	627	2.95

			Target
Sum of all Link Flow Δ%	1.38%	<	5%
% of Links with GEH < 5	100%	>	85%
GEH for Sum of all Link Flows	2.95	<	4

APPENDIX F – PM PEAK HOUR SCENARIO A AND SCENARIO B VISSIM OUTPUT

PM Peak Hour Intersection LOS and Average Delay (sec)

Intersection	Baseline	Scenario A	Scenario B	Scenario B – no BAT Lane
NE 45th St / Latona Ave NE	B 11.4	B 10.8	B 11.4	B 11.1
NE 45th St / 5th Ave NE	C 34.3	C 34.5	D 38.8	D 37.0
NE 45th St / 7th Ave NE	C 28.8	C 24.5	C 34.9	C 27.5
NE 45th St / Roosevelt Way NE	C 24.5	C 33.0	E 57.0	C 28.7
NE 45th St / 11th Ave NE	C 20.6	C 21.6	D 36.1	C 22.4
NE 45th St / 12th Ave NE	B 14.5	B 15.1	C 28.4	B 17.0
NE 45th St / Brooklyn Ave NE	B 12.1	B 11.4	C 27.8	B 16.0
NE 45th St / University Way NE	B 14.4	B 16.2	C 30.7	B 16.9
NE 45th St / 15th Ave NE	D 36.1	D 46.6	E 62.7	D 36.9
NE 50th St / 5th Ave NE	B 15.4	C 23.1	C 30.5	B 15.4
NE 50th St / 7th Ave NE	B 18.7	C 21.1	D 45.2	B 18.1
NE 50th St / 9th Ave NE	B 18.4	C 20.7	D 40.1	B 14.0
NE 50th St / Roosevelt Way NE	B 19.3	B 19.6	D 48.4	B 18.4
NE 50th St / 11th Ave NE	B 14.2	C 21.9	B 17.4	B 14.2
NE 50th St / Brooklyn Ave NE	B 19.1	B 13.5	B 16.5	B 17.6
NE 50th St / University Way NE	B 13.9	C 20.6	B 17.5	B 14.6
NE 50th St / 15th Ave NE	B 17.1	C 31.5	B 17.7	B 17.2

Note: average delay values were calculated using VISSIM output

PM Peak Hour Route 44 Travel Times

Scenario	Eastbound (sec)	Westbound (sec)
Baseline	303	332
Scenario A	302	312
Scenario B	375	392
Scenario B – no BAT Lane	301	318

Note: travel times were collected from NE 45th St / Thackeray Pl NE to NE 45th St / University Way NE (eastbound) and NE 45th St / Brooklyn Ave NE to NE 45th St / Latona Ave NE (westbound)

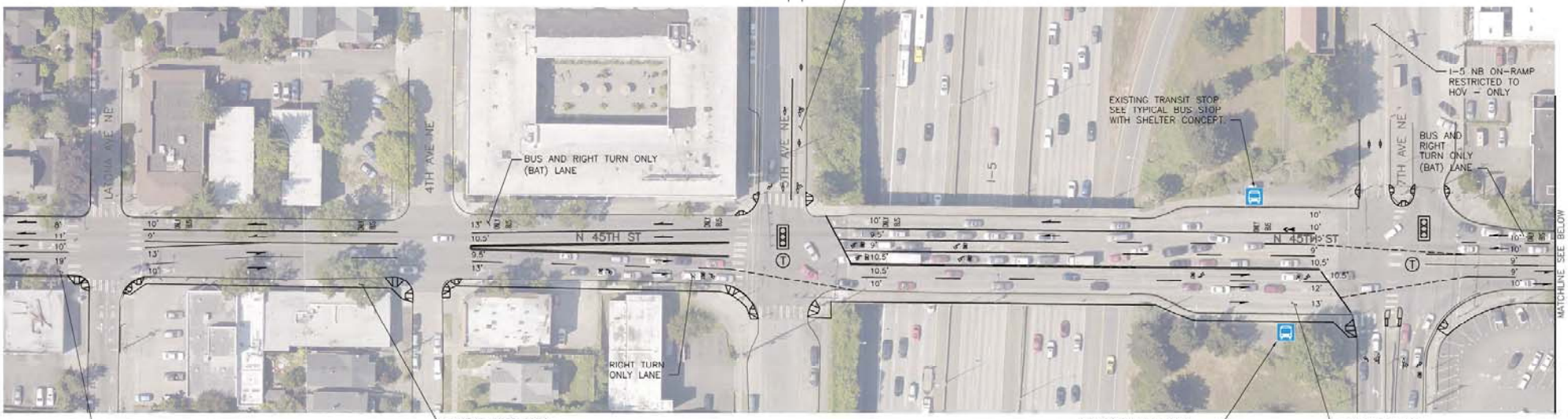
APPENDIX G – SCENARIO C PROPOSED CONFIGURATION

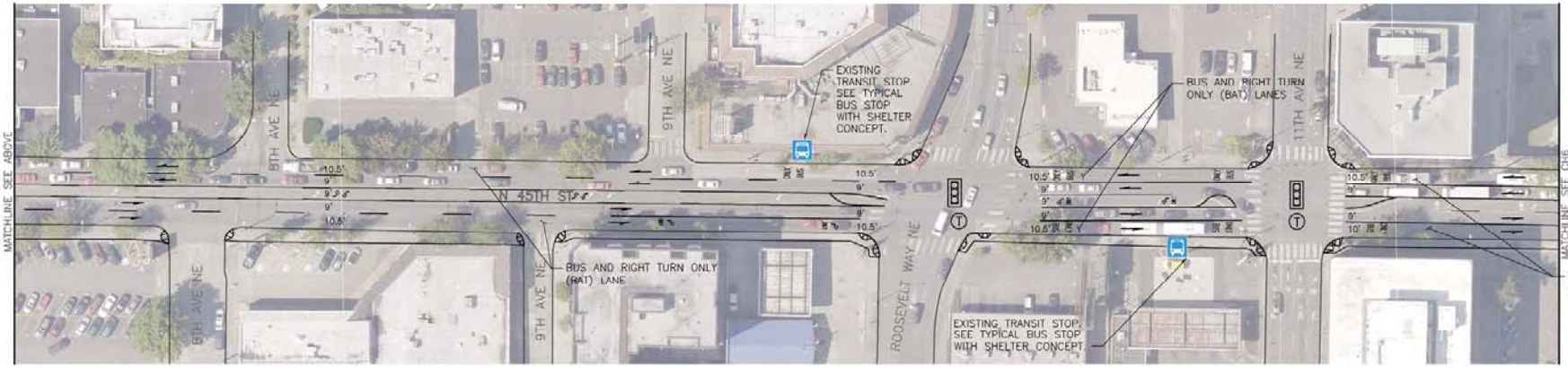
LEGEND

- SIGNAL MODIFICATION
- TRANSIT PRIORITY IMPROVEMENTS
- TRAFFIC DIRECTION
- TRANSIT STOP

N

40 20 0 40 80
SCALE IN FEET





CH5

N 45TH ST/LATONA AVE NE – 11TH AVE NE

CONCEPTUAL (5%)
NOT FOR CONSTRUCTION
MARCH 2015

APPROVED FOR ADVERTISING
NANCY LOCKE
DEPARTMENT OF FINANCE AND ADMINISTRATIVE SERVICES
SEATTLE, WASHINGTON 20
BY:
PURCHASING AND CONTRACTING SERVICES DIRECTOR

NAME OR INITIALS AND DATE	INITIALS AND DATE
DESIGNED LB CHECKED JP	REVIEWED: PE CONST. PROJ. MGR.
DRAWN RJ CHECKED PC	RECEIVED
	REVISED AS BUILT

ALL WORK DONE IN ACCORDANCE WITH THE CITY OF SEATTLE STANDARD PLANS AND SPECIFICATIONS AND OTHER DOCUMENTS CALLED FOR IN SECTION 0-02.3 OF THE PROJECT MANUAL.

City of Seattle
Seattle Department of Transportation
ORDINANCE NO.
FUND:
APPROVED
INSPECTOR'S BOOK

TRANSIT PRIORITY CORRIDOR IMPROVEMENT PROJECT ROUTE 44

JOB NO. PC TSXXXXX R/W CO TSXXXXX
VAULT PLAN NO. XXX-XXX
SHEET X OF XX

MAILS SERIAL NO. 33592 | DATE | MARK | MATRIX REVISIONS | MADE CHK'D | APV'D

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May 27, 2015 1:28pm

LEGEND

- SIGNAL MODIFICATION
- TRANSIT PRIORITY IMPROVEMENTS
- TRAFFIC DIRECTION
- TRANSIT STOP

N

40 20 0 40 80
SCALE IN FEET

CH6
N 45TH ST/12TH AVE NE – 15TH AVE NE

AS-BUILT	SPECIAL NO.	DATE	MARK	NATURE OF REVISIONS	MADE	CHK'D	REV'D
	35592						

CONCEPTUAL (5%)
NOT FOR CONSTRUCTION
MARCH 2015

APPROVED FOR ADVERTISING
NANCY LOCKE
DEPARTMENT OF FINANCE AND ADMINISTRATIVE SERVICES
SEATTLE, WASHINGTON 20
BY:
PURCHASING AND CONTRACTING SERVICES DIRECTOR

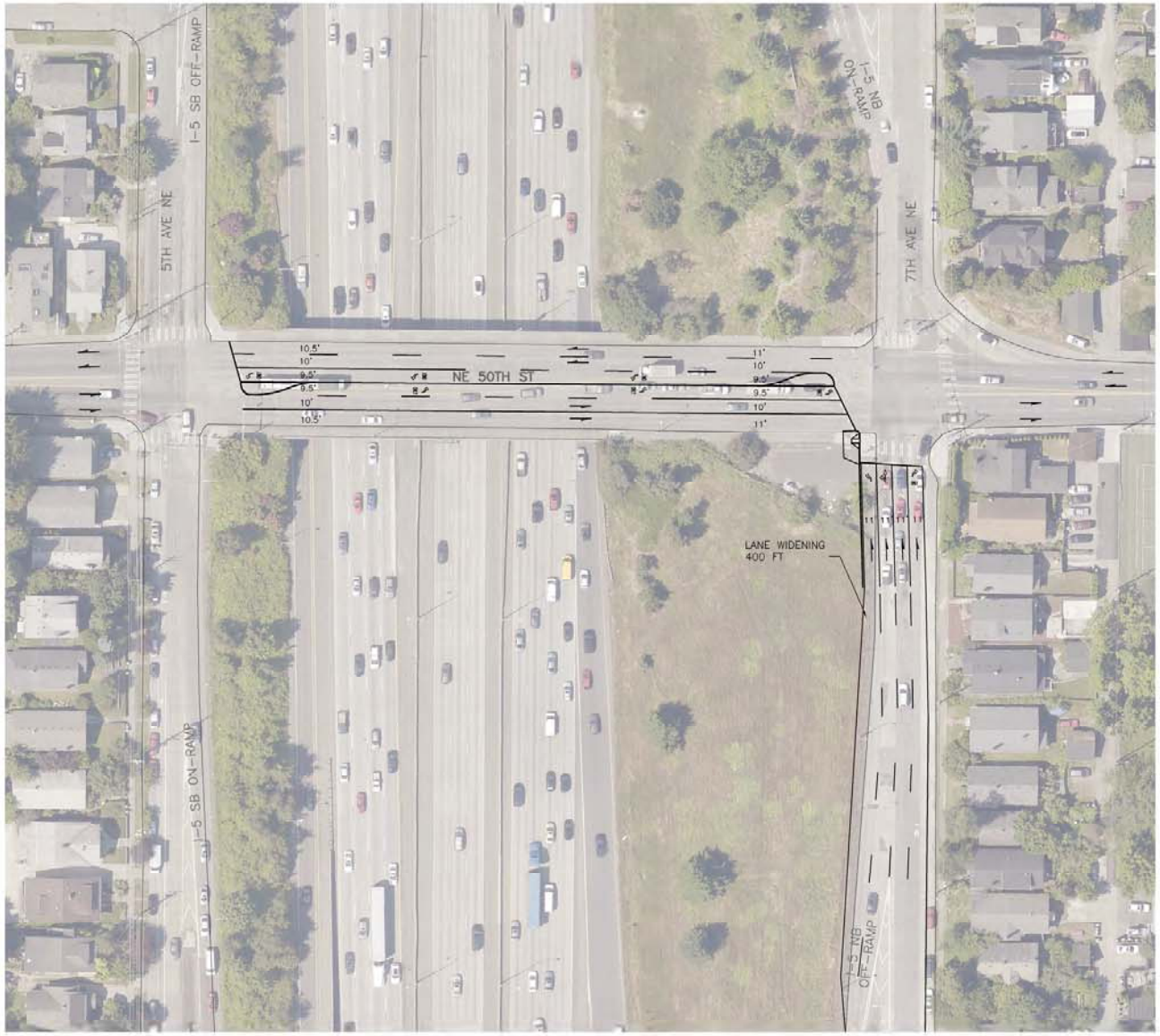
NAME OR INITIALS AND DATE	INITIALS AND DATE
DESIGNED LB	REVIEWED: PE CONST.
CHECKED JP	PROJ. MGR.
DRAWN RJ	RECEIVED
CHECKED PC	REVISED AS BUILT

ALL WORK DONE IN ACCORDANCE WITH THE CITY OF SEATTLE STANDARD PLANS AND SPECIFICATIONS AND OTHER DOCUMENTS CALLED FOR IN SECTION 0-02.3 OF THE PROJECT MANUAL.

City of Seattle
Seattle Department of Transportation
APPROVED
ORDINANCE NO.
FUND:
INSPECTOR'S BOOK

TRANSIT PRIORITY CORRIDOR IMPROVEMENT PROJECT ROUTE 44

JOB NO. PC TSXXXXX R/W CO TSXXXXX
VAULT PLAN NO. XXX--XXX
SHEET X OF XX

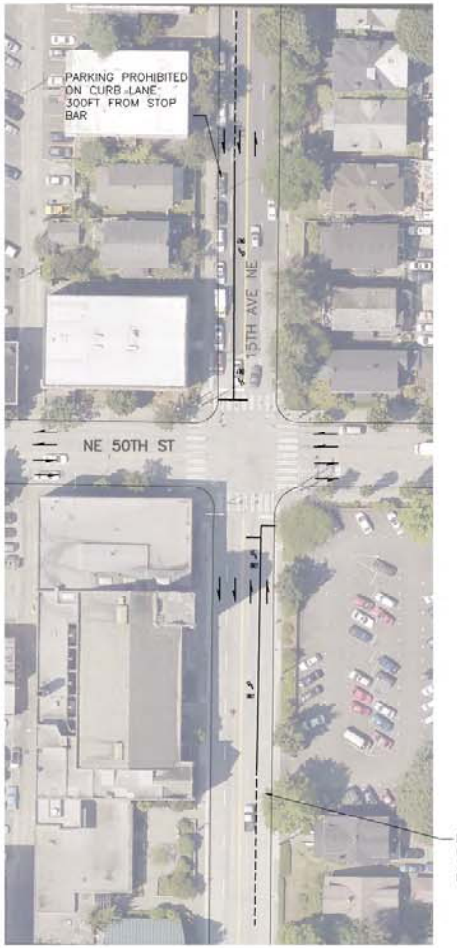


LEGEND

- SIGNAL MODIFICATION
- TRANSIT PRIORITY IMPROVEMENTS
- TRAFFIC DIRECTION
- TRANSIT STOP

N

40 20 0 40 80
SCALE IN FEET



CH7

N 50TH ST/5TH AVE NE – 15TH AVE NE

MULT. SERIAL NO. 33492	DATE	MADE	MATRL REVISIONS	MADE CHK'D	E-X'D

CONCEPTUAL (5%)
NOT FOR CONSTRUCTION
MARCH 2015

APPROVED FOR ADVERTISING
NANCY LOCKE
DEPARTMENT OF FINANCE AND ADMINISTRATIVE SERVICES
SEATTLE, WASHINGTON 20
BY:
PURCHASING AND CONTRACTING SERVICES DIRECTOR

NAME OR INITIALS AND DATE	INITIALS AND DATE
DESIGNED LB	REVIEWED: PE CONST.
CHECKED JP	PROJ. MGR.
DRAWN RJ	RECEIVED
CHECKED PC	REVISED AS BUILT

ALL WORK DONE IN ACCORDANCE WITH THE CITY OF SEATTLE STANDARD PLANS AND SPECIFICATIONS AND OTHER DOCUMENTS CALLED FOR IN SECTION 0-02.3 OF THE PROJECT MANUAL.

City of Seattle
Seattle Department of Transportation
ORDINANCE NO.
FUND:
APPROVED
INSPECTOR'S BOOK

TRANSIT PRIORITY CORRIDOR IMPROVEMENT PROJECT ROUTE 44

JOB NO. PC TSXXXXX R/W CO TSXXXXX
VAULT PLAN NO. XXX–XXX
SHEET X OF XX

APPENDIX H – SCENARIO C VISSIM OUTPUT

run	time	movement	direction	avg queue	max queue	veh	veh delay		Approach Delay	Approach Volume	Intersection Delay	Intersection LOS
AVG		5: NE 50th Street & Latona Avenue NE - 70@1	E-W	8.6	145.8	696	4.7					
AVG		5: NE 50th Street & Latona Avenue NE - 70@1	E-N	8.6	145.8	98	6.0	EB	5.7	852		
AVG		5: NE 50th Street & Latona Avenue NE - 71@1	W-E	9.9	165.7	852	5.7	WB	4.8	793	8.3	A
AVG		5: NE 50th Street & Latona Avenue NE - 100@	S-W	8.2	60.0	10	55.5	NB	33.9	63		
AVG		5: NE 50th Street & Latona Avenue NE - 100@	S-E	5.0	64.2	30	9.0	SB	32.3	142		
AVG		5: NE 50th Street & Latona Avenue NE - 100@	S-N	8.2	60.0	23	57.6					
AVG		5: NE 50th Street & Latona Avenue NE - 102@	N-W	23.3	209.7	74	22.2					
AVG		5: NE 50th Street & Latona Avenue NE - 102@	N-E	24.1	206.7	68	43.2					
AVG		6: NE 50th Street & 5th Avenue NE - 70@927.	E-W	0.8	55.7	508	1.2					
AVG		6: NE 50th Street & 5th Avenue NE - 71@335.	W-E	63.0	347.7	628	21.3	EB	20.3	950		
AVG		6: NE 50th Street & 5th Avenue NE - 71@335.	W-S	64.7	350.6	322	18.6	WB	13.0	701	24.6	C
AVG		6: NE 50th Street & 5th Avenue NE - 72@54.5	E-S	47.5	301.1	193	44.0	NB				
AVG		6: NE 50th Street & 5th Avenue NE - 74@52.1	N-W	87.0	435.7	285	20.8	SB	37.5	934		
AVG		6: NE 50th Street & 5th Avenue NE - 74@52.1	N-E	91.2	433.3	347	44.0					
AVG		6: NE 50th Street & 5th Avenue NE - 74@52.1	N-S	91.2	433.3	302	45.8					
AVG		7: NE 50th Street & 7th Avenue NE - 70@764.	E-W	6.0	181.0	434	5.0					
AVG		7: NE 50th Street & 7th Avenue NE - 71@498.	W-E	10.9	170.5	660	7.2	EB	14.2	972		
AVG		7: NE 50th Street & 7th Avenue NE - 73@47.8	W-N	51.7	370.4	313	29.1	WB	4.4	601	15.5	B
AVG		7: NE 50th Street & 7th Avenue NE - 87@86.6	S-W	53.1	216.6	266	38.5	NB	28.8	593		
AVG		7: NE 50th Street & 7th Avenue NE - 87@86.6	S-E	54.0	220.1	294	18.2	SB				
AVG		7: NE 50th Street & 7th Avenue NE - 87@86.6	S-N	53.1	216.6	33	45.1					
AVG		7: NE 50th Street & 7th Avenue NE - 10043@	E-N	0.4	69.9	167	3.1					
AVG		8: NE 50th Street & 9th Avenue NE - 70@596.	E-W	8.5	97.4	589	3.6					
AVG		8: NE 50th Street & 9th Avenue NE - 70@596.	E-S	8.5	97.4	2	39.5					
AVG		8: NE 50th Street & 9th Avenue NE - 70@596.	E-N	6.8	99.5	32	5.3					
AVG		8: NE 50th Street & 9th Avenue NE - 71@675.	W-E	93.9	386.5	819	27.1	EB	28.5	957		
AVG		8: NE 50th Street & 9th Avenue NE - 71@675.	W-S	97.4	392.0	57	19.7	WB	3.8	622	18.7	B
AVG		8: NE 50th Street & 9th Avenue NE - 71@675.	W-N	93.9	386.5	81	49.3	NB	19.1	22		
AVG		8: NE 50th Street & 9th Avenue NE - 115@18	S-W	1.7	45.9	7	20.1	SB	16.4	12		
AVG		8: NE 50th Street & 9th Avenue NE - 115@18	S-E	1.1	47.0	6	18.3					
AVG		8: NE 50th Street & 9th Avenue NE - 115@18	S-N	1.7	45.9	9	18.9					
AVG		8: NE 50th Street & 9th Avenue NE - 117@16	N-W	0.3	36.0	5	6.3					
AVG		8: NE 50th Street & 9th Avenue NE - 117@16	N-E	0.7	34.1	5	23.2					
AVG		8: NE 50th Street & 9th Avenue NE - 117@16	N-S	0.7	34.1	2	25.1					
AVG		9: NE 50th Street & Roosevelt Way NE - 70@5	E-W	8.1	88.8	488	4.8					
AVG		9: NE 50th Street & Roosevelt Way NE - 70@5	E-S	8.1	88.8	44	15.0	EB	23.7	829		
AVG		9: NE 50th Street & Roosevelt Way NE - 71@7	W-E	63.5	259.4	648	24.7	WB	5.6	532	17.8	B
AVG		9: NE 50th Street & Roosevelt Way NE - 71@7	W-S	67.8	265.9	181	19.8	NB				
AVG		9: NE 50th Street & Roosevelt Way NE - 342@	N-W	57.4	327.1	134	14.3	SB	19.3	997		
AVG		9: NE 50th Street & Roosevelt Way NE - 342@	N-E	58.8	325.4	93	22.0					
AVG		9: NE 50th Street & Roosevelt Way NE - 342@	N-S	58.8	325.4	770	19.8					
AVG		10: NE 50th Street & 11th Avenue NE - 70@4	E-W	31.2	150.9	459	21.3					
AVG		10: NE 50th Street & 11th Avenue NE - 70@4	E-N	32.1	157.5	5	18.6					
AVG		10: NE 50th Street & 11th Avenue NE - 71@8	W-E	8.2	91.9	695	3.5	EB	3.7	741		
AVG		10: NE 50th Street & 11th Avenue NE - 71@8	W-N	8.2	91.9	46	7.2	WB	21.3	465	15.8	B
AVG		10: NE 50th Street & 11th Avenue NE - 71@8	W-N	8.2	91.9	0	0.0	NB	45.6	213		
AVG		10: NE 50th Street & 11th Avenue NE - 358@	S-W	35.0	137.1	73	47.8	SB				
AVG		10: NE 50th Street & 11th Avenue NE - 358@	S-E	35.6	142.4	19	28.4					
AVG		10: NE 50th Street & 11th Avenue NE - 358@	S-N	35.0	137.1	121	47.0					
AVG		10: NE 50th Street & 11th Avenue NE - 358@	S-N	35.0	137.1	4	16.0					
AVG		11: NE 50th Street & Brooklyn Avenue NE - 70	E-W	7.6	124.6	380	5.9					
AVG		11: NE 50th Street & Brooklyn Avenue NE - 70	E-N	6.7	128.5	26	7.5					
AVG		11: NE 50th Street & Brooklyn Avenue NE - 70	E-S	7.6	124.6	11	17.8					
AVG		11: NE 50th Street & Brooklyn Avenue NE - 71	W-E	3.0	75.2	516	2.1	EB	2.4	652		
AVG		11: NE 50th Street & Brooklyn Avenue NE - 71	W-N	3.0	75.2	60	7.1	WB	6.3	417	6.4	A
AVG		11: NE 50th Street & Brooklyn Avenue NE - 71	W-S	2.2	79.7	77	1.2	NB	23.8	47		
AVG		11: NE 50th Street & Brooklyn Avenue NE - 34	S-W	5.5	71.3	21	27.9	SB	20.1	129		
AVG		11: NE 50th Street & Brooklyn Avenue NE - 34	S-E	3.2	72.1	5	13.8					
AVG		11: NE 50th Street & Brooklyn Avenue NE - 34	S-N	5.5	71.3	21	21.8					
AVG		11: NE 50th Street & Brooklyn Avenue NE - 34	N-W	11.0	138.9	51	13.5					
AVG		11: NE 50th Street & Brooklyn Avenue NE - 34	N-E	13.4	137.4	7	30.7					
AVG		11: NE 50th Street & Brooklyn Avenue NE - 34	N-S	13.4	137.4	71	23.7					

run	time	movement	direction	avg queue	max queue	veh	veh delay		Approach Delay	Approach Volume	Intersection Delay	Intersection LOS
AVG		12: NE 50th Street & University Way NE - 70@	E-W	12.4	115.4	329	9.8					
AVG		12: NE 50th Street & University Way NE - 70@	E-N	9.3	118.0	4	4.1					
AVG		12: NE 50th Street & University Way NE - 70@	E-S	12.4	115.4	15	39.7					
AVG		12: NE 50th Street & University Way NE - 71@	W-E	21.8	141.3	465	12.7	EB	12.9	527		
AVG		12: NE 50th Street & University Way NE - 71@	W-N	21.8	141.3	13	23.7	WB	11.0	347	13.5	B
AVG		12: NE 50th Street & University Way NE - 71@	W-S	23.2	144.5	49	12.4	NB	14.6	73		
AVG		12: NE 50th Street & University Way NE - 353	S-W	5.6	106.6	17	19.9	SB	19.0	189		
AVG		12: NE 50th Street & University Way NE - 353	S-E	4.9	107.3	13	10.3					
AVG		12: NE 50th Street & University Way NE - 353	S-N	5.6	106.6	43	14.0					
AVG		12: NE 50th Street & University Way NE - 354	N-W	20.0	193.9	70	14.2					
AVG		12: NE 50th Street & University Way NE - 354	N-E	22.1	192.7	30	26.7					
AVG		12: NE 50th Street & University Way NE - 354	N-S	22.1	192.7	89	20.3					
AVG		13: NE 50th Street & 15th Avenue NE - 70@1	E-W	19.5	150.3	232	20.9					
AVG		13: NE 50th Street & 15th Avenue NE - 70@1	E-N	16.6	151.7	6	18.2					
AVG		13: NE 50th Street & 15th Avenue NE - 70@1	E-S	19.5	150.3	24	35.3					
AVG		13: NE 50th Street & 15th Avenue NE - 71@1	W-E	15.1	196.2	303	8.4	EB	8.6	508		
AVG		13: NE 50th Street & 15th Avenue NE - 71@1	W-N	15.1	196.2	21	13.6	WB	22.1	261	12.7	B
AVG		13: NE 50th Street & 15th Avenue NE - 71@1	W-S	16.5	197.5	184	8.5	NB	10.2	189		
AVG		13: NE 50th Street & 15th Avenue NE - 347@	S-W	9.0	107.1	75	17.4	SB	13.0	526		
AVG		13: NE 50th Street & 15th Avenue NE - 347@	S-E	8.3	107.9	9	2.2					
AVG		13: NE 50th Street & 15th Avenue NE - 347@	S-N	9.0	107.1	105	5.8					
AVG		13: NE 50th Street & 15th Avenue NE - 348@	N-W	21.7	160.6	41	11.7					
AVG		13: NE 50th Street & 15th Avenue NE - 348@	N-E	21.1	159.2	15	13.6					
AVG		13: NE 50th Street & 15th Avenue NE - 348@	N-S	21.1	159.2	471	13.0					
AVG		18: NE 45th Street & Latona Avenue NE - 104	W-N	0.1	20.6	11	7.4					
AVG		18: NE 45th Street & Latona Avenue NE - 106	S-N	13.3	97.6	48	44.9	EB	3.9	553		
AVG		18: NE 45th Street & Latona Avenue NE - 106	S-E	12.1	101.6	87	8.3	WB	2.1	685	5.0	A
AVG		18: NE 45th Street & Latona Avenue NE - 106	S-W	13.3	97.6	10	45.8	NB	23.0	145		
AVG		18: NE 45th Street & Latona Avenue NE - 313	W-E	4.3	108.3	542	3.8	SB				
AVG		18: NE 45th Street & Latona Avenue NE - 418	E-N	2.4	149.2	9	2.0					
AVG		18: NE 45th Street & Latona Avenue NE - 418	E-W	3.1	147.5	676	2.1					
AVG		19: NE 45th Street & 5th Avenue NE - 313: 45	W-E	71.6	336.9	387	34.8					
AVG		19: NE 45th Street & 5th Avenue NE - 313: 45	W-S	74.1	341.0	242	26.6	EB	31.6	629		
AVG		19: NE 45th Street & 5th Avenue NE - 319@8	E-W	11.0	186.3	506	8.4	WB	28.8	834	39.9	D
AVG		19: NE 45th Street & 5th Avenue NE - 329@6	E-S	66.0	282.5	328	60.2	NB				
AVG		19: NE 45th Street & 5th Avenue NE - 338@6	N-E	278.3	818.0	417	53.8	SB	54.0	1023		
AVG		19: NE 45th Street & 5th Avenue NE - 338@6	N-W	279.2	819.6	179	51.4					
AVG		19: NE 45th Street & 5th Avenue NE - 338@6	N-S	278.3	818.0	427	55.2					
AVG		20: NE 45th Street & 7th Avenue NE - 313: 45	W-E	60.7	320.0	603	26.3					
AVG		20: NE 45th Street & 7th Avenue NE - 319@7	E-W	68.6	402.3	489	27.8					
AVG		20: NE 45th Street & 7th Avenue NE - 319@7	E-N	77.0	421.9	178	21.2					
AVG		20: NE 45th Street & 7th Avenue NE - 319@7	E-N	68.6	402.3	44	28.1	EB	37.4	747		
AVG		20: NE 45th Street & 7th Avenue NE - 319@7	E-W	68.6	402.3	6	24.2	WB	26.0	667	28.5	C
AVG		20: NE 45th Street & 7th Avenue NE - 325@5	S-W	62.3	555.6	603	19.4	NB	24.3	1162		
AVG		20: NE 45th Street & 7th Avenue NE - 325@5	S-N	61.1	555.0	216	34.0	SB				
AVG		20: NE 45th Street & 7th Avenue NE - 331@1	S-E	35.3	256.7	342	26.8					
AVG		20: NE 45th Street & 7th Avenue NE - 331@1	S-N	35.3	256.7	44	35.4					
AVG		20: NE 45th Street & 7th Avenue NE - 361@2	W-N	95.6	347.7	144	83.8					
AVG		20: NE 45th Street & 7th Avenue NE - 361@2	W-N	95.6	347.7	38	81.8					
AVG		20: NE 45th Street & 7th Avenue NE - 20001@	W-E	8.3	93.6	21	18.5					
AVG		21: NE 45th Street & Roosevelt Way NE - 1@2	E-S	75.2	260.5	287	43.0					
AVG		21: NE 45th Street & Roosevelt Way NE - 313:	W-E	97.9	459.4	777	24.8	EB	26.9	1026		
AVG		21: NE 45th Street & Roosevelt Way NE - 313:	W-S	103.1	468.5	249	33.4	WB	18.6	971	32.1	C
AVG		21: NE 45th Street & Roosevelt Way NE - 319	E-W	20.5	235.5	683	8.4	NB				
AVG		21: NE 45th Street & Roosevelt Way NE - 350	N-S	173.9	646.9	860	52.6	SB	51.0	971		
AVG		21: NE 45th Street & Roosevelt Way NE - 391	N-E	8.3	74.1	44	49.4					
AVG		21: NE 45th Street & Roosevelt Way NE - 104	NE-W	160.7	659.8	67	30.8					
AVG		22: NE 45th Street & 11th Avenue NE - 313: 4	W-E	23.0	256.9	821	4.1					
AVG		22: NE 45th Street & 11th Avenue NE - 319@	E-W	49.8	285.1	871	17.3	EB	4.1	821		
AVG		22: NE 45th Street & 11th Avenue NE - 319@	E-N	52.8	292.8	27	11.7	WB	17.1	898	14.5	B
AVG		22: NE 45th Street & 11th Avenue NE - 357@	S-E	31.9	129.7	64	12.5	NB	32.7	334		
AVG		22: NE 45th Street & 11th Avenue NE - 357@	S-W	32.5	126.5	98	42.7	SB				
AVG		22: NE 45th Street & 11th Avenue NE - 357@	S-N	32.5	126.5	172	34.6					

run	time	movement	direction	avg queue	max queue	veh	veh delay		Approach Delay	Approach Volume	Intersection Delay	Intersection LOS
AVG		23: NE 45th Street & 12th Avenue NE - 313: 4	W-E	19.2	271.7	748	7.1					
AVG		23: NE 45th Street & 12th Avenue NE - 313: 4	W-S	20.4	275.3	118	8.9					
AVG		23: NE 45th Street & 12th Avenue NE - 319@	E-W	36.4	278.1	872	12.9					
AVG		23: NE 45th Street & 12th Avenue NE - 319@	E-N	36.1	281.8	3	14.3	EB	7.9	886		
AVG		23: NE 45th Street & 12th Avenue NE - 387@	E-S	10.3	173.7	60	33.5	WB	14.2	935	12.2	B
AVG		23: NE 45th Street & 12th Avenue NE - 388@	N-E	17.4	142.0	10	32.0	NB	17.2	34		
AVG		23: NE 45th Street & 12th Avenue NE - 388@	N-W	15.8	142.5	15	21.9	SB	26.4	117		
AVG		23: NE 45th Street & 12th Avenue NE - 388@	N-S	17.4	142.0	92	26.5					
AVG		23: NE 45th Street & 12th Avenue NE - 389@	S-E	1.7	55.2	21	9.8					
AVG		23: NE 45th Street & 12th Avenue NE - 389@	S-W	1.9	52.9	9	27.0					
AVG		23: NE 45th Street & 12th Avenue NE - 389@	S-N	1.9	52.9	4	32.3					
AVG		23: NE 45th Street & 12th Avenue NE - 390@	W-N	3.5	47.2	21	33.7					
AVG		24: NE 45th Street & Brooklyn Avenue NE - 3	N-W	4.8	76.6	74	14.1					
AVG		24: NE 45th Street & Brooklyn Avenue NE - 31	W-E	5.1	143.5	754	3.5	EB	3.8	777		
AVG		24: NE 45th Street & Brooklyn Avenue NE - 31	E-W	25.2	189.4	861	7.4	WB	7.4	890	6.1	A
AVG		24: NE 45th Street & Brooklyn Avenue NE - 31	E-N	25.5	193.4	29	7.7	NB				
AVG		24: NE 45th Street & Brooklyn Avenue NE - 33	W-N	0.4	37.4	23	13.4	SB	14.1	74		
AVG		24: NE 45th Street & Brooklyn Avenue NE - 34	N-E	0.0	0.0	0	0.0					
AVG		25: NE 45th Street & University Way NE - 313	W-E	32.5	265.0	682	7.1					
AVG		25: NE 45th Street & University Way NE - 313	W-S	34.3	269.3	73	15.3					
AVG		25: NE 45th Street & University Way NE - 319	E-W	13.6	168.6	876	5.6	EB	7.9	755		
AVG		25: NE 45th Street & University Way NE - 319	E-N	13.3	171.7	13	3.1	WB	5.6	889	10.1	B
AVG		25: NE 45th Street & University Way NE - 351	S-E	18.8	129.2	5	27.3	NB	44.2	64		
AVG		25: NE 45th Street & University Way NE - 351	S-N	18.4	128.4	60	45.5	SB	38.1	126		
AVG		25: NE 45th Street & University Way NE - 354	N-W	28.6	242.3	15	29.9					
AVG		25: NE 45th Street & University Way NE - 354	N-S	28.7	242.1	111	39.3					
AVG		26: NE 45th Street & 15th Avenue NE - 313: 4	W-E	61.5	280.8	481	26.8					
AVG		26: NE 45th Street & 15th Avenue NE - 313: 4	W-S	62.5	282.0	171	26.5					
AVG		26: NE 45th Street & 15th Avenue NE - 319@	E-W	32.0	243.4	760	12.9					
AVG		26: NE 45th Street & 15th Avenue NE - 319@	E-N	30.6	244.8	26	9.9	EB	27.6	686		
AVG		26: NE 45th Street & 15th Avenue NE - 348@	N-W	126.5	413.8	45	61.2	WB	24.8	1018	34.3	C
AVG		26: NE 45th Street & 15th Avenue NE - 348@	N-S	126.0	412.3	529	54.9	NB	32.7	379		
AVG		26: NE 45th Street & 15th Avenue NE - 349@	S-W	22.4	138.4	82	45.6	SB	57.8	628		
AVG		26: NE 45th Street & 15th Avenue NE - 371@	S-E	35.7	220.0	116	23.9					
AVG		26: NE 45th Street & 15th Avenue NE - 371@	S-N	36.0	217.7	180	32.4					
AVG		26: NE 45th Street & 15th Avenue NE - 374@	N-E	55.9	351.0	55	83.5					
AVG		26: NE 45th Street & 15th Avenue NE - 384@	E-S	99.8	417.4	232	65.6					
AVG		26: NE 45th Street & 15th Avenue NE - 385@	W-N	7.9	78.9	34	43.8					

run	interval	movement	Direction	Queue	max Queue	Veh	Veh delay		Approach Delay	Approach Volume	Intersection Delay	Intersection LOS
AVG	900-4500	5: NE 50th Street & Latona Avenue NE - 7	E-W	11	166	676	6.1					
AVG	900-4500	5: NE 50th Street & Latona Avenue NE - 7	E-N	11	166	93	6.7	EB	6.3	849		
AVG	900-4500	5: NE 50th Street & Latona Avenue NE - 7	W-E	10	179	849	6.3	WB	6.2	769	9.3	A
AVG	900-4500	5: NE 50th Street & Latona Avenue NE - 1	S-W	8	61	10	55.6	NB	34.3	63		
AVG	900-4500	5: NE 50th Street & Latona Avenue NE - 1	S-E	5	66	30	9.3	SB	32.3	142		
AVG	900-4500	5: NE 50th Street & Latona Avenue NE - 1	S-N	8	61	23	58.0					
AVG	900-4500	5: NE 50th Street & Latona Avenue NE - 1	N-W	23	210	74	21.7					
AVG	900-4500	5: NE 50th Street & Latona Avenue NE - 1	N-E	24	207	68	43.8					
AVG	900-4500	6: NE 50th Street & 5th Avenue NE - 70@	E-W	19	137	503	12.2					
AVG	900-4500	6: NE 50th Street & 5th Avenue NE - 71@	W-E	120	467	623	35.8	EB	34.8	943		
AVG	900-4500	6: NE 50th Street & 5th Avenue NE - 71@	W-S	123	470	320	32.8	WB	26.2	694	31.0	C
AVG	900-4500	6: NE 50th Street & 5th Avenue NE - 72@	E-S	70	304	191	62.9	NB				
AVG	900-4500	6: NE 50th Street & 5th Avenue NE - 74@	N-W	216	1359	266	20.0	SB	30.8	1474		
AVG	900-4500	6: NE 50th Street & 5th Avenue NE - 74@	N-E	218	1356	685	34.7					
AVG	900-4500	6: NE 50th Street & 5th Avenue NE - 74@	N-S	218	1356	522	31.2					
AVG	900-4500	7: NE 50th Street & 7th Avenue NE - 70@	E-W	12	227	242	6.3					
AVG	900-4500	7: NE 50th Street & 7th Avenue NE - 70@	E-W	12	227	190	7.6	EB	13.6	1308		
AVG	900-4500	7: NE 50th Street & 7th Avenue NE - 71@	W-E	17	172	947	7.8	WB	6.4	806	16.6	B
AVG	900-4500	7: NE 50th Street & 7th Avenue NE - 73@	W-N	67	440	361	29.0	NB	30.3	890		
AVG	900-4500	7: NE 50th Street & 7th Avenue NE - 87@	S-W	72	339	262	33.2	SB				
AVG	900-4500	7: NE 50th Street & 7th Avenue NE - 87@	S-E	73	342	262	22.6					
AVG	900-4500	7: NE 50th Street & 7th Avenue NE - 87@	S-N	72	339	367	33.8					
AVG	900-4500	7: NE 50th Street & 7th Avenue NE - 87@	S-W	72	339	0	#DIV/0!					
AVG	900-4500	7: NE 50th Street & 7th Avenue NE - 1004	E-N	6	225	374	6.0					
AVG	900-4500	8: NE 50th Street & 9th Avenue NE - 70@	E-W	5	106	798	2.0					
AVG	900-4500	8: NE 50th Street & 9th Avenue NE - 70@	E-S	5	106	2	49.6					
AVG	900-4500	8: NE 50th Street & 9th Avenue NE - 70@	E-N	4	108	31	3.2					
AVG	900-4500	8: NE 50th Street & 9th Avenue NE - 71@	W-E	64	445	1152	16.8	EB	16.9	1208		
AVG	900-4500	8: NE 50th Street & 9th Avenue NE - 71@	W-S	67	450	56	18.2	WB	2.1	830	11.0	B
AVG	900-4500	8: NE 50th Street & 9th Avenue NE - 71@	W-N	64	445	0	#DIV/0!	NB	23.3	22		
AVG	900-4500	8: NE 50th Street & 9th Avenue NE - 115@	S-W	2	46	7	23.9	SB	18.8	12		
AVG	900-4500	8: NE 50th Street & 9th Avenue NE - 115@	S-E	2	47	7	25.6					
AVG	900-4500	8: NE 50th Street & 9th Avenue NE - 115@	S-N	2	46	9	20.8					
AVG	900-4500	8: NE 50th Street & 9th Avenue NE - 117@	N-W	0	37	5	8.3					
AVG	900-4500	8: NE 50th Street & 9th Avenue NE - 117@	N-E	1	34	4	25.1					
AVG	900-4500	8: NE 50th Street & 9th Avenue NE - 117@	N-S	1	34	2	29.3					
AVG	900-4500	9: NE 50th Street & Roosevelt Way NE - 7	E-W	10	117	679	4.7					
AVG	900-4500	9: NE 50th Street & Roosevelt Way NE - 7	E-S	10	117	46	18.3	EB	15.7	1164		
AVG	900-4500	9: NE 50th Street & Roosevelt Way NE - 7	W-E	56	253	824	14.6	WB	5.5	724	20.4	C
AVG	900-4500	9: NE 50th Street & Roosevelt Way NE - 7	W-S	61	260	340	18.3	NB				
AVG	900-4500	9: NE 50th Street & Roosevelt Way NE - 3	N-W	125	499	153	30.3	SB	36.5	1014		
AVG	900-4500	9: NE 50th Street & Roosevelt Way NE - 3	N-E	126	498	94	37.7					
AVG	900-4500	9: NE 50th Street & Roosevelt Way NE - 3	N-S	126	498	768	37.5					
AVG	900-4500	10: NE 50th Street & 11th Avenue NE - 70	E-W	36	196	638	18.2					
AVG	900-4500	10: NE 50th Street & 11th Avenue NE - 70	E-N	37	203	5	7.1					
AVG	900-4500	10: NE 50th Street & 11th Avenue NE - 71	W-E	5	89	877	2.0	EB	2.2	918		
AVG	900-4500	10: NE 50th Street & 11th Avenue NE - 71	W-N	5	89	41	7.1	WB	18.1	643	13.6	B
AVG	900-4500	10: NE 50th Street & 11th Avenue NE - 71	W-N	5	89	0	#DIV/0!	NB	47.6	222		
AVG	900-4500	10: NE 50th Street & 11th Avenue NE - 35	S-W	38	171	86	50.9	SB				
AVG	900-4500	10: NE 50th Street & 11th Avenue NE - 35	S-E	39	176	20	31.0					
AVG	900-4500	10: NE 50th Street & 11th Avenue NE - 35	S-N	38	171	116	48.0					
AVG	900-4500	10: NE 50th Street & 11th Avenue NE - 35	S-N	38	171	4	20.6					
AVG	900-4500	11: NE 50th Street & Brooklyn Avenue NE	E-W	12	149	509	5.9					
AVG	900-4500	11: NE 50th Street & Brooklyn Avenue NE	E-N	11	156	25	7.6					
AVG	900-4500	11: NE 50th Street & Brooklyn Avenue NE	E-S	12	149	13	29.0					
AVG	900-4500	11: NE 50th Street & Brooklyn Avenue NE	W-E	15	130	694	6.5	EB	6.8	832		
AVG	900-4500	11: NE 50th Street & Brooklyn Avenue NE	W-N	15	130	55	14.5	WB	6.5	547	8.6	A
AVG	900-4500	11: NE 50th Street & Brooklyn Avenue NE	W-S	15	135	82	3.9	NB	23.7	48		
AVG	900-4500	11: NE 50th Street & Brooklyn Avenue NE	S-W	6	82	22	26.0	SB	19.4	173		
AVG	900-4500	11: NE 50th Street & Brooklyn Avenue NE	S-E	4	82	5	13.5					
AVG	900-4500	11: NE 50th Street & Brooklyn Avenue NE	S-N	6	82	22	23.7					
AVG	900-4500	11: NE 50th Street & Brooklyn Avenue NE	N-W	16	170	93	14.6					
AVG	900-4500	11: NE 50th Street & Brooklyn Avenue NE	N-E	17	169	7	23.9					
AVG	900-4500	11: NE 50th Street & Brooklyn Avenue NE	N-S	17	169	74	25.1					

run	interval	movement	Direction	Queue	max Queue	Veh	Veh delay		Approach Delay	Approach Volume	Intersection Delay	Intersection LOS
AVG	900-4500	12: NE 50th Street & University Way NE -	E-W	15	115	452	9.5					
AVG	900-4500	12: NE 50th Street & University Way NE -	E-N	14	118	4	3.0					
AVG	900-4500	12: NE 50th Street & University Way NE -	E-S	15	115	15	33.8					
AVG	900-4500	12: NE 50th Street & University Way NE -	W-E	33	205	632	14.1	EB	14.2	707		
AVG	900-4500	12: NE 50th Street & University Way NE -	W-N	33	205	12	23.1	WB	10.2	471	14.6	B
AVG	900-4500	12: NE 50th Street & University Way NE -	W-S	34	208	63	13.2	NB	21.1	76		
AVG	900-4500	12: NE 50th Street & University Way NE -	S-W	9	113	18	30.7	SB	24.5	195		
AVG	900-4500	12: NE 50th Street & University Way NE -	S-E	8	113	14	15.9					
AVG	900-4500	12: NE 50th Street & University Way NE -	S-N	9	113	44	18.8					
AVG	900-4500	12: NE 50th Street & University Way NE -	N-W	28	214	76	18.9					
AVG	900-4500	12: NE 50th Street & University Way NE -	N-E	29	213	31	31.2					
AVG	900-4500	12: NE 50th Street & University Way NE -	N-S	29	213	88	27.0					
AVG	900-4500	13: NE 50th Street & 15th Avenue NE - 70	E-W	18	149	233	20.8					
AVG	900-4500	13: NE 50th Street & 15th Avenue NE - 70	E-S	18	149	24	30.8					
AVG	900-4500	13: NE 50th Street & 15th Avenue NE - 70	E-N	15	150	6	14.5					
AVG	900-4500	13: NE 50th Street & 15th Avenue NE - 71	W-E	52	251	298	24.7	EB	21.0	677		
AVG	900-4500	13: NE 50th Street & 15th Avenue NE - 71	W-S	53	250	349	17.1	WB	21.6	262	32.8	C
AVG	900-4500	13: NE 50th Street & 15th Avenue NE - 71	W-N	52	251	31	29.5	NB	44.2	300		
AVG	900-4500	13: NE 50th Street & 15th Avenue NE - 37	S-W	71	354	192	56.4	SB	47.0	530		
AVG	900-4500	13: NE 50th Street & 15th Avenue NE - 41	N-E	3	45	14	59.0					
AVG	900-4500	13: NE 50th Street & 15th Avenue NE - 42	N-W	198	727	46	42.0					
AVG	900-4500	13: NE 50th Street & 15th Avenue NE - 42	N-S	197	725	470	47.1					
AVG	900-4500	13: NE 50th Street & 15th Avenue NE - 42	S-E	11	119	9	13.5					
AVG	900-4500	13: NE 50th Street & 15th Avenue NE - 42	S-N	11	119	99	23.1					
AVG	900-4500	18: NE 45th Street & Latona Avenue NE -	W-N	0	23	11	8.3					
AVG	900-4500	18: NE 45th Street & Latona Avenue NE -	S-N	13	98	48	44.7	EB	4.1	554		
AVG	900-4500	18: NE 45th Street & Latona Avenue NE -	S-E	12	102	87	8.0	WB	2.5	680	5.3	A
AVG	900-4500	18: NE 45th Street & Latona Avenue NE -	S-W	13	98	10	44.8	NB	22.7	145		
AVG	900-4500	18: NE 45th Street & Latona Avenue NE -	W-E	5	112	542	4.0	SB				
AVG	900-4500	18: NE 45th Street & Latona Avenue NE -	E-N	4	157	8	1.6					
AVG	900-4500	18: NE 45th Street & Latona Avenue NE -	E-W	5	156	672	2.6					
AVG	900-4500	19: NE 45th Street & 5th Avenue NE - 313	W-S	81	449	242	14.0					
AVG	900-4500	19: NE 45th Street & 5th Avenue NE - 313	W-E	79	445	388	31.4					
AVG	900-4500	19: NE 45th Street & 5th Avenue NE - 329	E-S	43	236	329	36.9	EB	24.7	629		
AVG	900-4500	19: NE 45th Street & 5th Avenue NE - 338	N-S	123	609	413	40.2	WB	17.9	834	24.3	C
AVG	900-4500	19: NE 45th Street & 5th Avenue NE - 338	N-W	123	611	177	14.2	NB				
AVG	900-4500	19: NE 45th Street & 5th Avenue NE - 423	N-S	20	229	44	29.1	SB	31.9	666		
AVG	900-4500	19: NE 45th Street & 5th Avenue NE - 423	N-E	20	229	77	27.7					
AVG	900-4500	19: NE 45th Street & 5th Avenue NE - 428	E-W	10	308	504	5.5					
AVG	900-4500	20: NE 45th Street & 7th Avenue NE - 324	S-N	64	532	216	34.1					
AVG	900-4500	20: NE 45th Street & 7th Avenue NE - 324	S-E	65	533	602	19.1					
AVG	900-4500	20: NE 45th Street & 7th Avenue NE - 325	S-N	73	429	44	37.6	EB	35.2	405		
AVG	900-4500	20: NE 45th Street & 7th Avenue NE - 325	S-W	73	429	342	29.8	WB	28.5	531	27.9	C
AVG	900-4500	20: NE 45th Street & 7th Avenue NE - 426	W-N	87	254	145	79.6	NB	25.0	1160		
AVG	900-4500	20: NE 45th Street & 7th Avenue NE - 426	W-N	87	254	38	78.0	SB				
AVG	900-4500	20: NE 45th Street & 7th Avenue NE - 426	W-E	87	254	260	10.5					
AVG	900-4500	20: NE 45th Street & 7th Avenue NE - 430	E-N	76	384	0	#DIV/0!					
AVG	900-4500	20: NE 45th Street & 7th Avenue NE - 430	E-N	68	364	41	26.6					
AVG	900-4500	20: NE 45th Street & 7th Avenue NE - 430	E-W	68	364	491	28.7					
AVG	900-4500	20: NE 45th Street & 7th Avenue NE - 200	W-E	9	89	21	18.7					
AVG	900-4500	21: NE 45th Street & Roosevelt Way NE -	E-S	44	261	285	30.4					
AVG	900-4500	21: NE 45th Street & Roosevelt Way NE -	N-S	489	1255	987	60.4	EB	16.7	739		
AVG	900-4500	21: NE 45th Street & Roosevelt Way NE -	N-E	14	94	70	59.9	WB	15.9	797	34.2	C
AVG	900-4500	21: NE 45th Street & Roosevelt Way NE -	W-S	57	414	172	16.3	NB				
AVG	900-4500	21: NE 45th Street & Roosevelt Way NE -	W-E	53	405	566	16.8	SB	59.0	1110		
AVG	900-4500	21: NE 45th Street & Roosevelt Way NE -	E-W	25	241	511	7.9					
AVG	900-4500	21: NE 45th Street & Roosevelt Way NE -	NE-W	480	1266	53	31.9					
AVG	900-4500	22: NE 45th Street & 11th Avenue NE - 35	S-N	31	130	185	35.9					
AVG	900-4500	22: NE 45th Street & 11th Avenue NE - 35	S-E	30	133	64	8.1	EB	5.1	637		
AVG	900-4500	22: NE 45th Street & 11th Avenue NE - 35	S-W	31	130	84	41.0	WB	14.4	742	14.3	B
AVG	900-4500	22: NE 45th Street & 11th Avenue NE - 42	W-E	25	271	637	5.1	NB	31.8	333		
AVG	900-4500	22: NE 45th Street & 11th Avenue NE - 43	E-N	52	296	30	3.2	SB				
AVG	900-4500	22: NE 45th Street & 11th Avenue NE - 43	E-W	50	288	712	14.8					

run	interval	movement	Direction	Queue	max Queue	Veh	Veh delay		Approach Delay	Approach Volume	Intersection Delay	Intersection LOS
AVG	900-4500	23: NE 45th Street & 12th Avenue NE - 38	E-S	11	168	60	35.4					
AVG	900-4500	23: NE 45th Street & 12th Avenue NE - 38	N-S	20	148	95	30.0					
AVG	900-4500	23: NE 45th Street & 12th Avenue NE - 38	N-E	20	148	10	35.8					
AVG	900-4500	23: NE 45th Street & 12th Avenue NE - 38	N-W	18	149	12	19.2	EB	8.1	702		
AVG	900-4500	23: NE 45th Street & 12th Avenue NE - 38	S-N	2	55	5	26.2	WB	16.9	787	14.0	B
AVG	900-4500	23: NE 45th Street & 12th Avenue NE - 38	S-E	1	58	20	7.7	NB	17.1	32		
AVG	900-4500	23: NE 45th Street & 12th Avenue NE - 38	S-W	2	55	7	37.4	SB	29.4	117		
AVG	900-4500	23: NE 45th Street & 12th Avenue NE - 39	W-N	3	43	15	35.6					
AVG	900-4500	23: NE 45th Street & 12th Avenue NE - 43	W-S	26	295	113	6.4					
AVG	900-4500	23: NE 45th Street & 12th Avenue NE - 43	W-E	24	291	574	7.7					
AVG	900-4500	23: NE 45th Street & 12th Avenue NE - 43	E-N	59	307	4	2.6					
AVG	900-4500	23: NE 45th Street & 12th Avenue NE - 43	E-W	58	303	723	15.5					
AVG	900-4500	24: NE 45th Street & Brooklyn Avenue NE	N-W	1	35	33	6.0					
AVG	900-4500	24: NE 45th Street & Brooklyn Avenue NE	W-N	0	27	18	12.5	EB	3.1	604		
AVG	900-4500	24: NE 45th Street & Brooklyn Avenue NE	N-E	1	27	6	32.3	WB	11.2	782	7.7	A
AVG	900-4500	24: NE 45th Street & Brooklyn Avenue NE	W-E	5	172	586	2.8	NB				
AVG	900-4500	24: NE 45th Street & Brooklyn Avenue NE	E-N	43	299	28	5.4	SB	9.9	38		
AVG	900-4500	24: NE 45th Street & Brooklyn Avenue NE	E-W	42	295	754	11.4					
AVG	900-4500	25: NE 45th Street & University Way NE - 3	S-N	19	142	60	46.3					
AVG	900-4500	25: NE 45th Street & University Way NE - 3	S-E	19	142	4	20.5					
AVG	900-4500	25: NE 45th Street & University Way NE - 3	N-S	29	238	125	37.1	EB	6.6	594		
AVG	900-4500	25: NE 45th Street & University Way NE - 3	N-W	29	238	12	23.6	WB	6.7	782	10.8	B
AVG	900-4500	25: NE 45th Street & University Way NE - 4	W-S	27	228	60	12.8	NB	44.5	65		
AVG	900-4500	25: NE 45th Street & University Way NE - 4	W-E	25	224	534	5.9	SB	35.9	137		
AVG	900-4500	25: NE 45th Street & University Way NE - 4	E-N	20	261	13	2.0					
AVG	900-4500	25: NE 45th Street & University Way NE - 4	E-W	20	258	770	6.8					
AVG	900-4500	26: NE 45th Street & 15th Avenue NE - 31	E-N	229	1006	123	8.5					
AVG	900-4500	26: NE 45th Street & 15th Avenue NE - 31	E-W	229	1005	663	25.2					
AVG	900-4500	26: NE 45th Street & 15th Avenue NE - 34	S-W	26	159	75	56.4	EB	23.7	542		
AVG	900-4500	26: NE 45th Street & 15th Avenue NE - 37	S-N	37	219	188	32.0	WB	31.4	1018	37.7	D
AVG	900-4500	26: NE 45th Street & 15th Avenue NE - 37	S-E	37	221	114	23.9	NB	34.4	377		
AVG	900-4500	26: NE 45th Street & 15th Avenue NE - 37	N-E	140	426	166	83.9	SB	57.3	784		
AVG	900-4500	26: NE 45th Street & 15th Avenue NE - 38	E-S	177	914	232	61.3					
AVG	900-4500	26: NE 45th Street & 15th Avenue NE - 38	W-N	8	76	30	52.6					
AVG	900-4500	26: NE 45th Street & 15th Avenue NE - 42	N-S	144	430	573	49.7					
AVG	900-4500	26: NE 45th Street & 15th Avenue NE - 42	N-W	145	431	44	54.4					
AVG	900-4500	26: NE 45th Street & 15th Avenue NE - 43	W-S	60	294	137	10.2					
AVG	900-4500	26: NE 45th Street & 15th Avenue NE - 43	W-E	59	293	375	26.3					

AM Baseline

run	measurement	veh	time (all)	buses	time (bus)
40	3: EB Route 44, Thackeray to University	95	174.5275	5	339.6847
40	4: EB Route 44, University to 43rd	156	77.48427	16	116.0567
40	5: WB Route 44, 42nd to Brooklyn	82	126.6605	11	149.7521
40	6: WB Route 44, Brooklyn to Latona	115	195.6681	5	308.4194
41	3: EB Route 44, Thackeray to University	110	171.2702	5	305.6264
41	4: EB Route 44, University to 43rd	171	81.25962	17	117.3392
41	5: WB Route 44, 42nd to Brooklyn	76	117.4829	11	143.1635
41	6: WB Route 44, Brooklyn to Latona	96	196.9212	6	264.4711
42	3: EB Route 44, Thackeray to University	95	159.4703	5	325.9579
42	4: EB Route 44, University to 43rd	169	86.74242	17	115.6045
42	5: WB Route 44, 42nd to Brooklyn	80	92.42627	11	105.8865
42	6: WB Route 44, Brooklyn to Latona	119	146.2174	6	267.1689
43	3: EB Route 44, Thackeray to University	87	174.7179	5	381.4077
43	4: EB Route 44, University to 43rd	156	83.40985	17	125.7857
43	5: WB Route 44, 42nd to Brooklyn	76	95.64613	11	115.2264
43	6: WB Route 44, Brooklyn to Latona	117	152.6354	5	268.5418
44	3: EB Route 44, Thackeray to University	83	165.5598	5	294.3121
44	4: EB Route 44, University to 43rd	172	79.29533	17	109.6936
44	5: WB Route 44, 42nd to Brooklyn	80	97.72686	11	121.8226
44	6: WB Route 44, Brooklyn to Latona	117	142.0724	6	234.6537
45	3: EB Route 44, Thackeray to University	93	172.9392	5	291.8446
45	4: EB Route 44, University to 43rd	152	71.18631	17	108.3465
45	5: WB Route 44, 42nd to Brooklyn	82	100.5498	11	126.5872
45	6: WB Route 44, Brooklyn to Latona	129	149.9693	6	251.8534
46	3: EB Route 44, Thackeray to University	98	162.076	5	280.7095
46	4: EB Route 44, University to 43rd	175	78.42828	16	112.996
46	5: WB Route 44, 42nd to Brooklyn	66	97.74815	11	116.2637
46	6: WB Route 44, Brooklyn to Latona	120	132.8168	6	255.916
47	3: EB Route 44, Thackeray to University	105	168.3717	5	326.0212
47	4: EB Route 44, University to 43rd	183	82.76811	17	103.4423
47	5: WB Route 44, 42nd to Brooklyn	83	96.21172	11	115.9878
47	6: WB Route 44, Brooklyn to Latona	133	155.2734	5	275.742
48	3: EB Route 44, Thackeray to University	84	165.3205	5	364.0192
48	4: EB Route 44, University to 43rd	173	76.6249	16	130.1182
48	5: WB Route 44, 42nd to Brooklyn	70	92.67477	11	123.5625
48	6: WB Route 44, Brooklyn to Latona	105	145.621	5	247.7212
49	3: EB Route 44, Thackeray to University	83	157.8926	5	323.1644
49	4: EB Route 44, University to 43rd	160	81.15986	18	119.5348
49	5: WB Route 44, 42nd to Brooklyn	85	95.35951	12	120.9849
49	6: WB Route 44, Brooklyn to Latona	116	143.5712	6	235.4422

323.3	EB avg
261.0	WB avg
32.1	EB Stdev
21.6	WB Stdev
115.9	EB avg Univ to 43rd
8.0	EB stdev Univ to 43rd
123.9	WB avg 42nd to Brook
13.3	WB stdev 42nd to Brook

AM Scenario C

run	measureme	veh	time (all)	buses	time (bus)	
25	3: EB Route	95	156.1268	5	315.877	-23.8
25	4: EB Route	121	56.81335	15	99.20159	
25	5: WB Rout	74	104.8022	11	114.3324	
25	6: WB Rout	111	154.8174	6	190.2988	-118.1
26	3: EB Route	113	164.9631	5	279.0146	-26.6
26	4: EB Route	126	61.6	16	105.1591	
26	5: WB Rout	69	120.6173	11	133.1367	
26	6: WB Rout	97	165.9015	6	191.3683	-73.1
27	3: EB Route	95	163.1231	5	302.863	-23.1
27	4: EB Route	132	60.87918	17	93.05136	
27	5: WB Rout	66	121.5751	11	128.9828	
27	6: WB Rout	117	157.4943	6	218.0955	-49.1
28	3: EB Route	89	165.5162	6	310.1573	-71.3
28	4: EB Route	134	64.78418	16	104.8833	
28	5: WB Rout	67	103.1141	11	118.0452	
28	6: WB Rout	115	154.7254	6	218.2586	-50.3
29	3: EB Route	83	154.6549	6	256.1798	-38.1
29	4: EB Route	138	61.89298	15	106.7515	
29	5: WB Rout	70	112.9891	11	124.0002	
29	6: WB Rout	122	145.487	6	202.687	-32.0
30	3: EB Route	93	150.6593	5	274.3251	-17.5
30	4: EB Route	119	60.33061	16	101.0692	
30	5: WB Rout	77	136.0065	11	144.1372	
30	6: WB Rout	132	162.8354	6	223.2663	-28.6
31	3: EB Route	100	159.8028	5	276.82	-3.9
31	4: EB Route	138	59.33381	16	98.94474	
31	5: WB Rout	65	103.2244	11	115.8951	
31	6: WB Rout	123	147.0398	6	225.3836	-30.5
32	3: EB Route	106	157.6615	5	314.6125	-11.4
32	4: EB Route	144	61.77658	15	97.81084	
32	5: WB Rout	74	146.8928	11	148.9093	
32	6: WB Rout	132	162.5736	5	236.5938	-39.1
33	3: EB Route	87	154.5224	5	335.5951	-28.4
33	4: EB Route	143	61.9886	16	109.5866	
33	5: WB Rout	67	129.8264	11	152.7013	
33	6: WB Rout	102	151.0273	5	229.3375	-18.4
34	3: EB Route	83	152.3725	5	304.4041	-18.8
34	4: EB Route	122	61.39522	17	96.51887	
34	5: WB Rout	70	106.9356	12	122.6744	
34	6: WB Rout	117	151.7585	5	199.0366	-36.4

297.0	EB avg	-26.3
213.4	WB avg	-47.6
24.3	EB Stdev	-7.8
16.4	WB Stdev	-5.2
101.3	EB avg Univ to 43rd	-14.6
5.2	EB stdev Univ to 43rd	-2.8
130.3	WB avg 42nd to Brook	6.4
14.0	WB stdev 42nd to Brook	0.7

run	time	movement	direction	avg queue	max queue	veh	veh delay		Approach Delay	Approach Volume	Intersection Delay	Intersection LOS
AVG		5: NE 50th Street & Latona Avenue NE - 70@1	E-W	27.8	332.3	1211	8.3					
AVG		5: NE 50th Street & Latona Avenue NE - 70@1	E-N	27.8	332.3	165	12.0	EB	5.7	886		
AVG		5: NE 50th Street & Latona Avenue NE - 71@1	W-E	9.8	156.0	886	5.7	WB	8.8	1376	10.4	B
AVG		5: NE 50th Street & Latona Avenue NE - 100@	S-W	19.2	105.1	21	61.0	NB	40.8	121		
AVG		5: NE 50th Street & Latona Avenue NE - 100@	S-E	16.1	109.4	51	12.1	SB	33.7	119		
AVG		5: NE 50th Street & Latona Avenue NE - 100@	S-N	19.2	105.1	50	61.5					
AVG		5: NE 50th Street & Latona Avenue NE - 102@	N-W	19.8	176.0	70	23.3					
AVG		5: NE 50th Street & Latona Avenue NE - 102@	N-E	20.8	173.0	49	48.5					
AVG		6: NE 50th Street & 5th Avenue NE - 70@927.	E-W	3.2	123.5	1119	2.2					
AVG		6: NE 50th Street & 5th Avenue NE - 71@335.	W-E	63.4	378.7	739	20.5	EB	20.0	986		
AVG		6: NE 50th Street & 5th Avenue NE - 71@335.	W-S	65.1	381.6	247	18.3	WB	7.8	1305	15.9	B
AVG		6: NE 50th Street & 5th Avenue NE - 72@54.5	E-S	43.3	292.2	186	41.3	NB				
AVG		6: NE 50th Street & 5th Avenue NE - 74@52.1	N-W	34.2	168.3	256	18.8	SB	28.4	517		
AVG		6: NE 50th Street & 5th Avenue NE - 74@52.1	N-E	39.4	166.6	185	36.9					
AVG		6: NE 50th Street & 5th Avenue NE - 74@52.1	N-S	39.4	166.6	77	40.1					
AVG		7: NE 50th Street & 7th Avenue NE - 70@764.	E-W	16.8	223.7	661	8.8					
AVG		7: NE 50th Street & 7th Avenue NE - 71@498.	W-E	12.8	167.2	581	9.7	EB	18.3	925		
AVG		7: NE 50th Street & 7th Avenue NE - 73@47.8	W-N	67.5	449.3	344	32.6	WB	7.6	1033	20.3	C
AVG		7: NE 50th Street & 7th Avenue NE - 87@86.6	S-W	102.0	364.6	642	40.2	NB	35.1	1017		
AVG		7: NE 50th Street & 7th Avenue NE - 87@86.6	S-E	104.4	368.1	279	22.2	SB				
AVG		7: NE 50th Street & 7th Avenue NE - 87@86.6	S-N	102.0	364.6	96	38.7					
AVG		7: NE 50th Street & 7th Avenue NE - 10043@	E-N	2.2	163.2	372	5.6					
AVG		8: NE 50th Street & 9th Avenue NE - 70@596.	E-W	9.2	117.4	976	2.8					
AVG		8: NE 50th Street & 9th Avenue NE - 70@596.	E-S	9.2	117.4	9	21.3					
AVG		8: NE 50th Street & 9th Avenue NE - 70@596.	E-N	7.5	119.5	19	3.1					
AVG		8: NE 50th Street & 9th Avenue NE - 71@675.	W-E	92.8	382.0	802	28.8	EB	29.0	861		
AVG		8: NE 50th Street & 9th Avenue NE - 71@675.	W-S	95.5	387.5	40	18.5	WB	3.0	1004	16.9	B
AVG		8: NE 50th Street & 9th Avenue NE - 71@675.	W-N	92.8	382.0	20	61.7	NB	59.9	71		
AVG		8: NE 50th Street & 9th Avenue NE - 115@18	S-W	24.0	149.1	28	64.2	SB	26.0	52		
AVG		8: NE 50th Street & 9th Avenue NE - 115@18	S-E	23.9	150.2	32	58.5					
AVG		8: NE 50th Street & 9th Avenue NE - 115@18	S-N	24.0	149.1	11	53.4					
AVG		8: NE 50th Street & 9th Avenue NE - 117@16	N-W	5.6	86.3	28	17.7					
AVG		8: NE 50th Street & 9th Avenue NE - 117@16	N-E	5.8	83.3	8	47.4					
AVG		8: NE 50th Street & 9th Avenue NE - 117@16	N-S	5.8	83.3	16	29.8					
AVG		9: NE 50th Street & Roosevelt Way NE - 70@5	E-W	17.8	181.2	883	5.4					
AVG		9: NE 50th Street & Roosevelt Way NE - 70@5	E-S	17.8	181.2	74	22.9	EB	25.7	842		
AVG		9: NE 50th Street & Roosevelt Way NE - 71@7	W-E	72.9	270.5	732	26.5	WB	6.7	957	18.8	B
AVG		9: NE 50th Street & Roosevelt Way NE - 71@7	W-S	76.8	277.0	110	19.9	NB				
AVG		9: NE 50th Street & Roosevelt Way NE - 342@	N-W	63.1	323.9	121	21.6	SB	25.8	827		
AVG		9: NE 50th Street & Roosevelt Way NE - 342@	N-E	64.6	322.2	70	27.4					
AVG		9: NE 50th Street & Roosevelt Way NE - 342@	N-S	64.6	322.2	636	26.4					
AVG		10: NE 50th Street & 11th Avenue NE - 70@4	E-W	26.2	182.8	747	11.6					
AVG		10: NE 50th Street & 11th Avenue NE - 70@4	E-N	26.6	189.4	28	8.2					
AVG		10: NE 50th Street & 11th Avenue NE - 71@8	W-E	36.2	250.6	670	7.2	EB	11.2	803		
AVG		10: NE 50th Street & 11th Avenue NE - 71@8	W-N	36.2	250.6	133	31.0	WB	11.5	776	14.2	B
AVG		10: NE 50th Street & 11th Avenue NE - 71@8	W-N	36.2	250.6	0	0.0	NB	19.9	819		
AVG		10: NE 50th Street & 11th Avenue NE - 358@	S-W	52.9	399.6	209	23.0	SB				
AVG		10: NE 50th Street & 11th Avenue NE - 358@	S-E	53.2	404.9	43	16.7					
AVG		10: NE 50th Street & 11th Avenue NE - 358@	S-N	52.9	399.6	567	19.0					
AVG		10: NE 50th Street & 11th Avenue NE - 358@	S-N	52.9	399.6	7	22.5					
AVG		11: NE 50th Street & Brooklyn Avenue NE - 70	E-W	21.9	202.3	580	9.8					
AVG		11: NE 50th Street & Brooklyn Avenue NE - 70	E-N	22.0	205.5	39	11.2					
AVG		11: NE 50th Street & Brooklyn Avenue NE - 70	E-S	21.9	202.3	26	35.8					
AVG		11: NE 50th Street & Brooklyn Avenue NE - 71	W-E	62.4	273.5	529	21.7	EB	24.3	678		
AVG		11: NE 50th Street & Brooklyn Avenue NE - 71	W-N	62.4	273.5	68	57.2	WB	10.9	645	18.2	B
AVG		11: NE 50th Street & Brooklyn Avenue NE - 71	W-S	64.9	278.0	81	13.9	NB	21.6	195		
AVG		11: NE 50th Street & Brooklyn Avenue NE - 34	S-W	22.5	169.6	76	23.2	SB	17.3	167		
AVG		11: NE 50th Street & Brooklyn Avenue NE - 34	S-E	21.2	170.4	29	17.9					
AVG		11: NE 50th Street & Brooklyn Avenue NE - 34	S-N	22.5	169.6	90	21.3					
AVG		11: NE 50th Street & Brooklyn Avenue NE - 34	N-W	13.4	154.9	57	12.8					
AVG		11: NE 50th Street & Brooklyn Avenue NE - 34	N-E	14.7	153.4	13	23.6					
AVG		11: NE 50th Street & Brooklyn Avenue NE - 34	N-S	14.7	153.4	98	19.1					

run	time	movement	direction	avg queue	max queue	veh	veh delay		Approach Delay	Approach Volume	Intersection Delay	Intersection LOS
AVG		12: NE 50th Street & University Way NE - 70@	E-W	15.5	143.2	528	8.3					
AVG		12: NE 50th Street & University Way NE - 70@	E-N	13.5	145.8	16	6.1					
AVG		12: NE 50th Street & University Way NE - 70@	E-S	15.5	143.2	24	28.0					
AVG		12: NE 50th Street & University Way NE - 71@	W-E	14.9	175.1	443	6.4	EB	8.1	572		
AVG		12: NE 50th Street & University Way NE - 71@	W-N	14.9	175.1	68	22.6	WB	9.1	569	13.8	B
AVG		12: NE 50th Street & University Way NE - 71@	W-S	15.7	178.3	61	4.1	NB	29.8	181		
AVG		12: NE 50th Street & University Way NE - 353	S-W	31.9	227.8	49	35.9	SB	25.8	250		
AVG		12: NE 50th Street & University Way NE - 353	S-E	31.0	228.5	27	22.4					
AVG		12: NE 50th Street & University Way NE - 353	S-N	31.9	227.8	105	28.9					
AVG		12: NE 50th Street & University Way NE - 354	N-W	38.1	251.5	68	23.1					
AVG		12: NE 50th Street & University Way NE - 354	N-E	39.2	250.3	33	30.2					
AVG		12: NE 50th Street & University Way NE - 354	N-S	39.2	250.3	149	26.0					
AVG		13: NE 50th Street & 15th Avenue NE - 70@1	E-W	29.9	182.8	380	20.0					
AVG		13: NE 50th Street & 15th Avenue NE - 70@1	E-N	28.3	184.2	28	15.0					
AVG		13: NE 50th Street & 15th Avenue NE - 70@1	E-S	29.9	182.8	31	30.5					
AVG		13: NE 50th Street & 15th Avenue NE - 71@1	W-E	29.6	219.2	341	13.2	EB	14.7	504		
AVG		13: NE 50th Street & 15th Avenue NE - 71@1	W-N	29.6	219.2	51	27.1	WB	20.4	439	16.9	B
AVG		13: NE 50th Street & 15th Avenue NE - 71@1	W-S	30.7	220.4	112	13.8	NB	17.7	588		
AVG		13: NE 50th Street & 15th Avenue NE - 347@	S-W	41.1	224.6	160	31.7	SB	14.8	484		
AVG		13: NE 50th Street & 15th Avenue NE - 347@	S-E	41.2	225.4	42	9.9					
AVG		13: NE 50th Street & 15th Avenue NE - 347@	S-N	41.1	224.6	386	12.8					
AVG		13: NE 50th Street & 15th Avenue NE - 348@	N-W	22.5	168.4	29	12.8					
AVG		13: NE 50th Street & 15th Avenue NE - 348@	N-E	21.8	167.1	13	23.6					
AVG		13: NE 50th Street & 15th Avenue NE - 348@	N-S	21.8	167.1	442	14.6					
AVG		18: NE 45th Street & Latona Avenue NE - 104	W-N	0.4	30.4	16	17.4					
AVG		18: NE 45th Street & Latona Avenue NE - 106	S-N	28.5	205.4	78	45.9	EB	5.2	758		
AVG		18: NE 45th Street & Latona Avenue NE - 106	S-E	28.9	209.4	101	16.4	WB	12.2	959	11.5	B
AVG		18: NE 45th Street & Latona Avenue NE - 106	S-W	28.5	205.4	28	46.2	NB	31.5	207		
AVG		18: NE 45th Street & Latona Avenue NE - 313	W-E	7.5	155.9	742	4.9	SB				
AVG		18: NE 45th Street & Latona Avenue NE - 418	E-N	58.9	459.1	56	11.7					
AVG		18: NE 45th Street & Latona Avenue NE - 418	E-W	58.4	457.5	903	12.2					
AVG		19: NE 45th Street & 5th Avenue NE - 313: 45	W-E	142.5	465.2	567	40.6					
AVG		19: NE 45th Street & 5th Avenue NE - 313: 45	W-S	146.0	469.3	286	50.4	EB	43.9	852		
AVG		19: NE 45th Street & 5th Avenue NE - 319@8	E-W	32.8	233.9	790	14.4	WB	24.4	1095	34.5	C
AVG		19: NE 45th Street & 5th Avenue NE - 329@6	E-S	47.8	164.2	305	50.5	NB				
AVG		19: NE 45th Street & 5th Avenue NE - 338@6	N-E	93.9	412.8	303	35.6	SB	38.3	817		
AVG		19: NE 45th Street & 5th Avenue NE - 338@6	N-W	93.8	414.7	169	41.2					
AVG		19: NE 45th Street & 5th Avenue NE - 338@6	N-S	93.9	412.8	344	39.3					
AVG		20: NE 45th Street & 7th Avenue NE - 313: 45	W-E	39.1	294.5	701	16.7					
AVG		20: NE 45th Street & 7th Avenue NE - 319@7	E-W	158.2	639.3	652	22.0					
AVG		20: NE 45th Street & 7th Avenue NE - 319@7	E-N	170.7	658.9	352	36.5					
AVG		20: NE 45th Street & 7th Avenue NE - 319@7	E-N	158.2	639.3	87	39.7	EB	22.6	833		
AVG		20: NE 45th Street & 7th Avenue NE - 319@7	E-W	158.2	639.3	6	40.0	WB	27.1	1004	39.5	D
AVG		20: NE 45th Street & 7th Avenue NE - 325@5	S-W	598.0	1236.4	552	44.0	NB	60.1	1286		
AVG		20: NE 45th Street & 7th Avenue NE - 325@5	S-N	597.2	1235.9	296	95.8	SB				
AVG		20: NE 45th Street & 7th Avenue NE - 331@1	S-E	447.0	1171.4	437	56.3					
AVG		20: NE 45th Street & 7th Avenue NE - 331@1	S-N	447.0	1171.4	62	90.1					
AVG		20: NE 45th Street & 7th Avenue NE - 361@2	W-N	52.2	312.1	133	53.9					
AVG		20: NE 45th Street & 7th Avenue NE - 361@2	W-N	52.2	312.1	31	53.0					
AVG		20: NE 45th Street & 7th Avenue NE - 20001@	W-E	2.3	44.8	5	16.4					
AVG		21: NE 45th Street & Roosevelt Way NE - 1@2	E-S	24.5	230.0	179	30.4					
AVG		21: NE 45th Street & Roosevelt Way NE - 313	W-E	47.3	396.8	865	14.1	EB	14.7	1122		
AVG		21: NE 45th Street & Roosevelt Way NE - 313	W-S	51.4	405.9	257	16.6	WB	11.4	1149	27.4	C
AVG		21: NE 45th Street & Roosevelt Way NE - 319	E-W	21.7	233.2	970	7.9	NB				
AVG		21: NE 45th Street & Roosevelt Way NE - 350	N-S	218.9	736.1	667	60.6	SB	63.3	907		
AVG		21: NE 45th Street & Roosevelt Way NE - 391	N-E	65.6	547.9	106	74.3					
AVG		21: NE 45th Street & Roosevelt Way NE - 104	NE-W	225.8	751.6	135	68.2					
AVG		22: NE 45th Street & 11th Avenue NE - 313: 4	W-E	38.6	283.0	970	9.4					
AVG		22: NE 45th Street & 11th Avenue NE - 319@	E-W	53.6	296.1	914	17.0	EB	9.4	970		
AVG		22: NE 45th Street & 11th Avenue NE - 319@	E-N	57.0	303.8	63	17.3	WB	17.0	976	21.8	C
AVG		22: NE 45th Street & 11th Avenue NE - 357@	S-E	141.4	594.0	152	22.3	NB	36.7	1118		
AVG		22: NE 45th Street & 11th Avenue NE - 357@	S-W	139.5	590.7	234	44.9	SB				
AVG		22: NE 45th Street & 11th Avenue NE - 357@	S-N	139.5	590.7	732	37.1					

run	time	movement	direction	avg queue	max queue	veh	veh delay		Approach Delay	Approach Volume	Intersection Delay	Intersection LOS
AVG		23: NE 45th Street & 12th Avenue NE - 313: 4	W-E	27.5	287.8	947	8.6					
AVG		23: NE 45th Street & 12th Avenue NE - 313: 4	W-S	29.0	291.4	78	9.9					
AVG		23: NE 45th Street & 12th Avenue NE - 319@	E-W	44.9	297.9	905	15.5					
AVG		23: NE 45th Street & 12th Avenue NE - 319@	E-N	44.7	301.5	27	14.1	EB	11.6	1123		
AVG		23: NE 45th Street & 12th Avenue NE - 387@	E-S	10.2	117.3	48	43.1	WB	16.8	980	15.7	B
AVG		23: NE 45th Street & 12th Avenue NE - 388@	N-E	16.3	147.2	13	48.8	NB	31.9	119		
AVG		23: NE 45th Street & 12th Avenue NE - 388@	N-W	15.3	147.7	37	26.2	SB	34.2	86		
AVG		23: NE 45th Street & 12th Avenue NE - 388@	N-S	16.3	147.2	36	37.3					
AVG		23: NE 45th Street & 12th Avenue NE - 389@	S-E	18.3	159.5	20	20.5					
AVG		23: NE 45th Street & 12th Avenue NE - 389@	S-W	20.2	157.2	34	40.0					
AVG		23: NE 45th Street & 12th Avenue NE - 389@	S-N	20.2	157.2	65	31.2					
AVG		23: NE 45th Street & 12th Avenue NE - 390@	W-N	22.8	191.0	98	42.4					
AVG		24: NE 45th Street & Brooklyn Avenue NE - 3	N-W	6.0	86.7	99	14.9					
AVG		24: NE 45th Street & Brooklyn Avenue NE - 31	W-E	18.9	225.4	889	8.7	EB	9.7	979		
AVG		24: NE 45th Street & Brooklyn Avenue NE - 31	E-W	56.5	291.1	880	14.0	WB	14.6	926	12.9	B
AVG		24: NE 45th Street & Brooklyn Avenue NE - 31	E-N	57.9	295.1	46	24.7	NB				
AVG		24: NE 45th Street & Brooklyn Avenue NE - 33	W-N	5.9	93.0	91	19.3	SB	24.2	142		
AVG		24: NE 45th Street & Brooklyn Avenue NE - 34	N-E	9.4	89.6	43	45.4					
AVG		25: NE 45th Street & University Way NE - 313	W-E	41.0	276.5	787	9.1					
AVG		25: NE 45th Street & University Way NE - 313	W-S	43.2	280.8	148	18.7					
AVG		25: NE 45th Street & University Way NE - 319	E-W	27.9	192.9	884	9.6	EB	10.7	934		
AVG		25: NE 45th Street & University Way NE - 319	E-N	28.3	196.0	51	8.1	WB	9.6	935	15.1	B
AVG		25: NE 45th Street & University Way NE - 351	S-E	46.6	301.8	29	33.7	NB	38.0	201		
AVG		25: NE 45th Street & University Way NE - 351	S-N	46.0	301.0	172	38.7	SB	40.3	186		
AVG		25: NE 45th Street & University Way NE - 354	N-W	44.5	289.2	43	35.9					
AVG		25: NE 45th Street & University Way NE - 354	N-S	44.4	289.0	142	41.6					
AVG		26: NE 45th Street & 15th Avenue NE - 313: 4	W-E	48.2	284.5	596	18.9					
AVG		26: NE 45th Street & 15th Avenue NE - 313: 4	W-S	49.1	285.6	159	18.2					
AVG		26: NE 45th Street & 15th Avenue NE - 319@	E-W	106.9	474.2	782	17.4					
AVG		26: NE 45th Street & 15th Avenue NE - 319@	E-N	105.0	475.6	72	16.8	EB	21.4	814		
AVG		26: NE 45th Street & 15th Avenue NE - 348@	N-W	138.1	390.1	49	68.2	WB	26.5	1042	38.4	D
AVG		26: NE 45th Street & 15th Avenue NE - 348@	N-S	137.1	388.6	456	60.9	NB	47.9	807		
AVG		26: NE 45th Street & 15th Avenue NE - 349@	S-W	39.1	183.6	105	57.1	SB	69.2	601		
AVG		26: NE 45th Street & 15th Avenue NE - 371@	S-E	140.7	500.2	241	51.2					
AVG		26: NE 45th Street & 15th Avenue NE - 371@	S-N	138.7	498.0	462	44.1					
AVG		26: NE 45th Street & 15th Avenue NE - 374@	N-E	114.1	385.8	96	109.5					
AVG		26: NE 45th Street & 15th Avenue NE - 384@	E-S	109.7	405.6	188	68.4					
AVG		26: NE 45th Street & 15th Avenue NE - 385@	W-N	17.8	117.7	59	55.8					

run	interval	movement	Direction	Queue	max Queue	Veh	Veh delay		Approach Delay	Approach Volume	Intersection Delay	Intersection LOS
Average	900-4500	5: NE 50th Street & Latona Avenue NE - 7	E-W	36	330	1142	10.3					
Average	900-4500	5: NE 50th Street & Latona Avenue NE - 7	E-N	36	330	155	14.9	EB	17.2	846		
Average	900-4500	5: NE 50th Street & Latona Avenue NE - 7	W-E	35	182	846	17.2	WB	10.8	1297	17.3	B
Average	900-4500	5: NE 50th Street & Latona Avenue NE - 1	S-W	42	144	20	73.8	NB	54.4	116		
Average	900-4500	5: NE 50th Street & Latona Avenue NE - 1	S-E	40	149	48	29.5	SB	52.3	115		
Average	900-4500	5: NE 50th Street & Latona Avenue NE - 1	S-N	42	144	48	71.1					
Average	900-4500	5: NE 50th Street & Latona Avenue NE - 1	N-W	42	211	68	33.2					
Average	900-4500	5: NE 50th Street & Latona Avenue NE - 1	N-E	43	208	47	80.0					
Average	900-4500	6: NE 50th Street & 5th Avenue NE - 70@	E-W	11	187	1044	5.2					
Average	900-4500	6: NE 50th Street & 5th Avenue NE - 71@	W-E	144	519	704	37.9	EB	37.1	938		
Average	900-4500	6: NE 50th Street & 5th Avenue NE - 71@	W-S	146	522	234	34.9	WB	8.2	1216	25.8	C
Average	900-4500	6: NE 50th Street & 5th Avenue NE - 72@	E-S	25	229	172	26.9	NB				
Average	900-4500	6: NE 50th Street & 5th Avenue NE - 74@	N-W	178	902	250	25.3	SB	36.1	1032		
Average	900-4500	6: NE 50th Street & 5th Avenue NE - 74@	N-E	178	900	422	39.8					
Average	900-4500	6: NE 50th Street & 5th Avenue NE - 74@	N-S	178	900	360	39.2					
Average	900-4500	7: NE 50th Street & 7th Avenue NE - 70@	E-W	72	487	632	22.8					
Average	900-4500	7: NE 50th Street & 7th Avenue NE - 71@	W-E	53	265	781	17.8	EB	23.8	1125		
Average	900-4500	7: NE 50th Street & 7th Avenue NE - 73@	W-N	82	472	344	37.5	WB	18.7	1237	26.9	C
Average	900-4500	7: NE 50th Street & 7th Avenue NE - 87@	S-W	220	603	584	33.3	NB	38.6	1171		
Average	900-4500	7: NE 50th Street & 7th Avenue NE - 87@	S-E	222	606	253	47.5	SB				
Average	900-4500	7: NE 50th Street & 7th Avenue NE - 87@	S-N	220	603	334	41.3					
Average	900-4500	7: NE 50th Street & 7th Avenue NE - 1004	E-N	29	459	605	14.5					
Average	900-4500	8: NE 50th Street & 9th Avenue NE - 70@	E-W	10	173	1181	3.2					
Average	900-4500	8: NE 50th Street & 9th Avenue NE - 70@	E-S	10	173	9	22.6					
Average	900-4500	8: NE 50th Street & 9th Avenue NE - 70@	E-N	9	175	17	4.5					
Average	900-4500	8: NE 50th Street & 9th Avenue NE - 71@	W-E	129	492	978	31.3	EB	31.0	1027		
Average	900-4500	8: NE 50th Street & 9th Avenue NE - 71@	W-S	132	498	49	25.5	WB	3.3	1207	20.6	C
Average	900-4500	8: NE 50th Street & 9th Avenue NE - 71@	W-N	129	492	0		NB	148.7	67		
Average	900-4500	8: NE 50th Street & 9th Avenue NE - 115(	S-W	72	281	27	145.6	SB	50.0	52		
Average	900-4500	8: NE 50th Street & 9th Avenue NE - 115(	S-E	72	282	29	151.8					
Average	900-4500	8: NE 50th Street & 9th Avenue NE - 115(	S-N	72	281	11	148.0					
Average	900-4500	8: NE 50th Street & 9th Avenue NE - 117(	N-W	13	114	28	35.1					
Average	900-4500	8: NE 50th Street & 9th Avenue NE - 117(	N-E	13	111	8	100.7					
Average	900-4500	8: NE 50th Street & 9th Avenue NE - 117(	N-S	13	111	16	50.7					
Average	900-4500	9: NE 50th Street & Roosevelt Way NE - 7	E-W	36	234	1090	6.9					
Average	900-4500	9: NE 50th Street & Roosevelt Way NE - 7	E-S	36	234	73	31.8	EB	25.4	1015		
Average	900-4500	9: NE 50th Street & Roosevelt Way NE - 7	W-E	106	281	800	25.0	WB	8.4	1163	21.9	C
Average	900-4500	9: NE 50th Street & Roosevelt Way NE - 7	W-S	109	286	215	26.9	NB				
Average	900-4500	9: NE 50th Street & Roosevelt Way NE - 3	N-W	124	400	117	33.5	SB	37.2	800		
Average	900-4500	9: NE 50th Street & Roosevelt Way NE - 3	N-E	125	398	67	38.5					
Average	900-4500	9: NE 50th Street & Roosevelt Way NE - 3	N-S	125	398	616	37.7					
Average	900-4500	10: NE 50th Street & 11th Avenue NE - 70	E-W	43	256	901	12.5					
Average	900-4500	10: NE 50th Street & 11th Avenue NE - 70	E-N	44	262	28	9.3					
Average	900-4500	10: NE 50th Street & 11th Avenue NE - 71	W-E	41	273	747	6.5	EB	10.6	868		
Average	900-4500	10: NE 50th Street & 11th Avenue NE - 71	W-N	41	273	121	36.3	WB	12.4	929	28.0	C
Average	900-4500	10: NE 50th Street & 11th Avenue NE - 71	W-N	41	273	0		NB	62.7	852		
Average	900-4500	10: NE 50th Street & 11th Avenue NE - 35	S-W	415	947	262	73.3	SB				
Average	900-4500	10: NE 50th Street & 11th Avenue NE - 35	S-E	419	951	41	53.2					
Average	900-4500	10: NE 50th Street & 11th Avenue NE - 35	S-N	415	947	549	58.4					
Average	900-4500	10: NE 50th Street & 11th Avenue NE - 35	S-N	415	947	7	48.8					
Average	900-4500	11: NE 50th Street & Brooklyn Avenue NE	E-W	22	173	756	6.9					
Average	900-4500	11: NE 50th Street & Brooklyn Avenue NE	E-N	22	177	41	7.4					
Average	900-4500	11: NE 50th Street & Brooklyn Avenue NE	E-S	22	173	22	21.1					
Average	900-4500	11: NE 50th Street & Brooklyn Avenue NE	W-E	35	246	584	11.5	EB	13.4	736		
Average	900-4500	11: NE 50th Street & Brooklyn Avenue NE	W-N	35	246	63	38.8	WB	7.3	819	13.6	B
Average	900-4500	11: NE 50th Street & Brooklyn Avenue NE	W-S	36	251	89	7.9	NB	32.0	176		
Average	900-4500	11: NE 50th Street & Brooklyn Avenue NE	S-W	32	219	68	36.9	SB	25.9	163		
Average	900-4500	11: NE 50th Street & Brooklyn Avenue NE	S-E	30	220	26	21.2					
Average	900-4500	11: NE 50th Street & Brooklyn Avenue NE	S-N	32	219	82	31.5					
Average	900-4500	11: NE 50th Street & Brooklyn Avenue NE	N-W	29	202	55	19.6					
Average	900-4500	11: NE 50th Street & Brooklyn Avenue NE	N-E	30	200	12	34.1					
Average	900-4500	11: NE 50th Street & Brooklyn Avenue NE	N-S	30	200	96	28.4					

run	interval	movement	Direction	Queue	max Queue	Veh	Veh delay		Approach Delay	Approach Volume	Intersection Delay	Intersection LOS
Average	900-4500	12: NE 50th Street & University Way NE -	E-W	28	193	706	10.5					
Average	900-4500	12: NE 50th Street & University Way NE -	E-N	27	196	16	7.9					
Average	900-4500	12: NE 50th Street & University Way NE -	E-S	28	193	27	25.5					
Average	900-4500	12: NE 50th Street & University Way NE -	W-E	18	183	502	7.5	EB	9.2	624		
Average	900-4500	12: NE 50th Street & University Way NE -	W-N	18	183	65	25.3	WB	10.9	749	18.8	B
Average	900-4500	12: NE 50th Street & University Way NE -	W-S	19	186	57	6.0	NB	44.7	178		
Average	900-4500	12: NE 50th Street & University Way NE -	S-W	51	313	48	53.2	SB	48.3	246		
Average	900-4500	12: NE 50th Street & University Way NE -	S-E	50	314	26	36.2					
Average	900-4500	12: NE 50th Street & University Way NE -	S-N	51	313	104	42.9					
Average	900-4500	12: NE 50th Street & University Way NE -	N-W	87	394	66	45.3					
Average	900-4500	12: NE 50th Street & University Way NE -	N-E	87	393	33	51.0					
Average	900-4500	12: NE 50th Street & University Way NE -	N-S	87	393	147	49.1					
Average	900-4500	13: NE 50th Street & 15th Avenue NE - 70	E-W	36	215	418	20.1					
Average	900-4500	13: NE 50th Street & 15th Avenue NE - 70	E-N	34	216	29	16.1					
Average	900-4500	13: NE 50th Street & 15th Avenue NE - 70	E-S	36	215	27	29.3					
Average	900-4500	13: NE 50th Street & 15th Avenue NE - 71	W-E	44	241	323	20.2	EB	20.3	563		
Average	900-4500	13: NE 50th Street & 15th Avenue NE - 71	W-N	44	241	49	34.3	WB	20.4	474	31.9	C
Average	900-4500	13: NE 50th Street & 15th Avenue NE - 71	W-S	45	243	191	16.9	NB	34.9	711		
Average	900-4500	13: NE 50th Street & 15th Avenue NE - 43	S-E	61	481	38	24.9	SB	52.2	481		
Average	900-4500	13: NE 50th Street & 15th Avenue NE - 43	S-N	60	480	368	26.3					
Average	900-4500	13: NE 50th Street & 15th Avenue NE - 44	N-W	185	513	28	48.7					
Average	900-4500	13: NE 50th Street & 15th Avenue NE - 44	N-S	183	511	440	52.7					
Average	900-4500	13: NE 50th Street & 15th Avenue NE - 44	N-E	1	33	13	43.0					
Average	900-4500	13: NE 50th Street & 15th Avenue NE - 44	S-W	119	550	305	46.4					
Average	900-4500	18: NE 45th Street & Latona Avenue NE -	W-N	0	30	16	15.8					
Average	900-4500	18: NE 45th Street & Latona Avenue NE -	S-N	35	228	77	46.8	EB	5.2	738		
Average	900-4500	18: NE 45th Street & Latona Avenue NE -	S-W	35	228	28	48.8	WB	5.4	912	8.2	A
Average	900-4500	18: NE 45th Street & Latona Avenue NE -	S-E	35	232	98	15.0	NB	31.7	203		
Average	900-4500	18: NE 45th Street & Latona Avenue NE -	W-E	22	246	722	4.9	SB				
Average	900-4500	18: NE 45th Street & Latona Avenue NE -	E-N	21	245	57	5.1					
Average	900-4500	18: NE 45th Street & Latona Avenue NE -	E-W	21	244	855	5.4					
Average	900-4500	19: NE 45th Street & 5th Avenue NE - 329	E-S	46	159	300	46.1					
Average	900-4500	19: NE 45th Street & 5th Avenue NE - 338	N-S	79	382	279	47.9					
Average	900-4500	19: NE 45th Street & 5th Avenue NE - 338	N-W	79	384	172	11.5	EB	16.1	862		
Average	900-4500	19: NE 45th Street & 5th Avenue NE - 422	E-W	28	285	738	7.6	WB	18.7	1038	21.2	C
Average	900-4500	19: NE 45th Street & 5th Avenue NE - 437	W-S	79	472	283	13.6	NB				
Average	900-4500	19: NE 45th Street & 5th Avenue NE - 437	W-E	78	468	534	17.4	SB	33.7	555		
Average	900-4500	19: NE 45th Street & 5th Avenue NE - 445	N-S	32	189	45	32.0					
Average	900-4500	19: NE 45th Street & 5th Avenue NE - 445	N-E	32	189	59	33.2					
Average	900-4500	20: NE 45th Street & 7th Avenue NE - 324	S-N	1145	1520	185	166.2					
Average	900-4500	20: NE 45th Street & 7th Avenue NE - 324	S-E	1145	1521	519	65.8					
Average	900-4500	20: NE 45th Street & 7th Avenue NE - 325	S-N	1137	1519	45	149.2					
Average	900-4500	20: NE 45th Street & 7th Avenue NE - 325	S-W	1137	1519	377	78.3					
Average	900-4500	20: NE 45th Street & 7th Avenue NE - 373	E-N	102	652	62	14.5					
Average	900-4500	20: NE 45th Street & 7th Avenue NE - 373	E-N	96	633	83	21.4	EB	36.1	593		
Average	900-4500	20: NE 45th Street & 7th Avenue NE - 373	E-W	96	633	659	15.8	WB	16.3	804	53.7	D
Average	900-4500	20: NE 45th Street & 7th Avenue NE - 436	W-N	122	456	100	37.6	NB	89.8	1126		
Average	900-4500	20: NE 45th Street & 7th Avenue NE - 436	W-N	122	456	29	40.2	SB				
Average	900-4500	20: NE 45th Street & 7th Avenue NE - 436	W-E	122	456	464	35.5					
Average	900-4500	20: NE 45th Street & 7th Avenue NE - 200	W-E	2	45	5	16.4					
Average	900-4500	21: NE 45th Street & Roosevelt Way NE -	E-S	39	262	181	41.6					
Average	900-4500	21: NE 45th Street & Roosevelt Way NE -	N-S	603	1336	723	67.5	EB	36.1	880		
Average	900-4500	21: NE 45th Street & Roosevelt Way NE -	N-E	450	1218	123	150.0	WB	13.7	865	42.7	D
Average	900-4500	21: NE 45th Street & Roosevelt Way NE -	W-S	328	815	194	18.3	NB				
Average	900-4500	21: NE 45th Street & Roosevelt Way NE -	W-E	322	809	686	41.1	SB	74.5	970		
Average	900-4500	21: NE 45th Street & Roosevelt Way NE -	E-W	20	233	684	6.4					
Average	900-4500	21: NE 45th Street & Roosevelt Way NE -	NE-W	608	1344	124	40.5					
Average	900-4500	22: NE 45th Street & 11th Avenue NE - 35	S-N	434	1046	781	58.3					
Average	900-4500	22: NE 45th Street & 11th Avenue NE - 35	S-W	434	1046	167	66.7	EB	11.6	809		
Average	900-4500	22: NE 45th Street & 11th Avenue NE - 35	S-E	436	1049	149	29.3	WB	11.6	764	29.7	C
Average	900-4500	22: NE 45th Street & 11th Avenue NE - 42	E-N	49	303	66	10.5	NB	55.7	1097		
Average	900-4500	22: NE 45th Street & 11th Avenue NE - 42	E-W	48	299	698	11.7	SB				
Average	900-4500	22: NE 45th Street & 11th Avenue NE - 43	W-E	85	304	809	11.6					

run	interval	movement	Direction	Queue	max Queue	Veh	Veh delay		Approach Delay	Approach Volume	Intersection Delay	Intersection LOS
Average	900-4500	23: NE 45th Street & 12th Avenue NE - 38	E-S	3	81	49	20.4					
Average	900-4500	23: NE 45th Street & 12th Avenue NE - 38	N-S	20	173	47	37.5					
Average	900-4500	23: NE 45th Street & 12th Avenue NE - 38	N-W	19	173	36	24.1					
Average	900-4500	23: NE 45th Street & 12th Avenue NE - 38	N-E	20	173	13	60.0	EB	11.5	957		
Average	900-4500	23: NE 45th Street & 12th Avenue NE - 38	S-N	40	245	67	47.7	WB	13.8	775	15.7	B
Average	900-4500	23: NE 45th Street & 12th Avenue NE - 38	S-W	40	245	27	57.2	NB	47.2	113		
Average	900-4500	23: NE 45th Street & 12th Avenue NE - 38	S-E	38	247	19	31.2	SB	35.5	96		
Average	900-4500	23: NE 45th Street & 12th Avenue NE - 39	W-N	10	128	78	30.5					
Average	900-4500	23: NE 45th Street & 12th Avenue NE - 42	E-N	63	314	22	22.1					
Average	900-4500	23: NE 45th Street & 12th Avenue NE - 42	E-W	63	310	704	13.0					
Average	900-4500	23: NE 45th Street & 12th Avenue NE - 43	W-S	46	308	72	5.6					
Average	900-4500	23: NE 45th Street & 12th Avenue NE - 43	W-E	45	306	807	10.2					
Average	900-4500	24: NE 45th Street & Brooklyn Avenue NE	N-W	5	98	94	9.0					
Average	900-4500	24: NE 45th Street & Brooklyn Avenue NE	W-N	3	96	72	16.2	EB	10.2	838		
Average	900-4500	24: NE 45th Street & Brooklyn Avenue NE	N-E	14	109	54	49.6	WB	15.0	730	13.4	B
Average	900-4500	24: NE 45th Street & Brooklyn Avenue NE	E-N	76	313	47	15.0	NB				
Average	900-4500	24: NE 45th Street & Brooklyn Avenue NE	E-W	74	309	683	15.0	SB	23.8	148		
Average	900-4500	24: NE 45th Street & Brooklyn Avenue NE	W-E	33	303	766	9.7					
Average	900-4500	25: NE 45th Street & University Way NE -	S-N	124	513	169	79.8					
Average	900-4500	25: NE 45th Street & University Way NE -	S-E	125	514	30	74.3	EB	10.6	824		
Average	900-4500	25: NE 45th Street & University Way NE -	N-S	69	333	146	61.9	WB	8.1	747	21.2	C
Average	900-4500	25: NE 45th Street & University Way NE -	N-W	70	334	34	52.6	NB	79.0	199		
Average	900-4500	25: NE 45th Street & University Way NE -	E-N	34	285	46	2.9	SB	60.1	180		
Average	900-4500	25: NE 45th Street & University Way NE -	E-W	34	285	701	8.5					
Average	900-4500	25: NE 45th Street & University Way NE -	W-S	41	287	142	12.2					
Average	900-4500	25: NE 45th Street & University Way NE -	W-E	41	287	682	10.2					
Average	900-4500	26: NE 45th Street & 15th Avenue NE - 31	E-N	332	1285	193	7.0					
Average	900-4500	26: NE 45th Street & 15th Avenue NE - 31	E-W	332	1283	623	23.6					
Average	900-4500	26: NE 45th Street & 15th Avenue NE - 34	S-W	51	303	89	71.0					
Average	900-4500	26: NE 45th Street & 15th Avenue NE - 37	S-N	266	930	465	61.9	EB	22.3	713		
Average	900-4500	26: NE 45th Street & 15th Avenue NE - 37	S-E	267	932	238	70.6	WB	27.5	1006	41.7	D
Average	900-4500	26: NE 45th Street & 15th Avenue NE - 37	N-E	137	451	175	93.3	NB	65.5	792		
Average	900-4500	26: NE 45th Street & 15th Avenue NE - 38	E-S	204	901	190	60.9	SB	55.6	661		
Average	900-4500	26: NE 45th Street & 15th Avenue NE - 38	W-N	17	102	50	62.2					
Average	900-4500	26: NE 45th Street & 15th Avenue NE - 43	W-S	79	296	141	6.3					
Average	900-4500	26: NE 45th Street & 15th Avenue NE - 43	W-E	79	295	522	22.8					
Average	900-4500	26: NE 45th Street & 15th Avenue NE - 44	N-S	126	443	449	41.2					
Average	900-4500	26: NE 45th Street & 15th Avenue NE - 44	N-W	125	445	37	53.0					

PM Baseline

run	measurement	veh	time (all)	buses	time (bus)
30	3: EB Route 44, Thackeray to University	192	177.4338	5	319.5607
30	4: EB Route 44, University to 43rd	145	69.64098	16	102.9164
30	5: WB Route 44, 42nd to Brooklyn	84	146.6399	24	179.6968
30	6: WB Route 44, Brooklyn to Latona	206	144.8341	6	331.1193
31	3: EB Route 44, Thackeray to University	211	187.9832	6	315.2116
31	4: EB Route 44, University to 43rd	142	76.40246	16	117.2548
31	5: WB Route 44, 42nd to Brooklyn	89	146.1496	23	175.9184
31	6: WB Route 44, Brooklyn to Latona	204	148.0411	6	326.8086
32	3: EB Route 44, Thackeray to University	173	186.4223	5	293.0837
32	4: EB Route 44, University to 43rd	146	75.44882	15	98.00077
32	5: WB Route 44, 42nd to Brooklyn	84	141.8162	24	172.4573
32	6: WB Route 44, Brooklyn to Latona	225	161.5472	6	349.6334
33	3: EB Route 44, Thackeray to University	176	185.9033	5	349.4043
33	4: EB Route 44, University to 43rd	150	77.86201	16	111.91
33	5: WB Route 44, 42nd to Brooklyn	88	147.1597	24	183.421
33	6: WB Route 44, Brooklyn to Latona	203	152.6273	6	353.8934
34	3: EB Route 44, Thackeray to University	192	193.9199	5	302.754
34	4: EB Route 44, University to 43rd	149	68.60975	16	113.9262
34	5: WB Route 44, 42nd to Brooklyn	95	137.6174	24	177.3609
34	6: WB Route 44, Brooklyn to Latona	206	158.84	6	327.6422
35	3: EB Route 44, Thackeray to University	192	193.5019	5	298.3714
35	4: EB Route 44, University to 43rd	146	70.74198	15	107.9335
35	5: WB Route 44, 42nd to Brooklyn	104	185.0855	24	220.6847
35	6: WB Route 44, Brooklyn to Latona	233	237.9462	6	445.5038
36	3: EB Route 44, Thackeray to University	217	193.7057	5	306.0151
36	4: EB Route 44, University to 43rd	173	73.7623	15	100.0758
36	5: WB Route 44, 42nd to Brooklyn	88	149.3684	24	184.1936
36	6: WB Route 44, Brooklyn to Latona	228	145.6996	6	319.8564
37	3: EB Route 44, Thackeray to University	228	208.8524	5	298.0668
37	4: EB Route 44, University to 43rd	154	70.27751	15	95.24666
37	5: WB Route 44, 42nd to Brooklyn	86	167.748	23	187.9491
37	6: WB Route 44, Brooklyn to Latona	199	216.4086	6	442.8282
38	3: EB Route 44, Thackeray to University	209	205.9713	5	333.7215
38	4: EB Route 44, University to 43rd	169	78.31536	16	119.3142
38	5: WB Route 44, 42nd to Brooklyn	85	146.4892	23	173.5355
38	6: WB Route 44, Brooklyn to Latona	209	149.2857	6	363.7795
39	3: EB Route 44, Thackeray to University	203	208.1211	5	351.0581
39	4: EB Route 44, University to 43rd	137	77.52549	16	115.8211
39	5: WB Route 44, 42nd to Brooklyn	91	139.2363	24	175.0281
39	6: WB Route 44, Brooklyn to Latona	233	151.1133	6	309.689

316.7	EB avg
357.1	WB avg
21.3	EB Stdev
48.7	WB Stdev
108.2	EB avg Univ to 43rd
8.7	EB stdev Univ to 43rd
183.0	WB avg 42nd to Brook
14.2	WB stdev 42nd to Brook

PM Scenario C

run	measureme	veh	time (all)	buses	time (bus)	
29	3: EB Route	201	201.2192	5	253.634	-65.9
29	4: EB Route	126	57.4651	15	94.69412	-8.2
29	5: WB Rout	81	146.1198	24	181.1271	1.4
29	6: WB Rout	214	125.5438	6	347.6037	16.5
30	3: EB Route	222	243.153	5	278.0807	-37.1
30	4: EB Route	146	59.49252	17	92.66981	-24.6
30	5: WB Rout	83	170.1316	24	189.9249	14.0
30	6: WB Rout	198	140.416	6	282.3265	-44.5
31	3: EB Route	190	310.4579	5	298.9644	5.9
31	4: EB Route	125	61.0534	16	98.62684	0.6
31	5: WB Rout	87	153.1615	24	170.6217	-1.8
31	6: WB Rout	220	140.1661	6	322.4989	-27.1
32	3: EB Route	179	237.7297	5	319.6004	-29.8
32	4: EB Route	133	57.85049	17	93.65771	-18.3
32	5: WB Rout	80	174.9553	25	183.9931	0.6
32	6: WB Rout	200	145.5154	6	300.1816	-53.7
33	3: EB Route	188	225.9234	5	267.4805	-35.3
33	4: EB Route	125	63.93935	16	109.6013	-4.3
33	5: WB Rout	78	174.0969	21	201.9884	24.6
33	6: WB Rout	195	117.9901	5	367.6348	40.0
34	3: EB Route	192	236.5958	5	253.1378	-45.2
34	4: EB Route	147	64.29674	17	91.43182	-16.5
34	5: WB Rout	98	211.6121	24	249.2943	28.6
34	6: WB Rout	249	141.7068	6	303.2628	-142.2
35	3: EB Route	214	281.513	5	246.4675	-59.5
35	4: EB Route	147	58.86388	16	90.73374	-9.3
35	5: WB Rout	70	160.4663	24	185.4604	1.3
35	6: WB Rout	223	135.8636	6	281.1585	-38.7
36	3: EB Route	225	281.3807	5	300.5957	2.5
36	4: EB Route	143	59.08406	16	90.42106	-4.8
36	5: WB Rout	79	201.6057	24	219.4781	31.5
36	6: WB Rout	218	134.4127	6	293.7224	-149.1
37	3: EB Route	147	226.7286	4	298.7648	-35.0
37	4: EB Route	108	62.08347	14	104.0007	-15.3
37	5: WB Rout	61	148.6707	20	174.4487	0.9
37	6: WB Rout	160	127.4141	4	298.2018	-65.6
38	3: EB Route	194	211.3059	5	287.0747	-64.0
38	4: EB Route	126	74.79703	16	106.2073	-9.6
38	5: WB Rout	80	160.163	24	192.2981	17.3
38	6: WB Rout	235	123.3827	6	255.3557	-54.3

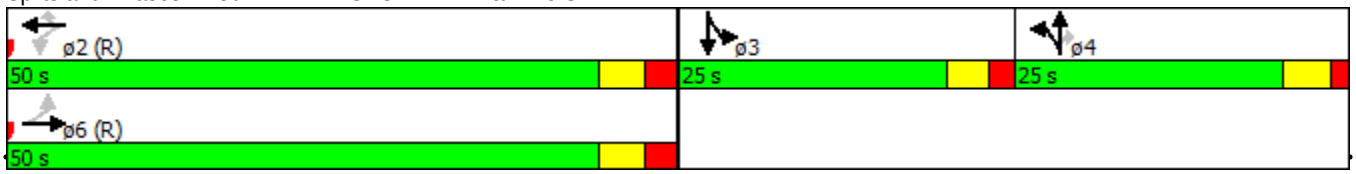
280.4	EB avg	-36.3
305.2	WB avg	-51.9
24.6	EB Stdev	3.3
33.0	WB Stdev	-15.7
97.2	EB avg Univ to 43rd	-11.0
7.0	EB stdev Univ to 43rd	-1.6
194.9	WB avg 42nd to Brook	11.8
23.7	WB stdev 42nd to Brook	9.5

APPENDIX I – WALLINGFORD AREA SYNCHRO ANALYSIS

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	23	450	61	98	389	13	34	44	78	36	103	26
Satd. Flow (prot)	1530	1218	0	1539	1535	1328	0	1232	1426	0	1676	0
Flt Permitted	0.374			0.302				0.979			0.989	
Satd. Flow (perm)	589	1218	0	489	1535	1210	0	1232	1262	0	1676	0
Satd. Flow (RTOR)									99		9	
Lane Group Flow (vph)	25	562	0	118	469	16	0	99	99	0	202	0
Turn Type	Perm	NA		Perm	NA	Perm	Split	NA	Perm	Split	NA	
Protected Phases		6			2		4	4		3	3	
Permitted Phases	6			2		2			4			
Detector Phase	6	6		2	2	2	4	4	4	3	3	
Switch Phase												
Minimum Initial (s)	7.0	7.0		7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	
Minimum Split (s)	26.0	26.0		26.0	26.0	26.0	25.0	25.0	25.0	25.0	25.0	
Total Split (s)	50.0	50.0		50.0	50.0	50.0	25.0	25.0	25.0	25.0	25.0	
Total Split (%)	50.0%	50.0%		50.0%	50.0%	50.0%	25.0%	25.0%	25.0%	25.0%	25.0%	
Yellow Time (s)	3.5	3.5		3.5	3.5	3.5	3.5	3.5	3.5	3.0	3.0	
All-Red Time (s)	2.5	2.5		2.5	2.5	2.5	1.5	1.5	1.5	2.0	2.0	
Lost Time Adjust (s)	-2.0	-2.0		-2.0	-2.0	-2.0		-1.0	-1.0		-1.0	
Total Lost Time (s)	4.0	4.0		4.0	4.0	4.0		4.0	4.0		4.0	
Lead/Lag							Lag	Lag	Lag	Lead	Lead	
Lead-Lag Optimize?												
Recall Mode	C-Max	C-Max		C-Max	C-Max	C-Max	None	None	None	None	None	
Act Effct Green (s)	52.5	52.5		52.5	52.5	52.5		18.4	18.4		17.1	
Actuated g/C Ratio	0.52	0.52		0.52	0.52	0.52		0.18	0.18		0.17	
v/c Ratio	0.08	0.88		0.46	0.58	0.03		0.44	0.32		0.69	
Control Delay	11.0	34.0		22.0	18.8	13.7		41.4	9.8		48.9	
Queue Delay	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0	
Total Delay	11.0	34.0		22.0	18.8	13.7		41.4	9.8		48.9	
LOS	B	C		C	B	B		D	A		D	
Approach Delay		33.0			19.3			25.6			48.9	
Approach LOS		C			B			C			D	

Intersection Summary	
Cycle Length: 100	
Actuated Cycle Length: 100	
Offset: 4 (4%), Referenced to phase 2:WBTL and 6:EBTL, Start of Green	
Natural Cycle: 90	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.88	
Intersection Signal Delay: 28.9	Intersection LOS: C
Intersection Capacity Utilization 67.1%	ICU Level of Service C
Analysis Period (min) 15	

Splits and Phases: 301: WALLINGFORD AV N & N 45 ST



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	18	535	7	17	427	21	20	23	18	36	34	57
Satd. Flow (prot)	1544	1259	0	1621	1326	1399	0	1700	0	0	1483	1386
Flt Permitted	0.463			0.411				0.886			0.833	
Satd. Flow (perm)	709	1259	0	701	1326	1128	0	1499	0	0	1213	1260
Satd. Flow (RTOR)		1				16		20				64
Lane Group Flow (vph)	20	590	0	20	491	24	0	68	0	0	78	64
Turn Type	Perm	NA		Perm	NA	Perm	Perm	NA		Perm	NA	Perm
Protected Phases		2			2			4			4	
Permitted Phases	2			2		2	4			4		4
Detector Phase	2	2		2	2	2	4	4		4	4	4
Switch Phase												
Minimum Initial (s)	7.0	7.0		7.0	7.0	7.0	7.0	7.0		7.0	7.0	7.0
Minimum Split (s)	17.5	17.5		17.5	17.5	17.5	20.5	20.5		20.5	20.5	20.5
Total Split (s)	69.0	69.0		69.0	69.0	69.0	31.0	31.0		31.0	31.0	31.0
Total Split (%)	69.0%	69.0%		69.0%	69.0%	69.0%	31.0%	31.0%		31.0%	31.0%	31.0%
Yellow Time (s)	3.5	3.5		3.5	3.5	3.5	3.5	3.5		3.5	3.5	3.5
All-Red Time (s)	1.0	1.0		1.0	1.0	1.0	1.0	1.0		1.0	1.0	1.0
Lost Time Adjust (s)	-0.5	-0.5		-0.5	-0.5	-0.5		-0.5			-0.5	-0.5
Total Lost Time (s)	4.0	4.0		4.0	4.0	4.0		4.0			4.0	4.0
Lead/Lag												
Lead-Lag Optimize?												
Recall Mode	C-Max	C-Max		C-Max	C-Max	C-Max	None	None		None	None	None
Act Effct Green (s)	81.9	81.9		81.9	81.9	81.9		13.2			13.2	13.2
Actuated g/C Ratio	0.82	0.82		0.82	0.82	0.82		0.13			0.13	0.13
v/c Ratio	0.03	0.57		0.03	0.45	0.03		0.32			0.49	0.29
Control Delay	1.1	2.8		3.2	5.5	1.8		31.9			49.7	13.2
Queue Delay	0.0	0.0		0.0	0.0	0.0		0.0			0.0	0.0
Total Delay	1.1	2.8		3.2	5.5	1.8		31.9			49.7	13.2
LOS	A	A		A	A	A		C			D	B
Approach Delay		2.8			5.2			31.9			33.2	
Approach LOS		A			A			C			C	

Intersection Summary	
Cycle Length: 100	
Actuated Cycle Length: 100	
Offset: 14 (14%), Referenced to phase 2:EBWB, Start of Green	
Natural Cycle: 60	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.57	
Intersection Signal Delay: 8.4	Intersection LOS: A
Intersection Capacity Utilization 54.2%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 302: MERIDIAN AV N & N 45 ST

Lanes, Volumes, Timings
301: WALLINGFORD AV N & N 45 ST

3/26/2015

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	23	450	61	201	389	13	34	44	78	0	0	26
Satd. Flow (prot)	1530	1218	0	1539	1535	1328	0	1232	1426	0	0	1337
Flt Permitted	0.494			0.357				0.979				
Satd. Flow (perm)	767	1218	0	569	1535	1210	0	1232	1262	0	0	1225
Satd. Flow (RTOR)									99			418
Lane Group Flow (vph)	25	562	0	242	469	16	0	99	99	0	0	32
Turn Type	Perm	NA		pm+pt	NA	Perm	Perm	NA	Perm			Perm
Protected Phases		6		5	2			8				
Permitted Phases	6			2		2	8		8			8
Detector Phase	6	6		5	2	2	8	8	8			8
Switch Phase												
Minimum Initial (s)	7.0	7.0		5.0	7.0	7.0	7.0	7.0	7.0			7.0
Minimum Split (s)	26.0	26.0		8.5	26.0	26.0	25.0	25.0	25.0			25.0
Total Split (s)	65.0	65.0		10.0	75.0	75.0	25.0	25.0	25.0			25.0
Total Split (%)	65.0%	65.0%		10.0%	75.0%	75.0%	25.0%	25.0%	25.0%			25.0%
Yellow Time (s)	3.5	3.5		3.5	3.5	3.5	3.5	3.5	3.5			3.5
All-Red Time (s)	2.5	2.5		0.0	2.5	2.5	1.5	1.5	1.5			1.5
Lost Time Adjust (s)	-2.0	-2.0		-2.0	-2.0	-2.0		-1.0	-1.0			0.0
Total Lost Time (s)	4.0	4.0		1.5	4.0	4.0		4.0	4.0			5.0
Lead/Lag	Lag	Lag		Lead								
Lead-Lag Optimize?				Yes								
Recall Mode	C-Max	C-Max		None	C-Max	C-Max	None	None	None			None
Act Effct Green (s)	63.8	63.8		76.1	73.6	73.6		18.4	18.4			17.4
Actuated g/C Ratio	0.64	0.64		0.76	0.74	0.74		0.18	0.18			0.17
v/c Ratio	0.05	0.72		0.47	0.42	0.02		0.44	0.32			0.06
Control Delay	4.5	13.2		6.4	6.1	4.0		41.4	9.8			0.2
Queue Delay	0.0	0.0		0.0	0.0	0.0		0.0	0.0			0.0
Total Delay	4.5	13.2		6.4	6.1	4.0		41.4	9.8			0.2
LOS	A	B		A	A	A		D	A			A
Approach Delay		12.8			6.2			25.6				
Approach LOS		B			A			C				

Intersection Summary	
Cycle Length: 100	
Actuated Cycle Length: 100	
Offset: 1 (1%), Referenced to phase 2:WBTL and 6:EBTL, Start of Green	
Natural Cycle: 80	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.72	
Intersection Signal Delay: 11.1	Intersection LOS: B
Intersection Capacity Utilization 65.5%	ICU Level of Service C
Analysis Period (min) 15	

Splits and Phases: 301: WALLINGFORD AV N & N 45 ST

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	18	535	7	17	427	21	20	23	18	72	34	160
Satd. Flow (prot)	1544	1259	0	1621	1326	1399	0	1700	0	0	1471	1386
Flt Permitted	0.453			0.398				0.887			0.770	
Satd. Flow (perm)	694	1259	0	679	1326	1128	0	1503	0	0	1105	1260
Satd. Flow (RTOR)		1				16		20				168
Lane Group Flow (vph)	20	590	0	20	491	24	0	68	0	0	119	180
Turn Type	Perm	NA		Perm	NA	Perm	Perm	NA		Perm	NA	Perm
Protected Phases		2			2			4			4	
Permitted Phases	2			2		2	4			4		4
Detector Phase	2	2		2	2	2	4	4		4	4	4
Switch Phase												
Minimum Initial (s)	7.0	7.0		7.0	7.0	7.0	7.0	7.0		7.0	7.0	7.0
Minimum Split (s)	17.5	17.5		17.5	17.5	17.5	20.5	20.5		20.5	20.5	20.5
Total Split (s)	69.0	69.0		69.0	69.0	69.0	31.0	31.0		31.0	31.0	31.0
Total Split (%)	69.0%	69.0%		69.0%	69.0%	69.0%	31.0%	31.0%		31.0%	31.0%	31.0%
Yellow Time (s)	3.5	3.5		3.5	3.5	3.5	3.5	3.5		3.5	3.5	3.5
All-Red Time (s)	1.0	1.0		1.0	1.0	1.0	1.0	1.0		1.0	1.0	1.0
Lost Time Adjust (s)	-0.5	-0.5		-0.5	-0.5	-0.5		-0.5			-0.5	-0.5
Total Lost Time (s)	4.0	4.0		4.0	4.0	4.0		4.0			4.0	4.0
Lead/Lag												
Lead-Lag Optimize?												
Recall Mode	C-Max	C-Max		C-Max	C-Max	C-Max	None	None		None	None	None
Act Effct Green (s)	76.2	76.2		76.2	76.2	76.2		15.8			15.8	15.8
Actuated g/C Ratio	0.76	0.76		0.76	0.76	0.76		0.16			0.16	0.16
v/c Ratio	0.04	0.62		0.04	0.49	0.03		0.27			0.68	0.53
Control Delay	1.7	3.5		4.4	7.4	2.6		28.2			58.2	12.6
Queue Delay	0.0	0.0		0.0	0.0	0.0		0.0			0.0	0.0
Total Delay	1.7	3.5		4.4	7.4	2.6		28.2			58.2	12.6
LOS	A	A		A	A	A		C			E	B
Approach Delay		3.5			7.1			28.2			30.7	
Approach LOS		A			A			C			C	

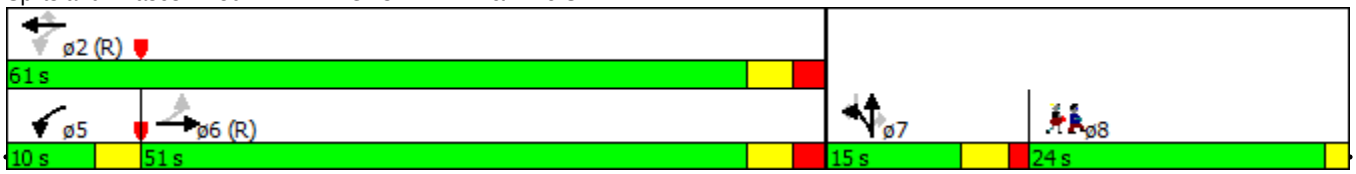
Intersection Summary	
Cycle Length: 100	
Actuated Cycle Length: 100	
Offset: 12 (12%), Referenced to phase 2:EBWB, Start of Green	
Natural Cycle: 60	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.68	
Intersection Signal Delay: 11.2	Intersection LOS: B
Intersection Capacity Utilization 57.1%	ICU Level of Service B
Analysis Period (min) 15	

Splits and Phases: 302: MERIDIAN AV N & N 45 ST

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	23	450	61	201	389	13	34	44	78	0	0	26
Satd. Flow (prot)	1530	1218	0	1539	1535	1328	0	1232	1426	0	0	1337
Flt Permitted	0.494			0.291				0.979				
Satd. Flow (perm)	767	1218	0	471	1535	1210	0	1232	1150	0	0	1140
Satd. Flow (RTOR)									99			557
Lane Group Flow (vph)	25	562	0	242	469	16	0	99	99	0	0	32
Turn Type	Perm	NA		pm+pt	NA	Perm	Split	NA	Perm			Perm
Protected Phases		6		5	2		7	7				
Permitted Phases	6			2		2			7			7
Detector Phase	6	6		5	2	2	7	7	7			7
Switch Phase												
Minimum Initial (s)	7.0	7.0		5.0	7.0	7.0	7.0	7.0	7.0			7.0
Minimum Split (s)	26.0	26.0		8.5	26.0	26.0	12.0	12.0	12.0			12.0
Total Split (s)	51.0	51.0		10.0	61.0	61.0	15.0	15.0	15.0			15.0
Total Split (%)	51.0%	51.0%		10.0%	61.0%	61.0%	15.0%	15.0%	15.0%			15.0%
Yellow Time (s)	3.5	3.5		3.5	3.5	3.5	3.5	3.5	3.5			3.5
All-Red Time (s)	2.5	2.5		0.0	2.5	2.5	1.5	1.5	1.5			1.5
Lost Time Adjust (s)	-2.0	-2.0		-2.0	-2.0	-2.0		-1.0	-1.0			0.0
Total Lost Time (s)	4.0	4.0		1.5	4.0	4.0		4.0	4.0			5.0
Lead/Lag	Lag	Lag		Lead			Lead	Lead	Lead			Lead
Lead-Lag Optimize?				Yes								
Recall Mode	C-Max	C-Max		None	C-Max	C-Max	None	None	None			None
Act Effct Green (s)	52.4	52.4		64.9	62.4	62.4		10.4	10.4			9.4
Actuated g/C Ratio	0.52	0.52		0.65	0.62	0.62		0.10	0.10			0.09
v/c Ratio	0.06	0.88		0.61	0.49	0.02		0.77	0.48			0.05
Control Delay	10.7	34.4		16.9	12.8	9.3		80.4	16.8			0.2
Queue Delay	0.0	0.0		0.0	0.0	0.0		0.0	0.0			0.0
Total Delay	10.7	34.4		16.9	12.8	9.3		80.4	16.8			0.2
LOS	B	C		B	B	A		F	B			A
Approach Delay		33.3			14.1			48.6				
Approach LOS		C			B			D				

Intersection Summary	
Cycle Length: 100	
Actuated Cycle Length: 100	
Offset: 3 (3%), Referenced to phase 2:WBTL and 6:EBTL, Start of Green	
Natural Cycle: 90	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.88	
Intersection Signal Delay: 25.6	Intersection LOS: C
Intersection Capacity Utilization 61.6%	ICU Level of Service B
Analysis Period (min) 15	

Splits and Phases: 301: WALLINGFORD AV N & N 45 ST



Lane Group	ø8
Lane Configurations	
Volume (vph)	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Satd. Flow (RTOR)	
Lane Group Flow (vph)	
Turn Type	
Protected Phases	8
Permitted Phases	
Detector Phase	
Switch Phase	
Minimum Initial (s)	10.0
Minimum Split (s)	24.0
Total Split (s)	24.0
Total Split (%)	24%
Yellow Time (s)	2.0
All-Red Time (s)	0.0
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	Lag
Lead-Lag Optimize?	Yes
Recall Mode	None
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay	
Queue Delay	
Total Delay	
LOS	
Approach Delay	
Approach LOS	

Intersection Summary

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	18	535	7	17	427	21	20	23	18	72	34	160
Satd. Flow (prot)	1544	1259	0	1621	1326	1399	0	1700	0	0	1471	1386
Flt Permitted	0.453			0.398				0.887			0.770	
Satd. Flow (perm)	694	1259	0	679	1326	1128	0	1503	0	0	1105	1260
Satd. Flow (RTOR)		1				16		20				168
Lane Group Flow (vph)	20	590	0	20	491	24	0	68	0	0	119	180
Turn Type	Perm	NA		Perm	NA	Perm	Perm	NA		Perm	NA	Perm
Protected Phases		2			2			4			4	
Permitted Phases	2			2		2	4			4		4
Detector Phase	2	2		2	2	2	4	4		4	4	4
Switch Phase												
Minimum Initial (s)	7.0	7.0		7.0	7.0	7.0	7.0	7.0		7.0	7.0	7.0
Minimum Split (s)	17.5	17.5		17.5	17.5	17.5	20.5	20.5		20.5	20.5	20.5
Total Split (s)	69.0	69.0		69.0	69.0	69.0	31.0	31.0		31.0	31.0	31.0
Total Split (%)	69.0%	69.0%		69.0%	69.0%	69.0%	31.0%	31.0%		31.0%	31.0%	31.0%
Yellow Time (s)	3.5	3.5		3.5	3.5	3.5	3.5	3.5		3.5	3.5	3.5
All-Red Time (s)	1.0	1.0		1.0	1.0	1.0	1.0	1.0		1.0	1.0	1.0
Lost Time Adjust (s)	-0.5	-0.5		-0.5	-0.5	-0.5		-0.5			-0.5	-0.5
Total Lost Time (s)	4.0	4.0		4.0	4.0	4.0		4.0			4.0	4.0
Lead/Lag												
Lead-Lag Optimize?												
Recall Mode	C-Max	C-Max		C-Max	C-Max	C-Max	None	None		None	None	None
Act Effct Green (s)	76.2	76.2		76.2	76.2	76.2		15.8			15.8	15.8
Actuated g/C Ratio	0.76	0.76		0.76	0.76	0.76		0.16			0.16	0.16
v/c Ratio	0.04	0.62		0.04	0.49	0.03		0.27			0.68	0.53
Control Delay	0.7	3.2		4.4	7.4	2.6		28.2			58.2	12.6
Queue Delay	0.0	0.0		0.0	0.0	0.0		0.0			0.0	0.0
Total Delay	0.7	3.2		4.4	7.4	2.6		28.2			58.2	12.6
LOS	A	A		A	A	A		C			E	B
Approach Delay		3.1			7.1			28.2			30.7	
Approach LOS		A			A			C			C	

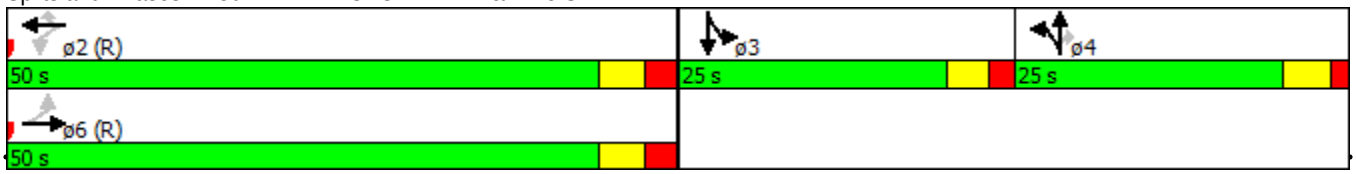
Intersection Summary	
Cycle Length: 100	
Actuated Cycle Length: 100	
Offset: 12 (12%), Referenced to phase 2:EBWB, Start of Green	
Natural Cycle: 60	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.68	
Intersection Signal Delay: 11.1	Intersection LOS: B
Intersection Capacity Utilization 57.1%	ICU Level of Service B
Analysis Period (min) 15	

Splits and Phases: 302: MERIDIAN AV N & N 45 ST

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	30	521	45	51	510	23	95	110	143	44	103	23
Satd. Flow (prot)	1635	1304	0	1660	1655	1432	0	1339	1553	0	1756	0
Flt Permitted	0.308			0.231				0.977			0.987	
Satd. Flow (perm)	505	1304	0	404	1655	1137	0	1339	1260	0	1756	0
Satd. Flow (RTOR)									87		7	
Lane Group Flow (vph)	34	636	0	54	537	24	0	225	157	0	209	0
Turn Type	Perm	NA		Perm	NA	Perm	Split	NA	Perm	Split	NA	
Protected Phases		6			2		4	4		3	3	
Permitted Phases	6			2		2			4			
Detector Phase	6	6		2	2	2	4	4	4	3	3	
Switch Phase												
Minimum Initial (s)	7.0	7.0		7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	
Minimum Split (s)	26.0	26.0		26.0	26.0	26.0	25.0	25.0	25.0	25.0	25.0	
Total Split (s)	50.0	50.0		50.0	50.0	50.0	25.0	25.0	25.0	25.0	25.0	
Total Split (%)	50.0%	50.0%		50.0%	50.0%	50.0%	25.0%	25.0%	25.0%	25.0%	25.0%	
Yellow Time (s)	3.5	3.5		3.5	3.5	3.5	3.5	3.5	3.5	3.0	3.0	
All-Red Time (s)	2.5	2.5		2.5	2.5	2.5	1.5	1.5	1.5	2.0	2.0	
Lost Time Adjust (s)	-2.0	-2.0		-2.0	-2.0	-2.0		-1.0	-1.0		-1.0	
Total Lost Time (s)	4.0	4.0		4.0	4.0	4.0		4.0	4.0		4.0	
Lead/Lag							Lag	Lag	Lag	Lead	Lead	
Lead-Lag Optimize?												
Recall Mode	C-Max	C-Max		C-Max	C-Max	C-Max	None	None	None	None	None	
Act Effct Green (s)	50.7	50.7		50.7	50.7	50.7		20.2	20.2		17.2	
Actuated g/C Ratio	0.51	0.51		0.51	0.51	0.51		0.20	0.20		0.17	
v/c Ratio	0.13	0.96		0.26	0.64	0.04		0.83	0.49		0.68	
Control Delay	12.3	48.1		17.5	19.5	13.7		64.3	21.6		48.5	
Queue Delay	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0	
Total Delay	12.3	48.1		17.5	19.5	13.7		64.3	21.6		48.5	
LOS	B	D		B	B	B		E	C		D	
Approach Delay		46.3			19.1			46.7			48.5	
Approach LOS		D			B			D			D	

Intersection Summary	
Cycle Length: 100	
Actuated Cycle Length: 100	
Offset: 3 (3%), Referenced to phase 2:WBTL and 6:EBTL, Start of Green	
Natural Cycle: 100	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.96	
Intersection Signal Delay: 37.7	Intersection LOS: D
Intersection Capacity Utilization 73.0%	ICU Level of Service D
Analysis Period (min) 15	

Splits and Phases: 301: WALLINGFORD AV N & N 45 ST



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	30	620	17	25	623	24	34	65	26	47	54	62
Satd. Flow (prot)	1635	1327	0	1701	1391	1468	0	1773	0	0	1544	1439
Flt Permitted	0.360			0.308				0.866			0.660	
Satd. Flow (perm)	620	1327	0	552	1391	968	0	1513	0	0	1011	1239
Satd. Flow (RTOR)		3				16		13				68
Lane Group Flow (vph)	36	767	0	27	663	26	0	177	0	0	114	70
Turn Type	Perm	NA		Perm	NA	Perm	Perm	NA		Perm	NA	Perm
Protected Phases		2			2			4			4	
Permitted Phases	2			2		2	4			4		4
Detector Phase	2	2		2	2	2	4	4		4	4	4
Switch Phase												
Minimum Initial (s)	7.0	7.0		7.0	7.0	7.0	7.0	7.0		7.0	7.0	7.0
Minimum Split (s)	17.5	17.5		17.5	17.5	17.5	20.5	20.5		20.5	20.5	20.5
Total Split (s)	69.0	69.0		69.0	69.0	69.0	31.0	31.0		31.0	31.0	31.0
Total Split (%)	69.0%	69.0%		69.0%	69.0%	69.0%	31.0%	31.0%		31.0%	31.0%	31.0%
Yellow Time (s)	3.5	3.5		3.5	3.5	3.5	3.5	3.5		3.5	3.5	3.5
All-Red Time (s)	1.0	1.0		1.0	1.0	1.0	1.0	1.0		1.0	1.0	1.0
Lost Time Adjust (s)	-0.5	-0.5		-0.5	-0.5	-0.5		-0.5			-0.5	-0.5
Total Lost Time (s)	4.0	4.0		4.0	4.0	4.0		4.0			4.0	4.0
Lead/Lag												
Lead-Lag Optimize?												
Recall Mode	C-Max	C-Max		C-Max	C-Max	C-Max	None	None		None	None	None
Act Effct Green (s)	76.3	76.3		76.3	76.3	76.3		15.7			15.7	15.7
Actuated g/C Ratio	0.76	0.76		0.76	0.76	0.76		0.16			0.16	0.16
v/c Ratio	0.08	0.76		0.06	0.62	0.04		0.71			0.72	0.28
Control Delay	1.7	8.0		4.4	9.6	2.6		52.2			63.9	11.8
Queue Delay	0.0	0.0		0.0	0.0	0.0		0.0			0.0	0.0
Total Delay	1.7	8.0		4.4	9.6	2.6		52.2			63.9	11.8
LOS	A	A		A	A	A		D			E	B
Approach Delay		7.7			9.2			52.2			44.0	
Approach LOS		A			A			D			D	

Intersection Summary	
Cycle Length: 100	
Actuated Cycle Length: 100	
Offset: 0 (0%), Referenced to phase 2:EBWB, Start of Green	
Natural Cycle: 75	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.76	
Intersection Signal Delay: 16.0	Intersection LOS: B
Intersection Capacity Utilization 67.8%	ICU Level of Service C
Analysis Period (min) 15	

Splits and Phases: 302: MERIDIAN AV N & N 45 ST

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	30	521	45	154	510	23	95	110	143	0	0	23
Satd. Flow (prot)	1635	1304	0	1660	1655	1432	0	1339	1553	0	0	1403
Flt Permitted	0.464			0.301				0.977				
Satd. Flow (perm)	727	1304	0	510	1655	1137	0	1339	1260	0	0	1238
Satd. Flow (RTOR)									81			301
Lane Group Flow (vph)	34	636	0	162	537	24	0	225	157	0	0	28
Turn Type	Perm	NA		pm+pt	NA	Perm	Split	NA	Perm			Perm
Protected Phases		6		5	2		4	4				
Permitted Phases	6			2		2			4			4
Detector Phase	6	6		5	2	2	4	4	4			4
Switch Phase												
Minimum Initial (s)	7.0	7.0		5.0	7.0	7.0	7.0	7.0	7.0			7.0
Minimum Split (s)	26.0	26.0		8.5	26.0	26.0	25.0	25.0	25.0			25.0
Total Split (s)	64.0	64.0		10.0	74.0	74.0	26.0	26.0	26.0			26.0
Total Split (%)	64.0%	64.0%		10.0%	74.0%	74.0%	26.0%	26.0%	26.0%			26.0%
Yellow Time (s)	3.5	3.5		3.5	3.5	3.5	3.5	3.5	3.5			3.5
All-Red Time (s)	2.5	2.5		0.0	2.5	2.5	1.5	1.5	1.5			1.5
Lost Time Adjust (s)	-2.0	-2.0		-2.0	-2.0	-2.0		-1.0	-1.0			0.0
Total Lost Time (s)	4.0	4.0		1.5	4.0	4.0		4.0	4.0			5.0
Lead/Lag	Lag	Lag		Lead								
Lead-Lag Optimize?				Yes								
Recall Mode	C-Max	C-Max		None	C-Max	C-Max	None	None	None			None
Act Effct Green (s)	62.0	62.0		74.2	71.7	71.7		20.3	20.3			19.3
Actuated g/C Ratio	0.62	0.62		0.74	0.72	0.72		0.20	0.20			0.19
v/c Ratio	0.08	0.79		0.34	0.45	0.03		0.83	0.49			0.06
Control Delay	5.3	18.0		5.6	7.2	5.0		63.3	22.7			0.2
Queue Delay	0.0	0.0		0.0	0.1	0.0		0.0	0.0			0.0
Total Delay	5.3	18.0		5.6	7.2	5.0		63.3	22.7			0.2
LOS	A	B		A	A	A		E	C			A
Approach Delay		17.4			6.8			46.6				
Approach LOS		B			A			D				

Intersection Summary	
Cycle Length: 100	
Actuated Cycle Length: 100	
Offset: 0 (0%), Referenced to phase 2:WBTL and 6:EBTL, Start of Green	
Natural Cycle: 80	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.83	
Intersection Signal Delay: 19.1	Intersection LOS: B
Intersection Capacity Utilization 69.7%	ICU Level of Service C
Analysis Period (min) 15	

Splits and Phases: 301: WALLINGFORD AV N & N 45 ST

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	30	620	17	25	623	24	34	65	26	91	54	165
Satd. Flow (prot)	1635	1327	0	1701	1391	1468	0	1773	0	0	1533	1439
Flt Permitted	0.341			0.286				0.837			0.600	
Satd. Flow (perm)	587	1327	0	512	1391	968	0	1468	0	0	909	1239
Satd. Flow (RTOR)		3				16		13				126
Lane Group Flow (vph)	36	767	0	27	663	26	0	177	0	0	163	185
Turn Type	Perm	NA		Perm	NA	Perm	Perm	NA		Perm	NA	Perm
Protected Phases		2			2			4			4	
Permitted Phases	2			2		2	4			4		4
Detector Phase	2	2		2	2	2	4	4		4	4	4
Switch Phase												
Minimum Initial (s)	7.0	7.0		7.0	7.0	7.0	7.0	7.0		7.0	7.0	7.0
Minimum Split (s)	17.5	17.5		17.5	17.5	17.5	20.5	20.5		20.5	20.5	20.5
Total Split (s)	69.0	69.0		69.0	69.0	69.0	31.0	31.0		31.0	31.0	31.0
Total Split (%)	69.0%	69.0%		69.0%	69.0%	69.0%	31.0%	31.0%		31.0%	31.0%	31.0%
Yellow Time (s)	3.5	3.5		3.5	3.5	3.5	3.5	3.5		3.5	3.5	3.5
All-Red Time (s)	1.0	1.0		1.0	1.0	1.0	1.0	1.0		1.0	1.0	1.0
Lost Time Adjust (s)	-0.5	-0.5		-0.5	-0.5	-0.5		-0.5			-0.5	-0.5
Total Lost Time (s)	4.0	4.0		4.0	4.0	4.0		4.0			4.0	4.0
Lead/Lag												
Lead-Lag Optimize?												
Recall Mode	C-Max	C-Max		C-Max	C-Max	C-Max	None	None		None	None	None
Act Effct Green (s)	71.8	71.8		71.8	71.8	71.8		20.2			20.2	20.2
Actuated g/C Ratio	0.72	0.72		0.72	0.72	0.72		0.20			0.20	0.20
v/c Ratio	0.09	0.80		0.07	0.66	0.04		0.58			0.89	0.53
Control Delay	4.0	11.7		6.3	13.1	3.6		39.9			81.5	17.3
Queue Delay	0.0	0.0		0.0	0.0	0.0		0.0			0.0	0.0
Total Delay	4.0	11.7		6.3	13.1	3.6		39.9			81.5	17.3
LOS	A	B		A	B	A		D			F	B
Approach Delay		11.3			12.5			39.9			47.4	
Approach LOS		B			B			D			D	

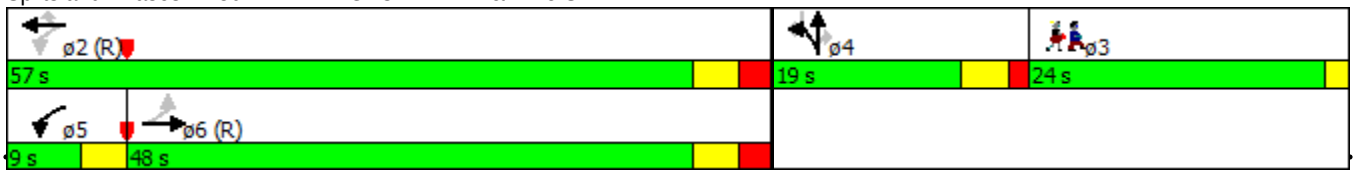
Intersection Summary	
Cycle Length: 100	
Actuated Cycle Length: 100	
Offset: 9 (9%), Referenced to phase 2:EBWB, Start of Green	
Natural Cycle: 75	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.89	
Intersection Signal Delay: 20.4	Intersection LOS: C
Intersection Capacity Utilization 69.7%	ICU Level of Service C
Analysis Period (min) 15	

Splits and Phases: 302: MERIDIAN AV N & N 45 ST

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	30	521	45	154	510	23	95	110	143	0	0	23
Satd. Flow (prot)	1635	1304	0	1660	1655	1432	0	1339	1553	0	0	1403
Flt Permitted	0.415			0.205				0.977				
Satd. Flow (perm)	661	1304	0	358	1655	1137	0	1339	1172	0	0	1179
Satd. Flow (RTOR)									93			479
Lane Group Flow (vph)	34	636	0	162	537	24	0	225	157	0	0	28
Turn Type	Perm	NA		pm+pt	NA	Perm	Split	NA	Perm			Perm
Protected Phases		6		5	2		4	4				
Permitted Phases	6			2		2			4			4
Detector Phase	6	6		5	2	2	4	4	4			4
Switch Phase												
Minimum Initial (s)	7.0	7.0		5.0	7.0	7.0	7.0	7.0	7.0			7.0
Minimum Split (s)	26.0	26.0		8.5	26.0	26.0	12.0	12.0	12.0			12.0
Total Split (s)	48.0	48.0		9.0	57.0	57.0	19.0	19.0	19.0			19.0
Total Split (%)	48.0%	48.0%		9.0%	57.0%	57.0%	19.0%	19.0%	19.0%			19.0%
Yellow Time (s)	3.5	3.5		3.5	3.5	3.5	3.5	3.5	3.5			3.5
All-Red Time (s)	2.5	2.5		0.0	2.5	2.5	1.5	1.5	1.5			1.5
Lost Time Adjust (s)	-2.0	-2.0		-2.0	-2.0	-2.0		-1.0	-1.0			0.0
Total Lost Time (s)	4.0	4.0		1.5	4.0	4.0		4.0	4.0			5.0
Lead/Lag	Lag	Lag		Lead			Lead	Lead	Lead			Lead
Lead-Lag Optimize?				Yes								
Recall Mode	C-Max	C-Max		None	C-Max	C-Max	None	None	None			None
Act Effct Green (s)	48.8	48.8		60.3	57.8	57.8		15.0	15.0			14.0
Actuated g/C Ratio	0.49	0.49		0.60	0.58	0.58		0.15	0.15			0.14
v/c Ratio	0.11	1.00		0.52	0.56	0.04		1.12	0.62			0.05
Control Delay	14.2	58.7		16.6	18.0	13.5		141.9	29.0			0.2
Queue Delay	0.0	0.0		0.0	0.0	0.0		0.0	0.0			0.0
Total Delay	14.2	58.7		16.6	18.1	13.5		141.9	29.0			0.2
LOS	B	E		B	B	B		F	C			A
Approach Delay		56.5			17.6			95.5				
Approach LOS		E			B			F				

Intersection Summary	
Cycle Length: 100	
Actuated Cycle Length: 100	
Offset: 97 (97%), Referenced to phase 2:WBTL and 6:EBTL, Start of Green	
Natural Cycle: 110	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.13	
Intersection Signal Delay: 48.3	Intersection LOS: D
Intersection Capacity Utilization 69.7%	ICU Level of Service C
Analysis Period (min) 15	

Splits and Phases: 301: WALLINGFORD AV N & N 45 ST



Lane Group	ø3
Lane Configurations	
Volume (vph)	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Satd. Flow (RTOR)	
Lane Group Flow (vph)	
Turn Type	
Protected Phases	3
Permitted Phases	
Detector Phase	
Switch Phase	
Minimum Initial (s)	10.0
Minimum Split (s)	24.0
Total Split (s)	24.0
Total Split (%)	24%
Yellow Time (s)	2.0
All-Red Time (s)	0.0
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	Lag
Lead-Lag Optimize?	
Recall Mode	None
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay	
Queue Delay	
Total Delay	
LOS	
Approach Delay	
Approach LOS	

Intersection Summary

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	30	620	17	25	623	24	34	65	26	91	54	165
Satd. Flow (prot)	1635	1327	0	1701	1391	1468	0	1773	0	0	1533	1439
Flt Permitted	0.341			0.286				0.837			0.600	
Satd. Flow (perm)	587	1327	0	512	1391	968	0	1468	0	0	909	1239
Satd. Flow (RTOR)		3				16		13				126
Lane Group Flow (vph)	36	767	0	27	663	26	0	177	0	0	163	185
Turn Type	Perm	NA		Perm	NA	Perm	Perm	NA		Perm	NA	Perm
Protected Phases		2			2			4			4	
Permitted Phases	2			2		2	4			4		4
Detector Phase	2	2		2	2	2	4	4		4	4	4
Switch Phase												
Minimum Initial (s)	7.0	7.0		7.0	7.0	7.0	7.0	7.0		7.0	7.0	7.0
Minimum Split (s)	17.5	17.5		17.5	17.5	17.5	20.5	20.5		20.5	20.5	20.5
Total Split (s)	69.0	69.0		69.0	69.0	69.0	31.0	31.0		31.0	31.0	31.0
Total Split (%)	69.0%	69.0%		69.0%	69.0%	69.0%	31.0%	31.0%		31.0%	31.0%	31.0%
Yellow Time (s)	3.5	3.5		3.5	3.5	3.5	3.5	3.5		3.5	3.5	3.5
All-Red Time (s)	1.0	1.0		1.0	1.0	1.0	1.0	1.0		1.0	1.0	1.0
Lost Time Adjust (s)	-0.5	-0.5		-0.5	-0.5	-0.5		-0.5			-0.5	-0.5
Total Lost Time (s)	4.0	4.0		4.0	4.0	4.0		4.0			4.0	4.0
Lead/Lag												
Lead-Lag Optimize?												
Recall Mode	C-Max	C-Max		C-Max	C-Max	C-Max	None	None		None	None	None
Act Effct Green (s)	71.8	71.8		71.8	71.8	71.8		20.2			20.2	20.2
Actuated g/C Ratio	0.72	0.72		0.72	0.72	0.72		0.20			0.20	0.20
v/c Ratio	0.09	0.80		0.07	0.66	0.04		0.58			0.89	0.53
Control Delay	1.5	8.8		6.3	13.1	3.6		39.9			81.5	17.3
Queue Delay	0.0	0.0		0.0	0.0	0.0		0.0			0.0	0.0
Total Delay	1.5	8.8		6.3	13.1	3.6		39.9			81.5	17.3
LOS	A	A		A	B	A		D			F	B
Approach Delay		8.5			12.5			39.9			47.4	
Approach LOS		A			B			D			D	

Intersection Summary	
Cycle Length: 100	
Actuated Cycle Length: 100	
Offset: 6 (6%), Referenced to phase 2:EBWB, Start of Green	
Natural Cycle: 75	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.89	
Intersection Signal Delay: 19.2	Intersection LOS: B
Intersection Capacity Utilization 69.7%	ICU Level of Service C
Analysis Period (min) 15	

Splits and Phases: 302: MERIDIAN AV N & N 45 ST

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	24	935	17	133	566	17	12	71	128	64	96	11
Satd. Flow (prot)	0	3256	0	0	3162	0	0	1693	1449	0	3173	0
Flt Permitted		0.999			0.991			0.937			0.806	
Satd. Flow (perm)	0	3256	0	0	3162	0	0	1594	1394	0	2582	0
Satd. Flow (RTOR)		2			3				145		6	
Lane Group Flow (vph)	0	1017	0	0	787	0	0	95	145	0	203	0
Turn Type	Split	NA		Split	NA		Perm	NA	Perm	Perm	NA	
Protected Phases	8	8		4	4			2			6	
Permitted Phases							2		2	6		
Detector Phase	8	8		4	4		2	2	2	6	6	
Switch Phase												
Minimum Initial (s)	7.0	7.0		7.0	7.0		7.0	7.0	7.0	7.0	7.0	
Minimum Split (s)	21.5	21.5		21.5	21.5		22.5	22.5	22.5	22.5	22.5	
Total Split (s)	38.0	38.0		37.0	37.0		25.0	25.0	25.0	25.0	25.0	
Total Split (%)	38.0%	38.0%		37.0%	37.0%		25.0%	25.0%	25.0%	25.0%	25.0%	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5	3.5	3.5	3.5	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0	1.0	1.0	1.0	
Lost Time Adjust (s)		0.0			0.0			0.0	0.0		0.0	
Total Lost Time (s)		4.5			4.5			4.5	4.5		4.5	
Lead/Lag												
Lead-Lag Optimize?												
Recall Mode	None	None		C-Max	C-Max		None	None	None	None	None	
Act Effct Green (s)		32.9			37.6			16.0	16.0		16.0	
Actuated g/C Ratio		0.33			0.38			0.16	0.16		0.16	
v/c Ratio		0.95			0.66			0.37	0.42		0.49	
Control Delay		44.3			29.8			41.0	10.2		40.6	
Queue Delay		0.0			0.0			0.0	0.0		0.0	
Total Delay		44.3			29.8			41.0	10.2		40.6	
LOS		D			C			D	B		D	
Approach Delay		44.3			29.8			22.4			40.6	
Approach LOS		D			C			C			D	

Intersection Summary	
Cycle Length: 100	
Actuated Cycle Length: 100	
Offset: 47 (47%), Referenced to phase 4:WBTL, Start of Green	
Natural Cycle: 90	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.95	
Intersection Signal Delay: 36.5	Intersection LOS: D
Intersection Capacity Utilization 71.1%	ICU Level of Service C
Analysis Period (min) 15	

Splits and Phases: 59: Fremont Ave N & N 46th St

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	18	820	35	5	574	21	19	23	16	33	91	52
Satd. Flow (prot)	0	3152	0	0	3216	0	0	1545	0	0	1560	0
Flt Permitted		0.936			0.950			0.809			0.927	
Satd. Flow (perm)	0	2953	0	0	3055	0	0	1265	0	0	1448	0
Satd. Flow (RTOR)		7			6			21			23	
Lane Group Flow (vph)	0	928	0	0	645	0	0	76	0	0	238	0
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		2			2			4			4	
Permitted Phases	2			2			4			4		
Detector Phase	2	2		2	2		4	4		4	4	
Switch Phase												
Minimum Initial (s)	7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0	
Minimum Split (s)	21.5	21.5		21.5	21.5		22.5	22.5		22.5	22.5	
Total Split (s)	61.0	61.0		61.0	61.0		39.0	39.0		39.0	39.0	
Total Split (%)	61.0%	61.0%		61.0%	61.0%		39.0%	39.0%		39.0%	39.0%	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5		3.5	3.5	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)		0.0			0.0			0.0			0.0	
Total Lost Time (s)		4.5			4.5			4.5			4.5	
Lead/Lag												
Lead-Lag Optimize?												
Recall Mode	C-Max	C-Max		C-Max	C-Max		None	None		None	None	
Act Effct Green (s)		71.1			71.1			19.9			19.9	
Actuated g/C Ratio		0.71			0.71			0.20			0.20	
v/c Ratio		0.44			0.30			0.28			0.78	
Control Delay		7.6			1.1			26.2			50.7	
Queue Delay		0.0			0.0			0.0			0.0	
Total Delay		7.6			1.1			26.2			50.7	
LOS		A			A			C			D	
Approach Delay		7.6			1.1			26.2			50.7	
Approach LOS		A			A			C			D	

Intersection Summary	
Cycle Length: 100	
Actuated Cycle Length: 100	
Offset: 76 (76%), Referenced to phase 2:EBWB, Start of Green	
Natural Cycle: 50	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.78	
Intersection Signal Delay: 11.6	Intersection LOS: B
Intersection Capacity Utilization 57.1%	ICU Level of Service B
Analysis Period (min) 15	

Splits and Phases: 95: Phinny Ave N & N 46th St

Arterial Level of Service: EB N 46th St

Cross Street	Node	Delay (s/veh)	Travel time (s)	Dist (mi)	Arterial Speed
Phinny Ave N	95	6.3	27.7	0.2	24
Fremont Ave N	59	38.6	59.1	0.2	12
Linden Ave N	1	3.2	8.9	0.0	19
Total		48.1	95.8	0.4	16

Arterial Level of Service: WB N 46th St

Cross Street	Node	Delay (s/veh)	Travel time (s)	Dist (mi)	Arterial Speed
Fremont Ave N	59	23.6	29.0	0.0	6
Phinny Ave N	95	3.7	26.6	0.2	26
Total		27.4	55.6	0.2	15

Arterial Level of Service: EB N 46th St

Cross Street	Node	Delay (s/veh)	Travel time (s)	Dist (mi)	Arterial Speed
SB SR99 ramp	7	1.7	6.1	0.0	21
Total		1.7	6.1	0.0	21

Arterial Level of Service: WB N 46th St

Cross Street	Node	Delay (s/veh)	Travel time (s)	Dist (mi)	Arterial Speed
Linden Ave N	1	2.5	6.7	0.0	19
Total		2.5	6.7	0.0	19

Intersection: 1: Linden Ave N & N 46th St/N 46th St

Movement	WB	NB	SB
Directions Served	TR	R	R
Maximum Queue (ft)	154	73	114
Average Queue (ft)	32	25	30
95th Queue (ft)	117	55	70
Link Distance (ft)	139	228	262
Upstream Blk Time (%)	1		
Queuing Penalty (veh)	11		
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 5: SB SR99 ramp & N 46th St

Movement	EB	EB	WB	WB
Directions Served	T	T	L	T
Maximum Queue (ft)	118	152	138	120
Average Queue (ft)	46	56	78	55
95th Queue (ft)	99	117	128	112
Link Distance (ft)	135	135	966	966
Upstream Blk Time (%)	0	0		
Queuing Penalty (veh)	0	0		
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 7: SB SR99 ramp & N 46th St /N 46th St

Movement	EB	WB
Directions Served	T	T
Maximum Queue (ft)	55	93
Average Queue (ft)	2	9
95th Queue (ft)	19	48
Link Distance (ft)	139	135
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 59: Fremont Ave N & N 46th St

Movement	EB	EB	WB	WB	NB	NB	SB	SB
Directions Served	LT	TR	LT	TR	LT	R	LT	TR
Maximum Queue (ft)	466	461	210	212	161	114	162	51
Average Queue (ft)	229	262	166	156	65	57	96	15
95th Queue (ft)	356	380	214	220	123	96	152	43
Link Distance (ft)	938	938	180	180	295	295	277	277
Upstream Blk Time (%)			8	5				
Queuing Penalty (veh)			31	21				
Storage Bay Dist (ft)								
Storage Blk Time (%)								
Queuing Penalty (veh)								

Intersection: 95: Phinny Ave N & N 46th St

Movement	EB	EB	WB	WB	NB	SB
Directions Served	LT	TR	LT	TR	LTR	LTR
Maximum Queue (ft)	188	199	109	56	121	237
Average Queue (ft)	92	78	18	12	40	124
95th Queue (ft)	173	153	58	42	91	215
Link Distance (ft)	928	928	938	938	231	222
Upstream Blk Time (%)						1
Queuing Penalty (veh)						0
Storage Bay Dist (ft)						
Storage Blk Time (%)						
Queuing Penalty (veh)						

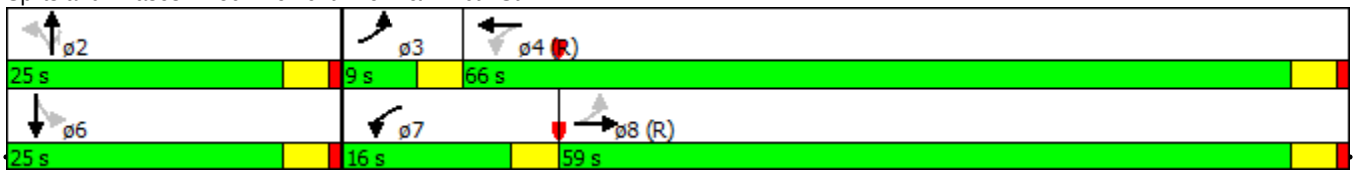
Network Summary

Network wide Queuing Penalty: 63

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	24	935	17	133	566	17	12	71	128	64	96	11
Satd. Flow (prot)	1636	3260	0	1604	1679	0	0	1693	1449	0	3169	0
Flt Permitted	0.346			0.201				0.937			0.806	
Satd. Flow (perm)	596	3260	0	339	1679	0	0	1591	1394	0	2578	0
Satd. Flow (RTOR)		3			3				145		6	
Lane Group Flow (vph)	25	992	0	146	641	0	0	95	145	0	203	0
Turn Type	pm+pt	NA		pm+pt	NA		Perm	NA	Perm	Perm	NA	
Protected Phases	3	8		7	4			2			6	
Permitted Phases	8			4			2		2	6		
Detector Phase	3	8		7	4		2	2	2	6	6	
Switch Phase												
Minimum Initial (s)	5.0	7.0		5.0	7.0		7.0	7.0	7.0	7.0	7.0	
Minimum Split (s)	8.5	20.5		8.5	19.5		22.5	22.5	22.5	22.5	22.5	
Total Split (s)	9.0	59.0		16.0	66.0		25.0	25.0	25.0	25.0	25.0	
Total Split (%)	9.0%	59.0%		16.0%	66.0%		25.0%	25.0%	25.0%	25.0%	25.0%	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5	3.5	3.5	3.5	
All-Red Time (s)	0.0	1.0		0.0	1.0		1.0	1.0	1.0	1.0	1.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0			0.0	0.0		0.0	
Total Lost Time (s)	3.5	4.5		3.5	4.5			4.5	4.5		4.5	
Lead/Lag	Lead	Lag		Lead	Lag							
Lead-Lag Optimize?												
Recall Mode	Max	C-Max		Max	C-Max		None	None	None	None	None	
Act Effct Green (s)	65.5	54.5		76.0	61.5			16.0	16.0		16.0	
Actuated g/C Ratio	0.66	0.54		0.76	0.62			0.16	0.16		0.16	
v/c Ratio	0.05	0.56		0.31	0.62			0.37	0.42		0.49	
Control Delay	3.7	11.8		5.2	15.1			41.0	10.2		40.6	
Queue Delay	0.0	0.0		0.0	0.0			0.0	0.0		0.0	
Total Delay	3.7	11.8		5.2	15.1			41.0	10.2		40.6	
LOS	A	B		A	B			D	B		D	
Approach Delay		11.6			13.3			22.4			40.6	
Approach LOS		B			B			C			D	

Intersection Summary	
Cycle Length: 100	
Actuated Cycle Length: 100	
Offset: 47 (47%), Referenced to phase 4:WBTL and 8:EBTL, Start of Green	
Natural Cycle: 65	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.62	
Intersection Signal Delay: 16.0	Intersection LOS: B
Intersection Capacity Utilization 58.6%	ICU Level of Service B
Analysis Period (min) 15	

Splits and Phases: 59: Fremont Ave N & N 46th St



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	18	820	35	5	574	21	19	23	16	33	91	52
Satd. Flow (prot)	1589	3155	0	1620	1693	0	0	1545	0	0	1548	0
Flt Permitted	0.324			0.283				0.805			0.927	
Satd. Flow (perm)	542	3155	0	481	1693	0	0	1255	0	0	1438	0
Satd. Flow (RTOR)		7			3			19			20	
Lane Group Flow (vph)	19	909	0	5	640	0	0	76	0	0	238	0
Turn Type	pm+pt	NA		pm+pt	NA		Perm	NA		Perm	NA	
Protected Phases	5	2		1	6			4			4	
Permitted Phases	2			6			4			4		
Detector Phase	5	2		1	6		4	4		4	4	
Switch Phase												
Minimum Initial (s)	5.0	7.0		5.0	7.0		7.0	7.0		7.0	7.0	
Minimum Split (s)	8.5	20.5		8.5	20.5		22.5	22.5		22.5	22.5	
Total Split (s)	9.0	60.0		9.0	60.0		31.0	31.0		31.0	31.0	
Total Split (%)	9.0%	60.0%		9.0%	60.0%		31.0%	31.0%		31.0%	31.0%	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5		3.5	3.5	
All-Red Time (s)	0.0	1.0		0.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0			0.0			0.0	
Total Lost Time (s)	3.5	4.5		3.5	4.5			4.5			4.5	
Lead/Lag	Lead	Lag		Lead	Lag							
Lead-Lag Optimize?												
Recall Mode	None	C-Max		None	C-Max		None	None		None	None	
Act Effct Green (s)	71.7	69.6		70.8	67.8			19.7			19.7	
Actuated g/C Ratio	0.72	0.70		0.71	0.68			0.20			0.20	
v/c Ratio	0.04	0.41		0.01	0.56			0.29			0.80	
Control Delay	5.4	8.4		4.4	7.2			27.4			53.5	
Queue Delay	0.0	0.0		0.0	0.0			0.0			0.0	
Total Delay	5.4	8.4		4.4	7.2			27.4			53.5	
LOS	A	A		A	A			C			D	
Approach Delay		8.3			7.2			27.4			53.5	
Approach LOS		A			A			C			D	

Intersection Summary	
Cycle Length: 100	
Actuated Cycle Length: 100	
Offset: 50 (50%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green	
Natural Cycle: 65	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.80	
Intersection Signal Delay: 14.4	Intersection LOS: B
Intersection Capacity Utilization 52.0%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 95: Phinny Ave N & N 46th St

Arterial Level of Service: EB N 46th St

Cross Street	Node	Delay (s/veh)	Travel time (s)	Dist (mi)	Arterial Speed
Phinny Ave N	95	6.1	27.4	0.2	24
Fremont Ave N	59	12.3	33.3	0.2	20
Linden Ave N	1	2.1	7.8	0.0	21
Total		20.4	68.5	0.4	22

Arterial Level of Service: WB N 46th St

Cross Street	Node	Delay (s/veh)	Travel time (s)	Dist (mi)	Arterial Speed
Fremont Ave N	59	10.2	15.7	0.0	11
Phinny Ave N	95	9.4	31.9	0.2	21
Total		19.6	47.6	0.2	18

Intersection: 1: Linden Ave N & N 46th St/N 46th St

Movement	WB	NB	SB
Directions Served	TR	R	R
Maximum Queue (ft)	172	71	150
Average Queue (ft)	31	27	36
95th Queue (ft)	122	55	71
Link Distance (ft)	139	228	262
Upstream Blk Time (%)	1		
Queuing Penalty (veh)	7		
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 5: SB SR99 ramp & N 46th St

Movement	EB	EB	WB	WB
Directions Served	T	T	L	T
Maximum Queue (ft)	31	22	176	161
Average Queue (ft)	1	2	88	29
95th Queue (ft)	11	11	138	96
Link Distance (ft)	135	135	966	966
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 7: SB SR99 ramp & N 46th St /N 46th St

Movement	WB
Directions Served	T
Maximum Queue (ft)	140
Average Queue (ft)	6
95th Queue (ft)	50
Link Distance (ft)	135
Upstream Blk Time (%)	0
Queuing Penalty (veh)	1
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 59: Fremont Ave N & N 46th St

Movement	EB	EB	EB	WB	WB	NB	NB	SB	SB
Directions Served	L	T	TR	L	TR	LT	R	LT	TR
Maximum Queue (ft)	55	174	206	158	200	119	136	244	117
Average Queue (ft)	15	102	123	59	146	57	61	100	21
95th Queue (ft)	41	161	201	114	222	100	116	173	59
Link Distance (ft)		938	938	181	181	291	291	282	282
Upstream Blk Time (%)					4				
Queuing Penalty (veh)					16				
Storage Bay Dist (ft)	100								
Storage Blk Time (%)		8							
Queuing Penalty (veh)		2							

Intersection: 95: Phinny Ave N & N 46th St

Movement	EB	EB	EB	WB	WB	NB	SB
Directions Served	L	T	TR	L	TR	LTR	LTR
Maximum Queue (ft)	55	182	216	31	217	93	242
Average Queue (ft)	8	91	86	5	118	40	121
95th Queue (ft)	32	163	158	22	208	82	194
Link Distance (ft)		928	928		938	226	227
Upstream Blk Time (%)							1
Queuing Penalty (veh)							0
Storage Bay Dist (ft)	100			100			
Storage Blk Time (%)		3			11		
Queuing Penalty (veh)		1			1		

Network Summary

Network wide Queuing Penalty: 26

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	35	853	40	146	790	64	39	224	160	75	146	26
Satd. Flow (prot)	0	3263	0	0	3236	0	0	1693	1449	0	3182	0
Flt Permitted		0.998			0.993			0.890			0.552	
Satd. Flow (perm)	0	3263	0	0	3236	0	0	1518	1354	0	1783	0
Satd. Flow (RTOR)		4			7				188		10	
Lane Group Flow (vph)	0	1042	0	0	1063	0	0	310	188	0	274	0
Turn Type	Split	NA		Split	NA		Perm	NA	Perm	Perm	NA	
Protected Phases	8	8		4	4			2			6	
Permitted Phases							2		2	6		
Detector Phase	8	8		4	4		2	2	2	6	6	
Switch Phase												
Minimum Initial (s)	7.0	7.0		7.0	7.0		7.0	7.0	7.0	7.0	7.0	
Minimum Split (s)	21.5	21.5		21.5	21.5		22.5	22.5	22.5	22.5	22.5	
Total Split (s)	40.0	40.0		44.0	44.0		26.0	26.0	26.0	26.0	26.0	
Total Split (%)	36.4%	36.4%		40.0%	40.0%		23.6%	23.6%	23.6%	23.6%	23.6%	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5	3.5	3.5	3.5	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0	1.0	1.0	1.0	
Lost Time Adjust (s)		0.0			0.0			0.0	0.0		0.0	
Total Lost Time (s)		4.5			4.5			4.5	4.5		4.5	
Lead/Lag												
Lead-Lag Optimize?												
Recall Mode	None	None		C-Max	C-Max		None	None	None	None	None	
Act Effct Green (s)		35.5			39.5			21.5	21.5		21.5	
Actuated g/C Ratio		0.32			0.36			0.20	0.20		0.20	
v/c Ratio		0.99			0.91			1.05	0.45		1.09dl	
Control Delay		56.1			44.1			109.0	9.3		56.0	
Queue Delay		0.0			0.0			0.0	0.0		0.0	
Total Delay		56.1			44.1			109.0	9.3		56.0	
LOS		E			D			F	A		E	
Approach Delay		56.1			44.1			71.4			56.0	
Approach LOS		E			D			E			E	

Intersection Summary	
Cycle Length: 110	
Actuated Cycle Length: 110	
Offset: 47 (43%), Referenced to phase 4:WBTL, Start of Green	
Natural Cycle: 100	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.05	
Intersection Signal Delay: 54.3	Intersection LOS: D
Intersection Capacity Utilization 95.5%	ICU Level of Service F
Analysis Period (min) 15	

dl Defacto Left Lane. Recode with 1 though lane as a left lane.

Splits and Phases: 59: Fremont Ave N & N 46th St

Existing PM Peak

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	39	852	40	20	708	39	39	78	30	46	78	65
Satd. Flow (prot)	0	3268	0	0	3285	0	0	1629	0	0	1594	0
Flt Permitted		0.882			0.912			0.764			0.818	
Satd. Flow (perm)	0	2886	0	0	2999	0	0	1254	0	0	1309	0
Satd. Flow (RTOR)		7			9			12			25	
Lane Group Flow (vph)	0	1011	0	0	815	0	0	171	0	0	218	0
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		2			2			4			4	
Permitted Phases	2			2			4			4		
Detector Phase	2	2		2	2		4	4		4	4	
Switch Phase												
Minimum Initial (s)	7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0	
Minimum Split (s)	21.5	21.5		21.5	21.5		22.5	22.5		22.5	22.5	
Total Split (s)	71.0	71.0		71.0	71.0		39.0	39.0		39.0	39.0	
Total Split (%)	64.5%	64.5%		64.5%	64.5%		35.5%	35.5%		35.5%	35.5%	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5		3.5	3.5	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)		0.0			0.0			0.0			0.0	
Total Lost Time (s)		4.5			4.5			4.5			4.5	
Lead/Lag												
Lead-Lag Optimize?												
Recall Mode	C-Max	C-Max		C-Max	C-Max		None	None		None	None	
Act Effct Green (s)		80.9			80.9			20.1			20.1	
Actuated g/C Ratio		0.74			0.74			0.18			0.18	
v/c Ratio		0.48			0.37			0.72			0.84	
Control Delay		7.6			0.8			54.9			64.1	
Queue Delay		0.0			0.0			0.0			0.0	
Total Delay		7.6			0.8			54.9			64.1	
LOS		A			A			D			E	
Approach Delay		7.6			0.8			54.9			64.1	
Approach LOS		A			A			D			E	

Intersection Summary	
Cycle Length: 110	
Actuated Cycle Length: 110	
Offset: 72 (65%), Referenced to phase 2:EBWB, Start of Green	
Natural Cycle: 50	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.84	
Intersection Signal Delay: 14.3	Intersection LOS: B
Intersection Capacity Utilization 73.5%	ICU Level of Service D
Analysis Period (min) 15	

Splits and Phases: 95: Phinny Ave N & N 46th St

Arterial Level of Service: EB N 46th St

Cross Street	Node	Delay (s/veh)	Travel time (s)	Dist (mi)	Arterial Speed
Phinny Ave N	95	9.5	25.3	0.1	19
Fremont Ave N	59	57.7	79.7	0.2	9
Linden Ave N	1	3.2	9.0	0.0	19
Total		70.4	114.0	0.4	12

Arterial Level of Service: WB N 46th St

Cross Street	Node	Delay (s/veh)	Travel time (s)	Dist (mi)	Arterial Speed
Fremont Ave N	59	37.7	43.1	0.0	4
Phinny Ave N	95	3.8	25.3	0.2	27
Total		41.5	68.5	0.2	12

Arterial Level of Service: EB N 46th St

Cross Street	Node	Delay (s/veh)	Travel time (s)	Dist (mi)	Arterial Speed
SB SR99 ramp	7	1.6	6.0	0.0	21
Total		1.6	6.0	0.0	21

Arterial Level of Service: WB N 46th St

Cross Street	Node	Delay (s/veh)	Travel time (s)	Dist (mi)	Arterial Speed
Linden Ave N	1	14.2	18.5	0.0	7
Total		14.2	18.5	0.0	7

Intersection: 1: Linden Ave N & N 46th St/N 46th St

Movement	WB	NB	SB
Directions Served	TR	R	R
Maximum Queue (ft)	157	91	277
Average Queue (ft)	146	47	124
95th Queue (ft)	157	81	267
Link Distance (ft)	139	228	262
Upstream Blk Time (%)	36		3
Queuing Penalty (veh)	358		0
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 5: SB SR99 ramp & N 46th St

Movement	EB	EB	WB	WB
Directions Served	T	T	L	T
Maximum Queue (ft)	121	120	677	677
Average Queue (ft)	61	74	548	576
95th Queue (ft)	108	127	892	855
Link Distance (ft)	135	135	638	638
Upstream Blk Time (%)	0	0	34	40
Queuing Penalty (veh)	0	0	0	0
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 7: SB SR99 ramp & N 46th St /N 46th St

Movement	EB	WB
Directions Served	T	T
Maximum Queue (ft)	39	147
Average Queue (ft)	1	139
95th Queue (ft)	13	174
Link Distance (ft)	139	135
Upstream Blk Time (%)		32
Queuing Penalty (veh)		323
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 59: Fremont Ave N & N 46th St

Movement	EB	EB	WB	WB	NB	NB	SB	SB
Directions Served	LT	TR	LT	TR	LT	R	LT	TR
Maximum Queue (ft)	501	512	244	238	329	347	292	226
Average Queue (ft)	337	360	195	199	284	204	174	118
95th Queue (ft)	495	518	217	229	367	387	289	227
Link Distance (ft)	938	938	180	180	295	295	277	277
Upstream Blk Time (%)			37	34	54	15	1	
Queuing Penalty (veh)			190	176	0	0	0	
Storage Bay Dist (ft)								
Storage Blk Time (%)								
Queuing Penalty (veh)								

Intersection: 95: Phinny Ave N & N 46th St

Movement	EB	EB	WB	WB	NB	SB
Directions Served	LT	TR	LT	TR	LTR	LTR
Maximum Queue (ft)	306	319	121	92	208	249
Average Queue (ft)	131	118	36	16	78	134
95th Queue (ft)	219	209	84	54	141	228
Link Distance (ft)	678	678	938	938	231	222
Upstream Blk Time (%)						3
Queuing Penalty (veh)						0
Storage Bay Dist (ft)						
Storage Blk Time (%)						
Queuing Penalty (veh)						

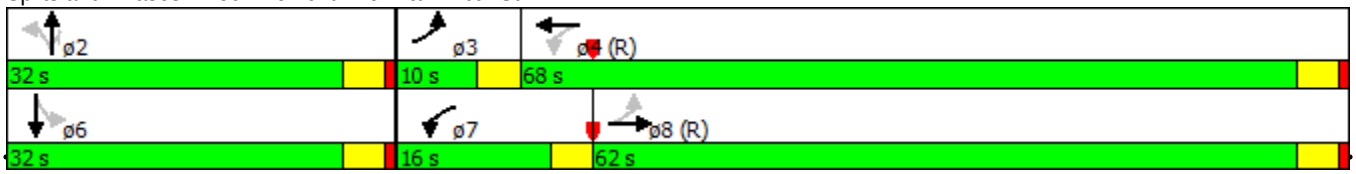
Network Summary

Network wide Queuing Penalty: 1047

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	35	853	40	146	790	64	39	224	160	75	146	26
Satd. Flow (prot)	1652	3266	0	1652	1712	0	0	1693	1449	0	3170	0
Flt Permitted	0.164			0.211				0.905			0.576	
Satd. Flow (perm)	285	3266	0	367	1712	0	0	1543	1354	0	1853	0
Satd. Flow (RTOR)		6			6				188		11	
Lane Group Flow (vph)	39	1003	0	155	908	0	0	310	188	0	274	0
Turn Type	pm+pt	NA		pm+pt	NA		Perm	NA	Perm	Perm	NA	
Protected Phases	3	8		7	4			2			6	
Permitted Phases	8			4			2		2	6		
Detector Phase	3	8		7	4		2	2	2	6	6	
Switch Phase												
Minimum Initial (s)	5.0	7.0		5.0	7.0		7.0	7.0	7.0	7.0	7.0	
Minimum Split (s)	8.5	20.5		8.5	19.5		22.5	22.5	22.5	22.5	22.5	
Total Split (s)	10.0	62.0		16.0	68.0		32.0	32.0	32.0	32.0	32.0	
Total Split (%)	9.1%	56.4%		14.5%	61.8%		29.1%	29.1%	29.1%	29.1%	29.1%	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5	3.5	3.5	3.5	
All-Red Time (s)	0.0	1.0		0.0	1.0		1.0	1.0	1.0	1.0	1.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0			0.0	0.0		0.0	
Total Lost Time (s)	3.5	4.5		3.5	4.5			4.5	4.5		4.5	
Lead/Lag	Lead	Lag		Lead	Lag							
Lead-Lag Optimize?												
Recall Mode	None	C-Max		None	C-Max		None	None	None	None	None	
Act Effct Green (s)	71.2	64.7		77.1	70.7			24.8	24.8		24.8	
Actuated g/C Ratio	0.65	0.59		0.70	0.64			0.23	0.23		0.23	
v/c Ratio	0.15	0.52		0.44	0.82			0.89	0.42		0.64	
Control Delay	6.7	12.4		9.2	23.9			69.1	7.9		44.1	
Queue Delay	0.0	0.0		0.0	0.3			0.0	0.0		0.0	
Total Delay	6.7	12.4		9.2	24.2			69.1	7.9		44.1	
LOS	A	B		A	C			E	A		D	
Approach Delay		12.1			22.0			46.0			44.1	
Approach LOS		B			C			D			D	

Intersection Summary	
Cycle Length: 110	
Actuated Cycle Length: 110	
Offset: 64 (58%), Referenced to phase 4:WBTL and 8:EBTL, Start of Green	
Natural Cycle: 90	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.89	
Intersection Signal Delay: 24.7	Intersection LOS: C
Intersection Capacity Utilization 90.5%	ICU Level of Service E
Analysis Period (min) 15	

Splits and Phases: 59: Fremont Ave N & N 46th St



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	39	852	40	20	708	39	39	78	30	46	78	65
Satd. Flow (prot)	1652	3271	0	1668	1731	0	0	1629	0	0	1575	0
Flt Permitted	0.246			0.264				0.760			0.814	
Satd. Flow (perm)	428	3271	0	461	1731	0	0	1243	0	0	1287	0
Satd. Flow (RTOR)		8			5			11			22	
Lane Group Flow (vph)	42	969	0	21	794	0	0	171	0	0	218	0
Turn Type	pm+pt	NA		pm+pt	NA		Perm	NA		Perm	NA	
Protected Phases	5	2		1	6			4			4	
Permitted Phases	2			6			4			4		
Detector Phase	5	2		1	6		4	4		4	4	
Switch Phase												
Minimum Initial (s)	5.0	7.0		5.0	7.0		7.0	7.0		7.0	7.0	
Minimum Split (s)	8.5	20.5		8.5	20.5		22.5	22.5		22.5	22.5	
Total Split (s)	9.0	71.0		9.0	71.0		30.0	30.0		30.0	30.0	
Total Split (%)	8.2%	64.5%		8.2%	64.5%		27.3%	27.3%		27.3%	27.3%	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5		3.5	3.5	
All-Red Time (s)	0.0	1.0		0.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0			0.0			0.0	
Total Lost Time (s)	3.5	4.5		3.5	4.5			4.5			4.5	
Lead/Lag	Lead	Lag		Lead	Lag							
Lead-Lag Optimize?												
Recall Mode	None	C-Max		None	C-Max		None	None		None	None	
Act Effct Green (s)	80.9	77.6		79.9	75.8			19.8			19.8	
Actuated g/C Ratio	0.74	0.71		0.73	0.69			0.18			0.18	
v/c Ratio	0.11	0.42		0.05	0.67			0.73			0.87	
Control Delay	5.3	8.7		2.3	5.0			57.6			70.6	
Queue Delay	0.0	0.0		0.0	0.0			0.0			0.0	
Total Delay	5.3	8.7		2.3	5.0			57.6			70.6	
LOS	A	A		A	A			E			E	
Approach Delay		8.5			4.9			57.6			70.6	
Approach LOS		A			A			E			E	

Intersection Summary	
Cycle Length: 110	
Actuated Cycle Length: 110	
Offset: 74 (67%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green	
Natural Cycle: 75	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.87	
Intersection Signal Delay: 17.1	Intersection LOS: B
Intersection Capacity Utilization 62.0%	ICU Level of Service B
Analysis Period (min) 15	

Splits and Phases: 95: Phinny Ave N & N 46th St

Arterial Level of Service: EB N 46th St

Cross Street	Node	Delay (s/veh)	Travel time (s)	Dist (mi)	Arterial Speed
Phinny Ave N	95	7.0	19.5	0.1	20
Fremont Ave N	59	14.7	37.0	0.2	18
Linden Ave N	1	1.7	7.4	0.0	22
Total		23.3	64.0	0.3	19

Arterial Level of Service: WB N 46th St

Cross Street	Node	Delay (s/veh)	Travel time (s)	Dist (mi)	Arterial Speed
Fremont Ave N	59	12.4	18.0	0.0	9
Phinny Ave N	95	6.1	27.7	0.2	25
Total		18.5	45.8	0.2	19

Arterial Level of Service: EB N 46th St

Cross Street	Node	Delay (s/veh)	Travel time (s)	Dist (mi)	Arterial Speed
SB SR99 ramp	7	1.2	5.7	0.0	22
Total		1.2	5.7	0.0	22

Arterial Level of Service: WB N 46th St

Cross Street	Node	Delay (s/veh)	Travel time (s)	Dist (mi)	Arterial Speed
Linden Ave N	1	5.2	9.5	0.0	13
Total		5.2	9.5	0.0	13

Intersection: 1: Linden Ave N & N 46th St/N 46th St

Movement	WB	NB	SB
Directions Served	TR	R	R
Maximum Queue (ft)	157	69	110
Average Queue (ft)	111	33	42
95th Queue (ft)	191	62	91
Link Distance (ft)	139	228	262
Upstream Blk Time (%)	8		
Queuing Penalty (veh)	76		
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 5: SB SR99 ramp & N 46th St

Movement	EB	EB	WB	WB
Directions Served	T	T	L	T
Maximum Queue (ft)	55	86	620	644
Average Queue (ft)	19	24	207	164
95th Queue (ft)	52	63	393	371
Link Distance (ft)	135	135	608	608
Upstream Blk Time (%)			0	0
Queuing Penalty (veh)			0	0
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 7: SB SR99 ramp & N 46th St /N 46th St

Movement	WB
Directions Served	T
Maximum Queue (ft)	149
Average Queue (ft)	57
95th Queue (ft)	152
Link Distance (ft)	135
Upstream Blk Time (%)	3
Queuing Penalty (veh)	26
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 59: Fremont Ave N & N 46th St

Movement	EB	EB	EB	WB	WB	NB	NB	SB	SB
Directions Served	L	T	TR	L	TR	LT	R	LT	TR
Maximum Queue (ft)	124	210	211	172	202	343	306	253	189
Average Queue (ft)	26	133	144	72	190	241	134	148	72
95th Queue (ft)	68	199	209	140	211	373	324	242	182
Link Distance (ft)		938	938	181	181	291	291	282	282
Upstream Blk Time (%)				0	15	36	9		
Queuing Penalty (veh)				0	78	0	0		
Storage Bay Dist (ft)	100								
Storage Blk Time (%)		17							
Queuing Penalty (veh)		6							

Intersection: 95: Phinny Ave N & N 46th St

Movement	EB	EB	EB	WB	WB	NB	SB
Directions Served	L	T	TR	L	TR	LTR	LTR
Maximum Queue (ft)	125	200	221	53	173	239	242
Average Queue (ft)	29	109	90	12	85	100	153
95th Queue (ft)	80	182	172	38	139	179	269
Link Distance (ft)		540	540		938	226	227
Upstream Blk Time (%)						0	11
Queuing Penalty (veh)						0	0
Storage Bay Dist (ft)	100			100			
Storage Blk Time (%)		7			4		
Queuing Penalty (veh)		3			1		

Network Summary

Network wide Queuing Penalty: 191