

TRAFFIC IMPACT ANALYSIS

For

THE FARM AT EAGLES NEST

LOCATED IN
HENDERSON COUNTY, NORTH CAROLINA

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September 2017

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INTRODUCTION AND BACKGROUND

This report summarizes the findings of the Traffic Impact Analysis (TIA) that was performed for a development consisting of 166 detached residences and 132 multi-plex units proposed in Henderson County, North Carolina. (Figures 1 & 2) The purpose of this study is to determine the impact of the anticipated traffic associated with this development including trip generation, trip distribution, intersection delay, vehicle queue, and intersection capacity. Each of these aspects will be analyzed to determine any potential adverse traffic impacts on the adjacent roadway network from the proposed development.

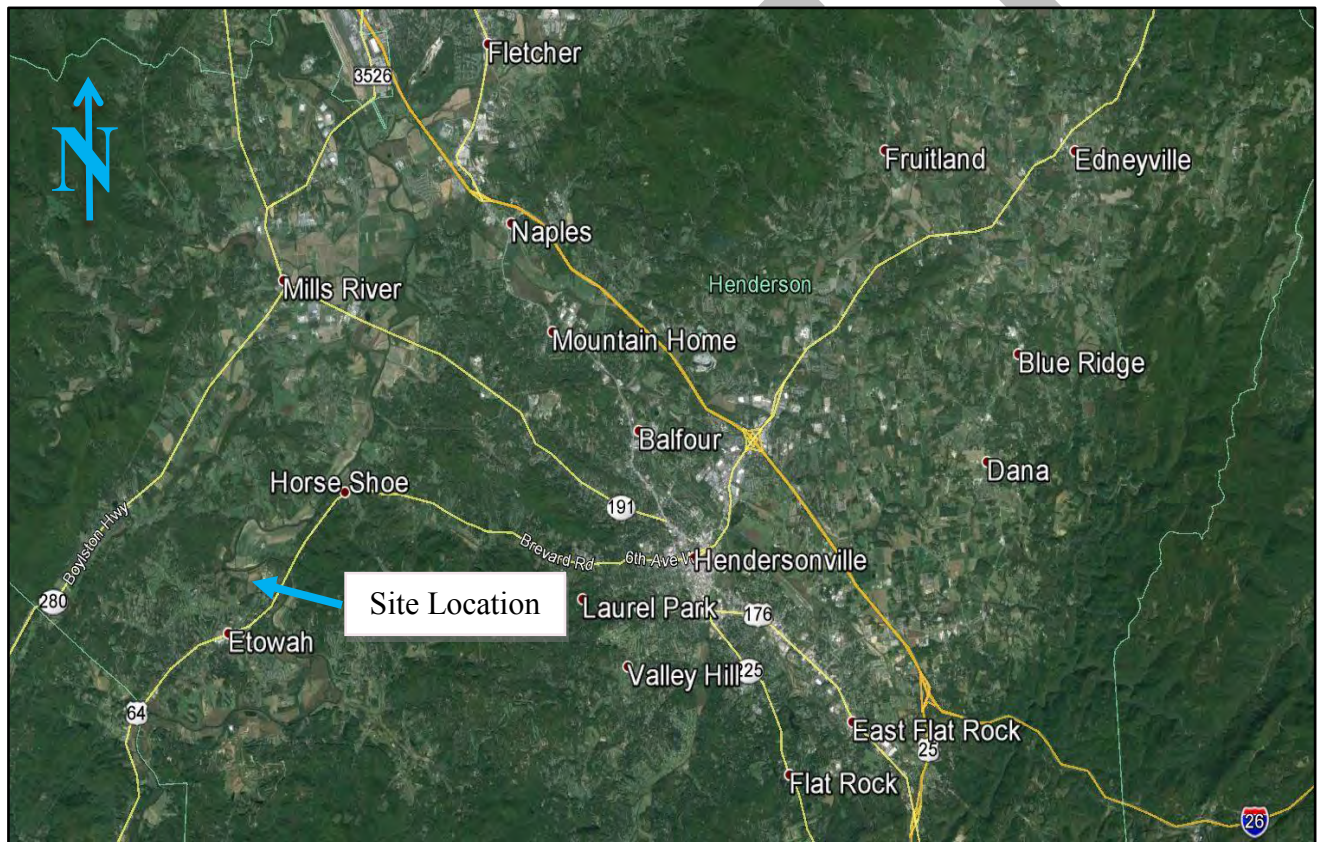


FIGURE 1 – REGION OF PROPOSED SITE LOCATION



FIGURE 2 – PROPOSED SITE LOCATION

PROPOSED SITE USE AND ACCESS

The site plan consists of 232 acres and contains 166 single-family residences and 132 multi-plex apartment units. According to developer representatives, this development will be marketed towards an older demographic – specifically, ages 55 and older. The development will provide a variety of on-site services / amenities to the residents such as tennis courts, hiking/biking trails, horse barn and riding ring, wellness center, swimming pool, clubhouse, shuffleboard, horseshoes, arts & crafts building, dining / kitchen facility, car shop / maintenance building, and a barbeque area.

There are two proposed full movement access points directly onto McKinney Road, one designated as the main access point and one designated as a service access. There is also a third full movement access point onto Ewbank Road, which connects directly to Brickyard Road. The Ewbank Road access will be gated and is designated for emergency use only. All residents will utilize the main access point on McKinney Road. *Figure 3* shows the proposed site layout of the development. *Appendix A* contains a full-size site plan.

Peak hour turning movement counts were obtained at each of the existing study intersections. AM and PM peak hours were determined between the AM and PM peak periods of 7:00 – 9:00 AM and 4:00 – 6:00 PM. AM and PM peak hours for each intersection were analyzed for existing traffic, background traffic, and full build-out traffic conditions (2020).

The AM and PM peak hours for each intersection are as follows:

- N. Greenwood Forest Drive (SR 1488) @ Brickyard Road (SR 1323)
 - AM Peak Hour – 7:00 AM – 8:00 AM || PM Peak Hour – 4:45 PM – 5:45 PM
- Holly Springs Road (SR 1322) @ Brickyard Road
 - AM Peak Hour – 7:15 AM – 8:15 AM || PM Peak Hour – 5:00 PM – 6:00 PM
- McKinney Road (SR 1203) @ Brickyard Road
 - AM Peak Hour – 7:15 AM – 8:15 AM || PM Peak Hour – 5:00 PM – 6:00 PM
- Pisgah View Drive (North) (SR 1469) @ McKinney Road
 - AM Peak Hour – 7:15 AM – 8:15 AM || PM Peak Hour – 5:00 PM – 6:00 PM
- Pisgah View Drive (South) @ McKinney Road
 - AM Peak Hour – 7:15 AM – 8:15 AM || PM Peak Hour – 5:00 PM – 6:00 PM
- McKinney Road @ US 64 (Brevard Road)
 - AM Peak Hour – 7:15 AM – 8:15 AM || PM Peak Hour – 4:45 PM – 5:45 PM
- Brickyard Road @ US 64 (Brevard Road)
 - AM Peak Hour – 7:15 AM – 8:15 AM || PM Peak Hour – 4:45 PM – 5:45 PM
- N. Greenwood Forest Drive @ US 64
 - AM Peak Hour – 7:15 AM – 8:15 AM || PM Peak Hour – 4:45 PM – 5:45 PM

Other parameters include:

- Background Traffic Growth Factor of 2%
 - NCDOT approved growth factor
- Peak Hour Factor of 0.90 for projected conditions

SURROUNDING LAND USES

The proposed site is located in the Etowah community of Henderson County, NC. The predominant land use within the study area is low density residential, recreational, and agricultural land uses. Horseshoe, NC is located roughly 3 miles to the east of the proposed site. Mills River, NC is located roughly 6 miles to the north of the proposed development and Hendersonville, NC is located roughly 8 miles to the east of the proposed development.

SURROUNDING ROADWAYS

According to NCDOT's Online GIS, US 64 (Brevard Road) is classified as a minor arterial. US 64 is a three-lane road with a posted speed limit of 45 mph within the vicinity of the proposed development. According to NCDOT data, the Average Annual Daily Traffic (AADT) on US 64 was 9,800 vehicles per day (vpd) east of Brickyard Road and 7,500 vpd west of Brickyard Road in 2016.

N. Greenwood Forest Drive is classified as a local road. N. Greenwood Forest Drive is a two-lane road with a posted speed limit of 35 mph. According to NCDOT data, the AADT on N. Greenwood Forest Drive near US 64 was 2,100 vpd in 2014. Additionally, the AADT near Brickyard Road was 2,100 in 2015.

Brickyard Road is classified as a local road. Brickyard Road is a two-lane road with a posted speed limit of 35 mph within the vicinity of the study area. According to NCDOT data, the AADT on Brickyard Road was 2,000 vpd between N. Greenwood Forest Drive and Holly Springs Road in 2016. Additionally, the AADT on Brickyard Road was 3,000 vpd between McKinney Road and US 64 in 2015.

Holly Springs Road is classified as a local road. Holly Springs Road is a two-lane road with a posted speed limit of 35 mph within the vicinity of the study area. According to NCDOT data, the AADT on Holly Springs Road was 2,400 vpd north of Brickyard Road in 2015.

McKinney Road Road is classified as a local road. McKinney Road is a two-lane road with a posted speed limit of 35 mph within the vicinity of the study area. According to NCDOT data, the AADT on McKinney Road was 480 vpd just north of US 64 in 2016.

Pisgah View Road is classified as a local road. Pisgah View Road is a two-lane road with a posted speed limit of 25 mph within the vicinity of the study area. According to NCDOT data, the AADT on Pisgah View Road was 180 vpd in 2015.

EXISTING TRAFFIC

Peak hour turning movement counts were conducted at the intersections in the study area. The AM and PM peak hours were identified between the peak periods of 7:00 – 9:00 AM and 4:00 – 6:00 PM. The existing lane configurations and existing peak hour volumes are shown in *Figures 4 & 5*. The complete existing turning movement counts can be found in *Appendix B*.

It is worth noting that the traffic patterns within the study area are indicative of commuter and “cut-through” travel patterns. N. Greenwood Forest Drive is a direct connection between Brickyard Road and US 64 for vehicles traveling to and from Brevard, Mills River, and Asheville.

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BACKGROUND TRAFFIC

Background traffic is defined as the traffic that would be at the studied intersections at the time of anticipated project completion (build-out), without the proposed development. Background traffic is comprised of existing traffic and any increase or decrease in volumes which might occur from general growth trends in the surrounding area or from nearby specific developments. It also assumes no significant roadway geometric changes from the existing condition scenario. A 2% background traffic growth factor was utilized for this study. The anticipated project completion year (build-out) is 2020. The anticipated background traffic is shown in *Figure 6*. The background turning movement data can be found in *Appendix B*.

NCDOT 2018-2027 STATE TRANSPORTATION IMPROVEMENT PROJECTS

The current 2018-2027 NCDOT State Transportation Improvement Projects (STIP) does not indicate any funded NCDOT projects within the immediate study area of the proposed development.

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TRIP DISTRIBUTION

The trip distribution for this development was estimated from the existing traffic volume patterns within the surrounding roadway network, the surrounding population densities, the location of the proposed development, and engineering judgment. Trip distribution percentages can be seen in *Figure 7*.

TRIP GENERATION

The latest edition (9th) of the Trip Generation Manual published by the Institute of Transportation Engineers (ITE) was used as a baseline to determine site generated traffic. The proposed development fits the characteristics for multiple ITE Land Use Codes. As previously mentioned, the intended demographic of this development is a 55 and older population geared towards a “senior adult housing” land use. However, no explicit age restrictions are being enforced on this development so it is anticipated that some typical single-family residences will be incorporated into the development. Through the TIA scoping process with NCDOT & Henderson County Planning, it was determined that assuming all the units as “Single-Family – Detached” would be appropriate to analyze a “worst-case” scenario.

Additionally, the proposed site will provide a plethora of amenities that will be accessible to the surrounding Etowah community through social memberships. Developer representatives have indicated a cap of 200 social memberships to use on-site amenities. NCDOT has requested that Land Use Code 495 (Recreational Community Club) be utilized to estimate anticipated traffic to and from the on-site amenities during the AM and PM peak hours. NCDOT guidelines indicate that the independent variable for this land use should be by the 1,000 SF. However, since the on-site amenities will be utilized by memberships, a custom trip generation scenario was created to combine the two variables.

The on-site amenities and associated square footages are as follows: Restaurant (6,000 SF), Clubhouse (4,000 SF), Wellness Center (10,000 SF), Art Gallery (3,000 SF), Motorcycle / Car Display Building (3,000 SF), Equestrian Barn / Restaurant (10,000 SF), Event Building / Restaurant (8,000 SF), and Pavilion / Restaurant (3,000 SF). The total square footage for the on-site amenities to be utilized by the social memberships is 47,000 SF.

ITE provides one (1) study for Land Use Code 495 with the independent variable listed as memberships and the study was conducted at a 14,000 SF facility. Using this information, a conversion factor was calculated ($47,000 \text{ SF} / 14,000 \text{ SF} = 3.4$) to determine anticipated site trips based on memberships.

In accordance with NCDOT guidelines, the rate method was used instead of the equation method in determining trips associated with these particular land uses. The rates for weekday total, AM peak hour, and PM peak hour can be seen below. The typical weekday trip generation is shown in *Table 1*.

- LUC 210 – Single-Family – Detached Housing
 - Weekday Rate = 9.52
 - AM Peak Hour of Adjacent Street Traffic Equation
 - Rate = 0.75 : 25% entering / 75% exiting
 - PM Peak Hour of Adjacent Street Traffic Equation
 - Rate = 1.00 : 63% entering / 37% exiting
- LUC 495 – Recreational Community Center
 - Weekday Rate = Not Listed for Memberships (Assumed to be 10x AM Peak Trips)
 - AM Peak Hour of Adjacent Street Traffic Equation
 - Rate = $(0.03) * (3.4) = 0.102$: 58% entering / 42% exiting
 - PM Peak Hour of Adjacent Street Traffic Equation
 - Rate = $(0.02) * (3.4) = 0.068$: 39% entering / 61% exiting

In addition to the land uses listed above, there will be employees dedicated to some of the on-site amenities that will come from off-site the development and add to the overall trips generated by the site. These employees will be staffed to the dining / kitchen facilities, administration building, car shop / maintenance building, and guest room services building. Through a review of the site plan layout, it was determined that 20 parking spaces will be dedicated for employee use. Based on engineering judgement and to assume a “worst-case” scenario, it was assumed that 20 employees (100%) would enter the site during the AM peak hour and a 50/50 split between ingress / egress trips would occur during the PM peak hour. Additionally, it was assumed that all employees will enter through the main site access instead of the secondary service access along McKinney Road. The trip generation associated with the 20 employee parking spaces can be seen below in *Table 1*.

	Size	Unit	ADT (vpd)	AM Peak (vph)		PM Peak (vph)	
				IN	OUT	IN	OUT
ITE Land Use Code 210 – Single-Family Detached	299	Dwelling Units	2,847	56	168	188	111
ITE Land Use Code 495 – Recreational Community Center	200	Memberships	200	12	8	5	9
Employees – Parking Spaces	20	Spaces	40	20	0	10	10
TOTAL TRIPS			3,087	88	176	203	130

Table 1 – Typical Weekday Trip Generation

Trip assignments were distributed using the percentages found in *Figure 7* and shown as AM and PM Peak Hour ingress and egress site generated trips in *Figure 8*.

BUILD-OUT TRAFFIC

Build-out traffic is defined as the total traffic volume that will be present on the surrounding roadway network at the time of project completion and full occupancy. This time is assumed to be 2020. Build-out traffic was calculated by adding the background traffic and site traffic. *Figure 9* shows the anticipated build-out AM & PM Peak Hour traffic.

METHOD OF ANALYSIS

The studied intersections were analyzed using Synchro. Synchro is a specialized software package that allow the user to model and simulate intersections and roadway networks to determine levels of service (LOS), based on the thresholds specified in the Highway Capacity Manual (HCM) published by the Transportation Research Board. Synchro also provides analysis of capacity, vehicle delay, volume to capacity ratio (v/c), queue lengths, traffic signal timing, and vehicle flow rate.

The HCM defines capacity as “the maximum hourly rate at which persons or vehicles can reasonably be expected to traverse a point during a given time period under prevailing roadway, traffic, and control conditions”. LOS is a term used to represent different driving conditions, primarily with respect to traffic congestion. It is defined as a “qualitative measure describing operational and perceptual conditions within a traffic stream”. LOS “A” represents free flow traffic conditions with no congestion. LOS “F” represents severely impacted traffic flow due to vehicle congestion. LOS is generally determined by the total “Control Delay” experienced by drivers. Control delay is vehicle delay that is ultimately caused by the traffic control device. This includes deceleration delay, queue move-up time delay, stopped delay, and acceleration delay.

(Table 2)

HIGHWAY CAPACITY MANUAL
LEVEL OF SERVICE AND DELAY

UN-SIGNALIZED INTERSECTION		SIGNALIZED INTERSECTION	
LEVEL OF SERVICE	AVERAGE CONTROL DELAY PER VEHICLE (Seconds)	LEVEL OF SERVICE	AVERAGE CONTROL DELAY PER VEHICLE (Seconds)
A	0-10	A	0-10
B	10-15	B	10-20
C	15-25	C	20-35
D	25-35	D	35-55
E	35-50	E	55-80
F	> 50	F	> 80

<Table 2>

The analysis for un-signalized intersections can project very high delays on the side street, thus it is recommended to use LOS measurements as a comparative tool rather than a design tool. The 95th Queue is defined to be the vehicle queue (back-up) that has only a 5% probability of being exceeded during the analysis period. At un-signalized intersections, p0 is the probability of a queue free state.

ANALYSIS OF EXISTING CONDITIONS

The analysis for existing conditions was based on methodology presented in NCDOT’s *Congestion Management Capacity Analysis Guidelines*. In order to estimate the existing LOS, delay, v/c ratio, and queue at the study intersections, the existing traffic volumes from the AM & PM peak hours were analyzed using existing lane configurations and traffic control conditions. (Tables 3 – 10) Since existing turning movement count data was collected, the existing peak hour factor (PHF) was utilized for analyzing existing conditions. Existing signal timing information was determined from the existing signal plan of record for the intersections of Brickyard Road @ US 64 and McKinney Road @ US 64.

In accordance with NCDOT’s *Congestion Management Capacity Analysis Guidelines*, zero volume movements were increased to four (4) vehicles per hour to prevent Synchro from incorrectly calculating one or more movements as being prohibited. The capacity analysis (Synchro) for the existing conditions are found in *Appendix C* and the signal plans of record are found in *Appendix D*. The estimated delay was field verified and found to generally coincide with the Synchro calculations.

N. GREENWOOD FOREST DRIVE @ BRICKYARD ROAD
 ANALYSIS OF EXISTING AM/PM PEAK HOUR TRAFFIC CONDITIONS

APPROACH	AM PEAK HOUR			PM PEAK HOUR		
	Queue Free Percent (%)	LOS and Delay (sec)	V/C Ratio	Queue Free Percent (%)	LOS and Delay (sec)	V/C Ratio
Eastbound	100	A 0.0	0.08	100	A 0.0	0.06
Westbound	97	A 4.7	0.03	93	A 5.0	0.07
Northbound	87	A 9.8	0.17	90	B 10.9	0.14

<Table 3>

HOLLY SPRINGS ROAD @ BRICKYARD ROAD
 ANALYSIS OF EXISTING AM/PM PEAK HOUR TRAFFIC CONDITIONS

APPROACH	AM PEAK HOUR			PM PEAK HOUR		
	Queue Free Percent (%)	LOS and Delay (sec)	V/C Ratio	Queue Free Percent (%)	LOS and Delay (sec)	V/C Ratio
Eastbound	91	A 5.2	0.09	98	A 2.8	0.02
Westbound	100	A 0.0	0.07	100	A 0.0	0.09
Southbound	86	B 12.0	0.17	86	B 10.8	0.25

<Table 4>

MCKINNEY ROAD @ BRICKYARD ROAD
 ANALYSIS OF EXISTING AM/PM PEAK HOUR TRAFFIC CONDITIONS

APPROACH	AM PEAK HOUR			PM PEAK HOUR		
	Queue Free Percent (%)	LOS and Delay (sec)	V/C Ratio	Queue Free Percent (%)	LOS and Delay (sec)	V/C Ratio
Eastbound	87	A 9.1	0.15	87	A 9.4	0.16
Westbound	98	B 11.3	0.03	97	B 13.0	0.05
Northbound	95	A 7.0	0.05	90	A 6.8	0.10

<Table 5>

PISGAH VIEW DRIVE (NORTH) @ MCKINNEY ROAD
 ANALYSIS OF EXISTING AM/PM PEAK HOUR TRAFFIC CONDITIONS

APPROACH	AM PEAK HOUR			PM PEAK HOUR		
	Queue Free Percent (%)	LOS and Delay (sec)	V/C Ratio	Queue Free Percent (%)	LOS and Delay (sec)	V/C Ratio
Eastbound	100	A 0.0	0.01	100	A 0.0	0.01
Westbound	100	A 1.8	0.01	100	A 2.4	0.01
Northbound	99	A 8.6	0.01	98	A 8.7	0.02

<Table 6>

**PISGAH VIEW DRIVE (SOUTH) @ MCKINNEY ROAD
ANALYSIS OF EXISTING AM/PM PEAK HOUR TRAFFIC CONDITIONS**

APPROACH	AM PEAK HOUR			PM PEAK HOUR		
	Queue Free Percent (%)	LOS and Delay (sec)	V/C Ratio	Queue Free Percent (%)	LOS and Delay (sec)	V/C Ratio
Eastbound	100	A 1.5	0.01	99	A 3.3	0.01
Westbound	100	A 0.0	0.01	100	A 0.0	0.01
Southbound	99	A 8.6	0.01	99	A 8.6	0.02

<Table 7>

**MCKINNEY ROAD / OLD HIGHWAY 64 @ US 64
ANALYSIS OF EXISTING AM/PM PEAK HOUR TRAFFIC CONDITIONS**

APPROACH	AM PEAK HOUR			PM PEAK HOUR		
	95th Queue Length (ft)	LOS and Delay (sec)	V/C Ratio	95th Queue Length (ft)	LOS and Delay (sec)	V/C Ratio
Eastbound Left	1	A 6.0	0.01	5	A 5.1	0.03
EB Thru/Right	123	A 8.7	0.47	138	A 8.3	0.51
Westbound Left	8	A 5.8	0.04	12	A 5.6	0.11
WB Thru/Right	83	A 7.2	0.33	133	A 8.0	0.50
Northbound	18	B 10.0	0.40	4	B 10.8	0.30
Southbound	9	A 9.2	0.11	14	B 11.5	0.12

<Table 8>

BRICKYARD ROAD @ US 64
ANALYSIS OF EXISTING AM/PM PEAK HOUR TRAFFIC CONDITIONS

APPROACH	AM PEAK HOUR			PM PEAK HOUR		
	95th Queue Length (ft)	LOS and Delay (sec)	V/C Ratio	95th Queue Length (ft)	LOS and Delay (sec)	V/C Ratio
Eastbound Left	7	A 5.1	0.05	7	A 3.6	0.08
Eastbound Thru	99	A 7.8	0.38	108	A 5.2	0.34
WB Thru/Right	188	B 14.1	0.54	288	B 13.0	0.58
Southbound	81	B 19.1	0.48	100	C 33.0	0.61

<Table 9>

N. GREENWOOD FOREST DRIVE @ US 64
ANALYSIS OF EXISTING AM/PM PEAK HOUR TRAFFIC CONDITIONS

APPROACH	AM PEAK HOUR			PM PEAK HOUR		
	Queue Free Percent (%)	LOS and Delay (sec)	V/C Ratio	Queue Free Percent (%)	LOS and Delay (sec)	V/C Ratio
Eastbound Left	91	A 8.2	0.09	96	A 8.2	0.04
Eastbound Thru	100	A 0.0	0.18	100	A 0.0	0.20
Westbound Thru	100	A 0.0	0.17	100	A 0.0	0.19
Westbound Right	100	A 0.0	0.02	100	A 0.0	0.04
Southbound	89	B 12.4	0.19	83	B 11.9	0.23

<Table 10>

ANALYSIS OF BACKGROUND TRAFFIC CONDITIONS

The analysis for background conditions was based on methodology presented in NCDOT’s *Congestion Management Capacity Analysis Guidelines*. In order to estimate the background LOS, delay, v/c ratio, and queue at the study intersections, the background traffic volumes were analyzed using existing lane configurations. (Tables 11 – 18) A PHF of 0.90 was utilized for all background conditions. Signal timing information was determined from the existing signal plan of record for the intersections of Brickyard Road @ US 64 and McKinney Road @ US 64.

In accordance with NCDOT’s *Congestion Management Capacity Analysis Guidelines*, zero volume movements were increased to four (4) vehicles per hour to prevent Synchro from incorrectly calculating one or more movements as being prohibited. The capacity analysis (Synchro Reports) for the background conditions can be found in *Appendix C*.

**N. GREENWOOD FOREST DRIVE @ BRICKYARD ROAD
ANALYSIS OF BACKGROUND AM/PM PEAK HOUR TRAFFIC CONDITIONS**

APPROACH	AM PEAK HOUR			PM PEAK HOUR		
	Queue Free Percent (%)	LOS and Delay (sec)	V/C Ratio	Queue Free Percent (%)	LOS and Delay (sec)	V/C Ratio
Eastbound	100	A 0.0	0.07	100	A 0.0	0.05
Westbound	98	A 4.9	0.02	94	A 4.6	0.06
Northbound	88	A 9.5	0.14	91	B 10.5	0.12

<Table 11>

**HOLLY SPRINGS ROAD @ BRICKYARD ROAD
ANALYSIS OF BACKGROUND AM/PM PEAK HOUR TRAFFIC CONDITIONS**

APPROACH	AM PEAK HOUR			PM PEAK HOUR		
	Queue Free Percent (%)	LOS and Delay (sec)	V/C Ratio	Queue Free Percent (%)	LOS and Delay (sec)	V/C Ratio
Eastbound	93	A 4.7	0.07	98	A 3.1	0.02
Westbound	100	A 0.0	0.06	100	A 0.0	0.09
Southbound	90	B 10.9	0.13	86	B 10.6	0.22

<Table 12>

MCKINNEY ROAD @ BRICKYARD ROAD
ANALYSIS OF BACKGROUND AM/PM PEAK HOUR TRAFFIC CONDITIONS

APPROACH	AM PEAK HOUR			PM PEAK HOUR		
	Queue Free Percent (%)	LOS and Delay (sec)	V/C Ratio	Queue Free Percent (%)	LOS and Delay (sec)	V/C Ratio
Eastbound	86	A 9.0	0.15	86	A 9.2	0.16
Westbound	99	B 11.0	0.02	98	B 12.8	0.04
Northbound	95	A 7.0	0.05	91	A 7.2	0.09

<Table 13>

PISGAH VIEW DRIVE (NORTH) @ MCKINNEY ROAD
ANALYSIS OF BACKGROUND AM/PM PEAK HOUR TRAFFIC CONDITIONS

APPROACH	AM PEAK HOUR			PM PEAK HOUR		
	Queue Free Percent (%)	LOS and Delay (sec)	V/C Ratio	Queue Free Percent (%)	LOS and Delay (sec)	V/C Ratio
Eastbound	100	A 0.0	0.01	100	A 0.0	0.01
Westbound	100	A 2.9	0.01	100	A 2.9	0.01
Northbound	100	A 8.5	0.01	99	A 8.6	0.02

<Table 14>

PISGAH VIEW DRIVE (SOUTH) @ MCKINNEY ROAD
ANALYSIS OF BACKGROUND AM/PM PEAK HOUR TRAFFIC CONDITIONS

APPROACH	AM PEAK HOUR			PM PEAK HOUR		
	Queue Free Percent (%)	LOS and Delay (sec)	V/C Ratio	Queue Free Percent (%)	LOS and Delay (sec)	V/C Ratio
Eastbound	100	A 0.6	0.01	99	A 3.5	0.01
Westbound	100	A 0.0	0.01	100	A 0.0	0.01
Southbound	99	A 8.4	0.01	99	A 8.4	0.01

<Table 15>

MCKINNEY ROAD / OLD HIGHWAY 64 @ US 64
ANALYSIS OF BACKGROUND AM/PM PEAK HOUR TRAFFIC CONDITIONS

APPROACH	AM PEAK HOUR			PM PEAK HOUR		
	95th Queue Length (ft)	LOS and Delay (sec)	V/C Ratio	95th Queue Length (ft)	LOS and Delay (sec)	V/C Ratio
Eastbound Left	2	A 6.0	0.01	5	A 4.7	0.02
EB Thru/Right	142	A 9.0	0.49	146	A 6.6	0.46
Westbound Left	9	A 5.7	0.04	13	A 4.8	0.07
WB Thru/Right	89	A 7.1	0.34	136	A 6.2	0.44
Northbound	48	B 10.3	0.39	35	B 11.8	0.25
Southbound	15	A 9.9	0.07	19	B 12.6	0.10

<Table 16>

BRICKYARD ROAD @ US 64
ANALYSIS OF BACKGROUND AM/PM PEAK HOUR TRAFFIC CONDITIONS

APPROACH	AM PEAK HOUR			PM PEAK HOUR		
	95th Queue Length (ft)	LOS and Delay (sec)	V/C Ratio	95th Queue Length (ft)	LOS and Delay (sec)	V/C Ratio
Eastbound Left	7	A 4.4	0.03	9	A 4.0	0.05
Eastbound Thru	91	A 7.3	0.39	122	A 7.0	0.43
WB Thru/Right	178	B 10.6	0.50	299	B 11.7	0.63
Southbound	93	B 17.2	0.42	116	C 22.7	0.46

<Table 17>

N. GREENWOOD FOREST DRIVE @ US 64
ANALYSIS OF BACKGROUND AM/PM PEAK HOUR TRAFFIC CONDITIONS

APPROACH	AM PEAK HOUR			PM PEAK HOUR		
	Queue Free Percent (%)	LOS and Delay (sec)	V/C Ratio	Queue Free Percent (%)	LOS and Delay (sec)	V/C Ratio
Eastbound Left	92	A 8.1	0.08	96	A 8.3	0.04
Eastbound Thru	100	A 0.0	0.19	100	A 0.0	0.22
Westbound Thru	100	A 0.0	0.17	100	A 0.0	0.21
Westbound Right	100	A 0.0	0.01	100	A 0.0	0.04
Southbound	92	B 12.0	0.13	85	B 12.0	0.20

<Table 18>

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ANALYSIS OF BUILD-OUT TRAFFIC CONDITIONS

The analysis for build-out conditions was based on methodology presented in NCDOT’s *Congestion Management Capacity Analysis Guidelines*. In order to estimate the build-out LOS, delay, v/c ratio, and queue at the study intersections, the build-out traffic volumes from the AM & PM peak hours were analyzed using existing lane configurations and traffic control conditions. (Tables 19 – 27) A PHF of 0.90 was utilized for all build-out conditions. Signal timing information was determined from the existing signal plan of record for the intersections of Brickyard Road @ US 64 and McKinney Road @ US 64.

In accordance with NCDOT’s *Congestion Management Capacity Analysis Guidelines*, zero volume movements were increased to four (4) vehicles per hour to prevent Synchro from incorrectly calculating one or more movements as being prohibited. The capacity analysis (Synchro Reports) for the build-out conditions can be found in *Appendix C*.

**N. GREENWOOD FOREST DRIVE @ BRICKYARD ROAD
ANALYSIS OF BUILD-OUT AM/PM PEAK HOUR TRAFFIC CONDITIONS**

APPROACH	AM PEAK HOUR			PM PEAK HOUR		
	Queue Free Percent (%)	LOS and Delay (sec)	V/C Ratio	Queue Free Percent (%)	LOS and Delay (sec)	V/C Ratio
Eastbound	100	A 0.0	0.07	100	A 0.0	0.07
Westbound	98	A 3.4	0.02	94	A 4.3	0.06
Northbound	88	A 9.6	0.15	91	B 10.8	0.13

<Table 19>

**HOLLY SPRINGS ROAD @ BRICKYARD ROAD
ANALYSIS OF BUILD-OUT AM/PM PEAK HOUR TRAFFIC CONDITIONS**

APPROACH	AM PEAK HOUR			PM PEAK HOUR		
	Queue Free Percent (%)	LOS and Delay (sec)	V/C Ratio	Queue Free Percent (%)	LOS and Delay (sec)	V/C Ratio
Eastbound	93	A 4.6	0.07	98	A 2.5	0.02
Westbound	100	A 0.0	0.10	100	A 0.0	0.12
Southbound	84	B 12.1	0.19	75	B 12.2	0.34

<Table 20>

MCKINNEY ROAD @ BRICKYARD ROAD
ANALYSIS OF BUILD-OUT AM/PM PEAK HOUR TRAFFIC CONDITIONS

APPROACH	AM PEAK HOUR			PM PEAK HOUR		
	Queue Free Percent (%)	LOS and Delay (sec)	V/C Ratio	Queue Free Percent (%)	LOS and Delay (sec)	V/C Ratio
Eastbound	86	A 9.8	0.21	80	B 12.3	0.34
Westbound	87	B 13.4	0.26	84	C 17.6	0.30
Northbound	95	A 5.8	0.05	91	A 5.5	0.09

<Table 21>

PISGAH VIEW DRIVE (NORTH) @ MCKINNEY ROAD
ANALYSIS OF BUILD-OUT AM/PM PEAK HOUR TRAFFIC CONDITIONS

APPROACH	AM PEAK HOUR			PM PEAK HOUR		
	Queue Free Percent (%)	LOS and Delay (sec)	V/C Ratio	Queue Free Percent (%)	LOS and Delay (sec)	V/C Ratio
Eastbound	100	A 0.0	0.04	100	A 0.0	0.03
Westbound	100	A 3.0	0.01	100	A 2.9	0.01
Northbound	96	A 8.9	0.04	91	A 9.1	0.10

<Table 22>

PISGAH VIEW DRIVE (SOUTH) @ MCKINNEY ROAD
ANALYSIS OF BUILD-OUT AM/PM PEAK HOUR TRAFFIC CONDITIONS

APPROACH	AM PEAK HOUR			PM PEAK HOUR		
	Queue Free Percent (%)	LOS and Delay (sec)	V/C Ratio	Queue Free Percent (%)	LOS and Delay (sec)	V/C Ratio
Eastbound	98	A 5.6	0.02	94	A 6.6	0.06
Westbound	100	A 0.0	0.01	100	A 0.0	0.01
Southbound	94	A 8.6	0.06	95	A 8.6	0.05

<Table 23>

MCKINNEY ROAD / OLD HIGHWAY 64 @ US 64
ANALYSIS OF BUILD-OUT AM/PM PEAK HOUR TRAFFIC CONDITIONS

APPROACH	AM PEAK HOUR			PM PEAK HOUR		
	95th Queue Length (ft)	LOS and Delay (sec)	V/C Ratio	95th Queue Length (ft)	LOS and Delay (sec)	V/C Ratio
Eastbound Left	2	A 5.4	0.01	8	A 4.8	0.04
EB Thru/Right	146	A 8.9	0.51	150	A 6.6	0.46
Westbound Left	8	A 5.4	0.04	13	A 4.7	0.08
WB Thru/Right	95	A 7.0	0.37	162	A 6.6	0.49
Northbound	62	B 13.4	0.44	44	B 13.5	0.28
Southbound	40	B 12.4	0.24	41	B 14.8	0.24

<Table 24>

BRICKYARD ROAD @ US 64
ANALYSIS OF BUILD-OUT AM/PM PEAK HOUR TRAFFIC CONDITIONS

APPROACH	AM PEAK HOUR			PM PEAK HOUR		
	95th Queue Length (ft)	LOS and Delay (sec)	V/C Ratio	95th Queue Length (ft)	LOS and Delay (sec)	V/C Ratio
Eastbound Left	14	A 5.1	0.07	23	A 4.8	0.16
Eastbound Thru	109	A 7.8	0.40	144	A 7.0	0.42
WB Thru/Right	204	B 14.0	0.56	344	B 17.3	0.71
Southbound	125	C 20.3	0.53	151	C 28.7	0.57

<Table 25>

**N. GREENWOOD FOREST DRIVE @ US 64
ANALYSIS OF BUILD-OUT AM/PM PEAK HOUR TRAFFIC CONDITIONS**

APPROACH	AM PEAK HOUR			PM PEAK HOUR		
	Queue Free Percent (%)	LOS and Delay (sec)	V/C Ratio	Queue Free Percent (%)	LOS and Delay (sec)	V/C Ratio
Eastbound Left	92	A 8.3	0.08	96	A 8.4	0.04
Eastbound Thru	100	A 0.0	0.21	100	A 0.0	0.25
Westbound Thru	100	A 0.0	0.20	100	A 0.0	0.23
Westbound Right	100	A 0.0	0.01	100	A 0.0	0.04
Southbound	91	B 12.4	0.14	85	B 12.5	0.21

<Table 26>

**SITE ACCESS "A" @ MCKINNEY ROAD
ANALYSIS OF BUILD-OUT AM/PM PEAK HOUR TRAFFIC CONDITIONS**

APPROACH	AM PEAK HOUR			PM PEAK HOUR		
	Queue Free Percent (%)	LOS and Delay (sec)	V/C Ratio	Queue Free Percent (%)	LOS and Delay (sec)	V/C Ratio
Eastbound	96	A 6.4	0.04	90	A 7.2	0.10
Westbound	100	A 0.0	0.02	100	A 0.0	0.06
Southbound	87	A 9.7	0.20	90	B 10.3	0.18

<Table 27>

CONCLUSIONS AND RECOMMENDATIONS

The mitigation recommendations at each of the studied intersections were based on NCDOT's *Policy on Street and Driveway Access to North Carolina Highways* (Driveway Manual) methodology and mitigation threshold requirements, and engineering judgement.

According to NCDOT, mitigation improvements are required to the studied roadway network if at least one of the following conditions exists when comparing base network conditions to project build-out conditions:

- Average intersection or approach delay increases by 25% or greater while maintaining same LOS,
- LOS degrades by at least one level
- LOS is F

NCDOT has requested that turn lane warrant analyses be conducted at each of the appropriate un-signalized studied intersections. The NCDOT "*Warrant for Left and Right-Turn Lanes*" chart was utilized to determine potential turn lane storage length requirements. For the purposes of this report and to assist with overall mitigation, turn lane installation will be recommended when turn lane warrants are met for 75-feet of storage or greater.

Additionally, the Driveway Manual states that all site access points to a development should have a minimum internal protected stem length of 100 feet before any crossing / left-turning conflicts are allowed.

N. Greenwood Forest Drive @ Brickyard Road:

Based on HCM and NCDOT guidance, “LOS for un-signalized intersections is not defined as a whole and should only be reported for individual stop-controlled or yield movements.” As a result, the free-flow movements / approaches were not utilized when comparing background conditions to build-out conditions. As can be seen in Table 28, the difference in LOS, delay, v/c ratio, and queue between background traffic and the anticipated trips generated by the project is minimally increased for the northbound approach during the AM and PM peak hours.

**N. GREENWOOD FOREST DRIVE @ BRICKYARD ROAD
COMPARISON OF BACKGROUND VS BUILD-OUT PEAK HOUR TRAFFIC CONDITIONS**

Approach	Peak Hour	Background			Build-out			Delay Increase %
		LOS	Delay	V/C	LOS	Delay	V/C	
Eastbound (Brickyard)	AM	A	0.0	0.07	A	0.0	0.07	0%
	PM	A	0.0	0.05	A	0.0	0.07	0%
Westbound (Brickyard)	AM	A	4.9	0.02	A	3.4	0.02	-31%
	PM	A	4.6	0.06	A	4.3	0.06	-7%
Northbound (Greenwood Forest)	AM	A	9.5	0.14	A	9.6	0.15	1%
	PM	B	10.5	0.12	B	10.8	0.13	3%

<Table 28>

It should be noted that the westbound approach experiences a decrease in delay when comparing background conditions to build-out conditions. This is a result of the Synchro calculations taking a weighted average of the westbound approach volumes. Since only through movements are being added to the free flow westbound approach, the Synchro calculations result in a lower average approach delay.

None of the approaches are beyond the NCDOT thresholds for delay increase percentage or LOS degradation. Since each approach maintains adequate LOS operation for an un-signalized intersection during a peak hour, no changes are recommended at this intersection to accommodate traffic generated by the site under build-out conditions based solely on capacity analysis.

From a capacity analysis standpoint, LOS A & LOS B are acceptable operation for an un-signalized intersection during a peak hour. However, as a secondary analysis, left and right turn lane warrants were studied for the eastbound and westbound approaches at this intersection. Table 29 below shows the results of the turn lane warrant analysis for this intersection.

N. GREENWOOD FOREST DRIVE @ BRICKYARD ROAD
 TURN LANE WARRANT ANALYSIS

Approach	Peak Hour	Left Turns (Vehicles)	Opposing Lefts (Vehicles)	Right Turns (Vehicles)	Opposing Rights (Vehicles)	Required Storage Length per NCDOT Chart
Eastbound	AM	-	-	39	100	50'
	PM	-	-	36	100	50'
Westbound	AM	26	111	-	-	50'
	PM	79	104	-	-	75'

<Table 29>

The results of the turn lane warrant analysis indicate that build-out volumes warrant a 50-foot eastbound right turn lane and a 75-foot westbound left turn lane. It is recommended to install a 75-foot westbound left turn lane at this intersection to accommodate traffic generated by the proposed site. The NCDOT “*Warrant for Left and Right-Turn Lanes*” chart can be found in *Appendix E*.



Holly Springs Road @ Brickyard Road:

Based on HCM and NCDOT guidance, “LOS for un-signalized intersections is not defined as a whole and should only be reported for individual stop-controlled or yield movements.” As a result, the free-flow movements / approaches were not utilized when comparing background conditions to build-out conditions. As can be seen in Table 30, the difference in LOS, delay, v/c ratio, and queue between background traffic and the anticipated trips generated by the project is minimally increased for the southbound approach during the AM and PM peak hours.

HOLLY SPRINGS ROAD @ BRICKYARD ROAD
COMPARISON OF BACKGROUND VS BUILD-OUT PEAK HOUR TRAFFIC CONDITIONS

Approach	Peak Hour	Background			Build-out			Delay Increase %
		LOS	Delay	V/C	LOS	Delay	V/C	
Eastbound (Brickyard)	AM	A	4.7	0.07	A	4.6	0.07	-2%
	PM	A	3.1	0.02	A	2.5	0.02	-20%
Westbound (Brickyard)	AM	A	0.0	0.06	A	0.0	0.10	0%
	PM	A	0.0	0.09	A	0.0	0.12	0%
Southbound (Holly Springs)	AM	B	10.9	0.13	B	12.1	0.19	11%
	PM	B	10.6	0.22	B	12.2	0.34	15%

<Table 30>

It should be noted that the eastbound approach experiences a decrease in delay when comparing background conditions to build-out conditions. This is a result of the Synchro calculations taking a weighted average of the eastbound approach volumes. Since through movements are being added to the free flow eastbound approach, the Synchro calculations result in a lower average approach delay.

None of the approaches are beyond the NCDOT thresholds for delay increase percentage or LOS degradation. Since each approach maintains adequate LOS operation for an un-signalized intersection during a peak hour, no changes are recommended at this intersection to accommodate traffic generated by the site under build-out conditions based solely on capacity analysis.

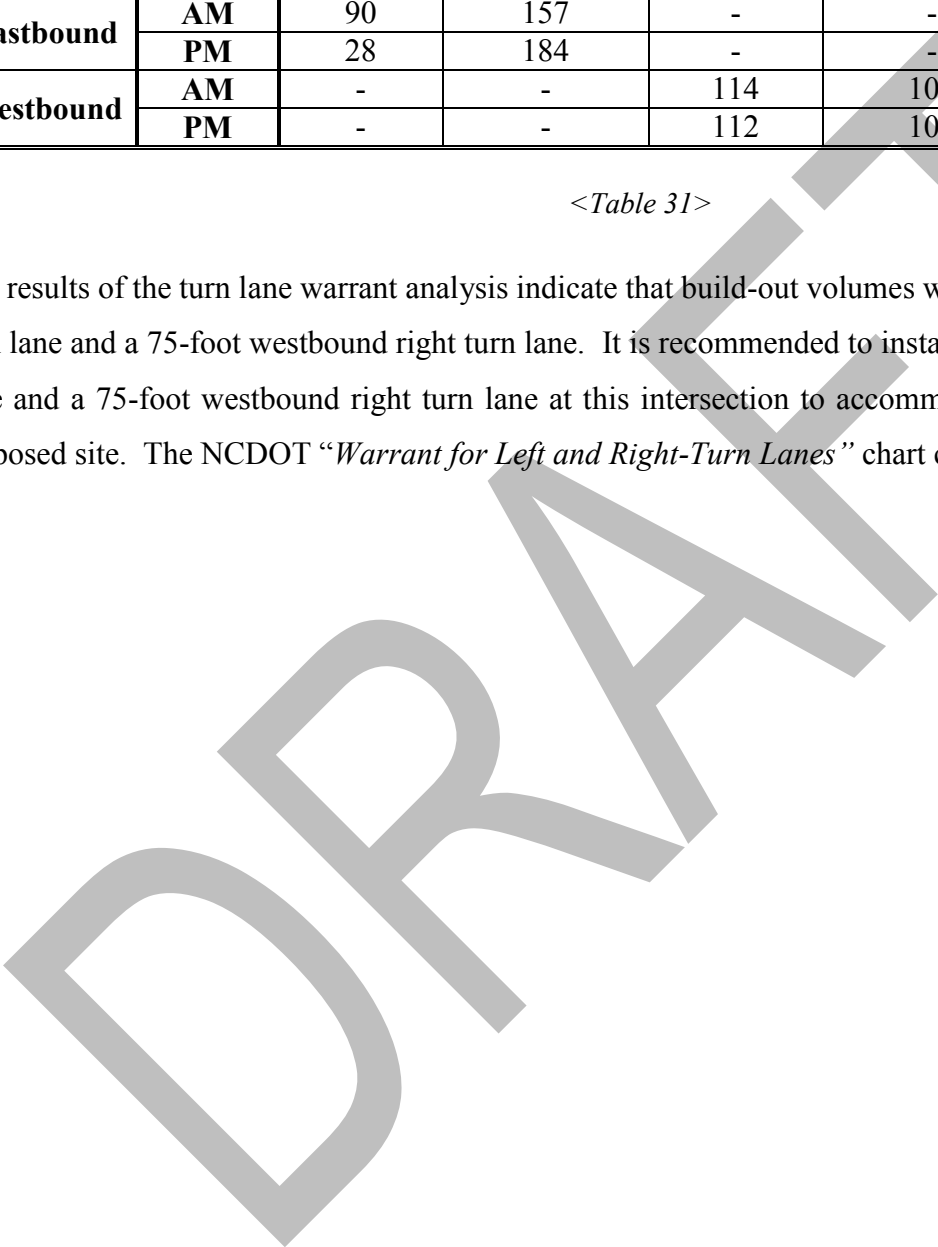
From a capacity analysis standpoint, LOS A & LOS B are acceptable operation for an un-signalized intersection during a peak hour. However, as a secondary analysis, left and right turn lane warrants were studied for the eastbound and westbound approaches at this intersection. Table 31 below shows the results of the turn lane warrant analysis for this intersection.

HOLLY SPRINGS ROAD @ BRICKYARD ROAD
 TURN LANE WARRANT ANALYSIS

Approach	Peak Hour	Left Turns (Vehicles)	Opposing Lefts (Vehicles)	Right Turns (Vehicles)	Opposing Rights (Vehicles)	Required Storage Length per NCDOT Chart
Eastbound	AM	90	157	-	-	75'
	PM	28	184	-	-	50'
Westbound	AM	-	-	114	100	75'
	PM	-	-	112	100	75'

<Table 31>

The results of the turn lane warrant analysis indicate that build-out volumes warrant a 75-foot eastbound left turn lane and a 75-foot westbound right turn lane. It is recommended to install a 75-foot eastbound left turn lane and a 75-foot westbound right turn lane at this intersection to accommodate traffic generated by the proposed site. The NCDOT “Warrant for Left and Right-Turn Lanes” chart can be found in Appendix E.



McKinney Road @ Brickyard Road:

Based on HCM and NCDOT guidance, “LOS for un-signalized intersections is not defined as a whole and should only be reported for individual stop-controlled or yield movements.” As a result, the free-flow movements / approaches were not utilized when comparing background conditions to build-out conditions. As can be seen in Table 32, the difference in LOS, delay, v/c ratio, and queue between background traffic and the anticipated trips generated by the project is increased for the eastbound and westbound approaches during the PM peak hours.

McKINNEY ROAD @ BRICKYARD ROAD
COMPARISON OF BACKGROUND VS BUILD-OUT PEAK HOUR TRAFFIC CONDITIONS

Approach	Peak Hour	Background			Build-out			Delay Increase %
		LOS	Delay	V/C	LOS	Delay	V/C	
Eastbound (Brickyard)	AM	A	9.0	0.15	A	9.8	0.21	9%
	PM	A	9.2	0.16	B	12.3	0.34	34%
Westbound (McKinney)	AM	B	11.0	0.02	B	13.4	0.26	22%
	PM	B	12.8	0.04	C	17.6	0.30	45%
Northbound (Brickyard)	AM	A	7.0	0.05	A	5.8	0.05	-17%
	PM	A	7.2	0.09	A	5.5	0.09	-24%

<Table 32>

The eastbound approach experiences LOS degradation under PM peak hour conditions when comparing background traffic to build-out traffic. During the PM peak hour, the westbound approach goes from a LOS A (9.2 seconds under background conditions) to LOS B (12.3 seconds under build-out conditions) – representing a 3.1 second increase in delay. Additionally, the delay increase percentage is beyond NCDOT thresholds – 34%.

The westbound approach experiences LOS degradation under PM peak hour conditions when comparing background traffic to build-out traffic. During the PM peak hour, the westbound approach goes from a LOS B (12.8 seconds under background conditions) to LOS C (17.6 seconds under build-out conditions) – representing a 4.8 second increase in delay. Additionally, the delay increase percentage is beyond NCDOT thresholds – 45%.

It should be noted that the northbound approach experiences a decrease in delay when comparing background conditions to build-out conditions. This is a result of the Synchro calculations taking a weighted average of the northbound approach volumes. Since through movements are being added to the free flow northbound

approach, the Synchro calculations result in a lower average approach delay.

Even though the eastbound and westbound approaches are beyond the NCDOT thresholds for delay increase percentage and LOS degradation, LOS A, LOS B, & LOS C are acceptable operation for an un-signalized intersection during a peak hour and typically do not warrant mitigation to accommodate site traffic. Since each approach maintains adequate LOS operation for an un-signalized intersection during a peak hour, no changes are recommended at this intersection to accommodate traffic generated by the site under build-out conditions based solely on capacity analysis.

However, as a secondary analysis, left and right turn lane warrants were studied for the eastbound and westbound approaches at this intersection. *Table 33* below shows the results of the turn lane warrant analysis for this intersection.

**BRICKYARD ROAD @ MCKINNEY ROAD
TURN LANE WARRANT ANALYSIS**

Approach	Peak Hour	Left Turns (Vehicles)	Opposing Lefts (Vehicles)	Right Turns (Vehicles)	Opposing Rights (Vehicles)	Required Storage Length per NCDOT Chart
Eastbound	AM	-	-	134	100	100'
	PM	-	-	137	100	100'
Westbound	AM	57	175	-	-	50'
	PM	45	229	-	-	50'

<Table 33>

The results of the turn lane warrant analysis indicate that build-out volumes warrant a 100-foot eastbound right turn lane. It is recommended to install a 100-foot eastbound right turn lane at this intersection to accommodate traffic generated by the proposed site. The NCDOT “*Warrant for Left and Right-Turn Lanes*” chart can be found in *Appendix E*.

NCDOT has requested a historical crash analysis at this intersection. The crash analysis will be forthcoming as a separate TIA Addendum.

Pisgah View Drive (North) @ McKinney Road:

Based on HCM and NCDOT guidance, “LOS for un-signalized intersections is not defined as a whole and should only be reported for individual stop-controlled or yield movements.” As a result, the free-flow movements / approaches were not utilized when comparing background conditions to build-out conditions. As can be seen in *Table 34*, the difference in LOS, delay, v/c ratio, and queue between background traffic and the anticipated trips generated by the project is minimally increased during the AM and PM peak hours.

**PISGAH VIEW DRIVE (NORTH) @ MCKINNEY ROAD
COMPARISON OF BACKGROUND VS BUILD-OUT PEAK HOUR TRAFFIC CONDITIONS**

Approach	Peak Hour	Background			Build-out			Delay Increase %
		LOS	Delay	V/C	LOS	Delay	V/C	
Eastbound (McKinney)	AM	A	0.0	0.01	A	0.0	0.04	0%
	PM	A	0.0	0.01	A	0.0	0.03	0%
Westbound (McKinney)	AM	A	2.9	0.01	A	3.0	0.01	3%
	PM	A	2.9	0.01	A	2.9	0.01	0%
Northbound (Pisgah View)	AM	A	8.5	0.01	A	8.9	0.04	5%
	PM	A	8.6	0.02	A	9.1	0.10	6%

<Table 34>

None of the approaches are beyond the NCDOT thresholds for delay increase percentage or LOS degradation. Since each approach maintains adequate LOS operation for an un-signalized intersection during a peak hour, no changes are recommended at this intersection to accommodate traffic generated by the site under build-out conditions based solely on capacity analysis.

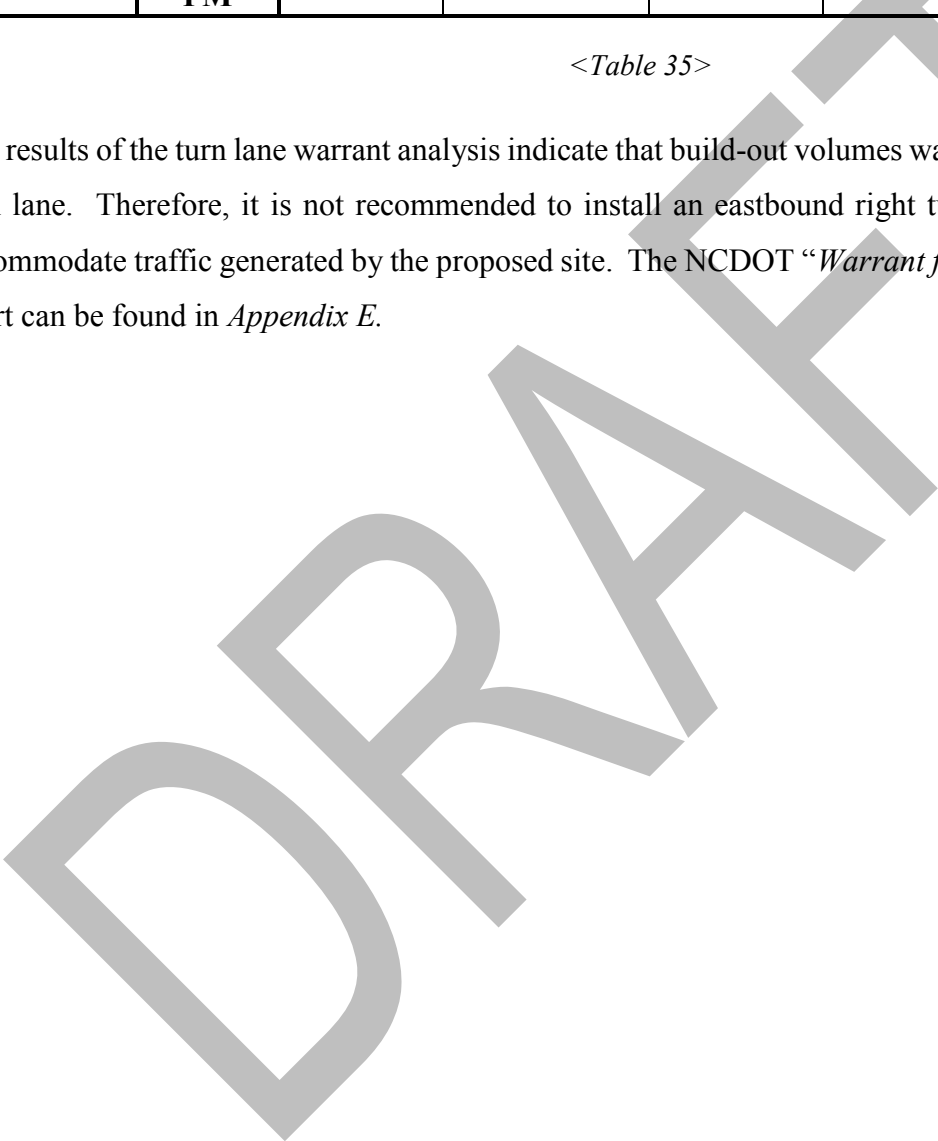
However, as a secondary analysis, right turn lane warrants were studied for the eastbound approach at this intersection. A left turn lane warrant was not evaluated since there are no westbound left turning vehicles under build-out conditions. *Table 35* below shows the results of the turn lane warrant analysis.

**PISGAH VIEW DRIVE (NORTH) @ MCKINNEY ROAD
TURN LANE WARRANT ANALYSIS**

Approach	Peak Hour	Left Turns (Vehicles)	Opposing Lefts (Vehicles)	Right Turns (Vehicles)	Opposing Rights (Vehicles)	Required Storage Length per NCDOT Chart
Eastbound	AM	-	-	60	100	50'
	PM	-	-	44	100	50'
Westbound	AM	-	-	-	-	-
	PM	-	-	-	-	-

<Table 35>

The results of the turn lane warrant analysis indicate that build-out volumes warrant a 50-foot eastbound right turn lane. Therefore, it is not recommended to install an eastbound right turn lane at this intersection to accommodate traffic generated by the proposed site. The NCDOT “*Warrant for Left and Right-Turn Lanes*” chart can be found in *Appendix E*.



Pisgah View Drive (South) @ McKinney Road:

Based on HCM and NCDOT guidance, “LOS for un-signalized intersections is not defined as a whole and should only be reported for individual stop-controlled or yield movements.” As a result, the free-flow movements / approaches were not utilized when comparing background conditions to build-out conditions. As can be seen in Table 36, the difference in LOS, delay, v/c ratio, and queue between background traffic and the anticipated trips generated by the project is minimally increased during the AM and PM peak hours.

**PISGAH VIEW DRIVE (SOUTH) @ MCKINNEY ROAD
COMPARISON OF BACKGROUND VS BUILD-OUT PEAK HOUR TRAFFIC CONDITIONS**

Approach	Peak Hour	Background			Build-out			Delay Increase %
		LOS	Delay	V/C	LOS	Delay	V/C	
Eastbound (McKinney)	AM	A	0.6	0.01	A	5.6	0.02	833%
	PM	A	3.5	0.01	A	6.6	0.06	89%
Westbound (McKinney)	AM	A	0.0	0.01	A	0.0	0.01	0%
	PM	A	0.0	0.01	A	0.0	0.01	0%
Southbound (Pisgah View)	AM	A	8.4	0.01	A	8.6	0.06	2%
	PM	A	8.4	0.01	A	8.6	0.05	2%

<Table 36>

Please note, the westbound approach experiences significant delay increase percentage but maintains a LOS A under build-out conditions. The significant percent increase is a result of the calculation when comparing background conditions to build-out conditions and should not be of concern when determining appropriate mitigation.

Since each approach maintains adequate LOS operation for an un-signalized intersection during a peak hour, no changes are recommended at this intersection to accommodate traffic generated by the site under build-out conditions based solely on capacity analysis.

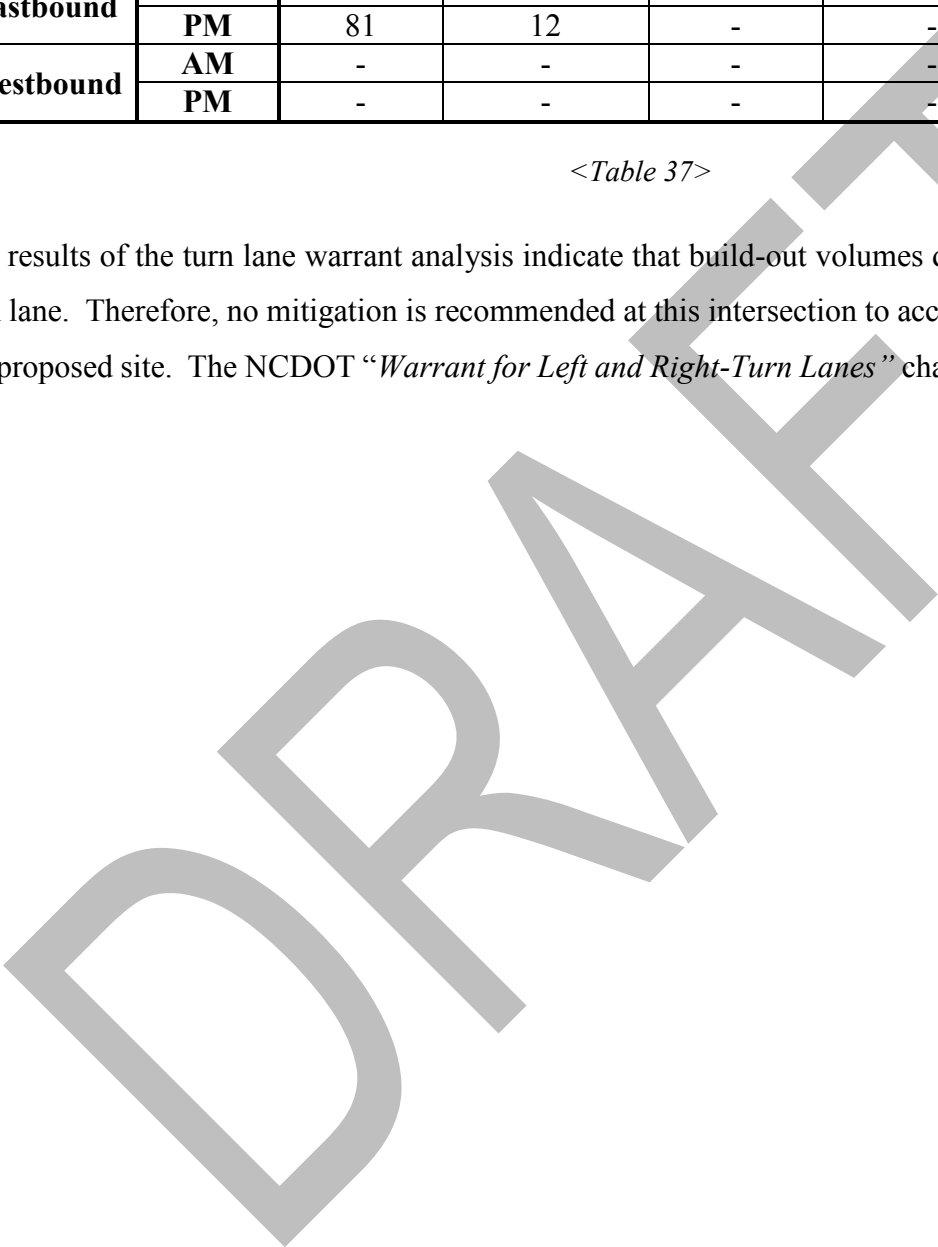
However, as a secondary analysis, left turn lane warrants were studied for the eastbound approach at this intersection. A right turn lane warrant was not evaluated since there are no westbound right turning vehicles under build-out conditions. Table 37 below shows the results of the turn lane warrant analysis.

**PISGAH VIEW DRIVE (SOUTH) @ MCKINNEY ROAD
TURN LANE WARRANT ANALYSIS**

Approach	Peak Hour	Left Turns (Vehicles)	Opposing Lefts (Vehicles)	Right Turns (Vehicles)	Opposing Rights (Vehicles)	Required Storage Length per NCDOT Chart
Eastbound	AM	32	12	-	-	0'
	PM	81	12	-	-	0'
Westbound	AM	-	-	-	-	-
	PM	-	-	-	-	-

<Table 37>

The results of the turn lane warrant analysis indicate that build-out volumes do not warrant a eastbound left turn lane. Therefore, no mitigation is recommended at this intersection to accommodate traffic generated by the proposed site. The NCDOT “*Warrant for Left and Right-Turn Lanes*” chart can be found in *Appendix E*.



McKinney Road @ US 64 (Brevard Road):

As can be seen in *Table 38*, the difference in LOS, delay, v/c ratio, and queue between background traffic and the anticipated trips generated by the project is minimally increased for all approaches during the AM and PM peak hours except for the eastbound approach during the AM and PM peak hour.

**MCKINNEY ROAD @ US 64 (BREVARD ROAD)
COMPARISON OF BACKGROUND VS BUILD-OUT PEAK HOUR TRAFFIC CONDITIONS**

Approach	Peak Hour	Background			Build-out			Delay Increase %
		LOS	Delay	V/C	LOS	Delay	V/C	
Eastbound (US 64)	AM	A	9.0	0.49	A	8.9	0.51	-1%
	PM	A	6.6	0.46	A	6.5	0.46	-2%
Westbound (US 64)	AM	A	7.1	0.34	A	7.0	0.37	-1%
	PM	A	6.1	0.44	A	6.5	0.49	7%
Northbound (Old Hwy 64)	AM	B	10.3	0.39	B	13.4	0.44	30%
	PM	B	11.8	0.25	B	13.5	0.28	14%
Southbound (McKinney)	AM	A	9.9	0.07	B	12.4	0.24	25%
	PM	B	12.6	0.10	B	14.8	0.24	17%

<Table 38>

The eastbound approach experiences a slightly improved delay under build-out conditions due to this intersection operating as an actuated signal and more green-time being allocated to the eastbound approach to accommodate proposed site traffic.

The northbound approach experiences a delay increase percentage beyond NCDOT thresholds during the AM peak hour when comparing background traffic to build-out traffic. The 30% increase in delay corresponds to a 3.1 second increase. This increase in delay is not anticipated to negatively affect intersection operation for the northbound approach during the AM peak hour – especially at a signalized intersection.

The southbound approach experiences LOS degradation under AM peak hour conditions when comparing background traffic to build-out traffic. During the AM peak hour, the westbound approach goes from a LOS A (9.9 seconds under background conditions) to LOS B (12.4 seconds under build-out conditions) – representing a 2.5 second increase in delay. Additionally, the delay increase percentage is beyond NCDOT thresholds – 25%.

Even though the northbound and southbound approaches are beyond the NCDOT thresholds for delay increase percentage and LOS degradation, LOS A & LOS B are acceptable operation for a signalized

intersection during a peak hour and typically do not warrant mitigation to accommodate site traffic. Since each approach maintains adequate LOS operation for a signalized intersection during a peak hour, no changes are recommended at this intersection to accommodate traffic generated by the site under build-out conditions.

Brickyard Road @ US 64 (Brevard Road):

As can be seen in Table 39, the difference in LOS, delay, v/c ratio, and queue between background traffic and the anticipated trips generated by the project is minimally increased for all approaches during the AM and PM peak hours except for the eastbound approach during the PM peak hour.

BRICKYARD ROAD @ US 64 (BREVARD ROAD)
COMPARISON OF BACKGROUND VS BUILD-OUT PEAK HOUR TRAFFIC CONDITIONS

Approach	Peak Hour	Background			Build-out			Delay Increase %
		LOS	Delay	V/C	LOS	Delay	V/C	
Eastbound (US 64)	AM	A	7.2	0.39	A	7.5	0.40	4%
	PM	A	6.8	0.43	A	6.7	0.42	-1%
Westbound (US 64)	AM	B	10.6	0.50	B	14.0	0.56	32%
	PM	B	11.7	0.63	B	17.3	0.71	48%
Southbound (Brickyard)	AM	B	17.2	0.42	C	20.3	0.53	18%
	PM	C	22.7	0.46	C	28.7	0.57	26%

<Table 39>

The eastbound approach experiences a slightly improved delay during the PM peak hour under build-out conditions due to this intersection operating as an actuated signal and more green-time being allocated to the eastbound approach to accommodate proposed site traffic.

The westbound approach experiences a delay increase percentage beyond NCDOT thresholds during the AM and PM peak hours when comparing background traffic to build-out traffic. The 32% increase in delay in the AM peak hour corresponds to a 3.4 second increase in delay and the 48% increase in delay during the PM peak hour corresponds to a 5.6 second increase in delay. This increase in delay is not anticipated to negatively affect intersection operation for the northbound approach during the AM and PM peak hours – especially at a signalized intersection.

The southbound approach experiences LOS degradation under AM peak hour conditions when comparing background traffic to build-out traffic. During the AM peak hour, the westbound approach goes from a LOS B (17.2 seconds under background conditions) to LOS C (20.3 seconds under build-out conditions) –

representing a 3.1 second increase in delay. Additionally, the delay increase percentage for the PM peak hour is beyond NCDOT thresholds – 26%.

Even though the westbound and southbound approaches are beyond the NCDOT thresholds for delay increase percentage and LOS degradation, LOS A, LOS B, & LOS C are acceptable operation for a signalized intersection during a peak hour and typically do not warrant mitigation to accommodate site traffic. Since each approach maintains adequate LOS operation for a signalized intersection during a peak hour, no changes are recommended at this intersection to accommodate traffic generated by the site under build-out conditions.

N. Greenwood Forest Drive @ US 64 (Brevard Road):

Based on HCM and NCDOT guidance, “LOS for un-signalized intersections is not defined as a whole and should only be reported for individual stop-controlled or yield movements.” As a result, the free-flow movements / approaches were not utilized when comparing background conditions to build-out conditions. As can be seen in Table 40, the difference in LOS, delay, v/c ratio, and queue between background traffic and the anticipated trips generated by the project is minimally increased for all approaches during the AM and PM peak hours except for the eastbound approach during the AM and PM peak hour.

N. GREENWOOD FOREST DRIVE @ US 64 (BREVARD ROAD)
COMPARISON OF BACKGROUND VS BUILD-OUT PEAK HOUR TRAFFIC CONDITIONS

Approach	Peak Hour	Background			Build-out			Delay Increase %
		LOS	Delay	V/C	LOS	Delay	V/C	
Eastbound (US 64)	AM	A	1.9	0.19	A	1.8	0.21	-5%
	PM	A	0.9	0.22	A	0.8	0.25	-11%
Westbound (US 64)	AM	A	0.0	0.17	A	0.0	0.20	0%
	PM	A	0.0	0.21	A	0.0	0.23	0%
Southbound (Greenwood Forest)	AM	B	12.0	0.13	B	12.4	0.14	3%
	PM	B	12.0	0.20	B	12.5	0.21	4%

<Table 40>

It should be noted that the eastbound approach experiences a decrease in delay when comparing background conditions to build-out conditions. This is a result of the Synchro calculations taking a weighted average of the eastbound approach volumes. Since through movements are being added to the free flow eastbound approach, the Synchro calculations result in a lower average approach delay.

None of the approaches are beyond the NCDOT thresholds for delay increase percentage or LOS degradation. Since each approach maintains adequate LOS operation for an un-signalized intersection during a peak hour, no changes are recommended at this intersection to accommodate traffic generated by the site under build-out conditions.

Turn lane warrants were not evaluated at this intersection since the eastbound and westbound approaches already contain left and right turn lanes. No additional mitigation is recommended at this intersection to accommodate traffic generated by the site.

Site Access “A” @ McKinney Road:

As can be seen in *Table 41*, the resulting LOS, delay, v/c ratio, and queue are within acceptable levels for Site Access “A” @ McKinney Road. The southbound approach (proposed site access) is anticipated to operate at a LOS A during the AM and a LOS B during the PM peak hour.

SITE ACCESS “A” @ MCKINNEY ROAD
ANALYSIS OF BUILD-OUT AM/PM PEAK HOUR TRAFFIC CONDITIONS

APPROACH	AM PEAK HOUR			PM PEAK HOUR		
	Queue Free Percent (%)	LOS and Delay (sec)	V/C Ratio	Queue Free Percent (%)	LOS and Delay (sec)	V/C Ratio
Eastbound	96	A 6.4	0.04	90	A 7.2	0.10
Westbound	100	A 0.0	0.02	100	A 0.0	0.06
Southbound	87	A 9.7	0.20	90	B 10.3	0.18

<Table 41>

Since each approach maintains adequate LOS operation for an un-signalized intersection during a peak hour, no changes are recommended at this intersection to accommodate traffic generated by the site under build-out conditions based solely on capacity analysis.

However, as a secondary analysis, left and right turn lane warrants were studied for the eastbound and westbound approaches at this intersection. *Table 42* below shows the results of the turn lane warrant analysis for this intersection.

SITE ACCESS “A” @ MCKINNEY ROAD
TURN LANE WARRANT ANALYSIS

Approach	Peak Hour	Left Turns (Vehicles)	Opposing Lefts (Vehicles)	Right Turns (Vehicles)	Opposing Rights (Vehicles)	Required Storage Length per NCDOT Chart
Eastbound	AM	57	38	-	-	50'
	PM	132	87	-	-	100'
Westbound	AM	-	-	31	100	50'
	PM	-	-	71	100	75'

<Table 42>

The results of the turn lane warrant analysis indicate that build-out volumes warrant a 100-foot eastbound left turn lane and a 75-foot westbound right turn lane. It is recommended to install a 100-foot eastbound left turn lane and a 75-foot westbound right turn lane at this intersection to accommodate traffic generated by the proposed site. The NCDOT “Warrant for Left and Right-Turn Lanes” chart can be found in Appendix E.

Based on a review of the proposed site plan, the main Site Access “A” @ McKinney Road exceeds NCDOT’s internal protected stem length requirement of 100 feet.

Service Site Access @ McKinney Road / Emergency Access @ Ewbank Road:

Capacity analysis was not performed at either of these site access locations due to the intended functionality of each access under build-out conditions. The emergency site access will be gated accesses and service access will be designated as employees only so no residential traffic will utilize either access under normal daily traffic operations. Each of these access points exceed NCDOT’s internal protected stem length requirement of 100 feet. No mitigation is recommended at either the emergency access or service access to accommodate traffic generated by the site. The addition of site generated traffic is not anticipated to degrade general roadway or driver safety at either intersection.

Overall:

The proposed Farm at Eagles Nest residential development will adequately accommodate anticipated site generated traffic during the weekday AM and PM peak hours when the following mitigation measures take place:

- N. Greenwood Forest Drive @ Brickyard Road
 - Install 75' westbound left turn lane
- Holly Springs Road @ Brickyard Road
 - Install 75' eastbound left turn lane
 - Install 75' westbound right turn lane
- Brickyard Road @ McKinney
 - Install 100' eastbound right turn lane
 - Maintain existing Stop control configuration
- Main Site Access "A" @ McKinney Road
 - Install 100' eastbound left turn lane
 - Install 75' westbound right turn lane

When the above mitigation takes place, the anticipated site traffic from the proposed development will be adequately accommodated under build-out conditions. *Figure 10* below shows the proposed lane configurations for build-out conditions.

Appendix A

PROPOSED SITE PLAN

PROJECT INFORMATION
 JOHN THOMAS HAMMONS,
 LAND PLANNING COLLABORATIVE
 200 NW PARKWAY BLVD.
 ORLANDO, FL 32804
 CONTACT: JOHN THORON
 EMAIL: jthoron@landplanningcollab.com

APPLICANT:
 JOHN THORON COMPANIES
 17 ARLINGTON STREET, SUITE 1
 HANNA BEACH, FL 32119
 PHONE: (407) 672-0702
 EMAIL: jthoron@johnthoron.com

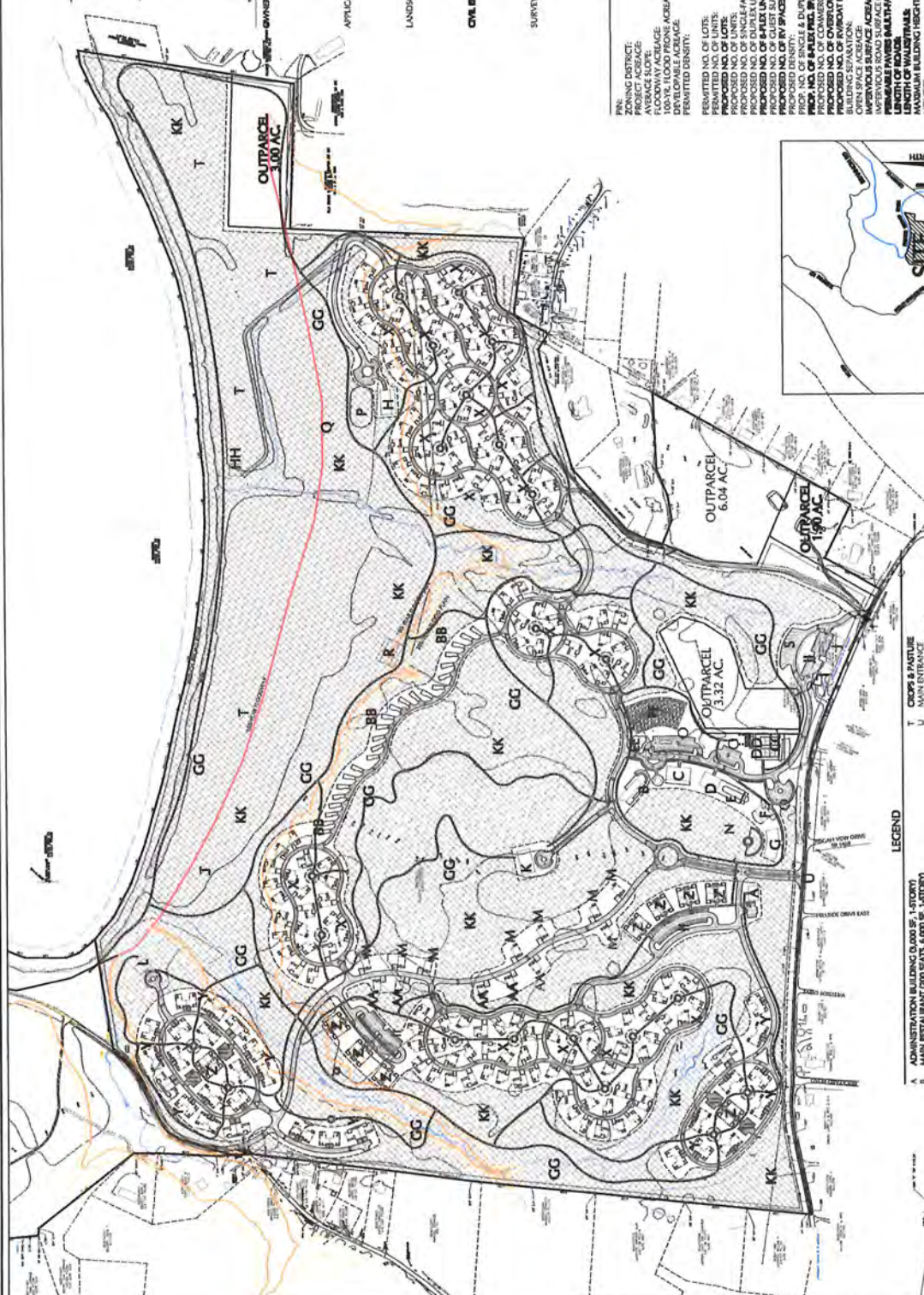
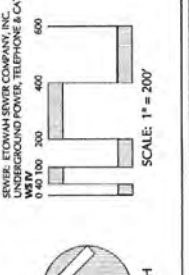
LANDSCAPE ARCHITECT:
 LAND PLANNING COLLABORATIVE
 ASHEVILLE, NC 28801
 17 ARLINGTON STREET, SUITE B
 EMAIL: jthoron@landplanningcollab.com

CIVIL ENGINEER:
 BOODE ENGINEERING ASSOCIATES
 17 ARLINGTON STREET
 ASHEVILLE, NC 28801
 PHONE: (828) 252-5770
 EMAIL: info@boode.com

SURVEYOR:
 CONTRACT: JAC ROBIN, P.E.
 50 NORTH HERSCHEM AVENUE, SUITE 109
 ASHEVILLE, NC 28804
 EMAIL: bob@jacrobin.com
 PHONE: (828) 252-3330
 CONTACT: JOHN YOUNG, P.L.S.

PER: HENSON DISTRICT
 PROJECT ACREAGE: 212.23 AC.
 AVERAGE SLOPE: 12.55%
 100-YR FLOOD PROBN ACREAGE: 35.07 AC.
 100-YR FLOOD PROBN ACREAGE: 144.64 AC. (OUTPARCELS EXCLUDED)
 PERMITTED DENSITY: 144.64 AC. (OUTPARCELS EXCLUDED)
 MULTIFAMILY: 14 UNITS/AC.
 928 LOTS
 3.715 MULTIFAMILY UNITS
 166 SINGLE-FAMILY UNITS
 299 UNITS
 72 BALD LOTS
 1 SUITE
 133 UNITS/AC. (OUTPARCELS EXCLUDED)
 334 SPACES (2 SPACES/LN)
 90 SPACES (1.18 SPACES/LN)
 89 SPACES
 10 SPACES
 14.52 AC. (61.0%) (OUTPARCELS EXCLUDED)
 33.07 AC. (15.1%) (OUTPARCELS EXCLUDED)
 14.46 AC. (6.8%) (OUTPARCELS EXCLUDED)
 36.61 AC. (17.2%)
 45,894 SF
 WATER: HENDERSONVILLE
 SEWER: EDOWAN SEWER COMPANY, INC.
 TELEPHONE & CABLE: HENSONVILLE
 WATER SUPPLY WATERBEDS: 0.40 100 300 400 500 600

PERMITTED NO. OF LOTS: 928 LOTS
 PERMITTED NO. OF UNITS: 3.715 MULTIFAMILY UNITS, 166 SINGLE-FAMILY UNITS, 299 UNITS
 PROPOSED NO. OF SINGLE-FAMILY UNITS: 166
 PROPOSED NO. OF MULTIFAMILY UNITS: 3.715
 PROPOSED NO. OF CHEST SUITES: 166
 PROPOSED NO. OF BALD LOTS: 72
 PROPOSED NO. OF RV SPACES: 1
 PROPOSED NO. OF DUPLEX PKG. SPACES: 334
 PROPOSED NO. OF OVERFLOW PKG. SPACES: 89
 PROPOSED NO. OF OVERFLOW PKG. SPACES: 10
 IMPROVED SURFACE ACREAGE: 14.52 AC. (61.0%) (OUTPARCELS EXCLUDED)
 IMPROVED ROAD SURFACE ACREAGE: 33.07 AC. (15.1%) (OUTPARCELS EXCLUDED)
 LENGTH OF WALDRIP TRAIL: 14.46 AC. (6.8%) (OUTPARCELS EXCLUDED)
 LENGTH OF ROAD: 36.61 AC. (17.2%)
 UTILITY: BUILDING FOOTPRINT
 WATER SUPPLY WATERBEDS: 0.40 100 300 400 500 600



NOTE: THE EXIST AND LOCATIONS OF UTILITIES ARE APPROXIMATE UNLESS NOTED. BUT SHALL COMPLY WITH ALL APPLICABLE REGULATIONS.

- LEGEND
- A ADMINISTRATION BUILDING (2,000 SF, 1-STORY)
 - B MAIN RESTAURANT (200 SEATS, 6,000 SF, 1-STORY)
 - C WALKING CORRIDOR (1,000 SF, 1-STORY)
 - D POOL
 - E ART GALLERY (2,000 SF, 1-STORY)
 - F EQUINE STABLES (10,000 SF, 2-STORY)
 - G ART STUDIO BUILDING (2,000 SF, 1-STORY)
 - H STORAGE BUILDING (4,000 SF, 1-STORY)
 - I EQUINE STABLES WITH RESTAURANT & GUEST SUITE (50 SEATS, 10,000 SF, 2-STORY)
 - J ART STUDIO
 - K EVENT BUILDING WITH RESTAURANT (100 SEATS, 4,000 SF, 2-STORY)
 - L PAVILION WITH RESTAURANT (100 SEATS, 3,000 SF, 1-STORY)
 - M ART STUDIO AREA
 - N COMMERCIAL PARKING LOTS
 - O RIDING RING
 - P HORSEMAN RESTAURATION FIELDS
 - Q DAIRY BARN
 - R RV & BOAT STORAGE
 - S
 - T CROPS & PASTURE
 - U MAIN ENTRANCE
 - V SINGLE-FAMILY UNIT WITH GARAGE
 - W SERVICE ENTRANCE
 - X BALD LOT
 - Y SINGLE-FAMILY UNIT WITH ART STUDIO
 - Z RV SPACES
 - AA BOODE, SHUFFLEBOARD & HORSESHOES
 - AB CHILDREN'S PLAYGROUND
 - AC HANGING ROCK RESTAURANT TRAILS
 - AD HANGING ROCK RESTAURANT TRAILS
 - AE RIVER OVERLOOKING RESOURCES
 - AF EMPLOYEE PARKING
 - AG OPEN PASTURE

SCALE: 1" = 200'

Appendix B

TURNING MOVEMENT COUNTS

DRAFT

J.M. Teague Engineering & Planning

525 N. Main Street, Waynesville, NC 28786

828-456-8383

File Name : N Greenwood Forest Dr @ Brickyard Rd - Existing AM

Site Code : P-0699

Start Date : 9/14/2017

Page No : 1

Groups Printed- Cars - Heavy Vehicles - Bikes, Peds

Start Time	N Greenwood Forest Dr Southbound					Brickyard Rd Westbound					N Greenwood Forest Dr Northbound					Brickyard Rd Eastbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
Factor	1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		
07:00 AM	0	0	0	0	0	4	1	0	0	5	4	0	31	0	35	0	13	10	0	23	63
07:15 AM	0	0	0	0	0	11	4	0	0	15	2	0	28	0	30	0	16	10	0	26	71
07:30 AM	0	0	0	0	0	7	2	0	0	9	6	0	28	1	35	0	21	12	0	33	77
07:45 AM	0	0	0	0	0	4	7	0	0	11	7	0	11	0	18	0	12	7	0	19	48
Total	0	0	0	0	0	26	14	0	0	40	19	0	98	1	118	0	62	39	0	101	259
08:00 AM	0	0	0	0	0	8	6	0	0	14	6	0	13	0	19	0	17	3	0	20	53
08:15 AM	0	0	0	0	0	6	2	0	0	8	3	0	17	0	20	0	6	6	0	12	40
08:30 AM	0	0	0	0	0	8	4	0	0	12	5	0	9	0	14	0	10	11	0	21	47
08:45 AM	0	0	0	0	0	6	2	0	0	8	6	0	10	0	16	0	12	7	1	20	44
Total	0	0	0	0	0	28	14	0	0	42	20	0	49	0	69	0	45	27	1	73	184
Grand Total	0	0	0	0	0	54	28	0	0	82	39	0	147	1	187	0	107	66	1	174	443
Apprch %	0	0	0	0	0	65.9	34.1	0	0		20.9	0	78.6	0.5		0	61.5	37.9	0.6		
Total %	0	0	0	0	0	12.2	6.3	0	0	18.5	8.8	0	33.2	0.2	42.2	0	24.2	14.9	0.2	39.3	
Cars	0	0	0	0	0	52	27	0	0	79	37	0	143	0	180	0	104	65	0	169	428
% Cars	0	0	0	0	0	96.3	96.4	0	0	96.3	94.9	0	97.3	0	96.3	0	97.2	98.5	0	97.1	96.6
Heavy Vehicles	0	0	0	0	0	2	1	0	0	3	2	0	4	0	6	0	3	1	0	4	13
% Heavy Vehicles	0	0	0	0	0	3.7	3.6	0	0	3.7	5.1	0	2.7	0	3.2	0	2.8	1.5	0	2.3	2.9
Bikes, Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	1	1	2
% Bikes, Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	100	0.5	0	0	0	100	0.6	0.5

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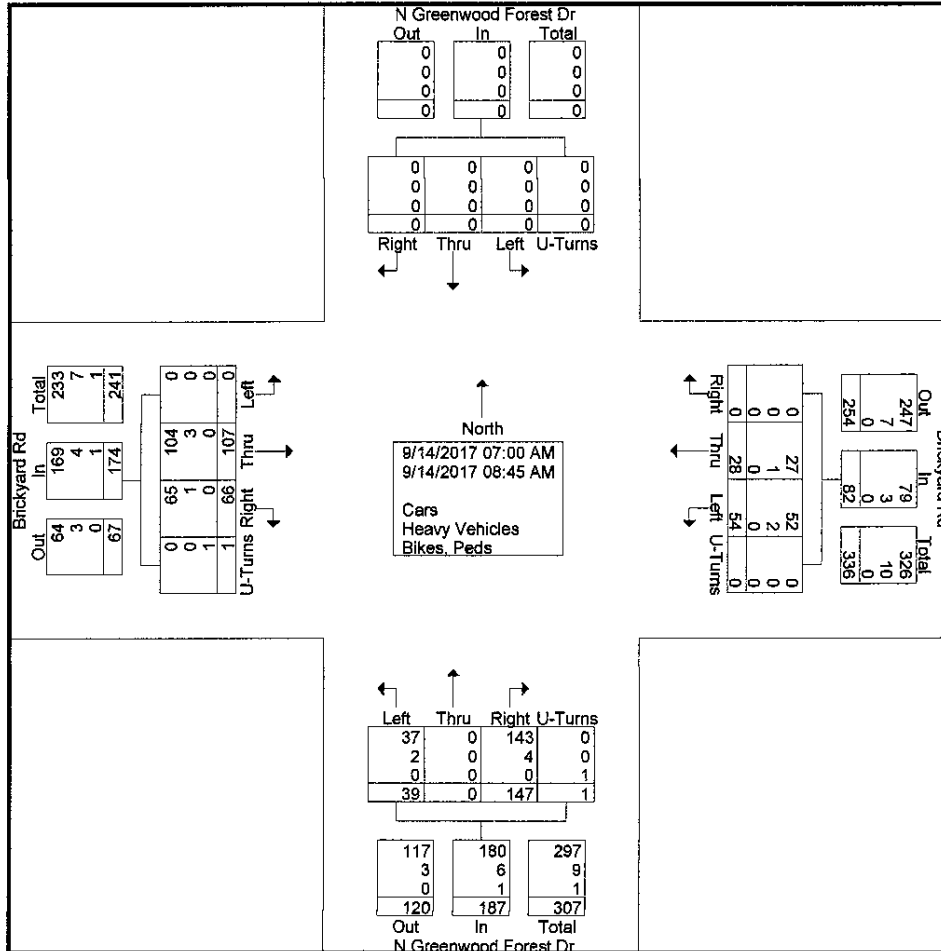
828-456-8383

File Name : N Greenwood Forest Dr @ Brickyard Rd - Existing AM

Site Code : P-0699

Start Date : 9/14/2017

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828-456-8383

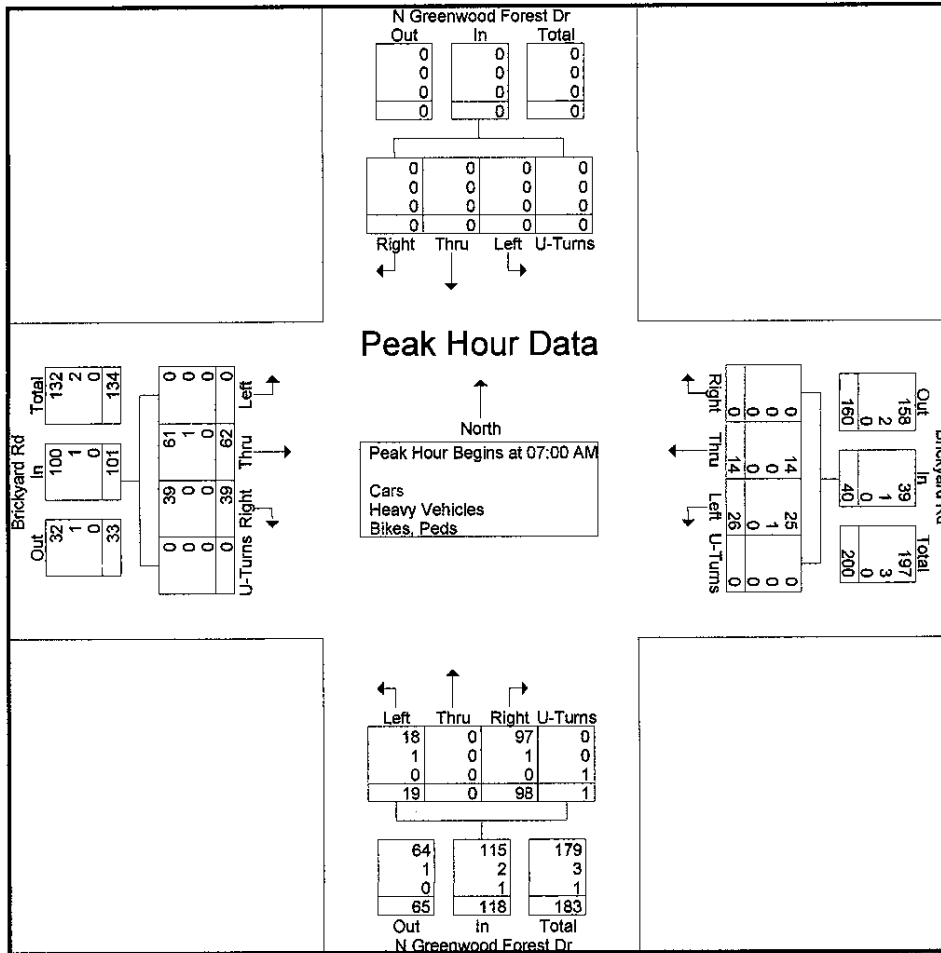
File Name : N Greenwood Forest Dr @ Brickyard Rd - Existing AM

Site Code : P-0699

Start Date : 9/14/2017

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Start Time	N Greenwood Forest Dr Southbound					Brickyard Rd Westbound					N Greenwood Forest Dr Northbound					Brickyard Rd Eastbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
Peak Hour Analysis From 7:00:00 AM to 8:45:00 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 7:00:00 AM																					
7:00:00 AM	0	0	0	0	0	4	1	0	0	5	4	0	31	0	35	0	13	10	0	23	63
7:15:00 AM	0	0	0	0	0	11	4	0	0	15	2	0	28	0	30	0	16	10	0	26	71
7:30:00 AM	0	0	0	0	0	7	2	0	0	9	6	0	28	1	35	0	21	12	0	33	77
7:45:00 AM	0	0	0	0	0	4	7	0	0	11	7	0	11	0	18	0	12	7	0	19	48
Total Volume	0	0	0	0	0	26	14	0	0	40	19	0	98	1	118	0	62	39	0	101	259
% App. Total	0	0	0	0	0	65	35	0	0	66.7	16.1	0	83.1	0.8	84.3	0	61.4	38.6	0	76.5	84.1
PHF	.000	.000	.000	.000	.000	.591	.500	.000	.000	.667	.679	.000	.790	.250	.843	.000	.738	.813	.000	.765	.841
Cars	0	0	0	0	0	25	14	0	0	39	18	0	97	0	115	0	61	39	0	100	254
% Cars	0	0	0	0	0	96.2	100	0	0	97.5	94.7	0	99.0	0	97.5	0	98.4	100	0	99.0	98.1
Heavy Vehicles	0	0	0	0	0	1	0	0	0	1	1	0	1	0	2	0	1	0	0	1	4
% Heavy Vehicles	0	0	0	0	0	3.8	0	0	0	2.5	5.3	0	1.0	0	1.7	0	1.6	0	0	1.0	1.5
Bikes, Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	1
% Bikes, Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	100	0.8	0	0	0	0	0	0.4



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525 N. Main Street, Waynesville, NC 28786

828-456-8383

File Name : N Greenwood Forest Dr @ Brickyard Rd - Existing PM

Site Code : P-0699

Start Date : 9/14/2017

Page No : 1

Groups Printed- Cars - Heavy Vehicles - Bikes, Peds

Start Time	N Greenwood Forest Dr Southbound					Brickyard Rd Westbound					N Greenwood Forest Dr Northbound					Brickyard Rd Eastbound					int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
Factor	1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		
04:00 PM	0	0	0	0	0	14	5	0	0	19	13	0	12	0	25	0	18	5	0	23	67
04:15 PM	0	0	0	0	0	19	14	0	0	33	15	0	13	0	28	0	13	4	0	17	78
04:30 PM	0	0	0	0	0	10	14	0	0	24	9	0	11	0	20	0	8	4	0	12	56
04:45 PM	0	0	0	0	0	20	14	0	0	34	15	0	7	0	22	0	11	8	0	19	75
Total	0	0	0	0	0	63	47	0	0	110	52	0	43	0	95	0	50	21	0	71	276
05:00 PM	0	0	0	0	0	16	15	0	0	31	14	0	10	0	24	0	7	10	0	17	72
05:15 PM	0	0	0	0	0	16	11	0	0	27	8	0	8	0	16	0	14	9	0	23	66
05:30 PM	0	0	0	0	0	26	15	0	0	41	13	0	8	0	21	0	16	9	0	25	87
05:45 PM	0	0	0	0	0	24	13	0	0	37	15	0	9	0	24	0	5	9	0	14	75
Total	0	0	0	0	0	82	54	0	0	136	50	0	35	0	85	0	42	37	0	79	300
Grand Total	0	0	0	0	0	145	101	0	0	246	102	0	78	0	180	0	92	58	0	150	576
Apprch %	0	0	0	0	0	58.9	41.1	0	0		56.7	0	43.3	0		0	61.3	38.7	0		
Total %	0	0	0	0	0	25.2	17.5	0	0	42.7	17.7	0	13.5	0	31.2	0	16	10.1	0	26	
Cars	0	0	0	0	0	141	99	0	0	240	101	0	77	0	178	0	90	57	0	147	565
% Cars	0	0	0	0	0	97.2	98	0	0	97.6	99	0	98.7	0	98.9	0	97.8	98.3	0	98	98.1
Heavy Vehicles	0	0	0	0	0	3	2	0	0	5	1	0	0	0	1	0	2	1	0	3	9
% Heavy Vehicles	0	0	0	0	0	2.1	2	0	0	2	1	0	0	0	0.6	0	2.2	1.7	0	2	1.6
Bikes, Peds	0	0	0	0	0	1	0	0	0	1	0	0	1	0	1	0	0	0	0	0	2
% Bikes, Peds	0	0	0	0	0	0.7	0	0	0	0.4	0	0	1.3	0	0.6	0	0	0	0	0	0.3

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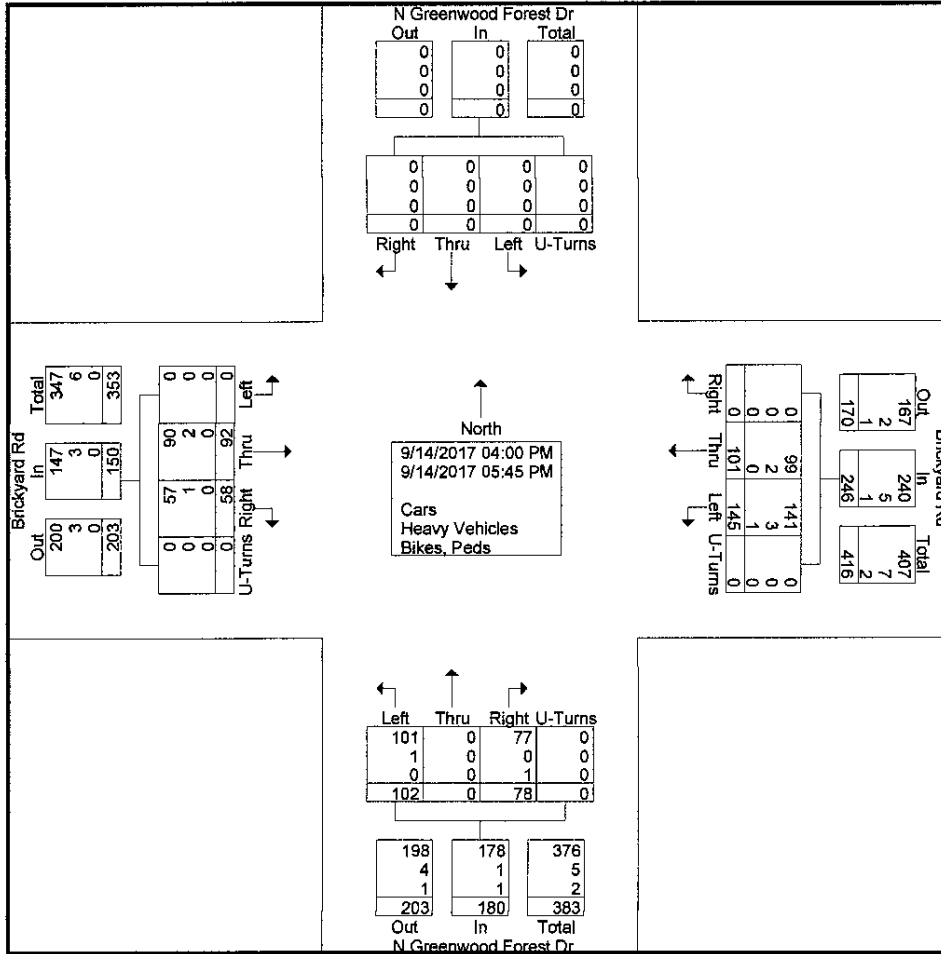
828-456-8383

File Name : N Greenwood Forest Dr @ Brickyard Rd - Existing PM

Site Code : P-0699

Start Date : 9/14/2017

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525 N. Main Street, Waynesville, NC 28786

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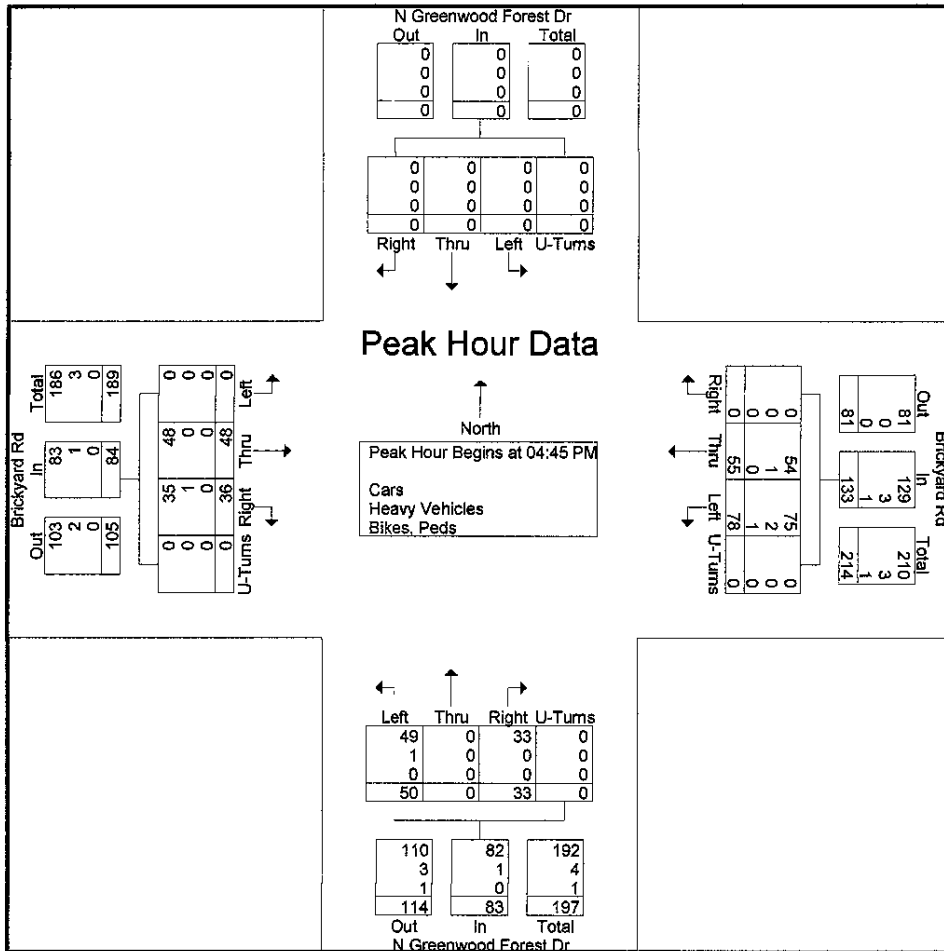
File Name : N Greenwood Forest Dr @ Brickyard Rd - Existing PM

Site Code : P-0699

Start Date : 9/14/2017

Page No : 3

Start Time	N Greenwood Forest Dr Southbound					Brickyard Rd Westbound					N Greenwood Forest Dr Northbound					Brickyard Rd Eastbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
Peak Hour Analysis From 4:00:00 PM to 5:45:00 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 4:45:00 PM																					
4:45:00 PM	0	0	0	0	0	20	14	0	0	34	15	0	7	0	22	0	11	8	0	19	75
5:00:00 PM	0	0	0	0	0	16	15	0	0	31	14	0	10	0	24	0	7	10	0	17	72
5:15:00 PM	0	0	0	0	0	16	11	0	0	27	8	0	8	0	16	0	14	9	0	23	66
5:30:00 PM	0	0	0	0	0	26	15	0	0	41	13	0	8	0	21	0	16	9	0	25	87
Total Volume	0	0	0	0	0	78	55	0	0	133	50	0	33	0	83	0	48	36	0	84	300
% App. Total	0	0	0	0	0	58.6	41.4	0	0		60.2	0	39.8	0		0	57.1	42.9	0		
PHF	.000	.000	.000	.000	.000	.750	.917	.000	.000	.811	.833	.000	.825	.000	.865	.000	.750	.900	.000	.840	.862
Cars	0	0	0	0	0	75	54	0	0	129	49	0	33	0	82	0	48	35	0	83	294
% Cars	0	0	0	0	0	96.2	98.2	0	0	97.0	98.0	0	100	0	98.8	0	100	97.2	0	98.8	98.0
Heavy Vehicles	0	0	0	0	0	2	1	0	0	3	1	0	0	0	1	0	0	1	0	1	5
% Heavy Vehicles	0	0	0	0	0	2.6	1.8	0	0	2.3	2.0	0	0	0	1.2	0	0	2.8	0	1.2	1.7
Bikes, Peds	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
% Bikes, Peds	0	0	0	0	0	1.3	0	0	0	0.8	0	0	0	0	0	0	0	0	0	0	0.3



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525 N. Main Street, Waynesville, NC 28786

828-456-8383

File Name : Holly Springs Rd @ Brickyard Rd - Existing AM

Site Code : P-0699

Start Date : 9/14/2017

Page No : 1

Groups Printed- Cars - Heavy Vehicles - Bikes, Peds

Start Time	Holly Springs Rd Southbound					Brickyard Rd Westbound					Holly Springs Rd Northbound					Brickyard Rd Eastbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
Factor	1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		
07:00 AM	5	0	5	0	10	0	0	12	0	12	0	0	0	0	0	26	14	0	0	40	62
07:15 AM	11	0	6	0	17	0	8	20	0	28	0	0	0	0	0	33	16	0	0	49	94
07:30 AM	10	0	7	0	17	0	2	14	0	16	0	0	0	0	0	29	18	1	1	49	82
07:45 AM	18	1	4	0	23	1	7	14	0	22	0	0	0	0	0	9	12	0	0	21	66
Total	44	1	22	0	67	1	17	60	0	78	0	0	0	0	0	97	60	1	1	159	304
08:00 AM	19	0	6	0	25	0	8	14	0	22	0	0	0	0	0	15	15	0	1	31	78
08:15 AM	9	0	5	0	14	1	4	15	0	20	0	0	0	0	0	13	10	2	0	25	59
08:30 AM	9	1	10	0	20	0	2	16	0	18	0	0	0	0	0	8	11	0	0	19	57
08:45 AM	7	1	4	1	13	1	3	9	0	13	0	0	0	0	0	9	13	0	0	22	48
Total	44	2	25	1	72	2	17	54	0	73	0	0	0	0	0	45	49	2	1	97	242
Grand Total	88	3	47	1	139	3	34	114	0	151	0	0	0	0	0	142	109	3	2	256	546
Apprch %	63.3	2.2	33.8	0.7		2	22.5	75.5	0		0	0	0	0		55.5	42.6	1.2	0.8		
Total %	16.1	0.5	8.6	0.2	25.5	0.5	6.2	20.9	0	27.7	0	0	0	0	0	26	20	0.5	0.4	46.9	
Cars	83	3	46	0	132	3	32	106	0	141	0	0	0	0	0	138	108	3	0	249	522
% Cars	94.3	100	97.9	0	95	100	94.1	93	0	93.4	0	0	0	0	0	97.2	99.1	100	0	97.3	95.6
Heavy Vehicles	5	0	1	0	6	0	2	8	0	10	0	0	0	0	0	4	1	0	0	5	21
% Heavy Vehicles	5.7	0	2.1	0	4.3	0	5.9	7	0	6.6	0	0	0	0	0	2.8	0.9	0	0	2	3.8
Bikes, Peds	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2	3
% Bikes, Peds	0	0	0	100	0.7	0	0	0	0	0	0	0	0	0	0	0	0	0	100	0.8	0.5

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525 N. Main Street, Waynesville, NC 28786

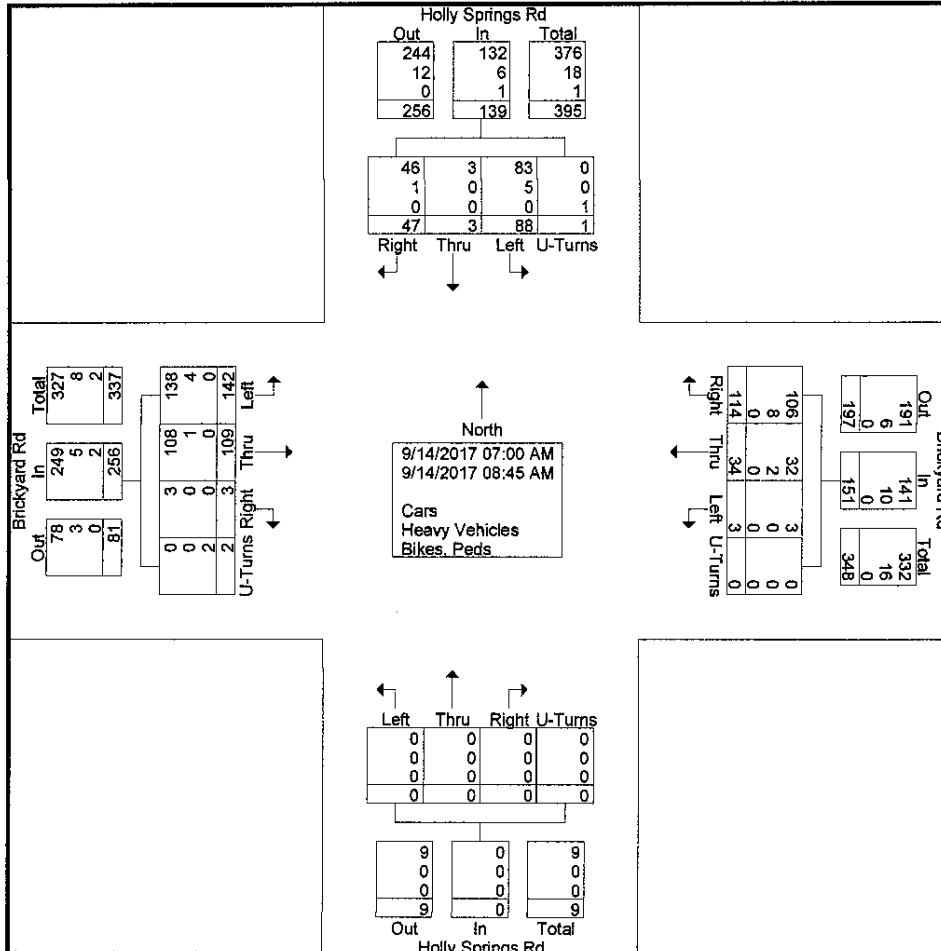
828-456-8383

File Name : Holly Springs Rd @ Brickyard Rd - Existing AM

Site Code : P-0699

Start Date : 9/14/2017

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J.M. Teague Engineering & Planning

525 N. Main Street, Waynesville, NC 28786

828-456-8383

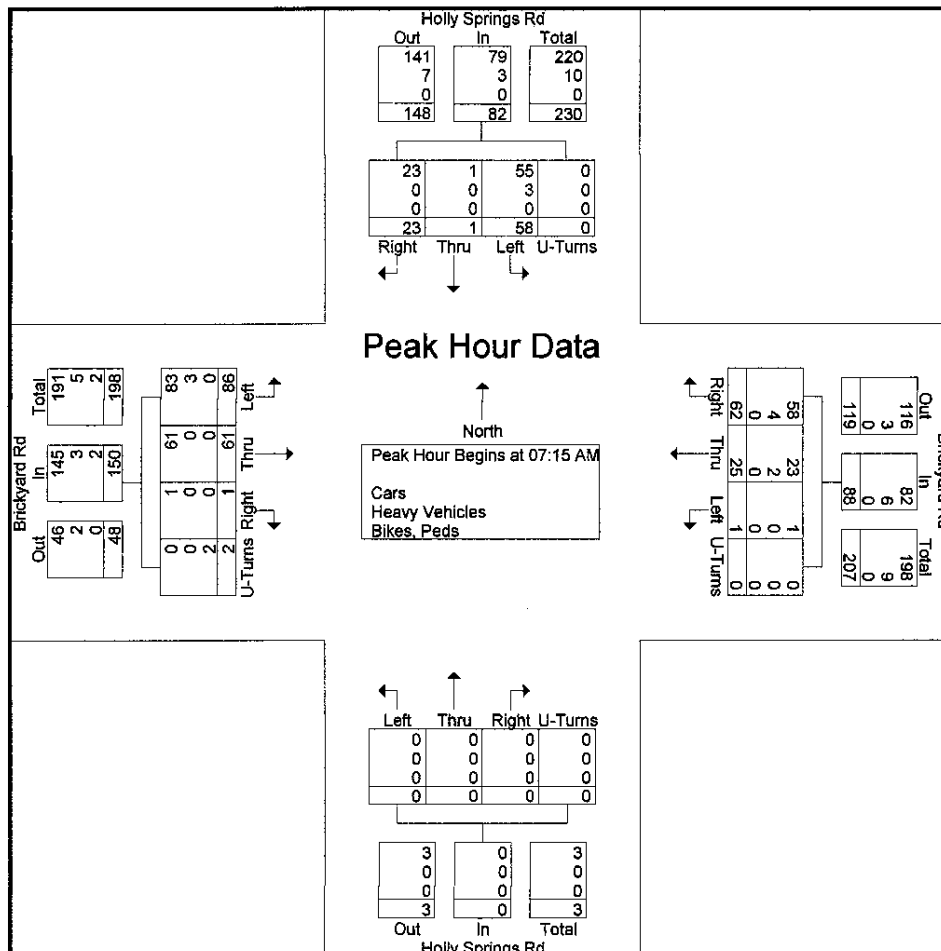
File Name : Holly Springs Rd @ Brickyard Rd - Existing AM

Site Code : P-0699

Start Date : 9/14/2017

Page No : 3

Start Time	Holly Springs Rd Southbound					Brickyard Rd Westbound					Holly Springs Rd Northbound					Brickyard Rd Eastbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
Peak Hour Analysis From 7:00:00 AM to 8:45:00 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 7:15:00 AM																					
7:15:00 AM	11	0	6	0	17	0	8	20	0	28	0	0	0	0	0	33	16	0	0	49	94
7:30:00 AM	10	0	7	0	17	0	2	14	0	16	0	0	0	0	0	29	18	1	1	49	82
7:45:00 AM	18	1	4	0	23	1	7	14	0	22	0	0	0	0	0	9	12	0	0	21	66
8:00:00 AM	19	0	6	0	25	0	8	14	0	22	0	0	0	0	0	15	15	0	1	31	78
Total Volume	58	1	23	0	82	1	25	62	0	88	0	0	0	0	0	86	61	1	2	150	320
% App. Total	70.7	1.2	28	0		1.1	28.4	70.5	0		0	0	0	0		57.3	40.7	0.7	1.3		
PHF	.763	.250	.821	.000	.820	.250	.781	.775	.000	.786	.000	.000	.000	.000	.000	.652	.847	.250	.500	.765	.851
Cars	55	1	23	0	79	1	23	58	0	82	0	0	0	0	0	83	61	1	0	145	306
% Cars	94.8	100	100	0	96.3	100	92.0	93.5	0	93.2	0	0	0	0	0	96.5	100	100	0	96.7	95.6
Heavy Vehicles	3	0	0	0	3	0	2	4	0	6	0	0	0	0	0	3	0	0	0	3	12
% Heavy Vehicles	5.2	0	0	0	3.7	0	8.0	6.5	0	6.8	0	0	0	0	0	3.5	0	0	0	2.0	3.8
Bikes, Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2	2
% Bikes, Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	100	1.3	0.6



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525 N. Main Street, Waynesville, NC 28786

828-456-8383

File Name : Holly Springs Rd @ Brickyard Rd - Existing PM

Site Code : P-0699

Start Date : 9/14/2017

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Groups Printed- Cars - Heavy Vehicles - Bikes, Peds

Start Time	Holly Springs Rd Southbound					Brickyard Rd Westbound					Holly Springs Rd Northbound					Brickyard Rd Eastbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
Factor	1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		
04:00 PM	14	4	12	0	30	3	9	14	0	26	0	0	1	0	1	14	21	1	4	40	97
04:15 PM	14	3	18	0	35	1	15	16	0	32	0	1	0	1	2	11	12	2	4	29	98
04:30 PM	19	0	7	0	26	0	14	15	0	29	1	0	0	0	1	11	8	1	0	20	76
04:45 PM	18	1	22	0	41	2	14	15	0	31	0	0	0	0	0	7	7	4	0	18	90
Total	65	8	59	0	132	6	52	60	0	118	1	1	1	1	4	43	48	8	8	107	361
05:00 PM	21	2	12	0	35	0	14	21	0	35	2	0	0	0	2	7	8	0	0	15	87
05:15 PM	24	1	17	0	42	0	14	10	0	24	1	0	0	0	1	5	15	1	0	21	88
05:30 PM	26	2	19	0	47	1	17	22	0	40	0	0	0	0	0	8	14	4	0	26	113
05:45 PM	21	2	26	0	49	2	14	18	0	34	0	0	0	0	0	8	4	1	0	13	96
Total	92	7	74	0	173	3	59	71	0	133	3	0	0	0	3	28	41	6	0	75	384
Grand Total	157	15	133	0	305	9	111	131	0	251	4	1	1	1	7	71	89	14	8	182	745
Approch %	51.5	4.9	43.6	0		3.6	44.2	52.2	0		57.1	14.3	14.3	14.3		39	48.9	7.7	4.4		
Total %	21.1	2	17.9	0	40.9	1.2	14.9	17.6	0	33.7	0.5	0.1	0.1	0.1	0.9	9.5	11.9	1.9	1.1	24.4	
Cars	154	15	131	0	300	9	107	131	0	247	4	1	1	0	6	71	87	13	0	171	724
% Cars	98.1	100	98.5	0	98.4	100	96.4	100	0	98.4	100	100	100	0	85.7	100	97.8	92.9	0	94	97.2
Heavy Vehicles	2	0	2	0	4	0	3	0	0	3	0	0	0	0	0	0	2	1	0	3	10
% Heavy Vehicles	1.3	0	1.5	0	1.3	0	2.7	0	0	1.2	0	0	0	0	0	0	2.2	7.1	0	1.6	1.3
Bikes, Peds	1	0	0	0	1	0	1	0	0	1	0	0	0	1	1	0	0	0	8	8	11
% Bikes, Peds	0.6	0	0	0	0.3	0	0.9	0	0	0.4	0	0	0	100	14.3	0	0	0	100	4.4	1.5

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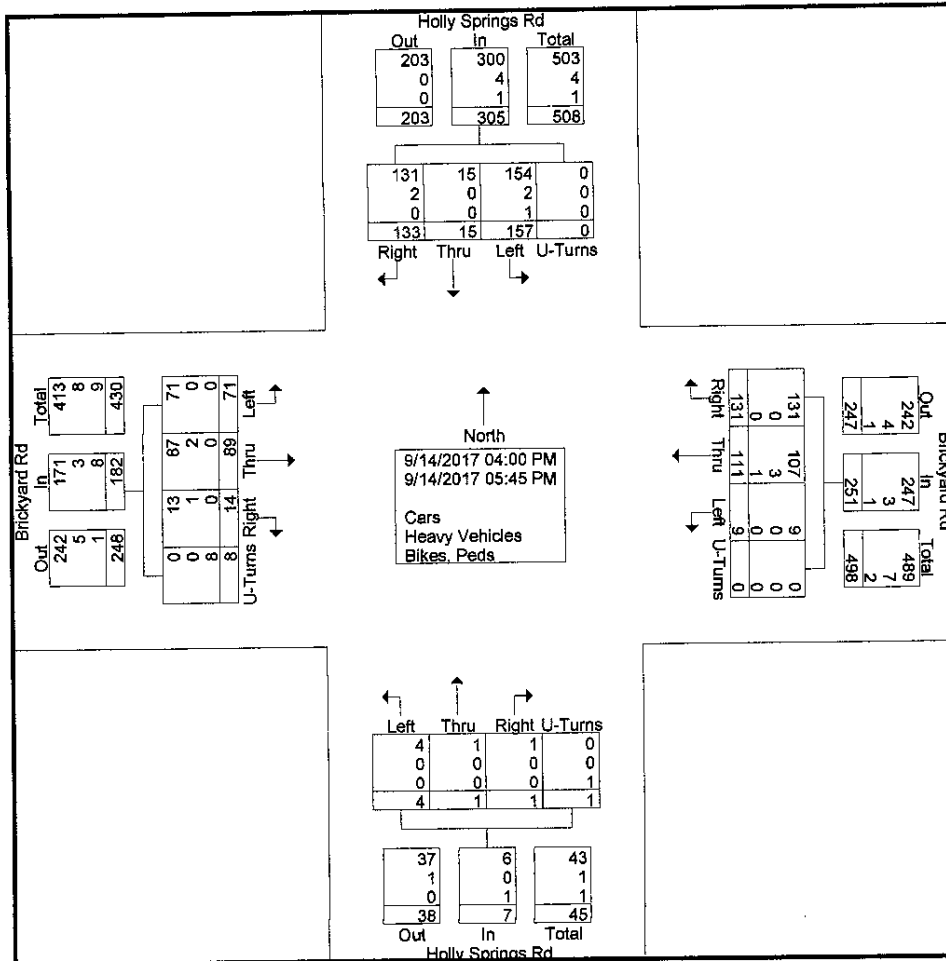
828-456-8383

File Name : Holly Springs Rd @ Brickyard Rd - Existing PM

Site Code : P-0699

Start Date : 9/14/2017

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525 N. Main Street, Waynesville, NC 28786

828-456-8383

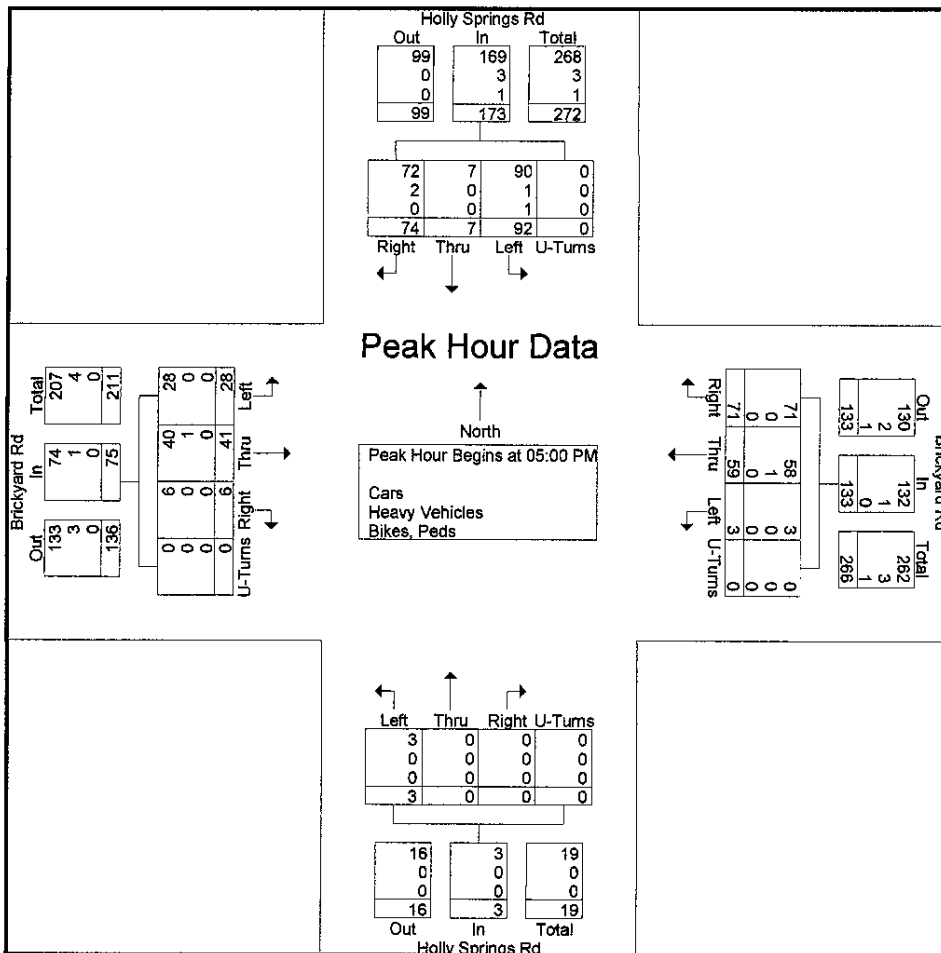
File Name : Holly Springs Rd @ Brickyard Rd - Existing PM

Site Code : P-0699

Start Date : 9/14/2017

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Start Time	Holly Springs Rd Southbound					Brickyard Rd Westbound					Holly Springs Rd Northbound					Brickyard Rd Eastbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
Peak Hour Analysis From 4:00:00 PM to 5:45:00 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 5:00:00 PM																					
5:00:00 PM	21	2	12	0	35	0	14	21	0	35	2	0	0	0	2	7	8	0	0	15	87
5:15:00 PM	24	1	17	0	42	0	14	10	0	24	1	0	0	0	1	5	15	1	0	21	88
5:30:00 PM	26	2	19	0	47	1	17	22	0	40	0	0	0	0	0	8	14	4	0	26	113
5:45:00 PM	21	2	26	0	49	2	14	18	0	34	0	0	0	0	0	8	4	1	0	13	96
Total Volume	92	7	74	0	173	3	59	71	0	133	3	0	0	0	3	28	41	6	0	75	384
% App. Total	53.2	4	42.8	0		2.3	44.4	53.4	0		100	0	0	0		37.3	54.7	8	0		
PHF	.885	.875	.712	.000	.883	.375	.868	.807	.000	.831	.375	.000	.000	.000	.375	.875	.683	.375	.000	.721	.850
Cars	90	7	72	0	169	3	58	71	0	132	3	0	0	0	3	28	40	6	0	74	378
% Cars	97.8	100	97.3	0	97.7	100	98.3	100	0	99.2	100	0	0	0	100	100	97.6	100	0	98.7	98.4
Heavy Vehicles	1	0	2	0	3	0	1	0	0	1	0	0	0	0	0	0	1	0	0	1	5
% Heavy Vehicles	1.1	0	2.7	0	1.7	0	1.7	0	0	0.8	0	0	0	0	0	0	2.4	0	0	1.3	1.3
Bikes, Peds	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
% Bikes, Peds	1.1	0	0	0	0.6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3



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525 N. Main Street, Waynesville, NC 28786

828-456-8383

File Name : Brickyard Rd @ McKinney Rd - Existing AM

Site Code : P-0699

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Groups Printed- Cars - Heavy Vehicles - Bikes, Peds

Start Time	Brickyard Rd Southbound					McKinney Rd Westbound					Brickyard Rd Northbound					McKinney Rd Eastbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
Factor	1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		
07:00 AM	0	0	0	0	0	0	2	0	0	2	5	0	0	0	5	0	1	23	0	24	31
07:15 AM	0	0	0	0	0	2	2	0	1	5	19	0	0	0	19	0	1	30	0	31	55
07:30 AM	0	0	0	0	0	1	2	0	0	3	14	0	0	0	14	0	0	33	0	33	50
07:45 AM	0	0	0	0	0	0	1	0	0	1	21	0	0	0	21	0	2	28	0	30	52
Total	0	0	0	0	0	3	7	0	1	11	59	0	0	0	59	0	4	114	0	118	188
08:00 AM	0	0	0	0	0	1	1	0	0	2	20	0	0	0	20	0	3	36	0	39	61
08:15 AM	0	0	0	0	0	0	2	0	0	2	14	0	1	1	16	0	0	26	0	26	44
08:30 AM	0	0	0	0	0	1	1	0	0	2	20	0	0	0	20	0	0	26	0	26	48
08:45 AM	0	0	0	0	0	2	2	0	0	4	13	0	0	0	13	0	1	26	0	27	44
Total	0	0	0	0	0	4	6	0	0	10	67	0	1	1	69	0	4	114	0	118	197
Grand Total	0	0	0	0	0	7	13	0	1	21	126	0	1	1	128	0	8	228	0	236	385
Apprch %	0	0	0	0		33.3	61.9	0	4.8		98.4	0	0.8	0.8		0	3.4	96.6	0		
Total %	0	0	0	0		1.8	3.4	0	0.3	5.5	32.7	0	0.3	0.3	33.2	0	2.1	59.2	0	61.3	
Cars	0	0	0	0		7	11	0	0	18	120	0	1	0	121	0	8	222	0	230	369
% Cars	0	0	0	0		100	84.6	0	0	85.7	95.2	0	100	0	94.5	0	100	97.4	0	97.5	95.8
Heavy Vehicles	0	0	0	0		0	2	0	0	2	6	0	0	0	6	0	0	6	0	6	14
% Heavy Vehicles	0	0	0	0		0	15.4	0	0	9.5	4.8	0	0	0	4.7	0	0	2.6	0	2.5	3.6
Bikes, Peds	0	0	0	0		0	0	0	1	1	0	0	0	1	1	0	0	0	0	0	2
% Bikes, Peds	0	0	0	0		0	0	0	100	4.8	0	0	0	100	0.8	0	0	0	0	0	0.5

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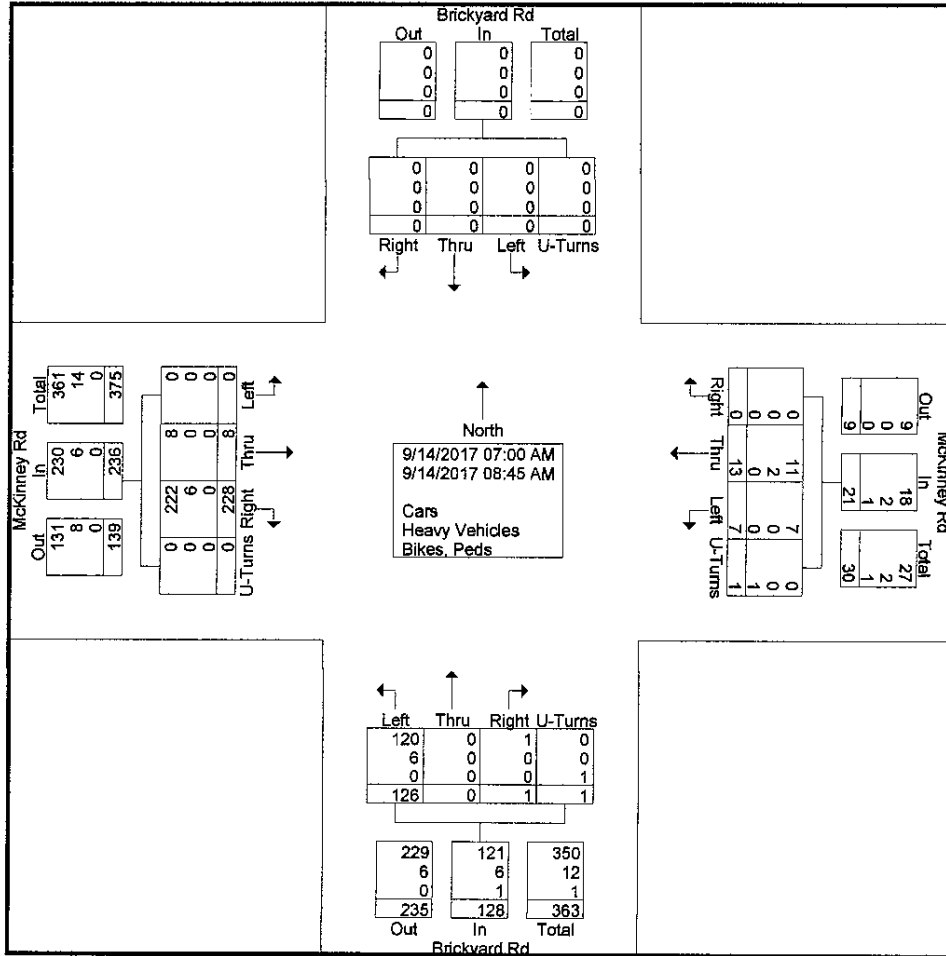
828-456-8383

File Name : Brickyard Rd @ McKinney Rd - Existing AM

Site Code : P-0699

Start Date : 9/14/2017

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525 N. Main Street, Waynesville, NC 28786

828-456-8383

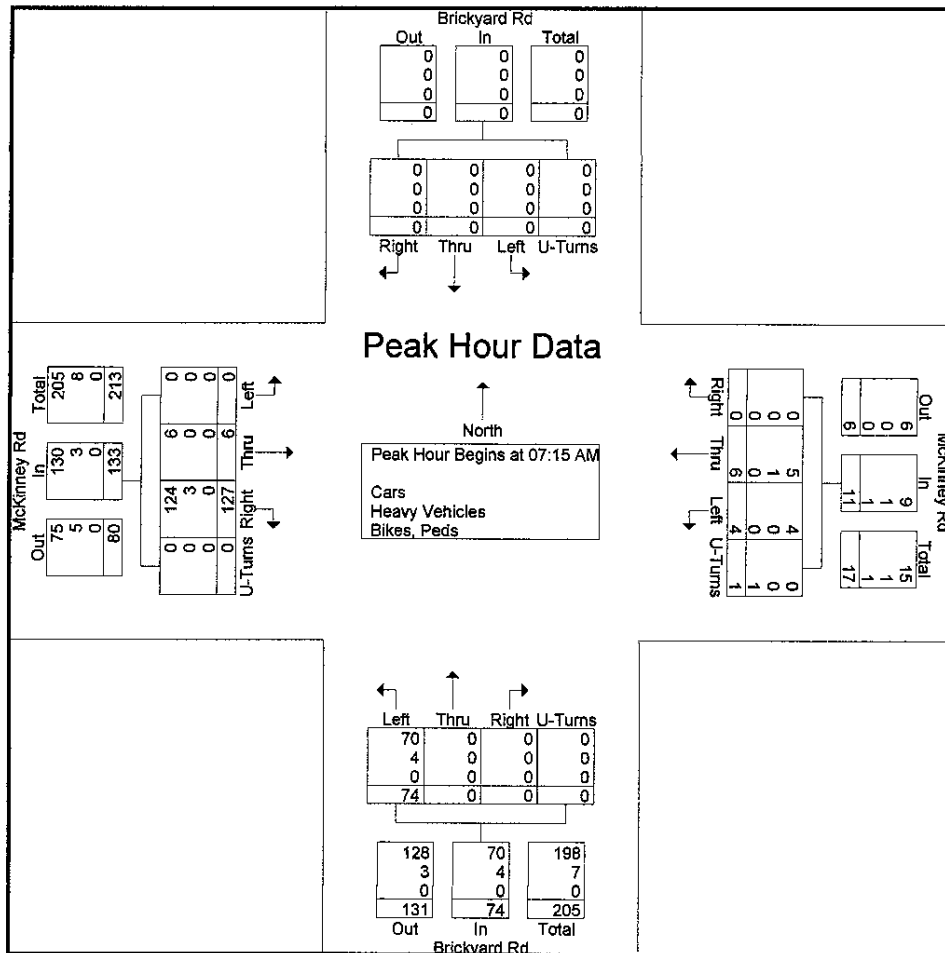
File Name : Brickyard Rd @ McKinney Rd - Existing AM

Site Code : P-0699

Start Date : 9/14/2017

Page No : 3

Start Time	Brickyard Rd Southbound					McKinney Rd Westbound					Brickyard Rd Northbound					McKinney Rd Eastbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
Peak Hour Analysis From 7:00:00 AM to 8:45:00 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 7:15:00 AM																					
7:15:00 AM	0	0	0	0	0	2	2	0	1	5	19	0	0	0	19	0	1	30	0	31	55
7:30:00 AM	0	0	0	0	0	1	2	0	0	3	14	0	0	0	14	0	0	33	0	33	50
7:45:00 AM	0	0	0	0	0	0	1	0	0	1	21	0	0	0	21	0	2	28	0	30	52
8:00:00 AM	0	0	0	0	0	1	1	0	0	2	20	0	0	0	20	0	3	36	0	39	61
Total Volume	0	0	0	0	0	4	6	0	1	11	74	0	0	0	74	0	6	127	0	133	218
% App. Total	0	0	0	0	0	36.4	54.5	0	9.1		100	0	0	0		0	4.5	95.5	0		
PHF	.000	.000	.000	.000	.000	.500	.750	.000	.250	.550	.881	.000	.000	.000	.881	.000	.500	.882	.000	.853	.893
Cars	0	0	0	0	0	4	5	0	0	9	70	0	0	0	70	0	6	124	0	130	209
% Cars	0	0	0	0	0	100	83.3	0	0	81.8	94.6	0	0	0	94.6	0	100	97.6	0	97.7	95.9
Heavy Vehicles	0	0	0	0	0	0	1	0	0	1	4	0	0	0	4	0	0	3	0	3	8
% Heavy Vehicles	0	0	0	0	0	0	16.7	0	0	9.1	5.4	0	0	0	5.4	0	0	2.4	0	2.3	3.7
Bikes, Peds	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	1
% Bikes, Peds	0	0	0	0	0	0	0	0	100	9.1	0	0	0	0	0	0	0	0	0	0	0.5



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525 N. Main Street, Waynesville, NC 28786

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File Name : Brickyard Rd @ McKinney Rd - Existing PM

Site Code : P-0699

Start Date : 9/14/2017

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Groups Printed- Cars - Heavy Vehicles - Bikes, Peds

Start Time	Brickyard Rd Southbound					McKinney Rd Westbound					Brickyard Rd Northbound					McKinney Rd Eastbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
Factor	1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		
04:00 PM	0	0	0	0	0	0	5	0	0	5	26	0	0	0	26	0	2	35	0	37	68
04:15 PM	0	0	0	0	0	2	2	0	0	4	30	0	2	0	32	0	1	34	0	35	71
04:30 PM	0	0	0	0	0	1	2	0	1	4	30	0	0	0	30	0	1	25	0	26	60
04:45 PM	0	0	0	0	0	0	2	0	0	2	39	0	1	0	40	0	1	25	0	26	68
Total	0	0	0	0	0	3	11	0	1	15	125	0	3	0	128	0	5	119	0	124	267
05:00 PM	0	0	0	0	0	2	4	0	0	6	30	0	4	0	34	0	4	30	0	34	74
05:15 PM	0	0	0	0	0	1	2	0	0	3	26	0	0	0	26	0	2	35	0	37	66
05:30 PM	0	0	0	0	0	2	3	0	0	5	33	0	1	0	34	0	3	36	0	39	78
05:45 PM	0	1	0	0	1	1	3	0	0	4	40	0	1	0	41	0	2	27	0	29	75
Total	0	1	0	0	1	6	12	0	0	18	129	0	6	0	135	0	11	128	0	139	293
Grand Total	0	1	0	0	1	9	23	0	1	33	254	0	9	0	263	0	16	247	0	263	560
Apprch %	0	100	0	0		27.3	69.7	0	3		96.6	0	3.4	0		0	6.1	93.9	0		
Total %	0	0.2	0	0	0.2	1.6	4.1	0	0.2	5.9	45.4	0	1.6	0	47	0	2.9	44.1	0	47	
Cars	0	0	0	0	0	9	23	0	0	32	251	0	9	0	260	0	14	244	0	258	550
% Cars	0	0	0	0	0	100	100	0	0	97	98.8	0	100	0	98.9	0	87.5	98.8	0	98.1	98.2
Heavy Vehicles	0	0	0	0	0	0	0	0	0	0	2	0	0	0	2	0	1	3	0	4	6
% Heavy Vehicles	0	0	0	0	0	0	0	0	0	0	0.8	0	0	0	0.8	0	6.2	1.2	0	1.5	1.1
Bikes, Peds	0	1	0	0	1	0	0	0	1	1	1	0	0	0	1	0	1	0	0	1	4
% Bikes, Peds	0	100	0	0	100	0	0	0	100	3	0.4	0	0	0	0.4	0	6.2	0	0	0.4	0.7

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525 N. Main Street, Waynesville, NC 28786

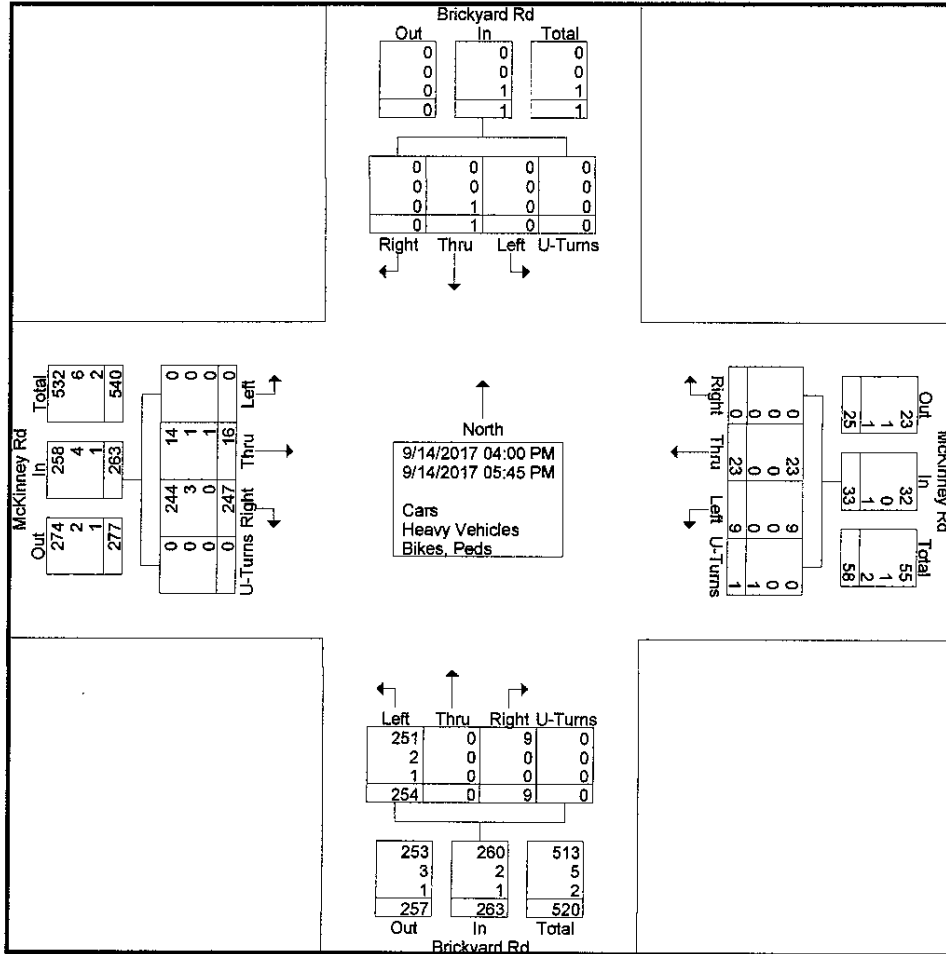
828-456-8383

File Name : Brickyard Rd @ McKinney Rd - Existing PM

Site Code : P-0699

Start Date : 9/14/2017

Page No : 2



J.M. Teague Engineering & Planning

525 N. Main Street, Waynesville, NC 28786

828-456-8383

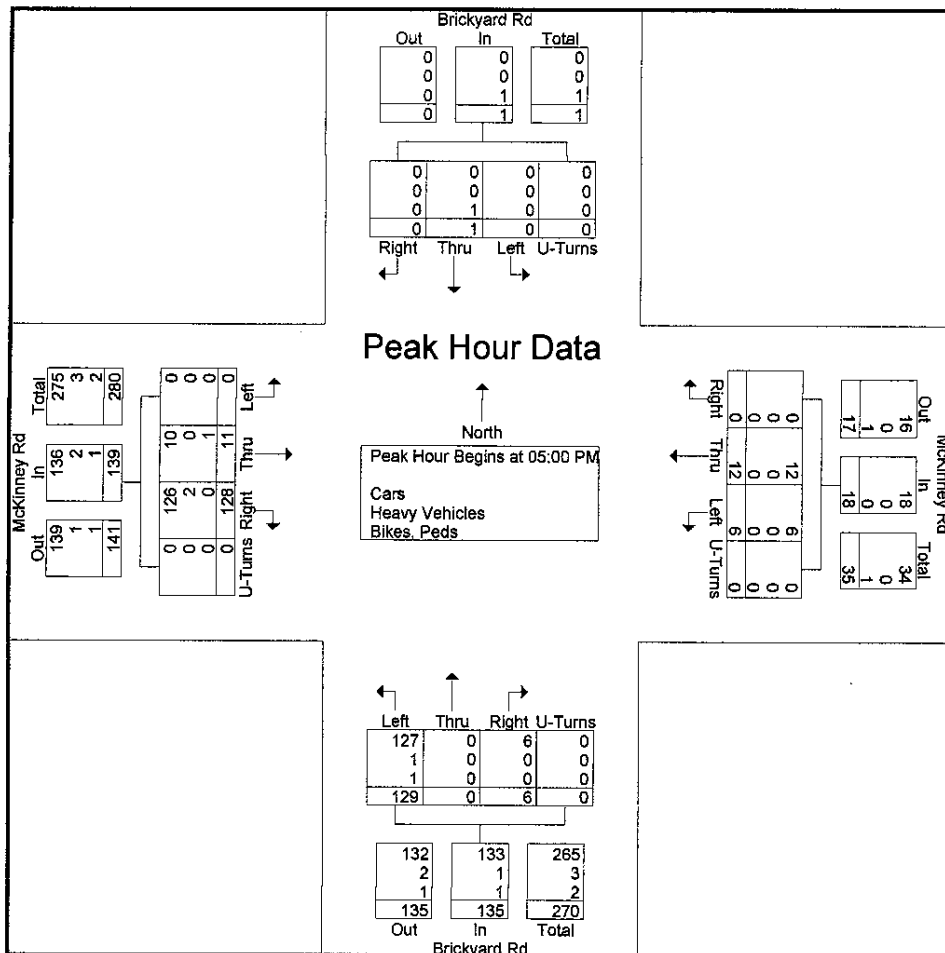
File Name : Brickyard Rd @ McKinney Rd - Existing PM

Site Code : P-0699

Start Date : 9/14/2017

Page No : 3

Start Time	Brickyard Rd Southbound					McKinney Rd Westbound					Brickyard Rd Northbound					McKinney Rd Eastbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
Peak Hour Analysis From 4:00:00 PM to 5:45:00 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 5:00:00 PM																					
5:00:00 PM	0	0	0	0	0	2	4	0	0	6	30	0	4	0	34	0	4	30	0	34	74
5:15:00 PM	0	0	0	0	0	1	2	0	0	3	26	0	0	0	26	0	2	35	0	37	66
5:30:00 PM	0	0	0	0	0	2	3	0	0	5	33	0	1	0	34	0	3	36	0	39	78
5:45:00 PM	0	1	0	0	1	1	3	0	0	4	40	0	1	0	41	0	2	27	0	29	75
Total Volume	0	1	0	0	1	6	12	0	0	18	129	0	6	0	135	0	11	128	0	139	293
% App. Total	0	100	0	0		33.3	66.7	0	0		95.6	0	4.4	0		0	7.9	92.1	0		
PHF	.000	.250	.000	.000	.250	.750	.750	.000	.000	.750	.806	.000	.375	.000	.823	.000	.688	.889	.000	.891	.939
Cars	0	0	0	0	0	6	12	0	0	18	127	0	6	0	133	0	10	126	0	136	287
% Cars	0	0	0	0	0	100	100	0	0	100	98.4	0	100	0	98.5	0	90.9	98.4	0	97.8	98.0
Heavy Vehicles	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	2	0	2	3
% Heavy Vehicles	0	0	0	0	0	0	0	0	0	0	0.8	0	0	0	0.7	0	0	1.6	0	1.4	1.0
Bikes, Peds	0	1	0	0	1	0	0	0	0	0	1	0	0	0	1	0	1	0	0	1	3
% Bikes, Peds	0	100	0	0	100	0	0	0	0	0	0.8	0	0	0	0.7	0	9.1	0	0	0.7	1.0



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525 N. Main Street, Waynesville, NC 28786

828-456-8383

File Name : Pisgah View Dr @ McKinney Rd (North) - Existing AM

Site Code : P-0699

Start Date : 9/14/2017

Page No : 1

Groups Printed- Cars - Heavy Vehicles - Bikes, Peds

Start Time	Pisgah View Dr Southbound					McKinney Rd (North) Westbound					Pisgah View Dr Northbound					McKinney Rd (North) Eastbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
Factor	1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		
07:00 AM	0	0	0	0	0	1	1	0	0	2	0	0	0	0	0	0	0	1	0	1	3
07:15 AM	0	0	0	1	1	0	1	0	0	1	2	0	0	0	2	0	0	2	0	2	6
07:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1
07:45 AM	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	1	2	0	3	4
Total	0	0	0	1	1	1	3	0	0	4	2	0	0	0	2	0	1	6	0	7	14
08:00 AM	0	0	0	0	0	0	3	0	0	3	0	0	0	0	0	0	1	2	0	3	6
08:15 AM	0	0	0	0	0	0	3	0	0	3	0	0	0	1	1	0	1	1	0	2	6
08:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:45 AM	0	0	0	0	0	0	3	0	0	3	1	0	0	0	1	0	0	1	0	1	5
Total	0	0	0	0	0	0	9	0	0	9	1	0	0	1	2	0	2	4	0	6	17
Grand Total	0	0	0	1	1	1	12	0	0	13	3	0	0	1	4	0	3	10	0	13	31
Apprch %	0	0	0	100		7.7	92.3	0	0		75	0	0	25		0	23.1	76.9	0		
Total %	0	0	0	3.2	3.2	3.2	38.7	0	0	41.9	9.7	0	0	3.2	12.9	0	9.7	32.3	0	41.9	
Cars	0	0	0	0	0	0	11	0	0	11	3	0	0	0	3	0	3	10	0	13	27
% Cars	0	0	0	0	0	0	91.7	0	0	84.6	100	0	0	0	75	0	100	100	0	100	87.1
Heavy Vehicles	0	0	0	0	0	1	1	0	0	2	0	0	0	0	0	0	0	0	0	0	2
% Heavy Vehicles	0	0	0	0	0	100	8.3	0	0	15.4	0	0	0	0	0	0	0	0	0	0	6.5
Bikes, Peds	0	0	0	1	1	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	2
% Bikes, Peds	0	0	0	100	100	0	0	0	0	0	0	0	0	100	25	0	0	0	0	0	6.5

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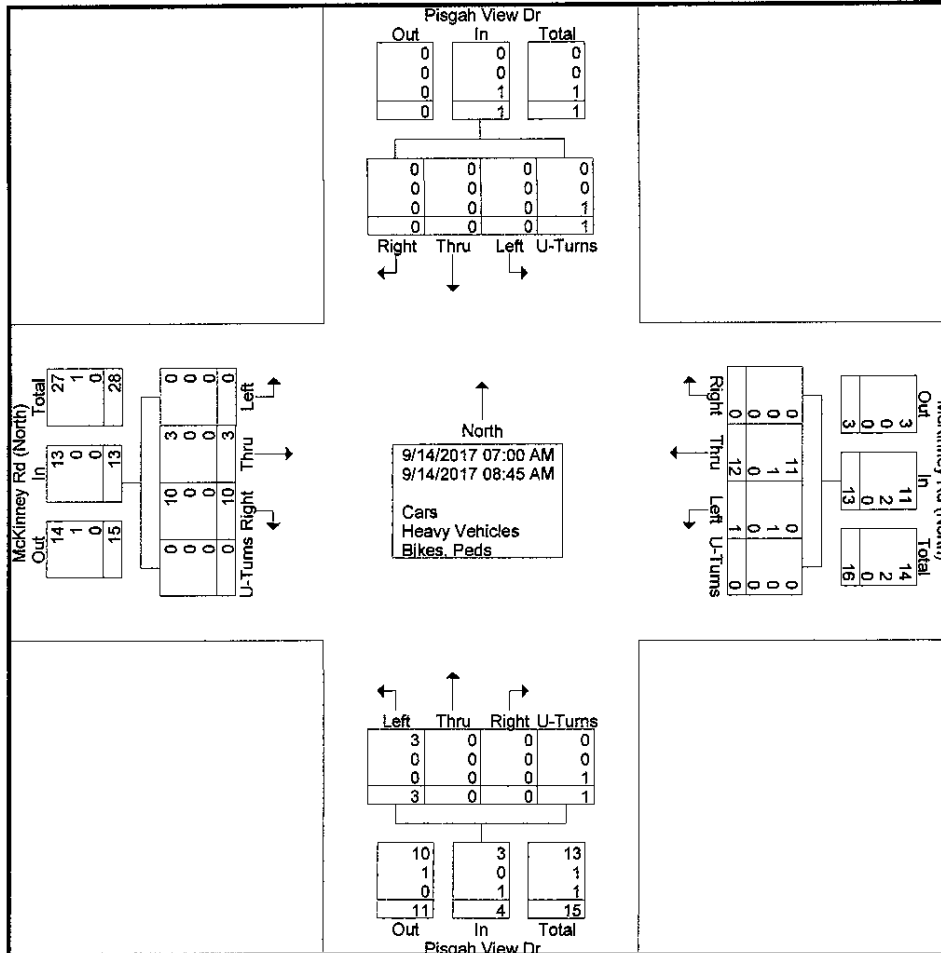
828-456-8383

File Name : Pisgah View Dr @ McKinney Rd (North) - Existing AM

Site Code : P-0699

Start Date : 9/14/2017

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525 N. Main Street, Waynesville, NC 28786

828-456-8383

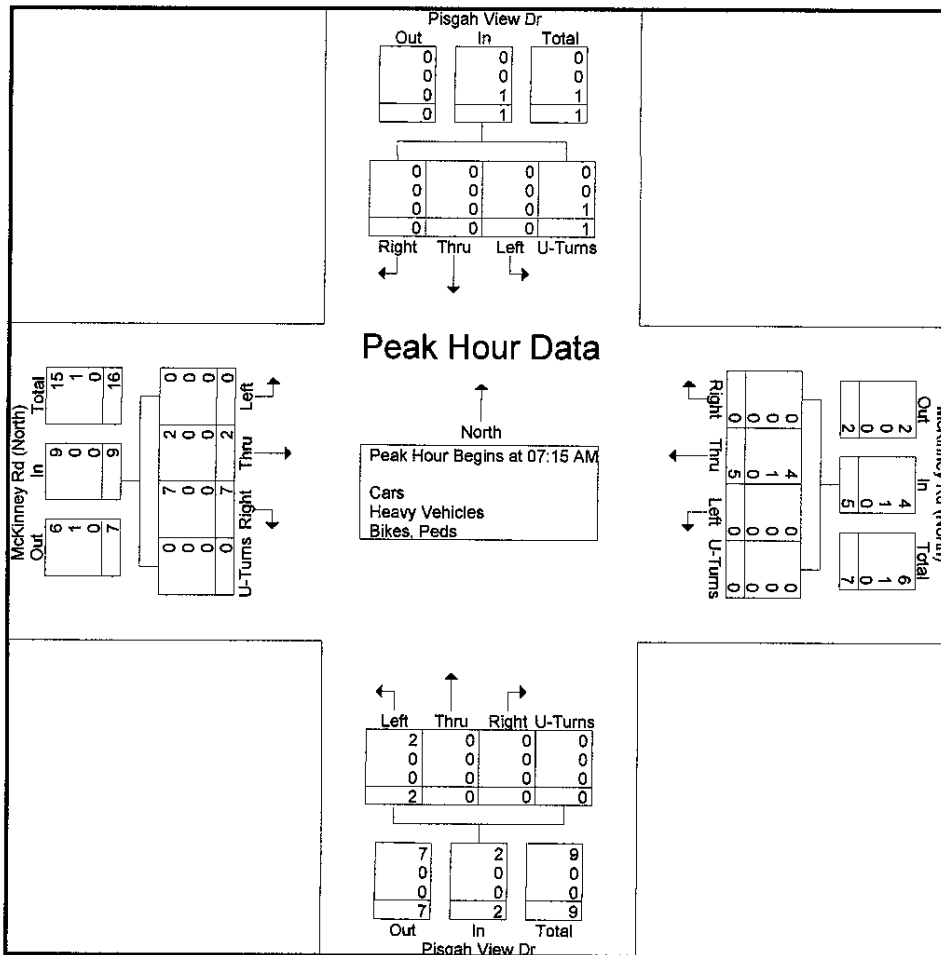
File Name : Pisgah View Dr @ McKinney Rd (North) - Existing AM

Site Code : P-0699

Start Date : 9/14/2017

Page No : 3

Start Time	Pisgah View Dr Southbound					McKinney Rd (North) Westbound					Pisgah View Dr Northbound					McKinney Rd (North) Eastbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
Peak Hour Analysis From 7:00:00 AM to 8:45:00 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 7:15:00 AM																					
7:15:00 AM	0	0	0	1	1	0	1	0	0	1	2	0	0	0	2	0	0	2	0	2	6
7:30:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1
7:45:00 AM	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	1	2	0	3	4
8:00:00 AM	0	0	0	0	0	0	3	0	0	3	0	0	0	0	0	0	1	2	0	3	6
Total Volume	0	0	0	1	1	0	5	0	0	5	2	0	0	0	2	0	2	7	0	9	17
% App. Total	0	0	0	100		0	100	0	0		100	0	0	0		0	22.2	77.8	0		
PHF	.000	.000	.000	.250	.250	.000	.417	.000	.000	.417	.250	.000	.000	.000	.250	.000	.500	.875	.000	.750	.708
Cars	0	0	0	0	0	0	4	0	0	4	2	0	0	0	2	0	2	7	0	9	15
% Cars	0	0	0	0	0	0	80.0	0	0	80.0	100	0	0	0	100	0	100	100	0	100	88.2
Heavy Vehicles	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	1
% Heavy Vehicles	0	0	0	0	0	0	20.0	0	0	20.0	0	0	0	0	0	0	0	0	0	0	5.9
Bikes, Peds	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
% Bikes, Peds	0	0	0	100	100	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5.9



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525 N. Main Street, Waynesville, NC 28786

828-456-8383

File Name : Pisgah View Dr @ McKinney Rd (North) - Existing PM

Site Code : P-0699

Start Date : 9/14/2017

Page No : 1

Groups Printed- Cars - Heavy Vehicles - Bikes, Peds

Start Time	Pisgah View Dr Southbound					McKinney Rd (North) Westbound					Pisgah View Dr Northbound					McKinney Rd (North) Eastbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
Factor	1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		
04:00 PM	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	2
04:15 PM	0	0	0	0	0	0	3	0	0	3	0	0	0	0	0	0	1	1	0	2	5
04:30 PM	0	0	0	0	0	0	0	0	0	0	3	0	0	0	3	0	1	1	0	2	5
04:45 PM	0	0	0	0	0	0	1	0	0	1	1	0	0	0	1	0	0	0	0	0	2
Total	0	0	1	0	1	0	4	0	0	4	4	0	0	0	4	1	2	2	0	5	14
05:00 PM	0	0	0	0	0	0	0	0	0	0	4	0	0	0	4	0	1	3	0	4	8
05:15 PM	0	0	0	0	0	0	1	0	0	1	2	0	0	0	2	0	2	0	0	2	5
05:30 PM	0	0	0	0	0	0	2	0	0	2	2	0	0	0	2	0	1	1	0	2	6
05:45 PM	0	0	0	0	0	0	2	0	0	2	3	0	0	0	3	0	1	1	0	2	7
Total	0	0	0	0	0	0	5	0	0	5	11	0	0	0	11	0	5	5	0	10	26
Grand Total	0	0	1	0	1	0	9	0	0	9	15	0	0	0	15	1	7	7	0	15	40
Apprch %	0	0	100	0		0	100	0	0		100	0	0	0		6.7	46.7	46.7	0		
Total %	0	0	2.5	0	2.5	0	22.5	0	0	22.5	37.5	0	0	0	37.5	2.5	17.5	17.5	0	37.5	
Cars	0	0	1	0	1	0	9	0	0	9	15	0	0	0	15	1	5	7	0	13	38
% Cars	0	0	100	0	100	0	100	0	0	100	100	0	0	0	100	100	71.4	100	0	86.7	95
Heavy Vehicles	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% Heavy Vehicles	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Bikes, Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2	2
% Bikes, Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	28.6	0	0	13.3	5

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525 N. Main Street, Waynesville, NC 28786

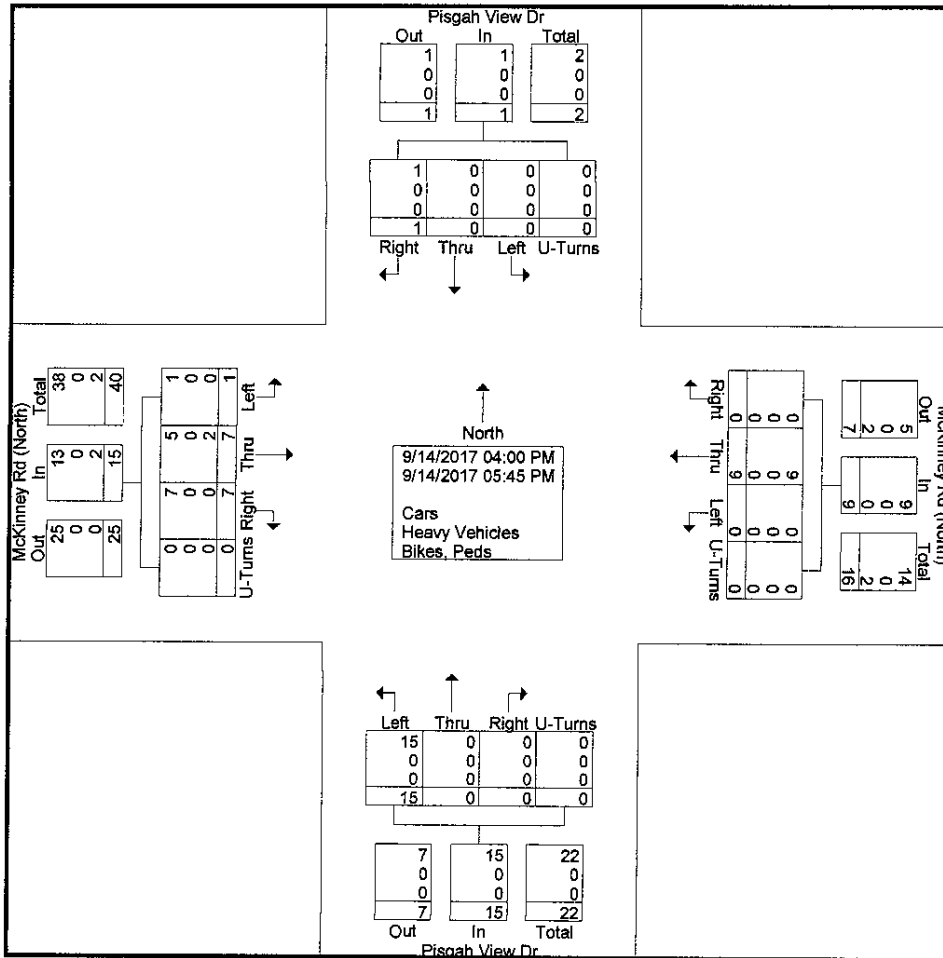
828-456-8383

File Name : Pisgah View Dr @ McKinney Rd (North) - Existing PM

Site Code : P-0699

Start Date : 9/14/2017

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525 N. Main Street, Waynesville, NC 28786

828-456-8383

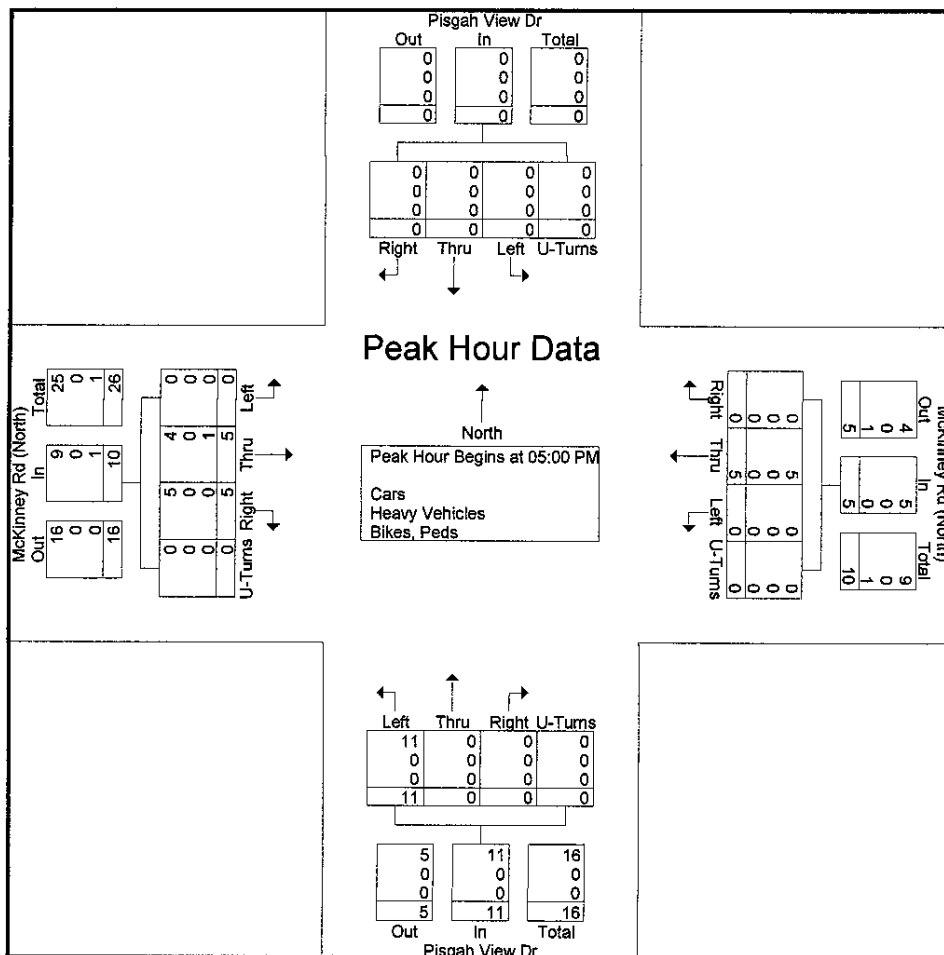
File Name : Pisgah View Dr @ McKinney Rd (North) - Existing PM

Site Code : P-0699

Start Date : 9/14/2017

Page No : 3

Start Time	Pisgah View Dr Southbound					McKinney Rd (North) Westbound					Pisgah View Dr Northbound					McKinney Rd (North) Eastbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
Peak Hour Analysis From 4:00:00 PM to 5:45:00 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 5:00:00 PM																					
5:00:00 PM	0	0	0	0	0	0	0	0	0	0	4	0	0	0	4	0	1	3	0	4	8
5:15:00 PM	0	0	0	0	0	0	0	1	0	1	2	0	0	0	2	0	2	0	0	2	5
5:30:00 PM	0	0	0	0	0	0	0	2	0	2	2	0	0	0	2	0	1	1	0	2	6
5:45:00 PM	0	0	0	0	0	0	0	2	0	2	3	0	0	0	3	0	1	1	0	2	7
Total Volume	0	0	0	0	0	0	0	5	0	5	11	0	0	0	11	0	5	5	0	10	26
% App. Total	0	0	0	0	0	0	100	0	0	100	100	0	0	0	100	0	50	50	0	100	
PHF	.000	.000	.000	.000	.000	.000	.625	.000	.000	.625	.688	.000	.000	.000	.688	.000	.625	.417	.000	.625	.813
Cars	0	0	0	0	0	0	0	5	0	5	11	0	0	0	11	0	4	5	0	9	25
% Cars	0	0	0	0	0	0	0	100	0	100	100	0	0	0	100	0	80.0	100	0	90.0	96.2
Heavy Vehicles	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% Heavy Vehicles	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Bikes, Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	1
% Bikes, Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	20.0	0	0	10.0	3.8



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525 N. Main Street, Waynesville, NC 28786

828-456-8383

File Name : Pisgah View Dr @ McKinney Rd (South) - Existing AM

Site Code : P-0699

Start Date : 9/14/2017

Page No : 1

Groups Printed- Cars - Heavy Vehicles - Bikes, Peds

Start Time	Pisgah View Dr Southbound					McKinney Rd (South) Westbound					Pisgah View Dr Northbound					McKinney Rd (South) Eastbound					Int. Total	
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total		
Factor	1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0			
07:00 AM	0	0	2	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
07:15 AM	0	0	1	0	1	0	3	0	0	3	0	0	0	0	0	1	4	0	0	0	5	9
07:30 AM	0	0	2	0	2	0	1	0	0	1	0	0	0	1	1	0	3	0	0	0	3	7
07:45 AM	1	0	1	0	2	0	3	0	0	3	0	0	0	0	0	0	0	0	0	0	0	5
Total	1	0	6	0	7	0	7	0	0	7	0	0	0	1	1	1	7	0	0	0	8	23
08:00 AM	0	0	2	0	2	0	5	0	0	5	0	0	0	0	0	0	3	0	0	0	3	10
08:15 AM	0	0	1	1	2	0	2	0	0	2	0	0	0	0	0	0	3	0	0	0	3	7
08:30 AM	0	0	0	0	0	0	3	0	0	3	0	0	0	0	0	0	1	0	0	0	1	4
08:45 AM	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	2	3
Total	0	0	4	1	5	0	10	0	0	10	0	0	0	0	0	1	8	0	0	0	9	24
Grand Total	1	0	10	1	12	0	17	0	0	17	0	0	0	1	1	2	15	0	0	0	17	47
Approch %	8.3	0	83.3	8.3		0	100	0	0		0	0	0	100		11.8	88.2	0	0	0		
Total %	2.1	0	21.3	2.1	25.5	0	36.2	0	0	36.2	0	0	0	2.1	2.1	4.3	31.9	0	0	0	36.2	
Cars	1	0	9	0	10	0	15	0	0	15	0	0	0	0	0	2	11	0	0	0	13	38
% Cars	100	0	90	0	83.3	0	88.2	0	0	88.2	0	0	0	0	0	100	73.3	0	0	0	76.5	80.9
Heavy Vehicles	0	0	1	0	1	0	2	0	0	2	0	0	0	0	0	0	4	0	0	0	4	7
% Heavy Vehicles	0	0	10	0	8.3	0	11.8	0	0	11.8	0	0	0	0	0	0	26.7	0	0	0	23.5	14.9
Bikes, Peds	0	0	0	1	1	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	2
% Bikes, Peds	0	0	0	100	8.3	0	0	0	0	0	0	0	0	100	100	0	0	0	0	0	0	4.3

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525 N. Main Street, Waynesville, NC 28786

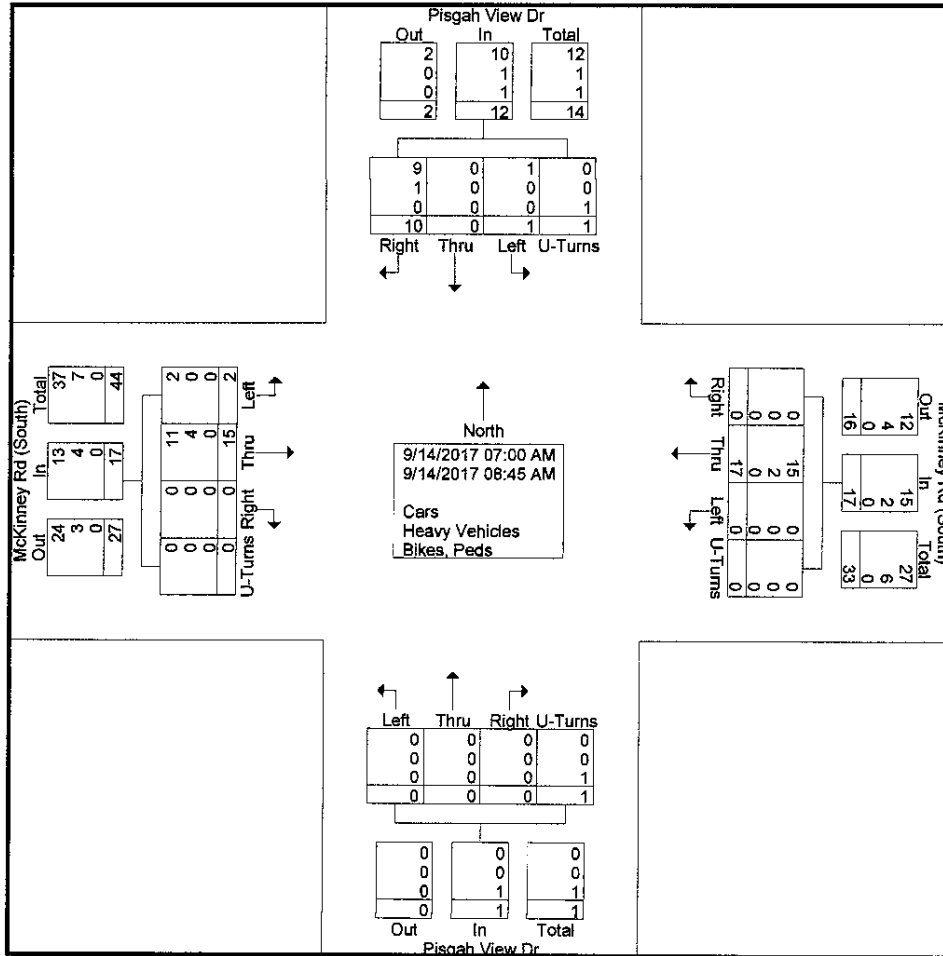
828-456-8383

File Name : Pisgah View Dr @ McKinney Rd (South) - Existing AM

Site Code : P-0699

Start Date : 9/14/2017

Page No : 2



J.M. Teague Engineering & Planning

525 N. Main Street, Waynesville, NC 28786

828-456-8383

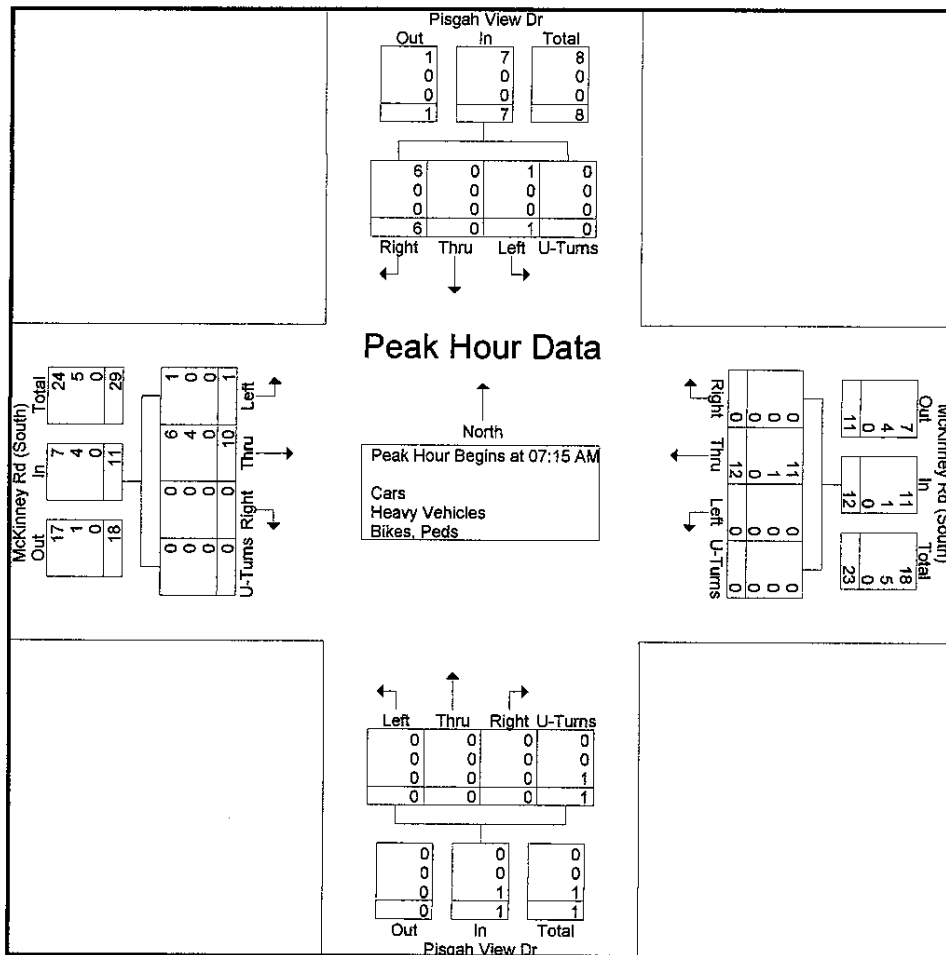
File Name : Pisgah View Dr @ McKinney Rd (South) - Existing AM

Site Code : P-0699

Start Date : 9/14/2017

Page No : 3

Start Time	Pisgah View Dr Southbound					McKinney Rd (South) Westbound					Pisgah View Dr Northbound					McKinney Rd (South) Eastbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
Peak Hour Analysis From 7:00:00 AM to 8:45:00 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 7:15:00 AM																					
7:15:00 AM	0	0	1	0	1	0	3	0	0	3	0	0	0	0	0	1	4	0	0	5	9
7:30:00 AM	0	0	2	0	2	0	1	0	0	1	0	0	0	1	1	0	3	0	0	3	7
7:45:00 AM	1	0	1	0	2	0	3	0	0	3	0	0	0	0	0	0	0	0	0	0	5
8:00:00 AM	0	0	2	0	2	0	5	0	0	5	0	0	0	0	0	0	3	0	0	3	10
Total Volume	1	0	6	0	7	0	12	0	0	12	0	0	0	1	1	1	10	0	0	11	31
% App. Total	14.3	0	85.7	0		0	100	0	0		0	0	0	100		9.1	90.9	0	0		
PHF	.250	.000	.750	.000	.875	.000	.600	.000	.000	.600	.000	.000	.250	.250	.250	.625	.000	.000	.550	.775	
Cars	1	0	6	0	7	0	11	0	0	11	0	0	0	0	0	1	6	0	0	7	25
% Cars	100	0	100	0	100	0	91.7	0	0	91.7	0	0	0	0	0	100	60.0	0	0	63.6	80.6
Heavy Vehicles	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	4	0	0	4	5
% Heavy Vehicles	0	0	0	0	0	0	8.3	0	0	8.3	0	0	0	0	0	0	40.0	0	0	36.4	16.1
Bikes, Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	1
% Bikes, Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	100	100	0	0	0	0	0	3.2



J.M. Teague Engineering & Planning

525 N. Main Street, Waynesville, NC 28786

828-456-8383

File Name : Pisgah View Dr @ McKinney Rd (South) - Existing PM

Site Code : P-0699

Start Date : 9/14/2017

Page No : 1

Groups Printed- Cars - Heavy Vehicles - Bikes, Peds

Start Time	Pisgah View Dr Southbound					McKinney Rd (South) Westbound					Pisgah View Dr Northbound					McKinney Rd (South) Eastbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
Factor	1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		
04:00 PM	0	0	0	0	0	0	1	0	1	2	0	0	0	0	0	1	2	0	0	3	5
04:15 PM	0	0	1	0	1	0	4	0	0	4	0	0	0	0	0	0	3	0	0	3	8
04:30 PM	0	0	1	0	1	0	3	0	0	3	0	0	0	0	0	4	6	0	0	10	14
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	3	0	0	4	5
Total	0	0	2	0	2	0	8	0	1	9	0	0	0	1	1	6	14	0	0	20	32
05:00 PM	0	0	3	0	3	0	1	0	0	1	0	0	0	0	0	4	0	0	0	4	8
05:15 PM	0	0	0	0	0	0	5	0	0	5	0	0	0	0	0	2	2	0	0	4	9
05:30 PM	1	0	0	0	1	0	1	1	0	2	0	0	0	0	0	1	4	0	0	5	8
05:45 PM	0	0	2	0	2	0	4	0	0	4	0	0	0	0	0	3	5	0	0	8	14
Total	1	0	5	0	6	0	11	1	0	12	0	0	0	0	0	10	11	0	0	21	39
Grand Total	1	0	7	0	8	0	19	1	1	21	0	0	0	1	1	16	25	0	0	41	71
Apprch %	12.5	0	87.5	0		0	90.5	4.8	4.8		0	0	0	100		39	61	0	0		
Total %	1.4	0	9.9	0	11.3	0	26.8	1.4	1.4	29.6	0	0	0	1.4	1.4	22.5	35.2	0	0	57.7	
Cars	1	0	7	0	8	0	17	1	0	18	0	0	0	0	0	16	25	0	0	41	67
% Cars	100	0	100	0	100	0	89.5	100	0	85.7	0	0	0	0	0	100	100	0	0	100	94.4
Heavy Vehicles	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	1
% Heavy Vehicles	0	0	0	0	0	0	5.3	0	0	4.8	0	0	0	0	0	0	0	0	0	0	1.4
Bikes, Peds	0	0	0	0	0	0	1	0	1	2	0	0	0	1	1	0	0	0	0	0	3
% Bikes, Peds	0	0	0	0	0	0	5.3	0	100	9.5	0	0	0	100	100	0	0	0	0	0	4.2

J.M. Teague Engineering & Planning

525 N. Main Street, Waynesville, NC 28786

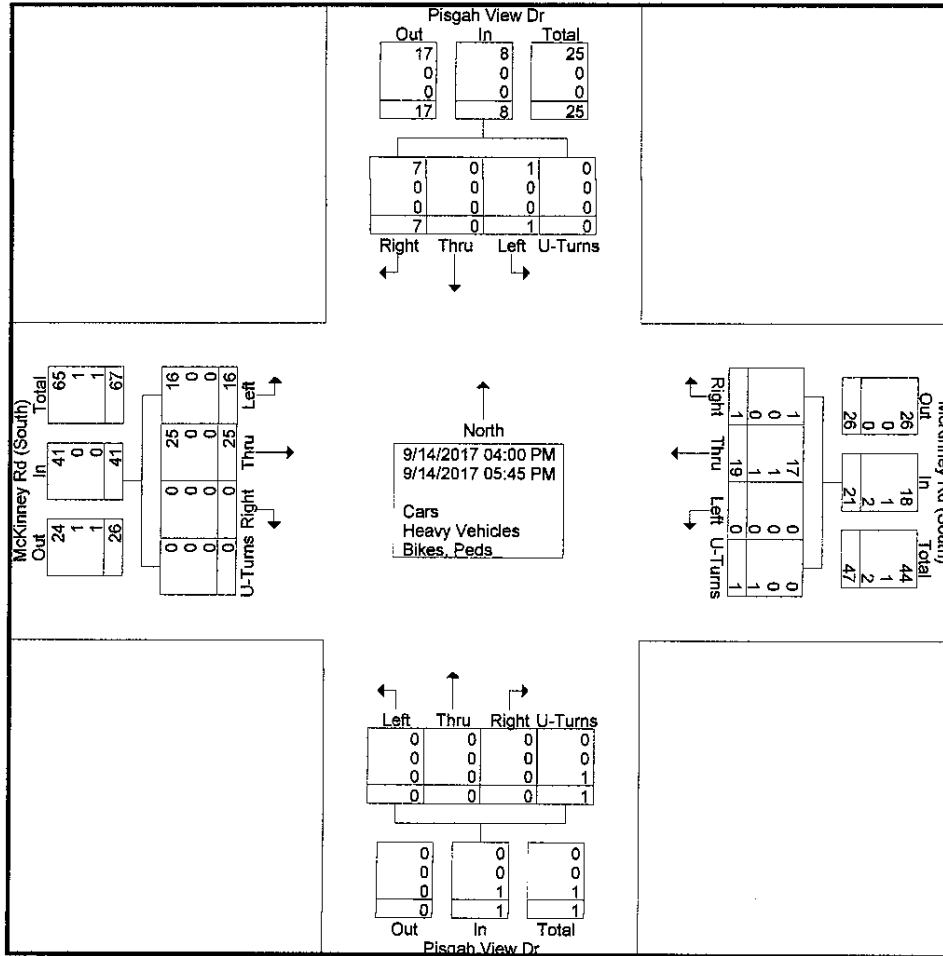
828-456-8383

File Name : Pisgah View Dr @ McKinney Rd (South) - Existing PM

Site Code : P-0699

Start Date : 9/14/2017

Page No : 2



J.M. Teague Engineering & Planning

525 N. Main Street, Waynesville, NC 28786

828-456-8383

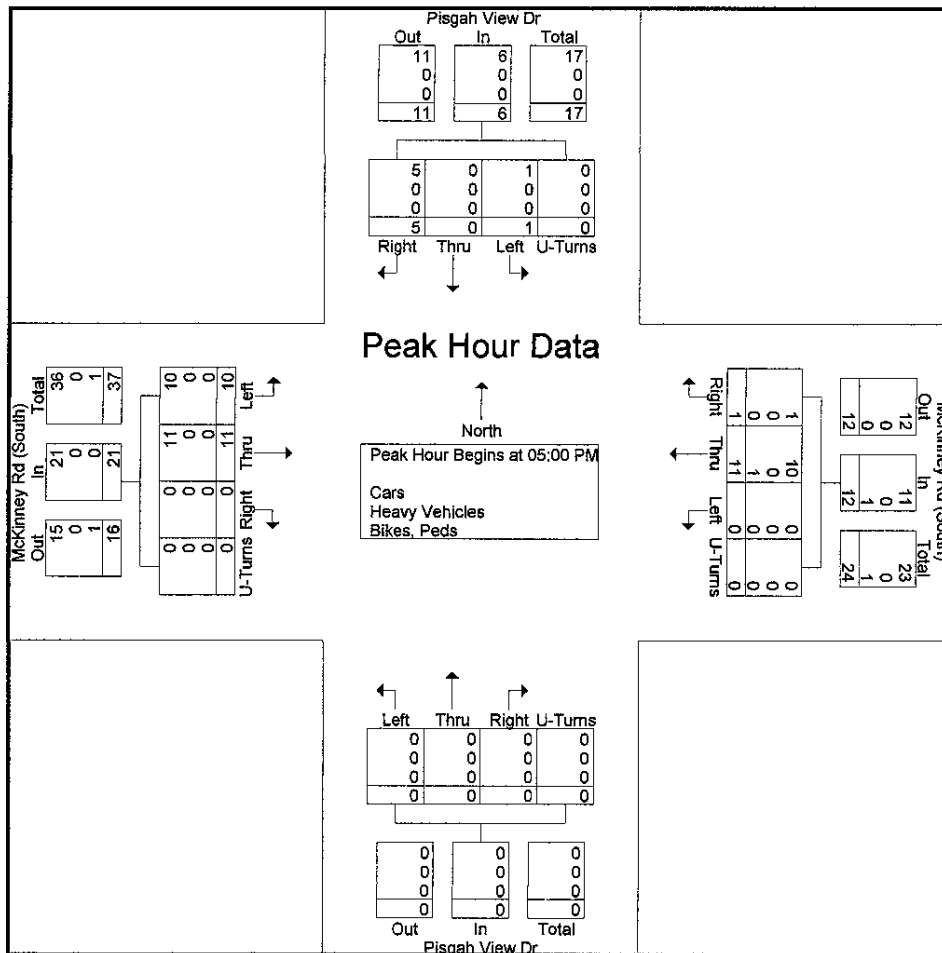
File Name : Pisgah View Dr @ McKinney Rd (South) - Existing PM

Site Code : P-0699

Start Date : 9/14/2017

Page No : 3

Start Time	Pisgah View Dr Southbound					McKinney Rd (South) Westbound					Pisgah View Dr Northbound					McKinney Rd (South) Eastbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
Peak Hour Analysis From 4:00:00 PM to 5:45:00 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 5:00:00 PM																					
5:00:00 PM	0	0	3	0	3	0	1	0	0	1	0	0	0	0	0	4	0	0	0	4	8
5:15:00 PM	0	0	0	0	0	0	5	0	0	5	0	0	0	0	0	2	2	0	0	4	9
5:30:00 PM	1	0	0	0	1	0	1	1	0	2	0	0	0	0	0	1	4	0	0	5	8
5:45:00 PM	0	0	2	0	2	0	4	0	0	4	0	0	0	0	0	3	5	0	0	8	14
Total Volume	1	0	5	0	6	0	11	1	0	12	0	0	0	0	0	10	11	0	0	21	39
% App. Total	16.7	0	83.3	0		0	91.7	8.3	0		0	0	0	0		47.6	52.4	0	0		
PHF	.250	.000	.417	.000	.500	.000	.550	.250	.000	.600	.000	.000	.000	.000	.000	.625	.550	.000	.000	.656	.696
Cars	1	0	5	0	6	0	10	1	0	11	0	0	0	0	0	10	11	0	0	21	38
% Cars	100	0	100	0	100	0	90.9	100	0	91.7	0	0	0	0	0	100	100	0	0	100	97.4
Heavy Vehicles	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% Heavy Vehicles	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Bikes, Peds	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	1
% Bikes, Peds	0	0	0	0	0	0	9.1	0	0	8.3	0	0	0	0	0	0	0	0	0	0	2.6



J.M. Teague Engineering & Planning

525 N. Main Street, Waynesville, NC 28786

828-456-8383

File Name : McKinney Rd @ US 64 - Exisitng AM

Site Code : P-0699

Start Date : 9/14/2017

Page No : 1

Groups Printed- Cars - Heavy Vehicles - Bikes, Peds

Start Time	McKinney Rd Southbound					US 64 Westbound					McKinney Rd Northbound					US 64 Eastbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
Factor	1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		
07:00 AM	2	0	0	0	2	2	33	4	0	39	9	0	17	0	26	0	89	2	1	92	159
07:15 AM	2	0	2	0	4	5	66	3	0	74	17	0	18	1	36	0	96	10	0	106	220
07:30 AM	5	1	0	0	6	3	70	4	0	77	19	1	19	0	39	0	103	8	0	111	233
07:45 AM	2	1	3	0	6	3	75	1	0	79	17	0	16	0	33	1	95	12	0	108	226
Total	11	2	5	0	18	13	244	12	0	269	62	1	70	1	134	1	383	32	1	417	838
08:00 AM	4	0	1	0	5	5	81	2	0	88	16	1	11	0	28	0	99	8	0	107	228
08:15 AM	1	0	1	0	2	3	64	4	0	71	8	0	6	0	14	2	80	7	1	90	177
08:30 AM	2	0	2	0	4	7	77	1	0	85	16	0	12	0	28	0	94	7	0	101	218
08:45 AM	0	0	0	0	0	1	61	1	0	63	6	0	7	0	13	1	73	5	0	79	155
Total	7	0	4	0	11	16	283	8	0	307	46	1	36	0	83	3	346	27	1	377	778
Grand Total	18	2	9	0	29	29	527	20	0	576	108	2	106	1	217	4	729	59	2	794	1616
Apprch %	62.1	6.9	31	0		5	91.5	3.5	0		49.8	0.9	48.8	0.5		0.5	91.8	7.4	0.3		
Total %	1.1	0.1	0.6	0	1.8	1.8	32.6	1.2	0	35.6	6.7	0.1	6.6	0.1	13.4	0.2	45.1	3.7	0.1	49.1	
Cars	15	2	9	0	26	29	497	16	0	542	107	2	102	0	211	4	703	59	0	766	1545
% Cars	83.3	100	100	0	89.7	100	94.3	80	0	94.1	99.1	100	96.2	0	97.2	100	96.4	100	0	96.5	95.6
Heavy Vehicles	3	0	0	0	3	0	30	4	0	34	1	0	4	0	5	0	25	0	0	25	67
% Heavy Vehicles	16.7	0	0	0	10.3	0	5.7	20	0	5.9	0.9	0	3.8	0	2.3	0	3.4	0	0	3.1	4.1
Bikes, Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	1	0	2	3	4
% Bikes, Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	100	0.5	0	0.1	0	100	0.4	0.2

J.M. Teague Engineering & Planning

525 N. Main Street, Waynesville, NC 28786

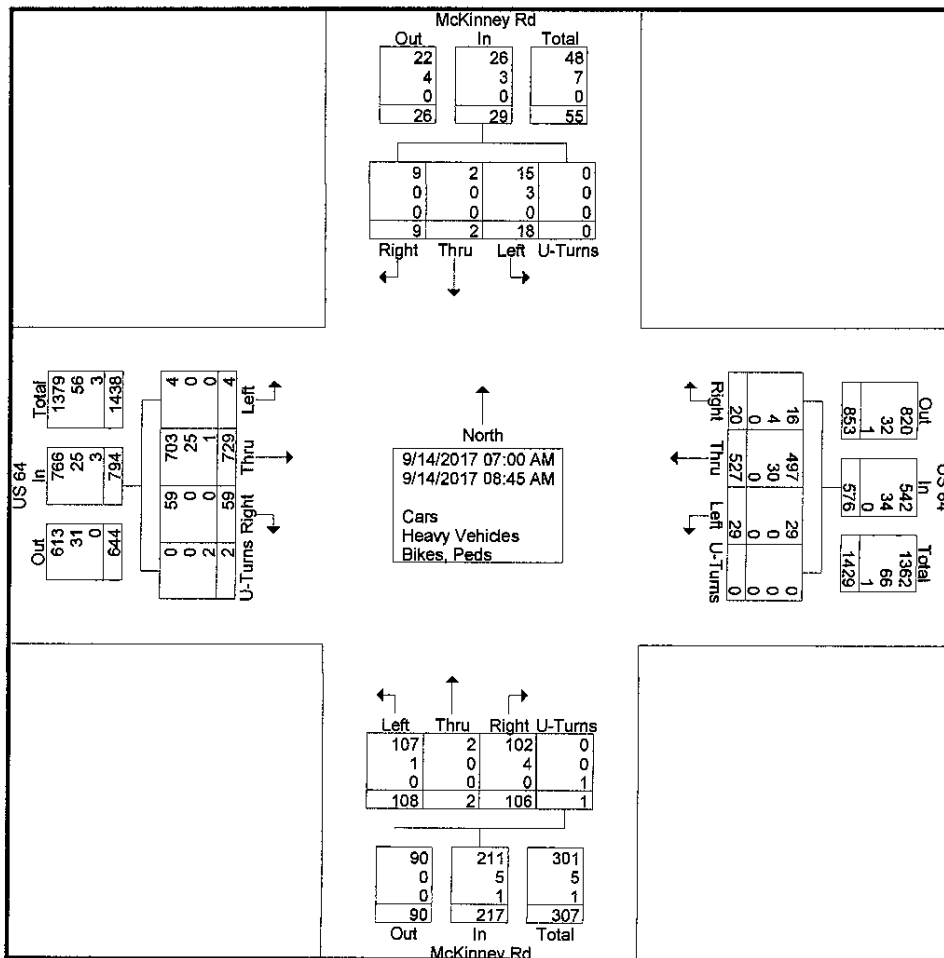
828-456-8383

File Name : McKinney Rd @ US 64 - Existing AM

Site Code : P-0699

Start Date : 9/14/2017

Page No : 2



J.M. Teague Engineering & Planning

525 N. Main Street, Waynesville, NC 28786

828-456-8383

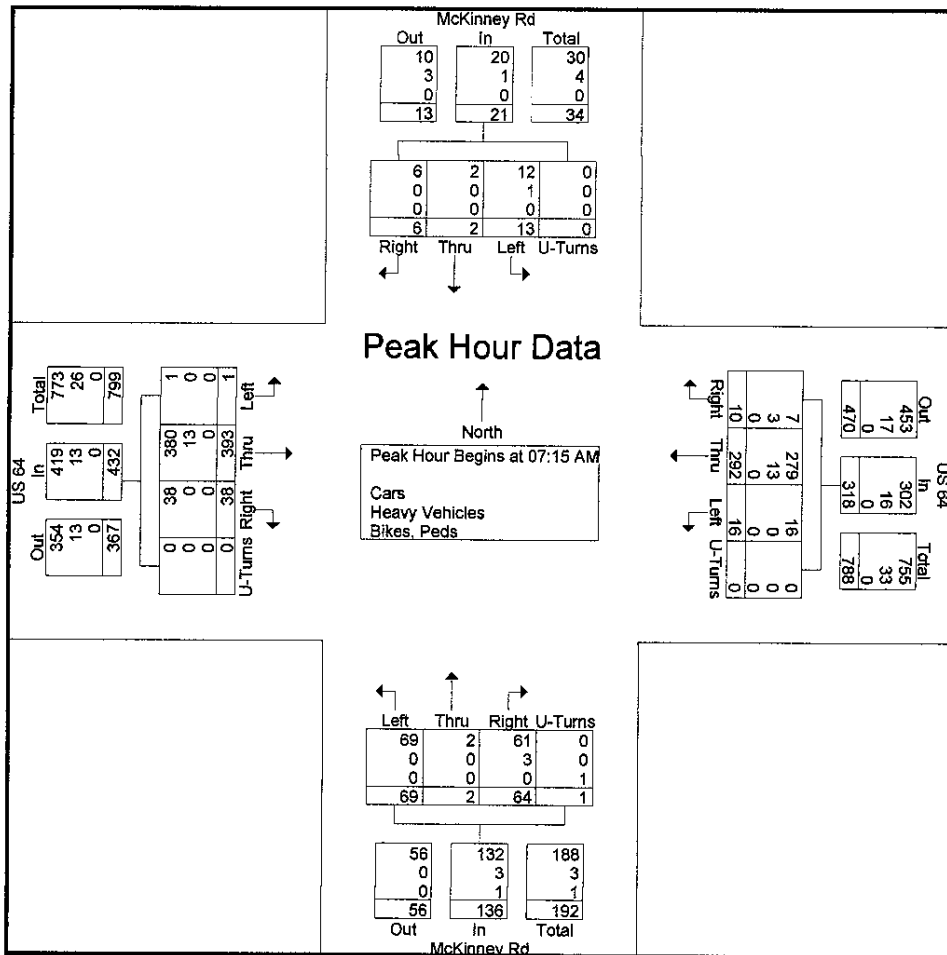
File Name : McKinney Rd @ US 64 - Existing AM

Site Code : P-0699

Start Date : 9/14/2017

Page No : 3

Start Time	McKinney Rd Southbound					US 64 Westbound					McKinney Rd Northbound					US 64 Eastbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
Peak Hour Analysis From 7:00:00 AM to 8:45:00 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 7:15:00 AM																					
7:15:00 AM	2	0	2	0	4	5	66	3	0	74	17	0	18	1	36	0	96	10	0	106	220
7:30:00 AM	5	1	0	0	6	3	70	4	0	77	19	1	19	0	39	0	103	8	0	111	233
7:45:00 AM	2	1	3	0	6	3	75	1	0	79	17	0	16	0	33	1	95	12	0	108	226
8:00:00 AM	4	0	1	0	5	5	81	2	0	88	16	1	11	0	28	0	99	8	0	107	228
Total Volume	13	2	6	0	21	16	292	10	0	318	69	2	64	1	136	1	393	38	0	432	907
% App. Total	61.9	9.5	28.6	0		5	91.8	3.1	0		50.7	1.5	47.1	0.7		0.2	91	8.8	0		
PHF	.650	.500	.500	.000	.875	.800	.901	.625	.000	.903	.908	.500	.842	.250	.872	.250	.954	.792	.000	.973	.973
Cars	12	2	6	0	20	16	279	7	0	302	69	2	61	0	132	1	380	38	0	419	873
% Cars	92.3	100	100	0	95.2	100	95.5	70.0	0	95.0	100	100	95.3	0	97.1	100	96.7	100	0	97.0	96.3
Heavy Vehicles	1	0	0	0	1	0	13	3	0	16	0	0	3	0	3	0	13	0	0	13	33
% Heavy Vehicles	7.7	0	0	0	4.8	0	4.5	30.0	0	5.0	0	0	4.7	0	2.2	0	3.3	0	0	3.0	3.6
Bikes, Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	1
% Bikes, Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	100	0.7	0	0	0	0	0	0.1



J.M. Teague Engineering & Planning

525 N. Main Street, Waynesville, NC 28786

828-456-8383

File Name : McKinney Rd @ US 64 - Existing PM

Site Code : P-0699

Start Date : 9/14/2017

Page No : 1

Groups Printed- Cars - Heavy Vehicles - Bikes, Peds

Start Time	McKinney Rd Southbound					US 64 Westbound					McKinney Rd Northbound					US 64 Eastbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
Factor	1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		
04:00 PM	0	0	1	0	1	11	103	2	0	116	15	0	13	0	28	3	121	13	0	137	282
04:15 PM	4	2	1	0	7	8	96	3	0	107	7	0	7	0	14	1	105	12	0	118	246
04:30 PM	6	1	1	0	8	11	104	6	0	121	14	1	7	0	22	1	92	10	0	103	254
04:45 PM	2	2	0	0	4	5	138	2	0	145	10	0	6	0	16	2	111	19	0	132	297
Total	12	5	3	0	20	35	441	13	0	489	46	1	33	0	80	7	429	54	0	490	1079
05:00 PM	5	1	2	0	8	8	110	2	0	120	13	1	5	0	19	2	106	12	0	120	267
05:15 PM	5	1	2	0	8	13	125	2	0	140	9	0	4	0	13	2	116	22	0	140	301
05:30 PM	3	1	1	0	5	11	110	4	0	125	10	0	11	0	21	3	108	10	0	121	272
05:45 PM	4	1	1	0	6	9	117	4	0	130	16	1	9	0	26	2	86	12	0	100	262
Total	17	4	6	0	27	41	462	12	0	515	48	2	29	0	79	9	416	56	0	481	1102
Grand Total	29	9	9	0	47	76	903	25	0	1004	94	3	62	0	159	16	845	110	0	971	2181
Apprch %	61.7	19.1	19.1	0		7.6	89.9	2.5	0		59.1	1.9	39	0		1.6	87	11.3	0		
Total %	1.3	0.4	0.4	0	2.2	3.5	41.4	1.1	0	46	4.3	0.1	2.8	0	7.3	0.7	38.7	5	0	44.5	
Cars	26	8	9	0	43	75	887	25	0	987	92	3	56	0	151	13	829	109	0	951	2132
% Cars	89.7	88.9	100	0	91.5	98.7	98.2	100	0	98.3	97.9	100	90.3	0	95	81.2	98.1	99.1	0	97.9	97.8
Heavy Vehicles	3	0	0	0	3	1	15	0	0	16	2	0	6	0	8	3	16	1	0	20	47
% Heavy Vehicles	10.3	0	0	0	6.4	1.3	1.7	0	0	1.6	2.1	0	9.7	0	5	18.8	1.9	0.9	0	2.1	2.2
Bikes, Peds	0	1	0	0	1	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	2
% Bikes, Peds	0	11.1	0	0	2.1	0	0.1	0	0	0.1	0	0	0	0	0	0	0	0	0	0	0.1

J.M. Teague Engineering & Planning

525 N. Main Street, Waynesville, NC 28786

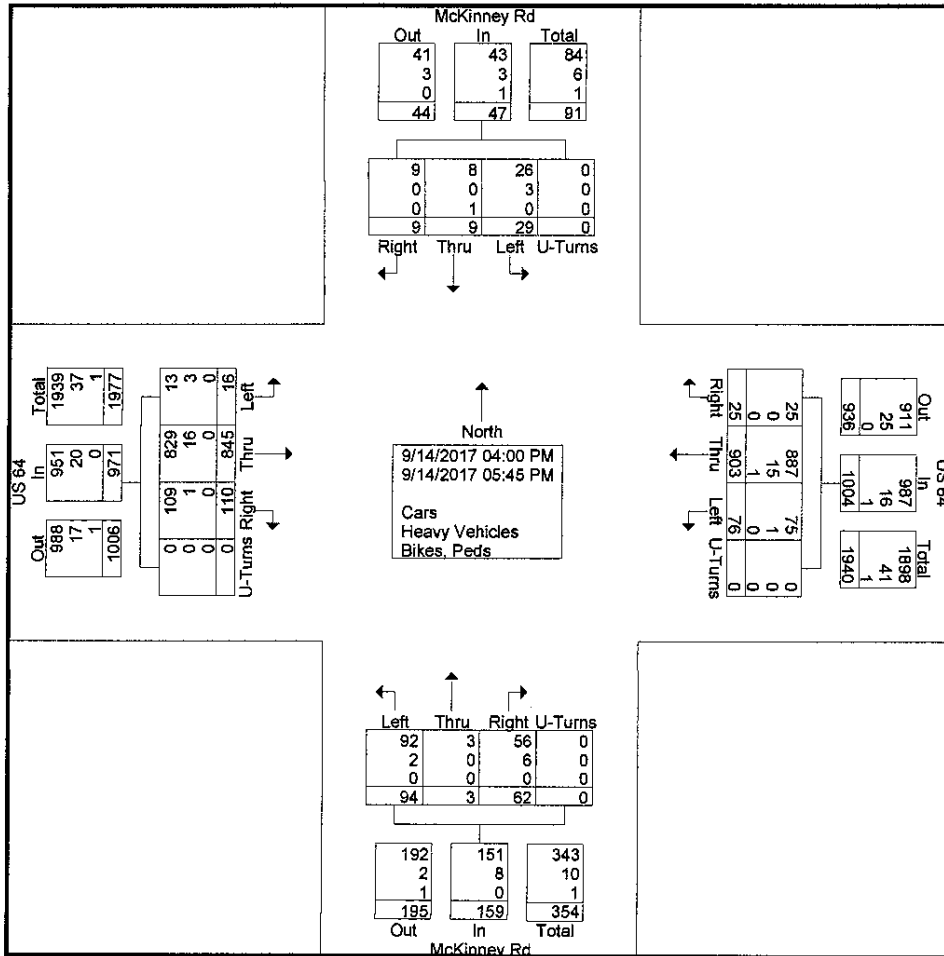
828-456-8383

File Name : McKinney Rd @ US 64 - Existing PM

Site Code : P-0699

Start Date : 9/14/2017

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J.M. Teague Engineering & Planning

525 N. Main Street, Waynesville, NC 28786

828-456-8383

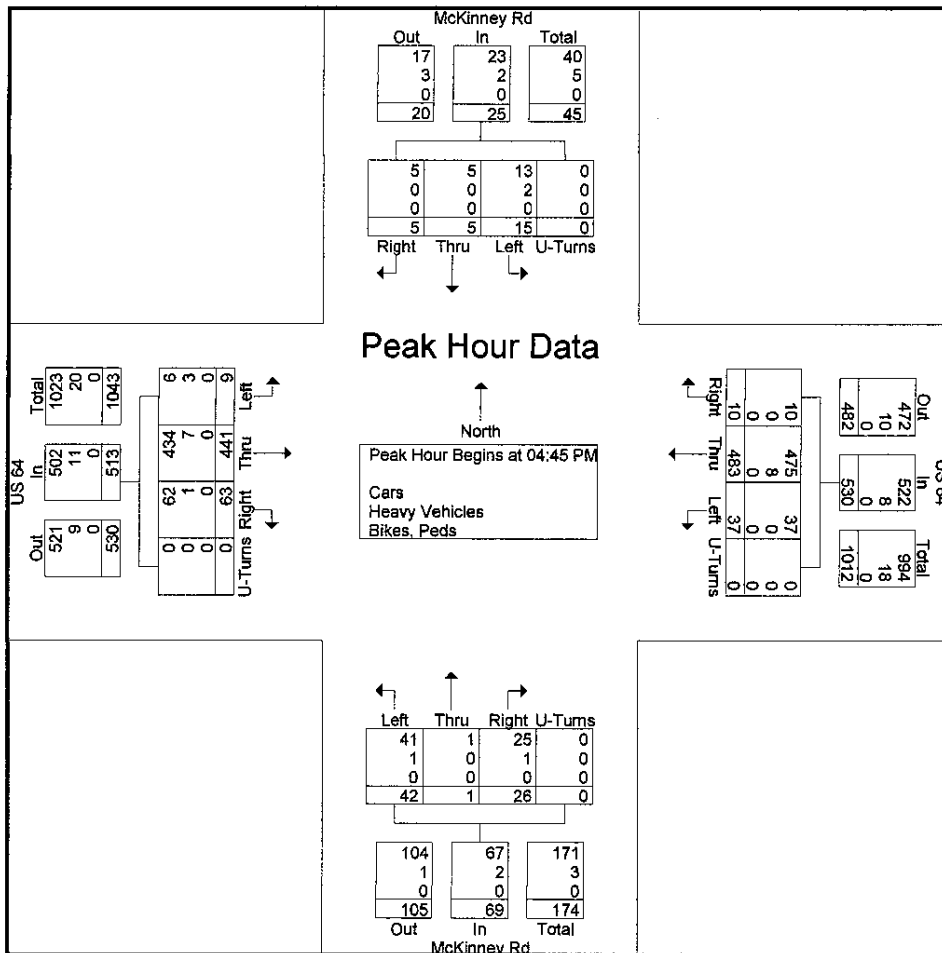
File Name : McKinney Rd @ US 64 - Existing PM

Site Code : P-0699

Start Date : 9/14/2017

Page No : 3

Start Time	McKinney Rd Southbound					US 64 Westbound					McKinney Rd Northbound					US 64 Eastbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
Peak Hour Analysis From 4:00:00 PM to 5:45:00 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 4:45:00 PM																					
4:45:00 PM	2	2	0	0	4	5	138	2	0	145	10	0	6	0	16	2	111	19	0	132	297
5:00:00 PM	5	1	2	0	8	8	110	2	0	120	13	1	5	0	19	2	106	12	0	120	267
5:15:00 PM	5	1	2	0	8	13	125	2	0	140	9	0	4	0	13	2	116	22	0	140	301
5:30:00 PM	3	1	1	0	5	11	110	4	0	125	10	0	11	0	21	3	108	10	0	121	272
Total Volume	15	5	5	0	25	37	483	10	0	530	42	1	26	0	69	9	441	63	0	513	1137
% App. Total	60	20	20	0		7	91.1	1.9	0		60.9	1.4	37.7	0		1.8	86	12.3	0		
PHF	.750	.625	.625	.000	.781	.712	.875	.625	.000	.914	.808	.250	.591	.000	.821	.750	.950	.716	.000	.916	.944
Cars	13	5	5	0	23	37	475	10	0	522	41	1	25	0	67	6	434	62	0	502	1114
% Cars	86.7	100	100	0	92.0	100	98.3	100	0	98.5	97.6	100	96.2	0	97.1	66.7	98.4	98.4	0	97.9	98.0
Heavy Vehicles	2	0	0	0	2	0	8	0	0	8	1	0	1	0	2	3	7	1	0	11	23
% Heavy Vehicles	13.3	0	0	0	8.0	0	1.7	0	0	1.5	2.4	0	3.8	0	2.9	33.3	1.6	1.6	0	2.1	2.0
Bikes, Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% Bikes, Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0



J.M. Teague Engineering & Planning

525 N. Main Street, Waynesville, NC 28786

828-456-8383

File Name : Brickyard Rd @ US 64 - Existing AM

Site Code : P-0699

Start Date : 9/14/2017

Page No : 1

Groups Printed- Cars - Heavy Vehicles - Bikes, Peds

Start Time	Brickyard Rd Southbound					US 64 Westbound					Brickyard Rd Northbound					US 64 Eastbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
Factor	1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		
07:00 AM	23	0	1	0	24	0	36	6	0	42	0	0	0	0	0	1	64	0	0	65	131
07:15 AM	31	0	6	0	37	0	65	19	0	84	0	0	0	1	1	2	76	0	0	78	200
07:30 AM	28	0	4	0	32	0	73	16	0	89	0	0	0	0	0	3	83	0	0	86	207
07:45 AM	17	0	4	0	21	0	68	28	0	96	0	0	0	0	0	4	89	0	0	93	210
Total	99	0	15	0	114	0	242	69	0	311	0	0	0	1	1	10	312	0	0	322	748
08:00 AM	43	0	8	0	51	0	75	21	0	96	0	0	0	0	0	7	66	0	0	73	220
08:15 AM	22	0	4	0	26	0	59	13	0	72	0	0	0	0	0	4	66	0	0	70	168
08:30 AM	21	0	11	0	32	0	81	13	0	94	0	0	0	0	0	4	78	0	0	82	208
08:45 AM	18	0	9	0	27	0	50	11	0	61	0	0	0	0	0	6	63	0	0	69	157
Total	104	0	32	0	136	0	265	58	0	323	0	0	0	0	0	21	273	0	0	294	753
Grand Total	203	0	47	0	250	0	507	127	0	634	0	0	0	1	1	31	585	0	0	616	1501
Apprch %	81.2	0	18.8	0		0	80	20	0		0	0	0	100		5	95	0	0		
Total %	13.5	0	3.1	0	16.7	0	33.8	8.5	0	42.2	0	0	0	0.1	0.1	2.1	39	0	0	41	
Cars	195	0	44	0	239	0	476	121	0	597	0	0	0	0	0	28	553	0	0	581	1417
% Cars	96.1	0	93.6	0	95.6	0	93.9	95.3	0	94.2	0	0	0	0	0	90.3	94.5	0	0	94.3	94.4
Heavy Vehicles	8	0	3	0	11	0	31	6	0	37	0	0	0	0	0	3	31	0	0	34	82
% Heavy Vehicles	3.9	0	6.4	0	4.4	0	6.1	4.7	0	5.8	0	0	0	0	0	9.7	5.3	0	0	5.5	5.5
Bikes, Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	1	0	0	1	2
% Bikes, Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	100	100	0	0.2	0	0	0.2	0.1

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525 N. Main Street, Waynesville, NC 28786

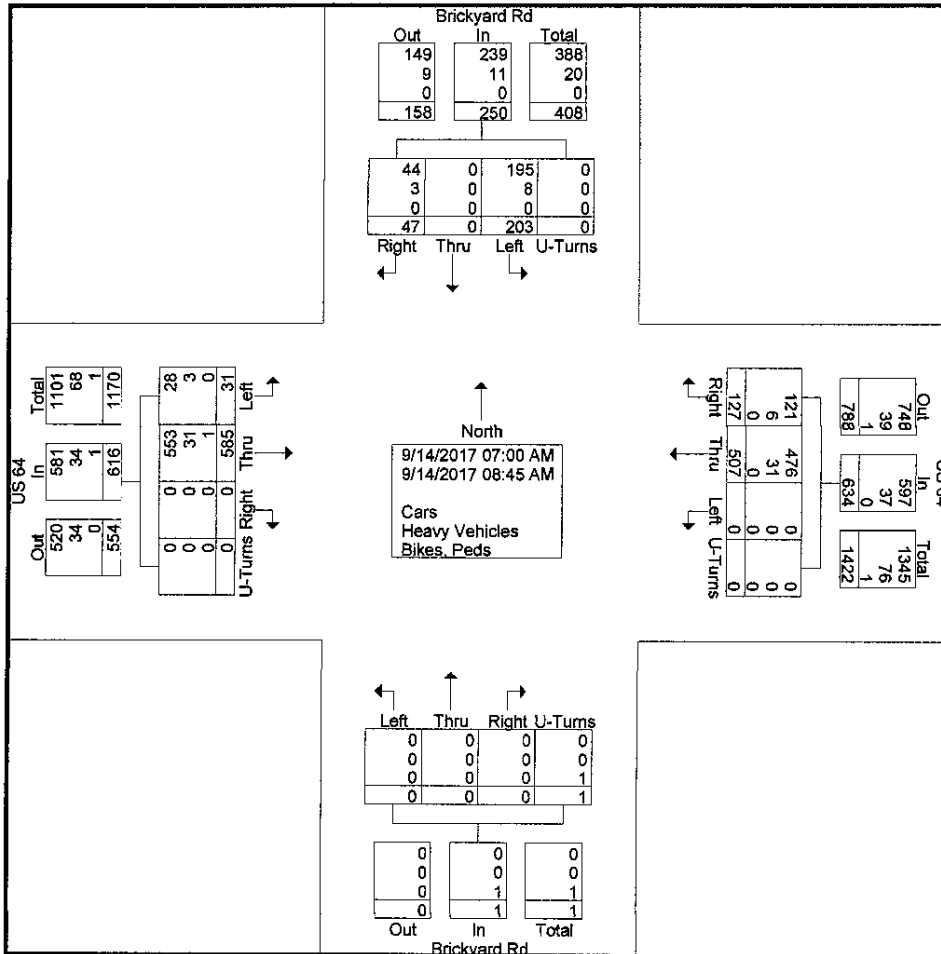
828-456-8383

File Name : Brickyard Rd @ US 64 - Existing AM

Site Code : P-0699

Start Date : 9/14/2017

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525 N. Main Street, Waynesville, NC 28786

828-456-8383

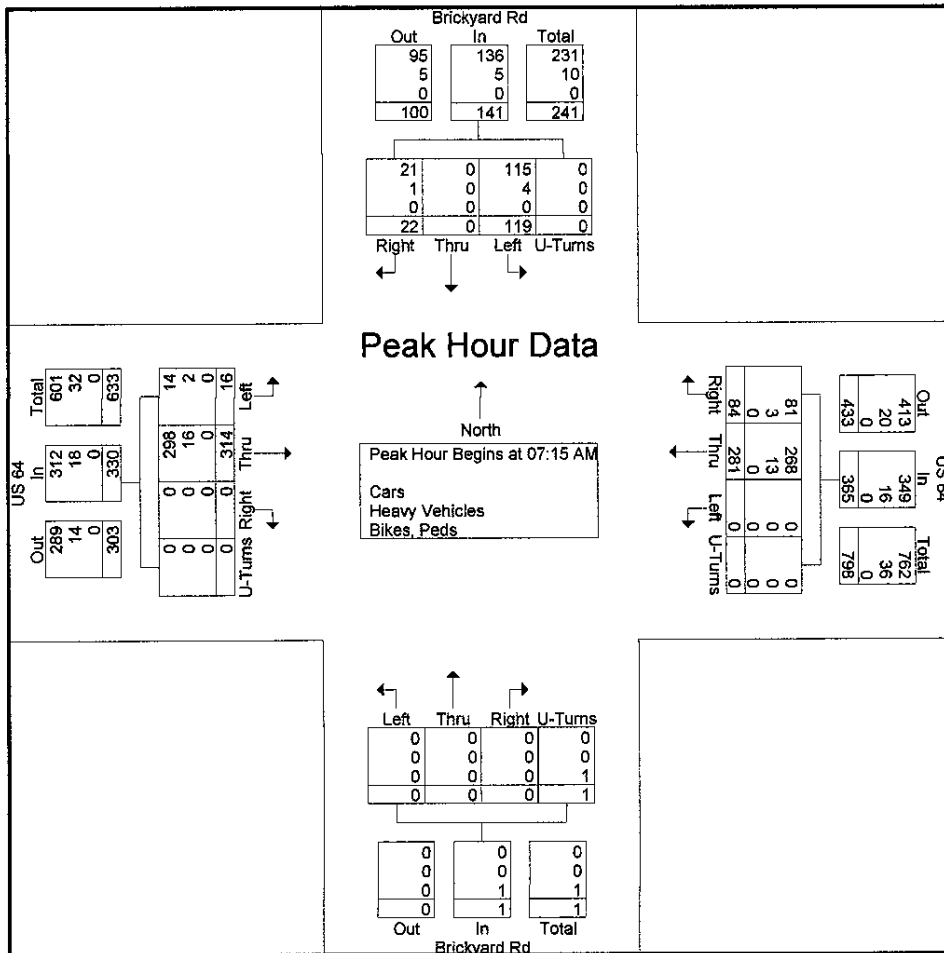
File Name : Brickyard Rd @ US 64 - Existing AM

Site Code : P-0699

Start Date : 9/14/2017

Page No : 3

Start Time	Brickyard Rd Southbound					US 64 Westbound					Brickyard Rd Northbound					US 64 Eastbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
Peak Hour Analysis From 7:00:00 AM to 8:45:00 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 7:15:00 AM																					
7:15:00 AM	31	0	6	0	37	0	65	19	0	84	0	0	0	1	1	2	76	0	0	78	200
7:30:00 AM	28	0	4	0	32	0	73	16	0	89	0	0	0	0	0	3	83	0	0	86	207
7:45:00 AM	17	0	4	0	21	0	68	28	0	96	0	0	0	0	0	4	89	0	0	93	210
8:00:00 AM	43	0	8	0	51	0	75	21	0	96	0	0	0	0	0	7	66	0	0	73	220
Total Volume	119	0	22	0	141	0	281	84	0	365	0	0	0	1	1	16	314	0	0	330	837
% App. Total	84.4	0	15.6	0		0	77	23	0		0	0	0	100		4.8	95.2	0	0		
PHF	.692	.000	.688	.000	.691	.000	.937	.750	.000	.951	.000	.000	.000	.250	.250	.571	.882	.000	.000	.887	.951
Cars	115	0	21	0	136	0	268	81	0	349	0	0	0	0	0	14	298	0	0	312	797
% Cars	96.6	0	95.5	0	96.5	0	95.4	96.4	0	95.6	0	0	0	0	0	87.5	94.9	0	0	94.5	95.2
Heavy Vehicles	4	0	1	0	5	0	13	3	0	16	0	0	0	0	0	2	16	0	0	18	39
% Heavy Vehicles	3.4	0	4.5	0	3.5	0	4.6	3.6	0	4.4	0	0	0	0	0	12.5	5.1	0	0	5.5	4.7
Bikes, Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	1
% Bikes, Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	100	100	0	0	0	0	0	0.1



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525 N. Main Street, Waynesville, NC 28786

828-456-8383

File Name : Brickyard Rd @ US 64 - Existing PM

Site Code : P-0699

Start Date : 9/14/2017

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Groups Printed- Cars - Heavy Vehicles - Bikes, Peds

Start Time	Brickyard Rd Southbound					US 64 Westbound					Brickyard Rd Northbound					US 64 Eastbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
Factor	1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		
04:00 PM	33	0	4	0	37	0	96	25	0	121	0	0	0	0	0	4	104	0	0	108	266
04:15 PM	31	0	5	0	36	0	81	24	0	105	0	0	0	0	0	9	83	0	0	92	233
04:30 PM	31	0	2	0	33	0	90	25	0	115	0	0	0	0	0	7	79	0	0	86	234
04:45 PM	16	0	5	0	21	0	113	39	0	152	0	0	0	0	0	3	106	0	0	109	282
Total	111	0	16	0	127	0	380	113	0	493	0	0	0	0	0	23	372	0	0	395	1015
05:00 PM	29	0	7	0	36	0	98	24	0	122	0	0	0	0	0	11	89	0	0	100	258
05:15 PM	33	0	3	0	36	0	109	25	0	134	0	0	0	0	0	5	109	0	0	114	284
05:30 PM	33	0	8	0	41	0	91	31	0	122	0	0	0	0	0	3	84	0	0	87	250
05:45 PM	20	0	8	0	28	0	98	34	0	132	0	0	0	0	0	3	76	0	0	79	239
Total	115	0	26	0	141	0	396	114	0	510	0	0	0	0	0	22	358	0	0	380	1031
Grand Total	226	0	42	0	268	0	776	227	0	1003	0	0	0	0	0	45	730	0	0	775	2046
Apprch %	84.3	0	15.7	0		0	77.4	22.6	0		0	0	0	0		5.8	94.2	0	0		
Total %	11	0	2.1	0	13.1	0	37.9	11.1	0	49	0	0	0	0	0	2.2	35.7	0	0	37.9	
Cars	223	0	41	0	264	0	757	225	0	982	0	0	0	0	0	44	709	0	0	753	1999
% Cars	98.7	0	97.6	0	98.5	0	97.6	99.1	0	97.9	0	0	0	0	0	97.8	97.1	0	0	97.2	97.7
Heavy Vehicles	3	0	1	0	4	0	19	2	0	21	0	0	0	0	0	1	21	0	0	22	47
% Heavy Vehicles	1.3	0	2.4	0	1.5	0	2.4	0.9	0	2.1	0	0	0	0	0	2.2	2.9	0	0	2.8	2.3
Bikes, Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% Bikes, Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

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525 N. Main Street, Waynesville, NC 28786

828-456-8383

File Name : N Greenwood Forest Dr @ US 64 - Existing AM

Site Code : P-0699

Start Date : 9/14/2017

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Groups Printed- Cars - Heavy Vehicles - Bikes, Peds

Start Time	N Greenwood Forest Dr Southbound					US 64 Westbound					N Greenwood Forest Dr Northbound					US 64 Eastbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
Factor	1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		
07:00 AM	9	0	7	0	16	0	36	1	0	37	0	0	0	0	0	32	58	0	0	90	143
07:15 AM	14	0	14	0	28	0	58	3	0	61	0	0	0	0	0	28	59	0	0	87	176
07:30 AM	11	0	7	0	18	0	71	1	0	72	0	0	0	0	0	27	74	0	0	101	191
07:45 AM	10	0	5	0	15	0	61	5	0	66	0	0	0	0	0	14	75	0	1	90	171
Total	44	0	33	0	77	0	226	10	0	236	0	0	0	0	0	101	266	0	1	368	681
08:00 AM	2	0	8	0	10	0	62	8	0	70	0	0	0	0	0	15	71	0	0	86	166
08:15 AM	10	0	5	0	15	0	61	4	0	65	0	0	0	0	0	13	60	0	0	73	153
08:30 AM	11	0	12	0	23	0	66	3	1	70	0	0	0	0	0	10	56	0	0	66	159
08:45 AM	9	0	9	0	18	0	53	5	0	58	0	0	0	0	0	11	54	0	0	65	141
Total	32	0	34	0	66	0	242	20	1	263	0	0	0	0	0	49	241	0	0	290	619
Grand Total	76	0	67	0	143	0	468	30	1	499	0	0	0	0	0	150	507	0	1	658	1300
Apprch %	53.1	0	46.9	0		0	93.8	6	0.2		0	0	0	0		22.8	77.1	0	0.2		
Total %	5.8	0	5.2	0	11	0	36	2.3	0.1	38.4	0	0	0	0	0	11.5	39	0	0.1	50.6	
Cars	75	0	66	0	141	0	440	29	0	469	0	0	0	0	0	147	486	0	0	633	1243
% Cars	98.7	0	98.5	0	98.6	0	94	96.7	0	94	0	0	0	0	0	98	95.9	0	0	96.2	95.6
Heavy Vehicles	1	0	1	0	2	0	28	1	0	29	0	0	0	0	0	3	20	0	0	23	54
% Heavy Vehicles	1.3	0	1.5	0	1.4	0	6	3.3	0	5.8	0	0	0	0	0	2	3.9	0	0	3.5	4.2
Bikes, Peds	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	1	0	1	2	3
% Bikes, Peds	0	0	0	0	0	0	0	0	100	0.2	0	0	0	0	0	0	0.2	0	100	0.3	0.2

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525 N. Main Street, Waynesville, NC 28786

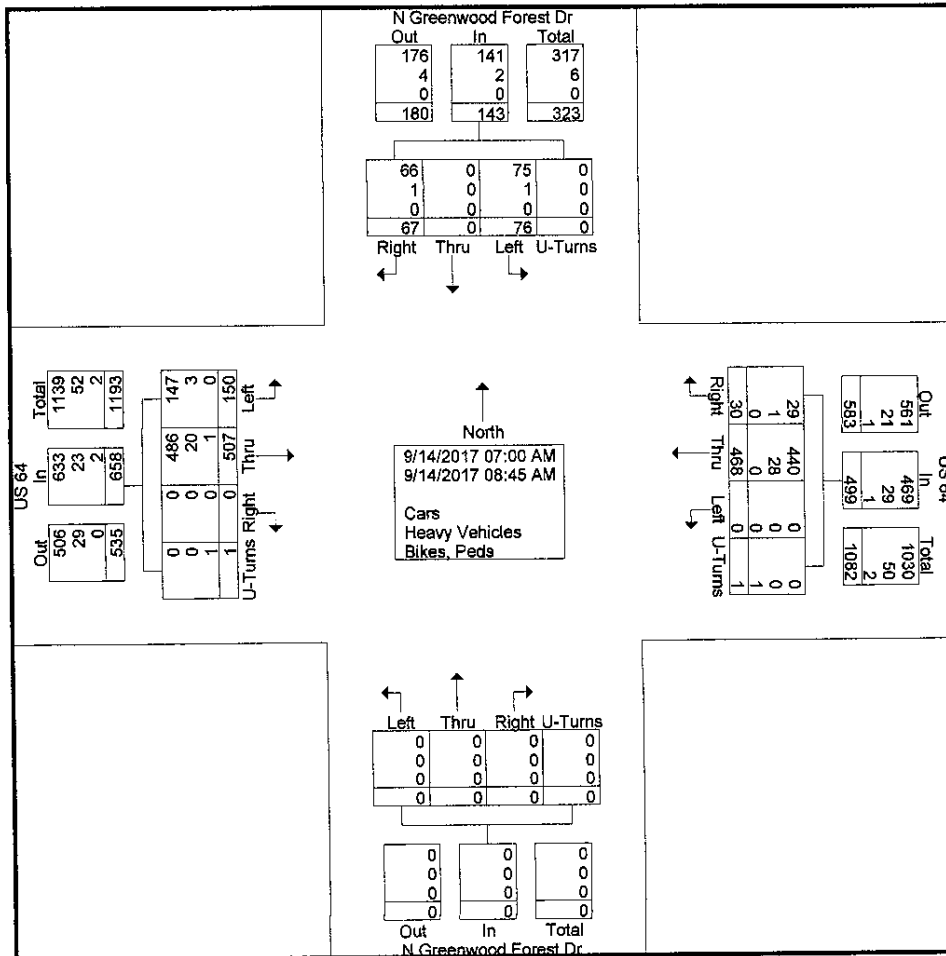
828-456-8383

File Name : N Greenwood Forest Dr @ US 64 - Existing AM

Site Code : P-0699

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525 N. Main Street, Waynesville, NC 28786

828-456-8383

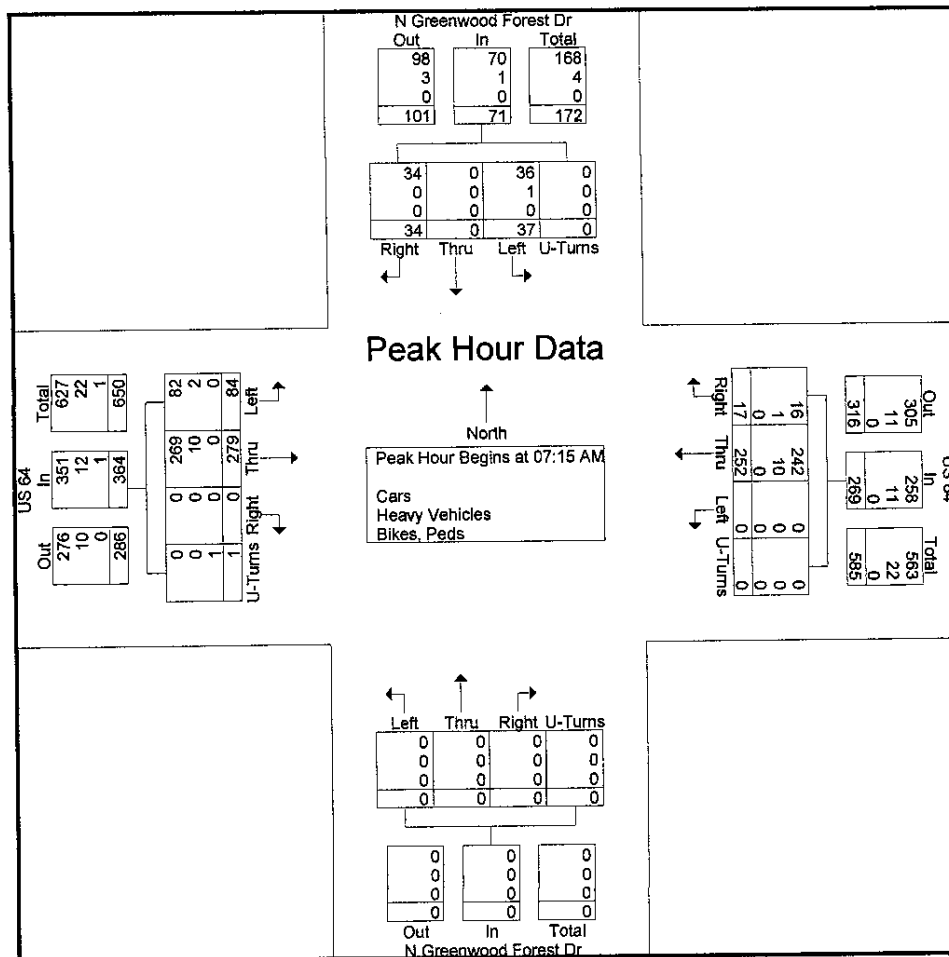
File Name : N Greenwood Forest Dr @ US 64 - Existing AM

Site Code : P-0699

Start Date : 9/14/2017

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Start Time	N Greenwood Forest Dr Southbound					US 64 Westbound					N Greenwood Forest Dr Northbound					US 64 Eastbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
Peak Hour Analysis From 7:00:00 AM to 8:45:00 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 7:15:00 AM																					
7:15:00 AM	14	0	14	0	28	0	58	3	0	61	0	0	0	0	0	28	59	0	0	87	176
7:30:00 AM	11	0	7	0	18	0	71	1	0	72	0	0	0	0	0	27	74	0	0	101	191
7:45:00 AM	10	0	5	0	15	0	61	5	0	66	0	0	0	0	0	14	75	0	1	90	171
8:00:00 AM	2	0	8	0	10	0	62	8	0	70	0	0	0	0	0	15	71	0	0	86	166
Total Volume	37	0	34	0	71	0	252	17	0	269	0	0	0	0	0	84	279	0	1	364	704
% App. Total	52.1	0	47.9	0		0	93.7	6.3	0		0	0	0	0		23.1	76.6	0	0.3		
PHF	.661	.000	.607	.000	.634	.000	.887	.531	.000	.934	.000	.000	.000	.000	.000	.750	.930	.000	.250	.901	.921
Cars	36	0	34	0	70	0	242	16	0	258	0	0	0	0	0	82	269	0	0	351	679
% Cars	97.3	0	100	0	98.6	0	96.0	94.1	0	95.9	0	0	0	0	0	97.6	96.4	0	0	96.4	96.4
Heavy Vehicles	1	0	0	0	1	0	10	1	0	11	0	0	0	0	0	2	10	0	0	12	24
% Heavy Vehicles	2.7	0	0	0	1.4	0	4.0	5.9	0	4.1	0	0	0	0	0	2.4	3.6	0	0	3.3	3.4
Bikes, Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1
% Bikes, Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	100	0.3	0.1



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525 N. Main Street, Waynesville, NC 28786

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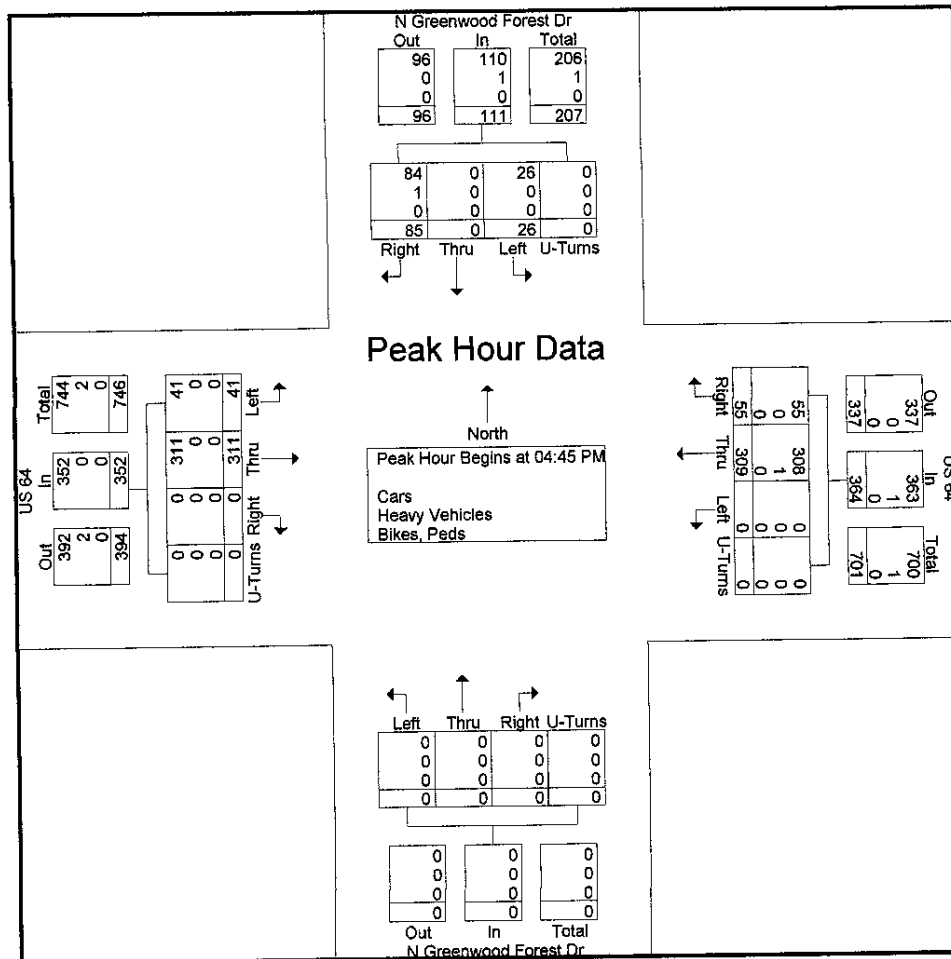
File Name : N Greenwood Forest Dr @ US 64 - Existing PM

Site Code : P-0699

Start Date : 9/14/2017

Page No : 3

Start Time	N Greenwood Forest Dr Southbound					US 64 Westbound					N Greenwood Forest Dr Northbound					US 64 Eastbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
Peak Hour Analysis From 4:00:00 PM to 5:45:00 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 4:45:00 PM																					
4:45:00 PM	5	0	18	0	23	0	78	13	0	91	0	0	0	0	0	10	85	0	0	95	209
5:00:00 PM	6	0	16	0	22	0	77	16	0	93	0	0	0	0	0	11	80	0	0	91	206
5:15:00 PM	8	0	21	0	29	0	81	12	0	93	0	0	0	0	0	11	78	0	0	89	211
5:30:00 PM	7	0	30	0	37	0	73	14	0	87	0	0	0	0	0	9	68	0	0	77	201
Total Volume	26	0	85	0	111	0	309	55	0	364	0	0	0	0	0	41	311	0	0	352	827
% App. Total	23.4	0	76.6	0		0	84.9	15.1	0		0	0	0	0	0	11.6	88.4	0	0		
PHF	.813	.000	.708	.000	.750	.000	.954	.859	.000	.978	.000	.000	.000	.000	.000	.932	.915	.000	.000	.926	.980
Cars	26	0	84	0	110	0	308	55	0	363	0	0	0	0	0	41	311	0	0	352	825
% Cars	100	0	98.8	0	99.1	0	99.7	100	0	99.7	0	0	0	0	0	100	100	0	0	100	99.8
Heavy Vehicles	0	0	1	0	1	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	2
% Heavy Vehicles	0	0	1.2	0	0.9	0	0.3	0	0	0.3	0	0	0	0	0	0	0	0	0	0	0.2
Bikes, Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% Bikes, Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0



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525 N. Main Street, Waynesville, NC 28786

828-456-8383

File Name : N Greenwood Forest Dr @ Brickyard Rd - Background AM

Site Code : P-0699

Start Date : 9/14/2017

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Groups Printed- Cars - Heavy Vehicles - Bikes, Peds

Start Time	N Greenwood Forest Dr Southbound					Brickyard Rd Westbound					N Greenwood Forest Dr Northbound					Brickyard Rd Eastbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
Factor	1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		
07:00 AM	0	0	0	0	0	4	1	0	0	5	4	0	33	0	37	0	13	10	0	23	65
07:15 AM	0	0	0	0	0	11	4	0	0	15	2	0	29	0	31	0	16	10	0	26	72
07:30 AM	0	0	0	0	0	7	2	0	0	9	6	0	29	1	36	0	22	12	0	34	79
07:45 AM	0	0	0	0	0	4	7	0	0	11	7	0	11	0	18	0	12	7	0	19	48
Total	0	0	0	0	0	26	14	0	0	40	19	0	102	1	122	0	63	39	0	102	264
08:00 AM	0	0	0	0	0	8	6	0	0	14	6	0	13	0	19	0	17	3	0	20	53
08:15 AM	0	0	0	0	0	6	2	0	0	8	3	0	17	0	20	0	6	6	0	12	40
08:30 AM	0	0	0	0	0	8	4	0	0	12	5	0	9	0	14	0	10	11	0	21	47
08:45 AM	0	0	0	0	0	6	2	0	0	8	6	0	10	0	16	0	12	7	1	20	44
Total	0	0	0	0	0	28	14	0	0	42	20	0	49	0	69	0	45	27	1	73	184
Grand Total	0	0	0	0	0	54	28	0	0	82	39	0	151	1	191	0	108	66	1	175	448
Apprch %	0	0	0	0	0	65.9	34.1	0	0		20.4	0	79.1	0.5		0	61.7	37.7	0.6		
Total %	0	0	0	0	0	12.1	6.2	0	0	18.3	8.7	0	33.7	0.2	42.6	0	24.1	14.7	0.2	39.1	
Cars	0	0	0	0	0	52	27	0	0	79	37	0	147	0	184	0	105	65	0	170	433
% Cars	0	0	0	0	0	96.3	96.4	0	0	96.3	94.9	0	97.4	0	96.3	0	97.2	98.5	0	97.1	96.7
Heavy Vehicles	0	0	0	0	0	2	1	0	0	3	2	0	4	0	6	0	3	1	0	4	13
% Heavy Vehicles	0	0	0	0	0	3.7	3.6	0	0	3.7	5.1	0	2.6	0	3.1	0	2.8	1.5	0	2.3	2.9
Bikes, Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	1	1	2
% Bikes, Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	100	0.5	0	0	0	100	0.6	0.4

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525 N. Main Street, Waynesville, NC 28786

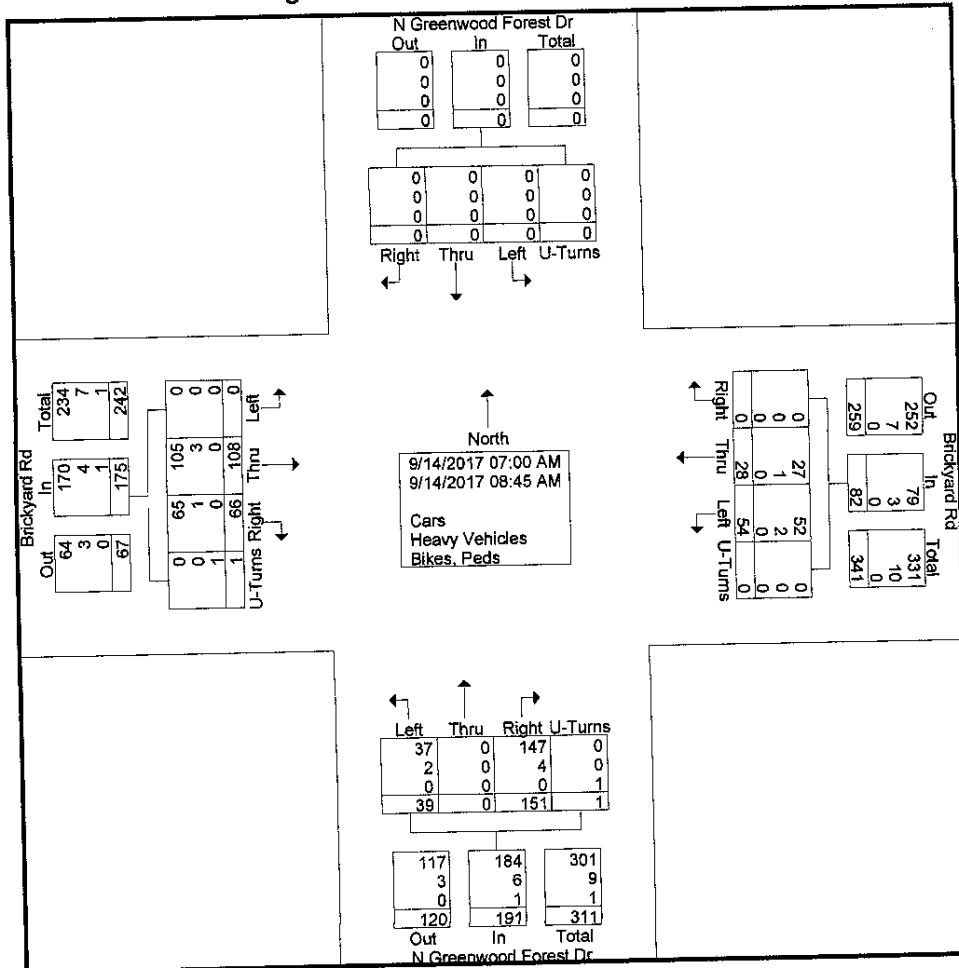
828-456-8383

File Name : N Greenwood Forest Dr @ Brickyard Rd - Background AM

Site Code : P-0699

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525 N. Main Street, Waynesville, NC 28786

828-456-8383

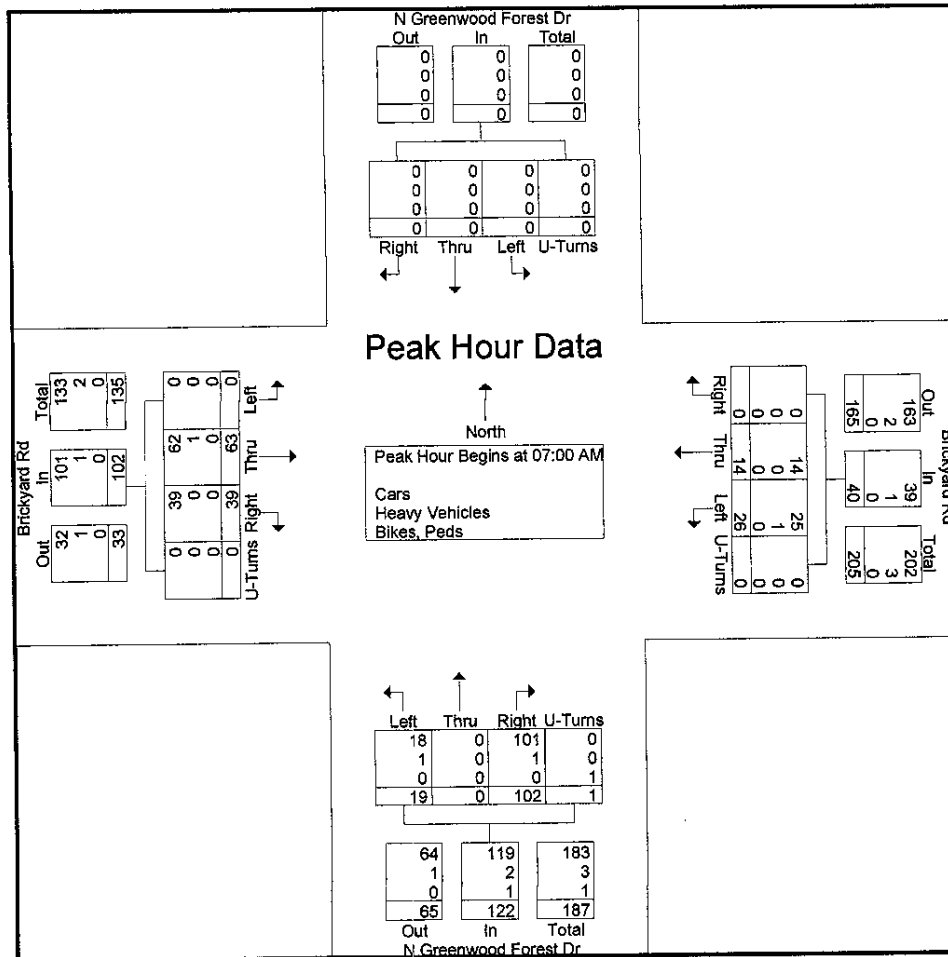
File Name : N Greenwood Forest Dr @ Brickyard Rd - Background AM

Site Code : P-0699

Start Date : 9/14/2017

Page No : 3

Start Time	N Greenwood Forest Dr Southbound					Brickyard Rd Westbound					N Greenwood Forest Dr Northbound					Brickyard Rd Eastbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
Peak Hour Analysis From 7:00:00 AM to 8:45:00 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 7:00:00 AM																					
7:00:00 AM	0	0	0	0	0	4	1	0	0	5	4	0	33	0	37	0	13	10	0	23	65
7:15:00 AM	0	0	0	0	0	11	4	0	0	15	2	0	29	0	31	0	16	10	0	26	72
7:30:00 AM	0	0	0	0	0	7	2	0	0	9	6	0	29	1	36	0	22	12	0	34	79
7:45:00 AM	0	0	0	0	0	4	7	0	0	11	7	0	11	0	18	0	12	7	0	19	48
Total Volume	0	0	0	0	0	26	14	0	0	40	19	0	102	1	122	0	63	39	0	102	264
% App. Total	0	0	0	0	0	65	35	0	0		15.6	0	83.6	0.8		0	61.8	38.2	0		
PHF	.000	.000	.000	.000	.000	.591	.500	.000	.000	.667	.679	.000	.773	.250	.824	.000	.716	.813	.000	.750	.835
Cars	0	0	0	0	0	25	14	0	0	39	18	0	101	0	119	0	62	39	0	101	259
% Cars	0	0	0	0	0	96.2	100	0	0	97.5	94.7	0	99.0	0	97.5	0	98.4	100	0	99.0	98.1
Heavy Vehicles	0	0	0	0	0	1	0	0	0	1	1	0	1	0	2	0	1	0	0	1	4
% Heavy Vehicles	0	0	0	0	0	3.8	0	0	0	2.5	5.3	0	1.0	0	1.6	0	1.6	0	0	1.0	1.5
Bikes, Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	1
% Bikes, Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	100	0.8	0	0	0	0	0	0.4



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525 North Main Street, Waynesville, NC

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File Name : N Greenwood Forest Dr @ Brickyard Rd - Background PM

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Groups Printed- Cars - Heavy Vehicles - Bikes, Peds

Start Time	N Greenwood Forest Dr Southbound					Brickyard Rd Westbound					N Greenwood Forest Dr Northbound					Brickyard Rd Eastbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
Factor	1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		
04:00 PM	0	0	0	0	0	14	5	0	0	19	13	0	12	0	25	0	19	5	0	24	68
04:15 PM	0	0	0	0	0	19	14	0	0	33	15	0	13	0	28	0	13	4	0	17	78
04:30 PM	0	0	0	0	0	10	14	0	0	24	9	0	11	0	20	0	8	4	0	12	56
04:45 PM	0	0	0	0	0	20	14	0	0	34	15	0	7	0	22	0	11	8	0	19	75
Total	0	0	0	0	0	63	47	0	0	110	52	0	43	0	95	0	51	21	0	72	277
05:00 PM	0	0	0	0	0	16	16	0	0	32	14	0	10	0	24	0	7	10	0	17	73
05:15 PM	0	0	0	0	0	16	11	0	0	27	8	0	8	0	16	0	14	9	0	23	66
05:30 PM	0	0	0	0	0	27	15	0	0	42	13	0	8	0	21	0	16	9	0	25	88
05:45 PM	0	0	0	0	0	25	13	0	0	38	15	0	9	0	24	0	5	9	0	14	76
Total	0	0	0	0	0	84	55	0	0	139	50	0	35	0	85	0	42	37	0	79	303
Grand Total	0	0	0	0	0	147	102	0	0	249	102	0	78	0	180	0	93	58	0	151	580
Apprch %	0	0	0	0		59	41	0	0		56.7	0	43.3	0		0	61.6	38.4	0		
Total %	0	0	0	0	0	25.3	17.6	0	0	42.9	17.6	0	13.4	0	31	0	16	10	0	26	
Cars	0	0	0	0	0	143	100	0	0	243	101	0	77	0	178	0	91	57	0	148	569
% Cars	0	0	0	0	0	97.3	98	0	0	97.6	99	0	98.7	0	98.9	0	97.8	98.3	0	98	98.1
Heavy Vehicles	0	0	0	0	0	3	2	0	0	5	1	0	0	0	1	0	2	1	0	3	9
% Heavy Vehicles	0	0	0	0	0	2	2	0	0	2	1	0	0	0	0.6	0	2.2	1.7	0	2	1.6
Bikes, Peds	0	0	0	0	0	1	0	0	0	1	0	0	1	0	1	0	0	0	0	0	2
% Bikes, Peds	0	0	0	0	0	0.7	0	0	0	0.4	0	0	1.3	0	0.6	0	0	0	0	0	0.3

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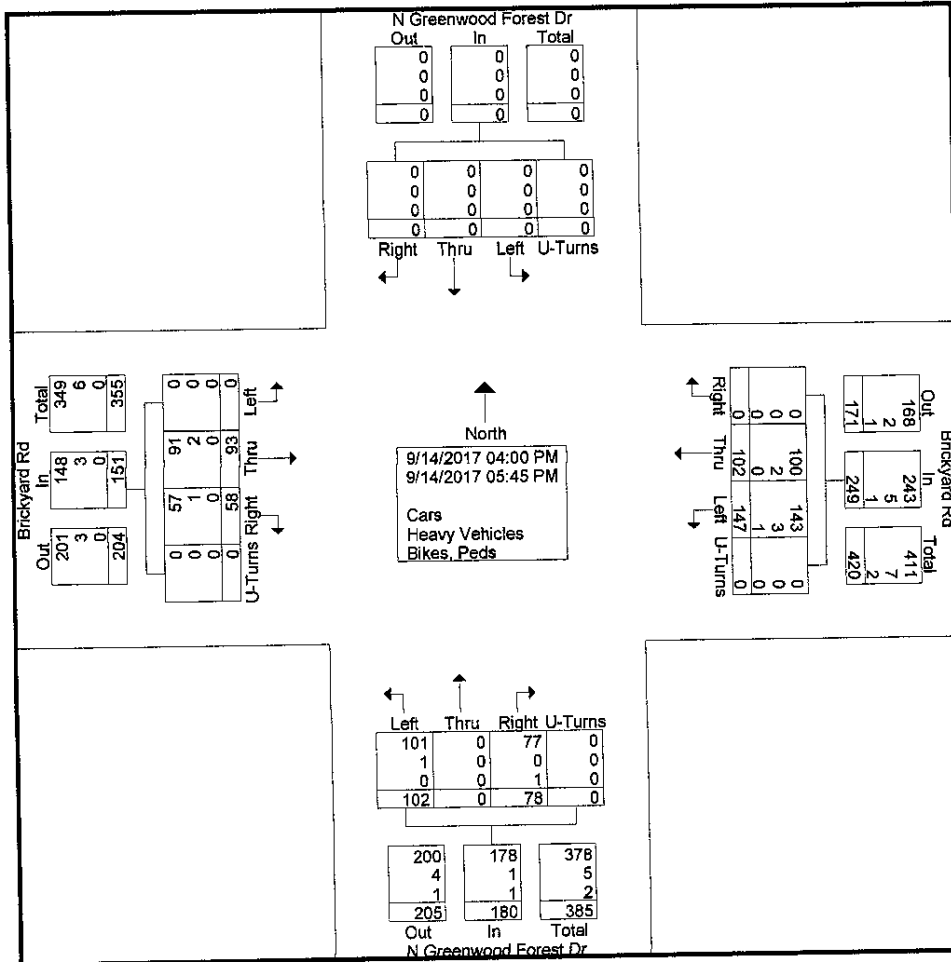
(828) 456-8383

File Name : N Greenwood Forest Dr @ Brickyard Rd - Background PM

Site Code : P-0699

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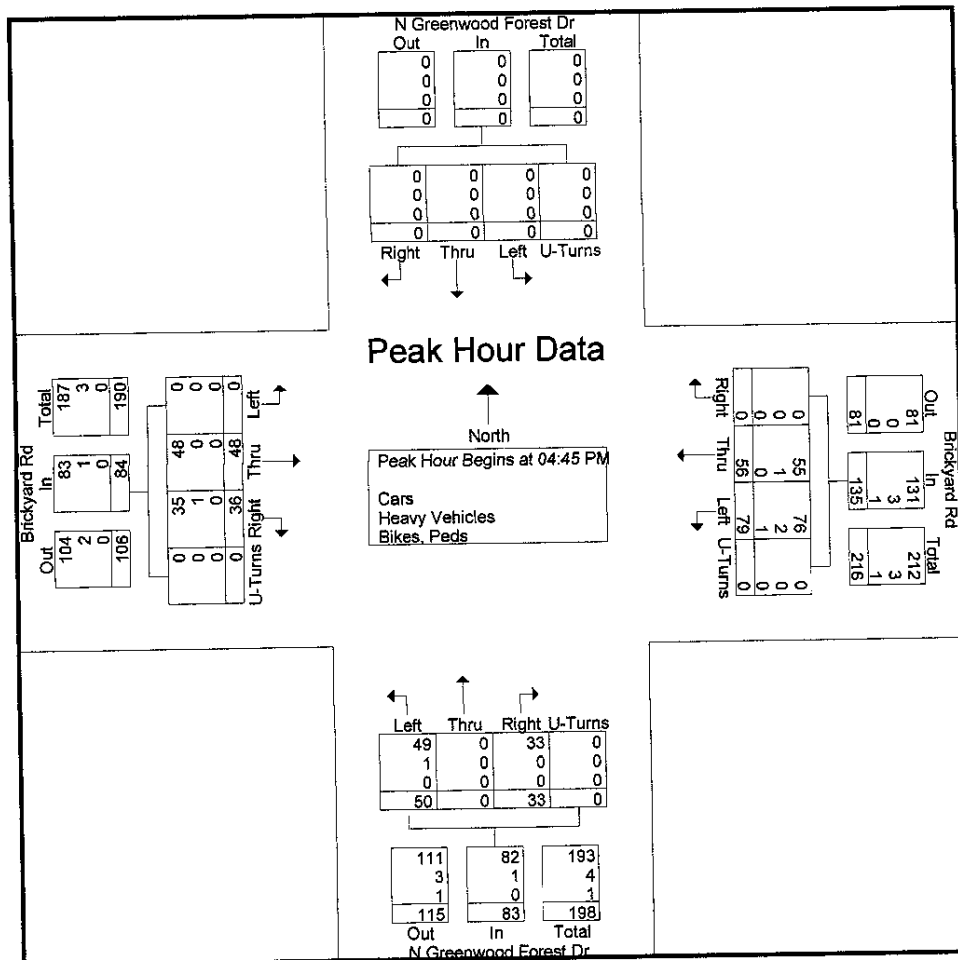
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Site Code : P-0699

Start Date : 9/14/2017

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Start Time	N Greenwood Forest Dr Southbound					Brickyard Rd Westbound					N Greenwood Forest Dr Northbound					Brickyard Rd Eastbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
Peak Hour Analysis From 4:45:00 PM to 5:30:00 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 4:45:00 PM																					
4:45:00 PM	0	0	0	0	0	20	14	0	0	34	15	0	7	0	22	0	11	8	0	19	75
5:00:00 PM	0	0	0	0	0	16	16	0	0	32	14	0	10	0	24	0	7	10	0	17	73
5:15:00 PM	0	0	0	0	0	16	11	0	0	27	8	0	8	0	16	0	14	9	0	23	66
5:30:00 PM	0	0	0	0	0	27	15	0	0	42	13	0	8	0	21	0	16	9	0	25	88
Total Volume	0	0	0	0	0	79	56	0	0	135	50	0	33	0	83	0	48	36	0	84	302
% App. Total	0	0	0	0	0	58.5	41.5	0	0	0	60.2	0	39.8	0	0	0	57.1	42.9	0	0	0
PHF	.000	.000	.000	.000	.000	.731	.875	.000	.000	.804	.833	.000	.825	.000	.865	.000	.750	.900	.000	.840	.858
Cars	0	0	0	0	0	76	55	0	0	131	49	0	33	0	82	0	48	35	0	83	296
% Cars	0	0	0	0	0	96.2	98.2	0	0	97.0	98.0	0	100	0	98.8	0	100	97.2	0	98.8	98.0
Heavy Vehicles	0	0	0	0	0	2.5	1.8	0	0	2.2	2.0	0	0	0	1.2	0	0	2.8	0	1.2	1.7
% Heavy Vehicles	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
Bikes, Peds	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
% Bikes, Peds	0	0	0	0	0	1.3	0	0	0	0.7	0	0	0	0	0	0	0	0	0	0	0.3



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File Name : Holly Springs Rd @ Brickyard Rd - Background AM

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Groups Printed- Cars - Heavy Vehicles - Bikes, Peds

Start Time	Holly Springs Rd Southbound					Brickyard Rd Westbound					Holly Springs Rd Northbound					Brickyard Rd Eastbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
Factor	1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		
07:00 AM	5	0	5	0	10	0	0	12	0	12	0	0	0	0	0	27	14	0	0	41	63
07:15 AM	11	0	6	0	17	0	8	20	0	28	0	0	0	0	0	35	16	0	0	51	96
07:30 AM	10	0	7	0	17	0	2	14	0	16	0	0	0	0	0	31	19	1	1	52	85
07:45 AM	18	1	4	0	23	1	7	14	0	22	0	0	0	0	0	9	12	0	0	21	66
Total	44	1	22	0	67	1	17	60	0	78	0	0	0	0	0	102	61	1	1	165	310
08:00 AM	19	0	6	0	25	0	8	14	0	22	0	0	0	0	0	15	15	0	1	31	78
08:15 AM	9	0	5	0	14	1	4	15	0	20	0	0	0	0	0	13	10	2	0	25	59
08:30 AM	9	1	10	0	20	0	2	16	0	18	0	0	0	0	0	8	11	0	0	19	57
08:45 AM	7	1	4	1	13	1	3	9	0	13	0	0	0	0	0	9	13	0	0	22	48
Total	44	2	25	1	72	2	17	54	0	73	0	0	0	0	0	45	49	2	1	97	242
Grand Total	88	3	47	1	139	3	34	114	0	151	0	0	0	0	0	147	110	3	2	262	552
Approch %	63.3	2.2	33.8	0.7		2	22.5	75.5	0		0	0	0	0		56.1	42	1.1	0.8		
Total %	15.9	0.5	8.5	0.2	25.2	0.5	6.2	20.7	0	27.4	0	0	0	0	0	26.6	19.9	0.5	0.4	47.5	
Cars	83	3	46	0	132	3	32	106	0	141	0	0	0	0	0	143	109	3	0	255	528
% Cars	94.3	100	97.9	0	95	100	94.1	93	0	93.4	0	0	0	0	0	97.3	99.1	100	0	97.3	95.7
Heavy Vehicles	5	0	1	0	6	0	2	8	0	10	0	0	0	0	0	4	1	0	0	5	21
% Heavy Vehicles	5.7	0	2.1	0	4.3	0	5.9	7	0	6.6	0	0	0	0	0	2.7	0.9	0	0	1.9	3.8
Bikes, Peds	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2	3
% Bikes, Peds	0	0	0	100	0.7	0	0	0	0	0	0	0	0	0	0	0	0	0	100	0.8	0.5

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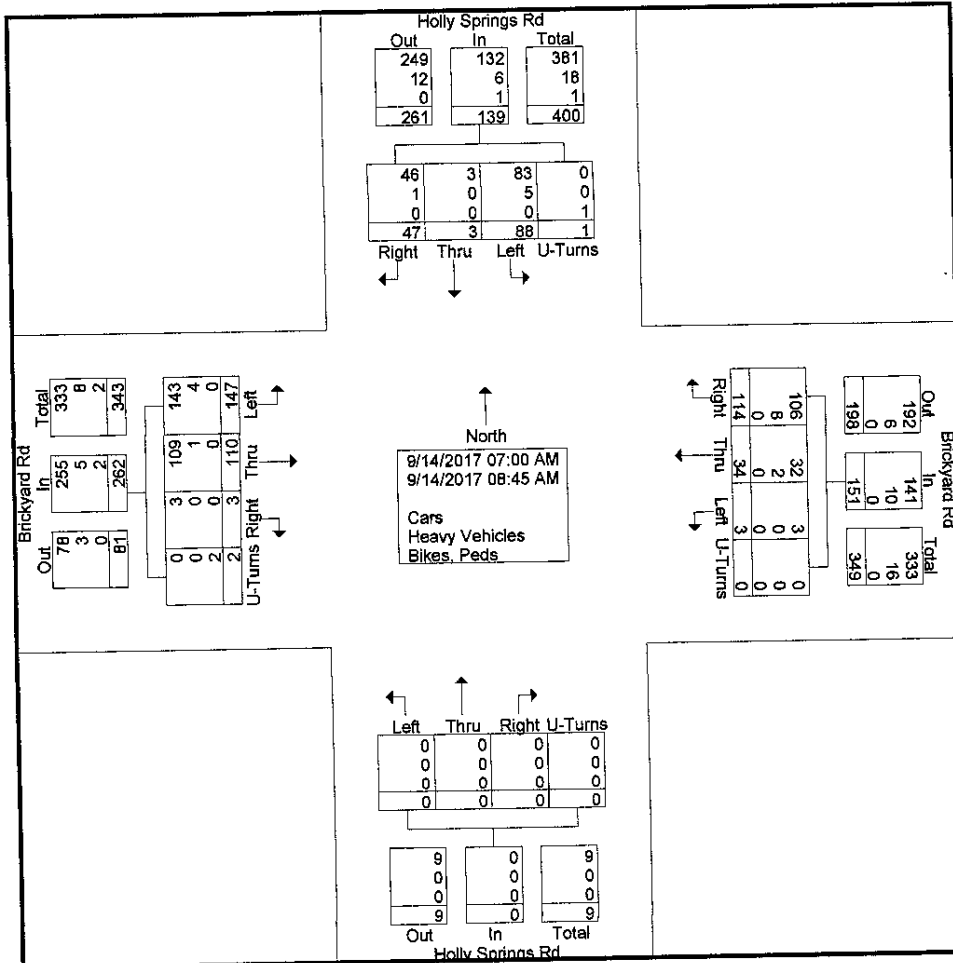
828-456-8383

File Name : Holly Springs Rd @ Brickyard Rd - Background AM

Site Code : P-0699

Start Date : 9/14/2017

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525 N. Main Street, Waynesville, NC 28786

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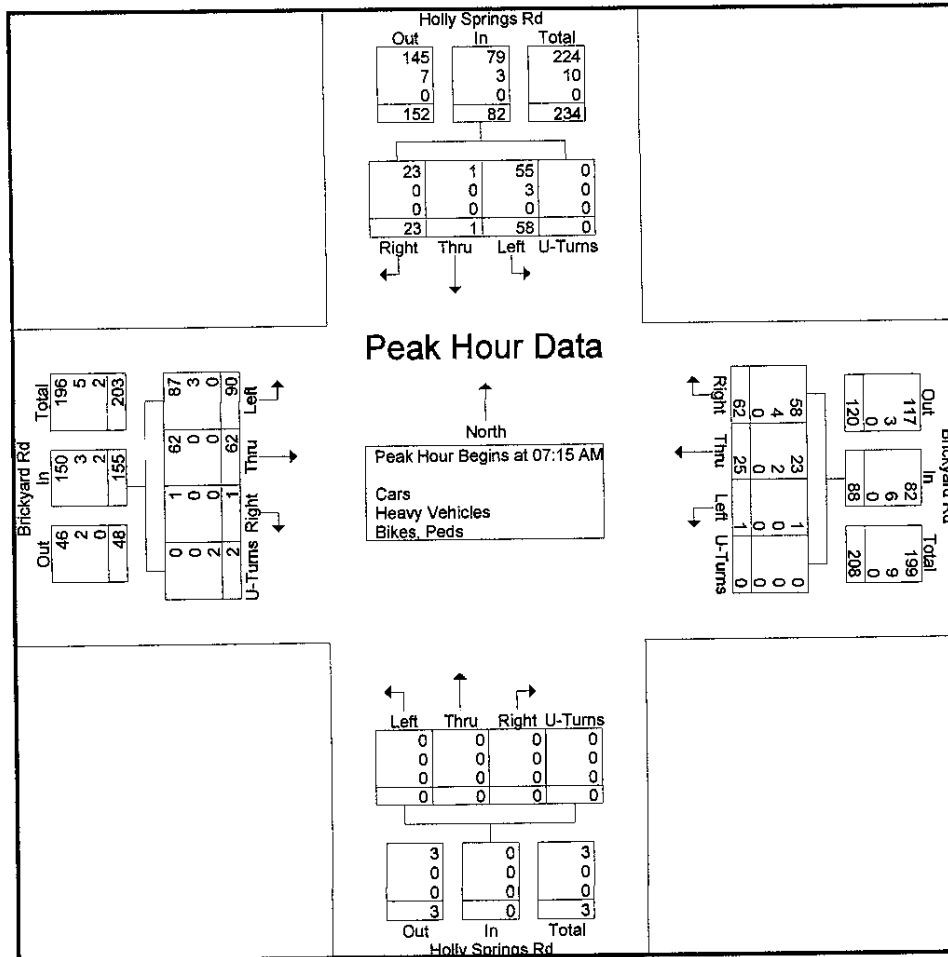
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Start Time	Holly Springs Rd Southbound					Brickyard Rd Westbound					Holly Springs Rd Northbound					Brickyard Rd Eastbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
Peak Hour Analysis From 7:00:00 AM to 8:45:00 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 7:15:00 AM																					
7:15:00 AM	11	0	6	0	17	0	8	20	0	28	0	0	0	0	0	35	16	0	0	51	96
7:30:00 AM	10	0	7	0	17	0	2	14	0	16	0	0	0	0	0	31	19	1	1	52	85
7:45:00 AM	18	1	4	0	23	1	7	14	0	22	0	0	0	0	0	9	12	0	0	21	66
8:00:00 AM	19	0	6	0	25	0	8	14	0	22	0	0	0	0	0	15	15	0	1	31	78
Total Volume	58	1	23	0	82	1	25	62	0	88	0	0	0	0	0	90	62	1	2	155	325
% App. Total	70.7	1.2	28	0		1.1	28.4	70.5	0		0	0	0	0		58.1	40	0.6	1.3		
PHF	.763	.250	.821	.000	.820	.250	.781	.775	.000	.786	.000	.000	.000	.000	.000	.643	.816	.250	.500	.745	.846
Cars	55	1	23	0	79	1	23	58	0	82	0	0	0	0	0	87	62	1	0	150	311
% Cars	94.8	100	100	0	96.3	100	92.0	93.5	0	93.2	0	0	0	0	0	96.7	100	100	0	96.8	95.7
Heavy Vehicles	3	0	0	0	3	0	2	4	0	6	0	0	0	0	0	3	0	0	0	3	12
% Heavy Vehicles	5.2	0	0	0	3.7	0	8.0	6.5	0	6.8	0	0	0	0	0	3.3	0	0	0	1.9	3.7
Bikes, Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2	2
% Bikes, Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	100	1.3	0.6



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Groups Printed- Cars - Heavy Vehicles - Bikes, Peds

Start Time	Holly Springs Rd Southbound					Brickyard Rd Westbound					Holly Springs Rd Northbound					Brickyard Rd Eastbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
Factor	1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		
04:00 PM	14	4	12	0	30	3	9	14	0	26	0	0	1	0	1	15	22	1	4	42	99
04:15 PM	14	3	18	0	35	1	15	16	0	32	0	1	0	1	2	11	12	2	4	29	98
04:30 PM	19	0	7	0	26	0	14	15	0	29	1	0	0	0	1	11	8	1	0	20	76
04:45 PM	19	1	22	0	42	2	14	15	0	31	0	0	0	0	0	7	7	4	0	18	91
Total	66	8	59	0	133	6	52	60	0	118	1	1	1	1	4	44	49	8	8	109	364
05:00 PM	21	2	12	0	35	0	14	22	0	36	2	0	0	0	2	7	8	0	0	15	88
05:15 PM	25	1	17	0	43	0	14	10	0	24	1	0	0	0	1	5	15	1	0	21	89
05:30 PM	27	2	19	0	48	1	17	23	0	41	0	0	0	0	0	8	14	4	0	26	115
05:45 PM	21	2	27	0	50	2	14	18	0	34	0	0	0	0	0	8	4	1	0	13	97
Total	94	7	75	0	176	3	59	73	0	135	3	0	0	0	3	28	41	6	0	75	389
Grand Total	160	15	134	0	309	9	111	133	0	253	4	1	1	1	7	72	90	14	8	184	753
Apprch %	51.8	4.9	43.4	0		3.6	43.9	52.6	0		57.1	14.3	14.3	14.3		39.1	48.9	7.6	4.3		
Total %	21.2	2	17.8	0	41	1.2	14.7	17.7	0	33.6	0.5	0.1	0.1	0.1	0.9	9.6	12	1.9	1.1	24.4	
Cars	157	15	132	0	304	9	107	133	0	249	4	1	1	0	6	72	88	13	0	173	732
% Cars	98.1	100	98.5	0	98.4	100	96.4	100	0	98.4	100	100	100	0	85.7	100	97.8	92.9	0	94	97.2
Heavy Vehicles	2	0	2	0	4	0	3	0	0	3	0	0	0	0	0	0	2	1	0	3	10
% Heavy Vehicles	1.2	0	1.5	0	1.3	0	2.7	0	0	1.2	0	0	0	0	0	0	2.2	7.1	0	1.6	1.3
Bikes, Peds	1	0	0	0	1	0	1	0	0	1	0	0	0	1	1	0	0	0	8	8	11
% Bikes, Peds	0.6	0	0	0	0.3	0	0.9	0	0	0.4	0	0	0	100	14.3	0	0	0	100	4.3	1.5

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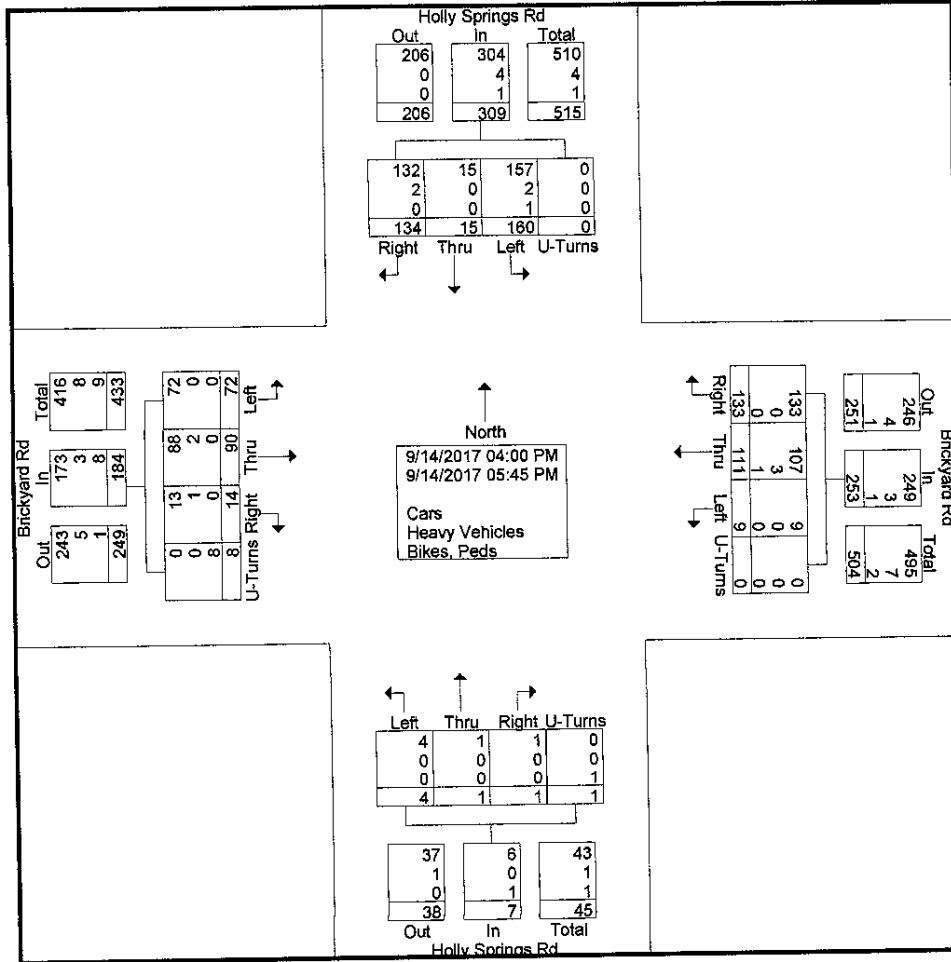
828-456-8383

File Name : Holly Springs Rd @ Brickyard Rd - Background PM

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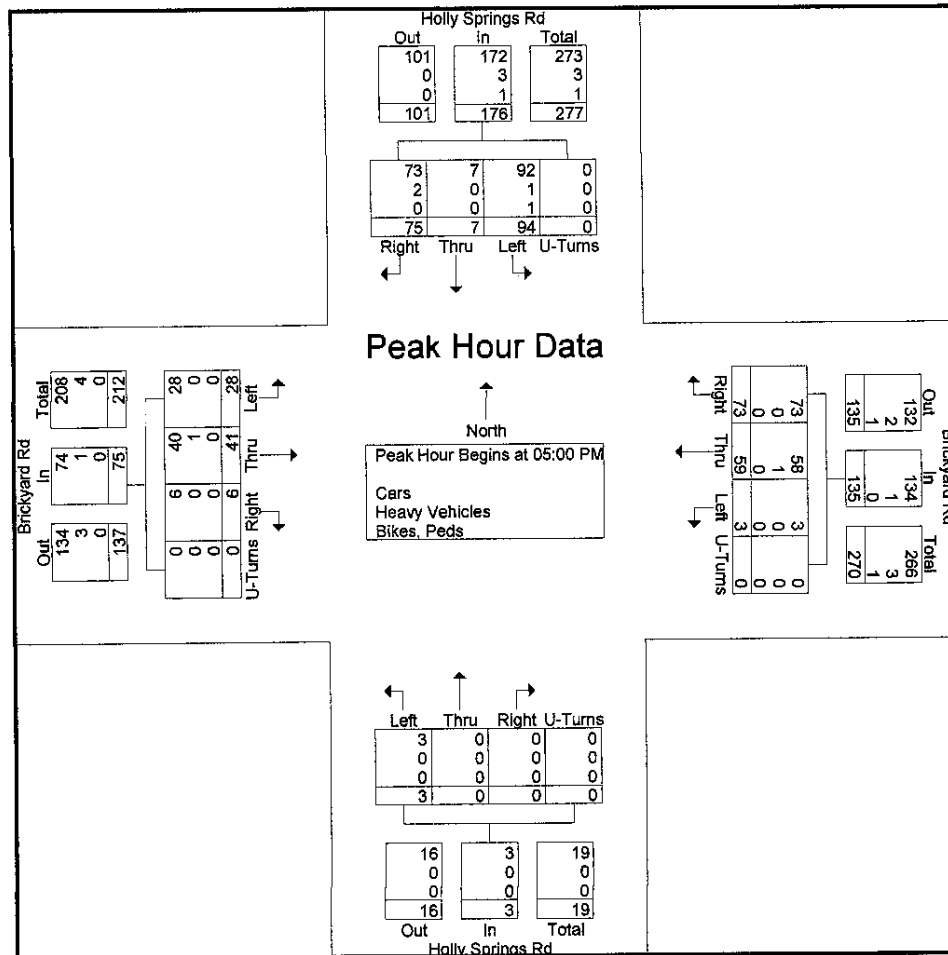
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Peak Hour Analysis From 4:00:00 PM to 5:45:00 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 5:00:00 PM																					
5:00:00 PM	21	2	12	0	35	0	14	22	0	36	2	0	0	0	2	7	8	0	0	15	88
5:15:00 PM	25	1	17	0	43	0	14	10	0	24	1	0	0	0	1	5	15	1	0	21	89
5:30:00 PM	27	2	19	0	48	1	17	23	0	41	0	0	0	0	0	8	14	4	0	26	115
5:45:00 PM	21	2	27	0	50	2	14	18	0	34	0	0	0	0	0	8	4	1	0	13	97
Total Volume	94	7	75	0	176	3	59	73	0	135	3	0	0	0	3	28	41	6	0	75	389
% App. Total	53.4	4	42.6	0		2.2	43.7	54.1	0		100	0	0	0		37.3	54.7	8	0		
PHF	.870	.875	.694	.000	.880	.375	.868	.793	.000	.823	.375	.000	.000	.000	.375	.875	.683	.375	.000	.721	.846
Cars	92	7	73	0	172	3	58	73	0	134	3	0	0	0	3	28	40	6	0	74	383
% Cars	97.9	100	97.3	0	97.7	100	98.3	100	0	99.3	100	0	0	0	100	100	97.6	100	0	98.7	98.5
Heavy Vehicles	1	0	2	0	3	0	1	0	0	1	0	0	0	0	0	0	1	0	0	1	5
% Heavy Vehicles	1.1	0	2.7	0	1.7	0	1.7	0	0	0.7	0	0	0	0	0	0	2.4	0	0	1.3	1.3
Bikes, Peds	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
% Bikes, Peds	1.1	0	0	0	0.6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3



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525 N. Main Street, Waynesville, NC 28786

828-456-8383

File Name : Brickyard Rd @ McKinney Rd - Background AM

Site Code : P-0699

Start Date : 9/14/2017

Page No : 1

Groups Printed- Cars - Heavy Vehicles - Bikes, Peds

Start Time	Brickyard Rd Southbound					McKinney Rd Westbound					Brickyard Rd Northbound					McKinney Rd Eastbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
Factor	1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		
07:00 AM	0	0	0	0	0	0	2	0	0	2	5	0	0	0	5	0	1	24	0	25	32
07:15 AM	0	0	0	0	0	2	2	0	1	5	19	0	0	0	19	0	1	32	0	33	57
07:30 AM	0	0	0	0	0	1	2	0	0	3	14	0	0	0	14	0	0	35	0	35	52
07:45 AM	0	0	0	0	0	0	1	0	0	1	22	0	0	0	22	0	2	29	0	31	54
Total	0	0	0	0	0	3	7	0	1	11	60	0	0	0	60	0	4	120	0	124	195
08:00 AM	0	0	0	0	0	1	1	0	0	2	20	0	0	0	20	0	3	38	0	41	63
08:15 AM	0	0	0	0	0	0	2	0	0	2	14	0	1	1	16	0	0	27	0	27	45
08:30 AM	0	0	0	0	0	1	1	0	0	2	21	0	0	0	21	0	0	27	0	27	50
08:45 AM	0	0	0	0	0	2	2	0	0	4	13	0	0	0	13	0	1	28	0	29	46
Total	0	0	0	0	0	4	6	0	0	10	68	0	1	1	70	0	4	120	0	124	204
Grand Total	0	0	0	0	0	7	13	0	1	21	128	0	1	1	130	0	8	240	0	248	399
Apprch %	0	0	0	0		33.3	61.9	0	4.8		98.5	0	0.8	0.8		0	3.2	96.8	0		
Total %	0	0	0	0	0	1.8	3.3	0	0.3	5.3	32.1	0	0.3	0.3	32.6	0	2	60.2	0	62.2	
Cars	0	0	0	0	0	7	11	0	0	18	122	0	1	0	123	0	8	234	0	242	383
% Cars	0	0	0	0	0	100	84.6	0	0	85.7	95.3	0	100	0	94.6	0	100	97.5	0	97.6	96
Heavy Vehicles	0	0	0	0	0	0	2	0	0	2	6	0	0	0	6	0	0	6	0	6	14
% Heavy Vehicles	0	0	0	0	0	0	15.4	0	0	9.5	4.7	0	0	0	4.6	0	0	2.5	0	2.4	3.5
Bikes, Peds	0	0	0	0	0	0	0	0	1	1	0	0	0	1	1	0	0	0	0	0	2
% Bikes, Peds	0	0	0	0	0	0	0	0	100	4.8	0	0	0	100	0.8	0	0	0	0	0	0.5

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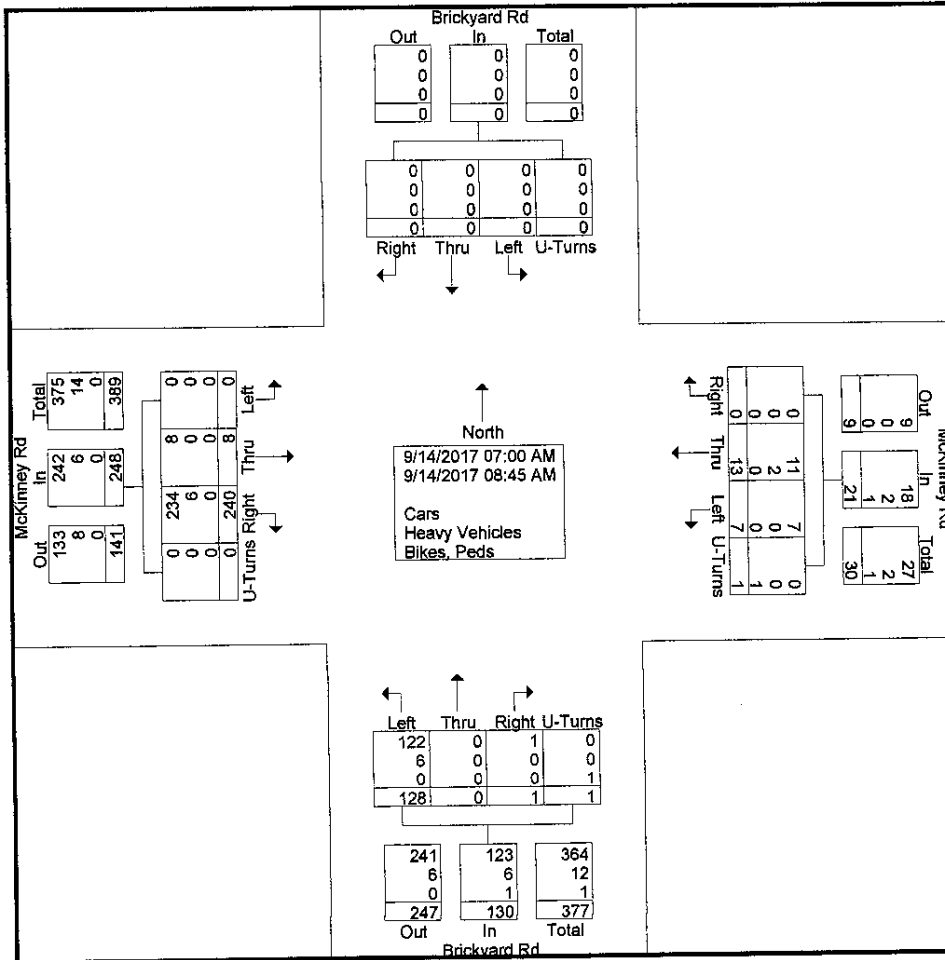
828-456-8383

File Name : Brickyard Rd @ McKinney Rd - Background AM

Site Code : P-0699

Start Date : 9/14/2017

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525 N. Main Street, Waynesville, NC 28786

828-456-8383

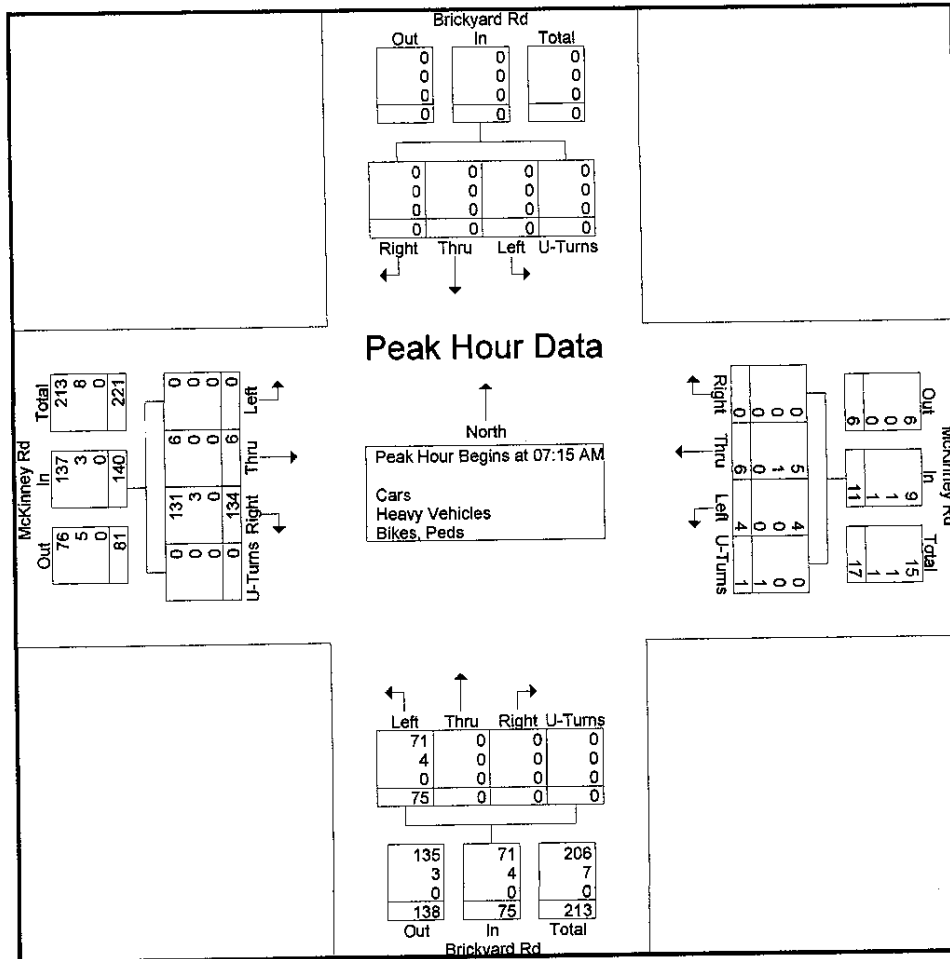
File Name : Brickyard Rd @ McKinney Rd - Background AM

Site Code : P-0699

Start Date : 9/14/2017

Page No : 3

Start Time	Brickyard Rd Southbound					McKinney Rd Westbound					Brickyard Rd Northbound					McKinney Rd Eastbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
Peak Hour Analysis From 7:00:00 AM to 8:45:00 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 7:15:00 AM																					
7:15:00 AM	0	0	0	0	0	2	2	0	1	5	19	0	0	0	19	0	1	32	0	33	57
7:30:00 AM	0	0	0	0	0	1	2	0	0	3	14	0	0	0	14	0	0	35	0	35	52
7:45:00 AM	0	0	0	0	0	0	1	0	0	1	22	0	0	0	22	0	2	29	0	31	54
8:00:00 AM	0	0	0	0	0	1	1	0	0	2	20	0	0	0	20	0	3	38	0	41	63
Total Volume	0	0	0	0	0	4	6	0	1	11	75	0	0	0	75	0	6	134	0	140	226
% App. Total	0	0	0	0	0	36.4	54.5	0	9.1		100	0	0	0		0	4.3	95.7	0		
PHF	.000	.000	.000	.000	.000	.500	.750	.000	.250	.550	.852	.000	.000	.000	.852	.000	.500	.882	.000	.854	.897
Cars	0	0	0	0	0	4	5	0	0	9	71	0	0	0	71	0	6	131	0	137	217
% Cars	0	0	0	0	0	100	83.3	0	0	81.8	94.7	0	0	0	94.7	0	100	97.8	0	97.9	96.0
Heavy Vehicles	0	0	0	0	0	0	1	0	0	1	4	0	0	0	4	0	0	3	0	3	8
% Heavy Vehicles	0	0	0	0	0	0	16.7	0	0	9.1	5.3	0	0	0	5.3	0	0	2.2	0	2.1	3.5
Bikes, Peds	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	1
% Bikes, Peds	0	0	0	0	0	0	0	0	100	9.1	0	0	0	0	0	0	0	0	0	0	0.4



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525 N. Main Street, Waynesville, NC 28786

828-456-8383

File Name : Brickyard Rd @ McKinney Rd - Background PM

Site Code : P-0699

Start Date : 9/14/2017

Page No : 1

Groups Printed- Cars - Heavy Vehicles - Bikes, Peds

Start Time	Brickyard Rd Southbound					McKinney Rd Westbound					Brickyard Rd Northbound					McKinney Rd Eastbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
Factor	1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		
04:00 PM	0	0	0	0	0	0	5	0	0	5	28	0	0	0	28	0	2	38	0	40	73
04:15 PM	0	0	0	0	0	2	2	0	0	4	31	0	2	0	33	0	1	37	0	38	75
04:30 PM	0	0	0	0	0	1	2	0	1	4	32	0	0	0	32	0	1	26	0	27	63
04:45 PM	0	0	0	0	0	0	2	0	0	2	42	0	1	0	43	0	1	27	0	28	73
Total	0	0	0	0	0	3	11	0	1	15	133	0	3	0	136	0	5	128	0	133	284
05:00 PM	0	0	0	0	0	2	4	0	0	6	33	0	4	0	37	0	4	32	0	36	79
05:15 PM	0	0	0	0	0	1	2	0	0	3	28	0	0	0	28	0	2	38	0	40	71
05:30 PM	0	0	0	0	0	2	3	0	0	5	35	0	1	0	36	0	3	39	0	42	83
05:45 PM	0	1	0	0	1	1	3	0	0	4	43	0	1	0	44	0	2	28	0	30	79
Total	0	1	0	0	1	6	12	0	0	18	139	0	6	0	145	0	11	137	0	148	312
Grand Total	0	1	0	0	1	9	23	0	1	33	272	0	9	0	281	0	16	265	0	281	596
Apprch %	0	100	0	0		27.3	69.7	0	3		96.8	0	3.2	0		0	5.7	94.3	0		
Total %	0	0.2	0	0	0.2	1.5	3.9	0	0.2	5.5	45.6	0	1.5	0	47.1	0	2.7	44.5	0	47.1	
Cars	0	0	0	0	0	9	23	0	0	32	269	0	9	0	278	0	14	262	0	276	586
% Cars	0	0	0	0	0	100	100	0	0	97	98.9	0	100	0	98.9	0	87.5	98.9	0	98.2	98.3
Heavy Vehicles	0	0	0	0	0	0	0	0	0	0	2	0	0	0	2	0	1	3	0	4	6
% Heavy Vehicles	0	0	0	0	0	0	0	0	0	0	0.7	0	0	0	0.7	0	6.2	1.1	0	1.4	1
Bikes, Peds	0	1	0	0	1	0	0	0	1	1	1	0	0	0	1	0	1	0	0	1	4
% Bikes, Peds	0	100	0	0	100	0	0	0	100	3	0.4	0	0	0	0.4	0	6.2	0	0	0.4	0.7

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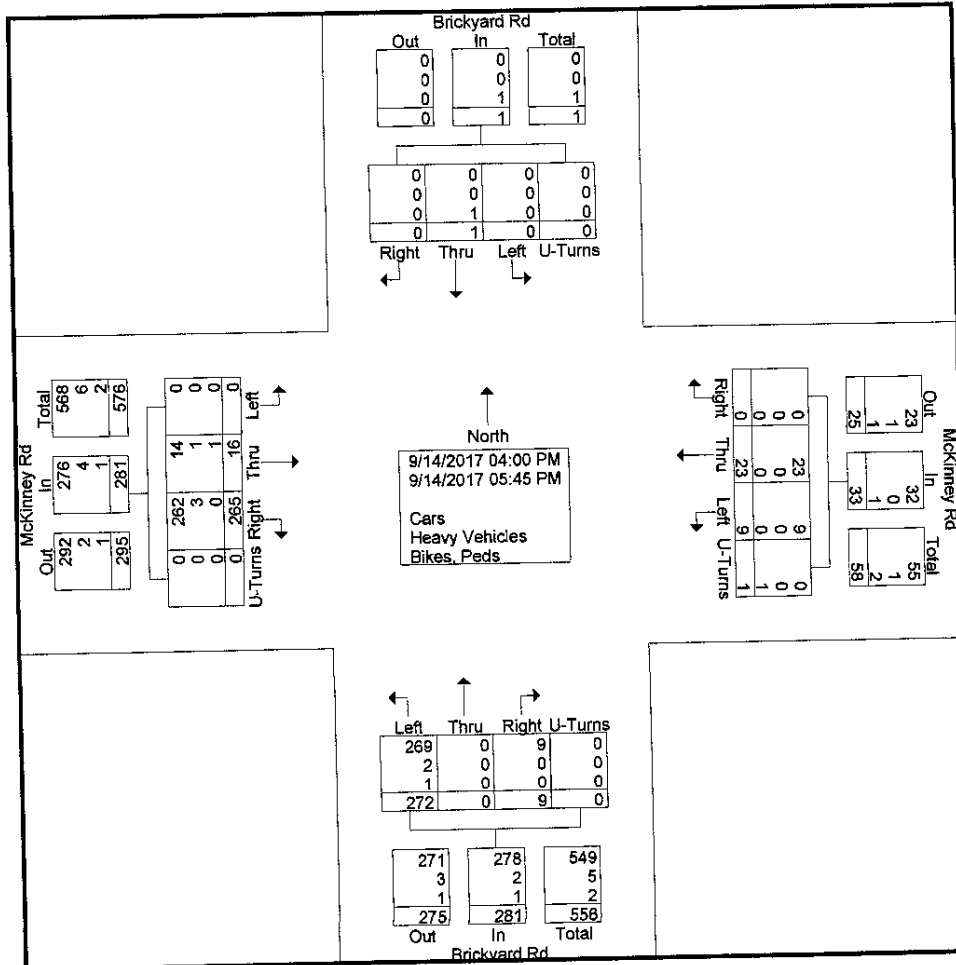
828-456-8383

File Name : Brickyard Rd @ McKinney Rd - Background PM

Site Code : P-0699

Start Date : 9/14/2017

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525 N. Main Street, Waynesville, NC 28786

828-456-8383

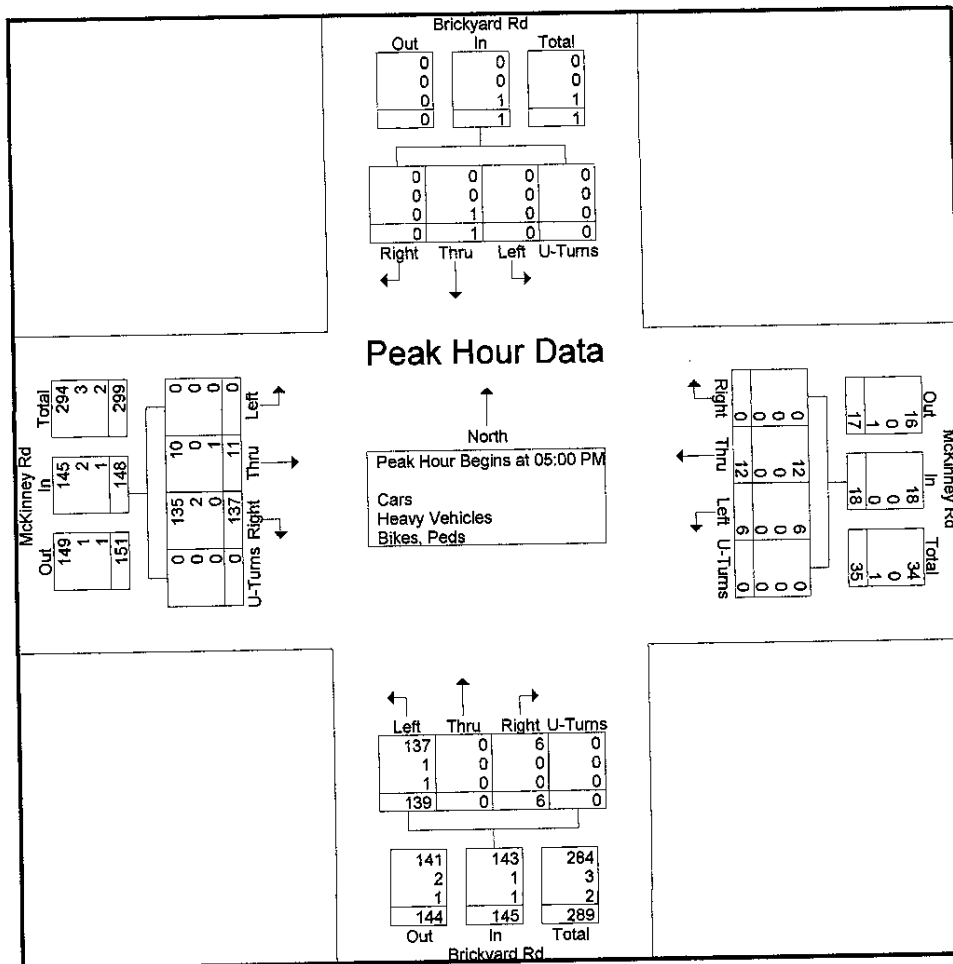
File Name : Brickyard Rd @ McKinney Rd - Background PM

Site Code : P-0699

Start Date : 9/14/2017

Page No : 3

Start Time	Brickyard Rd Southbound					McKinney Rd Westbound					Brickyard Rd Northbound					McKinney Rd Eastbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
Peak Hour Analysis From 4:00:00 PM to 5:45:00 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 5:00:00 PM																					
5:00:00 PM	0	0	0	0	0	2	4	0	0	6	33	0	4	0	37	0	4	32	0	36	79
5:15:00 PM	0	0	0	0	0	1	2	0	0	3	28	0	0	0	28	0	2	38	0	40	71
5:30:00 PM	0	0	0	0	0	2	3	0	0	5	35	0	1	0	36	0	3	39	0	42	83
5:45:00 PM	0	1	0	0	1	1	3	0	0	4	43	0	1	0	44	0	2	28	0	30	79
Total Volume	0	1	0	0	1	6	12	0	0	18	139	0	6	0	145	0	11	137	0	148	312
% App. Total	0	100	0	0		33.3	66.7	0	0		95.9	0	4.1	0		0	7.4	92.6	0		
PHF	.000	.250	.000	.000	.250	.750	.750	.000	.000	.750	.808	.000	.375	.000	.824	.000	.688	.878	.000	.881	.940
Cars	0	0	0	0	0	6	12	0	0	18	137	0	6	0	143	0	10	135	0	145	306
% Cars	0	0	0	0	0	100	100	0	0	100	98.6	0	100	0	98.6	0	90.9	98.5	0	98.0	98.1
Heavy Vehicles	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	2	0	2	3
% Heavy Vehicles	0	0	0	0	0	0	0	0	0	0	0.7	0	0	0	0.7	0	0	1.5	0	1.4	1.0
Bikes, Peds	0	1	0	0	1	0	0	0	0	0	1	0	0	0	1	0	1	0	0	1	3
% Bikes, Peds	0	100	0	0	100	0	0	0	0	0	0.7	0	0	0	0.7	0	9.1	0	0	0.7	1.0



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525 N. Main Street, Waynesville, NC 28786
828-456-8383

File Name : Pisgah View Dr @ McKinney Rd (North) - Background AM
Site Code : P-0699
Start Date : 9/14/2017
Page No : 1

Groups Printed- Cars - Heavy Vehicles - Bikes, Peds

Start Time	Pisgah View Dr Southbound					McKinney Rd (North) Westbound					Pisgah View Dr Northbound					McKinney Rd (North) Eastbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
Factor	1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		
07:00 AM	0	0	0	0	0	1	1	0	0	2	0	0	0	0	0	0	0	1	0	1	3
07:15 AM	0	0	0	1	1	0	1	0	0	1	2	0	0	0	2	0	0	2	0	2	6
07:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1
07:45 AM	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	1	2	0	3	4
Total	0	0	0	1	1	1	3	0	0	4	2	0	0	0	2	0	1	6	0	7	14
08:00 AM	0	0	0	0	0	0	3	0	0	3	0	0	0	0	0	0	1	2	0	3	6
08:15 AM	0	0	0	0	0	0	3	0	0	3	0	0	0	1	1	0	1	1	0	2	6
08:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:45 AM	0	0	0	0	0	0	3	0	0	3	1	0	0	0	1	0	0	1	0	1	5
Total	0	0	0	0	0	0	9	0	0	9	1	0	0	1	2	0	2	4	0	6	17
Grand Total	0	0	0	1	1	1	12	0	0	13	3	0	0	1	4	0	3	10	0	13	31
Apprch %	0	0	0	100		7.7	92.3	0	0		75	0	0	25		0	23.1	76.9	0		
Total %	0	0	0	3.2	3.2	3.2	38.7	0	0	41.9	9.7	0	0	3.2	12.9	0	9.7	32.3	0	41.9	
Cars	0	0	0	0	0	0	11	0	0	11	3	0	0	0	3	0	3	10	0	13	27
% Cars	0	0	0	0	0	0	91.7	0	0	84.6	100	0	0	0	75	0	100	100	0	100	87.1
Heavy Vehicles	0	0	0	0	0	1	1	0	0	2	0	0	0	0	0	0	0	0	0	0	2
% Heavy Vehicles	0	0	0	0	0	100	8.3	0	0	15.4	0	0	0	0	0	0	0	0	0	0	6.5
Bikes, Peds	0	0	0	1	1	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	2
% Bikes, Peds	0	0	0	100	100	0	0	0	0	0	0	0	0	100	25	0	0	0	0	0	6.5

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525 N. Main Street, Waynesville, NC 28786

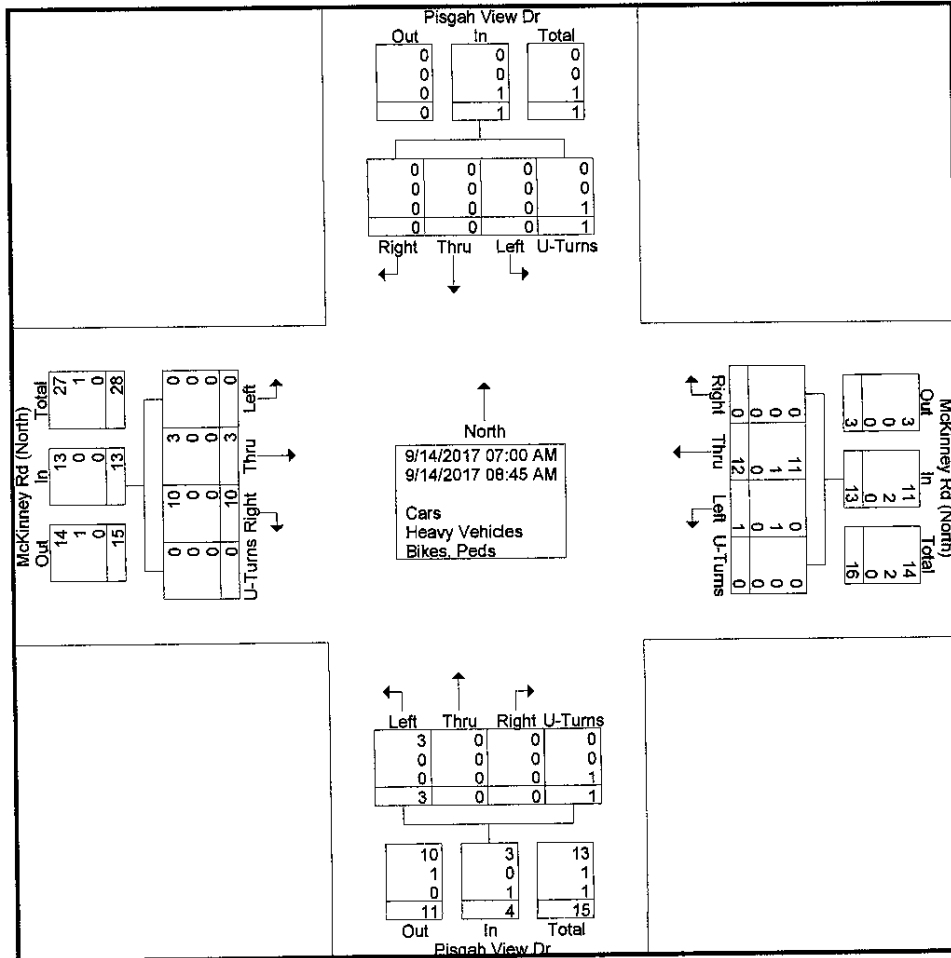
828-456-8383

File Name : Pisgah View Dr @ McKinney Rd (North) - Background AM

Site Code : P-0699

Start Date : 9/14/2017

Page No : 2



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525 N. Main Street, Waynesville, NC 28786

828-456-8383

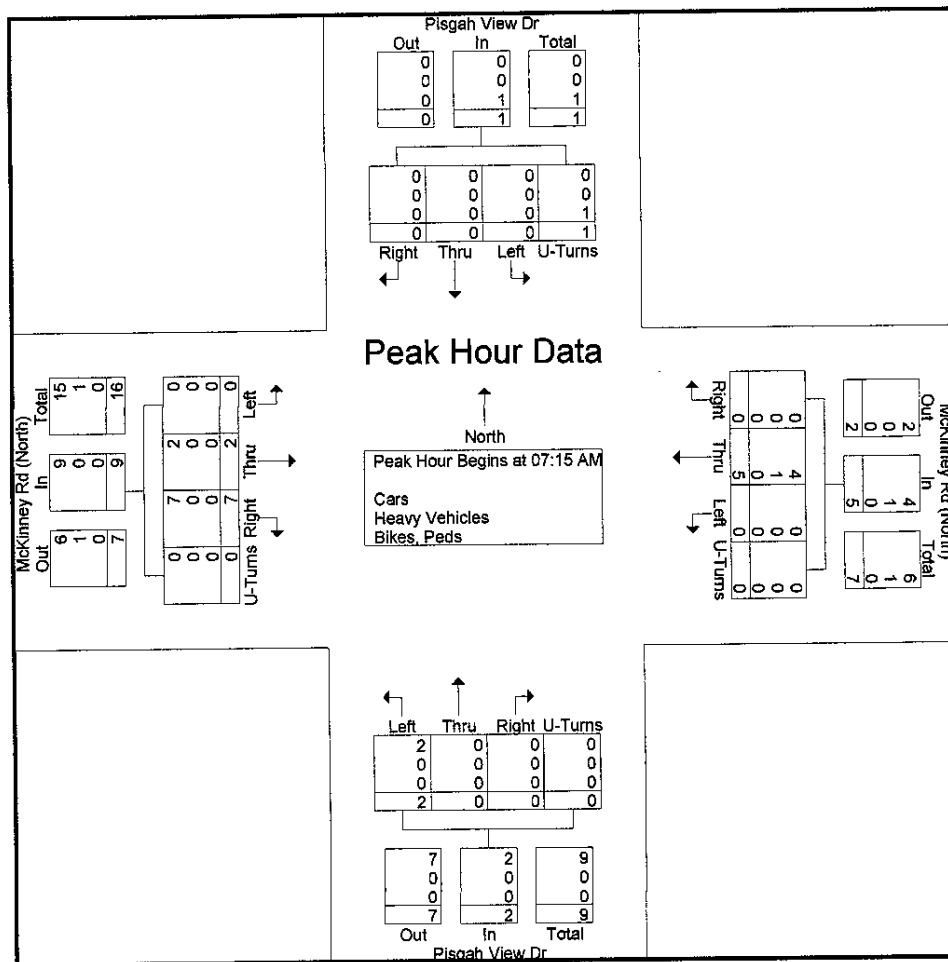
File Name : Pisgah View Dr @ McKinney Rd (North) - Background AM

Site Code : P-0699

Start Date : 9/14/2017

Page No : 3

Start Time	Pisgah View Dr Southbound					McKinney Rd (North) Westbound					Pisgah View Dr Northbound					McKinney Rd (North) Eastbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
Peak Hour Analysis From 7:00:00 AM to 8:45:00 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 7:15:00 AM																					
7:15:00 AM	0	0	0	1	1	0	1	0	0	1	2	0	0	0	2	0	0	2	0	2	6
7:30:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1
7:45:00 AM	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	1	2	0	3	4
8:00:00 AM	0	0	0	0	0	0	3	0	0	3	0	0	0	0	0	0	1	2	0	3	6
Total Volume	0	0	0	1	1	0	5	0	0	5	2	0	0	0	2	0	2	7	0	9	17
% App. Total	0	0	0	100		0	100	0	0		100	0	0	0		0	22.2	77.8	0		
PHF	.000	.000	.000	.250	.250	.000	.417	.000	.000	.417	.250	.000	.000	.000	.250	.000	.500	.875	.000	.750	.708
Cars	0	0	0	0	0	0	4	0	0	4	2	0	0	0	2	0	2	7	0	9	15
% Cars	0	0	0	0	0	0	80.0	0	0	80.0	100	0	0	0	100	0	100	100	0	100	88.2
Heavy Vehicles	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	1
% Heavy Vehicles	0	0	0	0	0	0	20.0	0	0	20.0	0	0	0	0	0	0	0	0	0	0	5.9
Bikes, Peds	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
% Bikes, Peds	0	0	0	100	100	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5.9



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525 N. Main Street, Waynesville, NC 28786

828-456-8383

File Name : Pisgah View Dr @ McKinney Rd (North) - Background PM

Site Code : P-0699

Start Date : 9/14/2017

Page No : 1

Groups Printed- Cars - Heavy Vehicles - Bikes, Peds

Start Time	Pisgah View Dr Southbound					McKinney Rd (North) Westbound					Pisgah View Dr Northbound					McKinney Rd (North) Eastbound					Int. Total	
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total		
Factor	1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0			
04:00 PM	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	2
04:15 PM	0	0	0	0	0	0	3	0	0	3	0	0	0	0	0	0	1	1	0	0	2	5
04:30 PM	0	0	0	0	0	0	0	0	0	0	3	0	0	0	3	0	1	1	0	0	2	5
04:45 PM	0	0	0	0	0	0	1	0	0	1	1	0	0	0	1	0	0	0	0	0	0	2
Total	0	0	1	0	1	0	4	0	0	4	4	0	0	0	4	1	2	2	0	5	14	
05:00 PM	0	0	0	0	0	0	0	0	0	0	4	0	0	0	4	0	1	3	0	4	4	8
05:15 PM	0	0	0	0	0	0	1	0	0	1	2	0	0	0	2	0	2	0	0	2	2	5
05:30 PM	0	0	0	0	0	0	2	0	0	2	2	0	0	0	2	0	1	1	0	2	2	6
05:45 PM	0	0	0	0	0	0	2	0	0	2	3	0	0	0	3	0	1	1	0	2	2	7
Total	0	0	0	0	0	0	5	0	0	5	11	0	0	0	11	0	5	5	0	10	26	
Grand Total	0	0	1	0	1	0	9	0	0	9	15	0	0	0	15	1	7	7	0	15	15	40
Apprch %	0	0	100	0		0	100	0	0		100	0	0	0		6.7	46.7	46.7	0			
Total %	0	0	2.5	0	2.5	0	22.5	0	0	22.5	37.5	0	0	0	37.5	2.5	17.5	17.5	0	37.5		
Cars	0	0	1	0	1	0	9	0	0	9	15	0	0	0	15	1	5	7	0	13	13	38
% Cars	0	0	100	0	100	0	100	0	0	100	100	0	0	0	100	100	71.4	100	0	86.7	86.7	95
Heavy Vehicles	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% Heavy Vehicles	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Bikes, Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2	2	2
% Bikes, Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	28.6	0	0	13.3	13.3	5

J.M. Teague Engineering & Planning

525 N. Main Street, Waynesville, NC 28786

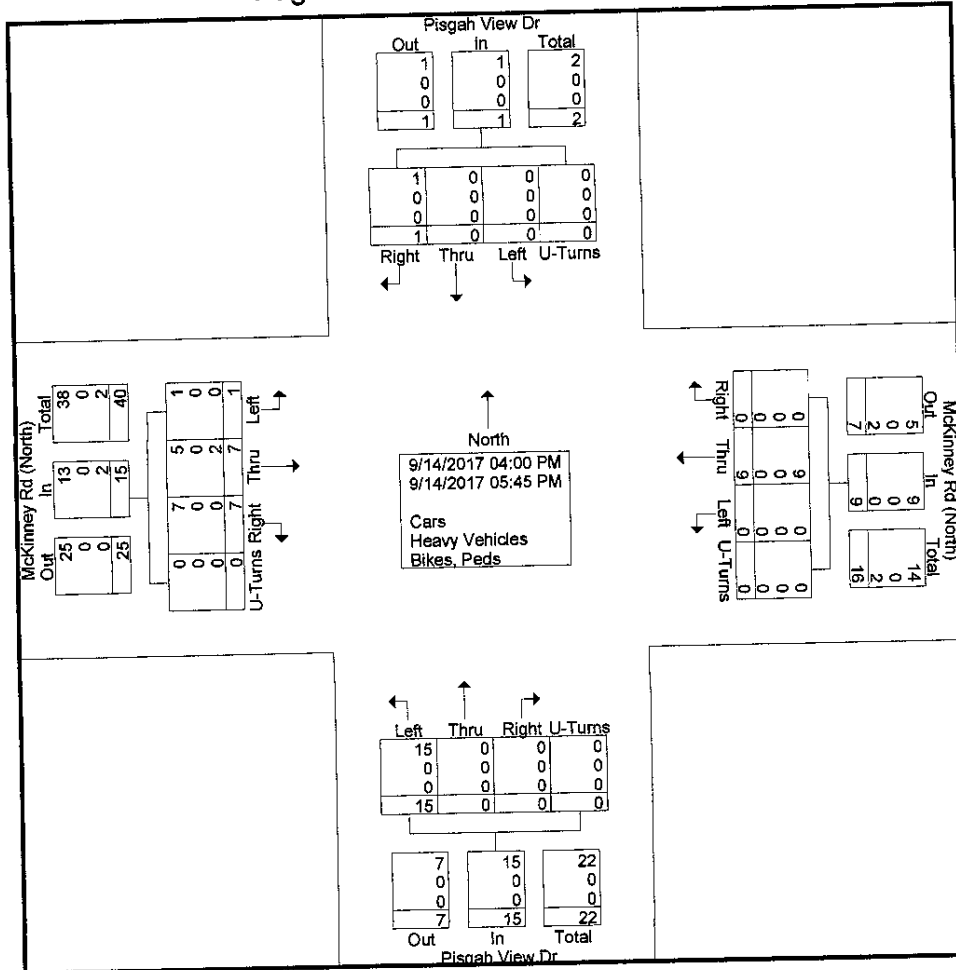
828-456-8383

File Name : Pisgah View Dr @ McKinney Rd (North) - Background PM

Site Code : P-0699

Start Date : 9/14/2017

Page No : 2



J.M. Teague Engineering & Planning

525 N. Main Street, Waynesville, NC 28786

828-456-8383

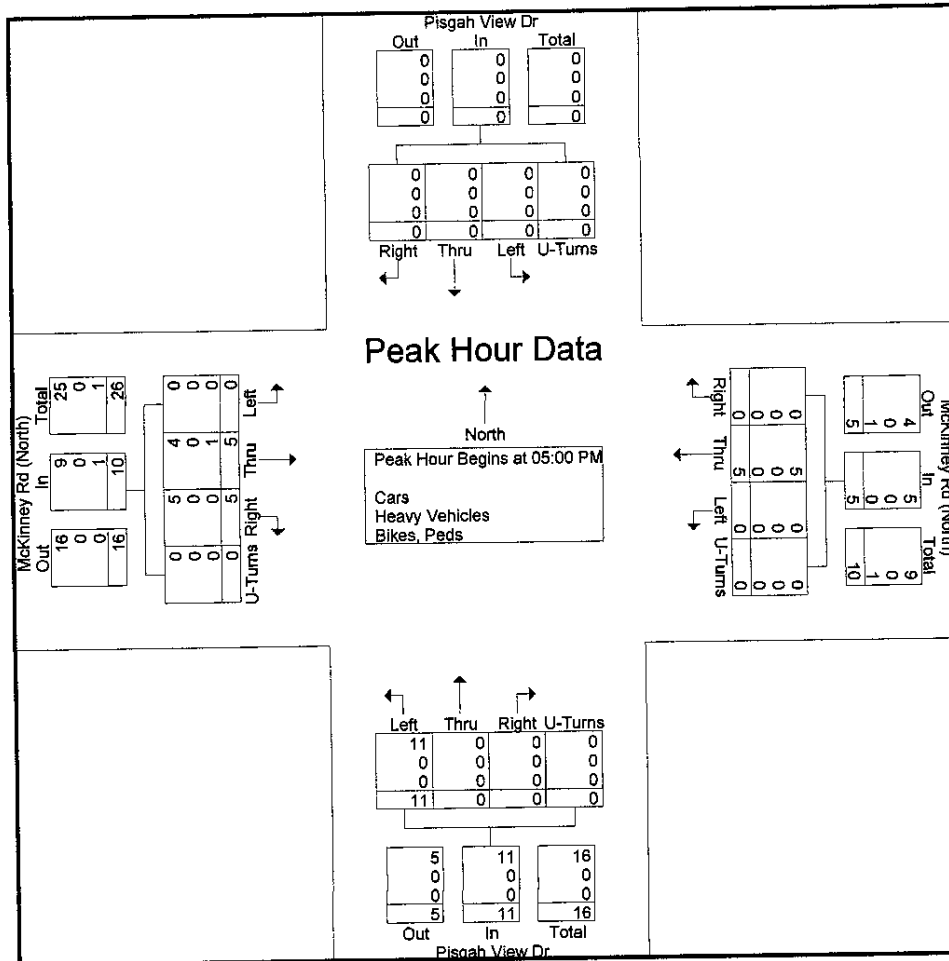
File Name : Pisgah View Dr @ McKinney Rd (North) - Background PM

Site Code : P-0699

Start Date : 9/14/2017

Page No : 3

Start Time	Pisgah View Dr Southbound					McKinney Rd (North) Westbound					Pisgah View Dr Northbound					McKinney Rd (North) Eastbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
Peak Hour Analysis From 4:00:00 PM to 5:45:00 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 5:00:00 PM																					
5:00:00 PM	0	0	0	0	0	0	0	0	0	0	4	0	0	0	4	0	1	3	0	4	8
5:15:00 PM	0	0	0	0	0	0	1	0	0	1	2	0	0	0	2	0	2	0	0	2	5
5:30:00 PM	0	0	0	0	0	0	2	0	0	2	2	0	0	0	2	0	1	1	0	2	6
5:45:00 PM	0	0	0	0	0	0	2	0	0	2	3	0	0	0	3	0	1	1	0	2	7
Total Volume	0	0	0	0	0	0	5	0	0	5	11	0	0	0	11	0	5	5	0	10	26
% App. Total	0	0	0	0	0	0	100	0	0	100	100	0	0	0	100	0	50	50	0	100	100
PHF	.000	.000	.000	.000	.000	.000	.625	.000	.000	.625	.688	.000	.000	.000	.688	.000	.625	.417	.000	.625	.813
Cars	0	0	0	0	0	0	5	0	0	5	11	0	0	0	11	0	4	5	0	9	25
% Cars	0	0	0	0	0	0	100	0	0	100	100	0	0	0	100	0	80.0	100	0	90.0	96.2
Heavy Vehicles	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% Heavy Vehicles	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Bikes, Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	1
% Bikes, Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	20.0	0	0	10.0	3.8



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525 N. Main Street, Waynesville, NC 28786

828-456-8383

File Name : Pisgah View Dr @ McKinney Rd (South) - Background AM

Site Code : P-0699

Start Date : 9/14/2017

Page No : 1

Groups Printed- Cars - Heavy Vehicles - Bikes, Peds

Start Time	Pisgah View Dr Southbound					McKinney Rd (South) Westbound					Pisgah View Dr Northbound					McKinney Rd (South) Eastbound					Int. Total	
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total		
Factor	1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0			
07:00 AM	0	0	2	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
07:15 AM	0	0	1	0	1	0	3	0	0	3	0	0	0	0	0	1	4	0	0	5	9	
07:30 AM	0	0	2	0	2	0	1	0	0	1	0	0	0	1	1	0	3	0	0	3	7	
07:45 AM	1	0	1	0	2	0	3	0	0	3	0	0	0	0	0	0	0	0	0	0	5	
Total	1	0	6	0	7	0	7	0	0	7	0	0	0	1	1	1	7	0	0	8	23	
08:00 AM	0	0	2	0	2	0	5	0	0	5	0	0	0	0	0	0	3	0	0	3	10	
08:15 AM	0	0	1	1	2	0	2	0	0	2	0	0	0	0	0	0	3	0	0	3	7	
08:30 AM	0	0	0	0	0	0	3	0	0	3	0	0	0	0	0	0	1	0	0	1	4	
08:45 AM	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	1	1	0	2	3	
Total	0	0	4	1	5	0	10	0	0	10	0	0	0	0	0	1	8	0	0	9	24	
Grand Total	1	0	10	1	12	0	17	0	0	17	0	0	0	1	1	2	15	0	0	17	47	
Approch %	8.3	0	83.3	8.3		0	100	0	0		0	0	0	100		11.8	88.2	0	0			
Total %	2.1	0	21.3	2.1	25.5	0	36.2	0	0	36.2	0	0	0	2.1	2.1	4.3	31.9	0	0	36.2		
Cars	1	0	9	0	10	0	15	0	0	15	0	0	0	0	0	2	11	0	0	13	38	
% Cars	100	0	90	0	83.3	0	88.2	0	0	88.2	0	0	0	0	0	100	73.3	0	0	76.5	80.9	
Heavy Vehicles	0	0	1	0	1	0	2	0	0	2	0	0	0	0	0	0	4	0	0	4	7	
% Heavy Vehicles	0	0	10	0	8.3	0	11.8	0	0	11.8	0	0	0	0	0	0	26.7	0	0	23.5	14.9	
Bikes, Peds	0	0	0	1	1	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	2	
% Bikes, Peds	0	0	0	100	8.3	0	0	0	0	0	0	0	0	100	100	0	0	0	0	0	4.3	

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525 N. Main Street, Waynesville, NC 28786

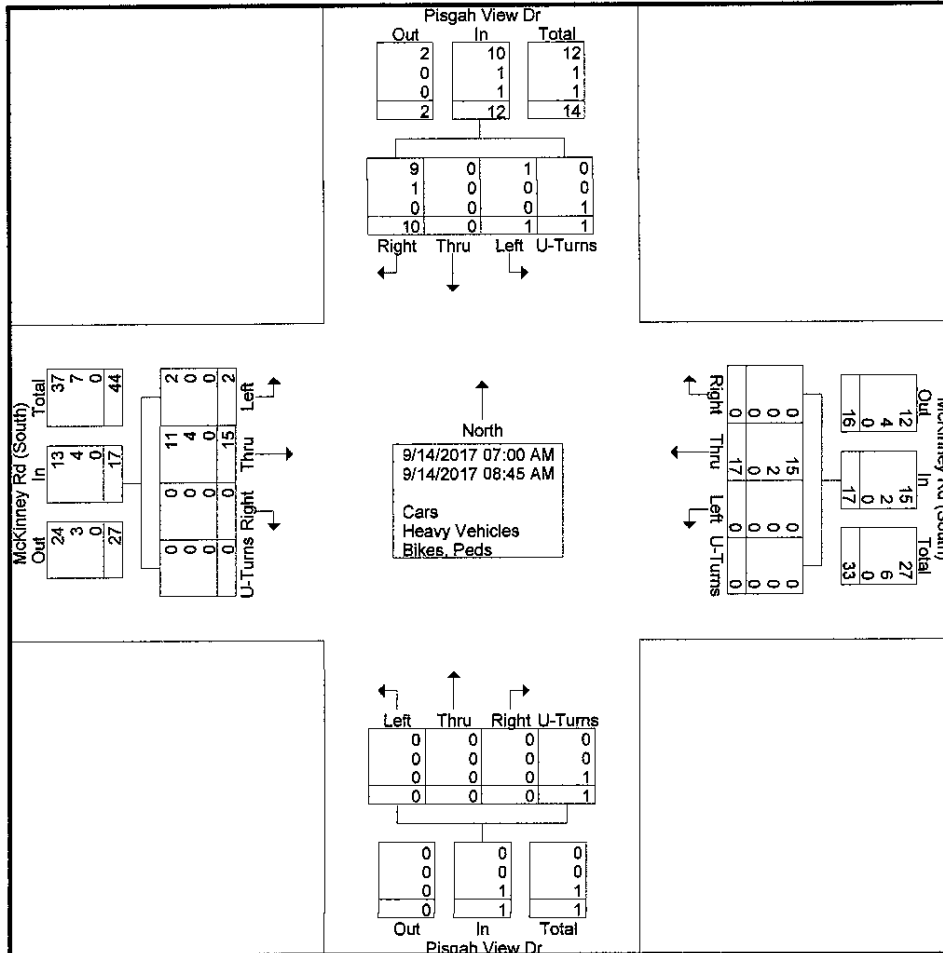
828-456-8383

File Name : Pisgah View Dr @ McKinney Rd (South) - Background AM

Site Code : P-0699

Start Date : 9/14/2017

Page No : 2



J.M. Teague Engineering & Planning

525 N. Main Street, Waynesville, NC 28786

828-456-8383

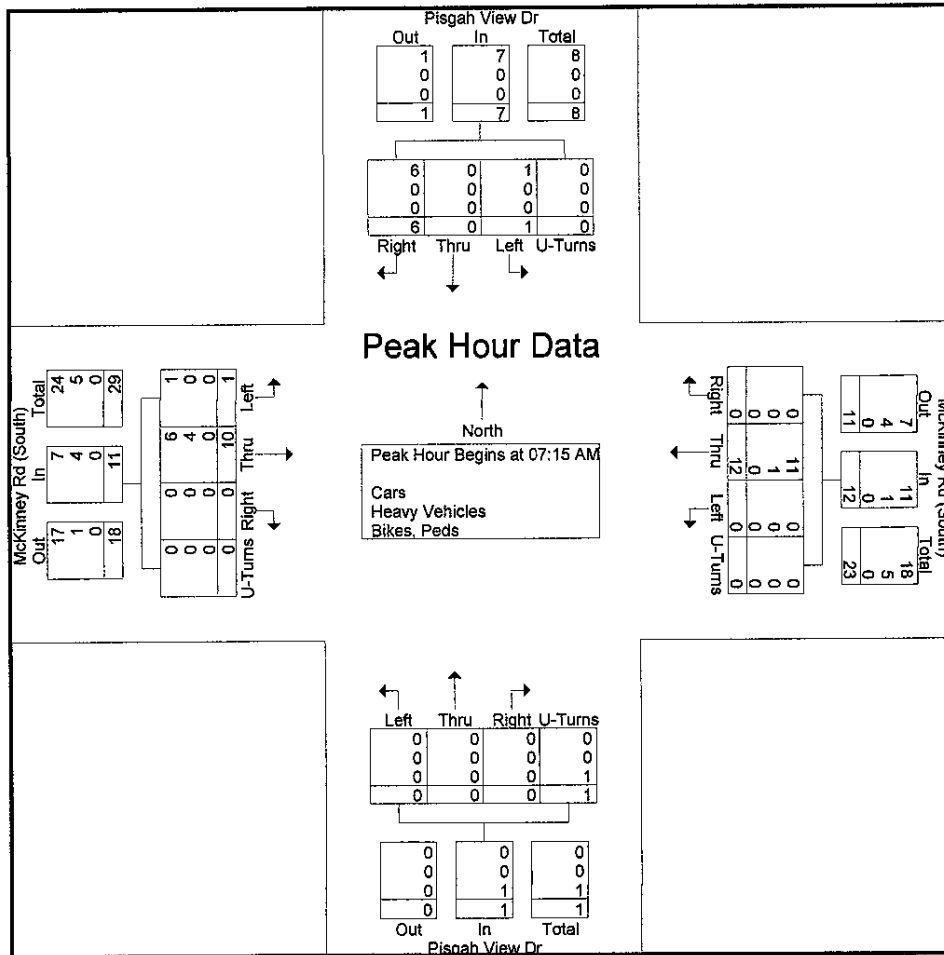
File Name : Pisgah View Dr @ McKinney Rd (South) - Background AM

Site Code : P-0699

Start Date : 9/14/2017

Page No : 3

Start Time	Pisgah View Dr Southbound					McKinney Rd (South) Westbound					Pisgah View Dr Northbound					McKinney Rd (South) Eastbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
Peak Hour Analysis From 7:00:00 AM to 8:45:00 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 7:15:00 AM																					
7:15:00 AM	0	0	1	0	1	0	3	0	0	3	0	0	0	0	0	1	4	0	0	5	9
7:30:00 AM	0	0	2	0	2	0	1	0	0	1	0	0	0	1	1	0	3	0	0	3	7
7:45:00 AM	1	0	1	0	2	0	3	0	0	3	0	0	0	0	0	0	0	0	0	0	5
8:00:00 AM	0	0	2	0	2	0	5	0	0	5	0	0	0	0	0	0	3	0	0	3	10
Total Volume	1	0	6	0	7	0	12	0	0	12	0	0	0	1	1	1	10	0	0	11	31
% App. Total	14.3	0	85.7	0		0	100	0	0		0	0	0	100		9.1	90.9	0	0		
PHF	.250	.000	.750	.000	.875	.000	.600	.000	.000	.600	.000	.000	.000	.250	.250	.250	.625	.000	.000	.550	.775
Cars	1	0	6	0	7	0	11	0	0	11	0	0	0	0	0	1	6	0	0	7	25
% Cars	100	0	100	0	100	0	91.7	0	0	91.7	0	0	0	0	0	100	60.0	0	0	63.6	80.6
Heavy Vehicles	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	4	0	0	4	5
% Heavy Vehicles	0	0	0	0	0	0	8.3	0	0	8.3	0	0	0	0	0	0	40.0	0	0	36.4	16.1
Bikes, Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	1
% Bikes, Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	100	100	0	0	0	0	0	3.2



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525 N. Main Street, Waynesville, NC 28786

828-456-8383

File Name : Pisgah View Dr @ McKinney Rd (South) - Background PM

Site Code : P-0699

Start Date : 9/14/2017

Page No : 1

Groups Printed- Cars - Heavy Vehicles - Bikes, Peds

Start Time	Pisgah View Dr Southbound					McKinney Rd (South) Westbound					Pisgah View Dr Northbound					McKinney Rd (South) Eastbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
Factor	1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		
04:00 PM	0	0	0	0	0	0	1	0	1	2	0	0	0	0	0	1	2	0	0	3	5
04:15 PM	0	0	1	0	1	0	4	0	0	4	0	0	0	0	0	0	3	0	0	3	8
04:30 PM	0	0	1	0	1	0	3	0	0	3	0	0	0	0	0	4	6	0	0	10	14
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	3	0	0	4	5
Total	0	0	2	0	2	0	8	0	1	9	0	0	0	1	1	6	14	0	0	20	32
05:00 PM	0	0	3	0	3	0	1	0	0	1	0	0	0	0	0	4	0	0	0	4	8
05:15 PM	0	0	0	0	0	0	5	0	0	5	0	0	0	0	0	2	2	0	0	4	9
05:30 PM	1	0	0	0	1	0	1	1	0	2	0	0	0	0	0	1	4	0	0	5	8
05:45 PM	0	0	2	0	2	0	4	0	0	4	0	0	0	0	0	3	5	0	0	8	14
Total	1	0	5	0	6	0	11	1	0	12	0	0	0	0	0	10	11	0	0	21	39
Grand Total	1	0	7	0	8	0	19	1	1	21	0	0	0	1	1	16	25	0	0	41	71
Apprch %	12.5	0	87.5	0		0	90.5	4.8	4.8		0	0	0	100		39	61	0	0		
Total %	1.4	0	9.9	0	11.3	0	26.8	1.4	1.4	29.6	0	0	0	1.4	1.4	22.5	35.2	0	0	57.7	
Cars	1	0	7	0	8	0	17	1	0	18	0	0	0	0	0	16	25	0	0	41	67
% Cars	100	0	100	0	100	0	89.5	100	0	85.7	0	0	0	0	0	100	100	0	0	100	94.4
Heavy Vehicles	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	1
% Heavy Vehicles	0	0	0	0	0	0	5.3	0	0	4.8	0	0	0	0	0	0	0	0	0	0	1.4
Bikes, Peds	0	0	0	0	0	0	1	0	1	2	0	0	0	1	1	0	0	0	0	0	3
% Bikes, Peds	0	0	0	0	0	0	5.3	0	100	9.5	0	0	0	100	100	0	0	0	0	0	4.2

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525 N. Main Street, Waynesville, NC 28786

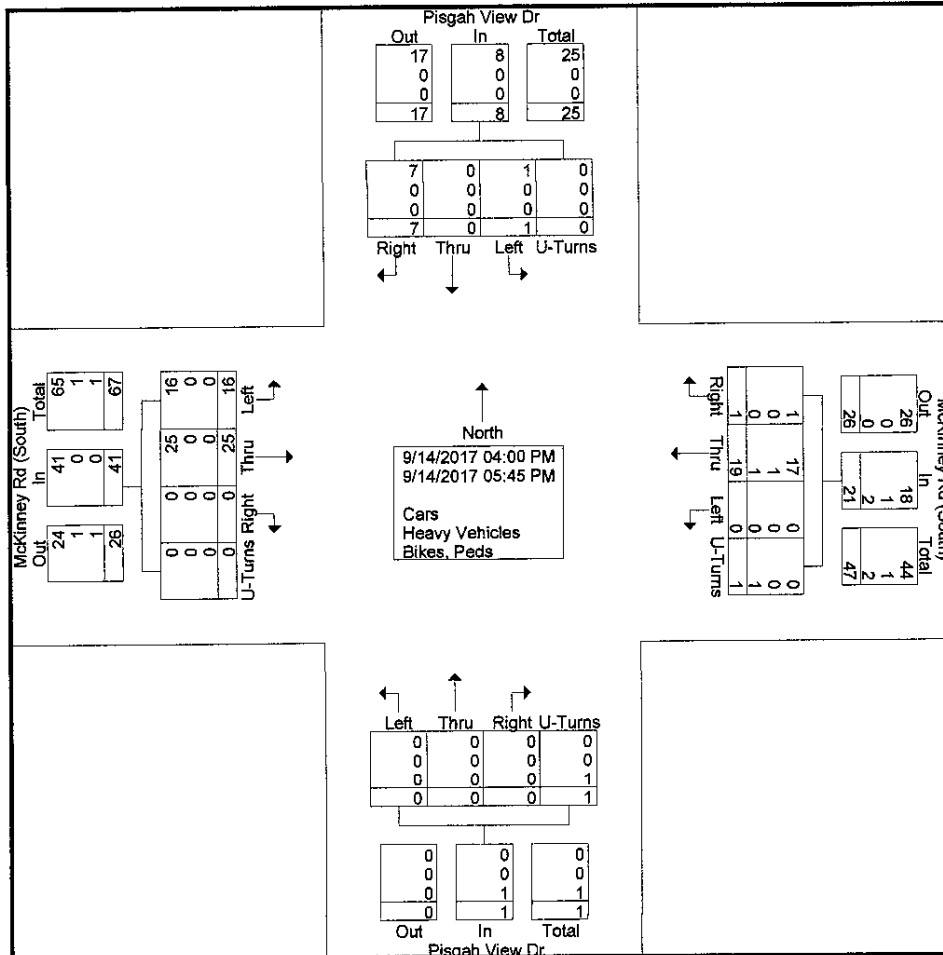
828-456-8383

File Name : Pisgah View Dr @ McKinney Rd (South) - Background PM

Site Code : P-0699

Start Date : 9/14/2017

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525 N. Main Street, Waynesville, NC 28786

828-456-8383

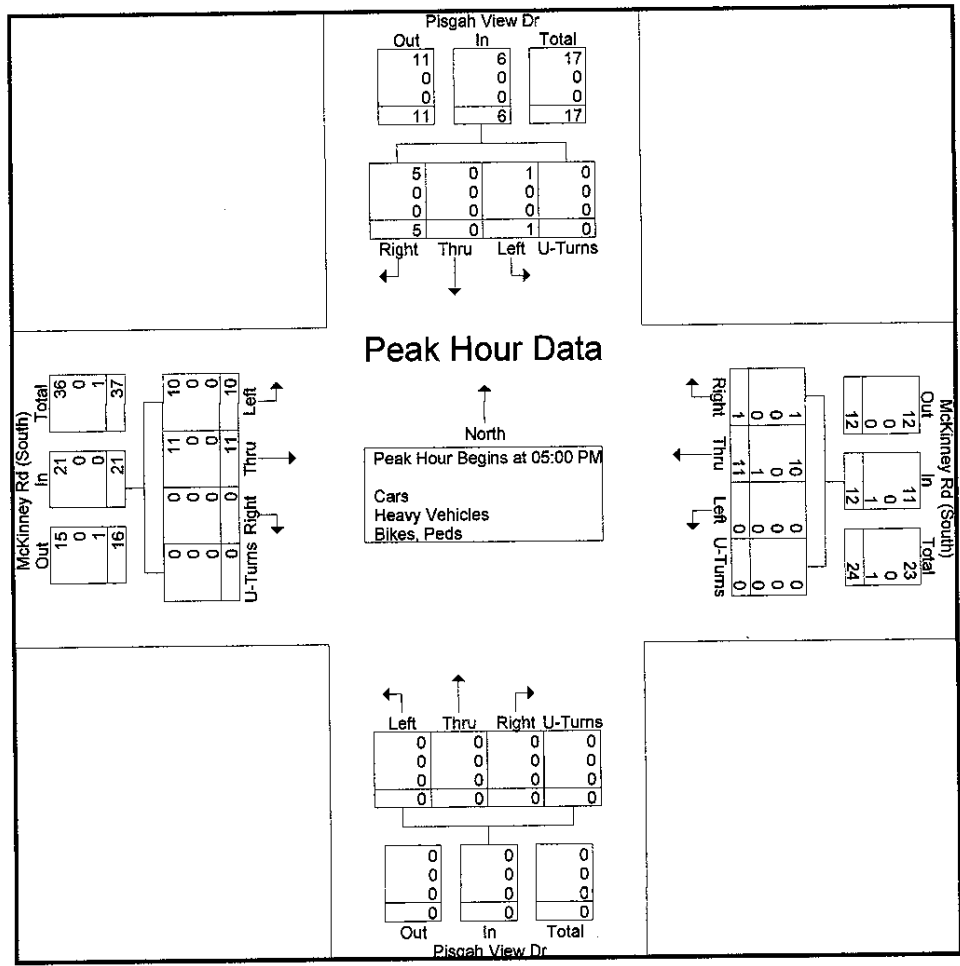
File Name : Pisgah View Dr @ McKinney Rd (South) - Background PM

Site Code : P-0699

Start Date : 9/14/2017

Page No : 3

Start Time	Pisgah View Dr Southbound					McKinney Rd (South) Westbound					Pisgah View Dr Northbound					McKinney Rd (South) Eastbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
Peak Hour Analysis From 4:00:00 PM to 5:45:00 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 5:00:00 PM																					
5:00:00 PM	0	0	3	0	3	0	1	0	0	1	0	0	0	0	0	4	0	0	0	4	8
5:15:00 PM	0	0	0	0	0	0	5	0	0	5	0	0	0	0	0	2	2	0	0	4	9
5:30:00 PM	1	0	0	0	1	0	1	1	0	2	0	0	0	0	0	1	4	0	0	5	8
5:45:00 PM	0	0	2	0	2	0	4	0	0	4	0	0	0	0	0	3	5	0	0	8	14
Total Volume	1	0	5	0	6	0	11	1	0	12	0	0	0	0	0	10	11	0	0	21	39
% App. Total	16.7	0	83.3	0		0	91.7	8.3	0		0	0	0	0		47.6	52.4	0	0		
PHF	.250	.000	.417	.000	.500	.000	.550	.250	.000	.600	.000	.000	.000	.000	.000	.625	.550	.000	.000	.656	.696
Cars	1	0	5	0	6	0	10	1	0	11	0	0	0	0	0	10	11	0	0	21	38
% Cars	100	0	100	0	100	0	90.9	100	0	91.7	0	0	0	0	0	100	100	0	0	100	97.4
Heavy Vehicles	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% Heavy Vehicles	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Bikes, Peds	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	1
% Bikes, Peds	0	0	0	0	0	0	9.1	0	0	8.3	0	0	0	0	0	0	0	0	0	0	2.6



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525 N. Main Street, Waynesville, NC 28786

828-456-8383

File Name : McKinney Rd @ US 64 - Background AM

Site Code : P-0699

Start Date : 9/14/2017

Page No : 1

Groups Printed- Cars - Heavy Vehicles - Bikes, Peds

Start Time	McKinney Rd Southbound					US 64 Westbound					McKinney Rd Northbound					US 64 Eastbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
Factor	1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		
07:00 AM	2	0	0	0	2	2	35	4	0	41	9	0	17	0	26	0	95	2	1	98	167
07:15 AM	2	0	2	0	4	5	70	3	0	78	17	0	18	1	36	0	102	10	0	112	230
07:30 AM	5	1	0	0	6	3	75	4	0	82	19	1	19	0	39	0	109	8	0	117	244
07:45 AM	2	1	3	0	6	3	80	1	0	84	17	0	17	0	34	1	101	12	0	114	238
Total	11	2	5	0	18	13	260	12	0	285	62	1	71	1	135	1	407	32	1	441	879
08:00 AM	4	0	1	0	5	5	85	2	0	92	16	1	11	0	28	0	105	8	0	113	238
08:15 AM	1	0	1	0	2	3	68	4	0	75	8	0	6	0	14	2	85	7	1	95	186
08:30 AM	2	0	2	0	4	7	82	1	0	90	17	0	12	0	29	0	99	7	0	106	229
08:45 AM	0	0	0	0	0	1	64	1	0	66	6	0	7	0	13	1	77	5	0	83	162
Total	7	0	4	0	11	16	299	8	0	323	47	1	36	0	84	3	366	27	1	397	815
Grand Total	18	2	9	0	29	29	559	20	0	608	109	2	107	1	219	4	773	59	2	838	1694
Apprch %	62.1	6.9	31	0		4.8	91.9	3.3	0		49.8	0.9	48.9	0.5		0.5	92.2	7	0.2		
Total %	1.1	0.1	0.5	0	1.7	1.7	33	1.2	0	35.9	6.4	0.1	6.3	0.1	12.9	0.2	45.6	3.5	0.1	49.5	
Cars	15	2	9	0	26	29	529	16	0	574	108	2	103	0	213	4	747	59	0	810	1623
% Cars	83.3	100	100	0	89.7	100	94.6	80	0	94.4	99.1	100	96.3	0	97.3	100	96.6	100	0	96.7	95.8
Heavy Vehicles	3	0	0	0	3	0	30	4	0	34	1	0	4	0	5	0	25	0	0	25	67
% Heavy Vehicles	16.7	0	0	0	10.3	0	5.4	20	0	5.6	0.9	0	3.7	0	2.3	0	3.2	0	0	3	4
Bikes, Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	1	0	2	3	4
% Bikes, Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	100	0.5	0	0.1	0	100	0.4	0.2

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525 N. Main Street, Waynesville, NC 28786

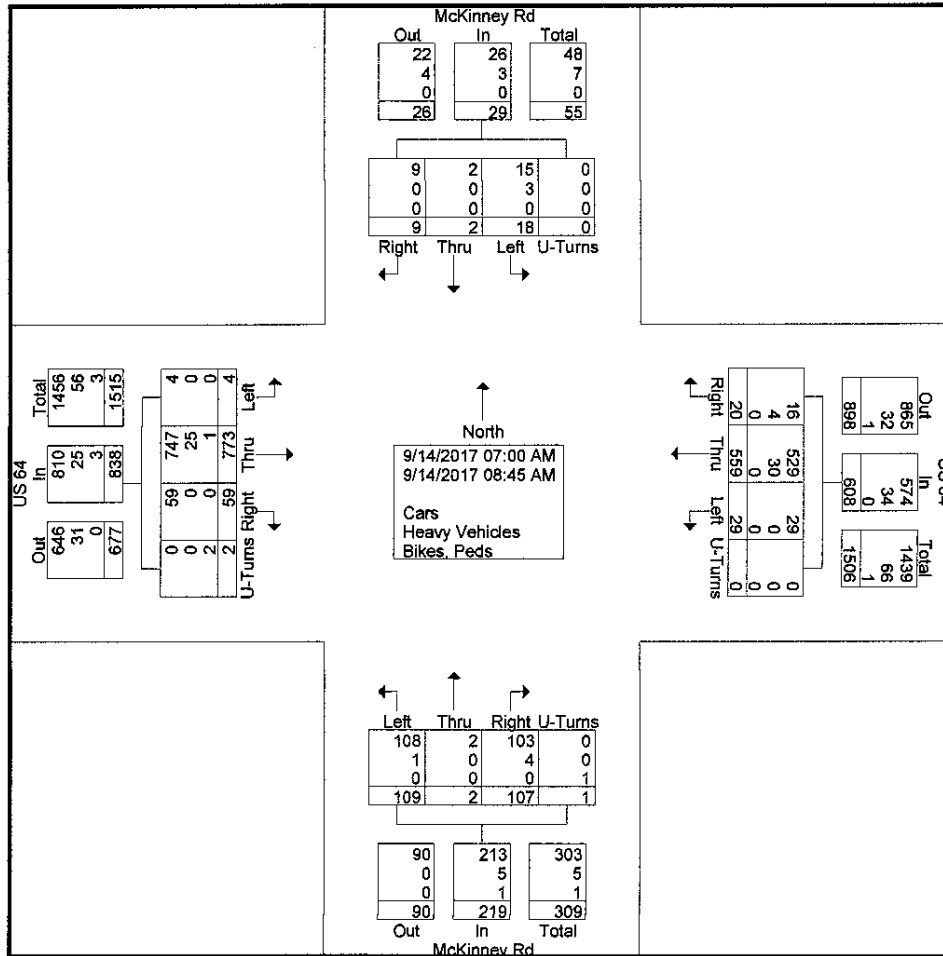
828-456-8383

File Name : McKinney Rd @ US 64 - Background AM

Site Code : P-0699

Start Date : 9/14/2017

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525 N. Main Street, Waynesville, NC 28786

828-456-8383

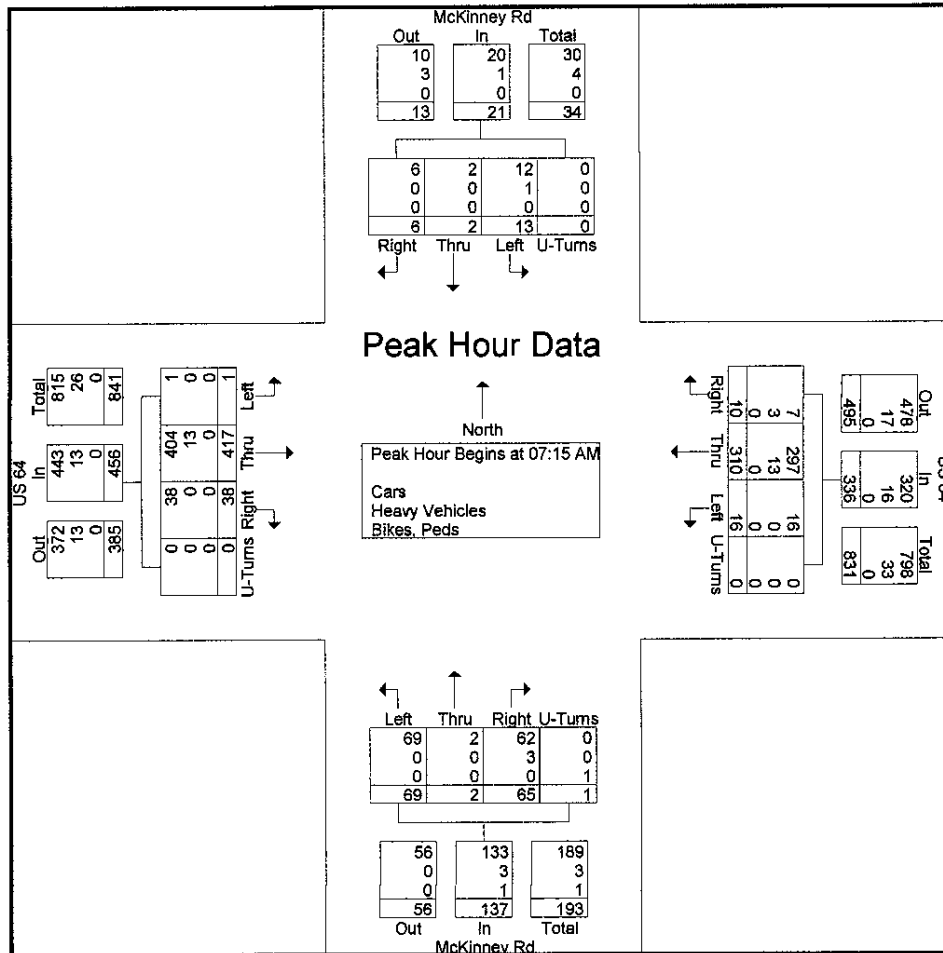
File Name : McKinney Rd @ US 64 - Background AM

Site Code : P-0699

Start Date : 9/14/2017

Page No : 3

Start Time	McKinney Rd Southbound					US 64 Westbound					McKinney Rd Northbound					US 64 Eastbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
Peak Hour Analysis From 7:00:00 AM to 8:45:00 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 7:15:00 AM																					
7:15:00 AM	2	0	2	0	4	5	70	3	0	78	17	0	18	1	36	0	102	10	0	112	230
7:30:00 AM	5	1	0	0	6	3	75	4	0	82	19	1	19	0	39	0	109	8	0	117	244
7:45:00 AM	2	1	3	0	6	3	80	1	0	84	17	0	17	0	34	1	101	12	0	114	238
8:00:00 AM	4	0	1	0	5	5	85	2	0	92	16	1	11	0	28	0	105	8	0	113	238
Total Volume	13	2	6	0	21	16	310	10	0	336	69	2	65	1	137	1	417	38	0	456	950
% App. Total	61.9	9.5	28.6	0		4.8	92.3	3	0		50.4	1.5	47.4	0.7		0.2	91.4	8.3	0		
PHF	.650	.500	.500	.000	.875	.800	.912	.625	.000	.913	.908	.500	.855	.250	.878	.250	.956	.792	.000	.974	.973
Cars	12	2	6	0	20	16	297	7	0	320	69	2	62	0	133	1	404	38	0	443	916
% Cars	92.3	100	100	0	95.2	100	95.8	70.0	0	95.2	100	100	95.4	0	97.1	100	96.9	100	0	97.1	96.4
Heavy Vehicles	1	0	0	0	1	0	13	3	0	16	0	0	3	0	3	0	13	0	0	13	33
% Heavy Vehicles	7.7	0	0	0	4.8	0	4.2	30.0	0	4.8	0	0	4.6	0	2.2	0	3.1	0	0	2.9	3.5
Bikes, Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	1
% Bikes, Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	100	0.7	0	0	0	0	0	0.1



J.M. Teague Engineering & Planning

525 N. Main Street, Waynesville, NC 28786

828-456-8383

File Name : McKinney Rd @ US 64 - Background PM

Site Code : P-0699

Start Date : 9/14/2017

Page No : 1

Groups Printed- Cars - Heavy Vehicles - Bikes, Peds

Start Time	McKinney Rd Southbound					US 64 Westbound					McKinney Rd Northbound					US 64 Eastbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
Factor	1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		
04:00 PM	0	0	1	0	1	11	109	2	0	122	15	0	13	0	28	3	128	13	0	144	295
04:15 PM	4	2	1	0	7	8	102	3	0	113	7	0	7	0	14	1	111	12	0	124	258
04:30 PM	6	1	1	0	8	11	111	6	0	128	14	1	7	0	22	1	98	10	0	109	267
04:45 PM	2	2	0	0	4	5	146	2	0	153	10	0	6	0	16	2	118	20	0	140	313
Total	12	5	3	0	20	35	468	13	0	516	46	1	33	0	80	7	455	55	0	517	1133
05:00 PM	5	1	2	0	8	8	116	2	0	126	13	1	5	0	19	2	112	12	0	126	279
05:15 PM	5	1	2	0	8	13	133	2	0	148	9	0	4	0	13	2	123	23	0	148	317
05:30 PM	3	1	1	0	5	11	117	4	0	132	10	0	11	0	21	3	115	10	0	128	286
05:45 PM	4	1	1	0	6	9	124	4	0	137	16	1	9	0	26	2	90	12	0	104	273
Total	17	4	6	0	27	41	490	12	0	543	48	2	29	0	79	9	440	57	0	506	1155
Grand Total	29	9	9	0	47	76	958	25	0	1059	94	3	62	0	159	16	895	112	0	1023	2288
Apprch %	61.7	19.1	19.1	0		7.2	90.5	2.4	0		59.1	1.9	39	0		1.6	87.5	10.9	0		
Total %	1.3	0.4	0.4	0	2.1	3.3	41.9	1.1	0	46.3	4.1	0.1	2.7	0	6.9	0.7	39.1	4.9	0	44.7	
Cars	26	8	9	0	43	75	942	25	0	1042	92	3	56	0	151	13	879	111	0	1003	2239
% Cars	89.7	88.9	100	0	91.5	98.7	98.3	100	0	98.4	97.9	100	90.3	0	95	81.2	98.2	99.1	0	98	97.9
Heavy Vehicles	3	0	0	0	3	1	15	0	0	16	2	0	6	0	8	3	16	1	0	20	47
% Heavy Vehicles	10.3	0	0	0	6.4	1.3	1.6	0	0	1.5	2.1	0	9.7	0	5	18.8	1.8	0.9	0	2	2.1
Bikes, Peds	0	1	0	0	1	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	2
% Bikes, Peds	0	11.1	0	0	2.1	0	0.1	0	0	0.1	0	0	0	0	0	0	0	0	0	0	0.1

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525 N. Main Street, Waynesville, NC 28786

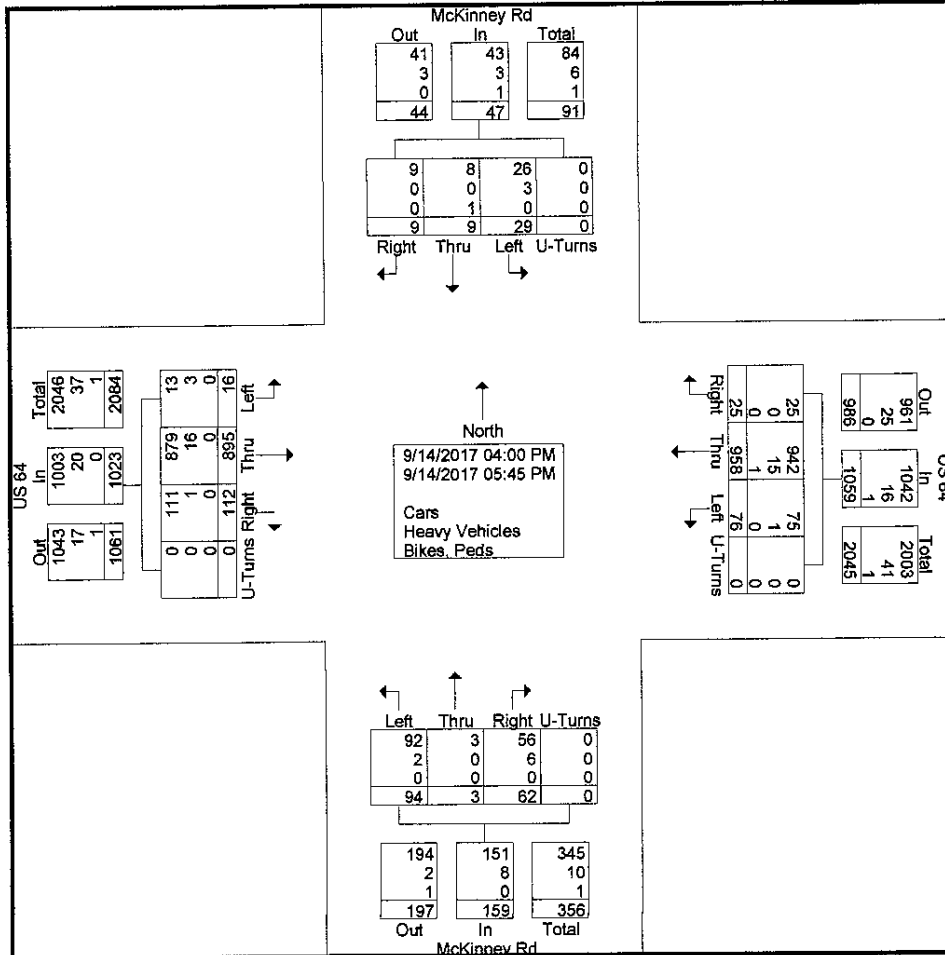
828-456-8383

File Name : McKinney Rd @ US 64 - Background PM

Site Code : P-0699

Start Date : 9/14/2017

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525 N. Main Street, Waynesville, NC 28786

828-456-8383

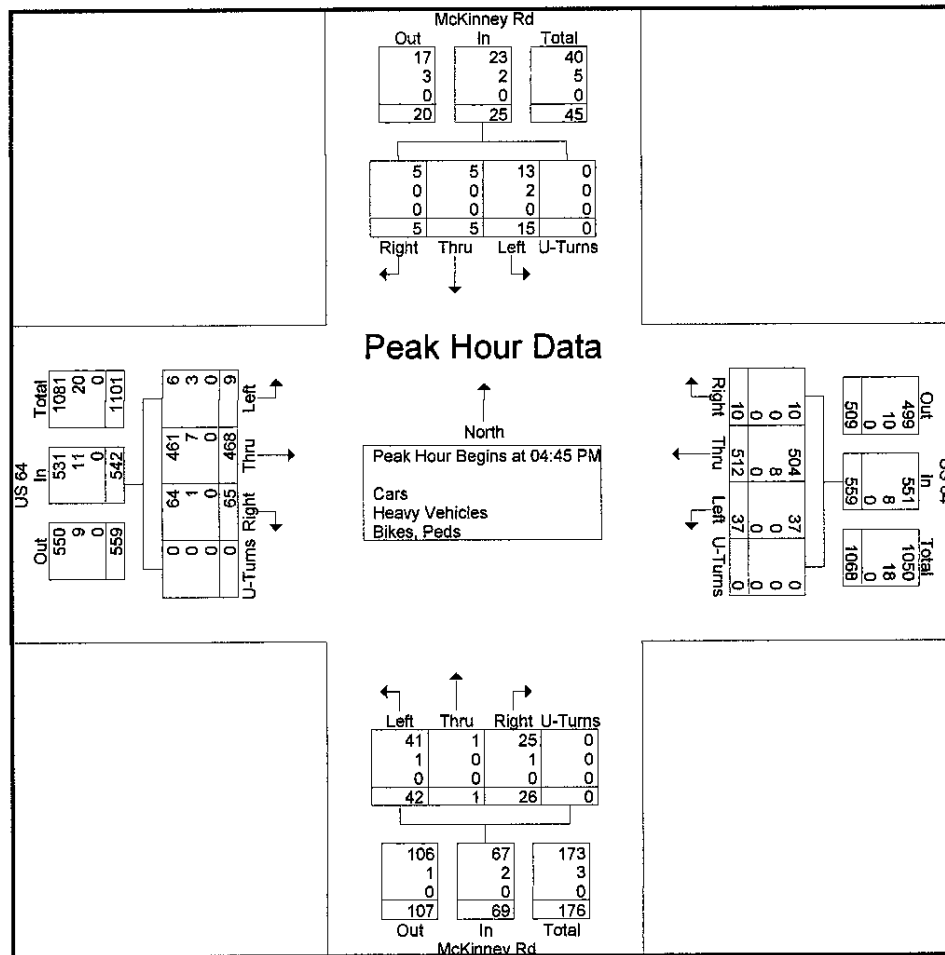
File Name : McKinney Rd @ US 64 - Background PM

Site Code : P-0699

Start Date : 9/14/2017

Page No : 3

Start Time	McKinney Rd Southbound					US 64 Westbound					McKinney Rd Northbound					US 64 Eastbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
Peak Hour Analysis From 4:00:00 PM to 5:45:00 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 4:45:00 PM																					
4:45:00 PM	2	2	0	0	4	5	146	2	0	153	10	0	6	0	16	2	118	20	0	140	313
5:00:00 PM	5	1	2	0	8	8	116	2	0	126	13	1	5	0	19	2	112	12	0	126	279
5:15:00 PM	5	1	2	0	8	13	133	2	0	148	9	0	4	0	13	2	123	23	0	148	317
5:30:00 PM	3	1	1	0	5	11	117	4	0	132	10	0	11	0	21	3	115	10	0	128	286
Total Volume	15	5	5	0	25	37	512	10	0	559	42	1	26	0	69	9	468	65	0	542	1195
% App. Total	60	20	20	0		6.6	91.6	1.8	0		60.9	1.4	37.7	0		1.7	86.3	12	0		
PHF	.750	.625	.625	.000	.781	.712	.877	.625	.000	.913	.808	.250	.591	.000	.821	.750	.951	.707	.000	.916	.942
Cars	13	5	5	0	23	37	504	10	0	551	41	1	25	0	67	6	461	64	0	531	1172
% Cars	86.7	100	100	0	92.0	100	98.4	100	0	98.6	97.6	100	96.2	0	97.1	66.7	98.5	98.5	0	98.0	98.1
Heavy Vehicles	2	0	0	0	2	0	8	0	0	8	1	0	1	0	2	3	7	1	0	11	23
% Heavy Vehicles	13.3	0	0	0	8.0	0	1.6	0	0	1.4	2.4	0	3.8	0	2.9	33.3	1.5	1.5	0	2.0	1.9
Bikes, Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% Bikes, Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0



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525 N. Main Street, Waynesville, NC 28786

828-456-8383

File Name : Brickyard Rd @ US 64 - Background AM

Site Code : P-0699

Start Date : 9/14/2017

Page No : 1

Groups Printed- Cars - Heavy Vehicles - Bikes, Peds

Start Time	Brickyard Rd Southbound					US 64 Westbound					Brickyard Rd Northbound					US 64 Eastbound					Int. Total	
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total		
Factor	1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0			
07:00 AM	24	0	1	0	25	0	38	6	0	44	0	0	0	0	0	1	67	0	0	0	68	137
07:15 AM	32	0	6	0	38	0	69	19	0	88	0	0	0	1	1	2	81	0	0	0	83	210
07:30 AM	30	0	4	0	34	0	77	16	0	93	0	0	0	0	0	3	88	0	0	0	91	218
07:45 AM	17	0	4	0	21	0	71	30	0	101	0	0	0	0	0	4	94	0	0	0	98	220
Total	103	0	15	0	118	0	255	71	0	326	0	0	0	1	1	10	330	0	0	0	340	785
08:00 AM	46	0	8	0	54	0	79	22	0	101	0	0	0	0	0	7	69	0	0	0	76	231
08:15 AM	23	0	4	0	27	0	62	13	0	75	0	0	0	0	0	4	70	0	0	0	74	176
08:30 AM	22	0	11	0	33	0	86	13	0	99	0	0	0	0	0	4	82	0	0	0	86	218
08:45 AM	18	0	9	0	27	0	53	11	0	64	0	0	0	0	0	6	67	0	0	0	73	164
Total	109	0	32	0	141	0	280	59	0	339	0	0	0	0	0	21	288	0	0	0	309	789
Grand Total	212	0	47	0	259	0	535	130	0	665	0	0	0	1	1	31	618	0	0	0	649	1574
Apprch %	81.9	0	18.1	0		0	80.5	19.5	0		0	0	0	100		4.8	95.2	0	0	0		
Total %	13.5	0	3	0	16.5	0	34	8.3	0	42.2	0	0	0	0.1	0.1	2	39.3	0	0	0	41.2	
Cars	204	0	44	0	248	0	504	124	0	628	0	0	0	0	0	28	586	0	0	0	614	1490
% Cars	96.2	0	93.6	0	95.8	0	94.2	95.4	0	94.4	0	0	0	0	0	90.3	94.8	0	0	0	94.6	94.7
Heavy Vehicles	8	0	3	0	11	0	31	6	0	37	0	0	0	0	0	3	31	0	0	0	34	82
% Heavy Vehicles	3.8	0	6.4	0	4.2	0	5.8	4.6	0	5.6	0	0	0	0	0	9.7	5	0	0	0	5.2	5.2
Bikes, Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	1	0	0	0	1	2
% Bikes, Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	100	100	0	0.2	0	0	0	0.2	0.1

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525 N. Main Street, Waynesville, NC 28786

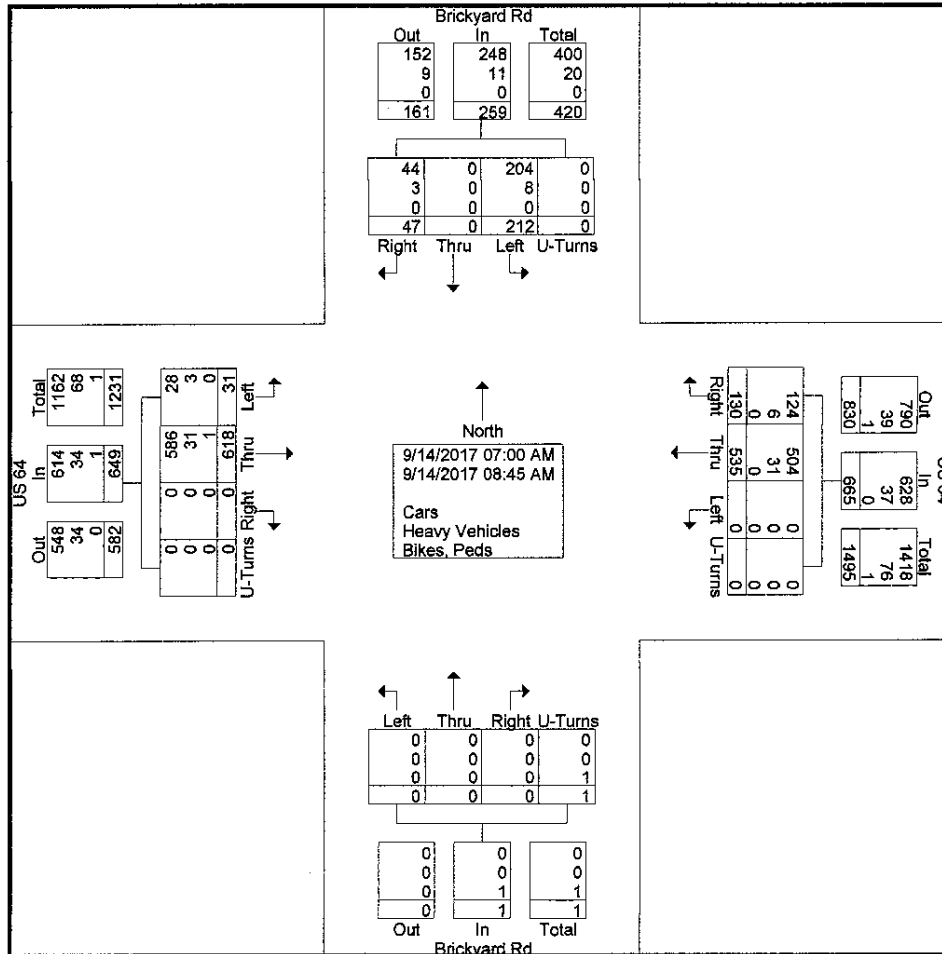
828-456-8383

File Name : Brickyard Rd @ US 64 - Background AM

Site Code : P-0699

Start Date : 9/14/2017

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525 N. Main Street, Waynesville, NC 28786

828-456-8383

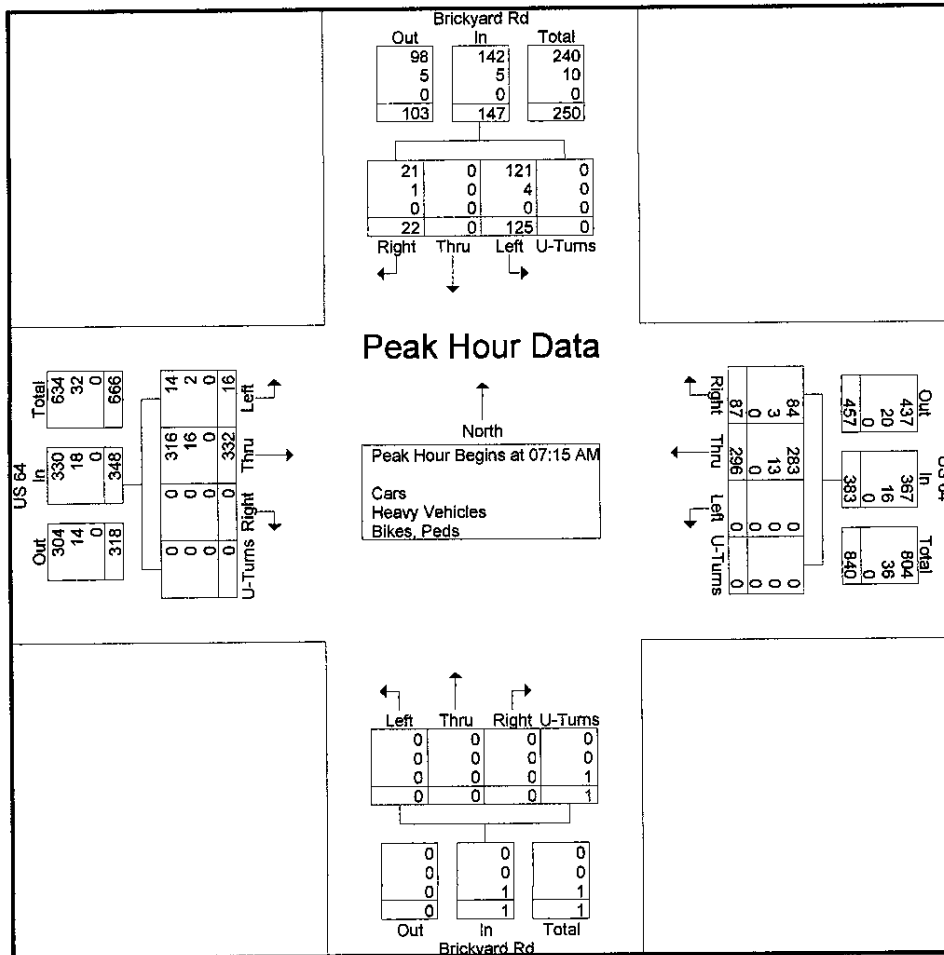
File Name : Brickyard Rd @ US 64 - Background AM

Site Code : P-0699

Start Date : 9/14/2017

Page No : 3

Start Time	Brickyard Rd Southbound					US 64 Westbound					Brickyard Rd Northbound					US 64 Eastbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
Peak Hour Analysis From 7:00:00 AM to 8:45:00 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 7:15:00 AM																					
7:15:00 AM	32	0	6	0	38	0	69	19	0	88	0	0	0	1	1	2	81	0	0	83	210
7:30:00 AM	30	0	4	0	34	0	77	16	0	93	0	0	0	0	0	3	88	0	0	91	218
7:45:00 AM	17	0	4	0	21	0	71	30	0	101	0	0	0	0	0	4	94	0	0	98	220
8:00:00 AM	46	0	8	0	54	0	79	22	0	101	0	0	0	0	0	7	69	0	0	76	231
Total Volume	125	0	22	0	147	0	296	87	0	383	0	0	0	1	1	16	332	0	0	348	879
% App. Total	85	0	15	0		0	77.3	22.7	0		0	0	0	100		4.6	95.4	0	0		
PHF	.679	.000	.688	.000	.681	.000	.937	.725	.000	.948	.000	.000	.000	.250	.250	.571	.883	.000	.000	.888	.951
Cars	121	0	21	0	142	0	283	84	0	367	0	0	0	0	0	14	316	0	0	330	839
% Cars	96.8	0	95.5	0	96.6	0	95.6	96.6	0	95.8	0	0	0	0	0	87.5	95.2	0	0	94.8	95.4
Heavy Vehicles	4	0	1	0	5	0	13	3	0	16	0	0	0	0	0	2	16	0	0	18	39
% Heavy Vehicles	3.2	0	4.5	0	3.4	0	4.4	3.4	0	4.2	0	0	0	0	0	12.5	4.8	0	0	5.2	4.4
Bikes, Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	1
% Bikes, Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	100	100	0	0	0	0	0	0.1



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525 N. Main Street, Waynesville, NC 28786

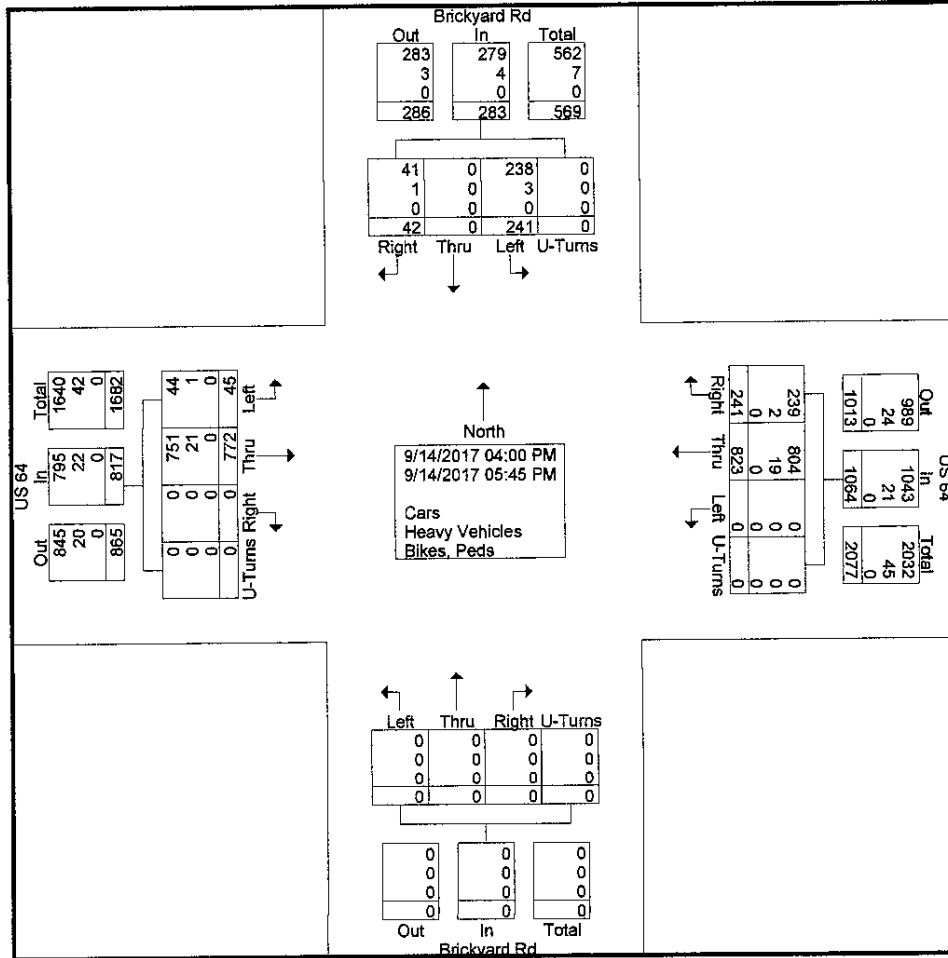
828-456-8383

File Name : Brickyard Rd @ US 64 - Background PM

Site Code : P-0699

Start Date : 9/14/2017

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525 N. Main Street, Waynesville, NC 28786

828-456-8383

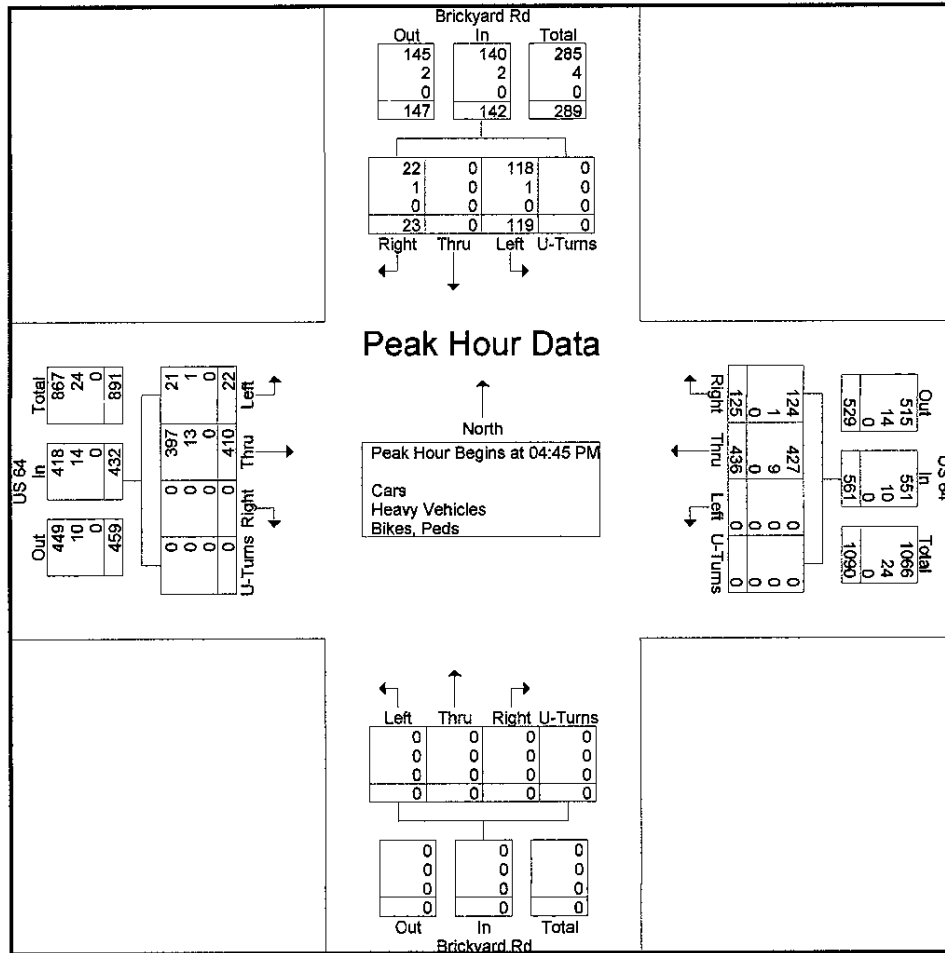
File Name : Brickyard Rd @ US 64 - Background PM

Site Code : P-0699

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Page No : 3

Start Time	Brickyard Rd Southbound					US 64 Westbound					Brickyard Rd Northbound					US 64 Eastbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
Peak Hour Analysis From 4:00:00 PM to 5:45:00 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 4:45:00 PM																					
4:45:00 PM	17	0	5	0	22	0	120	41	0	161	0	0	0	0	0	3	112	0	0	115	298
5:00:00 PM	31	0	7	0	38	0	104	24	0	128	0	0	0	0	0	11	94	0	0	105	271
5:15:00 PM	36	0	3	0	39	0	115	27	0	142	0	0	0	0	0	5	115	0	0	120	301
5:30:00 PM	35	0	8	0	43	0	97	33	0	130	0	0	0	0	0	3	89	0	0	92	265
Total Volume	119	0	23	0	142	0	436	125	0	561	0	0	0	0	0	22	410	0	0	432	1135
% App. Total	83.8	0	16.2	0		0	77.7	22.3	0		0	0	0	0		5.1	94.9	0	0		
PHF	.826	.000	.719	.000	.826	.000	.908	.762	.000	.871	.000	.000	.000	.000	.000	.500	.891	.000	.000	.900	.943
Cars	118	0	22	0	140	0	427	124	0	551	0	0	0	0	0	21	397	0	0	418	1109
% Cars	99.2	0	95.7	0	98.6	0	97.9	99.2	0	98.2	0	0	0	0	0	95.5	96.8	0	0	96.8	97.7
Heavy Vehicles	1	0	1	0	2	0	9	1	0	10	0	0	0	0	0	1	13	0	0	14	26
% Heavy Vehicles	0.8	0	4.3	0	1.4	0	2.1	0.8	0	1.8	0	0	0	0	0	4.5	3.2	0	0	3.2	2.3
Bikes, Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% Bikes, Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0



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525 N. Main Street, Waynesville, NC 28786

828-456-8383

File Name : N Greenwood Forest Dr @ US 64 - Background AM

Site Code : P-0699

Start Date : 9/14/2017

Page No : 1

Groups Printed- Cars - Heavy Vehicles - Bikes, Peds

Start Time Factor	N Greenwood Forest Dr Southbound					US 64 Westbound					N Greenwood Forest Dr Northbound					US 64 Eastbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
07:00 AM	9	0	7	0	16	0	37	1	0	38	0	0	0	0	0	34	61	0	0	95	149
07:15 AM	14	0	14	0	28	0	61	3	0	64	0	0	0	0	0	30	62	0	0	92	184
07:30 AM	11	0	7	0	18	0	75	1	0	76	0	0	0	0	0	29	79	0	0	108	202
07:45 AM	10	0	5	0	15	0	64	5	0	69	0	0	0	0	0	14	80	0	1	95	179
Total	44	0	33	0	77	0	237	10	0	247	0	0	0	0	0	107	282	0	1	390	714
08:00 AM	2	0	8	0	10	0	65	8	0	73	0	0	0	0	0	15	76	0	0	91	174
08:15 AM	10	0	5	0	15	0	64	4	0	68	0	0	0	0	0	13	63	0	0	76	159
08:30 AM	11	0	12	0	23	0	70	3	1	74	0	0	0	0	0	10	59	0	0	69	166
08:45 AM	9	0	9	0	18	0	56	5	0	61	0	0	0	0	0	11	57	0	0	68	147
Total	32	0	34	0	66	0	255	20	1	276	0	0	0	0	0	49	255	0	0	304	646
Grand Total	76	0	67	0	143	0	492	30	1	523	0	0	0	0	0	156	537	0	1	694	1360
Apprch %	53.1	0	46.9	0		0	94.1	5.7	0.2		0	0	0	0		22.5	77.4	0	0.1		
Total %	5.6	0	4.9	0	10.5	0	36.2	2.2	0.1	38.5	0	0	0	0	0	11.5	39.5	0	0.1	51	
Cars	75	0	66	0	141	0	464	29	0	493	0	0	0	0	0	153	516	0	0	669	1303
% Cars	98.7	0	98.5	0	98.6	0	94.3	96.7	0	94.3	0	0	0	0	0	98.1	96.1	0	0	96.4	95.8
Heavy Vehicles	1	0	1	0	2	0	28	1	0	29	0	0	0	0	0	3	20	0	0	23	54
% Heavy Vehicles	1.3	0	1.5	0	1.4	0	5.7	3.3	0	5.5	0	0	0	0	0	1.9	3.7	0	0	3.3	4
Bikes, Peds	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	1	0	1	2	3
% Bikes, Peds	0	0	0	0	0	0	0	0	100	0.2	0	0	0	0	0	0	0.2	0	100	0.3	0.2

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525 N. Main Street, Waynesville, NC 28786

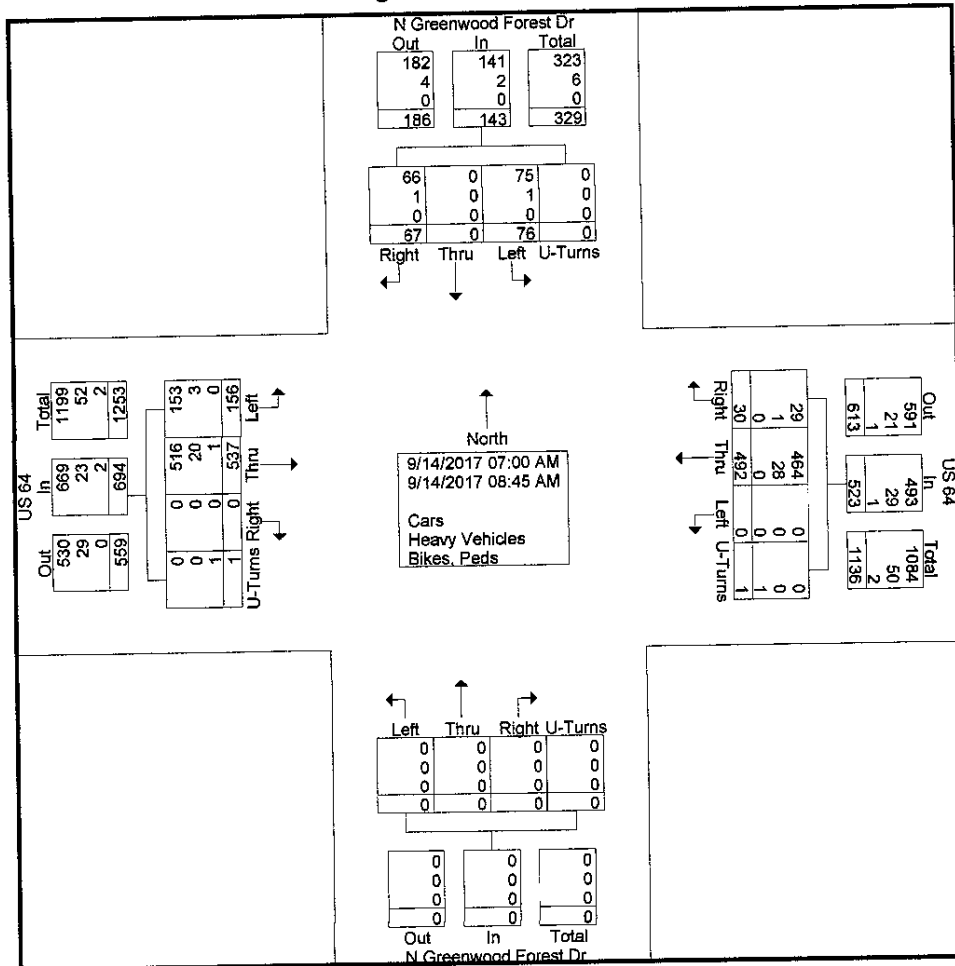
828-456-8383

File Name : N Greenwood Forest Dr @ US 64 - Background AM

Site Code : P-0699

Start Date : 9/14/2017

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525 N. Main Street, Waynesville, NC 28786

828-456-8383

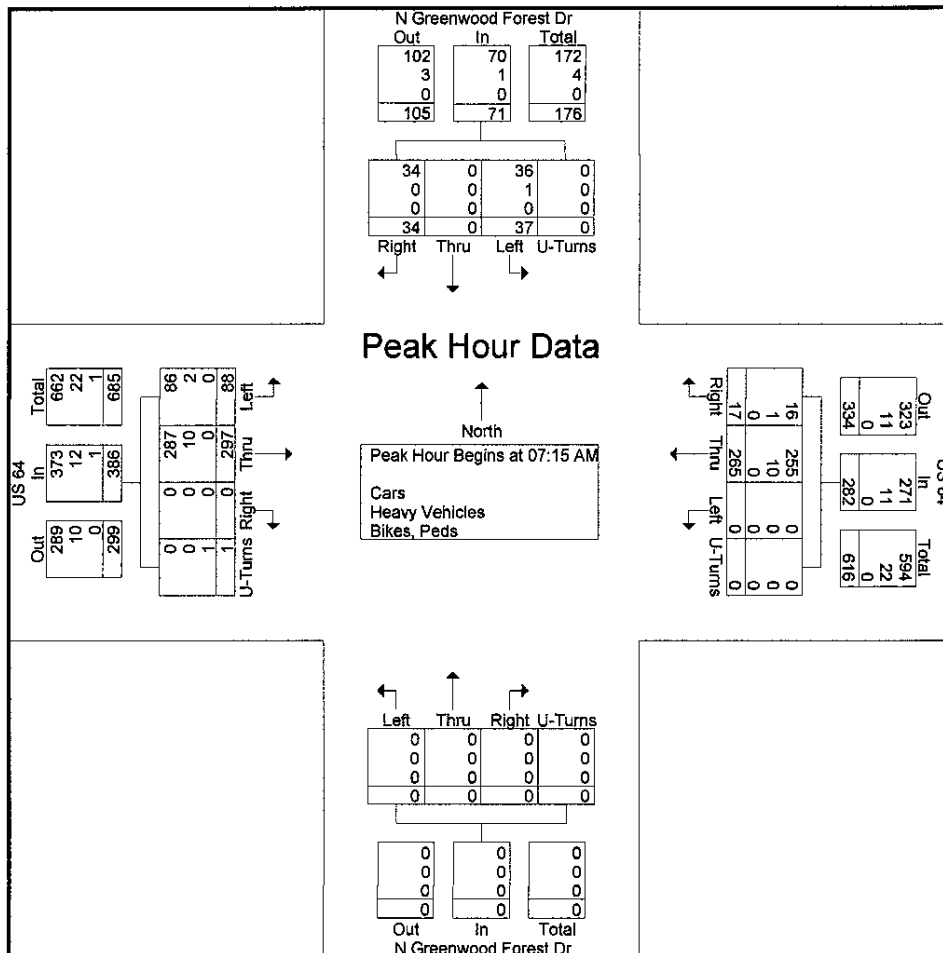
File Name : N Greenwood Forest Dr @ US 64 - Background AM

Site Code : P-0699

Start Date : 9/14/2017

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Start Time	N Greenwood Forest Dr Southbound					US 64 Westbound					N Greenwood Forest Dr Northbound					US 64 Eastbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
Peak Hour Analysis From 7:00:00 AM to 8:45:00 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 7:15:00 AM																					
7:15:00 AM	14	0	14	0	28	0	61	3	0	64	0	0	0	0	0	30	62	0	0	92	184
7:30:00 AM	11	0	7	0	18	0	75	1	0	76	0	0	0	0	0	29	79	0	0	108	202
7:45:00 AM	10	0	5	0	15	0	64	5	0	69	0	0	0	0	0	14	80	0	1	95	179
8:00:00 AM	2	0	8	0	10	0	65	8	0	73	0	0	0	0	0	15	76	0	0	91	174
Total Volume	37	0	34	0	71	0	265	17	0	282	0	0	0	0	0	88	297	0	1	386	739
% App. Total	52.1	0	47.9	0		0	94	6	0		0	0	0	0		22.8	76.9	0	0.3		
PHF	.661	.000	.607	.000	.634	.000	.883	.531	.000	.928	.000	.000	.000	.000	.000	.733	.928	.000	.250	.894	.915
Cars	36	0	34	0	70	0	255	16	0	271	0	0	0	0	0	86	287	0	0	373	714
% Cars	97.3	0	100	0	98.6	0	96.2	94.1	0	96.1	0	0	0	0	0	97.7	96.6	0	0	96.6	96.6
Heavy Vehicles	1	0	0	0	1	0	10	1	0	11	0	0	0	0	0	2	10	0	0	12	24
% Heavy Vehicles	2.7	0	0	0	1.4	0	3.8	5.9	0	3.9	0	0	0	0	0	2.3	3.4	0	0	3.1	3.2
Bikes, Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1
% Bikes, Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	100	0.3	0.1



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525 N. Main Street, Waynesville, NC 28786

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File Name : N Greenwood Forest Dr @ US 64 - Background PM

Site Code : P-0699

Start Date : 9/14/2017

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Groups Printed- Cars - Heavy Vehicles - Bikes, Peds

Start Time	N Greenwood Forest Dr Southbound					US 64 Westbound					N Greenwood Forest Dr Northbound					US 64 Eastbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
Factor	1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		
04:00 PM	12	0	14	0	26	0	71	14	0	85	0	0	0	0	0	13	77	0	0	90	201
04:15 PM	5	0	16	0	21	0	67	20	0	87	0	0	0	0	0	10	74	0	0	84	192
04:30 PM	5	0	14	0	19	0	77	8	0	85	0	0	0	0	0	15	68	0	0	83	187
04:45 PM	5	0	18	0	23	0	83	13	0	96	0	0	0	0	0	10	91	0	0	101	220
Total	27	0	62	0	89	0	298	55	0	353	0	0	0	0	0	48	310	0	0	358	800
05:00 PM	6	0	16	0	22	0	82	16	0	98	0	0	0	0	0	11	85	0	0	96	216
05:15 PM	8	0	22	0	30	0	85	12	0	97	0	0	0	0	0	11	82	0	0	93	220
05:30 PM	7	0	33	0	40	0	77	14	0	91	0	0	0	0	0	9	73	0	0	82	213
05:45 PM	12	0	20	0	32	0	68	12	0	80	0	0	0	0	0	15	60	0	0	75	187
Total	33	0	91	0	124	0	312	54	0	366	0	0	0	0	0	46	300	0	0	346	836
Grand Total	60	0	153	0	213	0	610	109	0	719	0	0	0	0	0	94	610	0	0	704	1636
Apprch %	28.2	0	71.8	0		0	84.8	15.2	0		0	0	0	0		13.4	86.6	0	0		
Total %	3.7	0	9.4	0	13	0	37.3	6.7	0	43.9	0	0	0	0	0	5.7	37.3	0	0	43	
Cars	60	0	152	0	212	0	609	109	0	718	0	0	0	0	0	93	610	0	0	703	1633
% Cars	100	0	99.3	0	99.5	0	99.8	100	0	99.9	0	0	0	0	0	98.9	100	0	0	99.9	99.8
Heavy Vehicles	0	0	1	0	1	0	1	0	0	1	0	0	0	0	0	1	0	0	0	1	3
% Heavy Vehicles	0	0	0.7	0	0.5	0	0.2	0	0	0.1	0	0	0	0	0	1.1	0	0	0	0.1	0.2
Bikes, Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% Bikes, Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

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525 N. Main Street, Waynesville, NC 28786

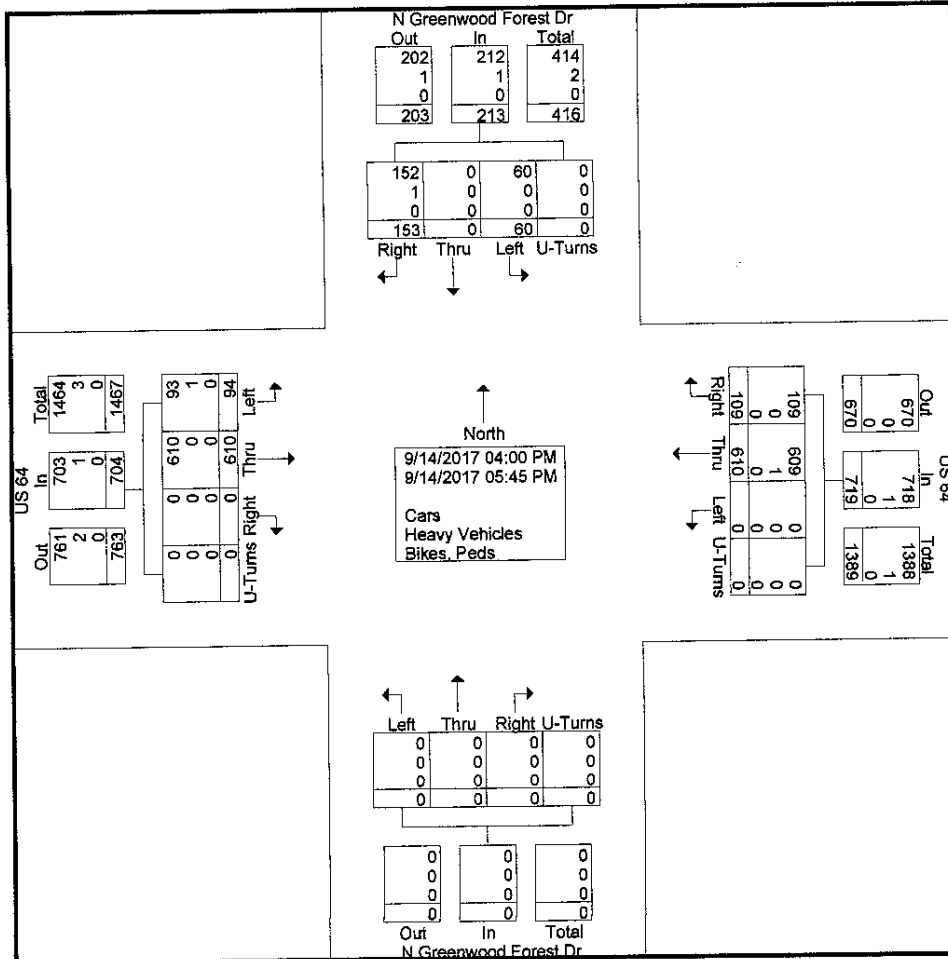
828-456-8383

File Name : N Greenwood Forest Dr @ US 64 - Background PM

Site Code : P-0699

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525 N. Main Street, Waynesville, NC 28786

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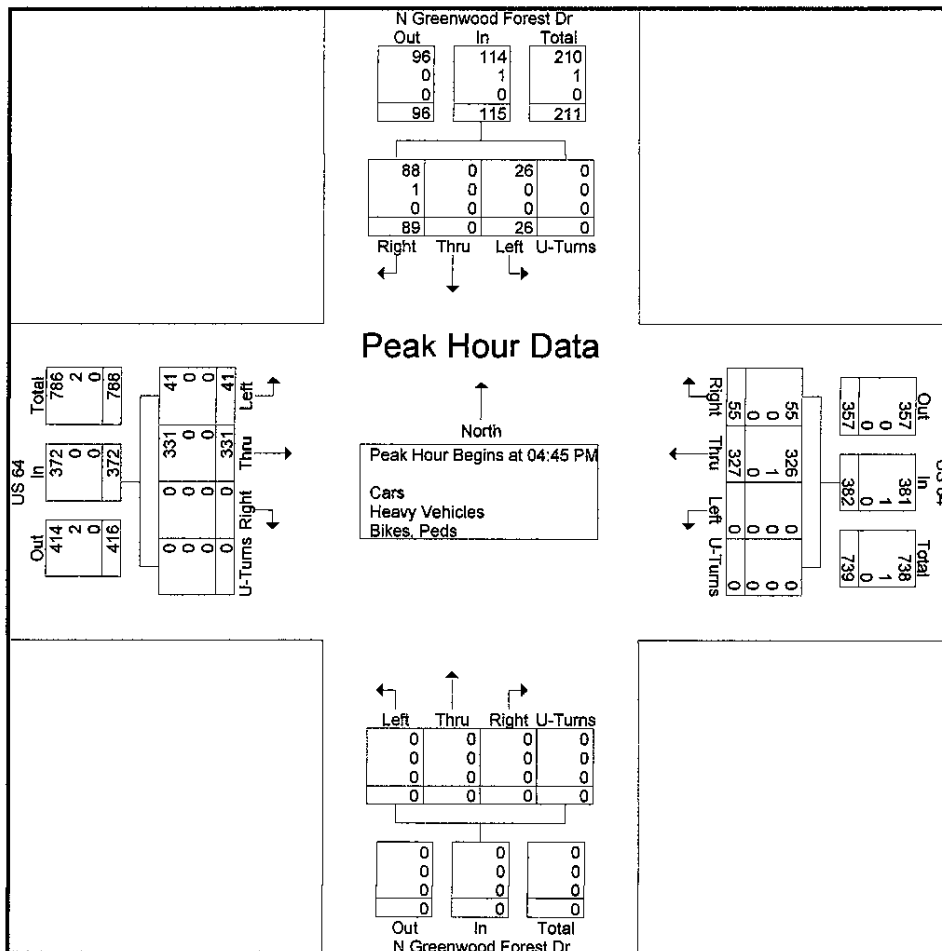
File Name : N Greenwood Forest Dr @ US 64 - Background PM

Site Code : P-0699

Start Date : 9/14/2017

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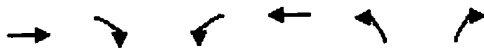
Start Time	N Greenwood Forest Dr Southbound					US 64 Westbound					N Greenwood Forest Dr Northbound					US 64 Eastbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
Peak Hour Analysis From 4:00:00 PM to 5:45:00 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 4:45:00 PM																					
4:45:00 PM	5	0	18	0	23	0	83	13	0	96	0	0	0	0	0	10	91	0	0	101	220
5:00:00 PM	6	0	16	0	22	0	82	16	0	98	0	0	0	0	0	11	85	0	0	96	216
5:15:00 PM	8	0	22	0	30	0	85	12	0	97	0	0	0	0	0	11	82	0	0	93	220
5:30:00 PM	7	0	33	0	40	0	77	14	0	91	0	0	0	0	0	9	73	0	0	82	213
Total Volume	26	0	89	0	115	0	327	55	0	382	0	0	0	0	0	41	331	0	0	372	869
% App. Total	22.6	0	77.4	0		0	85.6	14.4	0		0	0	0	0		11	89	0	0		
PHF	.813	.000	.674	.000	.719	.000	.962	.859	.000	.974	.000	.000	.000	.000	.000	.932	.909	.000	.000	.921	.988
Cars	26	0	88	0	114	0	326	55	0	381	0	0	0	0	0	41	331	0	0	372	867
% Cars	100	0	98.9	0	99.1	0	99.7	100	0	99.7	0	0	0	0	0	100	100	0	0	100	99.8
Heavy Vehicles	0	0	1	0	1	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	2
% Heavy Vehicles	0	0	1.1	0	0.9	0	0.3	0	0	0.3	0	0	0	0	0	0	0	0	0	0	0.2
Bikes, Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% Bikes, Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0



Appendix C

INTERSECTION ANALYSIS REPORTS

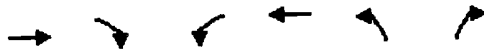
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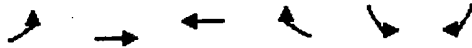
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↩			↩	↩	
Traffic Volume (veh/h)	62	39	26	14	19	98
Future Volume (Veh/h)	62	39	26	14	19	98
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.74	0.81	0.59	0.50	0.68	0.79
Hourly flow rate (vph)	84	48	44	28	28	124
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume			132		224	108
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			132		224	108
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			97		96	87
cM capacity (veh/h)			1453		741	946

Direction Lane #	EB 1	WB 1	NB 1
Volume Total	132	72	152
Volume Left	0	44	28
Volume Right	48	0	124
cSH	1700	1453	900
Volume to Capacity	0.08	0.03	0.17
Queue Length 95th (ft)	0	2	15
Control Delay (s)	0.0	4.7	9.8
Lane LOS		A	A
Approach Delay (s)	0.0	4.7	9.8
Approach LOS			A

Intersection Summary			
Average Delay		5.1	
Intersection Capacity Utilization		22.6%	ICU Level of Service
Analysis Period (min)		15	A



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	→			←	↔	
Traffic Volume (veh/h)	48	36	78	55	50	33
Future Volume (Veh/h)	48	36	78	55	50	33
Sign Control	Free		Free		Stop	
Grade	0%		0%		0%	
Peak Hour Factor	0.75	0.90	0.75	0.92	0.83	0.82
Hourly flow rate (vph)	64	40	104	60	60	40
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)				None		
Median type	None			None		
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked			104		352	84
vC, conflicting volume						
vC1, stage 1 conf vol						
vC2, stage 2 conf vol			104		352	84
vCu, unblocked vol			4.1		6.4	6.2
tC, single (s)						
tC, 2 stage (s)			2.2		3.5	3.3
tF (s)			93		90	96
p0 queue free %			1488		600	975
cM capacity (veh/h)						
Direction, Lane #	EB 1	WB 1	NB 1			
Volume Total	104	164	100			
Volume Left	0	104	60			
Volume Right	40	0	40			
cSH	1700	1488	710			
Volume to Capacity	0.06	0.07	0.14			
Queue Length 95th (ft)	0	6	12			
Control Delay (s)	0.0	5.0	10.9			
Lane LOS		A	B			
Approach Delay (s)	0.0	5.0	10.9			
Approach LOS			B			
Intersection Summary						
Average Delay			5.2			
Intersection Capacity Utilization			25.3%	ICU Level of Service	A	
Analysis Period (min)			15			



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↖	↗		↘	
Traffic Volume (veh/h)	86	61	25	62	58	23
Future Volume (Veh/h)	86	61	25	62	58	23
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.65	0.85	0.78	0.78	0.76	0.82
Hourly flow rate (vph)	132	72	32	79	76	28
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None	None			
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	111				408	72
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	111				408	72
tC, single (s)	4.1				6.4	6.2
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	91				86	97
cM capacity (veh/h)	1479				546	991

Direction, Lane #	EB 1	WB 1	SB 1
Volume Total	204	111	104
Volume Left	132	0	76
Volume Right	0	79	28
cSH	1479	1700	621
Volume to Capacity	0.09	0.07	0.17
Queue Length 95th (ft)	7	0	15
Control Delay (s)	5.2	0.0	12.0
Lane LOS	A		B
Approach Delay (s)	5.2	0.0	12.0
Approach LOS			B

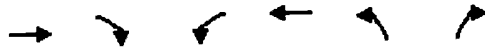
Intersection Summary			
Average Delay		5.5	
Intersection Capacity Utilization		25.9%	ICU Level of Service
Analysis Period (min)		15	A



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↖	↗		↘	
Traffic Volume (veh/h)	28	41	59	71	92	74
Future Volume (Veh/h)	28	41	59	71	92	74
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.88	0.68	0.87	0.81	0.89	0.71
Hourly flow rate (vph)	32	60	68	88	103	104
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None	None			
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked					236	112
vC, conflicting volume	156					
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	156				236	112
tC, single (s)	4.1				6.4	6.2
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	98				86	89
cM capacity (veh/h)	1424				735	941

Direction, Lane #	EB 1	WB 1	SB 1
Volume Total	92	156	207
Volume Left	32	0	103
Volume Right	0	88	104
cSH	1424	1700	826
Volume to Capacity	0.02	0.09	0.25
Queue Length 95th (ft)	2	0	25
Control Delay (s)	2.8	0.0	10.8
Lane LOS	A		B
Approach Delay (s)	2.8	0.0	10.8
Approach LOS			B

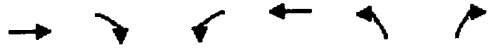
Intersection Summary			
Average Delay		5.5	
Intersection Capacity Utilization		30.8%	ICU Level of Service A
Analysis Period (min)		15	



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↩			↩	↩	
Traffic Volume (veh/h)	6	127	4	6	74	4
Future Volume (Veh/h)	6	127	4	6	74	4
Sign Control	Stop			Stop	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.50	0.88	0.50	0.75	0.88	0.90
Hourly flow rate (vph)	12	144	8	8	84	4
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)					None	
Median type						
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	172	0	320	170	0	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	172	0	320	170	0	
tC, single (s)	6.5	6.2	7.1	6.5	4.1	
tC, 2 stage (s)						
tF (s)	4.0	3.3	3.5	4.0	2.2	
p0 queue free %	98	87	98	99	95	
cM capacity (veh/h)	684	1085	520	686	1623	

Direction, Lane #	EB 1	WB 1	NB 1
Volume Total	156	16	88
Volume Left	0	8	84
Volume Right	144	0	4
cSH	1038	592	1623
Volume to Capacity	0.15	0.03	0.05
Queue Length 95th (ft)	13	2	4
Control Delay (s)	9.1	11.3	7.0
Lane LOS	A	B	A
Approach Delay (s)	9.1	11.3	7.0
Approach LOS	A	B	

Intersection Summary			
Average Delay		8.5	
Intersection Capacity Utilization		19.2%	ICU Level of Service
Analysis Period (min)		15	A



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↔			↔	↔	
Traffic Volume (veh/h)	11	128	6	12	129	6
Future Volume (Veh/h)	11	128	6	12	129	6
Sign Control	Stop			Stop	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.69	0.89	0.75	0.75	0.81	0.38
Hourly flow rate (vph)	16	144	8	16	159	16
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type					None	
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	334	0	478	326	0	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	334	0	478	326	0	
tC, single (s)	6.5	6.2	7.1	6.5	4.1	
tC, 2 stage (s)						
tF (s)	4.0	3.3	3.5	4.0	2.2	
p0 queue free %	97	87	98	97	90	
cM capacity (veh/h)	529	1085	390	534	1623	

Direction, Lane #	EB 1	WB 1	NB 1
Volume Total	160	24	175
Volume Left	0	8	159
Volume Right	144	0	16
cSH	982	476	1623
Volume to Capacity	0.16	0.05	0.10
Queue Length 95th (ft)	15	4	8
Control Delay (s)	9.4	13.0	6.8
Lane LOS	A	B	A
Approach Delay (s)	9.4	13.0	6.8
Approach LOS	A	B	

Intersection Summary			
Average Delay		8.4	
Intersection Capacity Utilization		22.7%	ICU Level of Service A
Analysis Period (min)		15	



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↩			↩	↩	
Traffic Volume (veh/h)	2	7	4	5	2	4
Future Volume (Veh/h)	2	7	4	5	2	4
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.50	0.88	0.90	0.42	0.25	0.90
Hourly flow rate (vph)	4	8	4	12	8	4
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None		None			
Median storage veh						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume			12		28	8
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			12		28	8
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			100		99	100
cM capacity (veh/h)			1607		984	1074

Direction, Lane #	EB 1	WB 1	NB 1
Volume Total	12	16	12
Volume Left	0	4	8
Volume Right	8	0	4
cSH	1700	1607	1013
Volume to Capacity	0.01	0.00	0.01
Queue Length 95th (ft)	0	0	1
Control Delay (s)	0.0	1.8	8.6
Lane LOS		A	A
Approach Delay (s)	0.0	1.8	8.6
Approach LOS			A

Intersection Summary			
Average Delay		3.3	
Intersection Capacity Utilization		13.8%	ICU Level of Service
Analysis Period (min)		15	A

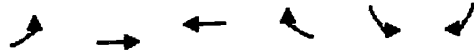


Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↩			↩	↩	
Traffic Volume (veh/h)	5	5	4	5	11	4
Future Volume (Veh/h)	5	5	4	5	11	4
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.62	0.42	0.90	0.62	0.69	0.90
Hourly flow rate (vph)	8	12	4	8	16	4
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None		None			
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume			20		30	14
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
yCu, unblocked vol			20		30	14
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			100		98	100
cM capacity (veh/h)			1596		982	1066

Direction, Lane #	EB 1	WB 1	NB 1
Volume Total	20	12	20
Volume Left	0	4	16
Volume Right	12	0	4
cSH	1700	1596	998
Volume to Capacity	0.01	0.00	0.02
Queue Length 95th (ft)	0	0	2
Control Delay (s)	0.0	2.4	8.7
Lane LOS		A	A
Approach Delay (s)	0.0	2.4	8.7
Approach LOS			A

Intersection Summary			
Average Delay		3.9	
Intersection Capacity Utilization		13.8%	ICU Level of Service
Analysis Period (min)		15	A

Pisgah View (South) @ McKinney
Existing AM



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↖	↗		↘	
Traffic Volume (veh/h)	1	10	12	4	1	6
Future Volume (Veh/h)	1	10	12	4	1	6
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.25	0.62	0.60	0.90	0.25	0.75
Hourly flow rate (vph)	4	16	20	4	4	8
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None	None			
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked					46	22
vC, conflicting volume	24					
vC1, stage 1 conf vol						
vC2, stage 2 conf vol					46	22
vCu, unblocked vol	24				6.4	6.2
tC, single (s)	4.1					
tC, 2 stage (s)					3.5	3.3
tF (s)	2.2				100	99
p0 queue free %	100				962	1055
cM capacity (veh/h)	1591					

Direction, Lane #	EB 1	WB 1	SB 1
Volume Total	20	24	12
Volume Left	4	0	4
Volume Right	0	4	8
cSH	1591	1700	1022
Volume to Capacity	0.00	0.01	0.01
Queue Length 95th (ft)	0	0	1
Control Delay (s)	1.5	0.0	8.6
Lane LOS	A		A
Approach Delay (s)	1.5	0.0	8.6
Approach LOS			A

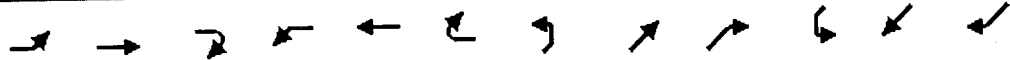
Intersection Summary			
Average Delay		2.4	
Intersection Capacity Utilization		13.3%	ICU Level of Service
Analysis Period (min)		15	A



Movement	EBL	EBT	WBT	WBR	SBL	SBR	
Lane Configurations		↔	↔		↔		
Traffic Volume (veh/h)	10	11	11	1	1	5	
Future Volume (Veh/h)	10	11	11	1	1	5	
Sign Control		Free	Free		Stop		
Grade		0%	0%		0%		
Peak Hour Factor	0.62	0.55	0.55	0.25	0.25	0.42	
Hourly flow rate (vph)	16	20	20	4	4	12	
Pedestrians							
Lane Width (ft)							
Walking Speed (ft/s)							
Percent Blockage							
Right turn flare (veh)							
Median type	None		None				
Median storage (veh)							
Upstream signal (ft)							
pX, platoon unblocked							
vC, conflicting volume	24					74	22
vC1, stage 1 conf vol							
vC2, stage 2 conf vol							
vCu, unblocked vol	24					74	22
tC, single (s)	4.1					6.4	6.2
tC, 2 stage (s)							
tF (s)	2.2					3.5	3.3
p0 queue free %	99					100	99
cM capacity (veh/h)	1591					920	1055

Direction, Lane #	EB 1	WB 1	SB 1
Volume Total	36	24	16
Volume Left	16	0	4
Volume Right	0	4	12
cSH	1591	1700	1018
Volume to Capacity	0.01	0.01	0.02
Queue Length 95th (ft)	1	0	1
Control Delay (s)	3.3	0.0	8.6
Lane LOS	A		A
Approach Delay (s)	3.3	0.0	8.6
Approach LOS			A

Intersection Summary			
Average Delay		3.4	
Intersection Capacity Utilization		17.8%	ICU Level of Service
Analysis Period (min)		15	A



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations	↖	↗		↖	↗			↕			↕	
Traffic Volume (vph)	1	393	38	16	292	10	69	2	64	13	2	6
Future Volume (vph)	1	393	38	16	292	10	69	2	64	13	2	6
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	75		0	75		0	0		0	0		0
Storage Lanes	1		0	1		0						
Taper Length (ft)	75			75								
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.984			0.993			0.934			0.955	
Flt Protected	0.950			0.950				0.976			0.973	
Satd. Flow (prot)	1770	1833	0	1770	1850	0	0	1698	0	0	1731	0
Flt Permitted	0.556			0.497				0.827			0.814	
Satd. Flow (perm)	1036	1833	0	926	1850	0	0	1439	0	0	1448	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		9			4			73			12	
Link Speed (mph)		45			45			35			35	
Link Distance (ft)		791			1452			753			481	
Travel Time (s)		12.0			22.0			14.7			9.4	
Peak Hour Factor	0.25	0.95	0.79	0.80	0.90	0.62	0.91	0.50	0.84	0.65	0.50	0.50
Adj. Flow (vph)	4	414	48	20	324	16	76	4	76	20	4	12
Shared Lane Traffic (%)												
Lane Group Flow (vph)	4	462	0	20	340	0	0	156	0	0	36	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane		Yes			Yes							
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	0	2		0	2		1	1		1	1	
Detector Template							Left			Left		
Leading Detector (ft)	0	306		0	306		20	60		20	60	
Trailing Detector (ft)	0	90		0	90		0	0		0	0	
Detector 1 Position(ft)	0	90		0	90		0	0		0	0	
Detector 1 Size(ft)	20	6		20	6		20	60		20	60	
Detector 1 Type	CI+Ex	CI+Ex		CI+Ex	CI+Ex		CI+Ex	CI+Ex		CI+Ex	CI+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	10.0		0.0	10.0	
Detector 2 Position(ft)		300			300							
Detector 2 Size(ft)		6			6							
Detector 2 Type		CI+Ex			CI+Ex							
Detector 2 Channel												
Detector 2 Extend (s)		1.8			1.8							
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		2			6			8			4	
Permitted Phases		2			6			8			4	



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Detector Phase	2	2		6	6		8	8		4	4	
Switch Phase							7.0	7.0		7.0	7.0	
Minimum Initial (s)	12.0	12.0		12.0	12.0		20.8	20.8		21.0	21.0	
Minimum Split (s)	22.1	22.1		21.6	21.6		42.8	42.8		42.8	42.8	
Total Split (s)	42.2	42.2		42.2	42.2		42.8	42.8		42.8	42.8	
Total Split (%)	49.6%	49.6%		49.6%	49.6%		50.4%	50.4%		50.4%	50.4%	
Maximum Green (s)	36.1	36.1		36.6	36.6		38.0	38.0		37.8	37.8	
Yellow Time (s)	4.5	4.5		4.6	4.6		3.8	3.8		3.9	3.9	
All-Red Time (s)	1.6	1.6		1.0	1.0		1.0	1.0		1.1	1.1	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0			0.0			0.0	
Total Lost Time (s)	6.1	6.1		5.6	5.6			4.8			5.0	
Lead/Lag												
Lead-Lag Optimize?							1.0	1.0		1.0	1.0	
Vehicle Extension (s)	2.0	2.0		2.0	2.0		None	None		None	None	
Recall Mode	Min	Min		Min	Min							
Act Effct Green (s)	17.8	17.8		18.2	18.2			7.8			7.6	
Actuated g/C Ratio	0.54	0.54		0.55	0.55			0.24			0.23	
v/c Ratio	0.01	0.47		0.04	0.33			0.40			0.11	
Control Delay	6.0	8.7		5.8	7.2			10.0			9.2	
Queue Delay	0.0	0.0		0.0	0.0			0.0			0.0	
Total Delay	6.0	8.7		5.8	7.2			10.0			9.2	
LOS	A	A		A	A			A			A	
Approach Delay		8.7			7.1			10.0			9.2	
Approach LOS		A			A			A			A	
90th %ile Green (s)	18.1	18.1		18.6	18.6		10.4	10.4		10.2	10.2	
90th %ile Term Code	Gap	Gap		Hold	Hold		Gap	Gap		Hold	Hold	
70th %ile Green (s)	12.9	12.9		13.4	13.4		7.2	7.2		7.0	7.0	
70th %ile Term Code	Gap	Gap		Hold	Hold		Gap	Gap		Hold	Hold	
50th %ile Green (s)	12.0	12.0		12.5	12.5		7.2	7.2		7.0	7.0	
50th %ile Term Code	Min	Min		Hold	Hold		Hold	Hold		Hold	Hold	
30th %ile Green (s)	13.2	13.2		13.7	13.7		7.2	7.2		7.0	7.0	
30th %ile Term Code	Dwell	Dwell		Dwell	Dwell		Hold	Hold		Hold	Hold	
10th %ile Green (s)	27.0	27.0		27.5	27.5		0.0	0.0		0.0	0.0	
10th %ile Term Code	Dwell	Dwell		Dwell	Dwell		Skip	Skip		Skip	Skip	
Queue Length 50th (ft)	0	51		2	33			10			3	
Queue Length 95th (ft)	1	123		8	83			18			9	
Internal Link Dist (ft)		711			1372			673			401	
Turn Bay Length (ft)	75			75							1436	
Base Capacity (vph)	1019	1802		913	1824			1429			0	
Starvation Cap Reductn	0	0		0	0			0			0	
Spillback Cap Reductn	0	0		0	0			0			0	
Storage Cap Reductn	0	0		0	0			0			0	
Reduced v/c Ratio	0.00	0.26		0.02	0.19			0.11			0.03	

Intersection Summary

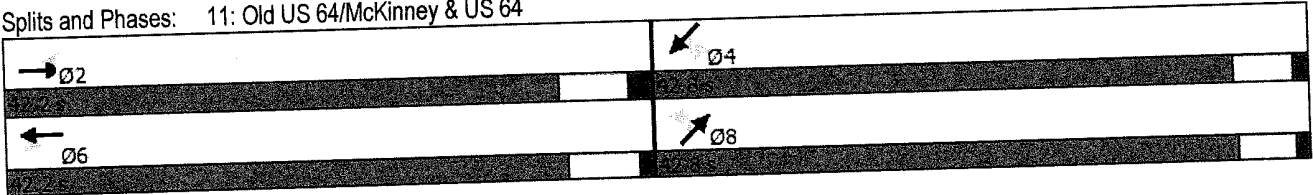
Area Type: Other
 Cycle Length: 85
 Actuated Cycle Length: 33
 Natural Cycle: 45

McKinney @ US 64
Existing AM

Control Type: Actuated-Uncoordinated
Maximum v/c Ratio: 0.47
Intersection Signal Delay: 8.3
Intersection Capacity Utilization 40.9%
Analysis Period (min) 15
90th %ile Actuated Cycle: 39.4
70th %ile Actuated Cycle: 31
50th %ile Actuated Cycle: 30.1
30th %ile Actuated Cycle: 31.3
10th %ile Actuated Cycle: 33.1

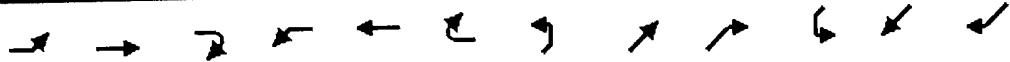
Intersection LOS: A
ICU Level of Service A

Splits and Phases: 11: Old US 64/McKinney & US 64





Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations	↖	↗		↖	↗			↕			↕	
Traffic Volume (vph)	9	441	63	37	483	10	42	1	26	15	5	5
Future Volume (vph)	9	441	63	37	483	10	42	1	26	15	5	5
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	75		0	75		0	0		0	0		0
Storage Lanes	1		0	1		0	0		0	0		0
Taper Length (ft)	75			75			25			25		
Lane Util. Factor	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.976			0.996			0.941			0.970	
Flt Protected	0.950			0.950				0.975			0.973	
Satd. Flow (prot)	1770	1818	0	1770	1855	0	0	1709	0	0	1758	0
Flt Permitted	0.410			0.427				0.818			0.773	
Satd. Flow (perm)	764	1818	0	795	1855	0	0	1434	0	0	1397	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		14			2			44			8	
Link Speed (mph)		45			45			35			35	
Link Distance (ft)		791			1452			753			481	
Travel Time (s)		12.0			22.0			14.7			9.4	
Peak Hour Factor	0.75	0.95	0.72	0.71	0.88	0.62	0.81	0.25	0.59	0.75	0.62	0.62
Adj. Flow (vph)	12	464	88	52	549	16	52	4	44	20	8	8
Shared Lane Traffic (%)												
Lane Group Flow (vph)	12	552	0	52	565	0	0	100	0	0	36	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane		Yes			Yes							
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	0	2		0	2		1	1			1	1
Detector Template							Left			Left		
Leading Detector (ft)	0	306		0	306		20	60		20	60	
Trailing Detector (ft)	0	90		0	90		0	0		0	0	
Detector 1 Position(ft)	0	90		0	90		0	0		0	0	
Detector 1 Size(ft)	20	6		20	6		20	60		20	60	
Detector 1 Type	CI+Ex	CI+Ex		CI+Ex	CI+Ex		CI+Ex	CI+Ex		CI+Ex	CI+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	10.0		0.0	10.0	
Detector 2 Position(ft)		300			300							
Detector 2 Size(ft)		6			6							
Detector 2 Type		CI+Ex			CI+Ex							
Detector 2 Channel												
Detector 2 Extend (s)		1.8			1.8							
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		2			6			8			4	
Permitted Phases		2			6			8			4	



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Detector Phase	2	2		6	6		8	8		4	4	
Switch Phase												
Minimum Initial (s)	12.0	12.0		12.0	12.0		7.0	7.0		7.0	7.0	
Minimum Split (s)	22.1	22.1		21.6	21.6		20.8	20.8		21.0	21.0	
Total Split (s)	42.2	42.2		42.2	42.2		42.8	42.8		42.8	42.8	
Total Split (%)	49.6%	49.6%		49.6%	49.6%		50.4%	50.4%		50.4%	50.4%	
Maximum Green (s)	36.1	36.1		36.6	36.6		38.0	38.0		37.8	37.8	
Yellow Time (s)	4.5	4.5		4.6	4.6		3.8	3.8		3.9	3.9	
All-Red Time (s)	1.6	1.6		1.0	1.0		1.0	1.0		1.1	1.1	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0			0.0			0.0	
Total Lost Time (s)	6.1	6.1		5.6	5.6			4.8			5.0	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0		2.0	2.0		1.0	1.0		1.0	1.0	
Recall Mode	Min	Min		Min	Min		None	None		None	None	
Act Effct Green (s)	21.6	21.6		22.0	22.0			7.5			7.4	
Actuated g/C Ratio	0.60	0.60		0.61	0.61			0.21			0.20	
v/c Ratio	0.03	0.51		0.11	0.50			0.30			0.12	
Control Delay	5.1	8.3		5.6	8.0			10.8			11.5	
Queue Delay	0.0	0.0		0.0	0.0			0.0			0.0	
Total Delay	5.1	8.3		5.6	8.0			10.8			11.5	
LOS	A	A		A	A			B			B	
Approach Delay		8.2			7.8			10.8			11.5	
Approach LOS		A			A			B			B	
90th %ile Green (s)	21.2	21.2		21.7	21.7		8.6	8.6		8.4	8.4	
90th %ile Term Code	Gap	Gap		Hold	Hold		Gap	Gap		Hold	Hold	
70th %ile Green (s)	15.9	15.9		16.4	16.4		7.2	7.2		7.0	7.0	
70th %ile Term Code	Gap	Gap		Hold	Hold		Hold	Hold		Hold	Hold	
50th %ile Green (s)	13.1	13.1		13.6	13.6		7.2	7.2		7.0	7.0	
50th %ile Term Code	Dwell	Dwell		Dwell	Dwell		Hold	Hold		Hold	Hold	
30th %ile Green (s)	24.2	24.2		24.7	24.7		7.2	7.2		7.0	7.0	
30th %ile Term Code	Dwell	Dwell		Dwell	Dwell		Hold	Hold		Hold	Hold	
10th %ile Green (s)	27.0	27.0		27.5	27.5		0.0	0.0		0.0	0.0	
10th %ile Term Code	Dwell	Dwell		Dwell	Dwell		Skip	Skip		Skip	Skip	
Queue Length 50th (ft)	1	64		5	65			7			4	
Queue Length 95th (ft)	5	138		12	133			4			14	
Internal Link Dist (ft)		711			1372			673			401	
Turn Bay Length (ft)	75			75								
Base Capacity (vph)	724	1724		757	1768			1387			1348	
Starvation Cap Reductn	0	0		0	0			0			0	
Spillback Cap Reductn	0	0		0	0			0			0	
Storage Cap Reductn	0	0		0	0			0			0	
Reduced v/c Ratio	0.02	0.32		0.07	0.32			0.07			0.03	

Intersection Summary

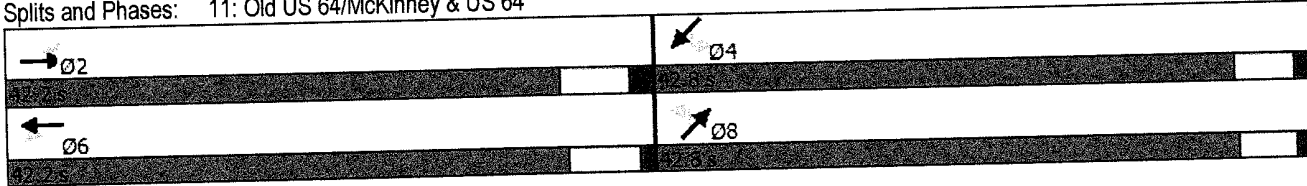
Area Type: Other
 Cycle Length: 85
 Actuated Cycle Length: 36.3
 Natural Cycle: 50

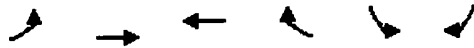
McKinney @ US 64
Existing PM

Control Type: Actuated-Uncoordinated
Maximum v/c Ratio: 0.51
Intersection Signal Delay: 8.3
Intersection Capacity Utilization 45.4%
Analysis Period (min) 15
90th %ile Actuated Cycle: 40.7
70th %ile Actuated Cycle: 34
50th %ile Actuated Cycle: 31.2
30th %ile Actuated Cycle: 42.3
10th %ile Actuated Cycle: 33.1

Intersection LOS: A
ICU Level of Service A

Splits and Phases: 11: Old US 64/McKinney & US 64





Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	16	314	281	84	119	22
Future Volume (vph)	16	314	281	84	119	22
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	70			0	0	0
Storage Lanes	1			0	1	0
Taper Length (ft)	100				25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Fr _t			0.963		0.979	
Fl _t Protected	0.950				0.960	
Satd. Flow (prot)	1770	1863	1794	0	1751	0
Fl _t Permitted	0.359				0.960	
Satd. Flow (perm)	669	1863	1794	0	1751	0
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)			17		9	
Link Speed (mph)		45	45		35	
Link Distance (ft)		2149	791		1670	
Travel Time (s)		32.6	12.0		32.5	
Peak Hour Factor	0.57	0.88	0.94	0.75	0.69	0.69
Adj. Flow (vph)	28	357	299	112	172	32
Shared Lane Traffic (%)						
Lane Group Flow (vph)	28	357	411	0	204	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		12	12		12	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane		Yes	Yes			
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15			9	15	9
Number of Detectors	1	1	1		1	
Detector Template	Left				Left	
Leading Detector (ft)	60	306	306		60	
Trailing Detector (ft)	0	300	300		0	
Detector 1 Position(ft)	0	300	300		0	
Detector 1 Size(ft)	60	6	6		60	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	
Detector 1 Channel						
Detector 1 Extend (s)	0.0	0.0	0.0		0.0	
Detector 1 Queue (s)	0.0	0.0	0.0		0.0	
Detector 1 Delay (s)	0.0	0.0	0.0		0.0	
Turn Type	pm+pt	NA	NA		Prot	
Protected Phases	5	2	6		4	
Permitted Phases	2					
Detector Phase	5	2	6		4	
Switch Phase						
Minimum Initial (s)	7.0	12.0	12.0		7.0	
Minimum Split (s)	11.4	21.5	21.5		20.7	
Total Split (s)	31.4	69.4	38.0		40.6	



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Total Split (%)	28.5%	63.1%	34.5%		36.9%	
Maximum Green (s)	27.0	63.9	32.5		35.9	
Yellow Time (s)	3.0	4.5	4.5		3.1	
All-Red Time (s)	1.4	1.0	1.0		1.6	
Lost Time Adjust (s)	0.0	0.0	0.0		0.0	
Total Lost Time (s)	4.4	5.5	5.5		4.7	
Lead/Lag	Lead		Lag			
Lead-Lag Optimize?	Yes		Yes			
Vehicle Extension (s)	1.0	6.0	6.0		1.0	
Minimum Gap (s)	0.2	3.0	3.0		0.2	
Time Before Reduce (s)	0.0	15.0	15.0		0.0	
Time To Reduce (s)	0.0	30.0	30.0		0.0	
Recall Mode	None	Min	Min		None	
Act Effct Green (s)	22.1	20.9	17.5		10.0	
Actuated g/C Ratio	0.53	0.50	0.42		0.24	
v/c Ratio	0.05	0.38	0.54		0.48	
Control Delay	5.1	7.8	14.1		19.1	
Queue Delay	0.0	0.0	0.0		0.0	
Total Delay	5.1	7.8	14.1		19.1	
LOS	A	A	B		B	
Approach Delay		7.6	14.1		19.1	
Approach LOS		A	B		B	
90th %ile Green (s)	7.0	34.5	23.1		15.2	
90th %ile Term Code	Min	Hold	Gap		Gap	
70th %ile Green (s)	7.0	30.4	19.0		12.3	
70th %ile Term Code	Min	Hold	Gap		Gap	
50th %ile Green (s)	0.0	12.7	12.7		8.5	
50th %ile Term Code	Skip	Hold	Gap		Gap	
30th %ile Green (s)	0.0	12.0	12.0		7.0	
30th %ile Term Code	Skip	Min	Min		Min	
10th %ile Green (s)	0.0	19.1	19.1		7.0	
10th %ile Term Code	Skip	Dwell	Dwell		Min	
Queue Length 50th (ft)	2	39	45		26	
Queue Length 95th (ft)	7	99	188		81	
Internal Link Dist (ft)		2069	711		1590	
Turn Bay Length (ft)	70					
Base Capacity (vph)	1315	1863	1457		1495	
Starvation Cap Reductn	0	0	0		0	
Spillback Cap Reductn	0	0	0		0	
Storage Cap Reductn	0	0	0		0	
Reduced v/c Ratio	0.02	0.19	0.28		0.14	

Intersection Summary

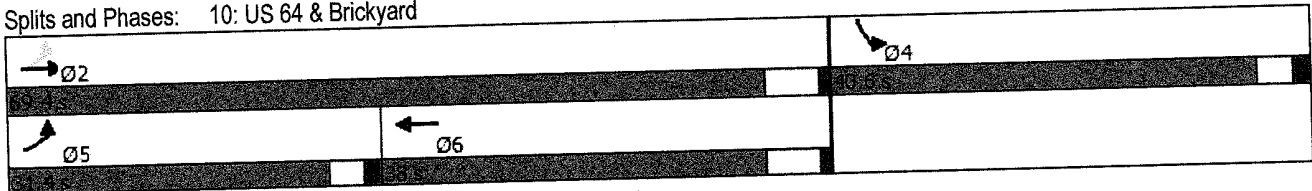
Area Type: Other
 Cycle Length: 110
 Actuated Cycle Length: 41.9
 Natural Cycle: 60
 Control Type: Actuated-Uncoordinated
 Maximum v/c Ratio: 0.54

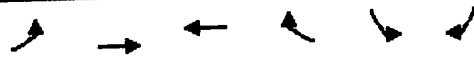
Brickyard @ US 64
Existing AM

Intersection Signal Delay: 12.6
Intersection Capacity Utilization 36.3%
Analysis Period (min) 15
90th %ile Actuated Cycle: 59.9
70th %ile Actuated Cycle: 52.9
50th %ile Actuated Cycle: 31.4
30th %ile Actuated Cycle: 29.2
10th %ile Actuated Cycle: 36.3

Intersection LOS: B
ICU Level of Service A

Splits and Phases: 10: US 64 & Brickyard





Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations	↶	↷	↷		↷	
Traffic Volume (vph)	22	388	411	119	111	23
Future Volume (vph)	22	388	411	119	111	23
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	70			0	0	0
Storage Lanes	1			0	1	0
Taper Length (ft)	100				25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Fr _t			0.965		0.974	
Fl _t Protected	0.950				0.961	
Satd. Flow (prot)	1770	1863	1798	0	1744	0
Fl _t Permitted	0.292				0.961	
Satd. Flow (perm)	544	1863	1798	0	1744	0
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)			16		12	
Link Speed (mph)		45	45		35	
Link Distance (ft)		2149	791		1670	
Travel Time (s)		32.6	12.0		32.5	
Peak Hour Factor	0.50	0.89	0.91	0.76	0.84	0.72
Adj. Flow (vph)	44	436	452	157	132	32
Shared Lane Traffic (%)						
Lane Group Flow (vph)	44	436	609	0	164	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		12	12		12	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane		Yes	Yes			
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15			9	15	9
Number of Detectors	1	1	1		1	
Detector Template	Left				Left	
Leading Detector (ft)	60	306	306		60	
Trailing Detector (ft)	0	300	300		0	
Detector 1 Position(ft)	0	300	300		0	
Detector 1 Size(ft)	60	6	6		60	
Detector 1 Type	CI+Ex	CI+Ex	CI+Ex		CI+Ex	
Detector 1 Channel						
Detector 1 Extend (s)	0.0	0.0	0.0		0.0	
Detector 1 Queue (s)	0.0	0.0	0.0		0.0	
Detector 1 Delay (s)	0.0	0.0	0.0		0.0	
Turn Type	pm+pt	NA	NA		Prot	
Protected Phases	5	2	6		4	
Permitted Phases	2					
Detector Phase	5	2	6		4	
Switch Phase						
Minimum Initial (s)	7.0	12.0	12.0		7.0	
Minimum Split (s)	11.4	21.5	21.5		20.7	
Total Split (s)	31.4	69.4	38.0		40.6	



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Total Split (%)	28.5%	63.1%	34.5%		36.9%	
Maximum Green (s)	27.0	63.9	32.5		35.9	
Yellow Time (s)	3.0	4.5	4.5		3.1	
All-Red Time (s)	1.4	1.0	1.0		1.6	
Lost Time Adjust (s)	0.0	0.0	0.0		0.0	
Total Lost Time (s)	4.4	5.5	5.5		4.7	
Lead/Lag	Lead		Lag			
Lead-Lag Optimize?	Yes		Yes			
Vehicle Extension (s)	1.0	6.0	6.0		1.0	
Minimum Gap (s)	0.2	3.0	3.0		0.2	
Time Before Reduce (s)	0.0	15.0	15.0		0.0	
Time To Reduce (s)	0.0	30.0	30.0		0.0	
Recall Mode	None	Min	Min		None	
Act Effct Green (s)	43.3	42.2	35.7		9.2	
Actuated g/C Ratio	0.70	0.68	0.58		0.15	
v/c Ratio	0.08	0.34	0.58		0.61	
Control Delay	3.6	5.2	13.0		33.0	
Queue Delay	0.0	0.0	0.0		0.0	
Total Delay	3.6	5.2	13.0		33.0	
LOS	A	A	B		C	
Approach Delay		5.1	13.0		33.0	
Approach LOS		A	B		C	
90th %ile Green (s)	7.0	43.9	32.5		12.8	
90th %ile Term Code	Min	Hold	Max		Gap	
70th %ile Green (s)	7.0	43.6	32.2		10.4	
70th %ile Term Code	Min	Hold	Gap		Gap	
50th %ile Green (s)	7.0	43.9	32.5		8.9	
50th %ile Term Code	Min	Hold	Max		Gap	
30th %ile Green (s)	0.0	32.5	32.5		7.0	
30th %ile Term Code	Skip	Hold	Max		Min	
10th %ile Green (s)	0.0	47.5	47.5		7.0	
10th %ile Term Code	Skip	Dwell	Dwell		Min	
Queue Length 50th (ft)	4	52	152		56	
Queue Length 95th (ft)	7	108	288		100	
Internal Link Dist (ft)		2069	711		1590	
Turn Bay Length (ft)	70					
Base Capacity (vph)	924	1840	1048		1031	
Starvation Cap Reductn	0	0	0		0	
Spillback Cap Reductn	0	0	0		0	
Storage Cap Reductn	0	0	0		0	
Reduced v/c Ratio	0.05	0.24	0.58		0.16	

Intersection Summary

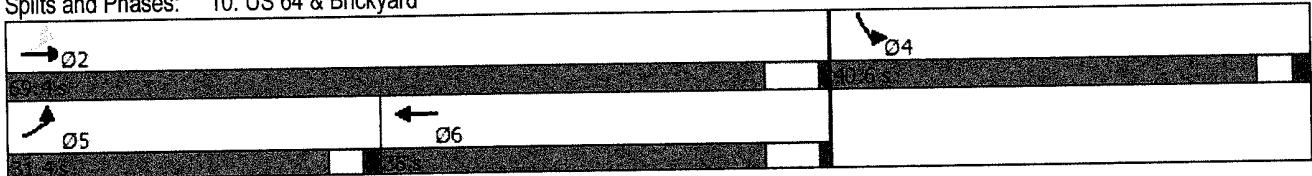
Area Type: Other
 Cycle Length: 110
 Actuated Cycle Length: 61.7
 Natural Cycle: 60
 Control Type: Actuated-Uncoordinated
 Maximum v/c Ratio: 0.61

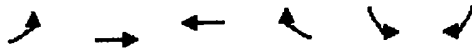
Brickyard @ US 64
Existing PM

Intersection Signal Delay: 12.6
Intersection Capacity Utilization 44.9%
Analysis Period (min) 15
90th %ile Actuated Cycle: 66.9
70th %ile Actuated Cycle: 64.2
50th %ile Actuated Cycle: 63
30th %ile Actuated Cycle: 49.7
10th %ile Actuated Cycle: 64.7

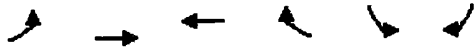
Intersection LOS: B
ICU Level of Service A

Splits and Phases: 10: US 64 & Brickyard

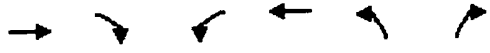




Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	84	279	252	17	37	34
Future Volume (Veh/h)	84	279	252	17	37	34
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.75	0.93	0.89	0.53	0.66	0.61
Hourly flow rate (vph)	112	300	283	32	56	56
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		TWLTL	TWLTL			
Median storage (veh)		2	2			
Upstream signal (ft)						
pX, platoon unblocked					807	283
vC, conflicting volume	315				283	
vC1, stage 1 conf vol					524	
vC2, stage 2 conf vol					807	283
vCu, unblocked vol	315				6.4	6.2
tC, single (s)	4.1				5.4	
tC, 2 stage (s)					3.5	3.3
tF (s)	2.2				89	93
p0 queue free %	91				497	756
cM capacity (veh/h)	1245					
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	SB 1	
Volume Total	112	300	283	32	112	
Volume Left	112	0	0	0	56	
Volume Right	0	0	0	32	56	
cSH	1245	1700	1700	1700	600	
Volume to Capacity	0.09	0.18	0.17	0.02	0.19	
Queue Length 95th (ft)	7	0	0	0	17	
Control Delay (s)	8.2	0.0	0.0	0.0	12.4	
Lane LOS	A				B	
Approach Delay (s)	2.2		0.0		12.4	
Approach LOS					B	
Intersection Summary						
Average Delay			2.7			
Intersection Capacity Utilization			32.1%		ICU Level of Service	A
Analysis Period (min)			15			



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations	↖	↑	↑	↗	↘	↙
Traffic Volume (veh/h)	41	311	309	55	26	85
Future Volume (Veh/h)	41	311	309	55	26	85
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.93	0.92	0.95	0.86	0.81	0.71
Hourly flow rate (vph)	44	338	325	64	32	120
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		TWLTL	TWLTL			
Median storage veh		2	2			
Upstream signal (ft)						
pX, platoon unblocked					751	325
vC, conflicting volume	389				325	
vC1, stage 1 conf vol					426	
vC2, stage 2 conf vol						
vCu, unblocked vol	389				751	325
tC, single (s)	4.1				6.4	6.2
tC, 2 stage (s)					5.4	
tF (s)	2.2				3.5	3.3
p0 queue free %	96				94	83
cM capacity (veh/h)	1170				557	716
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	SB 1	
Volume Total	44	338	325	64	152	
Volume Left	44	0	0	0	32	
Volume Right	0	0	0	64	120	
cSH	1170	1700	1700	1700	675	
Volume to Capacity	0.04	0.20	0.19	0.04	0.23	
Queue Length 95th (ft)	3	0	0	0	21	
Control Delay (s)	8.2	0.0	0.0	0.0	11.9	
Lane LOS	A				B	
Approach Delay (s)	0.9		0.0		11.9	
Approach LOS					B	
Intersection Summary						
Average Delay			2.3			
Intersection Capacity Utilization			36.3%		ICU Level of Service	A
Analysis Period (min)			15			



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↔			↔	↔	
Traffic Volume (veh/h)	63	39	26	14	19	102
Future Volume (Veh/h)	63	39	26	14	19	102
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	70	43	29	16	21	113
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume			113		166	92
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			113		166	92
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			98		97	88
cM capacity (veh/h)			1476		809	966

Direction, Lane #	EB 1	WB 1	NB 1
Volume Total	113	45	134
Volume Left	0	29	21
Volume Right	43	0	113
cSH	1700	1476	937
Volume to Capacity	0.07	0.02	0.14
Queue Length 95th (ft)	0	2	12
Control Delay (s)	0.0	4.9	9.5
Lane LOS		A	A
Approach Delay (s)	0.0	4.9	9.5
Approach LOS			A

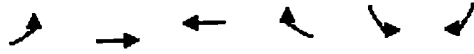
Intersection Summary			
Average Delay		5.1	
Intersection Capacity Utilization		22.9%	ICU Level of Service A
Analysis Period (min)		15	



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↔			↔	↔	
Traffic Volume (veh/h)	48	36	79	56	50	33
Future Volume (Veh/h)	48	36	79	56	50	33
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	53	40	88	62	56	37
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None		None			
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume			93		311	73
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			93		311	73
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			94		91	96
cM capacity (veh/h)			1501		642	989

Direction, Lane #	EB 1	WB 1	NB 1
Volume Total	93	150	93
Volume Left	0	88	56
Volume Right	40	0	37
cSH	1700	1501	746
Volume to Capacity	0.05	0.06	0.12
Queue Length 95th (ft)	0	5	11
Control Delay (s)	0.0	4.6	10.5
Lane LOS		A	B
Approach Delay (s)	0.0	4.6	10.5
Approach LOS			B

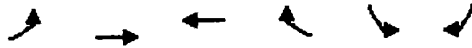
Intersection Summary			
Average Delay		5.0	
Intersection Capacity Utilization		25.4%	ICU Level of Service
Analysis Period (min)		15	A



Movement	EBL	EBT	WBT	WBR	SBL	SBR	
Lane Configurations		↖	↗		↘		
Traffic Volume (veh/h)	90	62	25	62	58	23	
Future Volume (Veh/h)	90	62	25	62	58	23	
Sign Control		Free	Free		Stop		
Grade		0%	0%		0%		
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	
Hourly flow rate (vph)	100	69	28	69	64	26	
Pedestrians							
Lane Width (ft)							
Walking Speed (ft/s)							
Percent Blockage							
Right turn flare (veh)							
Median type		None	None				
Median storage (veh)							
Upstream signal (ft)							
pX, platoon unblocked							
vC, conflicting volume	97					332	62
vC1, stage 1 conf vol							
vC2, stage 2 conf vol							
vCu, unblocked vol	97					332	62
tC, single (s)	4.1					6.4	6.2
tC, 2 stage (s)							
tF (s)	2.2					3.5	3.3
p0 queue free %	93					90	97
cM capacity (veh/h)	1496					619	1002

Direction, Lane #	EB 1	WB 1	SB 1
Volume Total	169	97	90
Volume Left	100	0	64
Volume Right	0	69	26
cSH	1496	1700	696
Volume to Capacity	0.07	0.06	0.13
Queue Length 95th (ft)	5	0	11
Control Delay (s)	4.7	0.0	10.9
Lane LOS	A		B
Approach Delay (s)	4.7	0.0	10.9
Approach LOS			B

Intersection Summary			
Average Delay		5.0	
Intersection Capacity Utilization		26.2%	ICU Level of Service
Analysis Period (min)		15	A



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↖	↗		↘	
Traffic Volume (veh/h)	28	41	59	73	94	75
Future Volume (Veh/h)	28	41	59	73	94	75
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	31	46	66	81	104	83
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None	None			
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	147				214	106
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	147				214	106
tC, single (s)	4.1				6.4	6.2
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	98				86	91
cM capacity (veh/h)	1435				757	948

Direction, Lane #	EB 1	WB 1	SB 1
Volume Total	77	147	187
Volume Left	31	0	104
Volume Right	0	81	83
cSH	1435	1700	831
Volume to Capacity	0.02	0.09	0.22
Queue Length 95th (ft)	2	0	22
Control Delay (s)	3.1	0.0	10.6
Lane LOS	A		B
Approach Delay (s)	3.1	0.0	10.6
Approach LOS			B

Intersection Summary			
Average Delay		5.4	
Intersection Capacity Utilization		31.1%	ICU Level of Service
Analysis Period (min)		15	A



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↩			↩	↩	
Traffic Volume (veh/h)	6	134	4	6	75	4
Future Volume (Veh/h)	6	134	4	6	75	4
Sign Control	Stop			Stop	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	7	149	4	7	83	4
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type						
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	170	0	320	168	0	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	170	0	320	168	0	
tC, single (s)	6.5	6.2	7.1	6.5	4.1	
tC, 2 stage (s)						
tF (s)	4.0	3.3	3.5	4.0	2.2	
p0 queue free %	99	86	99	99	95	
cM capacity (veh/h)	686	1085	520	688	1623	

None

Direction, Lane #	EB 1	WB 1	NB 1
Volume Total	156	11	87
Volume Left	0	4	83
Volume Right	149	0	4
cSH	1057	616	1623
Volume to Capacity	0.15	0.02	0.05
Queue Length 95th (ft)	13	1	4
Control Delay (s)	9.0	11.0	7.0
Lane LOS	A	B	A
Approach Delay (s)	9.0	11.0	7.0
Approach LOS	A	B	

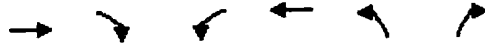
Intersection Summary			
Average Delay		8.4	
Intersection Capacity Utilization		19.7%	ICU Level of Service
Analysis Period (min)		15	A



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↗			↖	↘	
Traffic Volume (veh/h)	11	137	6	12	139	6
Future Volume (Veh/h)	11	137	6	12	139	6
Sign Control	Stop			Stop	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	12	152	7	13	154	7
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type					None	
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	315	0	470	312	0	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	315	0	470	312	0	
tC, single (s)	6.5	6.2	7.1	6.5	4.1	
tC, 2 stage (s)						
tF (s)	4.0	3.3	3.5	4.0	2.2	
p0 queue free %	98	86	98	98	91	
cM capacity (veh/h)	544	1085	395	546	1623	

Direction, Lane #	EB 1	WB 1	NB 1
Volume Total	164	20	161
Volume Left	0	7	154
Volume Right	152	0	7
cSH	1011	482	1623
Volume to Capacity	0.16	0.04	0.09
Queue Length 95th (ft)	14	3	8
Control Delay (s)	9.2	12.8	7.2
Lane LOS	A	B	A
Approach Delay (s)	9.2	12.8	7.2
Approach LOS	A	B	

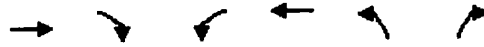
Intersection Summary			
Average Delay		8.5	
Intersection Capacity Utilization		23.8%	ICU Level of Service
Analysis Period (min)		15	A



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↩			↩	↩	
Traffic Volume (veh/h)	2	7	4	5	2	4
Future Volume (Veh/h)	2	7	4	5	2	4
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	2	8	4	6	2	4
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None		None			
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume			10		20	6
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			10		20	6
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			100		100	100
cM capacity (veh/h)			1610		995	1077

Direction	Lane #	EB 1	WB 1	NB 1
Volume Total		10	10	6
Volume Left		0	4	2
Volume Right		8	0	4
cSH		1700	1610	1048
Volume to Capacity		0.01	0.00	0.01
Queue Length 95th (ft)		0	0	0
Control Delay (s)		0.0	2.9	8.5
Lane LOS			A	A
Approach Delay (s)		0.0	2.9	8.5
Approach LOS				A

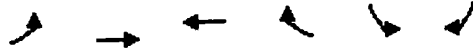
Intersection Summary			
Average Delay		3.1	
Intersection Capacity Utilization		13.8%	ICU Level of Service
Analysis Period (min)		15	A



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↩			↩	↩	
Traffic Volume (veh/h)	5	5	4	5	11	4
Future Volume (Veh/h)	5	5	4	5	11	4
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	6	6	4	6	12	4
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None		None			
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume			12		23	9
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			12		23	9
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			100		99	100
cM capacity (veh/h)			1607		991	1073

Direction, Lane #	EB 1	WB 1	NB 1
Volume Total	12	10	16
Volume Left	0	4	12
Volume Right	6	0	4
cSH	1700	1607	1010
Volume to Capacity	0.01	0.00	0.02
Queue Length 95th (ft)	0	0	1
Control Delay (s)	0.0	2.9	8.6
Lane LOS		A	A
Approach Delay (s)	0.0	2.9	8.6
Approach LOS			A

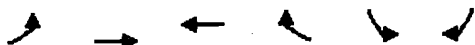
Intersection Summary			
Average Delay		4.4	
Intersection Capacity Utilization		13.8%	ICU Level of Service A
Analysis Period (min)		15	



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↖ ↗	↖ ↗		↖ ↗	
Traffic Volume (veh/h)	1	10	12	4	1	6
Future Volume (Veh/h)	1	10	12	4	1	6
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	1	11	13	4	1	7
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None	None			
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	17				28	15
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	17				28	15
tC, single (s)	4.1				6.4	6.2
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	100				100	99
cM capacity (veh/h)	1600				986	1065

Direction, Lane #	EB 1	WB 1	SB 1
Volume Total	12	17	8
Volume Left	1	0	1
Volume Right	0	4	7
cSH	1600	1700	1054
Volume to Capacity	0.00	0.01	0.01
Queue Length 95th (ft)	0	0	1
Control Delay (s)	0.6	0.0	8.4
Lane LOS	A		A
Approach Delay (s)	0.6	0.0	8.4
Approach LOS			A

Intersection Summary			
Average Delay		2.0	
Intersection Capacity Utilization		13.3%	ICU Level of Service
Analysis Period (min)		15	A



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↔	↔		↔	
Traffic Volume (veh/h)	10	11	11	1	1	5
Future Volume (Veh/h)	10	11	11	1	1	5
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	11	12	12	1	1	6
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None	None			
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	13				46	12
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	13				46	12
tC, single (s)	4.1				6.4	6.2
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	99				100	99
cM capacity (veh/h)	1606				957	1068

Direction, Lane #	EB 1	WB 1	SB 1
Volume Total	23	13	7
Volume Left	11	0	1
Volume Right	0	1	6
cSH	1606	1700	1051
Volume to Capacity	0.01	0.01	0.01
Queue Length 95th (ft)	1	0	1
Control Delay (s)	3.5	0.0	8.4
Lane LOS	A		A
Approach Delay (s)	3.5	0.0	8.4
Approach LOS			A

Intersection Summary			
Average Delay		3.2	
Intersection Capacity Utilization		17.8%	ICU Level of Service
Analysis Period (min)		15	A



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	1	417	38	16	310	10	69	2	65	13	2	6
Future Volume (vph)	1	417	38	16	310	10	69	2	65	13	2	6
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	75		0	75		0	0		0	0		0
Storage Lanes	1		0	1		0	0		0	0		0
Taper Length (ft)	75			75			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frnt		0.988			0.995			0.936			0.959	
Flt Protected	0.950			0.950				0.975			0.970	
Satd. Flow (prot)	1770	1840	0	1770	1853	0	0	1700	0	0	1733	0
Flt Permitted	0.549			0.460				0.827			0.807	
Satd. Flow (perm)	1023	1840	0	857	1853	0	0	1442	0	0	1442	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		7			2			70			7	
Link Speed (mph)		45			45			35			35	
Link Distance (ft)		791			1452			753			481	
Travel Time (s)		12.0			22.0			14.7			9.4	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	1	463	42	18	344	11	77	2	72	14	2	7
Shared Lane Traffic (%)												
Lane Group Flow (vph)	1	505	0	18	355	0	0	151	0	0	23	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane		Yes			Yes							
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	0	2		0	2		1	1		1	1	
Detector Template							Left			Left		
Leading Detector (ft)	0	306		0	306		20	60		20	60	
Trailing Detector (ft)	0	90		0	90		0	0		0	0	
Detector 1 Position(ft)	0	90		0	90		0	0		0	0	
Detector 1 Size(ft)	20	6		20	6		20	60		20	60	
Detector 1 Type	CI+Ex	CI+Ex		CI+Ex	CI+Ex		CI+Ex	CI+Ex		CI+Ex	CI+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	10.0		0.0	10.0	
Detector 2 Position(ft)		300			300							
Detector 2 Size(ft)		6			6							
Detector 2 Type		CI+Ex			CI+Ex							
Detector 2 Channel												
Detector 2 Extend (s)		1.8			1.8							
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		2			6			8			4	
Permitted Phases	2			6			8			4		



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Detector Phase	2	2		6	6		8	8		4	4	
Switch Phase												
Minimum Initial (s)	12.0	12.0		12.0	12.0		7.0	7.0		7.0	7.0	
Minimum Split (s)	22.1	22.1		21.6	21.6		20.8	20.8		21.0	21.0	
Total Split (s)	42.2	42.2		42.2	42.2		42.8	42.8		42.8	42.8	
Total Split (%)	49.6%	49.6%		49.6%	49.6%		50.4%	50.4%		50.4%	50.4%	
Maximum Green (s)	36.1	36.1		36.6	36.6		38.0	38.0		37.8	37.8	
Yellow Time (s)	4.5	4.5		4.6	4.6		3.8	3.8		3.9	3.9	
All-Red Time (s)	1.6	1.6		1.0	1.0		1.0	1.0		1.1	1.1	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	6.1	6.1		5.6	5.6		4.8	4.8			5.0	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0		2.0	2.0		1.0	1.0		1.0	1.0	
Recall Mode	Min	Min		Min	Min		None	None		None	None	
Act Effct Green (s)	18.8	18.8		19.2	19.2			7.8			7.7	
Actuated g/C Ratio	0.55	0.55		0.56	0.56			0.23			0.23	
v/c Ratio	0.00	0.49		0.04	0.34			0.39			0.07	
Control Delay	6.0	9.0		5.7	7.1			10.3			9.9	
Queue Delay	0.0	0.0		0.0	0.0			0.0			0.0	
Total Delay	6.0	9.0		5.7	7.1			10.3			9.9	
LOS	A	A		A	A			B			A	
Approach Delay		9.0			7.1			10.3			9.9	
Approach LOS		A			A			B			A	
90th %ile Green (s)	19.6	19.6		20.1	20.1		10.8	10.8		10.6	10.6	
90th %ile Term Code	Gap	Gap		Hold	Hold		Gap	Gap		Hold	Hold	
70th %ile Green (s)	14.0	14.0		14.5	14.5		7.3	7.3		7.1	7.1	
70th %ile Term Code	Gap	Gap		Hold	Hold		Gap	Gap		Hold	Hold	
50th %ile Green (s)	12.0	12.0		12.5	12.5		7.2	7.2		7.0	7.0	
50th %ile Term Code	Min	Min		Hold	Hold		Hold	Hold		Hold	Hold	
30th %ile Green (s)	15.4	15.4		15.9	15.9		7.2	7.2		7.0	7.0	
30th %ile Term Code	Dwell	Dwell		Dwell	Dwell		Hold	Hold		Hold	Hold	
10th %ile Green (s)	27.0	27.0		27.5	27.5		0.0	0.0		0.0	0.0	
10th %ile Term Code	Dwell	Dwell		Dwell	Dwell		Skip	Skip		Skip	Skip	
Queue Length 50th (ft)	0	58		2	35			10			2	
Queue Length 95th (ft)	2	142		9	89			48			15	
Internal Link Dist (ft)		711			1372			673			401	
Turn Bay Length (ft)	75			75								
Base Capacity (vph)	997	1794		837	1811			1420			1418	
Starvation Cap Reductn	0	0		0	0			0			0	
Spillback Cap Reductn	0	0		0	0			0			0	
Storage Cap Reductn	0	0		0	0			0			0	
Reduced v/c Ratio	0.00	0.28		0.02	0.20			0.11			0.02	

Intersection Summary

Area Type: Other
 Cycle Length: 85
 Actuated Cycle Length: 34
 Natural Cycle: 45

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.49

Intersection Signal Delay: 8.5

Intersection LOS: A

Intersection Capacity Utilization 42.2%

ICU Level of Service A

Analysis Period (min) 15

90th %ile Actuated Cycle: 41.3

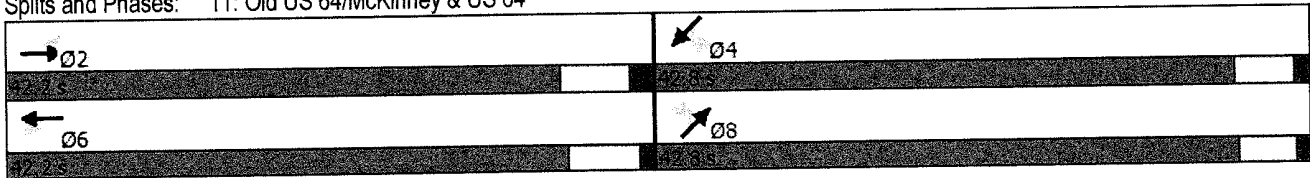
70th %ile Actuated Cycle: 32.2

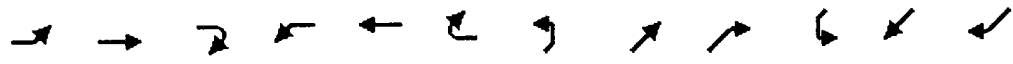
50th %ile Actuated Cycle: 30.1

30th %ile Actuated Cycle: 33.5

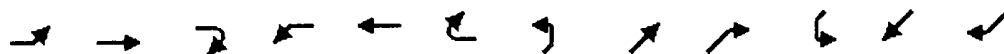
10th %ile Actuated Cycle: 33.1

Splits and Phases: 11: Old US 64/McKinney & US 64





Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	9	468	65	37	512	10	42	1	26	15	5	5
Future Volume (vph)	9	468	65	37	512	10	42	1	26	15	5	5
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	75		0	75		0	0		0	0		0
Storage Lanes	1		0	1		0	0		0			0
Taper Length (ft)	75			75			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.982			0.997			0.949			0.972	
Flt Protected	0.950			0.950				0.970			0.972	
Satd. Flow (prot)	1770	1829	0	1770	1857	0	0	1715	0	0	1760	0
Flt Permitted	0.419			0.416				0.797			0.776	
Satd. Flow (perm)	780	1829	0	775	1857	0	0	1409	0	0	1405	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		10			1			29			6	
Link Speed (mph)		45			45			35			35	
Link Distance (ft)		791			1452			753			481	
Travel Time (s)		12.0			22.0			14.7			9.4	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	10	520	72	41	569	11	47	1	29	17	6	6
Shared Lane Traffic (%)												
Lane Group Flow (vph)	10	592	0	41	580	0	0	77	0	0	29	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane		Yes			Yes							
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	0	2		0	2		1	1		1	1	
Detector Template							Left			Left		
Leading Detector (ft)	0	306		0	306		20	60		20	60	
Trailing Detector (ft)	0	90		0	90		0	0		0	0	
Detector 1 Position(ft)	0	90		0	90		0	0		0	0	
Detector 1 Size(ft)	20	6		20	6		20	60		20	60	
Detector 1 Type	CI+Ex	CI+Ex		CI+Ex	CI+Ex		CI+Ex	CI+Ex		CI+Ex	CI+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	10.0		0.0	10.0	
Detector 2 Position(ft)		300			300							
Detector 2 Size(ft)		6			6							
Detector 2 Type		CI+Ex			CI+Ex							
Detector 2 Channel												
Detector 2 Extend (s)		1.8			1.8							
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		2			6			8			4	
Permitted Phases		2			6			8			4	



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Detector Phase	2	2		6	6		8	8		4	4	
Switch Phase												
Minimum Initial (s)	12.0	12.0		12.0	12.0		7.0	7.0		7.0	7.0	
Minimum Split (s)	22.1	22.1		21.6	21.6		20.8	20.8		21.0	21.0	
Total Split (s)	42.2	42.2		42.2	42.2		42.8	42.8		42.8	42.8	
Total Split (%)	49.6%	49.6%		49.6%	49.6%		50.4%	50.4%		50.4%	50.4%	
Maximum Green (s)	36.1	36.1		36.6	36.6		38.0	38.0		37.8	37.8	
Yellow Time (s)	4.5	4.5		4.6	4.6		3.8	3.8		3.9	3.9	
All-Red Time (s)	1.6	1.6		1.0	1.0		1.0	1.0		1.1	1.1	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	6.1	6.1		5.6	5.6		4.8	4.8		5.0	5.0	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0		2.0	2.0		1.0	1.0		1.0	1.0	
Recall Mode	Min	Min		Min	Min		None	None		None	None	
Act Effct Green (s)	25.6	25.6		25.8	25.8		7.3	7.3		7.2	7.2	
Actuated g/C Ratio	0.71	0.71		0.72	0.72		0.20	0.20		0.20	0.20	
v/c Ratio	0.02	0.46		0.07	0.44		0.25	0.25		0.10	0.10	
Control Delay	4.7	6.6		4.8	6.2		11.8	11.8		12.6	12.6	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	4.7	6.6		4.8	6.2		11.8	11.8		12.6	12.6	
LOS	A	A		A	A		B	B		B	B	
Approach Delay		6.6			6.1		11.8	11.8		12.6	12.6	
Approach LOS		A			A		B	B		B	B	
90th %ile Green (s)	22.3	22.3		22.8	22.8		7.9	7.9		7.7	7.7	
90th %ile Term Code	Gap	Gap		Hold	Hold		Gap	Gap		Hold	Hold	
70th %ile Green (s)	17.3	17.3		17.8	17.8		7.2	7.2		7.0	7.0	
70th %ile Term Code	Gap	Gap		Hold	Hold		Hold	Hold		Hold	Hold	
50th %ile Green (s)	19.4	19.4		19.9	19.9		7.2	7.2		7.0	7.0	
50th %ile Term Code	Dwell	Dwell		Dwell	Dwell		Hold	Hold		Hold	Hold	
30th %ile Green (s)	27.0	27.0		27.5	27.5		0.0	0.0		0.0	0.0	
30th %ile Term Code	Dwell	Dwell		Dwell	Dwell		Skip	Skip		Skip	Skip	
10th %ile Green (s)	27.0	27.0		27.5	27.5		0.0	0.0		0.0	0.0	
10th %ile Term Code	Dwell	Dwell		Dwell	Dwell		Skip	Skip		Skip	Skip	
Queue Length 50th (ft)	1	72		4	68		8	8		4	4	
Queue Length 95th (ft)	5	146		13	136		35	35		19	19	
Internal Link Dist (ft)		711			1372		673	673		401	401	
Turn Bay Length (ft)	75			75								
Base Capacity (vph)	755	1771		754	1807		1388	1388		1382	1382	
Starvation Cap Reductn	0	0		0	0		0	0		0	0	
Spillback Cap Reductn	0	0		0	0		0	0		0	0	
Storage Cap Reductn	0	0		0	0		0	0		0	0	
Reduced v/c Ratio	0.01	0.33		0.05	0.32		0.06	0.06		0.02	0.02	

Intersection Summary

Area Type: Other
 Cycle Length: 85
 Actuated Cycle Length: 36
 Natural Cycle: 50

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.46

Intersection Signal Delay: 6.8

Intersection LOS: A

Intersection Capacity Utilization 45.4%

ICU Level of Service A

Analysis Period (min) 15

90th %ile Actuated Cycle: 41.1

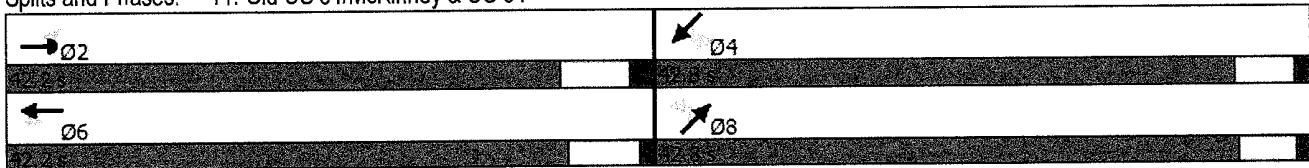
70th %ile Actuated Cycle: 35.4

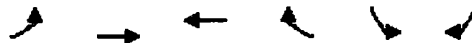
50th %ile Actuated Cycle: 37.5

30th %ile Actuated Cycle: 33.1

10th %ile Actuated Cycle: 33.1

Splits and Phases: 11: Old US 64/McKinney & US 64





Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	16	332	296	87	125	22
Future Volume (vph)	16	332	296	87	125	22
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	70			0	0	0
Storage Lanes	1			0	1	0
Taper Length (ft)	100				25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Fr _t			0.969		0.980	
Fl _t Protected	0.950				0.959	
Satd. Flow (prot)	1770	1863	1805	0	1751	0
Fl _t Permitted	0.372				0.959	
Satd. Flow (perm)	693	1863	1805	0	1751	0
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)			21		8	
Link Speed (mph)		45	45		35	
Link Distance (ft)		2149	791		1670	
Travel Time (s)		32.6	12.0		32.5	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	18	369	329	97	139	24
Shared Lane Traffic (%)						
Lane Group Flow (vph)	18	369	426	0	163	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		12	12		12	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane		Yes	Yes			
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15			9	15	9
Number of Detectors	1	1	1		1	
Detector Template	Left				Left	
Leading Detector (ft)	60	306	306		60	
Trailing Detector (ft)	0	300	300		0	
Detector 1 Position(ft)	0	300	300		0	
Detector 1 Size(ft)	60	6	6		60	
Detector 1 Type	CI+Ex	CI+Ex	CI+Ex		CI+Ex	
Detector 1 Channel						
Detector 1 Extend (s)	0.0	0.0	0.0		0.0	
Detector 1 Queue (s)	0.0	0.0	0.0		0.0	
Detector 1 Delay (s)	0.0	0.0	0.0		0.0	
Turn Type	pm+pt	NA	NA		Prot	
Protected Phases	5	2	6		4	
Permitted Phases	2					
Detector Phase	5	2	6		4	
Switch Phase						
Minimum Initial (s)	7.0	12.0	12.0		7.0	
Minimum Split (s)	11.4	21.5	21.5		20.7	
Total Split (s)	13.0	77.0	64.0		33.0	



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Total Split (%)	11.8%	70.0%	58.2%		30.0%	
Maximum Green (s)	8.6	71.5	58.5		28.3	
Yellow Time (s)	3.0	4.5	4.5		3.1	
All-Red Time (s)	1.4	1.0	1.0		1.6	
Lost Time Adjust (s)	0.0	0.0	0.0		0.0	
Total Lost Time (s)	4.4	5.5	5.5		4.7	
Lead/Lag	Lead		Lag			
Lead-Lag Optimize?	Yes		Yes			
Vehicle Extension (s)	1.0	6.0	6.0		1.0	
Minimum Gap (s)	0.2	3.0	3.0		0.2	
Time Before Reduce (s)	0.0	15.0	15.0		0.0	
Time To Reduce (s)	0.0	30.0	30.0		0.0	
Recall Mode	None	Min	Min		None	
Act Effct Green (s)	21.4	20.3	18.7		8.6	
Actuated g/C Ratio	0.54	0.51	0.47		0.22	
v/c Ratio	0.03	0.39	0.50		0.42	
Control Delay	4.4	7.3	10.6		17.2	
Queue Delay	0.0	0.0	0.0		0.0	
Total Delay	4.4	7.3	10.6		17.2	
LOS	A	A	B		B	
Approach Delay		7.2	10.6		17.2	
Approach LOS		A	B		B	
90th %ile Green (s)	7.0	34.2	22.8		12.2	
90th %ile Term Code	Min	Hold	Gap		Gap	
70th %ile Green (s)	0.0	18.4	18.4		9.3	
70th %ile Term Code	Skip	Hold	Gap		Gap	
50th %ile Green (s)	0.0	12.1	12.1		7.0	
50th %ile Term Code	Skip	Hold	Gap		Min	
30th %ile Green (s)	0.0	13.4	13.4		7.0	
30th %ile Term Code	Skip	Dwell	Dwell		Min	
10th %ile Green (s)	0.0	27.0	27.0		7.0	
10th %ile Term Code	Skip	Dwell	Dwell		Min	
Queue Length 50th (ft)	1	36	41		19	
Queue Length 95th (ft)	7	91	178		93	
Internal Link Dist (ft)		2069	711		1590	
Turn Bay Length (ft)	70					
Base Capacity (vph)	621	1863	1805		1324	
Starvation Cap Reductn	0	0	0		0	
Spillback Cap Reductn	0	0	0		0	
Storage Cap Reductn	0	0	0		0	
Reduced v/c Ratio	0.03	0.20	0.24		0.12	

Intersection Summary

Area Type: Other

Cycle Length: 110

Actuated Cycle Length: 39.7

Natural Cycle: 60

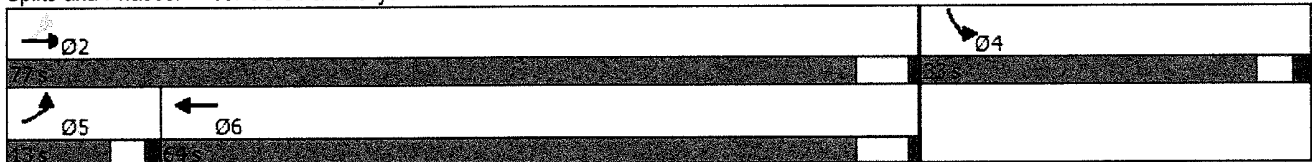
Control Type: Actuated-Uncoordinated

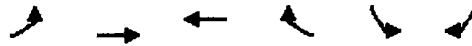
Maximum v/c Ratio: 0.50

Intersection Signal Delay: 10.4
Intersection Capacity Utilization 37.6%
Analysis Period (min) 15
90th %ile Actuated Cycle: 56.6
70th %ile Actuated Cycle: 37.9
50th %ile Actuated Cycle: 29.3
30th %ile Actuated Cycle: 30.6
10th %ile Actuated Cycle: 44.2

Intersection LOS: B
ICU Level of Service A

Splits and Phases: 10: US 64 & Brickyard





Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	22	410	436	125	119	23
Future Volume (vph)	22	410	436	125	119	23
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	70			0	0	0
Storage Lanes	1			0	1	0
Taper Length (ft)	100				25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.970		0.978	
Flt Protected	0.950				0.960	
Satd. Flow (prot)	1770	1863	1807	0	1749	0
Flt Permitted	0.257				0.960	
Satd. Flow (perm)	479	1863	1807	0	1749	0
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)			23		8	
Link Speed (mph)		45	45		35	
Link Distance (ft)		2149	791		1670	
Travel Time (s)		32.6	12.0		32.5	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	24	456	484	139	132	26
Shared Lane Traffic (%)						
Lane Group Flow (vph)	24	456	623	0	158	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		12	12		12	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane		Yes	Yes			
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15			9	15	9
Number of Detectors	1	1	1		1	
Detector Template	Left				Left	
Leading Detector (ft)	60	306	306		60	
Trailing Detector (ft)	0	300	300		0	
Detector 1 Position(ft)	0	300	300		0	
Detector 1 Size(ft)	60	6	6		60	
Detector 1 Type	CI+Ex	CI+Ex	CI+Ex		CI+Ex	
Detector 1 Channel						
Detector 1 Extend (s)	0.0	0.0	0.0		0.0	
Detector 1 Queue (s)	0.0	0.0	0.0		0.0	
Detector 1 Delay (s)	0.0	0.0	0.0		0.0	
Turn Type	pm+pt	NA	NA		Prot	
Protected Phases	5	2	6		4	
Permitted Phases	2					
Detector Phase	5	2	6		4	
Switch Phase						
Minimum Initial (s)	7.0	12.0	12.0		7.0	
Minimum Split (s)	11.4	21.5	21.5		20.7	
Total Split (s)	12.0	83.0	71.0		27.0	



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Total Split (%)	10.9%	75.5%	64.5%		24.5%	
Maximum Green (s)	7.6	77.5	65.5		22.3	
Yellow Time (s)	3.0	4.5	4.5		3.1	
All-Red Time (s)	1.4	1.0	1.0		1.6	
Lost Time Adjust (s)	0.0	0.0	0.0		0.0	
Total Lost Time (s)	4.4	5.5	5.5		4.7	
Lead/Lag	Lead		Lag			
Lead-Lag Optimize?	Yes		Yes			
Vehicle Extension (s)	1.0	6.0	6.0		1.0	
Minimum Gap (s)	0.2	3.0	3.0		0.2	
Time Before Reduce (s)	0.0	15.0	15.0		0.0	
Time To Reduce (s)	0.0	30.0	30.0		0.0	
Recall Mode	None	Min	Min		None	
Act Effct Green (s)	28.2	27.0	25.6		9.2	
Actuated g/C Ratio	0.60	0.57	0.54		0.19	
v/c Ratio	0.05	0.43	0.63		0.46	
Control Delay	4.0	7.0	11.7		22.7	
Queue Delay	0.0	0.0	0.0		0.0	
Total Delay	4.0	7.0	11.7		22.7	
LOS	A	A	B		C	
Approach Delay		6.8	11.7		22.7	
Approach LOS		A	B		C	
90th %ile Green (s)	7.0	49.3	37.9		14.1	
90th %ile Term Code	Min	Hold	Gap		Gap	
70th %ile Green (s)	0.0	27.4	27.4		10.3	
70th %ile Term Code	Skip	Hold	Gap		Gap	
50th %ile Green (s)	0.0	18.5	18.5		7.3	
50th %ile Term Code	Skip	Hold	Gap		Gap	
30th %ile Green (s)	0.0	17.0	17.0		7.0	
30th %ile Term Code	Skip	Dwell	Dwell		Min	
10th %ile Green (s)	0.0	27.0	27.0		7.0	
10th %ile Term Code	Skip	Dwell	Dwell		Min	
Queue Length 50th (ft)	2	48	72		26	
Queue Length 95th (ft)	9	122	299		116	
Internal Link Dist (ft)		2069	711		1590	
Turn Bay Length (ft)	70					
Base Capacity (vph)	510	1863	1768		894	
Starvation Cap Reductn	0	0	0		0	
Spillback Cap Reductn	0	0	0		0	
Storage Cap Reductn	0	0	0		0	
Reduced v/c Ratio	0.05	0.24	0.35		0.18	

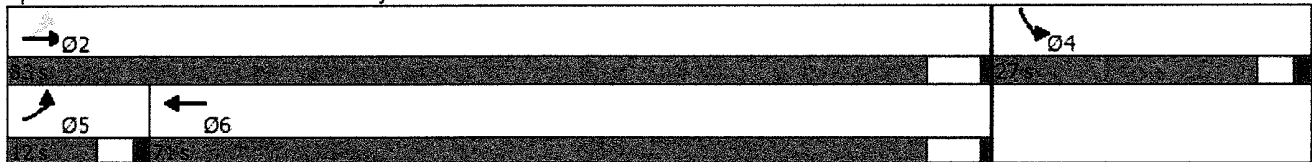
Intersection Summary

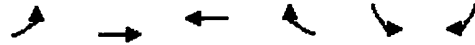
Area Type: Other
 Cycle Length: 110
 Actuated Cycle Length: 47.2
 Natural Cycle: 60
 Control Type: Actuated-Uncoordinated
 Maximum v/c Ratio: 0.63

Intersection Signal Delay: 11.2
Intersection Capacity Utilization 47.0%
Analysis Period (min) 15
90th %ile Actuated Cycle: 73.6
70th %ile Actuated Cycle: 47.9
50th %ile Actuated Cycle: 36
30th %ile Actuated Cycle: 34.2
10th %ile Actuated Cycle: 44.2

Intersection LOS: B
ICU Level of Service A

Splits and Phases: 10: US 64 & Brickyard

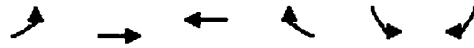




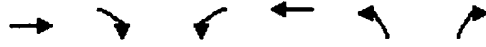
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations	↶	↷	↷	↶	↶↷	
Traffic Volume (veh/h)	88	297	265	17	37	34
Future Volume (Veh/h)	88	297	265	17	37	34
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	98	330	294	19	41	38
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	TWLTL		TWLTL			
Median storage (veh)	2		2			
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	313				820	294
vC1, stage 1 conf vol					294	
vC2, stage 2 conf vol					526	
vCu, unblocked vol	313				820	294
tC, single (s)	4.1				6.4	6.2
tC, 2 stage (s)					5.4	
tF (s)	2.2				3.5	3.3
p0 queue free %	92				92	95
cM capacity (veh/h)	1247				499	745

Direction, Lane #	EB 1	EB 2	WB 1	WB 2	SB 1
Volume Total	98	330	294	19	79
Volume Left	98	0	0	0	41
Volume Right	0	0	0	19	38
cSH	1247	1700	1700	1700	594
Volume to Capacity	0.08	0.19	0.17	0.01	0.13
Queue Length 95th (ft)	6	0	0	0	11
Control Delay (s)	8.1	0.0	0.0	0.0	12.0
Lane LOS	A				B
Approach Delay (s)	1.9	0.0			12.0
Approach LOS					B

Intersection Summary			
Average Delay	2.1		
Intersection Capacity Utilization	33.0%	ICU Level of Service	A
Analysis Period (min)	15		



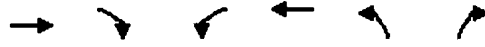
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations	↖	↑	↑	↗	↘	↙
Traffic Volume (veh/h)	41	331	327	55	26	89
Future Volume (Veh/h)	41	331	327	55	26	89
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	46	368	363	61	29	99
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		TWLTL	TWLTL			
Median storage (veh)		2	2			
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	424				823	363
vC1, stage 1 conf vol					363	
vC2, stage 2 conf vol					460	
vCu, unblocked vol	424				823	363
tC, single (s)	4.1				6.4	6.2
tC, 2 stage (s)					5.4	
tF (s)	2.2				3.5	3.3
p0 queue free %	96				95	85
cM capacity (veh/h)	1135				529	682
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	SB 1	
Volume Total	46	368	363	61	128	
Volume Left	46	0	0	0	29	
Volume Right	0	0	0	61	99	
cSH	1135	1700	1700	1700	640	
Volume to Capacity	0.04	0.22	0.21	0.04	0.20	
Queue Length 95th (ft)	3	0	0	0	19	
Control Delay (s)	8.3	0.0	0.0	0.0	12.0	
Lane LOS	A				B	
Approach Delay (s)	0.9		0.0		12.0	
Approach LOS					B	
Intersection Summary						
Average Delay			2.0			
Intersection Capacity Utilization			37.5%		ICU Level of Service	A
Analysis Period (min)			15			



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↔			↔		↔
Traffic Volume (veh/h)	72	39	26	32	19	102
Future Volume (Veh/h)	72	39	26	32	19	102
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	80	43	29	36	21	113
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage veh						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume			123		196	102
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			123		196	102
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			98		97	88
cM capacity (veh/h)			1464		778	954

Direction, Lane #	EB 1	WB 1	NB 1
Volume Total	123	65	134
Volume Left	0	29	21
Volume Right	43	0	113
cSH	1700	1464	921
Volume to Capacity	0.07	0.02	0.15
Queue Length 95th (ft)	0	2	13
Control Delay (s)	0.0	3.4	9.6
Lane LOS		A	A
Approach Delay (s)	0.0	3.4	9.6
Approach LOS			A

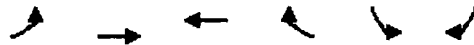
Intersection Summary			
Average Delay		4.7	
Intersection Capacity Utilization		23.8%	ICU Level of Service
Analysis Period (min)		15	A



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↔			↔	↔	
Traffic Volume (veh/h)	68	36	79	69	50	33
Future Volume (Veh/h)	68	36	79	69	50	33
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	76	40	88	77	56	37
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume			116		349	96
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			116		349	96
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			94		91	96
cM capacity (veh/h)			1473		609	960

Direction, Lane #	EB 1	WB 1	NB 1
Volume Total	116	165	93
Volume Left	0	88	56
Volume Right	40	0	37
cSH	1700	1473	713
Volume to Capacity	0.07	0.06	0.13
Queue Length 95th (ft)	0	5	11
Control Delay (s)	0.0	4.3	10.8
Lane LOS		A	B
Approach Delay (s)	0.0	4.3	10.8
Approach LOS			B

Intersection Summary			
Average Delay		4.6	
Intersection Capacity Utilization		26.1%	ICU Level of Service
Analysis Period (min)		15	A



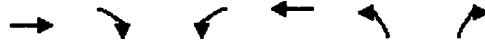
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↖	↗		↘	
Traffic Volume (veh/h)	90	71	43	114	84	23
Future Volume (Veh/h)	90	71	43	114	84	23
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	100	79	48	127	93	26
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None	None			
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	175				390	112
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	175				390	112
tC, single (s)	4.1				6.4	6.2
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	93				84	97
cM capacity (veh/h)	1401				570	942

Direction, Lane #	EB 1	WB 1	SB 1
Volume Total	179	175	119
Volume Left	100	0	93
Volume Right	0	127	26
cSH	1401	1700	624
Volume to Capacity	0.07	0.10	0.19
Queue Length 95th (ft)	6	0	17
Control Delay (s)	4.6	0.0	12.1
Lane LOS	A		B
Approach Delay (s)	4.6	0.0	12.1
Approach LOS			B

Intersection Summary			
Average Delay		4.8	
Intersection Capacity Utilization		34.0%	ICU Level of Service
Analysis Period (min)		15	A



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↖	↗		↘	
Traffic Volume (veh/h)	28	61	72	112	155	75
Future Volume (Veh/h)	28	61	72	112	155	75
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	31	68	80	124	172	83
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None	None			
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	204				272	142
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	204				272	142
tC, single (s)	4.1				6.4	6.2
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	98				75	91
cM capacity (veh/h)	1368				701	906
Direction, Lane #	EB 1	WB 1	SB 1			
Volume Total	99	204	255			
Volume Left	31	0	172			
Volume Right	0	124	83			
cSH	1368	1700	757			
Volume to Capacity	0.02	0.12	0.34			
Queue Length 95th (ft)	2	0	37			
Control Delay (s)	2.5	0.0	12.2			
Lane LOS	A		B			
Approach Delay (s)	2.5	0.0	12.2			
Approach LOS			B			
Intersection Summary						
Average Delay			6.0			
Intersection Capacity Utilization		38.6%		ICU Level of Service		A
Analysis Period (min)			15			



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↔			↔	↔	
Traffic Volume (veh/h)	41	134	57	76	75	22
Future Volume (Veh/h)	41	134	57	76	75	22
Sign Control	Stop			Stop	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	46	149	63	84	83	24
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None					
Median storage veh						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	190	0	350	178	0	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	190	0	350	178	0	
tC, single (s)	6.5	6.2	7.1	6.5	4.1	
tC, 2 stage (s)						
tF (s)	4.0	3.3	3.5	4.0	2.2	
p0 queue free %	93	86	87	88	95	
cM capacity (veh/h)	669	1085	475	679	1623	

Direction, Lane #	EB 1	WB 1	NB 1
Volume Total	195	147	107
Volume Left	0	63	83
Volume Right	149	0	24
cSH	946	574	1623
Volume to Capacity	0.21	0.26	0.05
Queue Length 95th (ft)	19	25	4
Control Delay (s)	9.8	13.4	5.8
Lane LOS	A	B	A
Approach Delay (s)	9.8	13.4	5.8
Approach LOS	A	B	

Intersection Summary			
Average Delay		10.0	
Intersection Capacity Utilization		33.1%	ICU Level of Service A
Analysis Period (min)		15	



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↔			↔	↔	
Traffic Volume (veh/h)	92	137	45	64	139	57
Future Volume (Veh/h)	92	137	45	64	139	57
Sign Control	Stop			Stop	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	102	152	50	71	154	63
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None					
Median storage veh						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	371	0	542	340	0	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	371	0	542	340	0	
tC, single (s)	6.5	6.2	7.1	6.5	4.1	
tC, 2 stage (s)						
tF (s)	4.0	3.3	3.5	4.0	2.2	
p0 queue free %	80	86	84	87	91	
cM capacity (veh/h)	506	1085	305	527	1623	

Direction, Lane #	EB 1	WB 1	NB 1
Volume Total	254	121	217
Volume Left	0	50	154
Volume Right	152	0	63
cSH	743	405	1623
Volume to Capacity	0.34	0.30	0.09
Queue Length 95th (ft)	38	31	8
Control Delay (s)	12.3	17.6	5.5
Lane LOS	B	C	A
Approach Delay (s)	12.3	17.6	5.5
Approach LOS	B	C	

Intersection Summary			
Average Delay		10.9	
Intersection Capacity Utilization		40.3%	ICU Level of Service
Analysis Period (min)		15	A



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↔			↔	↔	
Traffic Volume (veh/h)	2	60	4	5	33	4
Future Volume (Veh/h)	2	60	4	5	33	4
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	2	67	4	6	37	4
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage veh						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	69			50	36	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	69			50	36	
tC, single (s)	4.1			6.4	6.2	
tC, 2 stage (s)						
tF (s)	2.2			3.5	3.3	
p0 queue free %						
cM capacity (veh/h)						
	1532			957	1037	

Direction, Lane #	EB 1	WB 1	NB 1
Volume Total	69	10	41
Volume Left	0	4	37
Volume Right	67	0	4
cSH	1700	1532	964
Volume to Capacity	0.04	0.00	0.04
Queue Length 95th (ft)	0	0	3
Control Delay (s)	0.0	3.0	8.9
Lane LOS		A	A
Approach Delay (s)	0.0	3.0	8.9
Approach LOS			A

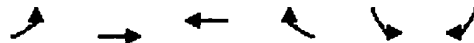
Intersection Summary			
Average Delay		3.3	
Intersection Capacity Utilization	13.8%	ICU Level of Service	A
Analysis Period (min)	15		



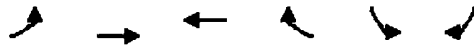
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↔			↔	↔	
Traffic Volume (veh/h)	5	44	4	5	82	4
Future Volume (Veh/h)	5	44	4	5	82	4
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	6	49	4	6	91	4
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage veh						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume			55		44	30
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			55		44	30
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			100		91	100
cM capacity (veh/h)			1550		963	1044

Direction, Lane #	EB 1	WB 1	NB 1
Volume Total	55	10	95
Volume Left	0	4	91
Volume Right	49	0	4
cSH	1700	1550	967
Volume to Capacity	0.03	0.00	0.10
Queue Length 95th (ft)	0	0	8
Control Delay (s)	0.0	2.9	9.1
Lane LOS		A	A
Approach Delay (s)	0.0	2.9	9.1
Approach LOS			A

Intersection Summary			
Average Delay		5.6	
Intersection Capacity Utilization		15.3%	ICU Level of Service
Analysis Period (min)		15	A



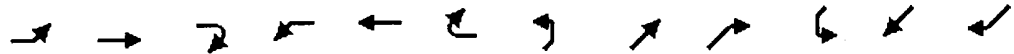
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↔	↔		↔	
Traffic Volume (veh/h)	32	10	12	4	1	59
Future Volume (Veh/h)	32	10	12	4	1	59
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	36	11	13	4	1	66
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None	None			
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	17				98	15
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	17				98	15
tC, single (s)	4.1				6.4	6.2
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	98				100	94
cM capacity (veh/h)	1600				881	1065
Direction, Lane #	EB 1	WB 1	SB 1			
Volume Total	47	17	67			
Volume Left	36	0	1			
Volume Right	0	4	66			
cSH	1600	1700	1061			
Volume to Capacity	0.02	0.01	0.06			
Queue Length 95th (ft)	2	0	5			
Control Delay (s)	5.6	0.0	8.6			
Lane LOS	A		A			
Approach Delay (s)	5.6	0.0	8.6			
Approach LOS			A			
Intersection Summary						
Average Delay			6.4			
Intersection Capacity Utilization		19.3%		ICU Level of Service		A
Analysis Period (min)			15			



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↔	↔		↔	
Traffic Volume (veh/h)	81	11	11	1	1	44
Future Volume (Veh/h)	81	11	11	1	1	44
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	90	12	12	1	1	49
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None	None			
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	13				204	12
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	13				204	12
tC, single (s)	4.1				6.4	6.2
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	94				100	95
cM capacity (veh/h)	1606				740	1068

Direction, Lane #	EB 1	WB 1	SB 1
Volume Total	102	13	50
Volume Left	90	0	1
Volume Right	0	1	49
cSH	1606	1700	1059
Volume to Capacity	0.06	0.01	0.05
Queue Length 95th (ft)	4	0	4
Control Delay (s)	6.6	0.0	8.6
Lane LOS	A		A
Approach Delay (s)	6.6	0.0	8.6
Approach LOS			A

Intersection Summary			
Average Delay		6.6	
Intersection Capacity Utilization		21.7%	ICU Level of Service
Analysis Period (min)		15	A



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	5	435	38	16	314	32	69	7	65	48	11	15
Future Volume (vph)	5	435	38	16	314	32	69	7	65	48	11	15
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	75		0	75		0	0		0	0		0
Storage Lanes	1		0	1		0	0		0	0		0
Taper Length (ft)	75			75			25			25		
Lane Util. Factor	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.988			0.986			0.938			0.972	
Flt Protected	0.950			0.950				0.976			0.969	
Satd. Flow (prot)	1770	1840	0	1770	1837	0	0	1705	0	0	1754	0
Flt Permitted	0.534			0.441				0.803			0.811	
Satd. Flow (perm)	995	1840	0	821	1837	0	0	1403	0	0	1468	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		9			11			49			15	
Link Speed (mph)		45			45			35			35	
Link Distance (ft)		791			1452			753			481	
Travel Time (s)		12.0			22.0			14.7			9.4	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	6	483	42	18	349	36	77	8	72	53	12	17
Shared Lane Traffic (%)												
Lane Group Flow (vph)	6	525	0	18	385	0	0	157	0	0	82	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane		Yes			Yes							
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	0	2		0	2		1	1		1	1	
Detector Template							Left			Left		
Leading Detector (ft)	0	306		0	306		20	60		20	60	
Trailing Detector (ft)	0	90		0	90		0	0		0	0	
Detector 1 Position(ft)	0	90		0	90		0	0		0	0	
Detector 1 Size(ft)	20	6		20	6		20	60		20	60	
Detector 1 Type	CI+Ex	CI+Ex		CI+Ex	CI+Ex		CI+Ex	CI+Ex		CI+Ex	CI+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	10.0		0.0	10.0	
Detector 2 Position(ft)		300			300							
Detector 2 Size(ft)		6			6							
Detector 2 Type		CI+Ex			CI+Ex							
Detector 2 Channel												
Detector 2 Extend (s)		1.8			1.8							
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		2			6			8			4	
Permitted Phases	2			6			8			4		



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Detector Phase	2	2		6	6		8	8		4	4	
Switch Phase												
Minimum Initial (s)	12.0	12.0		12.0	12.0		7.0	7.0		7.0	7.0	
Minimum Split (s)	22.1	22.1		21.6	21.6		20.8	20.8		21.0	21.0	
Total Split (s)	57.0	57.0		57.0	57.0		28.0	28.0		28.0	28.0	
Total Split (%)	67.1%	67.1%		67.1%	67.1%		32.9%	32.9%		32.9%	32.9%	
Maximum Green (s)	50.9	50.9		51.4	51.4		23.2	23.2		23.0	23.0	
Yellow Time (s)	4.5	4.5		4.6	4.6		3.8	3.8		3.9	3.9	
All-Red Time (s)	1.6	1.6		1.0	1.0		1.0	1.0		1.1	1.1	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	6.1	6.1		5.6	5.6		4.8	4.8		5.0	5.0	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0		2.0	2.0		1.0	1.0		1.0	1.0	
Recall Mode	Min	Min		Min	Min		None	None		None	None	
Act Effct Green (s)	19.4	19.4		19.8	19.8		8.0	8.0		7.9	7.9	
Actuated g/C Ratio	0.56	0.56		0.57	0.57		0.23	0.23		0.23	0.23	
v/c Ratio	0.01	0.51		0.04	0.37		0.44	0.44		0.24	0.24	
Control Delay	5.4	8.9		5.4	7.0		13.4	13.4		12.4	12.4	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	5.4	8.9		5.4	7.0		13.4	13.4		12.4	12.4	
LOS	A	A		A	A		B	B		B	B	
Approach Delay		8.9			7.0		13.4	13.4		12.4	12.4	
Approach LOS		A			A		B	B		B	B	
90th %ile Green (s)	23.1	23.1		23.6	23.6		11.0	11.0		10.8	10.8	
90th %ile Term Code	Gap	Gap		Hold	Hold		Gap	Gap		Hold	Hold	
70th %ile Green (s)	16.1	16.1		16.6	16.6		7.8	7.8		7.6	7.6	
70th %ile Term Code	Gap	Gap		Hold	Hold		Gap	Gap		Hold	Hold	
50th %ile Green (s)	12.9	12.9		13.4	13.4		7.2	7.2		7.0	7.0	
50th %ile Term Code	Gap	Gap		Hold	Hold		Hold	Hold		Min	Min	
30th %ile Green (s)	12.0	12.0		12.5	12.5		7.2	7.2		7.0	7.0	
30th %ile Term Code	Min	Min		Hold	Hold		Hold	Hold		Hold	Hold	
10th %ile Green (s)	27.0	27.0		27.5	27.5		0.0	0.0		0.0	0.0	
10th %ile Term Code	Dwell	Dwell		Dwell	Dwell		Skip	Skip		Skip	Skip	
Queue Length 50th (ft)	1	60		2	38		14	14		9	9	
Queue Length 95th (ft)	4	146		8	95		62	62		40	40	
Internal Link Dist (ft)		711			1372		673	673		401	401	
Turn Bay Length (ft)	75			75								
Base Capacity (vph)	995	1840		821	1837		970	970		995	995	
Starvation Cap Reductn	0	0		0	0		0	0		0	0	
Spillback Cap Reductn	0	0		0	0		0	0		0	0	
Storage Cap Reductn	0	0		0	0		0	0		0	0	
Reduced v/c Ratio	0.01	0.29		0.02	0.21		0.16	0.16		0.08	0.08	

Intersection Summary

Area Type: Other
 Cycle Length: 85
 Actuated Cycle Length: 34.8
 Natural Cycle: 50

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.51

Intersection Signal Delay: 9.1

Intersection LOS: A

Intersection Capacity Utilization 43.1%

ICU Level of Service A

Analysis Period (min) 15

90th %ile Actuated Cycle: 45

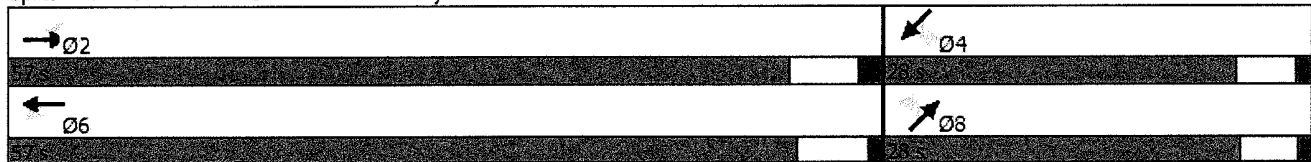
70th %ile Actuated Cycle: 34.8

50th %ile Actuated Cycle: 31

30th %ile Actuated Cycle: 30.1

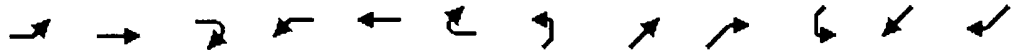
10th %ile Actuated Cycle: 33.1

Splits and Phases: 11: Old US 64/McKinney & US 64





Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	19	481	65	37	522	61	42	11	26	41	12	11
Future Volume (vph)	19	481	65	37	522	61	42	11	26	41	12	11
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	75		0	75		0	0		0	0		0
Storage Lanes	1		0	1		0	0		0	0		0
Taper Length (ft)	75			75			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Fr _t		0.982			0.984			0.956			0.977	
Fl _t Protected	0.950			0.950				0.974			0.969	
Satd. Flow (prot)	1770	1829	0	1770	1833	0	0	1734	0	0	1763	0
Fl _t Permitted	0.369			0.405				0.795			0.785	
Satd. Flow (perm)	687	1829	0	754	1833	0	0	1416	0	0	1429	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		16			14			27			11	
Link Speed (mph)		45			45			35			35	
Link Distance (ft)		791			1452			753			481	
Travel Time (s)		12.0			22.0			14.7			9.4	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	21	534	72	41	580	68	47	12	29	46	13	12
Shared Lane Traffic (%)												
Lane Group Flow (vph)	21	606	0	41	648	0	0	88	0	0	71	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane		Yes			Yes							
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	0	2		0	2		1	1		1	1	
Detector Template							Left			Left		
Leading Detector (ft)	0	306		0	306		20	60		20	60	
Trailing Detector (ft)	0	90		0	90		0	0		0	0	
Detector 1 Position(ft)	0	90		0	90		0	0		0	0	
Detector 1 Size(ft)	20	6		20	6		20	60		20	60	
Detector 1 Type	CI+Ex	CI+Ex		CI+Ex	CI+Ex		CI+Ex	CI+Ex		CI+Ex	CI+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	10.0		0.0	10.0	
Detector 2 Position(ft)		300			300							
Detector 2 Size(ft)		6			6							
Detector 2 Type		CI+Ex			CI+Ex							
Detector 2 Channel												
Detector 2 Extend (s)		1.8			1.8							
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		2			6			8			4	
Permitted Phases	2			6			8			4		



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Detector Phase	2	2		6	6		8	8		4	4	
Switch Phase												
Minimum Initial (s)	12.0	12.0		12.0	12.0		7.0	7.0		7.0	7.0	
Minimum Split (s)	22.1	22.1		21.6	21.6		20.8	20.8		21.0	21.0	
Total Split (s)	61.0	61.0		61.0	61.0		24.0	24.0		24.0	24.0	
Total Split (%)	71.8%	71.8%		71.8%	71.8%		28.2%	28.2%		28.2%	28.2%	
Maximum Green (s)	54.9	54.9		55.4	55.4		19.2	19.2		19.0	19.0	
Yellow Time (s)	4.5	4.5		4.6	4.6		3.8	3.8		3.9	3.9	
All-Red Time (s)	1.6	1.6		1.0	1.0		1.0	1.0		1.1	1.1	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	6.1	6.1		5.6	5.6		4.8	4.8		5.0	5.0	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0		2.0	2.0		1.0	1.0		1.0	1.0	
Recall Mode	Min	Min		Min	Min		None	None		None	None	
Act Effct Green (s)	25.9	25.9		26.1	26.1		7.5	7.5		7.4	7.4	
Actuated g/C Ratio	0.71	0.71		0.72	0.72		0.21	0.21		0.20	0.20	
v/c Ratio	0.04	0.46		0.08	0.49		0.28	0.28		0.24	0.24	
Control Delay	4.8	6.6		4.7	6.6		13.5	13.5		14.8	14.8	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	4.8	6.6		4.7	6.6		13.5	13.5		14.8	14.8	
LOS	A	A		A	A		B	B		B	B	
Approach Delay		6.5		6.5	6.5		13.5	13.5		14.8	14.8	
Approach LOS		A		A	A		B	B		B	B	
90th %ile Green (s)	27.2	27.2		27.7	27.7		8.6	8.6		8.4	8.4	
90th %ile Term Code	Hold	Hold		Gap	Gap		Gap	Gap		Hold	Hold	
70th %ile Green (s)	19.5	19.5		20.0	20.0		7.2	7.2		7.0	7.0	
70th %ile Term Code	Hold	Hold		Gap	Gap		Hold	Hold		Min	Min	
50th %ile Green (s)	15.4	15.4		15.9	15.9		7.2	7.2		7.0	7.0	
50th %ile Term Code	Hold	Hold		Gap	Gap		Hold	Hold		Hold	Hold	
30th %ile Green (s)	24.4	24.4		24.9	24.9		0.0	0.0		0.0	0.0	
30th %ile Term Code	Dwell	Dwell		Dwell	Dwell		Skip	Skip		Skip	Skip	
10th %ile Green (s)	27.0	27.0		27.5	27.5		0.0	0.0		0.0	0.0	
10th %ile Term Code	Dwell	Dwell		Dwell	Dwell		Skip	Skip		Skip	Skip	
Queue Length 50th (ft)	2	74		4	79		9	9		9	9	
Queue Length 95th (ft)	8	150		13	162		44	44		41	41	
Internal Link Dist (ft)		711		1372	1372		673	673		401	401	
Turn Bay Length (ft)	75			75								
Base Capacity (vph)	687	1829		754	1833		778	778		769	769	
Starvation Cap Reductn	0	0		0	0		0	0		0	0	
Spillback Cap Reductn	0	0		0	0		0	0		0	0	
Storage Cap Reductn	0	0		0	0		0	0		0	0	
Reduced v/c Ratio	0.03	0.33		0.05	0.35		0.11	0.11		0.09	0.09	

Intersection Summary

Area Type: Other

Cycle Length: 85

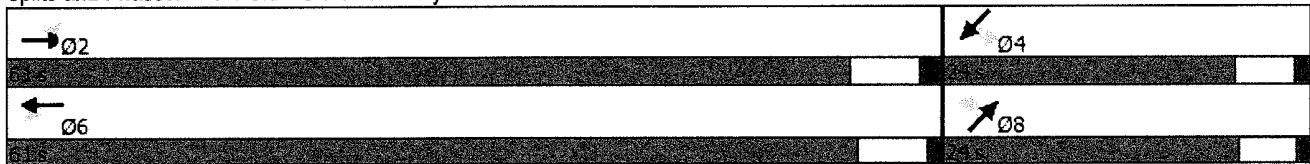
Actuated Cycle Length: 36.3

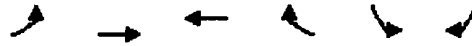
Natural Cycle: 55

Control Type: Actuated-Uncoordinated
Maximum v/c Ratio: 0.49
Intersection Signal Delay: 7.3
Intersection Capacity Utilization 45.8%
Analysis Period (min) 15
90th %ile Actuated Cycle: 46.7
70th %ile Actuated Cycle: 37.6
50th %ile Actuated Cycle: 33.5
30th %ile Actuated Cycle: 30.5
10th %ile Actuated Cycle: 33.1

Intersection LOS: A
ICU Level of Service A

Splits and Phases: 11: Old US 64/McKinney & US 64





Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	34	336	305	91	143	57
Future Volume (vph)	34	336	305	91	143	57
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	70			0	0	0
Storage Lanes	1			0	1	0
Taper Length (ft)	100				25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Fr _t			0.969		0.962	
Fit Protected	0.950				0.965	
Satd. Flow (prot)	1770	1863	1805	0	1729	0
Fit Permitted	0.338				0.965	
Satd. Flow (perm)	630	1863	1805	0	1729	0
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)			20		18	
Link Speed (mph)		45	45		35	
Link Distance (ft)		2149	791		1670	
Travel Time (s)		32.6	12.0		32.5	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	38	373	339	101	159	63
Shared Lane Traffic (%)						
Lane Group Flow (vph)	38	373	440	0	222	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		12	12		12	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane		Yes	Yes			
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15			9	15	9
Number of Detectors	1	1	1		1	
Detector Template	Left				Left	
Leading Detector (ft)	60	306	306		60	
Trailing Detector (ft)	0	300	300		0	
Detector 1 Position(ft)	0	300	300		0	
Detector 1 Size(ft)	60	6	6		60	
Detector 1 Type	CI+Ex	CI+Ex	CI+Ex		CI+Ex	
Detector 1 Channel						
Detector 1 Extend (s)	0.0	0.0	0.0		0.0	
Detector 1 Queue (s)	0.0	0.0	0.0		0.0	
Detector 1 Delay (s)	0.0	0.0	0.0		0.0	
Turn Type	pm+pt	NA	NA		Prot	
Protected Phases	5	2	6		4	
Permitted Phases	2					
Detector Phase	5	2	6		4	
Switch Phase						
Minimum Initial (s)	7.0	12.0	12.0		7.0	
Minimum Split (s)	11.4	21.5	21.5		20.7	
Total Split (s)	13.0	74.0	61.0		36.0	



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Total Split (%)	11.8%	67.3%	55.5%		32.7%	
Maximum Green (s)	8.6	68.5	55.5		31.3	
Yellow Time (s)	3.0	4.5	4.5		3.1	
All-Red Time (s)	1.4	1.0	1.0		1.6	
Lost Time Adjust (s)	0.0	0.0	0.0		0.0	
Total Lost Time (s)	4.4	5.5	5.5		4.7	
Lead/Lag	Lead		Lag			
Lead-Lag Optimize?	Yes		Yes			
Vehicle Extension (s)	1.0	6.0	6.0		1.0	
Minimum Gap (s)	0.2	3.0	3.0		0.2	
Time Before Reduce (s)	0.0	15.0	15.0		0.0	
Time To Reduce (s)	0.0	30.0	30.0		0.0	
Recall Mode	None	Min	Min		None	
Act Effect Green (s)	23.0	21.8	18.4		10.2	
Actuated g/C Ratio	0.53	0.51	0.43		0.24	
v/c Ratio	0.07	0.40	0.56		0.53	
Control Delay	5.1	7.8	14.0		20.3	
Queue Delay	0.0	0.0	0.0		0.0	
Total Delay	5.1	7.8	14.0		20.3	
LOS	A	A	B		C	
Approach Delay		7.5	14.0		20.3	
Approach LOS		A	B		C	
90th %ile Green (s)	7.0	37.0	25.6		15.8	
90th %ile Term Code	Min	Hold	Gap		Gap	
70th %ile Green (s)	7.0	31.7	20.3		11.8	
70th %ile Term Code	Min	Hold	Gap		Gap	
50th %ile Green (s)	0.0	16.8	16.8		9.6	
50th %ile Term Code	Skip	Hold	Gap		Gap	
30th %ile Green (s)	0.0	12.0	12.0		7.0	
30th %ile Term Code	Skip	Min	Min		Min	
10th %ile Green (s)	0.0	16.0	16.0		7.0	
10th %ile Term Code	Skip	Dwell	Dwell		Min	
Queue Length 50th (ft)	4	45	52		34	
Queue Length 95th (ft)	14	109	204		125	
Internal Link Dist (ft)		2069	711		1590	
Turn Bay Length (ft)	70					
Base Capacity (vph)	583	1863	1762		1345	
Starvation Cap Reductn	0	0	0		0	
Spillback Cap Reductn	0	0	0		0	
Storage Cap Reductn	0	0	0		0	
Reduced v/c Ratio	0.07	0.20	0.25		0.17	

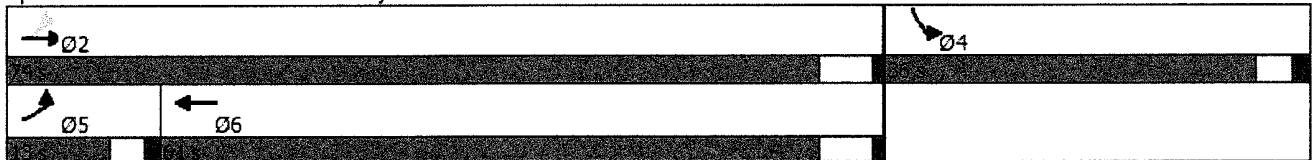
Intersection Summary

Area Type: Other
 Cycle Length: 110
 Actuated Cycle Length: 43.1
 Natural Cycle: 60
 Control Type: Actuated-Uncoordinated
 Maximum v/c Ratio: 0.56

Intersection Signal Delay: 12.8
Intersection Capacity Utilization 48.2%
Analysis Period (min) 15
90th %ile Actuated Cycle: 63
70th %ile Actuated Cycle: 53.7
50th %ile Actuated Cycle: 36.6
30th %ile Actuated Cycle: 29.2
10th %ile Actuated Cycle: 33.2

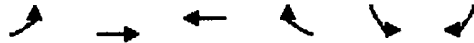
Intersection LOS: B
ICU Level of Service A

Splits and Phases: 10: US 64 & Brickyard





Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	63	420	442	135	132	49
Future Volume (vph)	63	420	442	135	132	49
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	70			0	0	0
Storage Lanes	1			0	1	0
Taper Length (ft)	100				25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Fr _t			0.968		0.964	
Fl _t Protected	0.950				0.965	
Satd. Flow (prot)	1770	1863	1803	0	1733	0
Fl _t Permitted	0.221				0.965	
Satd. Flow (perm)	412	1863	1803	0	1733	0
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)			24		15	
Link Speed (mph)		45	45		35	
Link Distance (ft)		2149	791		1670	
Travel Time (s)		32.6	12.0		32.5	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	70	467	491	150	147	54
Shared Lane Traffic (%)						
Lane Group Flow (vph)	70	467	641	0	201	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		12	12		12	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane		Yes	Yes			
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15			9	15	9
Number of Detectors	1	1	1		1	
Detector Template	Left				Left	
Leading Detector (ft)	60	306	306		60	
Trailing Detector (ft)	0	300	300		0	
Detector 1 Position(ft)	0	300	300		0	
Detector 1 Size(ft)	60	6	6		60	
Detector 1 Type	CI+Ex	CI+Ex	CI+Ex		CI+Ex	
Detector 1 Channel						
Detector 1 Extend (s)	0.0	0.0	0.0		0.0	
Detector 1 Queue (s)	0.0	0.0	0.0		0.0	
Detector 1 Delay (s)	0.0	0.0	0.0		0.0	
Turn Type	pm+pt	NA	NA		Prot	
Protected Phases	5	2	6		4	
Permitted Phases	2					
Detector Phase	5	2	6		4	
Switch Phase						
Minimum Initial (s)	7.0	12.0	12.0		7.0	
Minimum Split (s)	11.4	21.5	21.5		20.7	
Total Split (s)	12.0	81.0	69.0		29.0	



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Total Split (%)	10.9%	73.6%	62.7%		26.4%	
Maximum Green (s)	7.6	75.5	63.5		24.3	
Yellow Time (s)	3.0	4.5	4.5		3.1	
All-Red Time (s)	1.4	1.0	1.0		1.6	
Lost Time Adjust (s)	0.0	0.0	0.0		0.0	
Total Lost Time (s)	4.4	5.5	5.5		4.7	
Lead/Lag	Lead		Lag			
Lead-Lag Optimize?	Yes		Yes			
Vehicle Extension (s)	1.0	6.0	6.0		1.0	
Minimum Gap (s)	0.2	3.0	3.0		0.2	
Time Before Reduce (s)	0.0	15.0	15.0		0.0	
Time To Reduce (s)	0.0	30.0	30.0		0.0	
Recall Mode	None	Min	Min		None	
Act Effct Green (s)	34.2	33.0	27.2		10.9	
Actuated g/C Ratio	0.62	0.60	0.49		0.20	
v/c Ratio	0.16	0.42	0.71		0.57	
Control Delay	4.8	7.0	17.3		28.7	
Queue Delay	0.0	0.0	0.0		0.0	
Total Delay	4.8	7.0	17.3		28.7	
LOS	A	A	B		C	
Approach Delay		6.7	17.3		28.7	
Approach LOS		A	B		C	
90th %ile Green (s)	7.6	54.4	42.4		17.5	
90th %ile Term Code	Max	Hold	Gap		Gap	
70th %ile Green (s)	7.0	41.6	30.2		12.6	
70th %ile Term Code	Min	Hold	Gap		Gap	
50th %ile Green (s)	7.0	35.7	24.3		10.0	
50th %ile Term Code	Min	Hold	Gap		Gap	
30th %ile Green (s)	0.0	20.5	20.5		7.9	
30th %ile Term Code	Skip	Hold	Gap		Gap	
10th %ile Green (s)	0.0	17.9	17.9		7.0	
10th %ile Term Code	Skip	Dwell	Dwell		Min	
Queue Length 50th (ft)	7	61	169		58	
Queue Length 95th (ft)	23	144	344		151	
Internal Link Dist (ft)		2069	711		1590	
Turn Bay Length (ft)	70					
Base Capacity (vph)	461	1833	1717		849	
Starvation Cap Reductn	0	0	0		0	
Spillback Cap Reductn	0	0	0		0	
Storage Cap Reductn	0	0	0		0	
Reduced v/c Ratio	0.15	0.25	0.37		0.24	

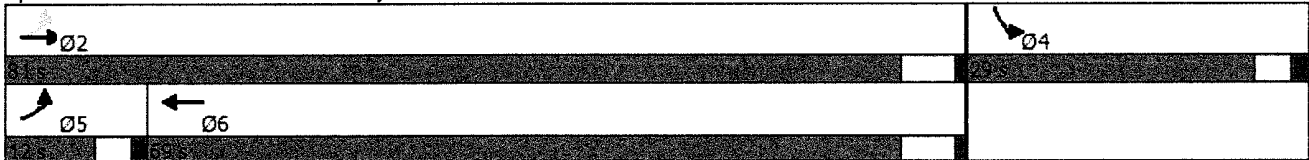
Intersection Summary

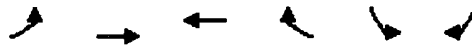
Area Type: Other
 Cycle Length: 110
 Actuated Cycle Length: 55.2
 Natural Cycle: 60
 Control Type: Actuated-Uncoordinated
 Maximum v/c Ratio: 0.71

Intersection Signal Delay: 14.8
Intersection Capacity Utilization 59.8%
Analysis Period (min) 15
90th %ile Actuated Cycle: 82.1
70th %ile Actuated Cycle: 64.4
50th %ile Actuated Cycle: 55.9
30th %ile Actuated Cycle: 38.6
10th %ile Actuated Cycle: 35.1

Intersection LOS: B
ICU Level of Service B

Splits and Phases: 10: US 64 & Brickyard





Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	88	319	309	17	37	34
Future Volume (Veh/h)	88	319	309	17	37	34
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	98	354	343	19	41	38
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		TWLTL	TWLTL			
Median storage veh		2	2			
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	362				893	343
vC1, stage 1 conf vol					343	
vC2, stage 2 conf vol					550	
vCu, unblocked vol	362				893	343
tC, single (s)	4.1				6.4	6.2
tC, 2 stage (s)					5.4	
tF (s)	2.2				3.5	3.3
p0 queue free %	92				91	95
cM capacity (veh/h)	1197				478	700

Direction, Lane #	EB 1	EB 2	WB 1	WB 2	SB 1
Volume Total	98	354	343	19	79
Volume Left	98	0	0	0	41
Volume Right	0	0	0	19	38
cSH	1197	1700	1700	1700	564
Volume to Capacity	0.08	0.21	0.20	0.01	0.14
Queue Length 95th (ft)	7	0	0	0	12
Control Delay (s)	8.3	0.0	0.0	0.0	12.4
Lane LOS	A				B
Approach Delay (s)	1.8		0.0		12.4
Approach LOS					B

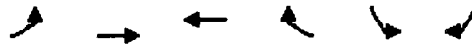
Intersection Summary			
Average Delay		2.0	
Intersection Capacity Utilization		35.3%	ICU Level of Service A
Analysis Period (min)		15	



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations	↶	↷	↷	↶	↶	↶
Traffic Volume (veh/h)	41	382	359	55	26	89
Future Volume (Veh/h)	41	382	359	55	26	89
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	46	424	399	61	29	99
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		TWLTL	TWLTL			
Median storage veh		2	2			
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	460				915	399
vC1, stage 1 conf vol					399	
vC2, stage 2 conf vol					516	
vCu, unblocked vol	460				915	399
tC, single (s)	4.1				6.4	6.2
tC, 2 stage (s)					5.4	
tF (s)	2.2				3.5	3.3
p0 queue free %	96				94	85
cM capacity (veh/h)	1101				495	651

Direction, Lane #	EB 1	EB 2	WB 1	WB 2	SB 1
Volume Total	46	424	399	61	128
Volume Left	46	0	0	0	29
Volume Right	0	0	0	61	99
cSH	1101	1700	1700	1700	607
Volume to Capacity	0.04	0.25	0.23	0.04	0.21
Queue Length 95th (ft)	3	0	0	0	20
Control Delay (s)	8.4	0.0	0.0	0.0	12.5
Lane LOS	A				B
Approach Delay (s)	0.8		0.0		12.5
Approach LOS					B

Intersection Summary			
Average Delay		1.9	
Intersection Capacity Utilization		39.2%	ICU Level of Service A
Analysis Period (min)		15	



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↔	↔		↔	
Traffic Volume (veh/h)	57	9	7	31	53	123
Future Volume (Veh/h)	57	9	7	31	53	123
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	63	10	8	34	59	137
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None	None			
Median storage veh						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	42				161	25
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	42				161	25
tC, single (s)	4.1				6.4	6.2
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	96				93	87
cM capacity (veh/h)	1567				797	1051

Direction, Lane #	EB 1	WB 1	SB 1
Volume Total	73	42	196
Volume Left	63	0	59
Volume Right	0	34	137
cSH	1567	1700	959
Volume to Capacity	0.04	0.02	0.20
Queue Length 95th (ft)	3	0	19
Control Delay (s)	6.4	0.0	9.7
Lane LOS	A		A
Approach Delay (s)	6.4	0.0	9.7
Approach LOS			A

Intersection Summary			
Average Delay		7.6	
Intersection Capacity Utilization	27.5%		ICU Level of Service A
Analysis Period (min)	15		



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↕	↕		↕	
Traffic Volume (veh/h)	132	10	16	71	39	91
Future Volume (Veh/h)	132	10	16	71	39	91
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	147	11	18	79	43	101
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None	None			
Median storage veh						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	97				362	58
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	97				362	58
tC, single (s)	4.1				6.4	6.2
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	90				93	90
cM capacity (veh/h)	1496				574	1009

Direction, Lane #	EB 1	WB 1	SB 1
Volume Total	158	97	144
Volume Left	147	0	43
Volume Right	0	79	101
cSH	1496	1700	823
Volume to Capacity	0.10	0.06	0.18
Queue Length 95th (ft)	8	0	16
Control Delay (s)	7.2	0.0	10.3
Lane LOS	A		B
Approach Delay (s)	7.2	0.0	10.3
Approach LOS			B

Intersection Summary			
Average Delay		6.6	
Intersection Capacity Utilization	28.9%	ICU Level of Service	A
Analysis Period (min)	15		

Appendix D

TRAFFIC SIGNAL PLAN OF RECORD

DRAFT

**2 PHASE
FULLY ACTUATED
ISOLATED**

NOTES

1. Refer to "Roadway Standard Drawings MDDOT" dated January 2012 and "Standard Specifications for Roads and Bridges" dated January 2012. Do not program signal for left night flashing operation unless otherwise directed by the Engineer.
2. Detector units to be installed as per reason noted.
3. Detector units to be installed as per reason noted.
4. Pavement markings are existing.
5. Railroad Tracks are Out of Service.

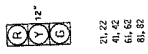
OASIS 2070 LOOP & DETECTOR INSTALLATION CHART

LOOP	SIZ	PI	SIZ		PI		SIZ	PI	SIZ	PI
			EXIST	NEW	EXIST	NEW				
20	0.56	300	EXIST	2	Y	Y	18	-	-	-
30	0.56	300	EXIST	2	Y	Y	18	-	-	-
40	0.56	300	EXIST	2	Y	Y	18	-	-	-
6A	0.56	300	EXIST	2	Y	Y	18	-	-	-
6B	0.56	300	EXIST	2	Y	Y	18	-	-	-
8A	0.56	300	EXIST	2	Y	Y	18	-	-	-

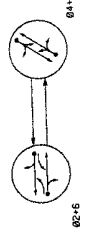
TABLE OF OPERATION

PHASE	1	2	3	4	5	6	7	8
STAGE	2	1	4	3	6	5	8	7
FACE	2	1	4	3	6	5	8	7
21-22	GRY	GRY	GRY	GRY	GRY	GRY	GRY	GRY
41-42	GRY	GRY	GRY	GRY	GRY	GRY	GRY	GRY
61-62	GRY	GRY	GRY	GRY	GRY	GRY	GRY	GRY
81-82	GRY	GRY	GRY	GRY	GRY	GRY	GRY	GRY

SIGNAL FACE I.D.
All roads L.F.D.

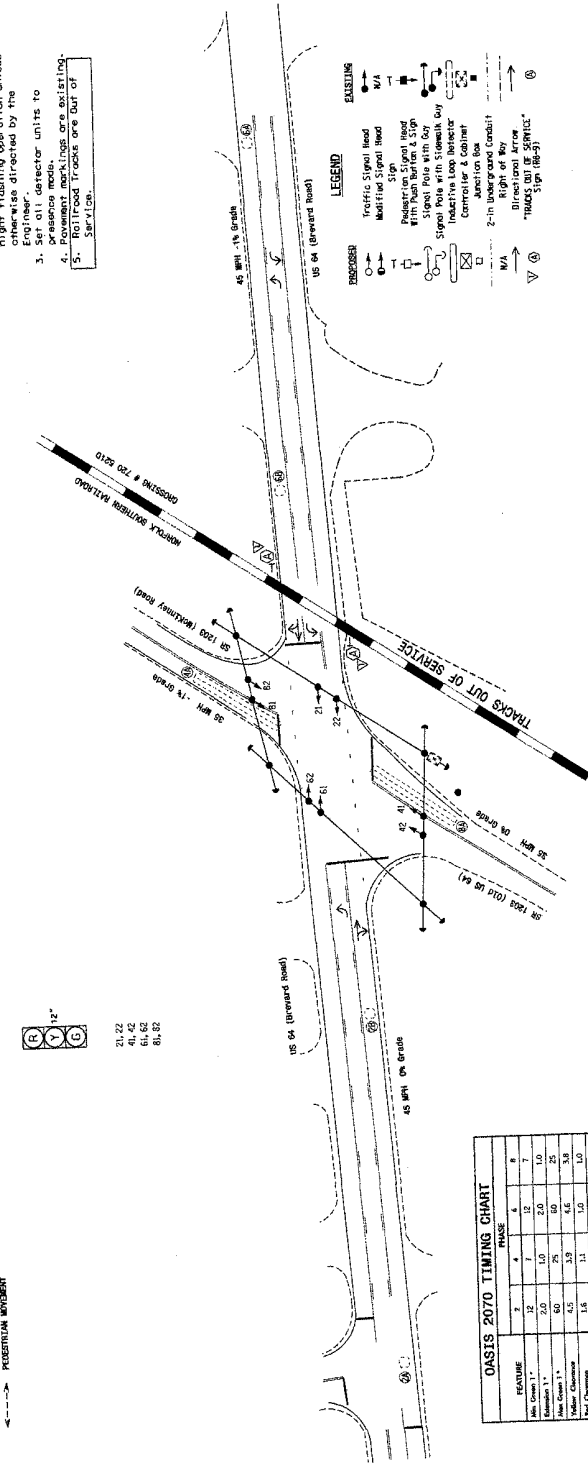


PHASING DIAGRAM



PHASING DIAGRAM INTERSECTION LEGEND

- DETECTED MOVEMENT
- UNDETECTED MOVEMENT (OVERLAP)
- DETECTED MOVEMENT
- UNDETECTED MOVEMENT
- PEDESTRIAN MOVEMENT



LEGEND

- PROCESOR
- EXISTING
- Traffic Signal Head
- Modified Signal Head
- Pedestrian Signal Head
- Signal Pole with Box
- Signal Pole with Detector
- Controller & Cabinet
- Junction Box
- 2-in Underground Conduit
- Directional Arrow
- "ROADS OUT OF SERVICE" Sign (R8-5)

Plan of Record
DESIGNED BY: M. BARBOZA, DATE: APRIL 2014
REVISED BY: J. WILLIAMS, DATE: APRIL 2014
DRAWN BY: J. WILLIAMS, DATE: APRIL 2014
CHECKED BY: J. WILLIAMS, DATE: APRIL 2014
APPROVED BY: J. WILLIAMS, DATE: APRIL 2014
US DOT STANDARD SPECIFICATIONS TO 2070.

Plan of Record

US 64 (Brevard Road) at SR 1208 (McKinney Road) / OLD US 64

DESIGNED BY: M. BARBOZA, DATE: APRIL 2014
REVISED BY: J. WILLIAMS, DATE: APRIL 2014
DRAWN BY: J. WILLIAMS, DATE: APRIL 2014
CHECKED BY: J. WILLIAMS, DATE: APRIL 2014
APPROVED BY: J. WILLIAMS, DATE: APRIL 2014

US DOT STANDARD SPECIFICATIONS TO 2070.

OASIS 2070 TIMING CHART

FEATURE	PHASE			
	2	1	4	3
Max Green 1"	32	1	12	7
Max Green 2"	2.0	1.0	2.0	1.0
Max Green 3"	6.0	2.5	5.0	3.5
Yellow Clearance	4.5	2.5	1.5	1.0
Max Clearance	2.0	2.0	2.0	2.0
Max 1"	-	-	-	-
Green 1"	-	-	-	-
Green 2"	-	-	-	-
Green 3"	-	-	-	-
Yellow 1"	-	-	-	-
Yellow 2"	-	-	-	-
Yellow 3"	-	-	-	-
Red 1"	-	-	-	-
Red 2"	-	-	-	-
Red 3"	-	-	-	-
Red 4"	-	-	-	-
Red 5"	-	-	-	-
Red 6"	-	-	-	-
Red 7"	-	-	-	-
Red 8"	-	-	-	-
Red 9"	-	-	-	-
Red 10"	-	-	-	-
Red 11"	-	-	-	-
Red 12"	-	-	-	-
Red 13"	-	-	-	-
Red 14"	-	-	-	-
Red 15"	-	-	-	-
Red 16"	-	-	-	-
Red 17"	-	-	-	-
Red 18"	-	-	-	-
Red 19"	-	-	-	-
Red 20"	-	-	-	-
Red 21"	-	-	-	-
Red 22"	-	-	-	-
Red 23"	-	-	-	-
Red 24"	-	-	-	-
Red 25"	-	-	-	-
Red 26"	-	-	-	-
Red 27"	-	-	-	-
Red 28"	-	-	-	-
Red 29"	-	-	-	-
Red 30"	-	-	-	-

* Phase 7 and 8 are from "Old US 64" and "Old SR 1208". All Green for all other phases should be the same time as shown.

Appendix E

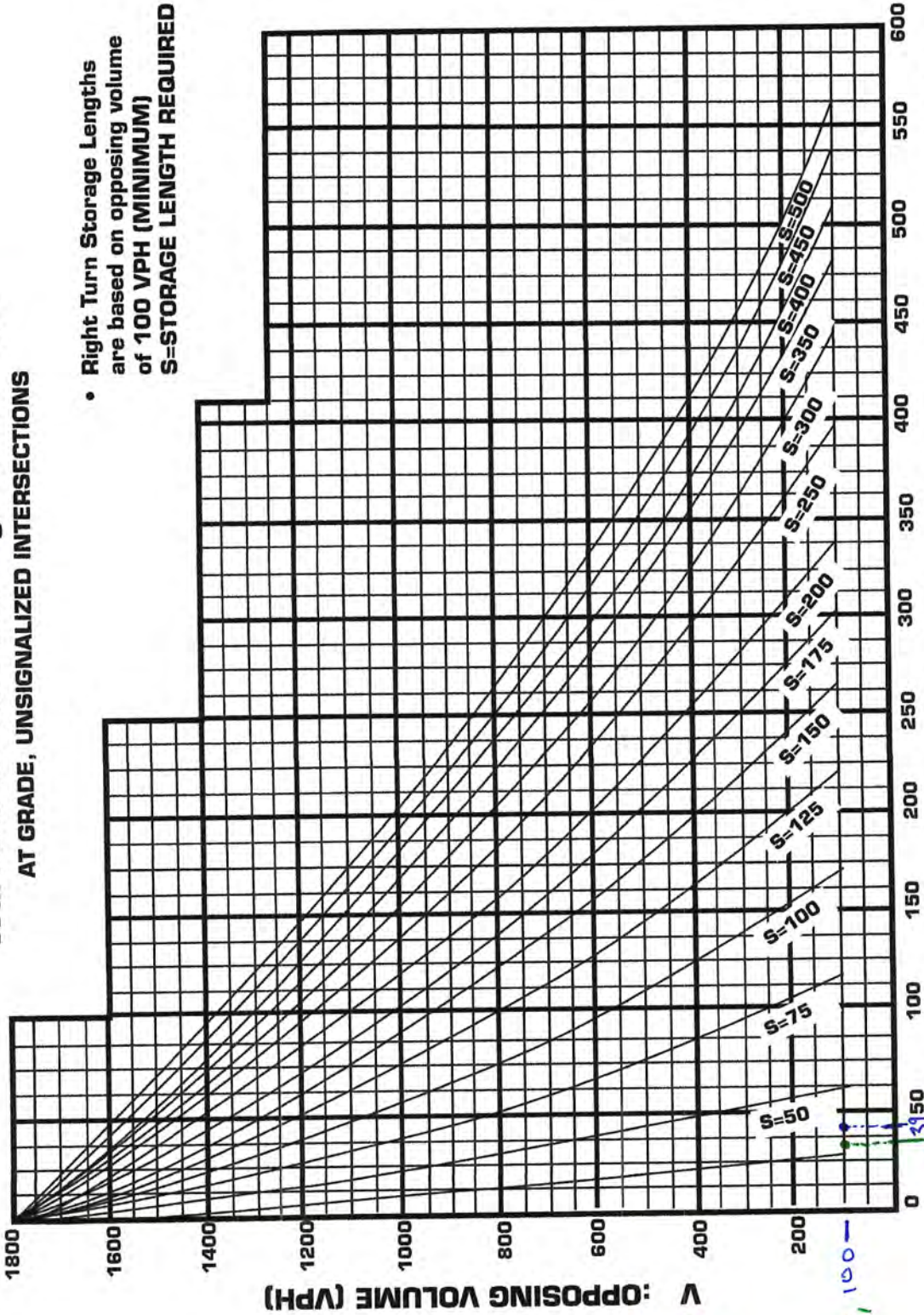
NCDOT TURN LANE WARRANT CHART

DRAFT

Greenwood Forest @ Brickyard AM Peak: $V_L = 39$ $V = 100$
 Movement: Eastbound RT PM Peak: $V_L = 36$ $V = 100$

Warrant for Left and Right-Turn Lanes
 AT GRADE, UNSIGNALIZED INTERSECTIONS

- Right Turn Storage Lengths are based on opposing volume of 100 VPH (MINIMUM)
 S=STORAGE LENGTH REQUIRED



Note: Where adjacent signalization may provide opportunities for gaps in the traffic stream a reduction in the above storage values can be considered on a case by case basis.

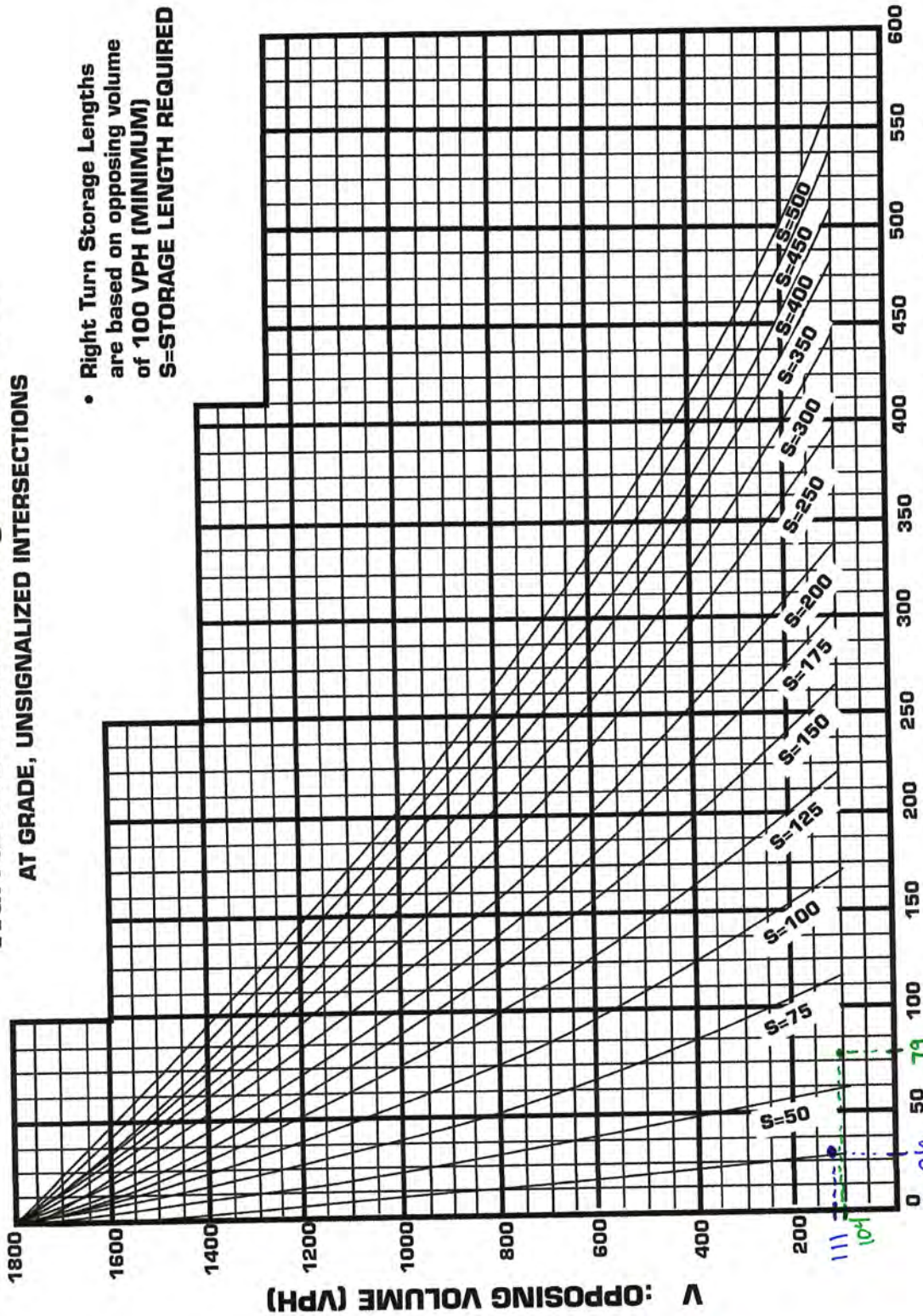
V_L : LEFT TURNING VOLUME (VPH)
 V_R : RIGHT TURNING VOLUME (VPH)

Storage
 AM - 50'
 PM - 50'

Greenwood Forest @ Brickyard AM Peak: $V_L = 26$ $V = 111$
 Movement: Westbound LT PM Peak: $V_L = 79$ $V = 104$

Warrant for Left and Right-Turn Lanes
 AT GRADE, UNSIGNALIZED INTERSECTIONS

- Right Turn Storage Lengths are based on opposing volume of 100 VPH (MINIMUM)
 S=STORAGE LENGTH REQUIRED



Note: Where adjacent signalization may provide opportunities for gaps in the traffic stream a reduction in the above storage values can be considered on a case by case basis.

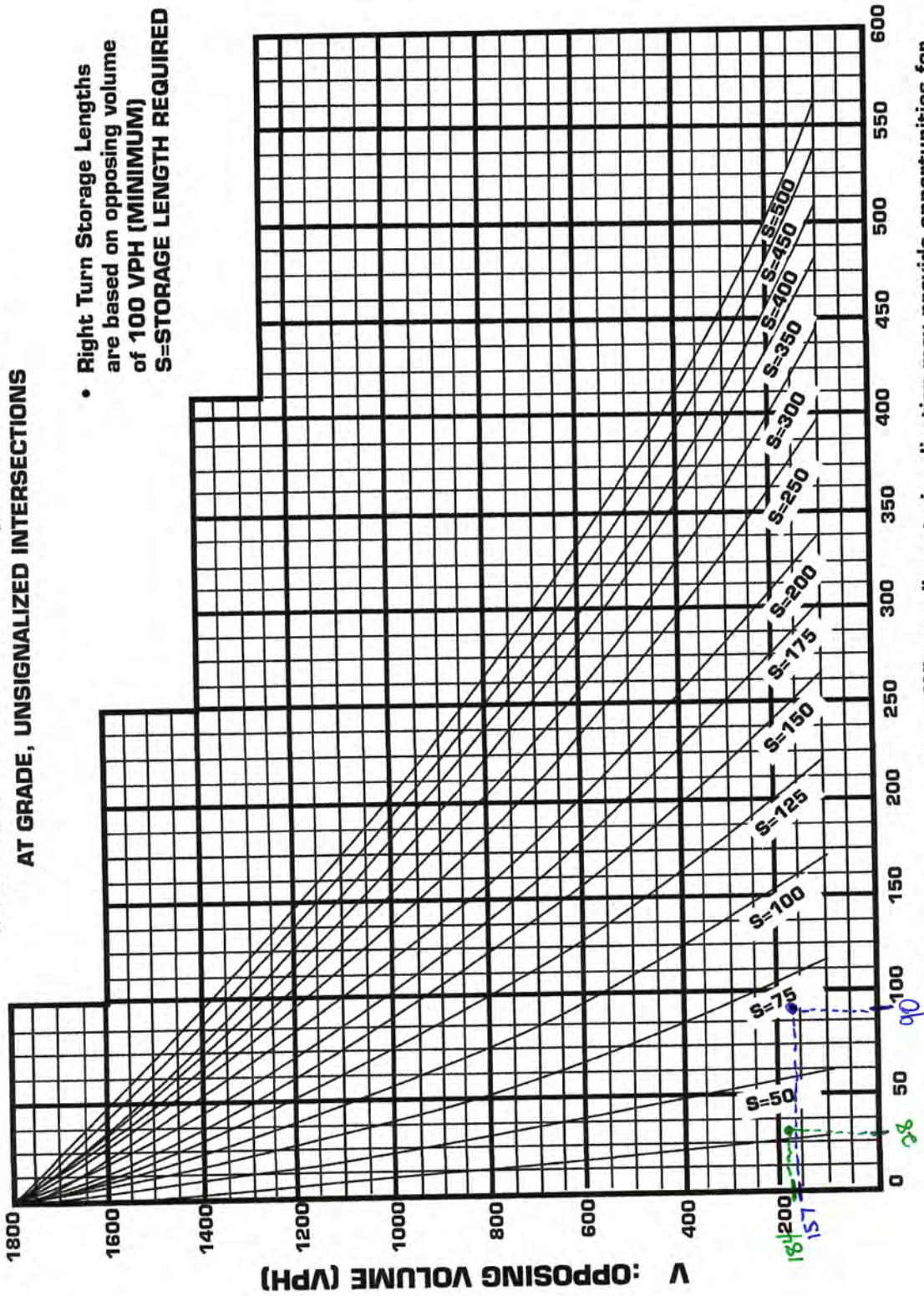
V_L : LEFT TURNING VOLUME (VPH)
 V_R : RIGHT TURNING VOLUME (VPH)

Storage
 AM - 50'
 PM - 75'

Holly Springs @ Brickyard
 Movement: Eastbound ~~RT~~ LT
 AM Peak: $V_L = 90$ $V = 157$
 PM Peak: $V_L = 28$ $V = 184$

Warrant for Left and Right-Turn Lanes
 AT GRADE, UNSIGNALIZED INTERSECTIONS

- Right Turn Storage Lengths are based on opposing volume of 100 VPH (MINIMUM)
 S=STORAGE LENGTH REQUIRED



Note: Where adjacent signalization may provide opportunities for gaps in the traffic stream a reduction in the above storage values can be considered on a case by case basis.

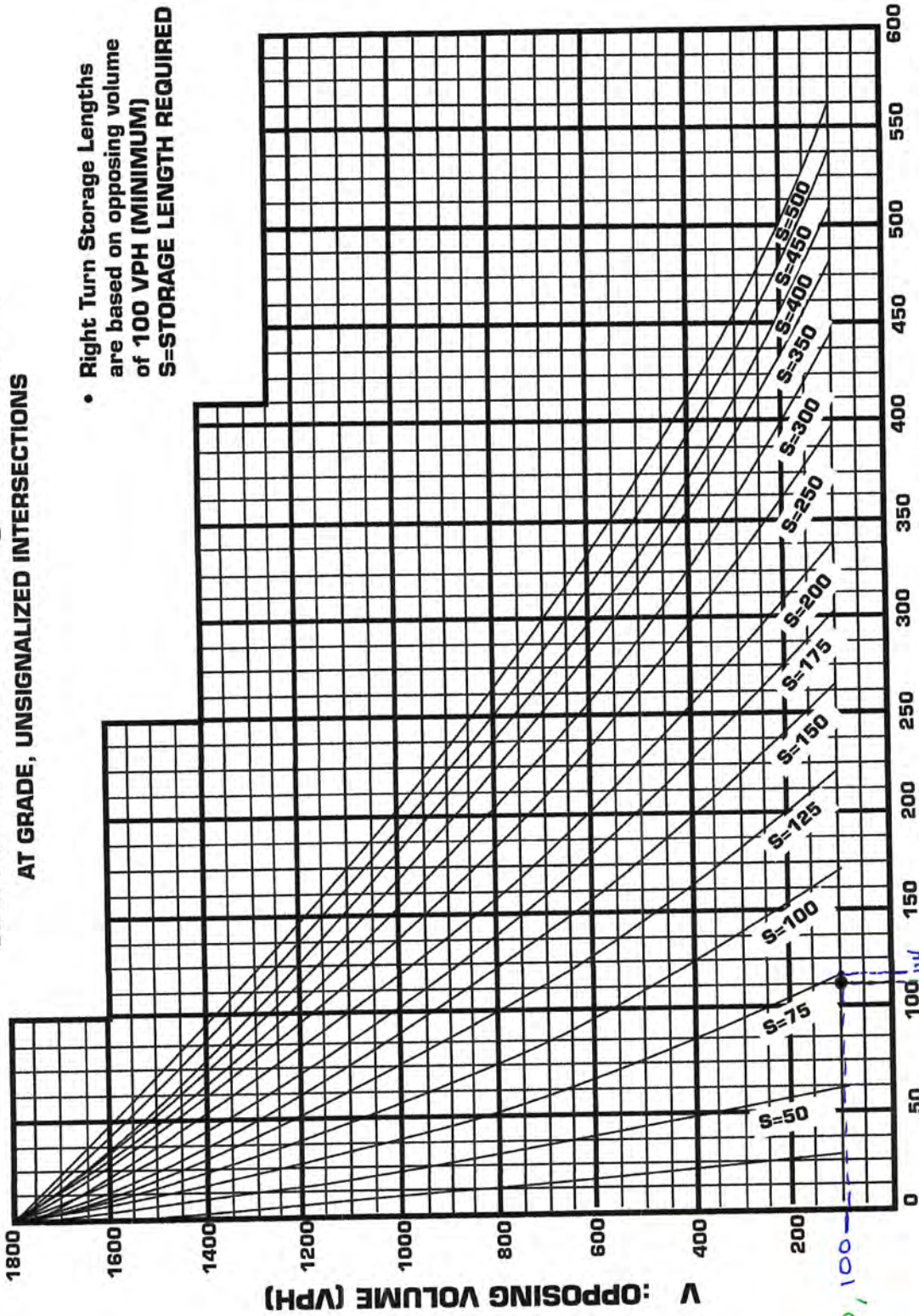
V_L : LEFT TURNING VOLUME (VPH)
 V_R : RIGHT TURNING VOLUME (VPH)

Storage
 AM - 75'
 PM - 50'

Holly Springs @ Brickyard
 Movement: Westbound RT
 AM Peak: $V_R = 114$ $V = 100$
 PM Peak: $V_R = 112$ $V = 100$

Warrant for Left and Right-Turn Lanes

AT GRADE, UNSIGNALIZED INTERSECTIONS



- Right Turn Storage Lengths are based on opposing volume of 100 VPH (MINIMUM)
- S=STORAGE LENGTH REQUIRED

Note: Where adjacent signalization may provide opportunities for gaps in the traffic stream a reduction in the above storage values can be considered on a case by case basis.

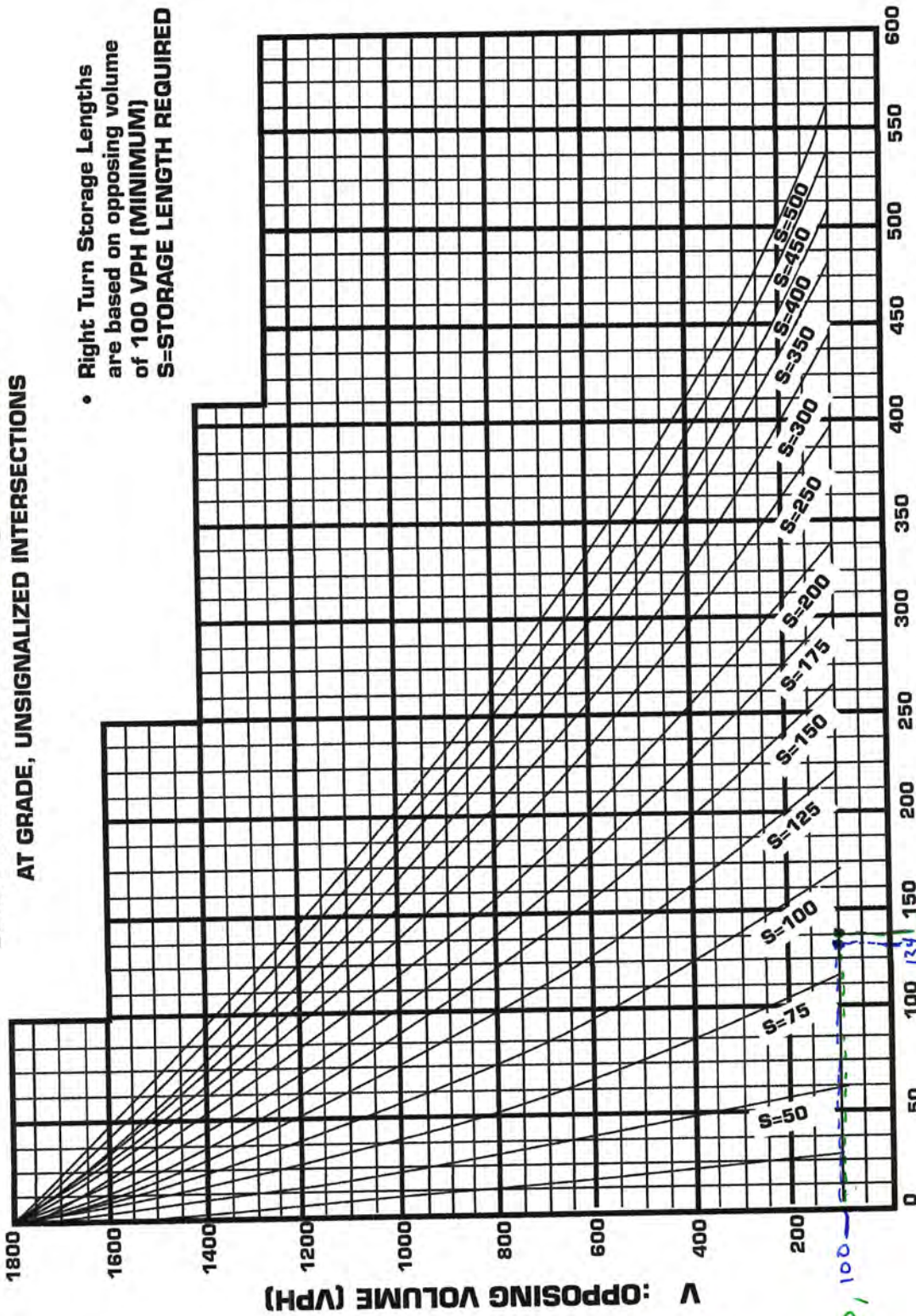
V_L : LEFT TURNING VOLUME (VPH)
 V_R : RIGHT TURNING VOLUME (VPH)

Storage
 AM - 75
 PM - 75

100, 100
 114
 112

Brickyard @ McKinney
 Movement: Eastbound RT
 AM Peak: $V_R = 134$ $V = 100$
 PM Peak: $V_R = 137$ $V = 100$

Warrant for Left and Right-Turn Lanes
 AT GRADE, UNSIGNALIZED INTERSECTIONS



Storage
 AM - 100'
 PM - 100'

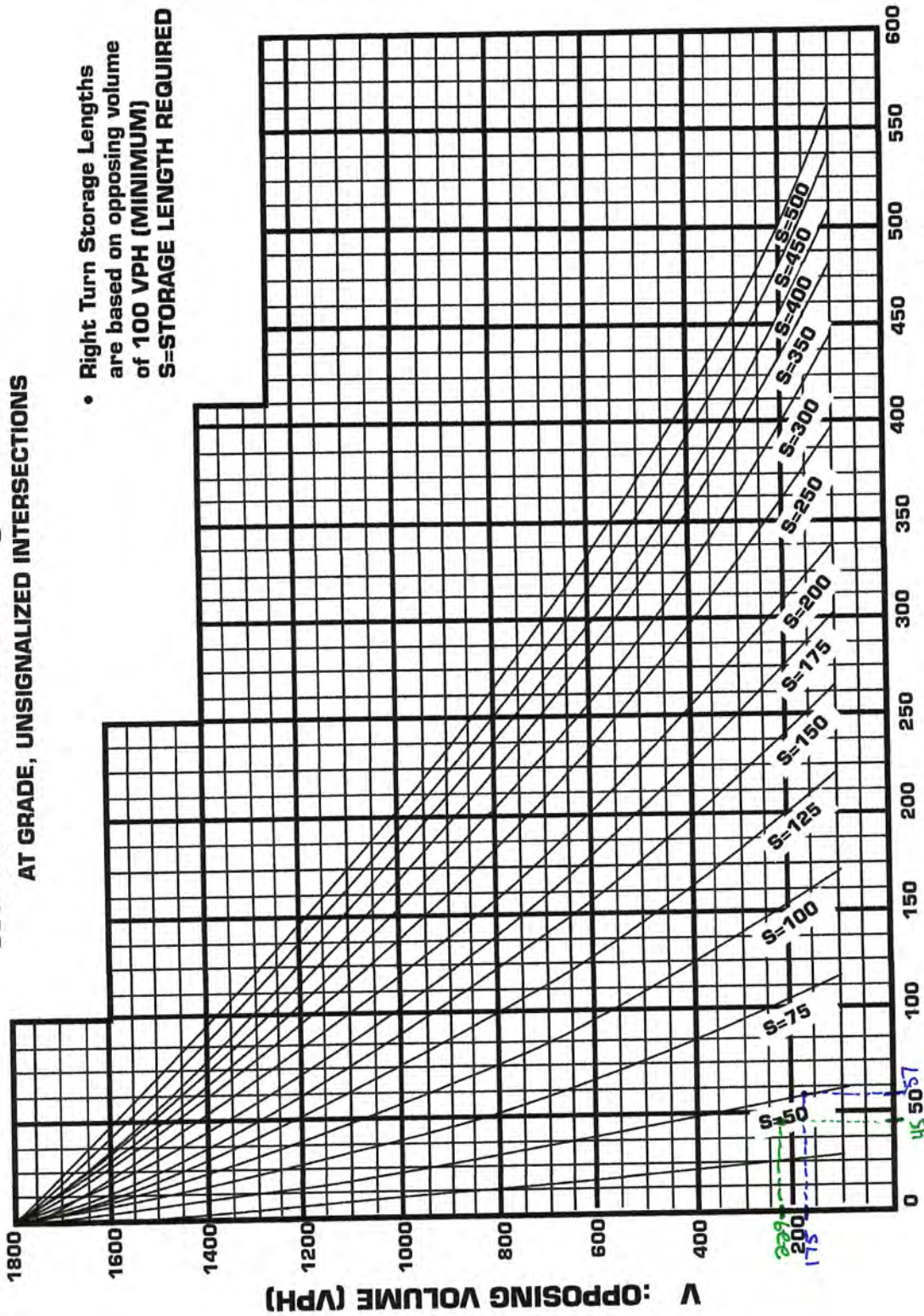
100, 100
 134
 137

Brickyard @ McKinney AM Peak: $V_L = 57$ $V = 175$
 Movement: Westbound LT PM Peak: $V_L = 45$ $V = 229$

Warrant for Left and Right-Turn Lanes

AT GRADE, UNSIGNALIZED INTERSECTIONS

- Right Turn Storage Lengths are based on opposing volume of 100 VPH (MINIMUM)
- S=STORAGE LENGTH REQUIRED



Note: Where adjacent signalization may provide opportunities for gaps in the traffic stream a reduction in the above storage values can be considered on a case by case basis.

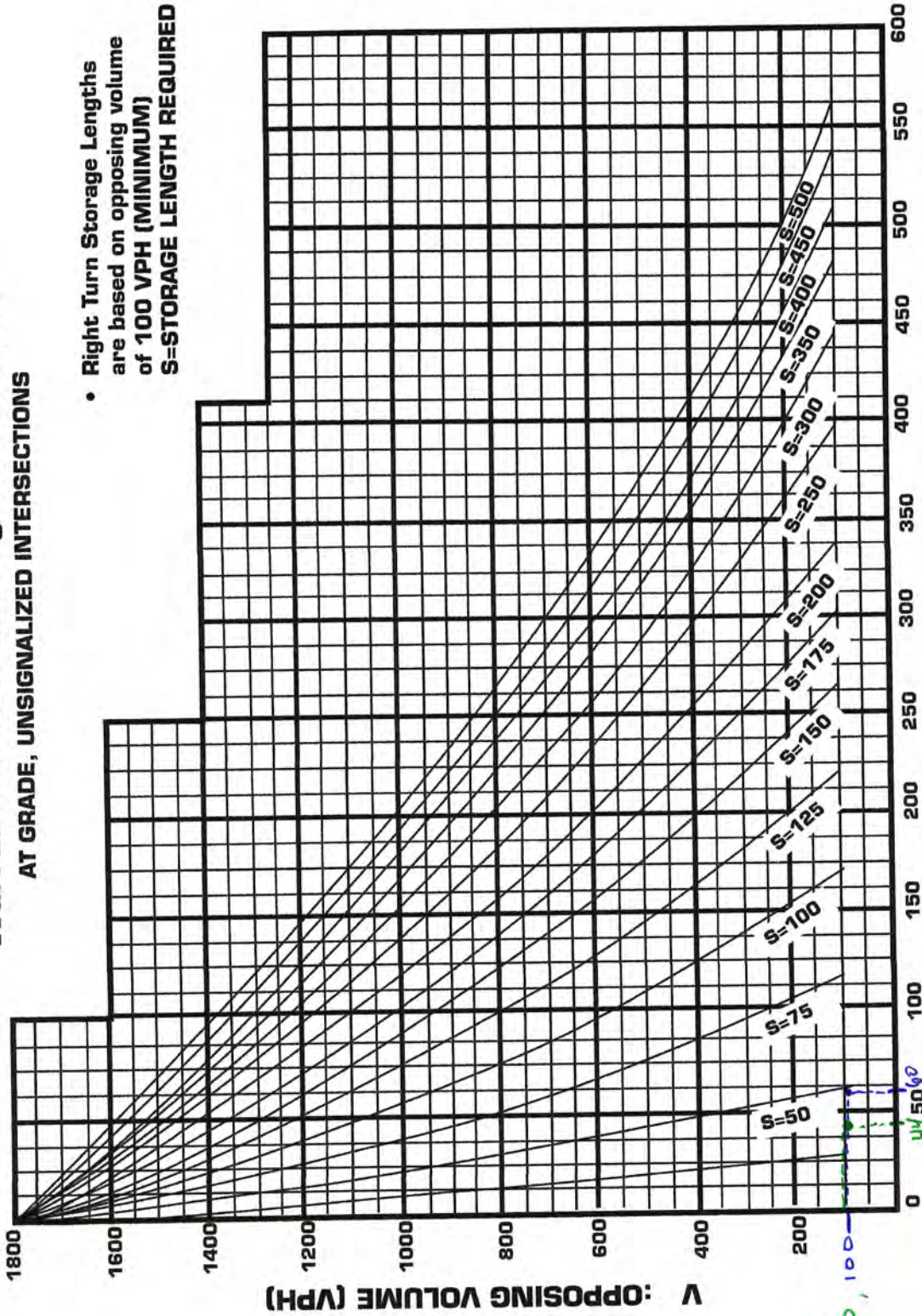
V_L: LEFT TURNING VOLUME (VPH)
 V: RIGHT TURNING VOLUME (VPH)

Storage
 AM - 50'
 PM - 50'

Pisgah View (North) @ McKinney
 Movement: Eastbound RT
 AM Peak: $V_R = 60$ $V = 100$
 PM Peak: $V_R = 44$ $V = 100$

Warrant for Left and Right-Turn Lanes

AT GRADE, UNSIGNALIZED INTERSECTIONS



- Right Turn Storage Lengths are based on opposing volume of 100 VPH (MINIMUM)
- S=STORAGE LENGTH REQUIRED

Note: Where adjacent signalization may provide opportunities for gaps in the traffic stream a reduction in the above storage values can be considered on a case by case basis.

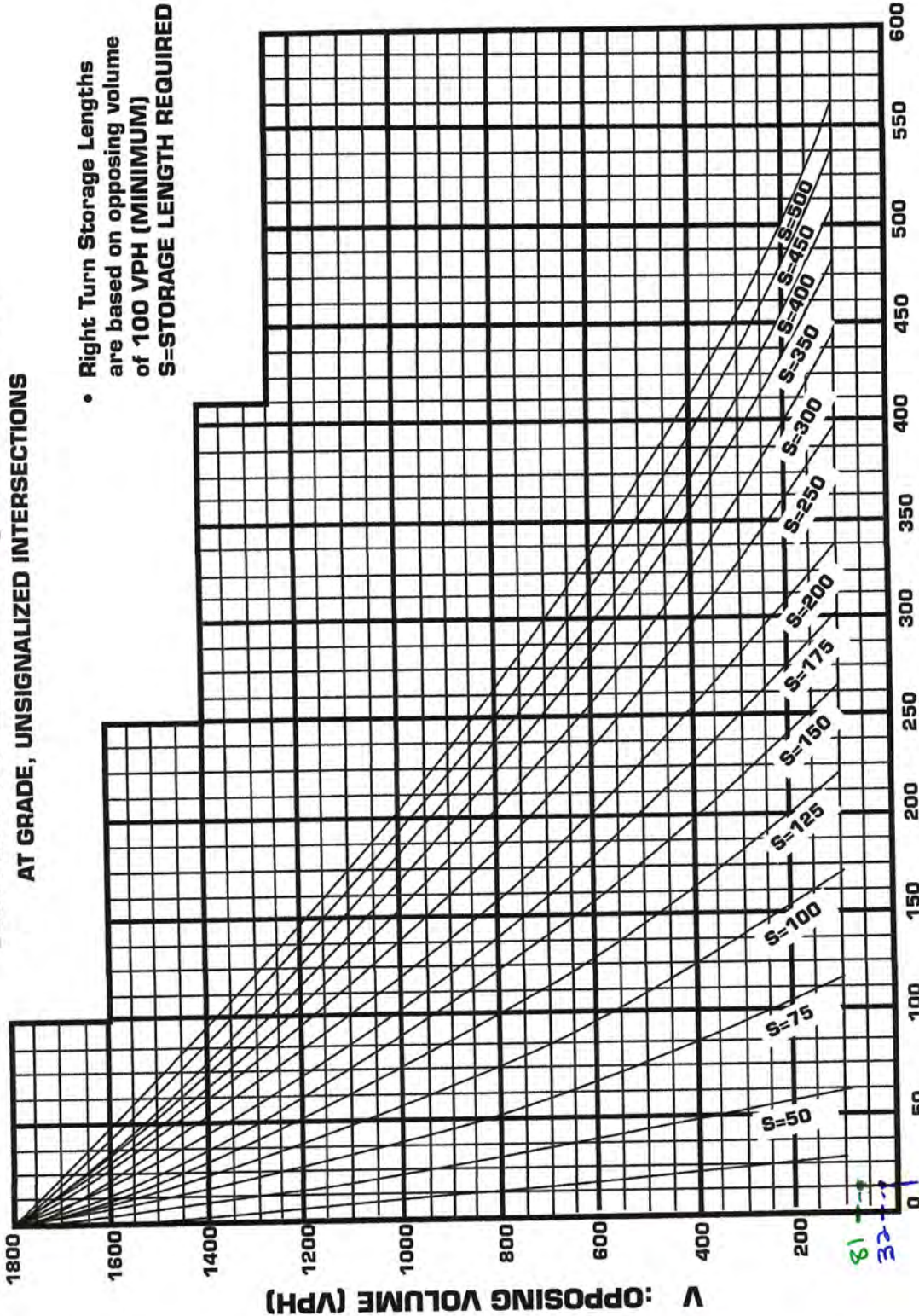
V: LEFT TURNING VOLUME (VPH)
 V_R: RIGHT TURNING VOLUME (VPH)

Storage
 AM - 50'
 PM - 50'

Pisgah View (south) @ McKinney AM Peak: $V_L = 32$ $V = 12$
 Movement: Eastbound LT PM Peak: $V_L = 81$ $V = 12$

Warrant for Left and Right-Turn Lanes
 AT GRADE, UNSIGNALIZED INTERSECTIONS

- Right Turn Storage Lengths are based on opposing volume of 100 VPH (MINIMUM)
 S=STORAGE LENGTH REQUIRED



Note: Where adjacent signalization may provide opportunities for gaps in the traffic stream a reduction in the above storage values can be considered on a case by case basis.

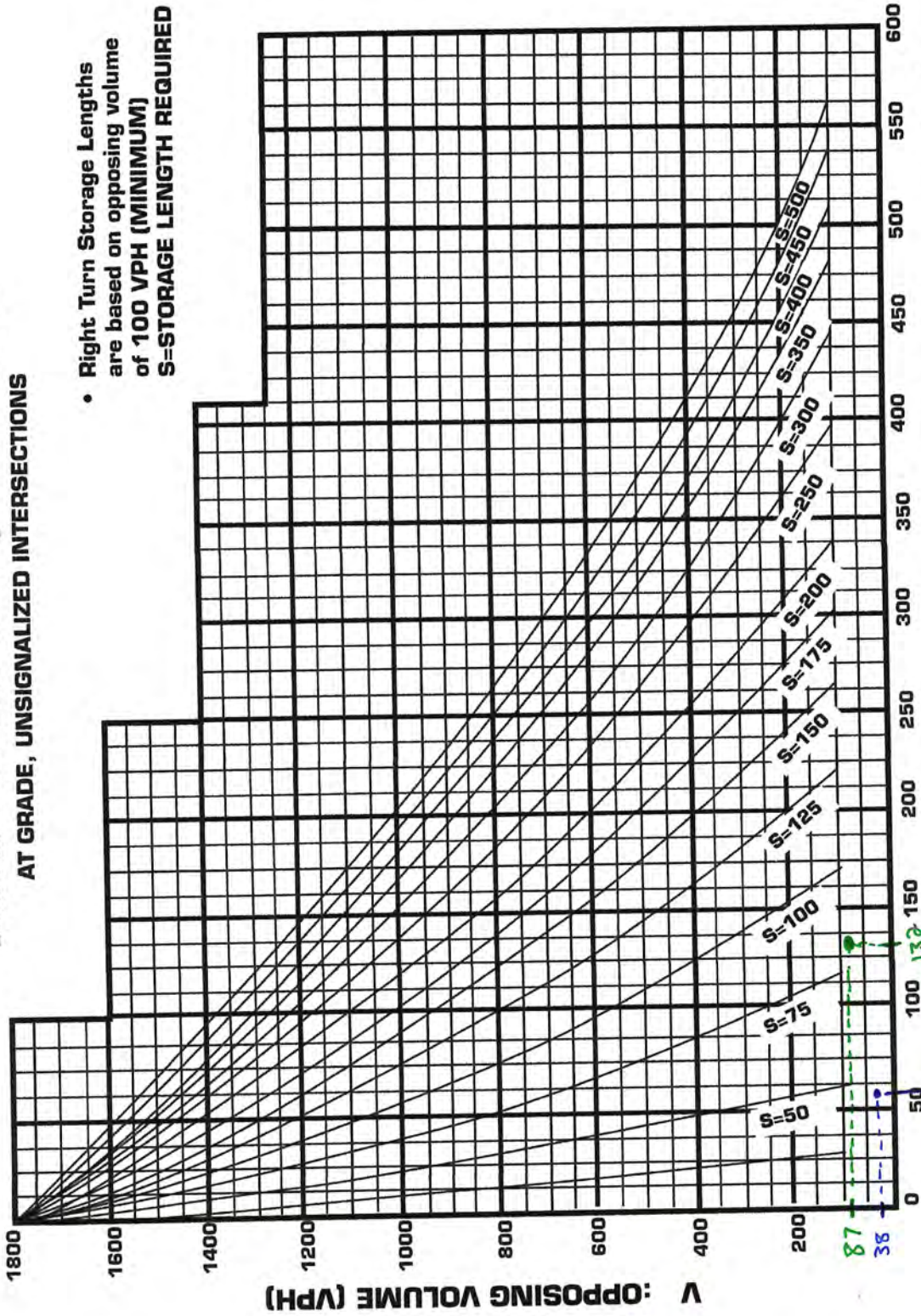
V: LEFT TURNING VOLUME (VPH)
 V: RIGHT TURNING VOLUME (VPH)

Storage
 AM - 0'
 PM - 0'

Site Access "A" @ McKinney AM Peak: $V_L = 57$ $V = 38$
 Movement: Eastbound LT PM Peak: $V_L = 132$ $V = 87$

Warrant for Left and Right-Turn Lanes
 AT GRADE, UNSIGNALIZED INTERSECTIONS

- Right Turn Storage Lengths are based on opposing volume of 100 VPH (MINIMUM)
 S=STORAGE LENGTH REQUIRED



Note: Where adjacent signalization may provide opportunities for gaps in the traffic stream a reduction in the above storage values can be considered on a case by case basis.

V_L : LEFT TURNING VOLUME (VPH)
 V_R : RIGHT TURNING VOLUME (VPH)

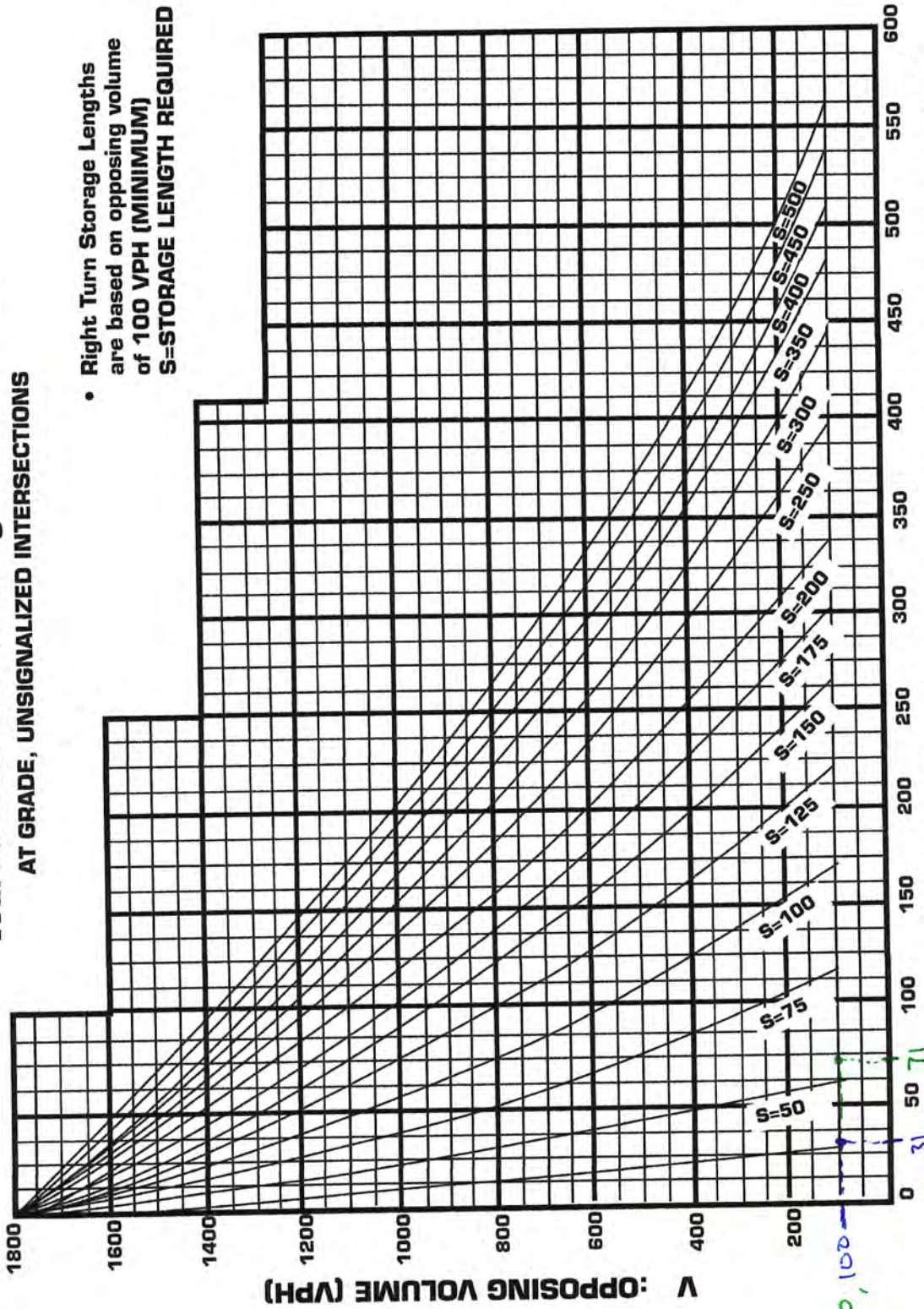
Storage
 50' - AM
 100' - PM

Site Access "A" @ McKinney AM Peak: $V_L = 31$ $V = 100$
 Movement: Westbound RT PM Peak: $V_L = 71$ $V = 100$

Warrant for Left and Right-Turn Lanes

AT GRADE, UNSIGNALIZED INTERSECTIONS

- Right Turn Storage Lengths are based on opposing volume of 100 VPH (MINIMUM)
- S=STORAGE LENGTH REQUIRED



Note: Where adjacent signalization may provide opportunities for gaps in the traffic stream a reduction in the above storage values can be considered on a case by case basis.

V_L : LEFT TURNING VOLUME (VPH)
 V_R : RIGHT TURNING VOLUME (VPH)

Storage
 AM - 50'
 PM - 75'

100, 100
 31 50 71