Traffic Study

Estates at Lynn Lane

Proposed Residential Development

prepared for:

Tulsa L. Development, LLC.

S. Lynn Lane Road

Broken Arrow, Oklahoma

PETERS & ASSOCIATES
ENGINEERS, INC.
• CIVIL & TRAFFIC ENGINEERING •
5507 Ranch Drive - Suite 209
Little Rock, Arkansas 72223 (501) 868-3999

Project No.: P-2070

December 1, 2020

TABLE OF CONTENTS

INTRODUCTION

Peters & Associates Engineers, Inc., has conducted a traffic engineering study relating to a single-family residential development on approximately 68 acres on the east side of S. Lynn Lane Road (S. 9th Street), approximately 0.4 mile north of E. New Orleans Street (E. 101st Street) and approximately 0.5 mile south of E. 91st Street (E. Washington Street) in Broken Arrow, Oklahoma. Access to the residential site is proposed to be provided by one fully-directional new street (Gary Place) intersecting S. Lynn Lane Road. There are also connections planned to adjacent developments to the north and to the east as a part of this development which have been taken into consideration as a part of this study. The primary focus of this study is to assess traffic operational characteristics of the nearby intersections of E. New Orleans Street and S. Lynn Lane Road, E. 91st Street and S. Lynn Lane Road, New Orleans Street and S. 23rd Street and of the new street (Gary Place) intersection along S. Lynn Lane Road proposed to serve the development so they provide safe and acceptable operation. The residential single-family site is proposed to consist of approximately 255 lots as indicated on the project site plan (a reduced copy of the plan is included in the Appendix for reference).

This is a report of methodology and findings relating to a traffic engineering study undertaken to:

- Evaluate existing traffic conditions in the vicinity of the site.

- Determine projected traffic volumes entering and exiting the proposed development at the new street intersection (Gary Place) along S. Lynn Lane Road proposed to serve the site and the intersections of E. New Orleans Street and S. Lynn Lane Road, E. 91st Street and S. Lynn Lane Road, and New Orleans Street and S. 23rd Street.

- Identify the effects on traffic operations for existing traffic in combination with site-generated traffic associated with the single-family residential development as proposed.

- Evaluate traffic operations for the study intersections and make recommendations for improvements which may be necessary and appropriate for acceptable traffic operations.

In the following sections of this traffic study report are traffic data, study methods, findings and recommendations. The study is technical in nature. Analysis techniques employed are those most commonly used in the traffic engineering profession for traffic impact analysis. Certain data and calculations relative to traffic operational analysis are referenced in the report. Complete calculations and data are included in the Appendix of the report.

THE SITE

The location of the development is within the city limits of Broken Arrow in Wagoner County, Oklahoma. The single-family residential development is proposed to be located on approximately 68 acres on the east side of S. Lynn Lane Road (S. 9th Street), approximately 0.4 mile north of E. New Orleans Street (E. 101st Street) and approximately 0.5 mile south of E. 91st Street (E. Washington Street). The residential single-family site is proposed to consist of approximately 255 lots plus new streets as indicated on the project site plan. The proposed development site location and vicinity are shown on Figures 1 and 2, which follow.

Figure 1 – Vicinity Map

Figure 2 – Site Location Map

Access to the single-family residential development site, as shown on the site plan, is proposed to be provided by one fully-directional new street (Gary Place) intersecting S. Lynn Lane Road. There are also connections planned to adjacent developments to the north and to the east as a part of this development which have been taken into consideration as a part of this study. Gary Place at S. Lynn Lane Road is proposed as fully-directional consisting of an outbound right-turn lane, an outbound left-turn lane and one inbound lane receiving lane.

The following photos show the general layout of the intersections of E. New Orleans Street and S. Lynn Lane Road, E. 91st Street and S. Lynn Lane Road, and New Orleans Street and S. 23rd Street in the vicinity of the site. Photos were taken at locations as indicated on the captions.

E. New Orleans Street and S. Lynn Lane Road

Looking west on E. New Orleans Street toward S. Lynn Lane Road.

Looking north on S. Lynn Lane Road toward E. New Orleans Street.

S. Lynn Lane Road and E. 91st Street

Looking east on E. 91st Street toward S. Lynn Lane Road.

Looking north on S. Lynn Lane Road toward E. 91st Street.

New Orleans Street and S. 23rd Street

Looking east on E. New Orleans Street toward S. 23rd Street.

Looking west on E. New Orleans Street toward S. 23rd Street.

EXISTING TRAFFIC CONDITIONS

Traffic count data collected as a part of this study include AM, school PM and typical PM peak hours vehicle turning movement counts at the following intersections:

- E. New Orleans Street and S. Lynn Lane Road.
- E. 91st Street and S. Lynn Lane Road.
- New Orleans Street and S. 23rd Street.

The AM, school PM and typical PM peak hours vehicle turning movement counts made as a part of this study are shown on Figure 3A, "Existing Traffic Volumes - AM Peak Hour," Figure 3B, "Existing Traffic Volumes - School PM Peak Hour." and Figure 3C, "Existing Traffic Volumes - PM Peak Hour." The peak hours vehicle turning movement count data for this intersection are presented in more detail in the Appendix of this report.

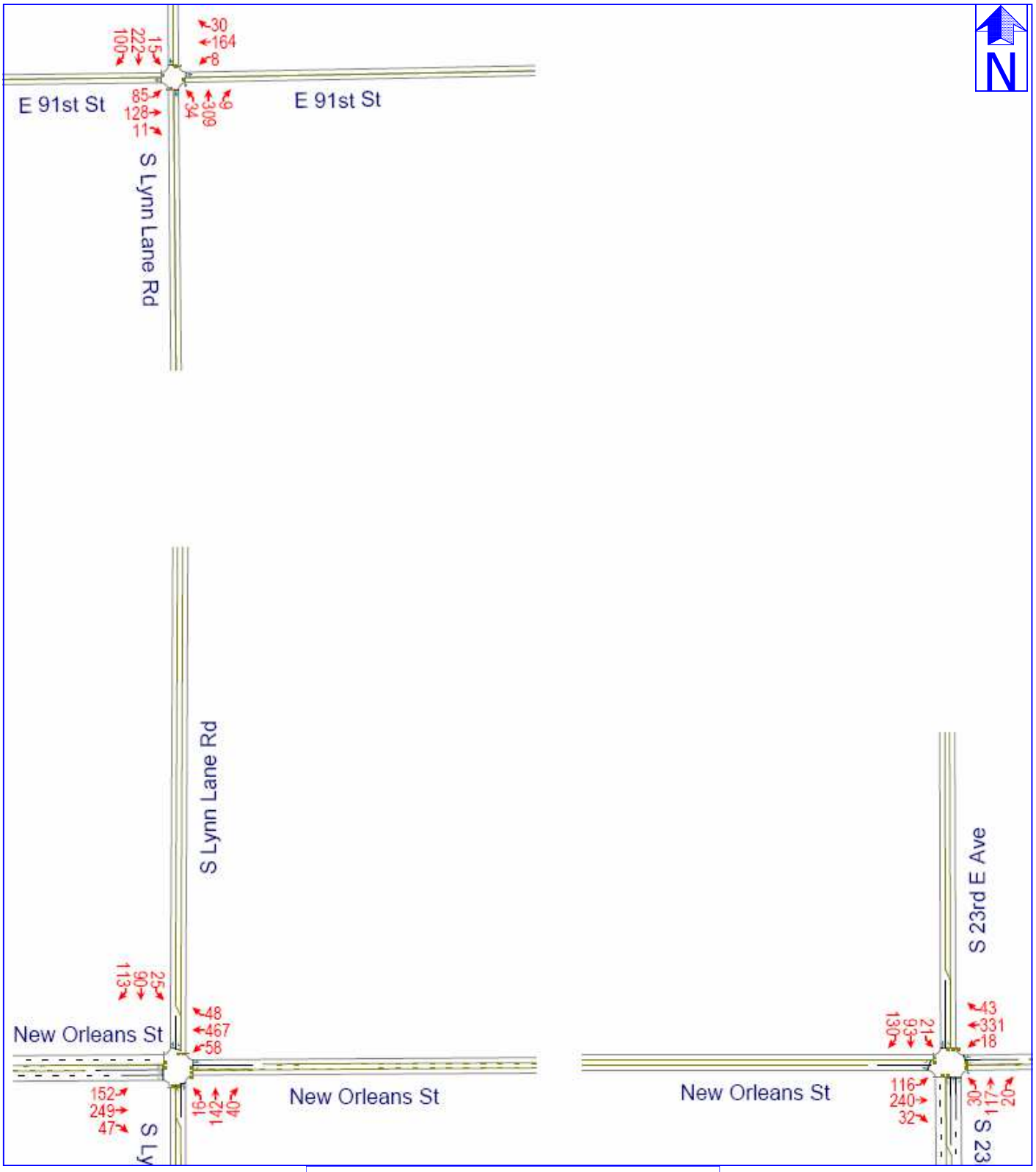


Figure 3A
Existing Traffic Volumes - AM Peak Hour

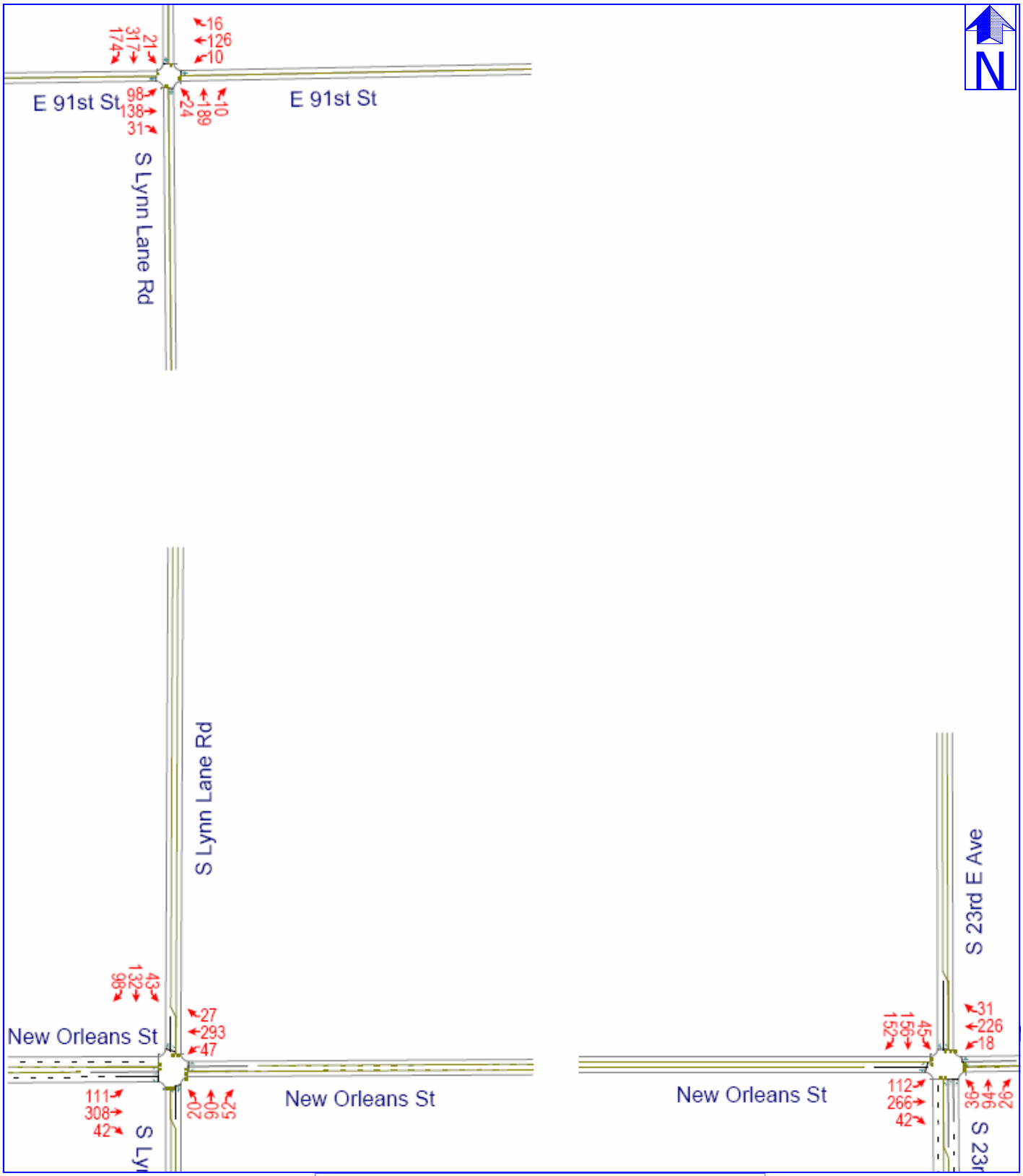


Figure 3B
Existing Traffic Volumes - School PM Peak Hour

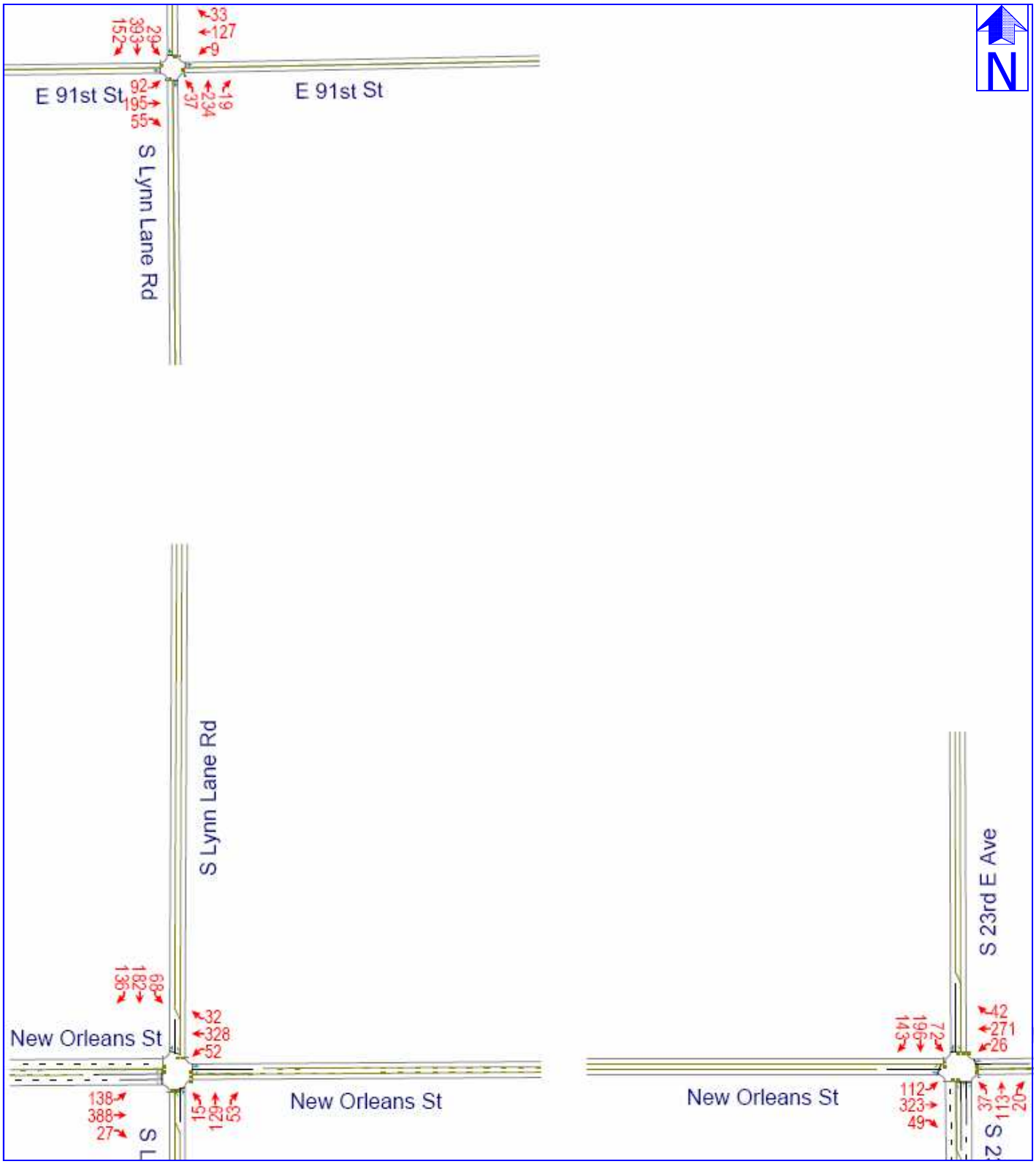


Figure 3C
Existing Traffic Volumes - PM Peak Hour

TRIP GENERATION and SITE TRAFFIC PROJECTIONS

The Trip Generation, an Informational Report, published by the Institute of Transportation Engineers (ITE) and The Trip Generation Manual 10th Edition, 2017, were utilized in calculating the magnitude of traffic volumes expected to be generated by the proposed land-use of the single-family residential development. These are reliable sources for this information and are commonly used in the traffic engineering profession.

Using the selected trip generation rates, calculations were made as a part of this study to provide a reliable estimate of traffic volumes that can be expected to be associated with the development as proposed. These calculations entail applying the appropriate trip-generation rates to the land use proposed for the development. Results of this calculation are summarized on Table 1, "Summary of Trip-Generation."

These calculations indicate that approximately 2,407 vehicle trips (combined in and out) per average weekday are projected to be generated by the proposed single-family residential development land use on this site. Of this total, approximately 189 vehicle trips are estimated during the traffic conditions of the AM peak hour, approximately 189 vehicle trips are estimated during the traffic conditions of the school PM peak hour and approximately 252 vehicle trips are estimated during the traffic conditions of the PM peak hour.

Residential traffic, as will be associated with site, ordinarily contributes to the adjacent street traffic conditions during the on-street AM and PM peak traffic hours. Additionally, there are several schools nearby. Accordingly, the AM, school PM and PM peak traffic periods of the adjacent streets are the traffic operating conditions which have warranted primary traffic analysis as a part of this study.

LAND USE	APPROXIMATE SIZE	ITE CODE	24-HOUR TWO-WAY WEEKDAY VOLUME	AM PEAK HOUR VOLUME		*SCHOOL PM PEAK HOUR VOLUME		PM PEAK HOUR VOLUME	
				ENTER	EXIT	ENTER	EXIT	ENTER	EXIT
Single-Family Residential	255 Lots	210	2,407	47	142	119	70	159	93
		TOTAL ENTERING + EXITING		189		189		252	

**School PM peak hour is not calculated by ITE but is assumed to be approximately 75% of PM peak hour.*

Table 1 – Summary of Trip-Generation

TRAFFIC VOLUME ASSIGNMENTS

Once projected traffic was estimated for the site, directional distributions were made to reflect the percent of anticipated left-turns, right-turns and thru vehicle movements at the study intersections. Vehicle trip distribution was developed based on current traffic counts and travel patterns in the immediate vicinity of the proposed development. Directional distribution percentages used in this report are shown on Figure 3, "Directional Distribution - Site Traffic." The directional distribution percentages for site traffic have been equated to percentage turns for each movement at the study intersections.

Figure 3
Directional Distribution
Site Traffic

The site-generated traffic volumes result from applying the directional distribution percentages to the corresponding projected site-generated traffic volumes summarized on Table 1, "Summary of Trip-Generation."

At the City's request, a calculated growth factor has been added to the projected traffic volumes to calculate representative future background traffic volume growth. A compounded annual growth rate of 2.5 percent per year for five years has been used for future 5-year projected traffic conditions.

The site-generated traffic volumes and corresponding existing background traffic volumes plus background traffic growth have been combined and the results are depicted on Figure 5A, "Projected 5-Year Traffic Volumes - AM Peak Hour," Figure 5B, "Projected 5-Year Traffic Volumes - School PM Peak Hour," and Figure 5C, "Projected 5-Year Traffic Volumes - PM Peak Hour."

Traffic volumes shown on Figures 3A, 3B, 3C, 5A, 5B and 5C are the values used in capacity and level of service calculations conducted as a part of this study. The effect of existing background traffic (i.e. the adjacent street non-site traffic which exists) and projected traffic associated with the site as well as background traffic growth development have thus been accounted for in this analysis.

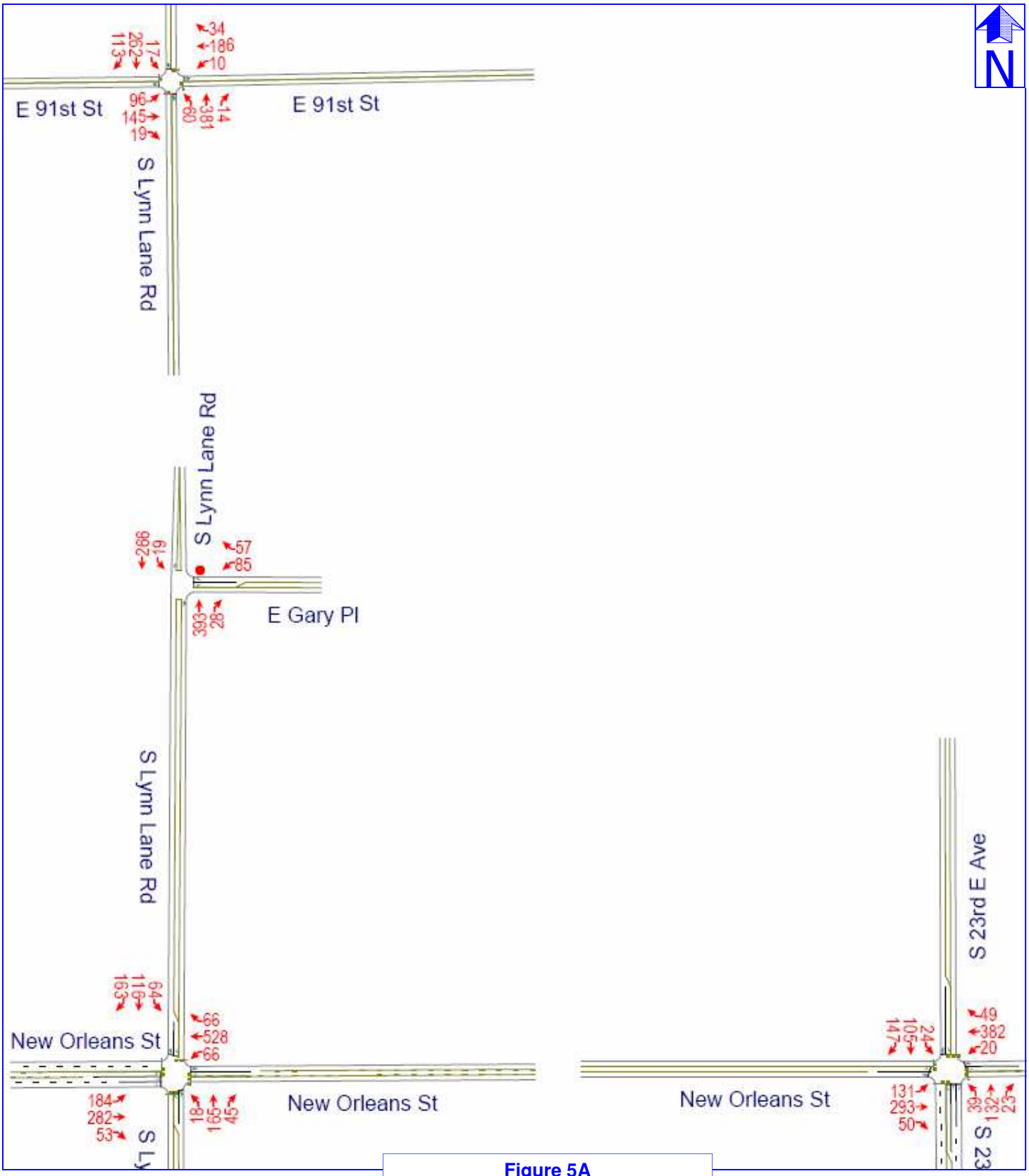


Figure 5A
Projected 5-Year Traffic Volumes
AM Peak Hour

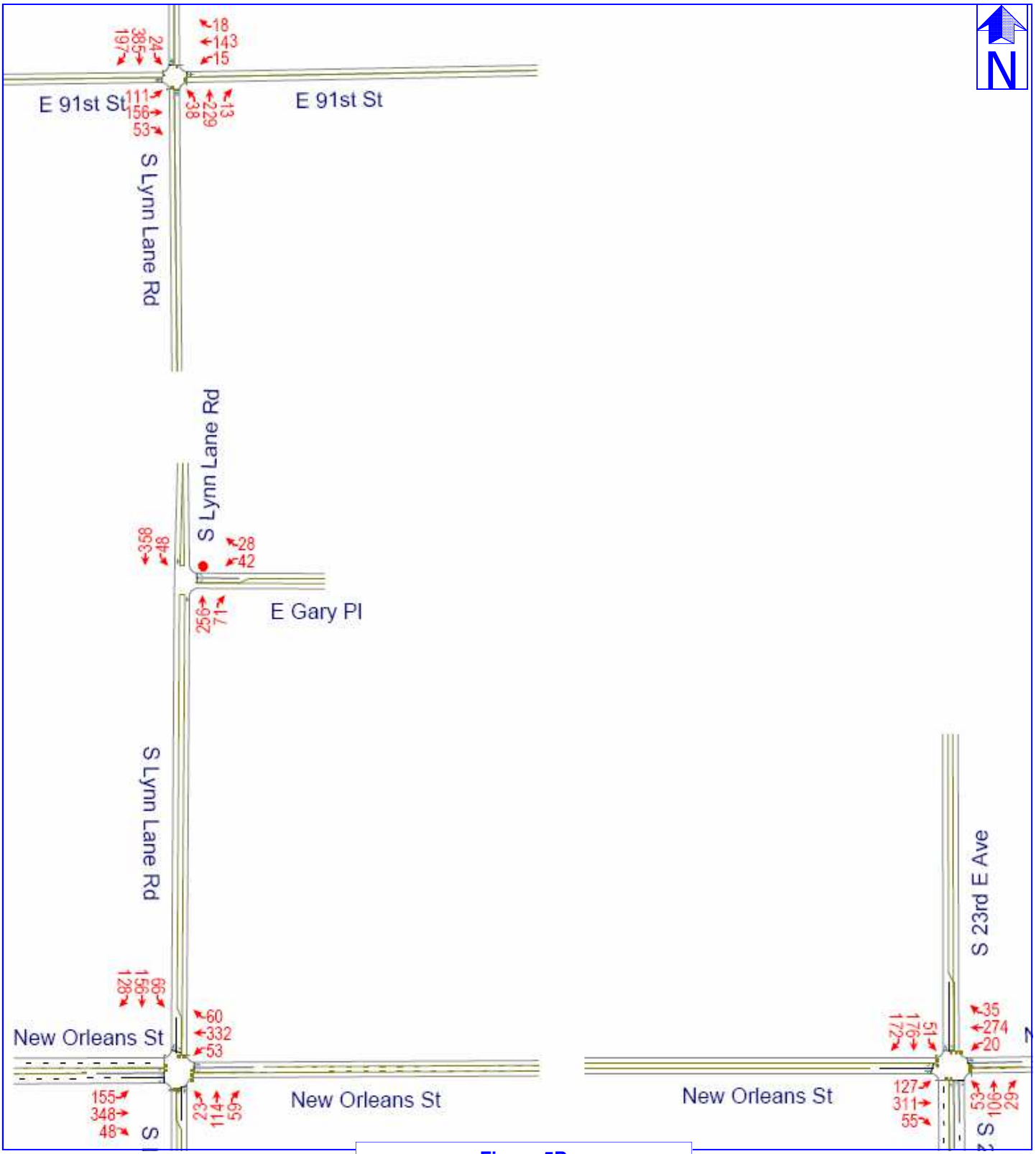


Figure 5B
Projected 5-Year Traffic Volumes
School PM Peak Hour

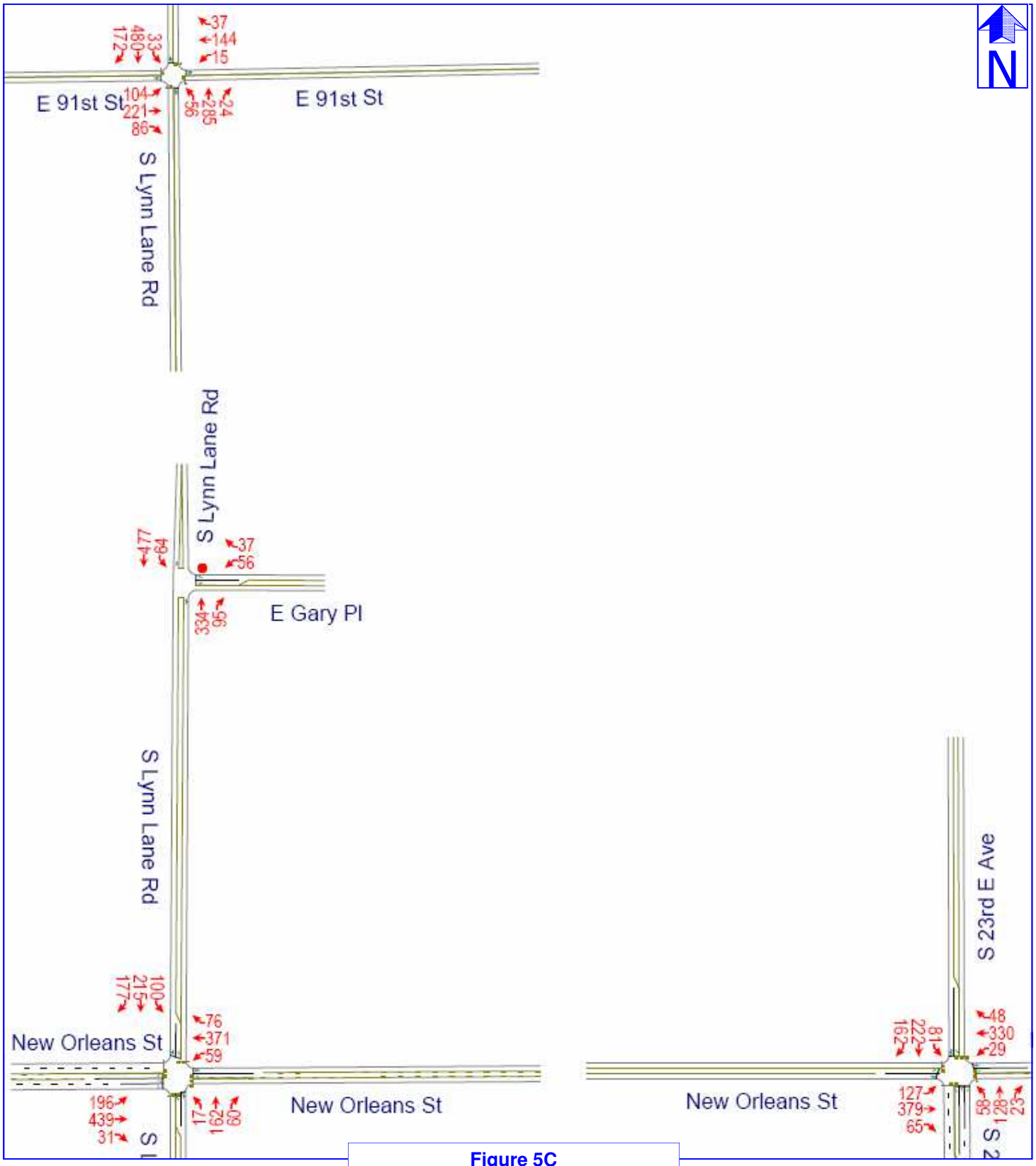


Figure 5C
Projected 5-Year Traffic Volumes
PM Peak Hour

CAPACITY and LEVEL OF SERVICE

Generally, the "capacity" of a street is a measure of its ability to accommodate a certain magnitude of moving vehicles. It is a rate as opposed to a quantity, measured in terms of vehicles per hour. More specifically, street capacity refers to the maximum number of vehicles that a street element (e.g. an intersection) can be expected to accommodate in a given time period under the prevailing roadway and traffic conditions.

Traffic operational analysis for the study intersections were evaluated based on the methodologies outlined in the Highway Capacity Manual, 2010 Edition, published by the Transportation Research Board. The operating conditions at an intersection are graded by the "level of service" experienced by drivers. Level of service (LOS) describes the quality of traffic operating conditions and is rated from "A" to "F". LOS "A" represents the most desirable condition with free-flow movement of traffic with minimal delays. LOS "F" generally indicates congested conditions with excessive delays to motorists. Intermediate grades of B, C, D, and E reflect incremental increases in the average delay per stopped vehicle. Delay is measured in seconds per vehicle. The table below shows the upper limit of delay associated with each level of service for signalized and un-signalized intersections.

Intersection Level of Service Delay Thresholds

Level of Service (LOS)	Signalized	Un-Signalized
A	< 10 Seconds	< 10 Seconds
B	< 20 Seconds	< 15 Seconds
C	< 35 Seconds	< 25 Seconds
D	< 55 Seconds	< 35 Seconds
E	< 80 Seconds	< 50 Seconds
F	≥ 80 Seconds	≥ 50 Seconds

The LOS rating deemed acceptable varies by community, facility type and traffic control device. LOS "D" is the desirable goal for movements at un-signalized intersections that must yield to other movements; however, a LOS "E" or "F" is often accepted for low to moderate traffic volumes where the installation of a traffic signal is not warranted by the conditions at the intersection or the location is deemed undesirable for signalization for other reasons. Other reasons may include the close proximity of an existing traffic signal or the presence of a convenient alternative route. For signalized intersections, level of service and average delay relate to all vehicles using the intersection. LOS "D" is the typical desirable standard for signalized and un-signalized intersections. The study intersections were evaluated using the Synchro analysis software package based on Highway Capacity Manual methods. This computer program has been proven to be reliable when used to analyze capacity and levels of traffic service under various operating conditions. Detailed results for all capacity calculations are included in the Appendix. The adjacent street weekday AM, school PM and PM peak traffic periods were used for these calculations. Factors included in the analysis are as follows:

- Existing traffic volumes and patterns.
- Directional distribution of projected traffic volumes.
- Existing and proposed intersection geometry (including elements such as turn lanes, curb radii, etc.).
- Existing background traffic volumes and projected site-generated volumes for projected traffic conditions.
- 5-year background traffic growth.
- Existing and proposed traffic control.

CAPACITY ANALYSIS

Level of Service Analysis Results

Existing Traffic Conditions

Capacity and level of service analysis was performed for existing traffic volumes, lane geometry and traffic control for the AM, school PM and PM peak hours for following study intersections:

- E. New Orleans Street and S. Lynn Lane Road.
- E. 91st Street and S. Lynn Lane Road.
- New Orleans Street and S. 23rd Street.

As indicated in Table 2, "Level of Service Summary – Existing Traffic Conditions," the traffic signal controlled study intersections of E. New Orleans Street and S. Lynn Lane Road, E. 91st Street and S. Lynn Lane Road, and New Orleans Street and S. 23rd Street currently operates at what calculates as an acceptable LOS "C" or better during the existing conditions of the AM, school PM and PM peak hours. Additionally, all vehicle movements at these intersections currently operate at what calculates as an acceptable LOS "D" or better for existing traffic conditions for the AM, school PM and PM peak hours.

Traffic volumes used for this analysis are shown on Figure 3A, "Existing Traffic Volumes - AM Peak Hour," Figure 3B, "Existing Traffic Volumes - School PM Peak Hour." and Figure 3C, "Existing Traffic Volumes - PM Peak Hour."

Projected Traffic Conditions

Capacity and LOS analysis was performed for projected traffic conditions at full build-out of the site plus five-years background growth for the AM, school PM and PM peak hours for the following intersections:

- E. New Orleans Street and S. Lynn Lane Road.
- E. 91st Street and S. Lynn Lane Road.
- New Orleans Street and S. 23rd Street.
- S. Lynn Lane Road and proposed Gary Place.

Traffic volumes used for these projected traffic conditions are shown on Figure 5A, "Projected 5-Year Traffic Volumes - AM Peak Hour," Figure 5B, "Projected 5-Year Traffic Volumes - School PM Peak Hour," and Figure 5C, "Projected 5-Year Traffic Volumes - PM Peak Hour." The operating conditions projected to exist at the study intersections are summarized in Table 3, "Level of Service Summary - Projected 5-Year Traffic Conditions."

As indicated in Table 3, the overall LOS for the traffic signal controlled study intersections of E. New Orleans Street and S. Lynn Lane Road, E. 91st Street and S. Lynn Lane Road, and New Orleans Street and S. 23rd Street are expected to operate at what calculates as an acceptable LOS "D" or better during projected conditions for the AM, school PM and PM peak hours. Additionally, all vehicle movements at these traffic signal controlled intersections as well as the proposed "Stop" sign controlled new site street intersection of S. Lynn Lane Road and Gary Place are expected to operate at what calculates as an acceptable LOS "D" or better for projected traffic conditions for the AM, school PM and PM peak hours.

Projected average control delay (seconds per vehicle) and intersection capacity utilization are found to be acceptable for each of the study intersections during the AM, school PM and PM peak hours for the projected 5-year traffic conditions with the development as proposed.

EXISTING TRAFFIC CONDITIONS		Traffic Control	Eastbound Left-Turn	Eastbound Thru	Eastbound Right-Turn	Westbound Left-Turn	Westbound Thru	Westbound Right-Turn	Northbound Left-Turn	Northbound Thru	Northbound Right-Turn	Southbound Left-Turn	Southbound Thru	Southbound Right-Turn	Overall Intersection	Avg. Control Delay Seconds / Vehicle	Intersection Capacity Utilization (%)
INTERSECTION	PEAK HR		PEAK HOUR - LEVEL OF SERVICE														
E. New Orleans Street and S. Lynn Lane Road	AM	SIGNAL	D	B	A	A	D		B	C		B	C		**C**	28.1	68.3%
	School PM		B	C	A	B	C		B	B		B	B		**B**	19.7	55.9%
	PM		B	C	A	B	C		B	B		B	B		**C**	21.6	65.2%
E. 91st Street and S. Lynn Lane Road	AM	SIGNAL	B			B			A			A			**B**	10.7	67.2%
	School PM		C			B			A			B			**B**	14.5	69.0%
	PM		C			B			A			B			**B**	18.7	78.5%
New Orleans Street and S. 23rd Street	AM	SIGNAL	B	B		A	C		B	B	A	B	B		**B**	19.1	59.4%
	School PM		B	B		B	C		B	B	A	B	B		**B**	18.3	57.4%
	PM		B	C		B	C		B	B	A	B	C		**C**	21.2	62.4%

Table 2 - Level of Service Summary - Existing Traffic Conditions

PROJECTED 5-YEAR TRAFFIC CONDITIONS		Traffic Control	Eastbound Left-Turn	Eastbound Thru	Eastbound Right-Turn	Westbound Left-Turn	Westbound Thru	Westbound Right-Turn	Northbound Left-Turn	Northbound Thru	Northbound Right-Turn	Southbound Left-Turn	Southbound Thru	Southbound Right-Turn	Overall Intersection	Avg. Control Delay Seconds / Vehicle	Intersection Capacity Utilization (%)
INTERSECTION	PEAK HR		PEAK HOUR - LEVEL OF SERVICE														
E. New Orleans Street and S. Lynn Lane Road	AM	SIGNAL	D	B	A	A	D		C	D		D	D		**D**	42.1	79.7%
	School PM		C	C	A	B	D		B	B		B	C		**C**	23.0	66.3%
	PM		C	B	A	A	D		C	C		C	D		**C**	29.6	78.7%
E. 91st Street and S. Lynn Lane Road	AM	SIGNAL	C			B			B			B			**B**	14.2	87.3%
	School PM		D			B			A			B			**C**	20.2	78.9%
	PM		D			B			B			C			**C**	29.5	90.5%
New Orleans Street and S. 23rd Street	AM	SIGNAL	C	B		A	C		B	B	A	B	B		**C**	22.9	65.4%
	School PM		B	C		B	C		B	B	A	B	C		**C**	23.9	63.7%
	PM		C	C		B	C		B	B	A	B	C		**C**	26.4	69.9%
S. Lynn Lane Road and Gary Place	AM	"STOP" SIGN				C		B		A		A			**n/a**	2.8	43.9%
	School PM					C		B		A		A			**n/a**	1.8	56.0%
	PM					D		B		A		A			**n/a**	2.3	69.8%

Table 3 - Level of Service Summary - Projected 5-Year Traffic Conditions

PROPOSED NEW STREET INTERSECTIONS

With the acceptable traffic operations for the projected traffic conditions (each vehicle movement is expected to operate at what calculates to an acceptable LOS "D" or better during the AM, school PM and PM peak hours), the proposed location of the new street (Gary Place) can be expected to serve access at the site well. There are no sight distance issues at the proposed new street location. The new street intersection should function safely as proposed.

The City of Broken Arrow has criteria guidelines for deceleration lanes at proposed new street intersections. The requirements have been reviewed for the proposed new street intersection as a part of this study. Per the City's criteria, the *National Cooperative Highway Research Report 279, INTERSECTION CHANNELIZATION DESIGN GUIDE, Transportation Research Board, National Research Council,* latest edition, states the following in Section 4006.4 DECELERATION LANES:

A deceleration lane is required when:

1. The number of vehicles making a right turn from the arterial is 100 vehicles per hour (vph) or more during the peak period.
2. Topography makes the deceleration lane necessary for safety.
3. Un-signalized capacity analysis indicates the need for it.

The new street (Gary Place) does not meet any of the aforementioned criteria guidelines. The maximum number of vehicles projected to turn right into the site from S. Lynn Lane Road at Gary Place is 28 during the AM peak hour, 71 during the school PM peak hour and 95 during the PM peak hour (each of these are below the 100 vehicles per hour criteria). There are no sight distance issues at the proposed new street location and capacity and LOS results indicate this proposed new street intersection is expected to operate satisfactorily without the addition of a deceleration lane.

If the new street intersection location (Gary Place) is constructed as proposed, it would allow acceptable traffic operations and provide safety and convenience for vehicles entering and exiting the site.

SUMMARY OF FINDINGS

Findings of this study are summarized as follows:

- For the development as proposed, approximately 2,407 vehicle trips (combined in and out) per average weekday are projected to be generated by the proposed single-family residential development land use on this site. Of this total, approximately 189 vehicle trips are estimated during the traffic conditions of the AM peak hour, approximately 189 vehicle trips are estimated during the traffic conditions of the school PM peak hour and approximately 252 vehicle trips are estimated during the traffic conditions of the PM peak hour.

- Capacity and level of service analysis was performed for existing traffic volumes, lane geometry and traffic control for the AM, school PM and PM peak hours for the study intersections. The traffic signal controlled study intersections of E. New Orleans Street and S. Lynn Lane Road, E. 91st Street and S. Lynn Lane Road, and New Orleans Street and S. 23rd Street currently operates at what calculates as an acceptable LOS "C" or better during the existing conditions of the AM, school PM and PM peak hours. Additionally, all vehicle movements at these intersections currently operate at what calculates as an acceptable LOS "D" or better for existing traffic conditions for the AM, school PM and PM peak hours.

- Capacity and LOS analysis was performed for projected traffic conditions at full build-out of the site plus five-years background growth for the AM, school PM and PM peak hours for the study intersections. The overall LOS for the traffic signal controlled study intersections of E. New Orleans Street and S. Lynn Lane Road, E. 91st Street and S. Lynn Lane Road, and New Orleans Street and S. 23rd Street are expected to operate at what calculates as an acceptable LOS "D" or better during projected conditions for the AM, school PM and PM peak hours. Additionally, all vehicle movements at these traffic signal controlled intersections as well as the proposed "Stop" sign controlled new site street intersection of S. Lynn Lane Road and Gary Place are expected to operate at what calculates as an acceptable LOS "D" or better for projected traffic conditions for the AM, school PM and PM peak hours.

- Projected average control delay (seconds per vehicle) and intersection capacity utilization are found to be acceptable for each of the study intersections during the AM, school PM and PM peak hours for the projected 5-year traffic conditions with the development as proposed.

- The new street (Gary Place) intersection as S. Lynn Lane Road does not meet any of the aforementioned deceleration right-turn lane criteria guidelines. The maximum number of vehicles projected to turn right into the site from S. Lynn Lane Road at Gary Place is below the 100 vehicle criteria for the AM, school PM and PM peak hours. There are no sight distance issues at the proposed new street location and capacity and LOS results indicate this proposed new street intersection is expected to operate satisfactorily without the addition of a deceleration lane.

- If the new street intersection location (Gary Place) is constructed as proposed, it would allow acceptable traffic operations and provide safety and convenience for vehicles entering and exiting the site.

PETERS & ASSOCIATES
ENGINEERS, INC.

APPENDIX

Site Plan

Preliminary Plat

PUD-315

Estates at Lynn Lane

PART OF THE NORTH HALF OF THE SOUTHWEST QUARTER (N/2 SW/4) OF SECTION TWENTY-FOUR (24)
TOWNSHIP EIGHTEEN (18) NORTH, RANGE FOURTEEN (14) EAST OF THE INDIAN MERIDIAN
A SUBDIVISION WITHIN THE CITY OF BROKEN ARROW, TULSA COUNTY, STATE OF OKLAHOMA

NORTH

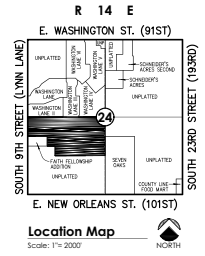
Scale: 1"= 100'
Tanner Consulting

LEGEND

B/L	BUILDING LINE
B/U	BUILDING LINE & UTILITY EASEMENT
BK PG	BOOK & PAGE
CB	CHORD BEARING
CD	CHORD DISTANCE
CL	CENTERLINE
Δ	DELTA ANGLE
DOC	DOCUMENT
ESMT	EASEMENT
GOVT	GOVERNMENT
LNA	LIMITS OF NO ACCESS
ODE	OVERLAND DRAINAGE EASEMENT
RES.	RESERVE
R.A.	RESTRICTED ACCESS
R/W	RIGHT-OF-WAY
U/E	UTILITY EASEMENT
1234	ADDRESS ASSIGNED
○	FOUND MONUMENT
●	SET MONUMENT (SEE NOTE 2)

OWNER:
Oklahoma Land Investments Co, LLC & Memorial Drive, L.L.C.
AN OKLAHOMA LIMITED LIABILITY COMPANY
JOHN DAVIS, MANAGER
2219 E. Skelly Dr.,
Tulsa, Oklahoma 74105
Phone: (918)749-1636

SURVEYOR/ENGINEER:
Tanner Consulting, L.L.C.
DAN E. TANNER, P.L.S. NO. 1435
OK CA NO. 2661, EXPIRES 6/30/2021
EMAIL: DAN@TANNERBAITSHOP.COM
5323 South Lewis Avenue
Tulsa, Oklahoma 74105
Phone: (918) 745-9929

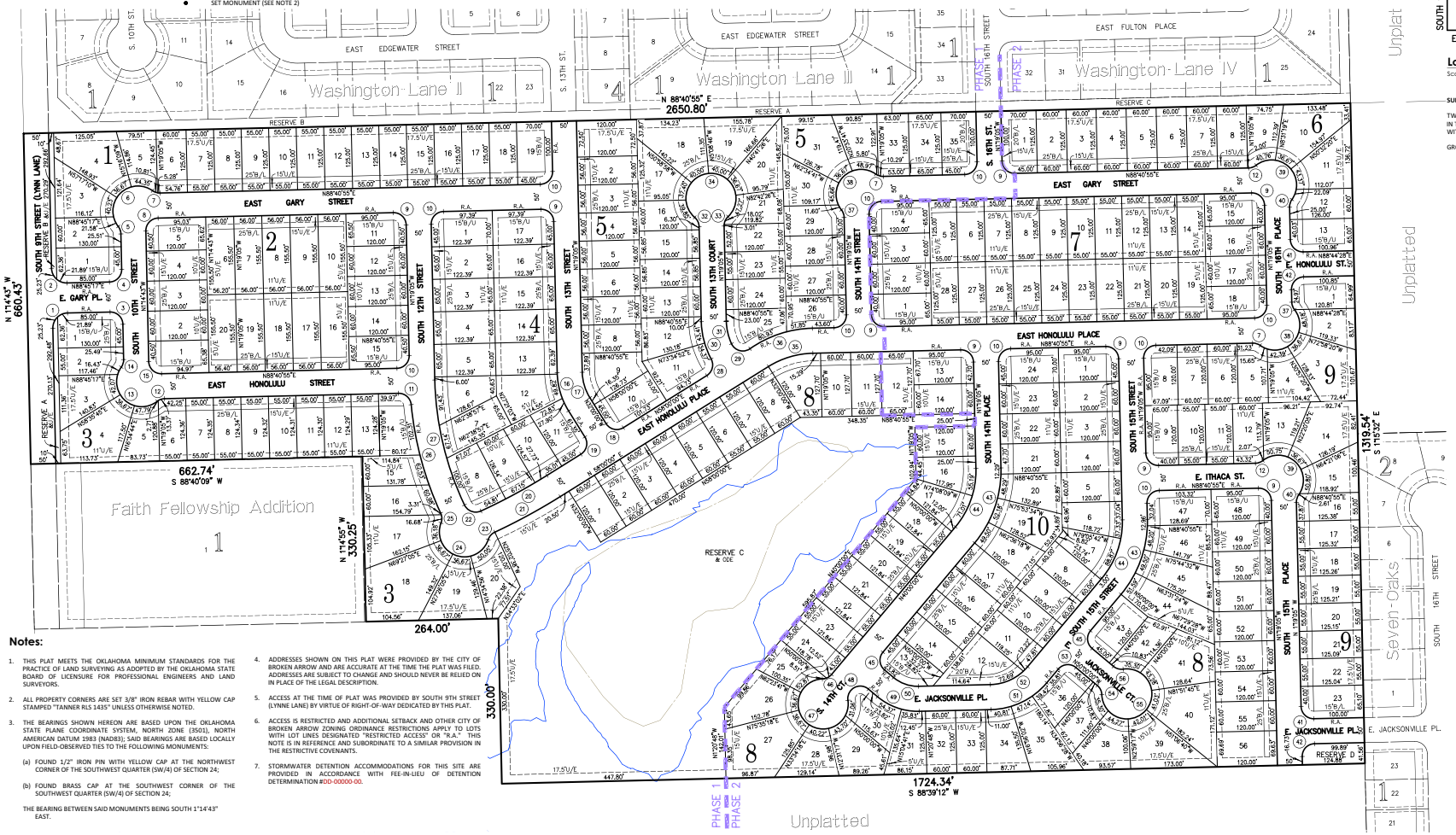


Location Map
Scale: 1"= 2000'

SUBDIVISION CONTAINS:

TWO-HUNDRED FIFTY-FIVE (255) LOTS
IN TEN (10) BLOCKS
WITH FOUR (4) RESERVES

GROSS SUBDIVISION AREA: 68.297 ACRES



Notes:

1. THIS PLAT MEETS THE OKLAHOMA MINIMUM STANDARDS FOR THE PRACTICE OF LAND SURVEYING AS ADOPTED BY THE OKLAHOMA STATE BOARD OF LICENSURE FOR PROFESSIONAL ENGINEERS AND LAND SURVEYORS.
2. ALL PROPERTY CORNERS ARE SET 3/8" IRON REBAR WITH YELLOW CAP STAMPED "TANNER RLS 1435" UNLESS OTHERWISE NOTED.
3. THE BEARINGS SHOWN HEREON ARE BASED UPON THE OKLAHOMA STATE PLANE COORDINATE SYSTEM, NORTH ZONE (3501), NORTH AMERICAN DATUM 1983 (NAD83); SAID BEARINGS ARE BASED LOCALLY UPON FIELD-OBSERVED TIES TO THE FOLLOWING MONUMENTS:
   (a) FOUND 1/2" IRON PIN WITH YELLOW CAP AT THE NORTHWEST CORNER OF THE SOUTHWEST QUARTER (SW/4) OF SECTION 24;
   (b) FOUND BRASS CAP AT THE SOUTHWEST CORNER OF THE SOUTHWEST QUARTER (SW/4) OF SECTION 24;
   THE BEARING BETWEEN SAID MONUMENTS BEING SOUTH 1°14'43" EAST.
4. ADDRESSES SHOWN ON THIS PLAT WERE PROVIDED BY THE CITY OF BROKEN ARROW AND ARE ACCURATE AT THE TIME THE PLAT WAS FILED. ADDRESSES ARE SUBJECT TO CHANGE AND SHOULD NEVER BE RELIED ON IN PLACE OF THE LEGAL DESCRIPTION.
5. ACCESS AT THE TIME OF PLAT WAS PROVIDED BY SOUTH 9TH STREET (LYNNE LANE) BY VIRTUE OF RIGHT-OF-WAY DEDICATED BY THIS PLAT.
6. ACCESS IS RESTRICTED AND ADDITIONAL SETBACK AND OTHER CITY OF BROKEN ARROW ZONING ORDINANCE RESTRICTIONS APPLY TO LOTS WITH LOT LINES DESIGNATED "RESTRICTED ACCESS" OR "R.A." THIS NOTE IS IN REFERENCE AND SUBORDINATE TO A SIMILAR PROVISION IN THE RESTRICTIVE COVENANTS.
7. STORMWATER DETENTION ACCOMMODATIONS FOR THIS SITE ARE PROVIDED IN ACCORDANCE WITH FEE-IN-LIEU OF DETENTION DETERMINATION #DD-00000-00.

DATE OF PREPARATION: October 22, 2020

APPROVED _____ by the City Council of the City of Broken Arrow, Oklahoma.

Mayor

Attest: City Clerk

PETERS & ASSOCIATES
ENGINEERS, INC.

Vehicle Turning Movement Count Data

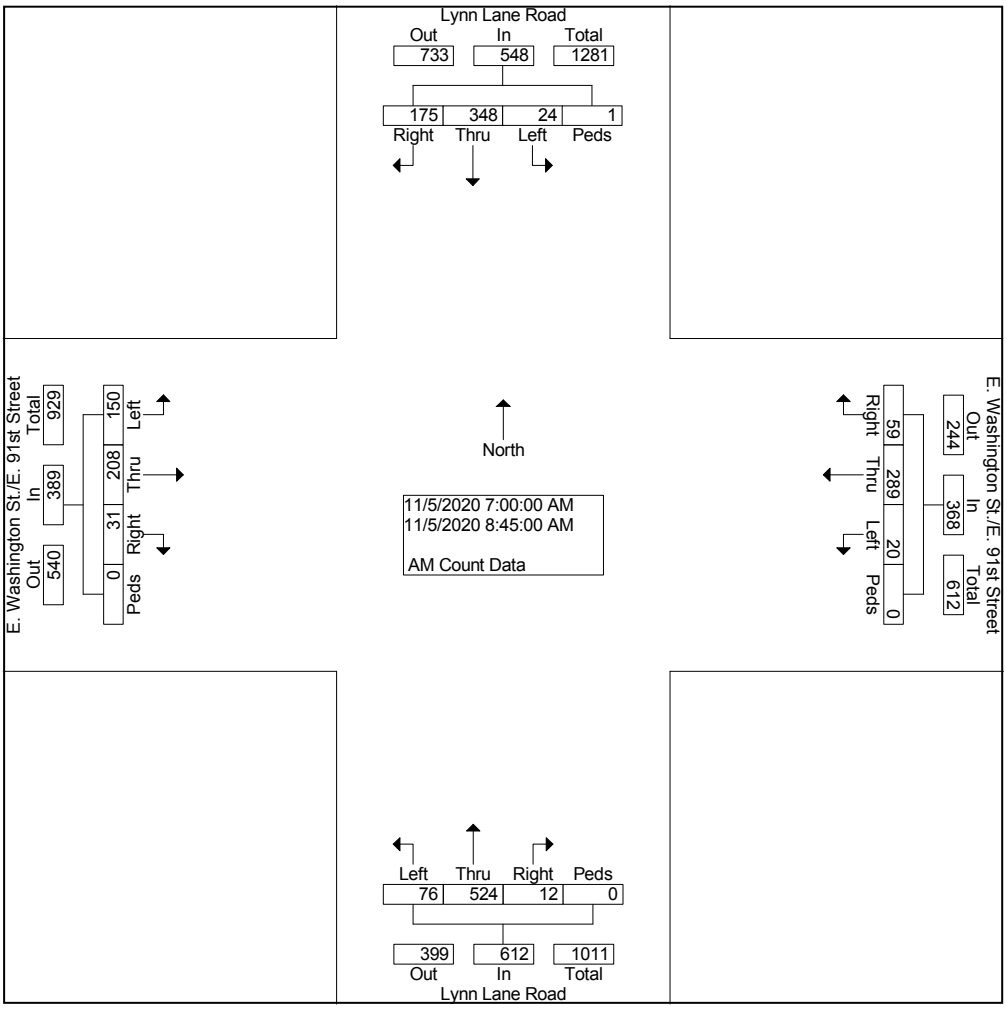
Peters & Assocoieates Engineers, Inc.
Peak Hour Turning Movement Count Data

AM Hour Turning Movement Count Data
E. Washington St..& S Lynn Lane Rd
Broken Arrow, Oklahoma
P-2070

File Name : AM-Ly-Wa
Site Code : 00000000
Start Date : 11/05/2020
Page No : 1

Groups Printed- AM Count Data

	Lynn Lane Road From North					E. Washington St./E. 91st Street From East					Lynn Lane Road From South					E. Washington St./E. 91st Street From West					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. 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	11	33	1	1	46	6	28	1	0	35	1	85	4	0	90	2	15	20	0	37	208
07:15 AM	18	46	5	0	69	8	48	2	0	58	5	83	4	0	92	3	37	23	0	63	282
07:30 AM	29	71	2	0	102	5	36	2	0	43	1	81	9	0	91	1	30	21	0	52	288
07:45 AM	19	46	4	0	69	13	38	1	0	52	0	78	13	0	91	5	34	24	0	63	275
Total	77	196	12	1	286	32	150	6	0	188	7	327	30	0	364	11	116	88	0	215	1053
08:00 AM	34	59	4	0	97	4	42	3	0	49	3	67	8	0	78	2	27	17	0	46	270
08:15 AM	32	45	2	0	79	4	34	4	0	42	1	50	12	0	63	7	25	24	0	56	240
08:30 AM	17	26	2	0	45	13	37	5	0	55	1	45	12	0	58	3	24	12	0	39	197
08:45 AM	15	22	4	0	41	6	26	2	0	34	0	35	14	0	49	8	16	9	0	33	157
Total	98	152	12	0	262	27	139	14	0	180	5	197	46	0	248	20	92	62	0	174	864
Grand Total	175	348	24	1	548	59	289	20	0	368	12	524	76	0	612	31	208	150	0	389	1917
Apprch %	31.9	63.5	4.4	0.2		16.0	78.5	5.4	0.0		2.0	85.6	12.4	0.0		8.0	53.5	38.6	0.0		
Total %	9.1	18.2	1.3	0.1	28.6	3.1	15.1	1.0	0.0	19.2	0.6	27.3	4.0	0.0	31.9	1.6	10.9	7.8	0.0	20.3	

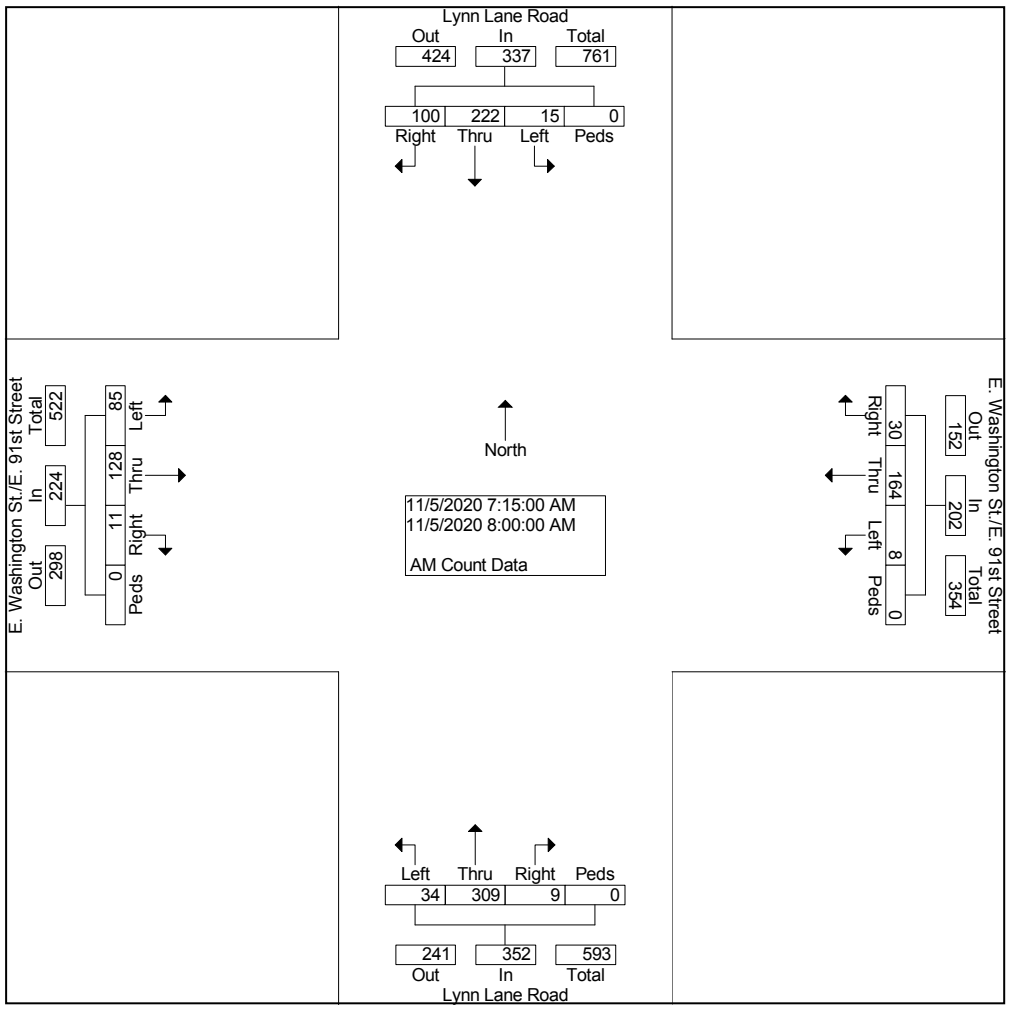


Peters & Assocoieates Engineers, Inc.
Peak Hour Turning Movement Count Data

AM Hour Turning Movement Count Data
E. Washington St..& S Lynn Lane Rd
Broken Arrow, Oklahoma
P-2070

File Name : AM-Ly-Wa
Site Code : 00000000
Start Date : 11/05/2020
Page No : 2

	Lynn Lane Road From North					E. Washington St./E. 91st Street From East					Lynn Lane Road From South					E. Washington St./E. 91st Street From West					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour From 07:00 AM to 08:45 AM - Peak 1 of 1																					
Intersection	07:15 AM																				
Volume	100	222	15	0	337	30	164	8	0	202	9	309	34	0	352	11	128	85	0	224	1115
Percent	29.7	65.9	4.5	0.0		14.9	81.2	4.0	0.0		2.6	87.8	9.7	0.0		4.9	57.1	37.9	0.0		
07:30 Volume	29	71	2	0	102	5	36	2	0	43	1	81	9	0	91	1	30	21	0	52	288
Peak Factor																					0.968
High Int.	07:30 AM					07:15 AM					07:15 AM					07:15 AM					
Volume	29	71	2	0	102	8	48	2	0	58	5	83	4	0	92	3	37	23	0	63	
Peak Factor					0.826					0.871					0.957					0.889	



Peters & Assocoieates Engineers, Inc.
Peak Hour Turning Movement Count Data

PM Hour Turning Movement Count Data
E. Washington St. & Lynn Lane Rd.
Broken Arrow, Oklahoma
P-2070

File Name : PM Ly-Wa
Site Code : 00000000
Start Date : 11/04/2020
Page No : 1

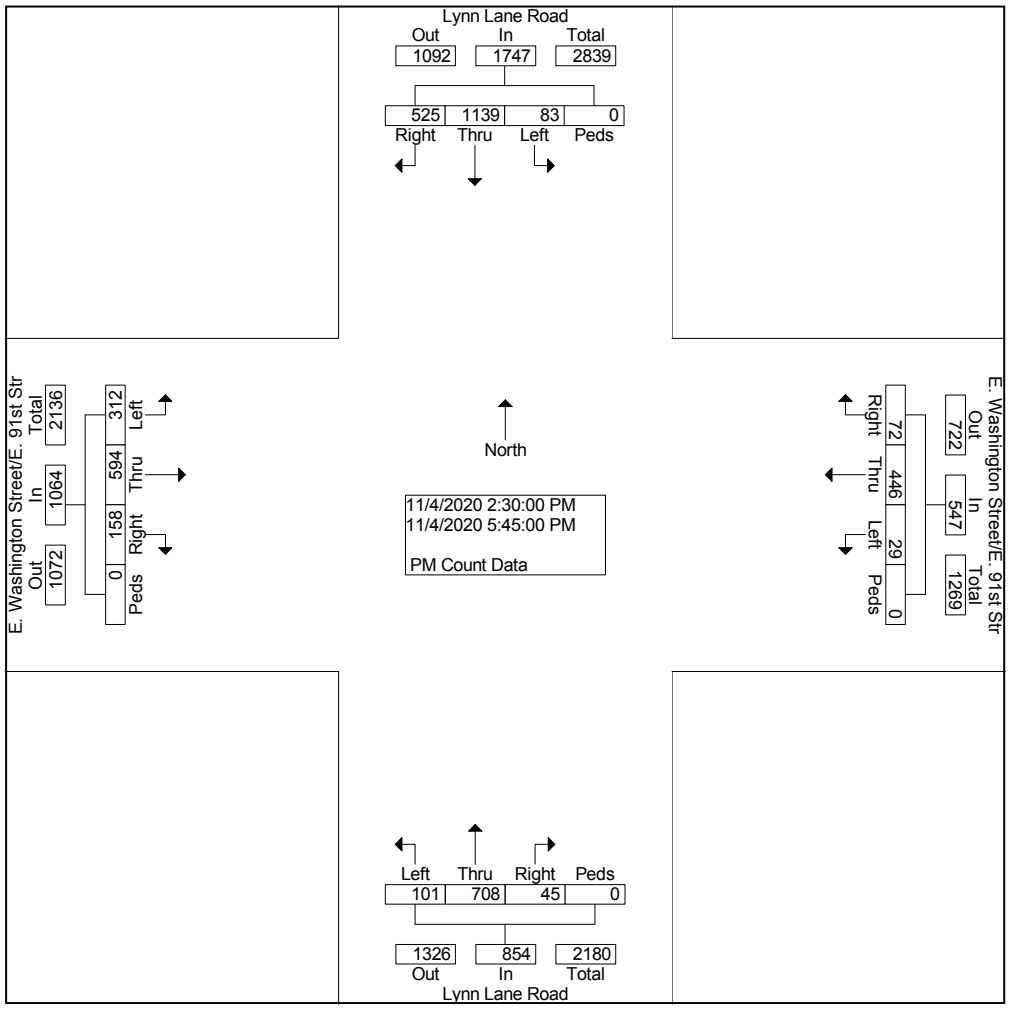
Groups Printed- PM Count Data

	Lynn Lane Road From North					E. Washington Street/E. 91st Str From East					Lynn Lane Road From South					E. Washington Street/E. 91st Str From West					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. 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		
02:30 PM	35	59	6	0	100	3	23	0	0	26	1	36	2	0	39	14	29	18	0	61	226
02:45 PM	31	53	2	0	86	3	36	1	0	40	2	64	6	0	72	7	32	26	0	65	263
Total	66	112	8	0	186	6	59	1	0	66	3	100	8	0	111	21	61	44	0	126	489
03:00 PM	53	63	4	0	120	2	38	2	0	42	3	43	10	0	56	10	34	23	0	67	285
03:15 PM	29	79	6	0	114	4	32	2	0	38	1	47	1	0	49	4	30	23	0	57	258
03:30 PM	36	96	6	0	138	6	26	3	0	35	2	50	6	0	58	4	48	32	0	84	315
03:45 PM	56	79	5	0	140	4	30	3	0	37	4	49	7	0	60	13	26	20	0	59	296
Total	174	317	21	0	512	16	126	10	0	152	10	189	24	0	223	31	138	98	0	267	1154
04:00 PM	44	80	6	0	130	5	37	2	0	44	2	33	5	0	40	18	63	20	0	101	315
04:15 PM	44	91	7	0	142	8	27	1	0	36	3	41	7	0	51	16	56	19	0	91	320
04:30 PM	45	116	8	0	169	12	24	1	0	37	4	51	14	0	69	12	53	24	0	89	364
04:45 PM	33	72	7	0	112	5	36	3	0	44	6	52	14	0	72	16	44	28	0	88	316
Total	166	359	28	0	553	30	124	7	0	161	15	177	40	0	232	62	216	91	0	369	1315
05:00 PM	41	113	6	0	160	11	33	1	0	45	6	62	5	0	73	14	60	21	0	95	373
05:15 PM	33	92	8	0	133	5	34	4	0	43	3	69	4	0	76	13	38	19	0	70	322
05:30 PM	23	85	7	0	115	2	34	4	0	40	6	64	11	0	81	9	37	23	0	69	305
05:45 PM	22	61	5	0	88	2	36	2	0	40	2	47	9	0	58	8	44	16	0	68	254
Total	119	351	26	0	496	20	137	11	0	168	17	242	29	0	288	44	179	79	0	302	1254
Grand Total	525	1139	83	0	1747	72	446	29	0	547	45	708	101	0	854	158	594	312	0	1064	4212
Apprch %	30.1	65.2	4.8	0.0		13.2	81.5	5.3	0.0		5.3	82.9	11.8	0.0		14.8	55.8	29.3	0.0		
Total %	12.5	27.0	2.0	0.0	41.5	1.7	10.6	0.7	0.0	13.0	1.1	16.8	2.4	0.0	20.3	3.8	14.1	7.4	0.0	25.3	

Peters & Assocoieates Engineers, Inc.
Peak Hour Turning Movement Count Data

PM Hour Turning Movement Count Data
E. Washington St. & Lynn Lane Rd.
Broken Arrow, Oklahoma
P-2070

File Name : PM Ly-Wa
Site Code : 00000000
Start Date : 11/04/2020
Page No : 2

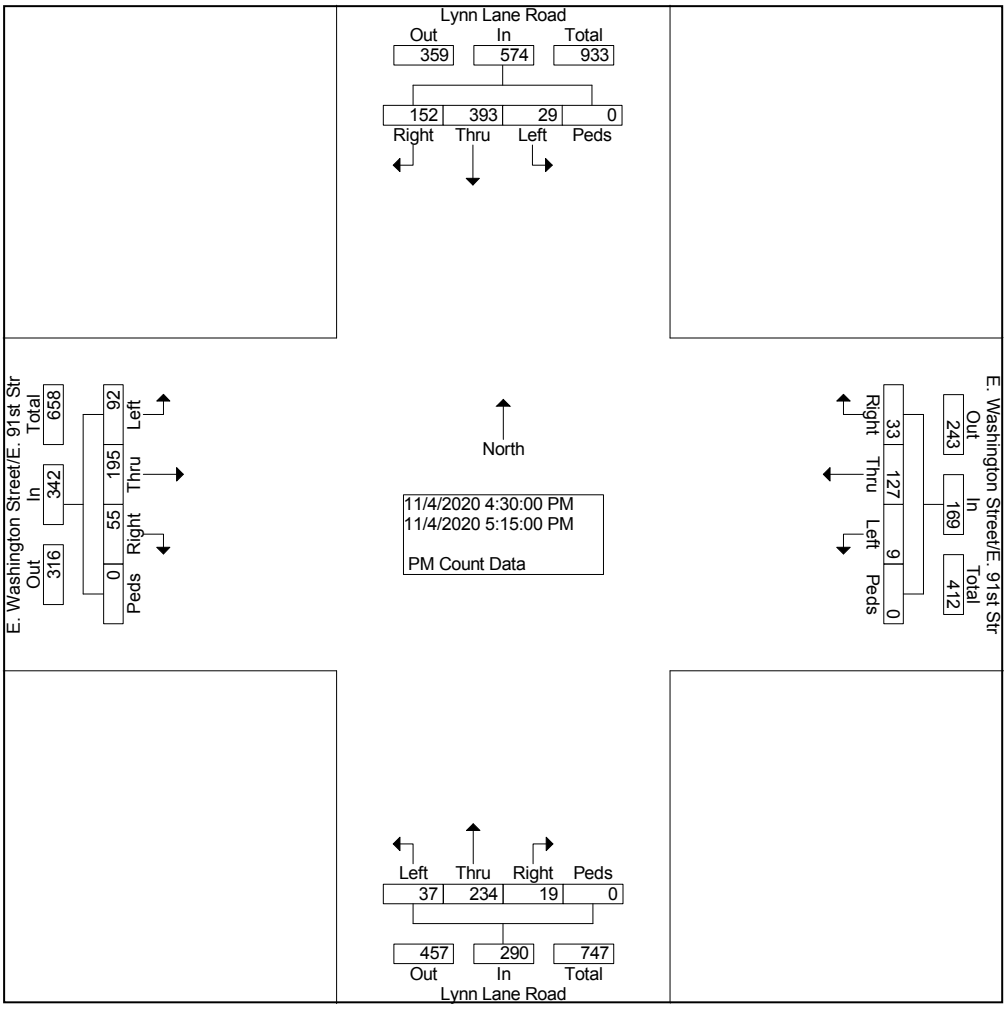


Peters & Assocoieates Engineers, Inc.
Peak Hour Turning Movement Count Data

PM Hour Turning Movement Count Data
E. Washington St. & Lynn Lane Rd.
Broken Arrow, Oklahoma
P-2070

File Name : PM Ly-Wa
Site Code : 00000000
Start Date : 11/04/2020
Page No : 3

	Lynn Lane Road From North					E. Washington Street/E. 91st Str From East					Lynn Lane Road From South					E. Washington Street/E. 91st Str From West					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour From 02:30 PM to 05:45 PM - Peak 1 of 1																					
Intersection	04:30 PM																				
Volume	152	393	29	0	574	33	127	9	0	169	19	234	37	0	290	55	195	92	0	342	1375
Percent	26.5	68.5	5.1	0.0		19.5	75.1	5.3	0.0		6.6	80.7	12.8	0.0		16.1	57.0	26.9	0.0		
05:00 Volume	41	113	6	0	160	11	33	1	0	45	6	62	5	0	73	14	60	21	0	95	373
Peak Factor																					0.922
High Int.	04:30 PM					05:00 PM					05:15 PM					05:00 PM					
Volume	45	116	8	0	169	11	33	1	0	45	3	69	4	0	76	14	60	21	0	95	
Peak Factor					0.849					0.939					0.954					0.900	



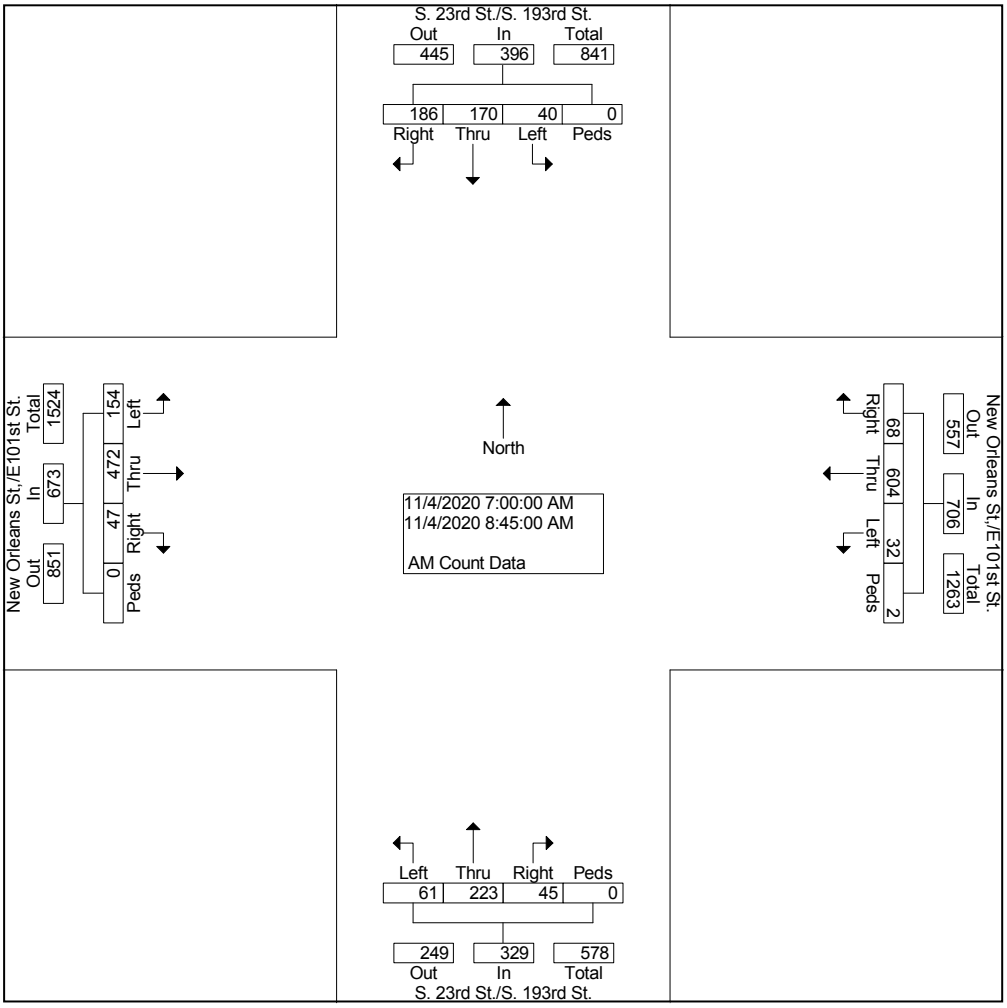
Peters & Assocoieates Engineers, Inc.
Peak Hour Turning Movement Count Data

AM Hour Turning Movement Count Data
S. 23rd Street & New Orleans Street
Broken Arrow, Oklahoma
P-2070

File Name : AM193NO
Site Code : 00000000
Start Date : 11/04/2020
Page No : 1

Groups Printed- AM Count Data

	S. 23rd St./S. 193rd St. From North					New Orleans St,/E101st St. From East					S. 23rd St./S. 193rd St. From South					New Orleans St,/E101st St. From West					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. 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	14	17	0	0	31	10	57	4	0	71	7	39	10	0	56	14	56	35	0	105	263
07:15 AM	43	30	6	0	79	10	105	4	0	119	2	30	6	0	38	6	52	39	0	97	333
07:30 AM	40	25	11	0	76	10	92	7	0	109	7	24	6	0	37	8	73	30	0	111	333
07:45 AM	33	21	4	0	58	13	77	3	0	93	4	24	8	0	36	4	59	12	0	75	262
Total	130	93	21	0	244	43	331	18	0	392	20	117	30	0	167	32	240	116	0	388	1191
08:00 AM	18	21	3	0	42	9	74	2	1	86	7	26	12	0	45	4	23	12	0	39	212
08:15 AM	12	18	6	0	36	4	62	5	0	71	5	30	9	0	44	4	46	8	0	58	209
08:30 AM	16	20	8	0	44	2	59	7	0	68	7	22	8	0	37	1	65	12	0	78	227
08:45 AM	10	18	2	0	30	10	78	0	1	89	6	28	2	0	36	6	98	6	0	110	265
Total	56	77	19	0	152	25	273	14	2	314	25	106	31	0	162	15	232	38	0	285	913
Grand Total	186	170	40	0	396	68	604	32	2	706	45	223	61	0	329	47	472	154	0	673	2104
Apprch %	47.0	42.9	10.1	0.0		9.6	85.6	4.5	0.3		13.7	67.8	18.5	0.0		7.0	70.1	22.9	0.0		
Total %	8.8	8.1	1.9	0.0	18.8	3.2	28.7	1.5	0.1	33.6	2.1	10.6	2.9	0.0	15.6	2.2	22.4	7.3	0.0	32.0	

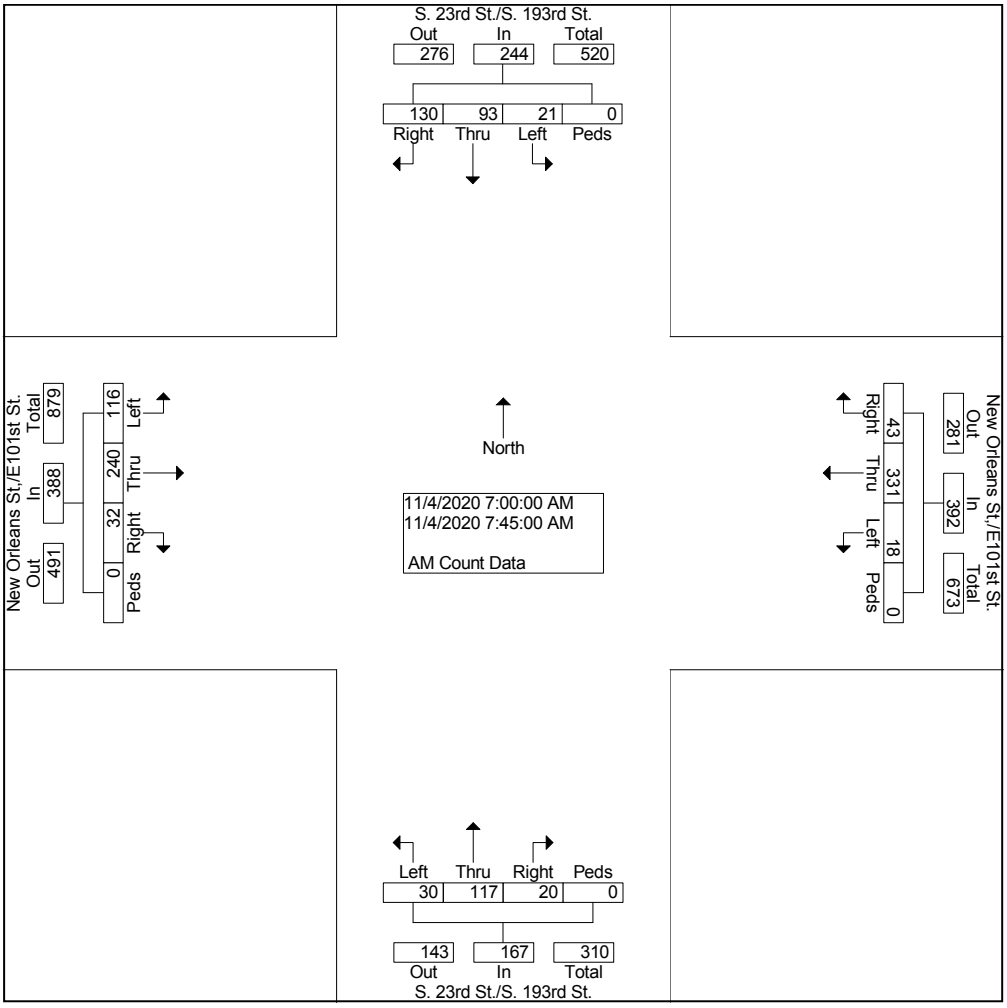


Peters & Assocoieates Engineers, Inc.
Peak Hour Turning Movement Count Data

AM Hour Turning Movement Count Data
S. 23rd Street & New Orleans Street
Broken Arrow, Oklahoma
P-2070

File Name : AM193NO
Site Code : 00000000
Start Date : 11/04/2020
Page No : 2

	S. 23rd St./S. 193rd St. From North					New Orleans St,/E101st St. From East					S. 23rd St./S. 193rd St. From South					New Orleans St,/E101st St. From West					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour From 07:00 AM to 08:45 AM - Peak 1 of 1																					
Intersection	07:00 AM																				
Volume	130	93	21	0	244	43	331	18	0	392	20	117	30	0	167	32	240	116	0	388	1191
Percent	53.3	38.1	8.6	0.0		11.0	84.4	4.6	0.0		12.0	70.1	18.0	0.0		8.2	61.9	29.9	0.0		
07:30 Volume	40	25	11	0	76	10	92	7	0	109	7	24	6	0	37	8	73	30	0	111	333
Peak Factor																					0.894
High Int.	07:15 AM					07:15 AM					07:00 AM					07:30 AM					
Volume	43	30	6	0	79	10	105	4	0	119	7	39	10	0	56	8	73	30	0	111	
Peak Factor					0.772					0.824					0.746					0.874	



Peters & Assocoieates Engineers, Inc.
Peak Hour Turning Movement Count Data

PM Hour Turning Movement Count Data
S. 23rd Street & New Orleans Street
Broken Arrow, Oklahoma
P-2070

File Name : PM193NO
Site Code : 00000000
Start Date : 11/03/2020
Page No : 1

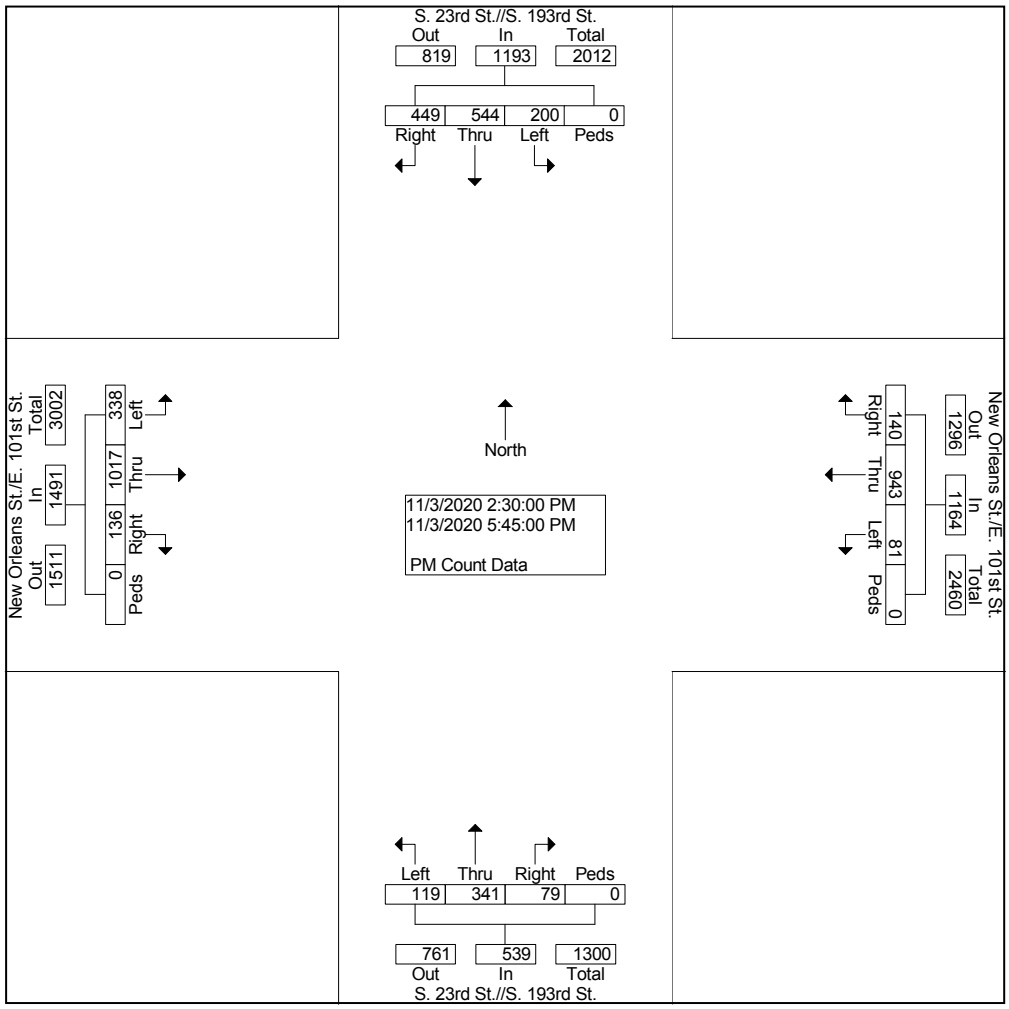
Groups Printed- PM Count Data

	S. 23rd St.//S. 193rd St. From North					New Orleans St./E. 101st St. From East					S. 23rd St.//S. 193rd St. From South					New Orleans St./E. 101st St. From West					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. 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		
02:30 PM	14	20	10	0	44	9	63	2	0	74	4	25	6	0	35	9	53	16	0	78	231
02:45 PM	44	38	9	0	91	6	61	3	0	70	5	25	9	0	39	13	87	39	0	139	339
Total	58	58	19	0	135	15	124	5	0	144	9	50	15	0	74	22	140	55	0	217	570
03:00 PM	46	44	17	0	107	13	40	5	0	58	7	23	5	0	35	8	45	32	0	85	285
03:15 PM	34	42	7	0	83	4	51	5	0	60	5	26	13	0	44	10	56	25	0	91	278
03:30 PM	28	32	12	0	72	8	74	5	0	87	9	20	9	0	38	11	78	16	0	105	302
03:45 PM	21	35	16	0	72	9	84	3	0	96	11	21	10	0	42	8	76	21	0	105	315
Total	129	153	52	0	334	34	249	18	0	301	32	90	37	0	159	37	255	94	0	386	1180
04:00 PM	29	32	13	0	74	12	90	7	0	109	7	19	9	0	35	7	77	19	0	103	321
04:15 PM	37	35	10	0	82	15	97	11	0	123	4	17	8	0	29	6	78	18	0	102	336
04:30 PM	27	37	15	0	79	13	67	8	0	88	5	20	10	0	35	10	70	21	0	101	303
04:45 PM	39	42	11	0	92	6	67	4	0	77	6	16	12	0	34	17	88	32	0	137	340
Total	132	146	49	0	327	46	321	30	0	397	22	72	39	0	133	40	313	90	0	443	1300
05:00 PM	44	58	18	0	120	14	68	5	0	87	6	22	10	0	38	20	78	29	0	127	372
05:15 PM	30	59	20	0	109	9	79	9	0	97	6	39	11	0	56	5	77	23	0	105	367
05:30 PM	30	37	23	0	90	13	57	8	0	78	2	36	4	0	42	7	80	28	0	115	325
05:45 PM	26	33	19	0	78	9	45	6	0	60	2	32	3	0	37	5	74	19	0	98	273
Total	130	187	80	0	397	45	249	28	0	322	16	129	28	0	173	37	309	99	0	445	1337
Grand Total	449	544	200	0	1193	140	943	81	0	1164	79	341	119	0	539	136	1017	338	0	1491	4387
Apprch %	37.6	45.6	16.8	0.0		12.0	81.0	7.0	0.0		14.7	63.3	22.1	0.0		9.1	68.2	22.7	0.0		
Total %	10.2	12.4	4.6	0.0	27.2	3.2	21.5	1.8	0.0	26.5	1.8	7.8	2.7	0.0	12.3	3.1	23.2	7.7	0.0	34.0	

Peters & Assocoieates Engineers, Inc.
Peak Hour Turning Movement Count Data

PM Hour Turning Movement Count Data
S. 23rd Street & New Orleans Street
Broken Arrow, Oklahoma
P-2070

File Name : PM193NO
Site Code : 00000000
Start Date : 11/03/2020
Page No : 2

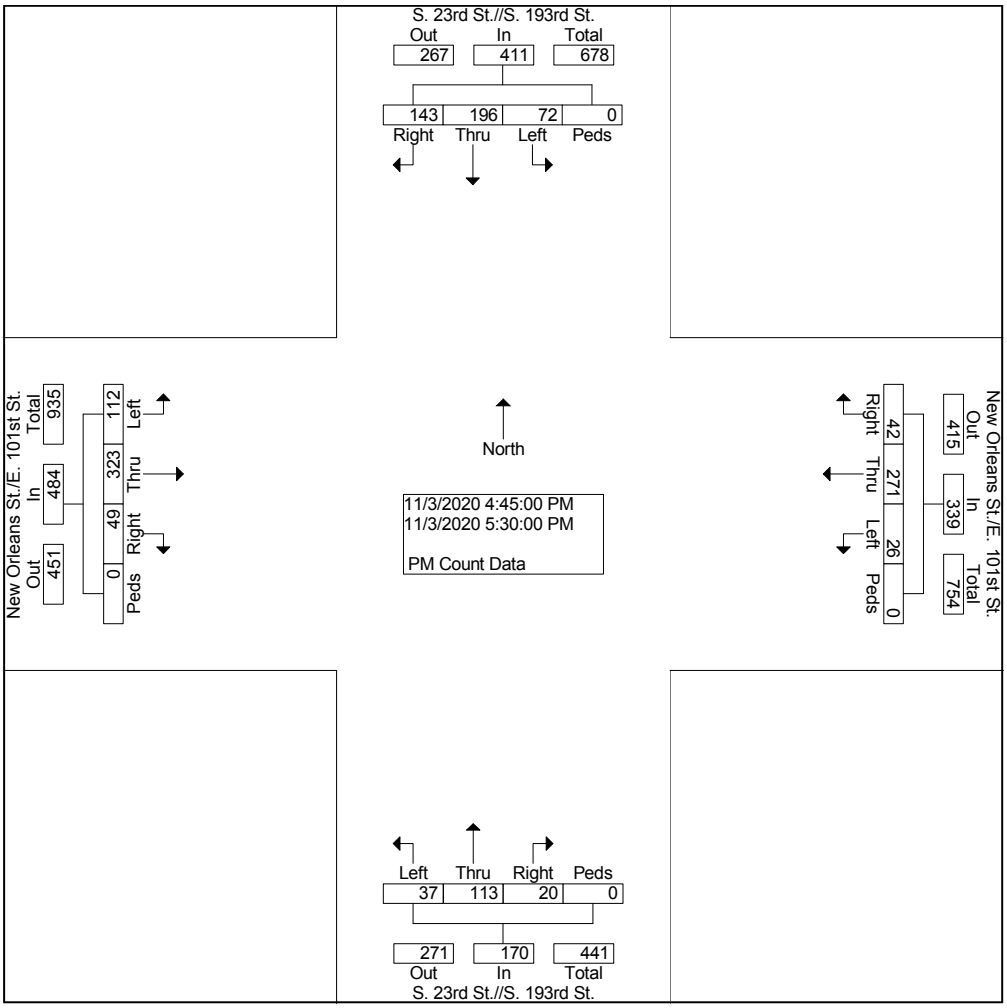


Peters & Assocoieates Engineers, Inc.
Peak Hour Turning Movement Count Data

PM Hour Turning Movement Count Data
S. 23rd Street & New Orleans Street
Broken Arrow, Oklahoma
P-2070

File Name : PM193NO
Site Code : 00000000
Start Date : 11/03/2020
Page No : 3

	S. 23rd St.//S. 193rd St. From North					New Orleans St./E. 101st St. From East					S. 23rd St.//S. 193rd St. From South					New Orleans St./E. 101st St. From West					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour From 02:30 PM to 05:45 PM - Peak 1 of 1																					
Intersection	04:45 PM																				
Volume	143	196	72	0	411	42	271	26	0	339	20	113	37	0	170	49	323	112	0	484	1404
Percent	34.8	47.7	17.5	0.0		12.4	79.9	7.7	0.0		11.8	66.5	21.8	0.0		10.1	66.7	23.1	0.0		
05:00 Volume	44	58	18	0	120	14	68	5	0	87	6	22	10	0	38	20	78	29	0	127	372
Peak Factor																					0.944
High Int.	05:00 PM					05:15 PM					05:15 PM					04:45 PM					
Volume	44	58	18	0	120	9	79	9	0	97	6	39	11	0	56	17	88	32	0	137	
Peak Factor					0.856					0.874					0.759					0.883	



New Orleans Street and Lynn Lane Road
Broken Arrow Oklahoma
Wednesday, November 4, 2020

Time	Southbound Lynn Lane Road						Westbound New Orleans Street						Northbound Lynn Lane Road						Eastbound New Orleans Street						VEHICLE TOTAL
	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	*Vehicle Approach Total*	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	*Vehicle Approach Total*	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	*Vehicle Approach Total*	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	*Vehicle Approach Total*	
12:00 AM	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
12:15 AM	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
12:30 AM	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
12:45 AM	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
Hourly Total	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
1:00 AM	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
1:15 AM	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
1:30 AM	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
1:45 AM	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
Hourly Total	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
2:00 AM	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
2:15 AM	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
2:30 AM	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
2:45 AM	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
Hourly Total	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
3:00 AM	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
3:15 AM	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
3:30 AM	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
3:45 AM	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
Hourly Total	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
4:00 AM	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
4:15 AM	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
4:30 AM	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
4:45 AM	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
Hourly Total	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
5:00 AM	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
5:15 AM	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
5:30 AM	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
5:45 AM	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
Hourly Total	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
6:00 AM	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
6:15 AM	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
6:30 AM	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
6:45 AM	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
Hourly Total	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
7:00 AM	0	8	13	21	0	*42*	0	6	77	13	0	*96*	0	6	37	17	0	*60*	0	32	45	2	0	*79*	**277**
7:15 AM	0	9	16	37	0	*62*	0	14	142	13	0	*169*	0	7	31	10	0	*48*	0	42	85	19	0	*146*	**425**
7:30 AM	0	5	20	34	0	*59*	0	17	115	7	0	*139*	0	2	36	15	0	*53*	0	52	86	19	0	*157*	**408**
7:45 AM	0	6	25	19	0	*50*	0	10	107	16	0	*133*	0	2	48	9	0	*59*	0	29	40	5	0	*74*	**316**
Hourly Total	0	28	74	111	0	*213*	0	47	441	49	0	*537*	0	17	152	51	0	*220*	0	155	256	45	0	*456*	**1426**

New Orleans Street and Lynn Lane Road
Broken Arrow Oklahoma
Wednesday, November 4, 2020

Time	Southbound Lynn Lane Road						Westbound New Orleans Street						Northbound Lynn Lane Road						Eastbound New Orleans Street						VEHICLE TOTAL
	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	*Vehicle Approach Total*	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	*Vehicle Approach Total*	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	*Vehicle Approach Total*	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	*Vehicle Approach Total*	
8:00 AM	0	5	29	23	0	*57*	0	17	103	10	0	*130*	0	5	27	6	0	*38*	0	29	38	4	0	*71*	**296**
8:15 AM	0	7	30	27	0	*64*	0	10	82	8	0	*100*	0	0	33	17	0	*50*	0	7	58	5	0	*70*	**284**
8:30 AM	0	8	20	14	0	*42*	0	15	74	7	0	*96*	0	3	24	13	0	*40*	0	15	49	1	0	*65*	**243**
8:45 AM	0	9	25	21	0	*55*	0	5	79	5	0	*89*	0	5	29	16	0	*50*	0	23	38	4	0	*65*	**259**
Hourly Total	0	29	104	85	0	*218*	0	47	338	30	0	*415*	0	13	113	52	0	*178*	0	74	183	14	0	*271*	**1082**
9:00 AM	0	5	25	19	0	*49*	0	8	73	18	0	*99*	0	3	25	8	0	*36*	0	18	33	3	0	*54*	**238**
9:15 AM	0	2	18	16	0	*36*	0	2	54	7	0	*63*	0	1	17	7	0	*25*	0	16	43	5	0	*64*	**188**
9:30 AM	0	7	27	19	0	*53*	0	5	66	6	0	*77*	0	2	15	5	0	*22*	0	18	34	3	0	*55*	**207**
9:45 AM	0	5	14	19	0	*38*	0	3	69	3	0	*75*	0	1	18	7	0	*26*	0	17	47	0	0	*64*	**203**
Hourly Total	0	19	84	73	0	*176*	0	18	262	34	0	*314*	0	7	75	27	0	*109*	0	69	157	11	0	*237*	**836**
10:00 AM	0	5	11	14	0	*30*	0	7	55	6	0	*68*	0	4	13	3	0	*20*	1	14	43	5	0	*63*	**181**
10:15 AM	0	4	13	23	0	*40*	0	2	60	10	0	*72*	0	0	18	4	0	*22*	0	15	39	0	0	*54*	**188**
10:30 AM	0	5	13	13	0	*31*	0	2	52	4	0	*58*	0	2	20	9	0	*31*	0	20	49	3	0	*72*	**192**
10:45 AM	0	7	13	13	0	*33*	0	10	43	8	0	*61*	0	4	12	5	0	*21*	0	23	60	2	0	*85*	**200**
Hourly Total	0	21	50	63	0	*134*	0	21	210	28	0	*259*	0	10	63	21	0	*94*	1	72	191	10	0	*274*	**761**
11:00 AM	0	7	24	20	0	*51*	0	3	73	8	0	*84*	0	5	23	7	0	*35*	0	21	47	2	0	*70*	**240**
11:15 AM	0	11	17	18	0	*46*	0	2	45	3	0	*50*	0	2	15	9	0	*26*	0	23	56	8	0	*87*	**209**
11:30 AM	0	7	24	16	0	*47*	0	5	60	5	0	*70*	0	2	17	8	0	*27*	0	14	61	4	0	*79*	**223**
11:45 AM	0	3	20	17	0	*40*	0	6	53	3	0	*62*	0	4	20	10	0	*34*	0	29	55	5	0	*89*	**225**
Hourly Total	0	28	85	71	0	*184*	0	16	231	19	0	*266*	0	13	75	34	0	*122*	0	87	219	19	0	*325*	**897**
12:00 PM	0	9	13	19	0	*41*	0	9	47	4	0	*60*	0	1	12	6	0	*19*	0	25	59	1	0	*85*	**205**
12:15 PM	0	5	33	15	0	*53*	0	5	68	7	0	*80*	0	1	11	4	0	*16*	0	15	54	3	0	*72*	**221**
12:30 PM	0	8	21	16	0	*45*	0	4	64	7	0	*75*	0	4	13	6	0	*23*	0	19	61	2	0	*82*	**225**
12:45 PM	0	7	21	29	0	*57*	0	5	67	3	0	*75*	0	4	22	13	0	*39*	0	19	59	5	0	*83*	**254**
Hourly Total	0	29	88	79	0	*196*	0	23	246	21	0	*290*	0	10	58	29	0	*97*	0	78	233	11	0	*322*	**905**
1:00 PM	0	9	25	26	0	*60*	0	5	55	8	0	*68*	0	3	16	3	0	*22*	0	15	72	4	0	*91*	**241**
1:15 PM	0	8	17	18	0	*43*	0	8	65	6	0	*79*	0	5	16	10	0	*31*	0	25	60	4	0	*89*	**242**
1:30 PM	0	7	20	15	0	*42*	0	2	55	8	0	*65*	0	0	24	5	0	*29*	0	21	47	3	0	*71*	**207**
1:45 PM	0	8	21	21	0	*50*	0	7	59	7	0	*73*	0	3	24	5	0	*32*	0	20	58	5	0	*83*	**238**
Hourly Total	0	32	83	80	0	*195*	0	22	234	29	0	*285*	0	11	80	23	0	*114*	0	81	237	16	0	*334*	**928**
2:00 PM	0	6	23	27	0	*56*	0	12	62	7	0	*81*	0	7	18	9	0	*34*	0	15	49	6	0	*70*	**241**
2:15 PM	0	10	33	46	0	*89*	0	7	68	7	0	*82*	0	3	12	9	0	*24*	0	28	62	3	0	*93*	**288**
2:30 PM	0	11	29	25	0	*65*	0	9	68	4	0	*81*	0	10	20	13	0	*43*	0	24	65	7	0	*96*	**285**
2:45 PM	0	6	32	21	0	*59*	0	14	78	6	0	*98*	0	8	22	18	0	*48*	0	40	89	21	0	*150*	**355**
Hourly Total	0	33	117	119	0	*269*	0	42	276	24	0	*342*	0	28	72	49	0	*149*	0	107	265	37	0	*409*	**1169**
3:00 PM	0	11	37	26	0	*74*	0	15	84	6	0	*105*	0	4	19	12	0	*35*	0	23	77	7	0	*107*	**321**
3:15 PM	0	13	28	27	0	*68*	0	11	64	8	0	*83*	0	3	22	12	0	*37*	0	18	67	5	0	*90*	**278**
3:30 PM	0	13	35	24	0	*72*	0	7	67	7	0	*81*	0	5	27	10	0	*42*	0	30	75	9	0	*114*	**309**
3:45 PM	0	18	38	28	0	*84*	0	9	87	8	0	*104*	0	4	24	11	0	*39*	0	22	102	8	0	*132*	**359**
Hourly Total	0	55	138	105	0	*298*	0	42	302	29	0	*373*	0	16	92	45	0	*153*	0	93	321	29	0	*443*	**1267**

New Orleans Street and Lynn Lane Road
Broken Arrow Oklahoma
Wednesday, November 4, 2020

Time	Southbound Lynn Lane Road						Westbound New Orleans Street						Northbound Lynn Lane Road						Eastbound New Orleans Street						VEHICLE TOTAL
	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	*Vehicle Approach Total*	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	*Vehicle Approach Total*	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	*Vehicle Approach Total*	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	*Vehicle Approach Total*	
4:00 PM	0	21	41	28	0	*90*	0	12	76	9	0	*97*	0	4	20	9	0	*33*	0	14	87	8	0	*109*	**329**
4:15 PM	0	26	38	24	0	*88*	0	13	85	22	0	*120*	0	5	23	17	0	*45*	0	25	78	7	0	*110*	**363**
4:30 PM	0	17	45	33	0	*95*	0	14	83	9	0	*106*	0	5	22	20	0	*47*	0	42	106	6	0	*154*	**402**
4:45 PM	0	17	44	32	0	*93*	0	14	96	5	0	*115*	0	3	34	6	0	*43*	0	30	92	9	0	*131*	**382**
Hourly Total	0	81	168	117	0	*366*	0	53	340	45	0	*438*	0	17	99	52	0	*168*	0	111	363	30	0	*504*	**1476**
5:00 PM	0	19	46	39	0	*104*	0	13	72	8	0	*93*	0	4	40	15	0	*59*	0	32	94	1	0	*127*	**383**
5:15 PM	0	15	47	32	0	*94*	0	11	77	10	0	*98*	0	3	33	12	0	*48*	0	34	96	11	0	*141*	**381**
5:30 PM	0	9	30	31	0	*70*	0	17	84	17	0	*118*	0	1	27	9	0	*37*	0	27	96	2	0	*125*	**350**
5:45 PM	0	12	30	36	0	*78*	0	12	84	7	0	*103*	0	4	21	11	0	*36*	0	37	80	2	0	*119*	**336**
Hourly Total	0	55	153	138	0	*346*	0	53	317	42	0	*412*	0	12	121	47	0	*180*	0	130	366	16	0	*512*	**1450**
6:00 PM	0	21	25	20	0	*66*	0	12	72	12	0	*96*	0	2	28	11	0	*41*	0	19	76	6	0	*101*	**304**
6:15 PM	0	8	24	23	0	*55*	0	14	68	11	0	*93*	0	2	17	4	0	*23*	0	17	65	6	0	*88*	**259**
6:30 PM	0	5	30	18	0	*53*	0	15	50	7	0	*72*	0	1	22	6	0	*29*	0	24	42	1	0	*67*	**221**
6:45 PM	0	6	25	19	0	*50*	0	11	42	4	0	*57*	0	3	14	10	0	*27*	0	18	70	4	0	*92*	**226**
Hourly Total	0	40	104	80	0	*224*	0	52	232	34	0	*318*	0	8	81	31	0	*120*	0	78	253	17	0	*348*	**1010**
7:00 PM	0	10	27	17	0	*54*	0	4	33	5	0	*42*	0	2	12	1	0	*15*	0	14	37	2	0	*53*	**164**
7:15 PM	0	5	21	10	0	*36*	0	6	37	1	0	*44*	0	2	7	7	0	*16*	0	10	31	1	0	*42*	**138**
7:30 PM	0	4	21	12	0	*37*	0	2	28	3	0	*33*	0	0	8	3	0	*11*	0	14	36	1	0	*51*	**132**
7:45 PM	0	7	23	10	0	*40*	0	4	25	1	0	*30*	0	1	3	1	0	*5*	0	13	24	1	0	*38*	**113**
Hourly Total	0	26	92	49	0	*167*	0	16	123	10	0	*149*	0	5	30	12	0	*47*	0	51	128	5	0	*184*	**547**
8:00 PM	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
8:15 PM	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
8:30 PM	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
8:45 PM	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
Hourly Total	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
9:00 PM	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
9:15 PM	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
9:30 PM	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
9:45 PM	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
Hourly Total	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
10:00 PM	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
10:15 PM	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
10:30 PM	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
10:45 PM	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
Hourly Total	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
11:00 PM	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
11:15 PM	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
11:30 PM	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
11:45 PM	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
Hourly Total	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
DAILY TOTAL	**0**	**476**	**1340**	**1170**	**0**	***2986***	**0**	**452**	**3552**	**394**	**0**	***4398***	**0**	**167**	**1111**	**473**	**0**	***1751***	**1**	**1186**	**3172**	**260**	**0**	***4619***	**13754**
Cars	0	454	1318	1111	0	*2883*	0	439	3462	373	0	*4274*	0	158	1084	461	0	*1703*	1	1132	3113	251	0	*4497*	**13357**
Heavy Vehicles	0	22	22	59	0	*103*	0	13	90	21	0	*124*	0	9	27	12	0	*48*	0	54	59	9	0	*122*	**397**
Heavy Vehicle %	0.00%	4.62%	1.64%	5.04%	0.00%	*3.45%*	0.00%	2.88%	2.53%	5.33%	0.00%	*2.82%*	0.00%	5.39%	2.43%	2.54%	0.00%	*2.74%*	0.00%	4.55%	1.86%	3.46%	0.00%	*2.64%*	**2.89%**

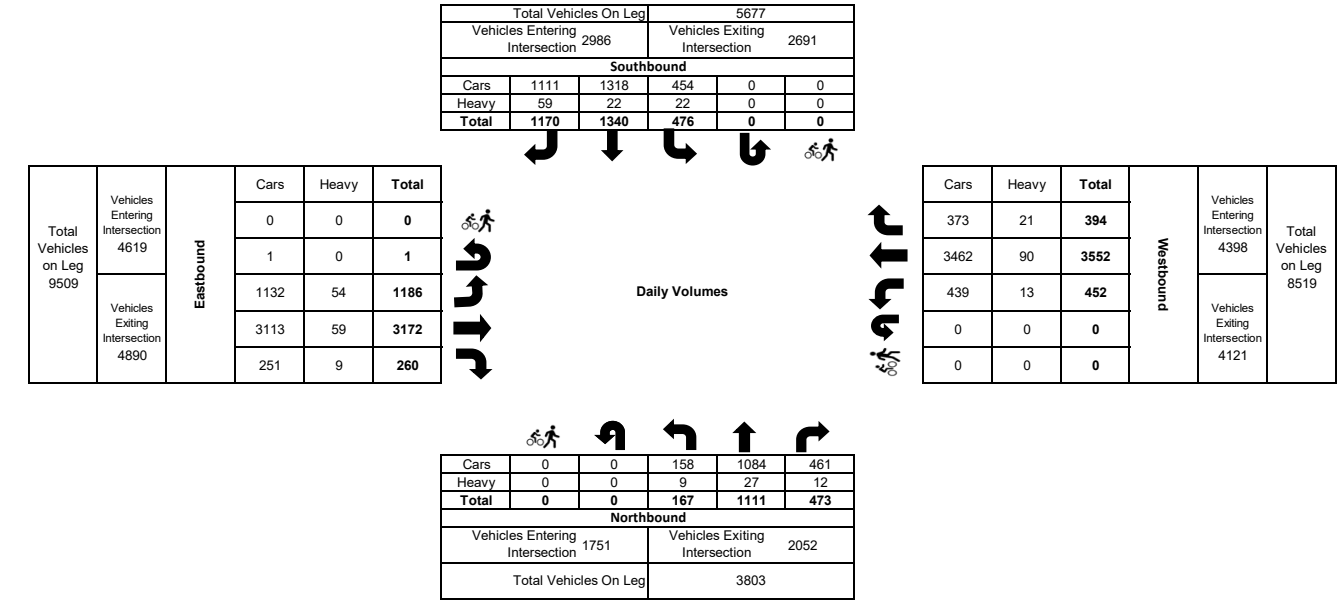
New Orleans Street and Lynn Lane Road
Broken Arrow Oklahoma
Wednesday, November 4, 2020

AM Peak Hour

Time	Southbound						Westbound						Northbound						Eastbound						VEHICLE TOTAL
	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	*Vehicle Approach Total*	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	*Vehicle Approach Total*	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	*Vehicle Approach Total*	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	*Vehicle Approach Total*	
7:15 AM	0	9	16	37	0	*62*	0	14	142	13	0	*169*	0	7	31	10	0	*48*	0	42	85	19	0	*146*	**425**
7:30 AM	0	5	20	34	0	*59*	0	17	115	7	0	*139*	0	2	36	15	0	*53*	0	52	86	19	0	*157*	**408**
7:45 AM	0	6	25	19	0	*50*	0	10	107	16	0	*133*	0	2	48	9	0	*59*	0	29	40	5	0	*74*	**316**
8:00 AM	0	5	29	23	0	*57*	0	17	103	10	0	*130*	0	5	27	6	0	*38*	0	29	38	4	0	*71*	**296**
Peak Hour Total	0	25	90	113	0	*228*	0	58	467	46	0	*571*	0	16	142	40	0	*198*	0	152	249	47	0	*448*	**1445**
PHF	0.000	0.694	0.776	0.764	0.000	*0.919*	0.000	0.853	0.822	0.719	0.000	*0.845*	0.000	0.571	0.740	0.667	0.000	*0.839*	0.000	0.731	0.724	0.618	0.000	*0.713*	**0.850**

PM Peak Hour

Time	Southbound						Westbound						Northbound						Eastbound						VEHICLE TOTAL
	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	*Vehicle Approach Total*	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	*Vehicle Approach Total*	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	*Vehicle Approach Total*	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	*Vehicle Approach Total*	
4:30 PM	0	17	45	33	0	*95*	0	14	83	9	0	*106*	0	5	22	20	0	*47*	0	42	106	6	0	*154*	**402**
4:45 PM	0	17	44	32	0	*93*	0	14	96	5	0	*115*	0	3	34	6	0	*43*	0	30	92	9	0	*131*	**382**
5:00 PM	0	19	46	39	0	*104*	0	13	72	8	0	*93*	0	4	40	15	0	*59*	0	32	94	1	0	*127*	**383**
5:15 PM	0	15	47	32	0	*94*	0	11	77	10	0	*98*	0	3	33	12	0	*48*	0	34	96	11	0	*141*	**381**
Peak Hour Total	0	68	182	136	0	*386*	0	52	328	32	0	*412*	0	15	129	53	0	*197*	0	138	388	27	0	*553*	**1548**
PHF	0.000	0.895	0.968	0.872	0.000	*0.928*	0.000	0.929	0.854	0.800	0.000	*0.896*	0.000	0.750	0.806	0.663	0.000	*0.835*	0.000	0.821	0.915	0.614	0.000	*0.898*	**0.963**



PETERS & ASSOCIATES
ENGINEERS, INC.

Trip-Generation Data

ITE TRIP-GENERATION 10TH EDITION
255 Residential Single-Family Lot Development (ITE 210)
11/20/2020
P2070

Weekday Daily Volume

DATA STATISTICS

Land Use:
Single-Family Detached Housing (210) Click for more details

Independent Variable:
Dwelling Units

Time Period:
Weekday

Setting/Location:
General Urban/Suburban

Trip Type:
Vehicle

Number of Studies:
159

Avg. Num. of Dwelling Units:
264

Average Rate:
9.44

Range of Rates:
4.81 - 19.39

Standard Deviation:
2.10

Fitted Curve Equation:
Ln(T) = 0.92 Ln(X) + 2.71

R^2:
0.95

Directional Distribution:
50% entering, 50% exiting

Calculated Trip Ends:
Average Rate: 2407 (Total), 1203 (Entry), 1204 (Exit)
Fitted Curve: 2460 (Total), 1230 (Entry), 1230 (Exit)

Weekday AM Peak Hour of Adjacent Street

Directional Distribution:
25% entering, 75% exiting

Calculated Trip Ends:
Average Rate: 189 (Total), 47 (Entry), 142 (Exit)
Fitted Curve: 186 (Total), 46 (Entry), 140 (Exit)

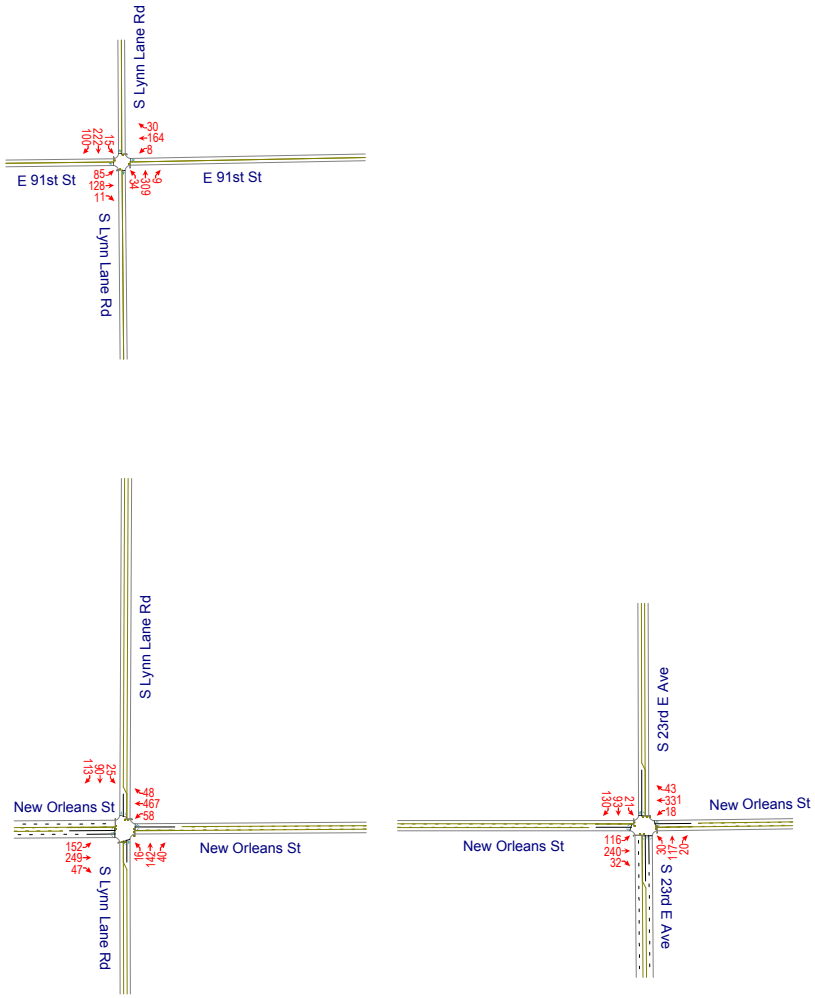
Weekday PM Peak Hour of Adjacent Street

Directional Distribution:
63% entering, 37% exiting

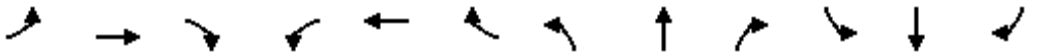
Calculated Trip Ends:
Average Rate: 252 (Total), 159 (Entry), 93 (Exit)
Fitted Curve: 250 (Total), 157 (Entry), 93 (Exit)

PETERS & ASSOCIATES
ENGINEERS, INC.

Capacity & Level of Service Calculations


S Lynn Lane Rd
E 91st St
E 91st St
S Lynn Lane Rd
S Lynn Lane Rd
New Orleans St
New Orleans St
S Lynn Lane Rd
S 23rd E Ave
New Orleans St
New Orleans St
S 23rd E Ave

EX AM



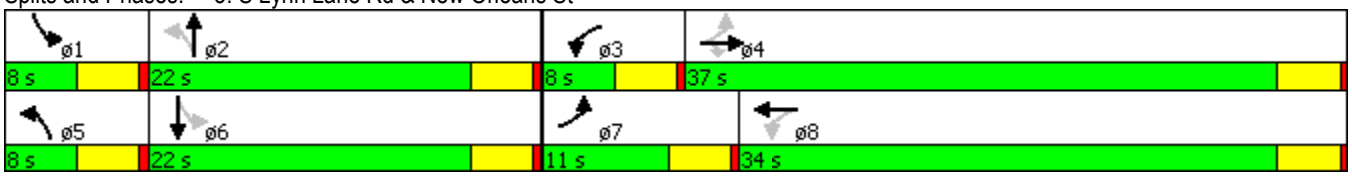
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	152	249	47	58	467	48	16	142	40	25	90	113
Ideal Flow (vphpl)	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750
Storage Length (ft)	160		0	140		0	70		0	75		0
Storage Lanes	1		1	1		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	1630	1716	1458	1630	1688	0	1630	1654	0	1630	1570	0
Flt Permitted	0.126			0.543			0.448			0.421		
Satd. Flow (perm)	216	1716	1458	932	1688	0	769	1654	0	722	1570	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			131		9			20			82	
Link Speed (mph)		40			40			40			40	
Link Distance (ft)		388			844			578			1226	
Travel Time (s)		6.6			14.4			9.9			20.9	
Peak Hour Factor	0.73	0.72	0.62	0.85	0.82	0.72	0.57	0.74	0.67	0.69	0.78	0.76
Adj. Flow (vph)	208	346	76	68	570	67	28	192	60	36	115	149
Shared Lane Traffic (%)												
Lane Group Flow (vph)	208	346	76	68	637	0	28	252	0	36	264	0
Turn Type	pm+pt	NA	Perm	pm+pt	NA		pm+pt	NA		pm+pt	NA	
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4		4	8			2			6		
Detector Phase	7	4	4	3	8		5	2		1	6	
Switch Phase												
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0		4.0	4.0	
Minimum Split (s)	8.0	20.0	20.0	8.0	20.0		8.0	20.0		8.0	20.0	
Total Split (s)	11.0	37.0	37.0	8.0	34.0		8.0	22.0		8.0	22.0	
Total Split (%)	14.7%	49.3%	49.3%	10.7%	45.3%		10.7%	29.3%		10.7%	29.3%	
Maximum Green (s)	7.0	33.0	33.0	4.0	30.0		4.0	18.0		4.0	18.0	
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5		3.5	3.5		3.5	3.5	
All-Red Time (s)	0.5	0.5	0.5	0.5	0.5		0.5	0.5		0.5	0.5	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0		4.0	4.0	
Lead/Lag	Lead	Lag	Lag	Lead	Lag		Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes		Yes	Yes		Yes	Yes	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	None	None	None	None		None	Max		None	Max	
Walk Time (s)		5.0	5.0		5.0			5.0			5.0	
Flash Dont Walk (s)		11.0	11.0		11.0			11.0			11.0	
Pedestrian Calls (#/hr)		0	0		0			0			0	
Act Effct Green (s)	39.2	35.3	35.3	32.7	28.7		20.4	18.1		21.1	19.6	
Actuated g/C Ratio	0.56	0.50	0.50	0.46	0.41		0.29	0.26		0.30	0.28	
v/c Ratio	0.80	0.40	0.10	0.14	0.92		0.10	0.57		0.13	0.53	
Control Delay	37.2	14.7	0.9	8.9	41.9		17.5	28.3		17.9	20.4	
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	37.2	14.7	0.9	8.9	41.9		17.5	28.3		17.9	20.4	
LOS	D	B	A	A	D		B	C		B	C	
Approach Delay		20.5			38.8			27.2			20.1	
Approach LOS		C			D			C			C	
Queue Length 50th (ft)	46	109	0	14	273		9	96		11	62	

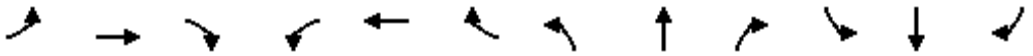
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Length 95th (ft)	#98	131	0	29	#413		15	131		23	118	
Internal Link Dist (ft)		308			764			498			1146	
Turn Bay Length (ft)	160			140			70			75		
Base Capacity (vph)	261	859	794	472	728		271	440		268	496	
Starvation Cap Reductn	0	0	0	0	0		0	0		0	0	
Spillback Cap Reductn	0	0	0	0	0		0	0		0	0	
Storage Cap Reductn	0	0	0	0	0		0	0		0	0	
Reduced v/c Ratio	0.80	0.40	0.10	0.14	0.88		0.10	0.57		0.13	0.53	

Intersection Summary			
Area Type:	Other		
Cycle Length: 75			
Actuated Cycle Length: 70.5			
Natural Cycle: 75			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.92			
Intersection Signal Delay: 28.1		Intersection LOS: C	
Intersection Capacity Utilization 68.3%		ICU Level of Service C	
Analysis Period (min) 15			

\# 95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 3: S Lynn Lane Rd & New Orleans St





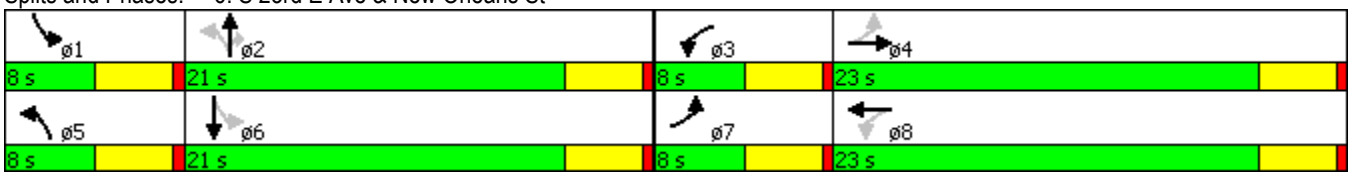
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	116	240	32	18	331	43	30	117	20	21	93	130
Ideal Flow (vphpl)	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750
Storage Length (ft)	120		0	120		0	160		0	160		0
Storage Lanes	1		0	1		0	1		1	1		0
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	1630	1685	0	1630	1687	0	1630	1716	1458	1630	1566	0
Flt Permitted	0.243			0.535			0.461			0.658		
Satd. Flow (perm)	417	1685	0	918	1687	0	791	1716	1458	1129	1566	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		12			11				164		117	
Link Speed (mph)		40			40			40			40	
Link Distance (ft)		861			522			531			779	
Travel Time (s)		14.7			8.9			9.1			13.3	
Peak Hour Factor	0.87	0.87	0.87	0.82	0.82	0.82	0.75	0.75	0.75	0.77	0.77	0.77
Adj. Flow (vph)	133	276	37	22	404	52	40	156	27	27	121	169
Shared Lane Traffic (%)												
Lane Group Flow (vph)	133	313	0	22	456	0	40	156	27	27	290	0
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA	Perm	pm+pt	NA	
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4			8			2		2	6		
Detector Phase	7	4		3	8		5	2	2	1	6	
Switch Phase												
Minimum Initial (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	
Minimum Split (s)	8.0	20.0		8.0	20.0		8.0	20.0	20.0	8.0	20.0	
Total Split (s)	8.0	23.0		8.0	23.0		8.0	21.0	21.0	8.0	21.0	
Total Split (%)	13.3%	38.3%		13.3%	38.3%		13.3%	35.0%	35.0%	13.3%	35.0%	
Maximum Green (s)	4.0	19.0		4.0	19.0		4.0	17.0	17.0	4.0	17.0	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5	3.5	3.5	3.5	
All-Red Time (s)	0.5	0.5		0.5	0.5		0.5	0.5	0.5	0.5	0.5	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag	Lag	Lead	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes	Yes	Yes	Yes	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	
Recall Mode	None	None		None	None		None	Max	Max	None	Max	
Walk Time (s)		5.0			5.0			5.0	5.0		5.0	
Flash Dont Walk (s)		11.0			11.0			11.0	11.0		11.0	
Pedestrian Calls (#/hr)		0			0			0	0		0	
Act Effct Green (s)	22.5	21.8		20.2	17.2		19.0	17.6	17.6	19.0	17.6	
Actuated g/C Ratio	0.43	0.42		0.39	0.33		0.37	0.34	0.34	0.37	0.34	
v/c Ratio	0.48	0.44		0.05	0.80		0.11	0.27	0.04	0.06	0.48	
Control Delay	16.6	14.0		9.2	30.6		11.8	17.2	0.2	11.2	13.2	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Delay	16.6	14.0		9.2	30.6		11.8	17.2	0.2	11.2	13.2	
LOS	B	B		A	C		B	B	A	B	B	
Approach Delay		14.8			29.6			14.1			13.0	
Approach LOS		B			C			B			B	
Queue Length 50th (ft)	19	48		3	114		8	35	0	6	39	

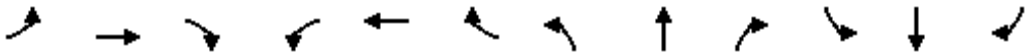
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Length 95th (ft)	#55	153		13	#252		19	70	0	15	87	
Internal Link Dist (ft)		781			442			451			699	
Turn Bay Length (ft)	120			120			160			160		
Base Capacity (vph)	277	783		414	646		356	582	603	453	608	
Starvation Cap Reductn	0	0		0	0		0	0	0	0	0	
Spillback Cap Reductn	0	0		0	0		0	0	0	0	0	
Storage Cap Reductn	0	0		0	0		0	0	0	0	0	
Reduced v/c Ratio	0.48	0.40		0.05	0.71		0.11	0.27	0.04	0.06	0.48	

Intersection Summary			
Area Type:	Other		
Cycle Length: 60			
Actuated Cycle Length: 51.8			
Natural Cycle: 60			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.80			
Intersection Signal Delay: 19.1		Intersection LOS: B	
Intersection Capacity Utilization 59.4%		ICU Level of Service B	
Analysis Period (min) 15			

\# 95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 6: S 23rd E Ave & New Orleans St



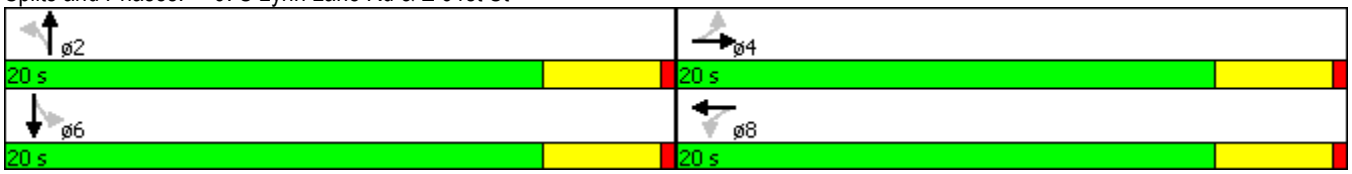


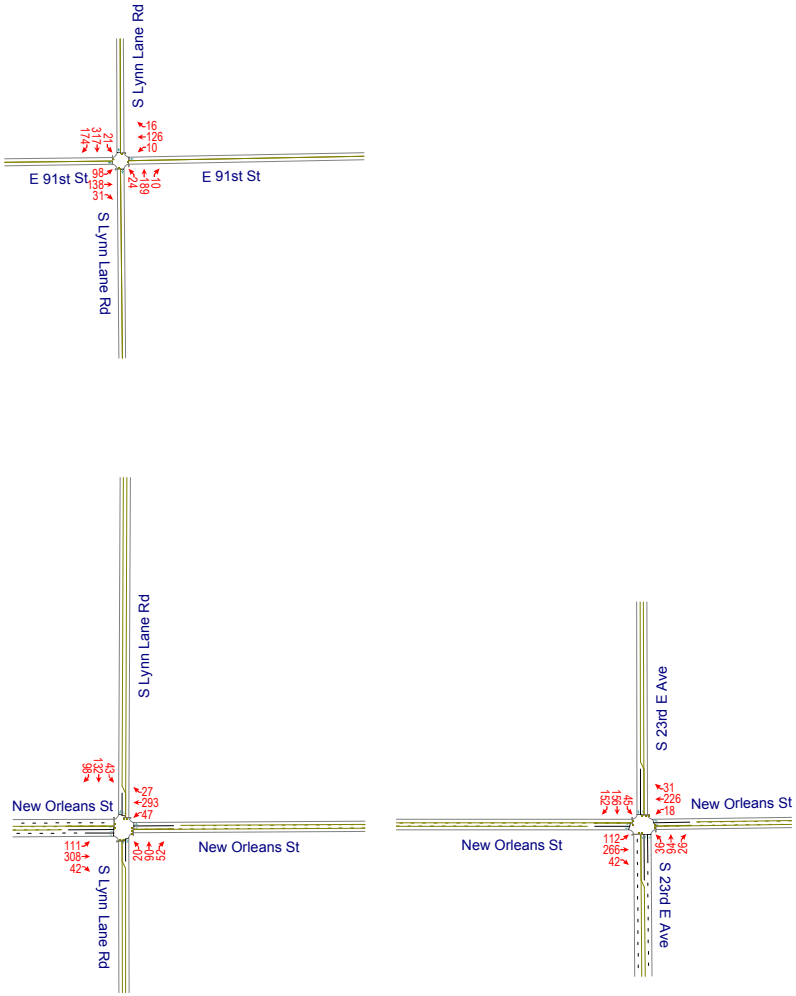
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	85	128	11	8	164	30	34	309	9	15	222	100
Ideal Flow (vphpl)	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750
Satd. Flow (prot)	0	1673	0	0	1678	0	0	1702	0	0	1644	0
Flt Permitted		0.809			0.983			0.946			0.980	
Satd. Flow (perm)	0	1380	0	0	1653	0	0	1618	0	0	1614	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		8			26			4			63	
Link Speed (mph)		40			40			40			40	
Link Distance (ft)		406			852			690			427	
Travel Time (s)		6.9			14.5			11.8			7.3	
Peak Hour Factor	0.89	0.89	0.89	0.87	0.87	0.87	0.96	0.96	0.96	0.83	0.83	0.83
Adj. Flow (vph)	96	144	12	9	189	34	35	322	9	18	267	120
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	252	0	0	232	0	0	366	0	0	405	0
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Detector Phase	4	4		8	8		2	2		6	6	
Switch Phase												
Minimum Initial (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Minimum Split (s)	20.0	20.0		20.0	20.0		20.0	20.0		20.0	20.0	
Total Split (s)	20.0	20.0		20.0	20.0		20.0	20.0		20.0	20.0	
Total Split (%)	50.0%	50.0%		50.0%	50.0%		50.0%	50.0%		50.0%	50.0%	
Maximum Green (s)	16.0	16.0		16.0	16.0		16.0	16.0		16.0	16.0	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5		3.5	3.5	
All-Red Time (s)	0.5	0.5		0.5	0.5		0.5	0.5		0.5	0.5	
Lost Time Adjust (s)		0.0			0.0			0.0			0.0	
Total Lost Time (s)		4.0			4.0			4.0			4.0	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	None		None	None		Max	Max		Max	Max	
Walk Time (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	
Flash Dont Walk (s)	11.0	11.0		11.0	11.0		11.0	11.0		11.0	11.0	
Pedestrian Calls (#/hr)	0	0		0	0		0	0		0	0	
Act Effct Green (s)		11.2			11.0			20.0			20.0	
Actuated g/C Ratio		0.31			0.30			0.55			0.55	
v/c Ratio		0.58			0.45			0.41			0.44	
Control Delay		15.6			11.1			9.4			8.5	
Queue Delay		0.0			0.0			0.0			0.0	
Total Delay		15.6			11.1			9.4			8.5	
LOS		B			B			A			A	
Approach Delay		15.6			11.1			9.4			8.5	
Approach LOS		B			B			A			A	
Queue Length 50th (ft)		37			29			43			40	
Queue Length 95th (ft)		80			62			118			102	
Internal Link Dist (ft)		326			772			610			347	
Turn Bay Length (ft)												

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Base Capacity (vph)		617			748			896			920	
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		0.41			0.31			0.41			0.44	

Intersection Summary			
Area Type:	Other		
Cycle Length: 40			
Actuated Cycle Length: 36.2			
Natural Cycle: 40			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.58			
Intersection Signal Delay: 10.7		Intersection LOS: B	
Intersection Capacity Utilization 67.2%		ICU Level of Service C	
Analysis Period (min) 15			

Splits and Phases: 9: S Lynn Lane Rd & E 91st St




S Lynn Lane Rd
E 91st St
E 91st St
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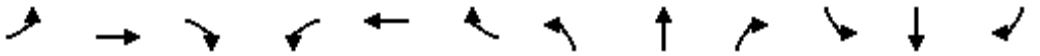
S 23rd E Ave
New Orleans St
New Orleans St
S 23rd E Ave

EX School PM



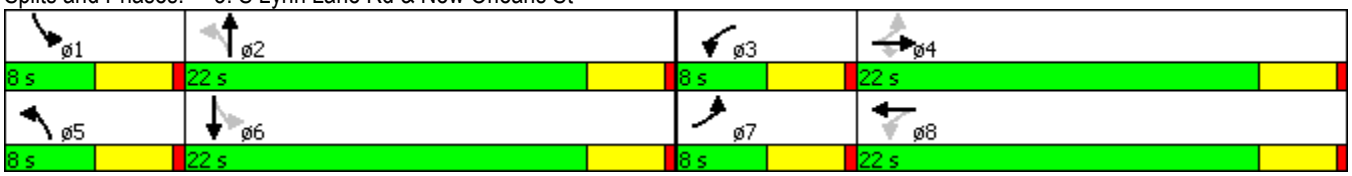
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	111	308	42	47	293	27	20	90	52	43	132	98
Ideal Flow (vphpl)	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750
Storage Length (ft)	160		0	140		0	70		0	75		0
Storage Lanes	1		1	1		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	1630	1716	1458	1630	1693	0	1630	1621	0	1630	1606	0
Flt Permitted	0.290			0.367			0.566			0.609		
Satd. Flow (perm)	498	1716	1458	630	1693	0	971	1621	0	1045	1606	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			164		8			49			64	
Link Speed (mph)		40			40			40			40	
Link Distance (ft)		388			844			578			1226	
Travel Time (s)		6.6			14.4			9.9			20.9	
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85
Adj. Flow (vph)	131	362	49	55	345	32	24	106	61	51	155	115
Shared Lane Traffic (%)												
Lane Group Flow (vph)	131	362	49	55	377	0	24	167	0	51	270	0
Turn Type	pm+pt	NA	Perm	pm+pt	NA		pm+pt	NA		pm+pt	NA	
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4		4	8			2			6		
Detector Phase	7	4	4	3	8		5	2		1	6	
Switch Phase												
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0		4.0	4.0	
Minimum Split (s)	8.0	20.0	20.0	8.0	20.0		8.0	20.0		8.0	20.0	
Total Split (s)	8.0	22.0	22.0	8.0	22.0		8.0	22.0		8.0	22.0	
Total Split (%)	13.3%	36.7%	36.7%	13.3%	36.7%		13.3%	36.7%		13.3%	36.7%	
Maximum Green (s)	4.0	18.0	18.0	4.0	18.0		4.0	18.0		4.0	18.0	
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5		3.5	3.5		3.5	3.5	
All-Red Time (s)	0.5	0.5	0.5	0.5	0.5		0.5	0.5		0.5	0.5	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0		4.0	4.0	
Lead/Lag	Lead	Lag	Lag	Lead	Lag		Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes		Yes	Yes		Yes	Yes	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	None	None	None	None		None	Max		None	Max	
Walk Time (s)		5.0	5.0		5.0			5.0			5.0	
Flash Dont Walk (s)		11.0	11.0		11.0			11.0			11.0	
Pedestrian Calls (#/hr)		0	0		0			0			0	
Act Effct Green (s)	19.1	17.0	17.0	18.2	15.3		20.9	18.8		22.3	21.6	
Actuated g/C Ratio	0.36	0.32	0.32	0.35	0.29		0.40	0.36		0.42	0.41	
v/c Ratio	0.48	0.65	0.08	0.19	0.76		0.05	0.27		0.10	0.39	
Control Delay	17.7	24.1	0.3	11.6	29.8		10.3	13.0		10.7	12.3	
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	17.7	24.1	0.3	11.6	29.8		10.3	13.0		10.7	12.3	
LOS	B	C	A	B	C		B	B		B	B	
Approach Delay		20.4			27.4			12.7			12.1	
Approach LOS		C			C			B			B	
Queue Length 50th (ft)	28	115	0	11	118		5	32		10	46	

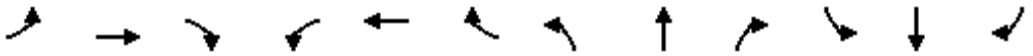
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Length 95th (ft)	53	183	0	27	#200		15	68		25	112	
Internal Link Dist (ft)		308			764			498			1146	
Turn Bay Length (ft)	160			140			70			75		
Base Capacity (vph)	271	639	646	297	610		437	610		489	697	
Starvation Cap Reductn	0	0	0	0	0		0	0		0	0	
Spillback Cap Reductn	0	0	0	0	0		0	0		0	0	
Storage Cap Reductn	0	0	0	0	0		0	0		0	0	
Reduced v/c Ratio	0.48	0.57	0.08	0.19	0.62		0.05	0.27		0.10	0.39	

Intersection Summary			
Area Type:	Other		
Cycle Length: 60			
Actuated Cycle Length: 52.6			
Natural Cycle: 60			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.76			
Intersection Signal Delay: 19.7		Intersection LOS: B	
Intersection Capacity Utilization 55.9%		ICU Level of Service B	
Analysis Period (min) 15			

\# 95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 3: S Lynn Lane Rd & New Orleans St





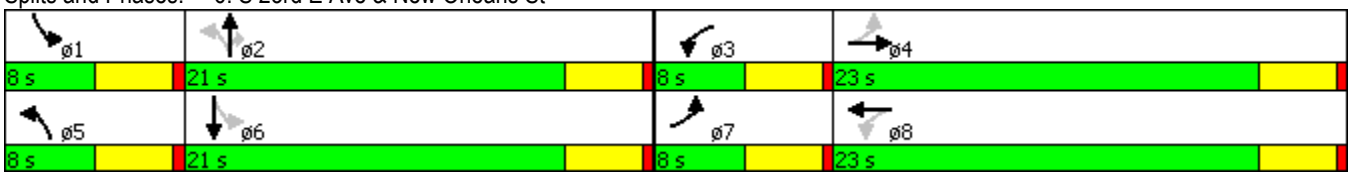
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	112	266	42	18	226	31	36	94	26	45	156	152
Ideal Flow (vphpl)	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750
Storage Length (ft)	120		0	120		0	160		0	160		0
Storage Lanes	1		0	1		0	1		1	1		0
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	1630	1681	0	1630	1685	0	1630	1716	1458	1630	1589	0
Flt Permitted	0.359			0.384			0.394			0.663		
Satd. Flow (perm)	616	1681	0	659	1685	0	676	1716	1458	1137	1589	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		14			12				164		81	
Link Speed (mph)		40			40			40			40	
Link Distance (ft)		861			522			531			779	
Travel Time (s)		14.7			8.9			9.1			13.3	
Peak Hour Factor	0.76	0.76	0.76	0.79	0.79	0.79	0.89	0.89	0.89	0.83	0.83	0.83
Adj. Flow (vph)	147	350	55	23	286	39	40	106	29	54	188	183
Shared Lane Traffic (%)												
Lane Group Flow (vph)	147	405	0	23	325	0	40	106	29	54	371	0
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA	Perm	pm+pt	NA	
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4			8			2		2	6		
Detector Phase	7	4		3	8		5	2	2	1	6	
Switch Phase												
Minimum Initial (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	
Minimum Split (s)	8.0	20.0		8.0	20.0		8.0	20.0	20.0	8.0	20.0	
Total Split (s)	8.0	23.0		8.0	23.0		8.0	21.0	21.0	8.0	21.0	
Total Split (%)	13.3%	38.3%		13.3%	38.3%		13.3%	35.0%	35.0%	13.3%	35.0%	
Maximum Green (s)	4.0	19.0		4.0	19.0		4.0	17.0	17.0	4.0	17.0	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5	3.5	3.5	3.5	
All-Red Time (s)	0.5	0.5		0.5	0.5		0.5	0.5	0.5	0.5	0.5	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag	Lag	Lead	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes	Yes	Yes	Yes	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	
Recall Mode	None	None		None	None		None	Max	Max	None	Max	
Walk Time (s)		5.0			5.0			5.0	5.0		5.0	
Flash Dont Walk (s)		11.0			11.0			11.0	11.0		11.0	
Pedestrian Calls (#/hr)		0			0			0	0		0	
Act Effct Green (s)	20.0	19.3		17.7	14.7		19.9	17.8	17.8	20.6	19.2	
Actuated g/C Ratio	0.39	0.38		0.35	0.29		0.39	0.35	0.35	0.40	0.38	
v/c Ratio	0.45	0.63		0.07	0.66		0.12	0.18	0.05	0.11	0.57	
Control Delay	15.7	19.6		10.1	23.8		11.1	16.4	0.2	10.9	17.6	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Delay	15.7	19.6		10.1	23.8		11.1	16.4	0.2	10.9	17.6	
LOS	B	B		B	C		B	B	A	B	B	
Approach Delay		18.6			22.9			12.5			16.8	
Approach LOS		B			C			B			B	
Queue Length 50th (ft)	30	96		4	94		7	26	0	10	63	

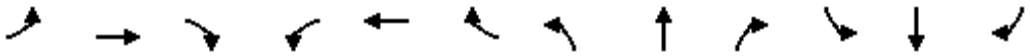
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Length 95th (ft)	50	168		13	139		23	62	0	27	#160	
Internal Link Dist (ft)		781			442			451			699	
Turn Bay Length (ft)	120			120			160			160		
Base Capacity (vph)	324	734		308	663		341	598	614	499	649	
Starvation Cap Reductn	0	0		0	0		0	0	0	0	0	
Spillback Cap Reductn	0	0		0	0		0	0	0	0	0	
Storage Cap Reductn	0	0		0	0		0	0	0	0	0	
Reduced v/c Ratio	0.45	0.55		0.07	0.49		0.12	0.18	0.05	0.11	0.57	

Intersection Summary			
Area Type:	Other		
Cycle Length: 60			
Actuated Cycle Length: 51			
Natural Cycle: 60			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.66			
Intersection Signal Delay: 18.3		Intersection LOS: B	
Intersection Capacity Utilization 57.4%		ICU Level of Service B	
Analysis Period (min) 15			

\# 95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 6: S 23rd E Ave & New Orleans St





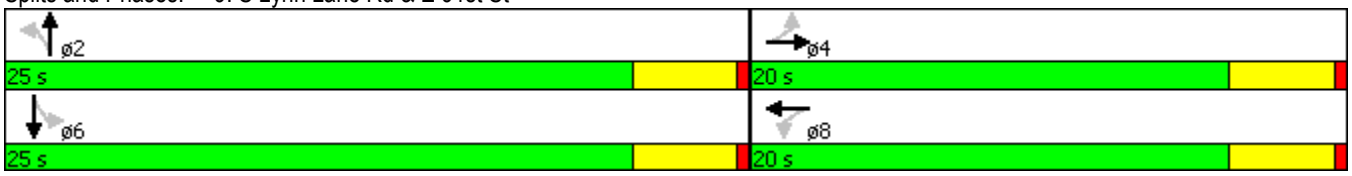
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	98	138	31	10	126	16	24	189	10	21	317	174
Ideal Flow (vphpl)	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750
Satd. Flow (prot)	0	1658	0	0	1685	0	0	1697	0	0	1633	0
Flt Permitted		0.849			0.970			0.930			0.985	
Satd. Flow (perm)	0	1433	0	0	1639	0	0	1586	0	0	1612	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		16			15			7			77	
Link Speed (mph)		40			40			40			40	
Link Distance (ft)		406			852			690			427	
Travel Time (s)		6.9			14.5			11.8			7.3	
Peak Hour Factor	0.80	0.80	0.80	0.91	0.91	0.91	0.93	0.93	0.93	0.91	0.91	0.91
Adj. Flow (vph)	122	172	39	11	138	18	26	203	11	23	348	191
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	333	0	0	167	0	0	240	0	0	562	0
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Detector Phase	4	4		8	8		2	2		6	6	
Switch Phase												
Minimum Initial (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Minimum Split (s)	20.0	20.0		20.0	20.0		20.0	20.0		20.0	20.0	
Total Split (s)	20.0	20.0		20.0	20.0		25.0	25.0		25.0	25.0	
Total Split (%)	44.4%	44.4%		44.4%	44.4%		55.6%	55.6%		55.6%	55.6%	
Maximum Green (s)	16.0	16.0		16.0	16.0		21.0	21.0		21.0	21.0	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5		3.5	3.5	
All-Red Time (s)	0.5	0.5		0.5	0.5		0.5	0.5		0.5	0.5	
Lost Time Adjust (s)		0.0			0.0			0.0			0.0	
Total Lost Time (s)		4.0			4.0			4.0			4.0	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	None		None	None		Max	Max		Max	Max	
Walk Time (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	
Flash Dont Walk (s)	11.0	11.0		11.0	11.0		11.0	11.0		11.0	11.0	
Pedestrian Calls (#/hr)	0	0		0	0		0	0		0	0	
Act Effct Green (s)		13.6			13.6			22.3			22.3	
Actuated g/C Ratio		0.31			0.31			0.51			0.51	
v/c Ratio		0.73			0.32			0.30			0.66	
Control Delay		23.5			11.7			8.2			12.7	
Queue Delay		0.0			0.0			0.0			0.0	
Total Delay		23.5			11.7			8.2			12.7	
LOS		C			B			A			B	
Approach Delay		23.5			11.7			8.2			12.7	
Approach LOS		C			B			A			B	
Queue Length 50th (ft)		65			27			32			83	
Queue Length 95th (ft)		111			60			70			#200	
Internal Link Dist (ft)		326			772			610			347	
Turn Bay Length (ft)												

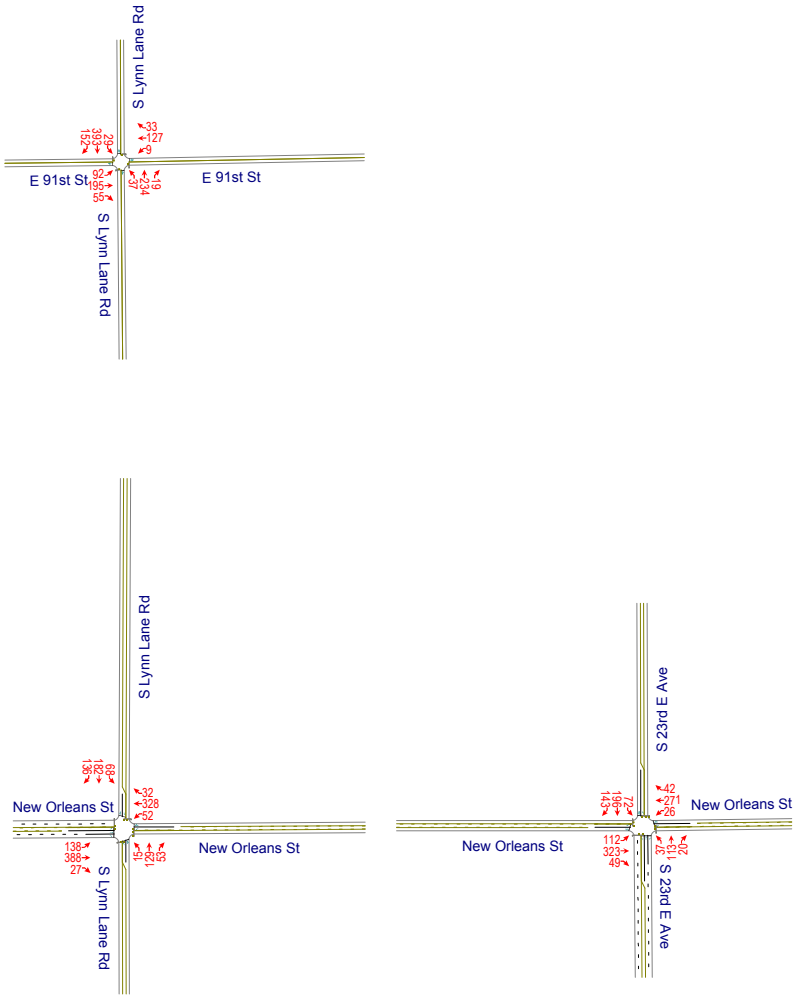
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Base Capacity (vph)		532			607			809			857	
Starvation Cap Reductn		0			0			0			0	
Spillback Cap Reductn		0			0			0			0	
Storage Cap Reductn		0			0			0			0	
Reduced v/c Ratio		0.63			0.28			0.30			0.66	

Intersection Summary			
Area Type:	Other		
Cycle Length: 45			
Actuated Cycle Length: 43.9			
Natural Cycle: 45			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.73			
Intersection Signal Delay: 14.5		Intersection LOS: B	
Intersection Capacity Utilization 69.0%		ICU Level of Service C	
Analysis Period (min) 15			

\# 95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 9: S Lynn Lane Rd & E 91st St




S Lynn Lane Rd
E 91st St
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S 23rd E Ave
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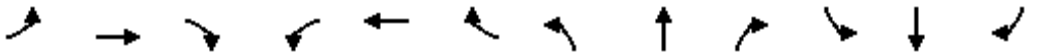
S 23rd E Ave



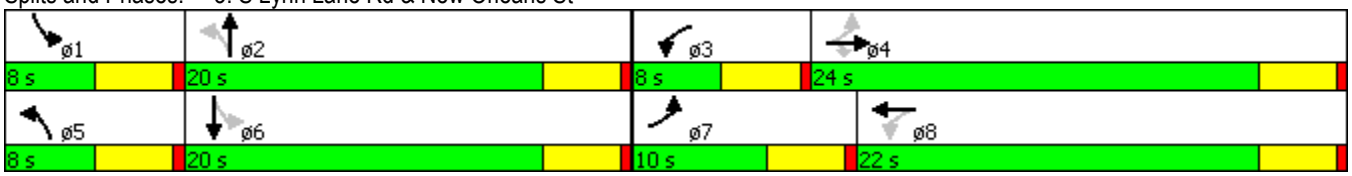
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	138	388	27	52	328	32	15	129	53	68	182	136
Ideal Flow (vphpl)	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750
Storage Length (ft)	160		0	140		0	70		0	75		0
Storage Lanes	1		1	1		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	1630	1716	1458	1630	1692	0	1630	1630	0	1630	1599	0
Flt Permitted	0.225			0.351			0.444			0.502		
Satd. Flow (perm)	386	1716	1458	602	1692	0	762	1630	0	861	1599	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			164		9			41			68	
Link Speed (mph)		40			40			40			40	
Link Distance (ft)		388			844			578			1226	
Travel Time (s)		6.6			14.4			9.9			20.9	
Peak Hour Factor	0.82	0.92	0.61	0.93	0.85	0.80	0.75	0.81	0.66	0.90	0.97	0.87
Adj. Flow (vph)	168	422	44	56	386	40	20	159	80	76	188	156
Shared Lane Traffic (%)												
Lane Group Flow (vph)	168	422	44	56	426	0	20	239	0	76	344	0
Turn Type	pm+pt	NA	Perm	pm+pt	NA		pm+pt	NA		pm+pt	NA	
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4		4	8			2			6		
Detector Phase	7	4	4	3	8		5	2		1	6	
Switch Phase												
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0		4.0	4.0	
Minimum Split (s)	8.0	20.0	20.0	8.0	20.0		8.0	20.0		8.0	20.0	
Total Split (s)	10.0	24.0	24.0	8.0	22.0		8.0	20.0		8.0	20.0	
Total Split (%)	16.7%	40.0%	40.0%	13.3%	36.7%		13.3%	33.3%		13.3%	33.3%	
Maximum Green (s)	6.0	20.0	20.0	4.0	18.0		4.0	16.0		4.0	16.0	
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5		3.5	3.5		3.5	3.5	
All-Red Time (s)	0.5	0.5	0.5	0.5	0.5		0.5	0.5		0.5	0.5	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0		4.0	4.0	
Lead/Lag	Lead	Lag	Lag	Lead	Lag		Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes		Yes	Yes		Yes	Yes	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	None	None	None	None		None	Max		None	Max	
Walk Time (s)		5.0	5.0		5.0			5.0			5.0	
Flash Dont Walk (s)		11.0	11.0		11.0			11.0			11.0	
Pedestrian Calls (#/hr)		0	0		0			0			0	
Act Effct Green (s)	22.6	19.4	19.4	19.2	16.3		18.9	16.7		20.3	19.6	
Actuated g/C Ratio	0.43	0.37	0.37	0.36	0.31		0.36	0.32		0.38	0.37	
v/c Ratio	0.54	0.67	0.07	0.19	0.81		0.06	0.44		0.20	0.54	
Control Delay	16.8	23.0	0.2	10.6	33.3		11.6	17.9		12.9	17.4	
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	16.8	23.0	0.2	10.6	33.3		11.6	17.9		12.9	17.4	
LOS	B	C	A	B	C		B	B		B	B	
Approach Delay		19.8			30.7			17.4			16.6	
Approach LOS		B			C			B			B	
Queue Length 50th (ft)	34	132	0	11	139		4	60		17	70	

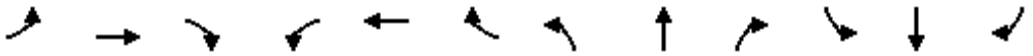
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Length 95th (ft)	59	#257	0	27	#256		13	103		39	#201	
Internal Link Dist (ft)		308			764			498			1146	
Turn Bay Length (ft)	160			140			70			75		
Base Capacity (vph)	311	719	706	299	606		339	542		389	632	
Starvation Cap Reductn	0	0	0	0	0		0	0		0	0	
Spillback Cap Reductn	0	0	0	0	0		0	0		0	0	
Storage Cap Reductn	0	0	0	0	0		0	0		0	0	
Reduced v/c Ratio	0.54	0.59	0.06	0.19	0.70		0.06	0.44		0.20	0.54	

Intersection Summary			
Area Type:	Other		
Cycle Length: 60			
Actuated Cycle Length: 53			
Natural Cycle: 60			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.81			
Intersection Signal Delay: 21.6		Intersection LOS: C	
Intersection Capacity Utilization 65.2%		ICU Level of Service C	
Analysis Period (min) 15			

\# 95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 3: S Lynn Lane Rd & New Orleans St





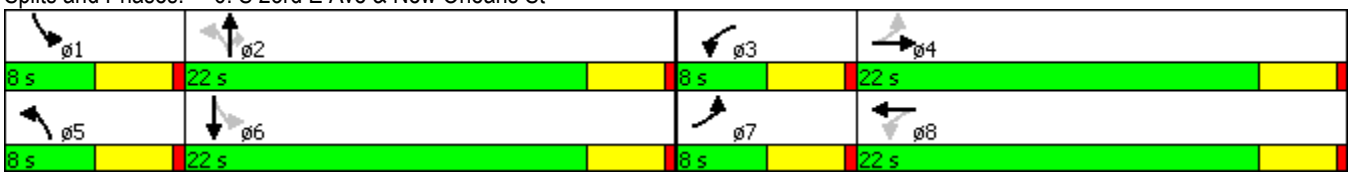
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	112	323	49	26	271	42	37	113	20	72	196	143
Ideal Flow (vphpl)	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750
Storage Length (ft)	120		0	120		0	160		0	160		0
Storage Lanes	1		0	1		0	1		1	1		0
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	1630	1681	0	1630	1681	0	1630	1716	1458	1630	1608	0
Flt Permitted	0.329			0.333			0.338			0.662		
Satd. Flow (perm)	564	1681	0	571	1681	0	580	1716	1458	1136	1608	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		13			13				164		62	
Link Speed (mph)		40			40			40			40	
Link Distance (ft)		861			522			531			779	
Travel Time (s)		14.7			8.9			9.1			13.3	
Peak Hour Factor	0.88	0.88	0.88	0.87	0.87	0.87	0.76	0.76	0.76	0.86	0.86	0.86
Adj. Flow (vph)	127	367	56	30	311	48	49	149	26	84	228	166
Shared Lane Traffic (%)												
Lane Group Flow (vph)	127	423	0	30	359	0	49	149	26	84	394	0
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA	Perm	pm+pt	NA	
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4			8			2		2	6		
Detector Phase	7	4		3	8		5	2	2	1	6	
Switch Phase												
Minimum Initial (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	
Minimum Split (s)	8.0	20.0		8.0	20.0		8.0	20.0	20.0	8.0	20.0	
Total Split (s)	8.0	22.0		8.0	22.0		8.0	22.0	22.0	8.0	22.0	
Total Split (%)	13.3%	36.7%		13.3%	36.7%		13.3%	36.7%	36.7%	13.3%	36.7%	
Maximum Green (s)	4.0	18.0		4.0	18.0		4.0	18.0	18.0	4.0	18.0	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5	3.5	3.5	3.5	
All-Red Time (s)	0.5	0.5		0.5	0.5		0.5	0.5	0.5	0.5	0.5	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag	Lag	Lead	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes	Yes	Yes	Yes	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	
Recall Mode	None	None		None	None		None	Max	Max	None	Max	
Walk Time (s)		5.0			5.0			5.0	5.0		5.0	
Flash Dont Walk (s)		11.0			11.0			11.0	11.0		11.0	
Pedestrian Calls (#/hr)		0			0			0	0		0	
Act Effct Green (s)	20.4	18.9		18.8	15.8		20.8	18.7	18.7	20.8	18.7	
Actuated g/C Ratio	0.38	0.36		0.35	0.30		0.39	0.35	0.35	0.39	0.35	
v/c Ratio	0.42	0.70		0.11	0.71		0.16	0.25	0.04	0.17	0.65	
Control Delay	15.7	24.5		10.8	26.4		11.4	16.9	0.2	11.3	21.6	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Delay	15.7	24.5		10.8	26.4		11.4	16.9	0.2	11.3	21.6	
LOS	B	C		B	C		B	B	A	B	C	
Approach Delay		22.5			25.2			13.7			19.8	
Approach LOS		C			C			B			B	
Queue Length 50th (ft)	27	106		6	109		10	40	0	17	105	

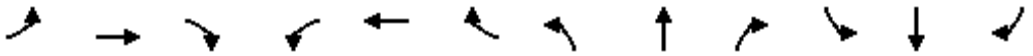
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Length 95th (ft)	54	#268		18	#189		22	67	0	38	#211	
Internal Link Dist (ft)		781			442			451			699	
Turn Bay Length (ft)	120			120			160			160		
Base Capacity (vph)	300	673		284	600		309	604	620	484	606	
Starvation Cap Reductn	0	0		0	0		0	0	0	0	0	
Spillback Cap Reductn	0	0		0	0		0	0	0	0	0	
Storage Cap Reductn	0	0		0	0		0	0	0	0	0	
Reduced v/c Ratio	0.42	0.63		0.11	0.60		0.16	0.25	0.04	0.17	0.65	

Intersection Summary	
Area Type:	Other
Cycle Length: 60	
Actuated Cycle Length: 53	
Natural Cycle: 60	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.71	
Intersection Signal Delay: 21.2	Intersection LOS: C
Intersection Capacity Utilization 62.4%	ICU Level of Service B
Analysis Period (min) 15	

\# 95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 6: S 23rd E Ave & New Orleans St





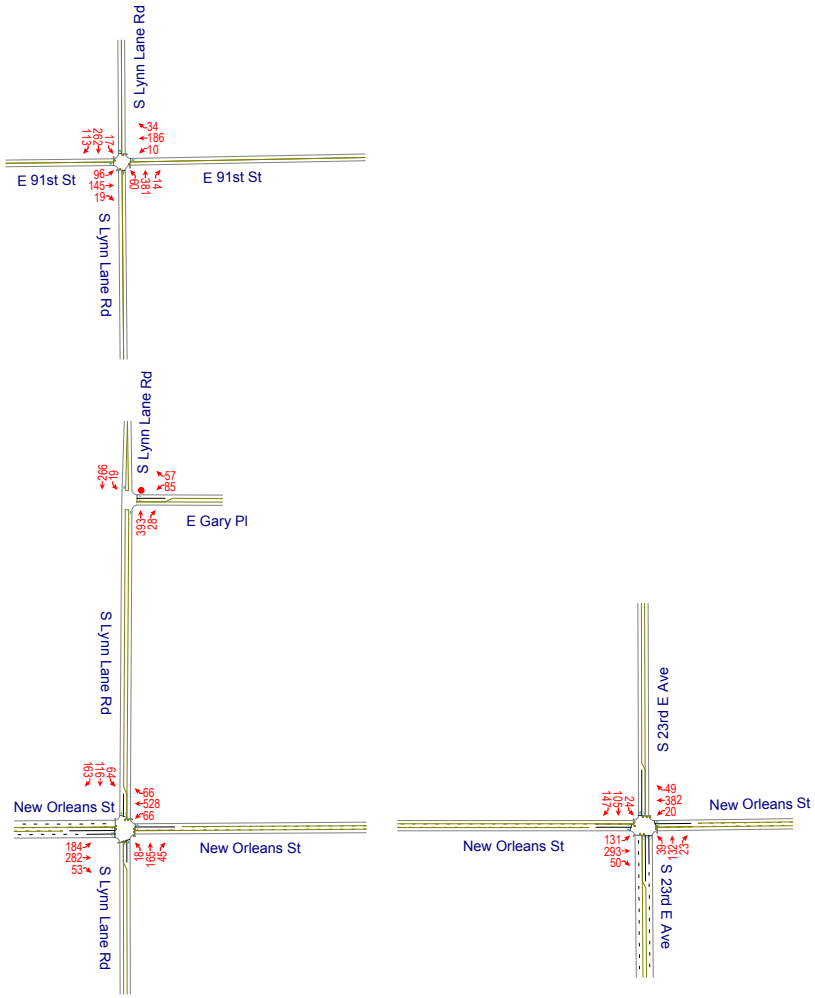
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	92	195	55	9	127	33	37	234	19	29	393	152
Ideal Flow (vphpl)	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750
Satd. Flow (prot)	0	1656	0	0	1666	0	0	1690	0	0	1649	0
Flt Permitted		0.883			0.976			0.893			0.976	
Satd. Flow (perm)	0	1482	0	0	1631	0	0	1518	0	0	1614	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		20			26			11			54	
Link Speed (mph)		40			40			40			40	
Link Distance (ft)		406			852			690			427	
Travel Time (s)		6.9			14.5			11.8			7.3	
Peak Hour Factor	0.90	0.90	0.90	0.94	0.94	0.94	0.95	0.95	0.95	0.85	0.85	0.85
Adj. Flow (vph)	102	217	61	10	135	35	39	246	20	34	462	179
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	380	0	0	180	0	0	305	0	0	675	0
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Detector Phase	4	4		8	8		2	2		6	6	
Switch Phase												
Minimum Initial (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Minimum Split (s)	20.0	20.0		20.0	20.0		20.0	20.0		20.0	20.0	
Total Split (s)	20.0	20.0		20.0	20.0		30.0	30.0		30.0	30.0	
Total Split (%)	40.0%	40.0%		40.0%	40.0%		60.0%	60.0%		60.0%	60.0%	
Maximum Green (s)	16.0	16.0		16.0	16.0		26.0	26.0		26.0	26.0	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5		3.5	3.5	
All-Red Time (s)	0.5	0.5		0.5	0.5		0.5	0.5		0.5	0.5	
Lost Time Adjust (s)		0.0			0.0			0.0			0.0	
Total Lost Time (s)		4.0			4.0			4.0			4.0	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	None		None	None		Max	Max		Max	Max	
Walk Time (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	
Flash Dont Walk (s)	11.0	11.0		11.0	11.0		11.0	11.0		11.0	11.0	
Pedestrian Calls (#/hr)	0	0		0	0		0	0		0	0	
Act Effct Green (s)		14.7			14.7			26.4			26.4	
Actuated g/C Ratio		0.30			0.30			0.54			0.54	
v/c Ratio		0.83			0.36			0.37			0.76	
Control Delay		33.5			13.4			8.4			16.3	
Queue Delay		0.0			0.0			0.0			0.0	
Total Delay		33.5			13.4			8.4			16.3	
LOS		C			B			A			B	
Approach Delay		33.5			13.4			8.4			16.3	
Approach LOS		C			B			A			B	
Queue Length 50th (ft)		93			33			46			130	
Queue Length 95th (ft)		#217			73			89			#237	
Internal Link Dist (ft)		326			772			610			347	
Turn Bay Length (ft)												

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Base Capacity (vph)		497			549			820			891	
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		0.76			0.33			0.37			0.76	

Intersection Summary			
Area Type:	Other		
Cycle Length: 50			
Actuated Cycle Length: 49.1			
Natural Cycle: 50			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.83			
Intersection Signal Delay: 18.7		Intersection LOS: B	
Intersection Capacity Utilization 78.5%		ICU Level of Service D	
Analysis Period (min) 15			

\# 95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 9: S Lynn Lane Rd & E 91st St



Projected AM

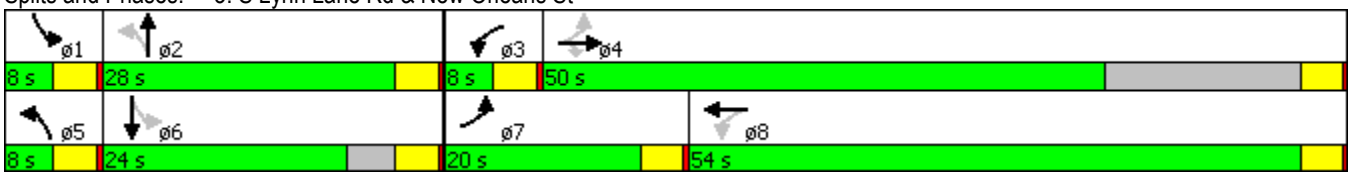
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	184	282	53	66	528	66	18	165	45	64	116	163
Ideal Flow (vphpl)	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750
Storage Length (ft)	160		0	140		0	70		0	75		0
Storage Lanes	1		1	1		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	1630	1716	1458	1630	1683	0	1630	1656	0	1630	1565	0
Flt Permitted	0.082			0.530			0.195			0.294		
Satd. Flow (perm)	141	1716	1458	909	1683	0	335	1656	0	504	1565	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			89		9			13			60	
Link Speed (mph)		40			40			40			40	
Link Distance (ft)		388			844			578			1151	
Travel Time (s)		6.6			14.4			9.9			19.6	
Peak Hour Factor	0.73	0.72	0.62	0.85	0.82	0.72	0.57	0.74	0.67	0.69	0.78	0.76
Adj. Flow (vph)	252	392	85	78	644	92	32	223	67	93	149	214
Shared Lane Traffic (%)												
Lane Group Flow (vph)	252	392	85	78	736	0	32	290	0	93	363	0
Turn Type	pm+pt	NA	Perm	pm+pt	NA		pm+pt	NA		pm+pt	NA	
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4		4	8			2			6		
Detector Phase	7	4	4	3	8		5	2		1	6	
Switch Phase												
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0		4.0	4.0	
Minimum Split (s)	8.0	20.0	20.0	8.0	20.0		8.0	20.0		8.0	20.0	
Total Split (s)	20.0	50.0	50.0	8.0	54.0		8.0	28.0		8.0	24.0	
Total Split (%)	18.2%	45.5%	45.5%	7.3%	49.1%		7.3%	25.5%		7.3%	21.8%	
Maximum Green (s)	16.0	46.0	46.0	4.0	50.0		4.0	24.0		4.0	20.0	
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5		3.5	3.5		3.5	3.5	
All-Red Time (s)	0.5	0.5	0.5	0.5	0.5		0.5	0.5		0.5	0.5	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0		4.0	4.0	
Lead/Lag	Lead	Lag	Lag	Lead	Lag		Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes		Yes	Yes		Yes	Yes	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	None	None	None	None		None	Max		None	Max	
Walk Time (s)		5.0	5.0		5.0			5.0			5.0	
Flash Dont Walk (s)		11.0	11.0		11.0			11.0			11.0	
Pedestrian Calls (#/hr)		0	0		0			0			0	
Act Effct Green (s)	67.0	60.8	60.8	51.4	47.4		27.3	24.2		28.1	25.8	
Actuated g/C Ratio	0.64	0.58	0.58	0.49	0.45		0.26	0.23		0.27	0.24	
v/c Ratio	0.82	0.40	0.10	0.17	0.97		0.24	0.74		0.53	0.85	
Control Delay	46.9	14.5	2.5	9.8	54.9		32.7	50.6		43.2	52.9	
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	46.9	14.5	2.5	9.8	54.9		32.7	50.6		43.2	52.9	
LOS	D	B	A	A	D		C	D		D	D	
Approach Delay		24.3			50.6			48.8			50.9	
Approach LOS		C			D			D			D	
Queue Length 50th (ft)	120	149	0	19	484		16	186		49	216	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Length 95th (ft)	154	160	5	35	#628		25	222		69	#302	
Internal Link Dist (ft)		308			764			498			1071	
Turn Bay Length (ft)	160			140			70			75		
Base Capacity (vph)	317	1019	901	470	810		136	390		177	427	
Starvation Cap Reductn	0	0	0	0	0		0	0		0	0	
Spillback Cap Reductn	0	0	0	0	0		0	0		0	0	
Storage Cap Reductn	0	0	0	0	0		0	0		0	0	
Reduced v/c Ratio	0.79	0.38	0.09	0.17	0.91		0.24	0.74		0.53	0.85	

Intersection Summary			
Area Type:	Other		
Cycle Length: 110			
Actuated Cycle Length: 105.4			
Natural Cycle: 90			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.97			
Intersection Signal Delay: 42.1		Intersection LOS: D	
Intersection Capacity Utilization 79.7%		ICU Level of Service D	
Analysis Period (min) 15			

\# 95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 3: S Lynn Lane Rd & New Orleans St



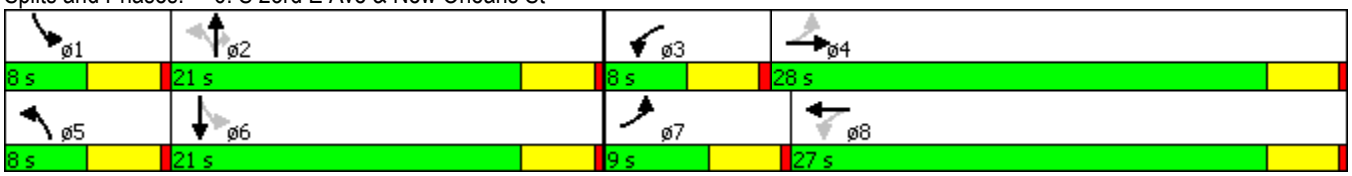
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	131	293	50	20	382	49	39	132	23	24	105	147
Ideal Flow (vphpl)	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750
Storage Length (ft)	120		0	120		0	160		0	160		0
Storage Lanes	1		0	1		0	1		1	1		0
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	1630	1678	0	1630	1687	0	1630	1716	1458	1630	1565	0
Flt Permitted	0.184			0.426			0.372			0.646		
Satd. Flow (perm)	316	1678	0	731	1687	0	638	1716	1458	1108	1565	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		15			11				151		105	
Link Speed (mph)		40			40			40			40	
Link Distance (ft)		861			522			531			779	
Travel Time (s)		14.7			8.9			9.1			13.3	
Peak Hour Factor	0.87	0.87	0.87	0.82	0.82	0.82	0.75	0.75	0.75	0.77	0.77	0.77
Adj. Flow (vph)	151	337	57	24	466	60	52	176	31	31	136	191
Shared Lane Traffic (%)												
Lane Group Flow (vph)	151	394	0	24	526	0	52	176	31	31	327	0
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA	Perm	pm+pt	NA	
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4			8			2		2	6		
Detector Phase	7	4		3	8		5	2	2	1	6	
Switch Phase												
Minimum Initial (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	
Minimum Split (s)	8.0	20.0		8.0	20.0		8.0	20.0	20.0	8.0	20.0	
Total Split (s)	9.0	28.0		8.0	27.0		8.0	21.0	21.0	8.0	21.0	
Total Split (%)	13.8%	43.1%		12.3%	41.5%		12.3%	32.3%	32.3%	12.3%	32.3%	
Maximum Green (s)	5.0	24.0		4.0	23.0		4.0	17.0	17.0	4.0	17.0	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5	3.5	3.5	3.5	
All-Red Time (s)	0.5	0.5		0.5	0.5		0.5	0.5	0.5	0.5	0.5	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag	Lag	Lead	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes	Yes	Yes	Yes	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	
Recall Mode	None	None		None	None		None	Max	Max	None	Max	
Walk Time (s)		5.0			5.0			5.0	5.0		5.0	
Flash Dont Walk (s)		11.0			11.0			11.0	11.0		11.0	
Pedestrian Calls (#/hr)		0			0			0	0		0	
Act Effct Green (s)	26.3	24.6		23.7	20.7		20.6	19.1	19.1	19.8	17.7	
Actuated g/C Ratio	0.46	0.43		0.41	0.36		0.36	0.33	0.33	0.34	0.31	
v/c Ratio	0.58	0.55		0.07	0.86		0.17	0.31	0.05	0.07	0.59	
Control Delay	20.4	16.9		9.2	35.0		14.4	19.6	0.2	13.2	19.3	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Delay	20.4	16.9		9.2	35.0		14.4	19.6	0.2	13.2	19.3	
LOS	C	B		A	C		B	B	A	B	B	
Approach Delay		17.9			33.9			16.3			18.7	
Approach LOS		B			C			B			B	
Queue Length 50th (ft)	31	92		5	187		13	46	0	8	76	

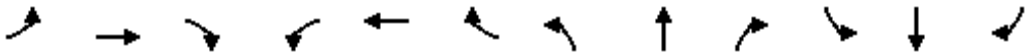
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Length 95th (ft)	#67	195		13	#304		27	87	0	19	121	
Internal Link Dist (ft)		781			442			451			699	
Turn Bay Length (ft)	120			120			160			160		
Base Capacity (vph)	262	810		364	707		298	568	584	418	552	
Starvation Cap Reductn	0	0		0	0		0	0	0	0	0	
Spillback Cap Reductn	0	0		0	0		0	0	0	0	0	
Storage Cap Reductn	0	0		0	0		0	0	0	0	0	
Reduced v/c Ratio	0.58	0.49		0.07	0.74		0.17	0.31	0.05	0.07	0.59	

Intersection Summary			
Area Type:	Other		
Cycle Length: 65			
Actuated Cycle Length: 57.7			
Natural Cycle: 65			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.86			
Intersection Signal Delay: 22.9		Intersection LOS: C	
Intersection Capacity Utilization 65.4%		ICU Level of Service C	
Analysis Period (min) 15			

\# 95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 6: S 23rd E Ave & New Orleans St





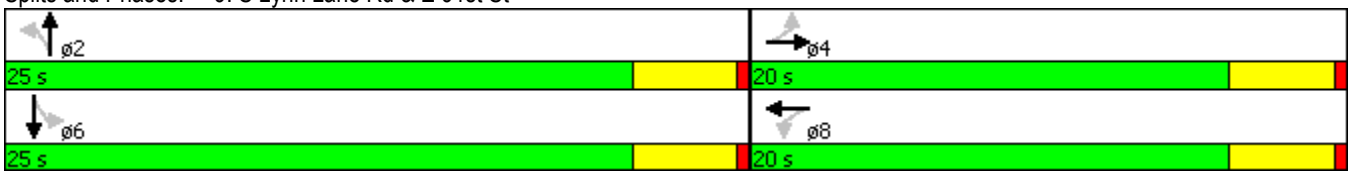
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	96	145	19	10	186	34	60	381	14	17	262	113
Ideal Flow (vphpl)	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750
Satd. Flow (prot)	0	1668	0	0	1678	0	0	1699	0	0	1645	0
Flt Permitted		0.789			0.982			0.904			0.976	
Satd. Flow (perm)	0	1340	0	0	1651	0	0	1545	0	0	1609	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		10			22			5			61	
Link Speed (mph)		40			40			40			40	
Link Distance (ft)		406			852			690			427	
Travel Time (s)		6.9			14.5			11.8			7.3	
Peak Hour Factor	0.89	0.89	0.89	0.87	0.87	0.87	0.96	0.96	0.96	0.83	0.83	0.83
Adj. Flow (vph)	108	163	21	11	214	39	62	397	15	20	316	136
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	292	0	0	264	0	0	474	0	0	472	0
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Detector Phase	4	4		8	8		2	2		6	6	
Switch Phase												
Minimum Initial (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Minimum Split (s)	20.0	20.0		20.0	20.0		20.0	20.0		20.0	20.0	
Total Split (s)	20.0	20.0		20.0	20.0		25.0	25.0		25.0	25.0	
Total Split (%)	44.4%	44.4%		44.4%	44.4%		55.6%	55.6%		55.6%	55.6%	
Maximum Green (s)	16.0	16.0		16.0	16.0		21.0	21.0		21.0	21.0	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5		3.5	3.5	
All-Red Time (s)	0.5	0.5		0.5	0.5		0.5	0.5		0.5	0.5	
Lost Time Adjust (s)		0.0			0.0			0.0			0.0	
Total Lost Time (s)		4.0			4.0			4.0			4.0	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	None		None	None		Max	Max		Max	Max	
Walk Time (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	
Flash Dont Walk (s)	11.0	11.0		11.0	11.0		11.0	11.0		11.0	11.0	
Pedestrian Calls (#/hr)	0	0		0	0		0	0		0	0	
Act Effct Green (s)		12.7			12.7			21.8			21.8	
Actuated g/C Ratio		0.30			0.30			0.51			0.51	
v/c Ratio		0.72			0.52			0.60			0.55	
Control Delay		23.5			14.8			12.2			10.0	
Queue Delay		0.0			0.0			0.0			0.0	
Total Delay		23.5			14.8			12.2			10.0	
LOS		C			B			B			B	
Approach Delay		23.5			14.8			12.2			10.0	
Approach LOS		C			B			B			B	
Queue Length 50th (ft)		57			45			73			60	
Queue Length 95th (ft)		#118			89			165			122	
Internal Link Dist (ft)		326			772			610			347	
Turn Bay Length (ft)												

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Base Capacity (vph)		511			636			794			854	
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		0.57			0.42			0.60			0.55	

Intersection Summary			
Area Type:	Other		
Cycle Length: 45			
Actuated Cycle Length: 42.5			
Natural Cycle: 45			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.72			
Intersection Signal Delay: 14.2		Intersection LOS: B	
Intersection Capacity Utilization 87.3%		ICU Level of Service E	
Analysis Period (min) 15			

\# 95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 9: S Lynn Lane Rd & E 91st St



Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (vph)	85	57	393	28	19	266
Ideal Flow (vphpl)	1750	1750	1750	1750	1750	1750
Storage Length (ft)	100	0		0	0	
Storage Lanes	1	1		0	0	
Taper Length (ft)	25				25	
Satd. Flow (prot)	1630	1458	1700	0	0	1711
Flt Permitted	0.950					0.997
Satd. Flow (perm)	1630	1458	1700	0	0	1711
Link Speed (mph)	25		40			40
Link Distance (ft)	334		1151			275
Travel Time (s)	9.1		19.6			4.7
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	92	62	427	30	21	289
Shared Lane Traffic (%)						
Lane Group Flow (vph)	92	62	457	0	0	310
Sign Control	Stop		Free			Free

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 43.9%		ICU Level of Service A	
Analysis Period (min) 15			

Intersection	
Intersection Delay, s/veh	2.8

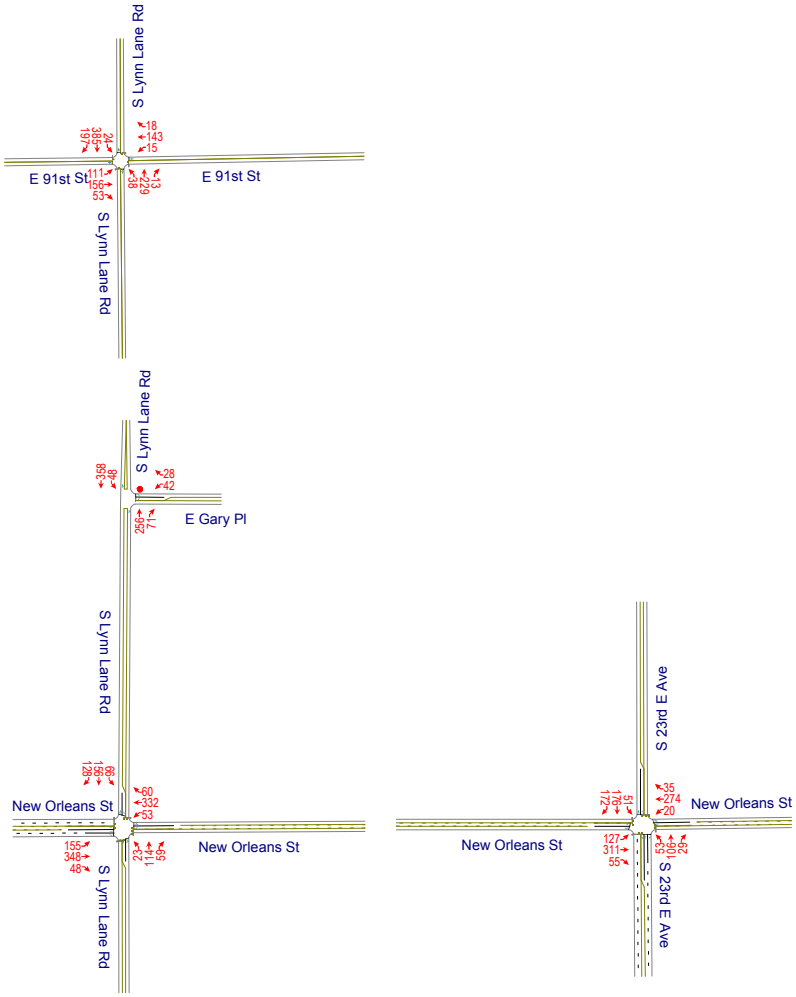
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Vol, veh/h	85	57	393	28	19	266
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	100	0	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	92	62	427	30	21	289

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	772	442	0	0	458	0
Stage 1	442	-	-	-	-	-
Stage 2	330	-	-	-	-	-
Follow-up Headway	3.518	3.318	-	-	2.218	-
Pot Capacity-1 Maneuver	368	615	-	-	1103	-
Stage 1	648	-	-	-	-	-
Stage 2	728	-	-	-	-	-
Time blocked-Platoon, %			-	-		-
Mov Capacity-1 Maneuver	360	615	-	-	1103	-
Mov Capacity-2 Maneuver	360	-	-	-	-	-
Stage 1	648	-	-	-	-	-
Stage 2	711	-	-	-	-	-

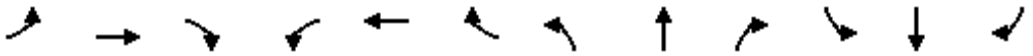
Approach	WB	NB	SB
HCM Control Delay, s	15.6	0	0.6
HCM LOS	C		

Minor Lane / Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	360	615	1103	-
HCM Lane V/C Ratio	-	-	0.257	0.101	0.019	-
HCM Control Delay (s)	-	-	18.4	11.5	8.326	0
HCM Lane LOS			C	B	A	A
HCM 95th %tile Q(veh)	-	-	1.006	0.334	0.057	-

Notes
~ : Volume Exceeds Capacity; $: Delay Exceeds 300 Seconds; Error : Computation Not Defined



Projected School PM



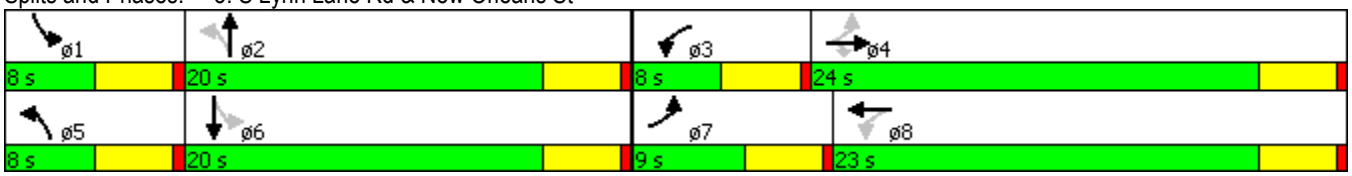
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	155	348	48	53	332	60	23	114	59	66	156	128
Ideal Flow (vphpl)	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750
Storage Length (ft)	160		0	140		0	70		0	75		0
Storage Lanes	1		1	1		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	1630	1716	1458	1630	1676	0	1630	1628	0	1630	1599	0
Flt Permitted	0.210			0.411			0.398			0.555		
Satd. Flow (perm)	360	1716	1458	705	1676	0	683	1628	0	952	1599	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			164		16			42			67	
Link Speed (mph)		40			40			40			40	
Link Distance (ft)		388			844			578			1151	
Travel Time (s)		6.6			14.4			9.9			19.6	
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85
Adj. Flow (vph)	182	409	56	62	391	71	27	134	69	78	184	151
Shared Lane Traffic (%)												
Lane Group Flow (vph)	182	409	56	62	462	0	27	203	0	78	335	0
Turn Type	pm+pt	NA	Perm	pm+pt	NA		pm+pt	NA		pm+pt	NA	
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4		4	8			2			6		
Detector Phase	7	4	4	3	8		5	2		1	6	
Switch Phase												
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0		4.0	4.0	
Minimum Split (s)	8.0	20.0	20.0	8.0	20.0		8.0	20.0		8.0	20.0	
Total Split (s)	9.0	24.0	24.0	8.0	23.0		8.0	20.0		8.0	20.0	
Total Split (%)	15.0%	40.0%	40.0%	13.3%	38.3%		13.3%	33.3%		13.3%	33.3%	
Maximum Green (s)	5.0	20.0	20.0	4.0	19.0		4.0	16.0		4.0	16.0	
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5		3.5	3.5		3.5	3.5	
All-Red Time (s)	0.5	0.5	0.5	0.5	0.5		0.5	0.5		0.5	0.5	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0		4.0	4.0	
Lead/Lag	Lead	Lag	Lag	Lead	Lag		Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes		Yes	Yes		Yes	Yes	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	None	None	None	None		None	Max		None	Max	
Walk Time (s)		5.0	5.0		5.0			5.0			5.0	
Flash Dont Walk (s)		11.0	11.0		11.0			11.0			11.0	
Pedestrian Calls (#/hr)		0	0		0			0			0	
Act Effct Green (s)	24.9	22.2	22.2	21.5	17.5		18.4	16.2		19.1	17.7	
Actuated g/C Ratio	0.45	0.40	0.40	0.39	0.32		0.33	0.29		0.35	0.32	
v/c Ratio	0.65	0.59	0.08	0.18	0.86		0.09	0.40		0.21	0.60	
Control Delay	24.9	20.5	0.2	10.3	36.1		12.0	16.7		13.1	20.1	
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	24.9	20.5	0.2	10.3	36.1		12.0	16.7		13.1	20.1	
LOS	C	C	A	B	D		B	B		B	C	
Approach Delay		19.9			33.0			16.2			18.8	
Approach LOS		B			C			B			B	
Queue Length 50th (ft)	37	127	0	12	149		6	47		17	67	

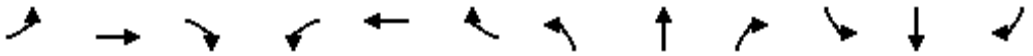
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Length 95th (ft)	#84	200	0	27	#274		17	92		38	#158	
Internal Link Dist (ft)		308			764			498			1071	
Turn Bay Length (ft)	160			140			70			75		
Base Capacity (vph)	278	688	682	341	592		296	506		379	556	
Starvation Cap Reductn	0	0	0	0	0		0	0		0	0	
Spillback Cap Reductn	0	0	0	0	0		0	0		0	0	
Storage Cap Reductn	0	0	0	0	0		0	0		0	0	
Reduced v/c Ratio	0.65	0.59	0.08	0.18	0.78		0.09	0.40		0.21	0.60	

Intersection Summary	
Area Type:	Other
Cycle Length: 60	
Actuated Cycle Length: 55.3	
Natural Cycle: 60	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.86	
Intersection Signal Delay: 23.0	Intersection LOS: C
Intersection Capacity Utilization 66.3%	ICU Level of Service C
Analysis Period (min) 15	

\# 95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 3: S Lynn Lane Rd & New Orleans St





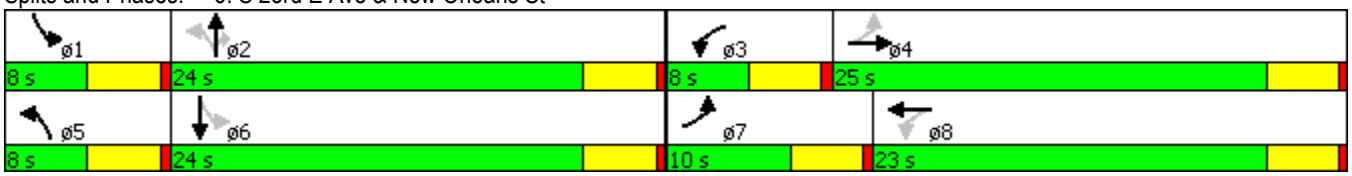
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	127	311	55	20	274	35	53	106	29	51	176	172
Ideal Flow (vphpl)	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750
Storage Length (ft)	120		0	120		0	160		0	160		0
Storage Lanes	1		0	1		0	1		1	1		0
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	1630	1678	0	1630	1687	0	1630	1716	1458	1630	1589	0
Flt Permitted	0.262			0.293			0.302			0.681		
Satd. Flow (perm)	450	1678	0	503	1687	0	518	1716	1458	1168	1589	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		14			10				151		78	
Link Speed (mph)		40			40			40			40	
Link Distance (ft)		861			522			531			779	
Travel Time (s)		14.7			8.9			9.1			13.3	
Peak Hour Factor	0.76	0.76	0.76	0.79	0.79	0.79	0.89	0.89	0.89	0.83	0.83	0.83
Adj. Flow (vph)	167	409	72	25	347	44	60	119	33	61	212	207
Shared Lane Traffic (%)												
Lane Group Flow (vph)	167	481	0	25	391	0	60	119	33	61	419	0
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA	Perm	pm+pt	NA	
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4			8			2		2	6		
Detector Phase	7	4		3	8		5	2	2	1	6	
Switch Phase												
Minimum Initial (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	
Minimum Split (s)	8.0	20.0		8.0	20.0		8.0	20.0	20.0	8.0	20.0	
Total Split (s)	10.0	25.0		8.0	23.0		8.0	24.0	24.0	8.0	24.0	
Total Split (%)	15.4%	38.5%		12.3%	35.4%		12.3%	36.9%	36.9%	12.3%	36.9%	
Maximum Green (s)	6.0	21.0		4.0	19.0		4.0	20.0	20.0	4.0	20.0	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5	3.5	3.5	3.5	
All-Red Time (s)	0.5	0.5		0.5	0.5		0.5	0.5	0.5	0.5	0.5	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag	Lag	Lead	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes	Yes	Yes	Yes	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	
Recall Mode	None	None		None	None		None	Max	Max	None	Max	
Walk Time (s)		5.0			5.0			5.0	5.0		5.0	
Flash Dont Walk (s)		11.0			11.0			11.0	11.0		11.0	
Pedestrian Calls (#/hr)		0			0			0	0		0	
Act Effct Green (s)	24.1	21.9		20.3	17.3		22.8	20.7	20.7	22.8	20.7	
Actuated g/C Ratio	0.42	0.38		0.35	0.30		0.39	0.36	0.36	0.39	0.36	
v/c Ratio	0.54	0.75		0.10	0.77		0.21	0.19	0.05	0.12	0.68	
Control Delay	18.1	27.0		11.3	32.0		13.0	17.3	0.2	11.8	22.9	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Delay	18.1	27.0		11.3	32.0		13.0	17.3	0.2	11.8	22.9	
LOS	B	C		B	C		B	B	A	B	C	
Approach Delay		24.7			30.8			13.4			21.5	
Approach LOS		C			C			B			C	
Queue Length 50th (ft)	39	136		5	137		14	35	0	14	121	

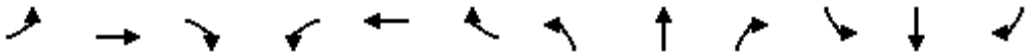
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Length 95th (ft)	61	#233		15	193		33	70	0	31	#204	
Internal Link Dist (ft)		781			442			451			699	
Turn Bay Length (ft)	120			120			160			160		
Base Capacity (vph)	312	704		256	577		282	611	616	491	615	
Starvation Cap Reductn	0	0		0	0		0	0	0	0	0	
Spillback Cap Reductn	0	0		0	0		0	0	0	0	0	
Storage Cap Reductn	0	0		0	0		0	0	0	0	0	
Reduced v/c Ratio	0.54	0.68		0.10	0.68		0.21	0.19	0.05	0.12	0.68	

Intersection Summary			
Area Type:	Other		
Cycle Length: 65			
Actuated Cycle Length: 58			
Natural Cycle: 65			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.77			
Intersection Signal Delay: 23.9		Intersection LOS: C	
Intersection Capacity Utilization 63.7%		ICU Level of Service B	
Analysis Period (min) 15			

\# 95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 6: S 23rd E Ave & New Orleans St





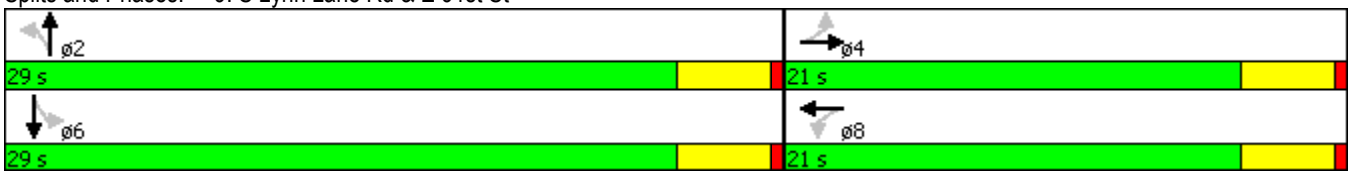
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	111	156	53	15	143	18	38	229	13	24	385	197
Ideal Flow (vphpl)	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750
Satd. Flow (prot)	0	1649	0	0	1685	0	0	1693	0	0	1637	0
Flt Permitted		0.832			0.960			0.885			0.983	
Satd. Flow (perm)	0	1396	0	0	1624	0	0	1509	0	0	1612	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		22			13			7			69	
Link Speed (mph)		40			40			40			40	
Link Distance (ft)		406			852			690			427	
Travel Time (s)		6.9			14.5			11.8			7.3	
Peak Hour Factor	0.80	0.80	0.80	0.91	0.91	0.91	0.93	0.93	0.93	0.91	0.91	0.91
Adj. Flow (vph)	139	195	66	16	157	20	41	246	14	26	423	216
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	400	0	0	193	0	0	301	0	0	665	0
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Detector Phase	4	4		8	8		2	2		6	6	
Switch Phase												
Minimum Initial (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Minimum Split (s)	20.0	20.0		20.0	20.0		20.0	20.0		20.0	20.0	
Total Split (s)	21.0	21.0		21.0	21.0		29.0	29.0		29.0	29.0	
Total Split (%)	42.0%	42.0%		42.0%	42.0%		58.0%	58.0%		58.0%	58.0%	
Maximum Green (s)	17.0	17.0		17.0	17.0		25.0	25.0		25.0	25.0	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5		3.5	3.5	
All-Red Time (s)	0.5	0.5		0.5	0.5		0.5	0.5		0.5	0.5	
Lost Time Adjust (s)		0.0			0.0			0.0			0.0	
Total Lost Time (s)		4.0			4.0			4.0			4.0	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	None		None	None		Max	Max		Max	Max	
Walk Time (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	
Flash Dont Walk (s)	11.0	11.0		11.0	11.0		11.0	11.0		11.0	11.0	
Pedestrian Calls (#/hr)	0	0		0	0		0	0		0	0	
Act Effct Green (s)		15.9			15.9			25.1			25.1	
Actuated g/C Ratio		0.32			0.32			0.51			0.51	
v/c Ratio		0.86			0.36			0.39			0.77	
Control Delay		35.6			13.9			9.4			17.7	
Queue Delay		0.0			0.0			0.0			0.0	
Total Delay		35.6			13.9			9.4			17.7	
LOS		D			B			A			B	
Approach Delay		35.6			13.9			9.4			17.7	
Approach LOS		D			B			A			B	
Queue Length 50th (ft)		98			38			48			129	
Queue Length 95th (ft)		#187			79			94			#312	
Internal Link Dist (ft)		326			772			610			347	
Turn Bay Length (ft)												

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Base Capacity (vph)		499			572			777			859	
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		0.80			0.34			0.39			0.77	

Intersection Summary			
Area Type:	Other		
Cycle Length: 50			
Actuated Cycle Length: 49			
Natural Cycle: 50			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.86			
Intersection Signal Delay: 20.2		Intersection LOS: C	
Intersection Capacity Utilization 78.9%		ICU Level of Service D	
Analysis Period (min) 15			

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 9: S Lynn Lane Rd & E 91st St



Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (vph)	42	28	256	71	48	358
Ideal Flow (vphpl)	1750	1750	1750	1750	1750	1750
Storage Length (ft)	100	0		0	0	
Storage Lanes	1	1		0	0	
Taper Length (ft)	25				25	
Satd. Flow (prot)	1630	1458	1666	0	0	1705
Flt Permitted	0.950					0.994
Satd. Flow (perm)	1630	1458	1666	0	0	1705
Link Speed (mph)	25		40			40
Link Distance (ft)	334		1151			275
Travel Time (s)	9.1		19.6			4.7
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	46	30	278	77	52	389
Shared Lane Traffic (%)						
Lane Group Flow (vph)	46	30	355	0	0	441
Sign Control	Stop		Free			Free

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 56.0%		ICU Level of Service B	
Analysis Period (min) 15			

Intersection	
Intersection Delay, s/veh	1.8

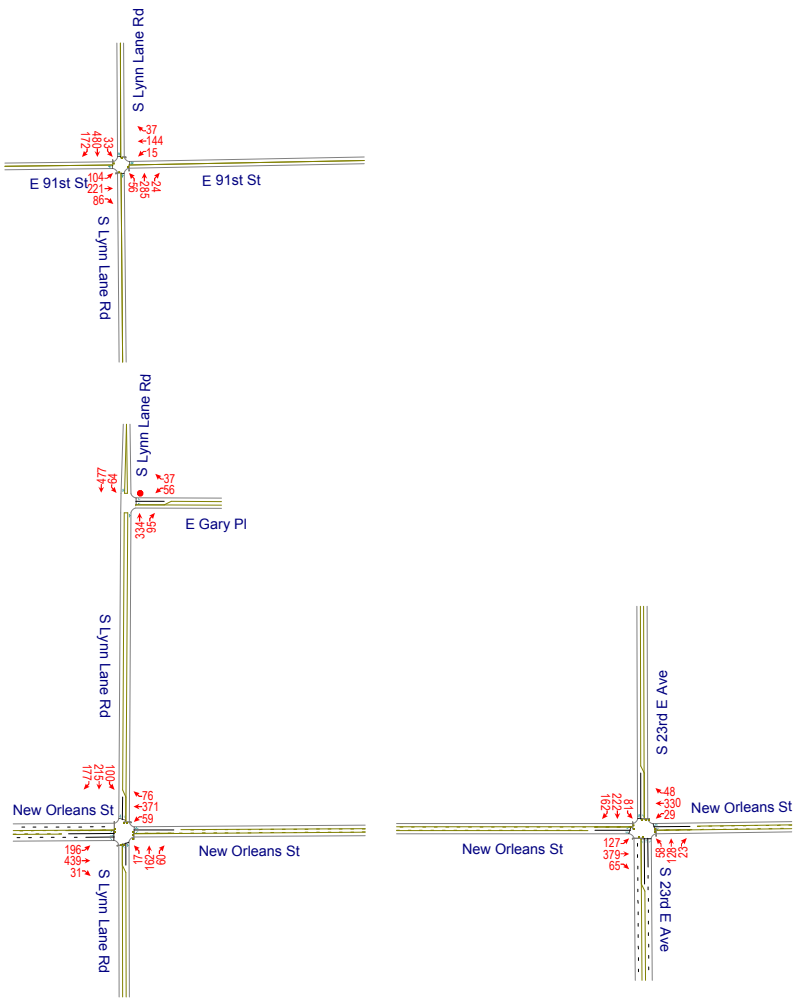
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Vol, veh/h	42	28	256	71	48	358
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	100	0	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	46	30	278	77	52	389

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	810	317	0	0	355	0
Stage 1	317	-	-	-	-	-
Stage 2	493	-	-	-	-	-
Follow-up Headway	3.518	3.318	-	-	2.218	-
Pot Capacity-1 Maneuver	349	724	-	-	1204	-
Stage 1	738	-	-	-	-	-
Stage 2	614	-	-	-	-	-
Time blocked-Platoon, %			-	-		-
Mov Capacity-1 Maneuver	330	724	-	-	1204	-
Mov Capacity-2 Maneuver	330	-	-	-	-	-
Stage 1	738	-	-	-	-	-
Stage 2	580	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	14.7	0	1
HCM LOS	B		

Minor Lane / Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	330	724	1204	-
HCM Lane V/C Ratio	-	-	0.138	0.042	0.043	-
HCM Control Delay (s)	-	-	17.7	10.2	8.125	0
HCM Lane LOS			C	B	A	A
HCM 95th %tile Q(veh)	-	-	0.475	0.131	0.136	-

Notes
~ : Volume Exceeds Capacity; $: Delay Exceeds 300 Seconds; Error : Computation Not Defined



Projected PM

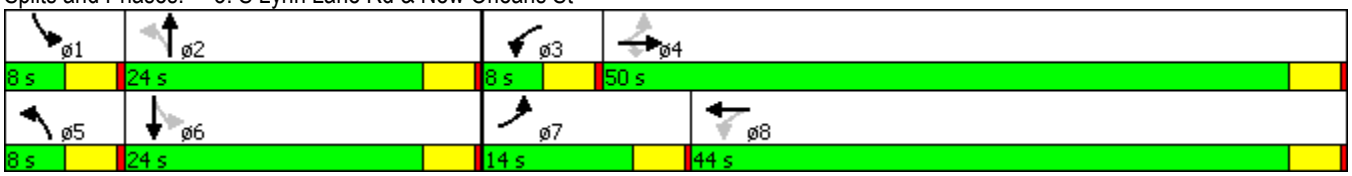
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	196	439	31	59	371	76	17	162	60	100	215	177
Ideal Flow (vphpl)	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750
Storage Length (ft)	160		0	140		0	70		0	75		0
Storage Lanes	1		1	1		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	1630	1716	1458	1630	1669	0	1630	1635	0	1630	1592	0
Flt Permitted	0.170			0.409			0.235			0.363		
Satd. Flow (perm)	292	1716	1458	702	1669	0	403	1635	0	623	1592	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			109		16			23			47	
Link Speed (mph)		40			40			40			40	
Link Distance (ft)		388			844			578			1151	
Travel Time (s)		6.6			14.4			9.9			19.6	
Peak Hour Factor	0.82	0.92	0.61	0.93	0.85	0.80	0.75	0.81	0.66	0.90	0.97	0.87
Adj. Flow (vph)	239	477	51	63	436	95	23	200	91	111	222	203
Shared Lane Traffic (%)												
Lane Group Flow (vph)	239	477	51	63	531	0	23	291	0	111	425	0
Turn Type	pm+pt	NA	Perm	pm+pt	NA		pm+pt	NA		pm+pt	NA	
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4		4	8			2			6		
Detector Phase	7	4	4	3	8		5	2		1	6	
Switch Phase												
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0		4.0	4.0	
Minimum Split (s)	8.0	20.0	20.0	8.0	20.0		8.0	20.0		8.0	20.0	
Total Split (s)	14.0	50.0	50.0	8.0	44.0		8.0	24.0		8.0	24.0	
Total Split (%)	15.6%	55.6%	55.6%	8.9%	48.9%		8.9%	26.7%		8.9%	26.7%	
Maximum Green (s)	10.0	46.0	46.0	4.0	40.0		4.0	20.0		4.0	20.0	
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5		3.5	3.5		3.5	3.5	
All-Red Time (s)	0.5	0.5	0.5	0.5	0.5		0.5	0.5		0.5	0.5	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0		4.0	4.0	
Lead/Lag	Lead	Lag	Lag	Lead	Lag		Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes		Yes	Yes		Yes	Yes	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	None	None	None	None		None	Max		None	Max	
Walk Time (s)		5.0	5.0		5.0			5.0			5.0	
Flash Dont Walk (s)		11.0	11.0		11.0			11.0			11.0	
Pedestrian Calls (#/hr)		0	0		0			0			0	
Act Effct Green (s)	42.6	36.6	36.6	32.7	28.6		23.5	20.5		25.1	23.7	
Actuated g/C Ratio	0.55	0.47	0.47	0.42	0.37		0.30	0.26		0.32	0.31	
v/c Ratio	0.72	0.59	0.07	0.18	0.85		0.12	0.65		0.44	0.82	
Control Delay	24.4	19.1	0.2	9.9	35.3		21.8	34.4		28.2	40.9	
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	24.4	19.1	0.2	9.9	35.3		21.8	34.4		28.2	40.9	
LOS	C	B	A	A	D		C	C		C	D	
Approach Delay		19.5			32.6			33.5			38.3	
Approach LOS		B			C			C			D	
Queue Length 50th (ft)	58	174	0	14	230		8	122		38	163	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Length 95th (ft)	#103	265	0	30	321		22	205		88	#436	
Internal Link Dist (ft)		308			764			498			1071	
Turn Bay Length (ft)	160			140			70			75		
Base Capacity (vph)	338	1046	931	345	892		187	450		255	520	
Starvation Cap Reductn	0	0	0	0	0		0	0		0	0	
Spillback Cap Reductn	0	0	0	0	0		0	0		0	0	
Storage Cap Reductn	0	0	0	0	0		0	0		0	0	
Reduced v/c Ratio	0.71	0.46	0.05	0.18	0.60		0.12	0.65		0.44	0.82	

Intersection Summary			
Area Type:	Other		
Cycle Length: 90			
Actuated Cycle Length: 77.4			
Natural Cycle: 80			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.85			
Intersection Signal Delay: 29.6		Intersection LOS: C	
Intersection Capacity Utilization 78.7%		ICU Level of Service D	
Analysis Period (min) 15			

\# 95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 3: S Lynn Lane Rd & New Orleans St



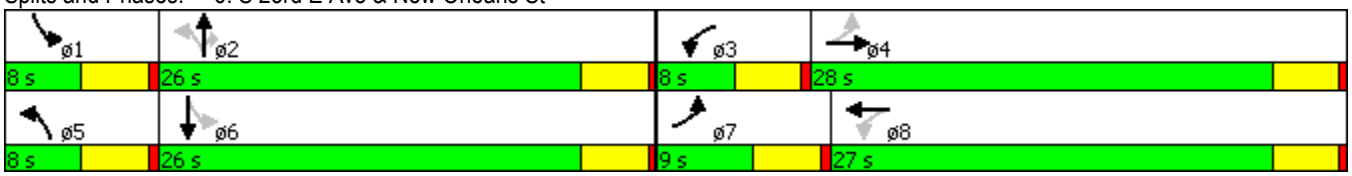
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	127	379	65	29	330	48	58	128	23	81	222	162
Ideal Flow (vphpl)	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750
Storage Length (ft)	120		0	120		0	160		0	160		0
Storage Lanes	1		0	1		0	1		1	1		0
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	1630	1678	0	1630	1683	0	1630	1716	1458	1630	1608	0
Flt Permitted	0.245			0.248			0.266			0.633		
Satd. Flow (perm)	420	1678	0	425	1683	0	456	1716	1458	1086	1608	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		13			11				140		55	
Link Speed (mph)		40			40			40			40	
Link Distance (ft)		861			522			531			779	
Travel Time (s)		14.7			8.9			9.1			13.3	
Peak Hour Factor	0.88	0.88	0.88	0.87	0.87	0.87	0.76	0.76	0.76	0.86	0.86	0.86
Adj. Flow (vph)	144	431	74	33	379	55	76	168	30	94	258	188
Shared Lane Traffic (%)												
Lane Group Flow (vph)	144	505	0	33	434	0	76	168	30	94	446	0
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA	Perm	pm+pt	NA	
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4			8			2		2	6		
Detector Phase	7	4		3	8		5	2	2	1	6	
Switch Phase												
Minimum Initial (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	
Minimum Split (s)	8.0	20.0		8.0	20.0		8.0	20.0	20.0	8.0	20.0	
Total Split (s)	9.0	28.0		8.0	27.0		8.0	26.0	26.0	8.0	26.0	
Total Split (%)	12.9%	40.0%		11.4%	38.6%		11.4%	37.1%	37.1%	11.4%	37.1%	
Maximum Green (s)	5.0	24.0		4.0	23.0		4.0	22.0	22.0	4.0	22.0	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5	3.5	3.5	3.5	
All-Red Time (s)	0.5	0.5		0.5	0.5		0.5	0.5	0.5	0.5	0.5	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag	Lag	Lead	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes	Yes	Yes	Yes	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	
Recall Mode	None	None		None	None		None	Max	Max	None	Max	
Walk Time (s)		5.0			5.0			5.0	5.0		5.0	
Flash Dont Walk (s)		11.0			11.0			11.0	11.0		11.0	
Pedestrian Calls (#/hr)		0			0			0	0		0	
Act Effct Green (s)	26.1	24.3		23.5	20.5		25.7	22.7	22.7	25.7	22.7	
Actuated g/C Ratio	0.41	0.38		0.37	0.32		0.40	0.35	0.35	0.40	0.35	
v/c Ratio	0.54	0.79		0.14	0.79		0.29	0.28	0.05	0.20	0.74	
Control Delay	20.2	29.6		12.2	33.2		15.3	19.4	0.2	13.6	28.0	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Delay	20.2	29.6		12.2	33.2		15.3	19.4	0.2	13.6	28.0	
LOS	C	C		B	C		B	B	A	B	C	
Approach Delay		27.5			31.7			16.2			25.5	
Approach LOS		C			C			B			C	
Queue Length 50th (ft)	35	156		8	162		19	54	0	24	155	

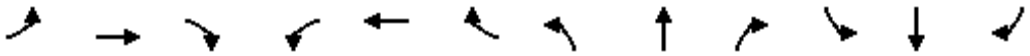
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Length 95th (ft)	66	#353		21	#283		35	83	0	48	#283	
Internal Link Dist (ft)		781			442			451			699	
Turn Bay Length (ft)	120			120			160			160		
Base Capacity (vph)	268	714		233	629		258	607	606	469	604	
Starvation Cap Reductn	0	0		0	0		0	0	0	0	0	
Spillback Cap Reductn	0	0		0	0		0	0	0	0	0	
Storage Cap Reductn	0	0		0	0		0	0	0	0	0	
Reduced v/c Ratio	0.54	0.71		0.14	0.69		0.29	0.28	0.05	0.20	0.74	

Intersection Summary			
Area Type:	Other		
Cycle Length: 70			
Actuated Cycle Length: 64.1			
Natural Cycle: 70			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.79			
Intersection Signal Delay: 26.4		Intersection LOS: C	
Intersection Capacity Utilization 69.9%		ICU Level of Service C	
Analysis Period (min) 15			

\# 95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 6: S 23rd E Ave & New Orleans St





Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	104	221	86	15	144	37	56	285	24	33	480	172
Ideal Flow (vphpl)	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750
Satd. Flow (prot)	0	1646	0	0	1666	0	0	1687	0	0	1654	0
Flt Permitted		0.861			0.964			0.842			0.971	
Satd. Flow (perm)	0	1436	0	0	1613	0	0	1432	0	0	1609	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		22			19			8			40	
Link Speed (mph)		40			40			40			40	
Link Distance (ft)		406			852			690			427	
Travel Time (s)		6.9			14.5			11.8			7.3	
Peak Hour Factor	0.90	0.90	0.90	0.94	0.94	0.94	0.95	0.95	0.95	0.85	0.85	0.85
Adj. Flow (vph)	116	246	96	16	153	39	59	300	25	39	565	202
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	458	0	0	208	0	0	384	0	0	806	0
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Detector Phase	4	4		8	8		2	2		6	6	
Switch Phase												
Minimum Initial (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Minimum Split (s)	20.0	20.0		20.0	20.0		20.0	20.0		20.0	20.0	
Total Split (s)	26.0	26.0		26.0	26.0		39.0	39.0		39.0	39.0	
Total Split (%)	40.0%	40.0%		40.0%	40.0%		60.0%	60.0%		60.0%	60.0%	
Maximum Green (s)	22.0	22.0		22.0	22.0		35.0	35.0		35.0	35.0	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5		3.5	3.5	
All-Red Time (s)	0.5	0.5		0.5	0.5		0.5	0.5		0.5	0.5	
Lost Time Adjust (s)		0.0			0.0			0.0			0.0	
Total Lost Time (s)		4.0			4.0			4.0			4.0	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	None		None	None		Max	Max		Max	Max	
Walk Time (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	
Flash Dont Walk (s)	11.0	11.0		11.0	11.0		11.0	11.0		11.0	11.0	
Pedestrian Calls (#/hr)	0	0		0	0		0	0		0	0	
Act Effct Green (s)		21.3			21.3			35.0			35.0	
Actuated g/C Ratio		0.33			0.33			0.54			0.54	
v/c Ratio		0.93			0.38			0.49			0.90	
Control Delay		50.2			17.2			11.8			29.3	
Queue Delay		0.0			0.0			0.0			0.0	
Total Delay		50.2			17.2			11.8			29.3	
LOS		D			B			B			C	
Approach Delay		50.2			17.3			11.8			29.3	
Approach LOS		D			B			B			C	
Queue Length 50th (ft)		163			55			85			253	
Queue Length 95th (ft)		#335			107			152			#451	
Internal Link Dist (ft)		326			772			610			347	
Turn Bay Length (ft)												

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Base Capacity (vph)		505			564			782			893	
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		0.91			0.37			0.49			0.90	

Intersection Summary			
Area Type:	Other		
Cycle Length: 65			
Actuated Cycle Length: 64.3			
Natural Cycle: 65			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.93			
Intersection Signal Delay: 29.5		Intersection LOS: C	
Intersection Capacity Utilization 90.5%		ICU Level of Service E	
Analysis Period (min) 15			

\# 95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 9: S Lynn Lane Rd & E 91st St

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (vph)	56	37	334	95	64	477
Ideal Flow (vphpl)	1750	1750	1750	1750	1750	1750
Storage Length (ft)	100	0		0	0	
Storage Lanes	1	1		0	0	
Taper Length (ft)	25				25	
Satd. Flow (prot)	1630	1458	1664	0	0	1705
Flt Permitted	0.950					0.994
Satd. Flow (perm)	1630	1458	1664	0	0	1705
Link Speed (mph)	25		40			40
Link Distance (ft)	334		1151			275
Travel Time (s)	9.1		19.6			4.7
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	61	40	363	103	70	518
Shared Lane Traffic (%)						
Lane Group Flow (vph)	61	40	466	0	0	588
Sign Control	Stop		Free			Free

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 69.8%		ICU Level of Service C	
Analysis Period (min) 15			

Intersection	
Intersection Delay, s/veh	2.3

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Vol, veh/h	56	37	334	95	64	477
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	100	0	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	61	40	363	103	70	518

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1073	415	0	0	466	0
Stage 1	415	-	-	-	-	-
Stage 2	658	-	-	-	-	-
Follow-up Headway	3.518	3.318	-	-	2.218	-
Pot Capacity-1 Maneuver	244	637	-	-	1095	-
Stage 1	666	-	-	-	-	-
Stage 2	515	-	-	-	-	-
Time blocked-Platoon, %			-	-		-
Mov Capacity-1 Maneuver	222	637	-	-	1095	-
Mov Capacity-2 Maneuver	222	-	-	-	-	-
Stage 1	666	-	-	-	-	-
Stage 2	469	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	20.8	0	1
HCM LOS	C		

Minor Lane / Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	222	637	1095	-
HCM Lane V/C Ratio	-	-	0.274	0.063	0.064	-
HCM Control Delay (s)	-	-	27.2	11	8.511	0
HCM Lane LOS			D	B	A	A
HCM 95th %tile Q(veh)	-	-	1.076	0.202	0.203	-

Notes
~ : Volume Exceeds Capacity; $: Delay Exceeds 300 Seconds; Error : Computation Not Defined

PETERS & ASSOCIATES
ENGINEERS, INC.
• *CIVIL & TRAFFIC ENGINEERING* •
5507 Ranch Drive - Suite 209
Little Rock, Arkansas 72223 (501) 868-3999