

CORRIDOR STUDY

CHARDON TOWNSHIP, GEAUGA COUNTY and CONCORD TOWNSHIP, LAKE COUNTY, OHIO

GEA/LAK-44 CORRIDOR STUDY

**PREPARED BY GPD GROUP FOR: OHIO DEPARTMENT OF
TRANSPORTATION – DISTRICT 12**

APRIL 2022



GPD GROUP®

Glaus, Pyle, Schomer, Burns & DeHaven, Inc.

GEA/LAK-44 CORRIDOR STUDY

State Route 44 (SR-44)

Chardon Township, Geauga County and
Concord Township, Lake County

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I. **Purpose:**

The Ohio Department of Transportation (ODOT) District 12 has embarked on an initiative to address mobility and safety issues along State Route 44 (SR-44) corridor. This initiative is focused on addressing current congestion and safety issues while providing infrastructure for potential future development. Selected results of this study will be integrated into the GEA/LAK-44-18.45/0.00 Rehab project (PID 114163) scheduled for award in 2025.

GPD Group was retained by ODOT District 12 to complete a Corridor Study along the limited access facility of the SR-44 Corridor. The purpose of this study is to analyze vehicular operating conditions along the study route to determine what capacity and/or safety improvements are necessary to correct the identified deficiencies, if any, for the projected future traffic conditions.

II. **Project Setting:**

Study Area

The limits of the corridor which are under consideration as a part of this study encompass SR-44 from just south of Capital Parkway (Lake County SLM 1.07) to just north of Mentor Road (Gauga County SLM 18.45) at the border of the City of Chardon. The study area also includes the Girdled Road / Auburn Road and the Girdled Road / Crile Road intersections. The limits of SR-44 encompassed by this study spans two townships (Chardon and Concord), and two counties (Lake and Geauga). The land uses surrounding the study corridor are primarily residential and commercial land uses. See **Figure 1** for the Project Location Map and **Figure 2** for an Aerial Photograph.

'No-Build' Area Roadway System

SR-44 currently exists as a two lane asphalt roadway (one travel lane in each direction) throughout the study area. SR-44 widens to two lanes in each direction north of the study area. The current posted speed limit on SR-44 is 45 miles per hour (mph) north of Colburn Road and increases to 55 mph south of Colburn Road. According to information obtained from the Ohio Department of Transportation's (ODOT) website, SR-44 is classified as a principal arterial roadway.

Girdled Road currently exists as a two lane asphalt roadway (one travel lane in each direction) throughout the study area. The current posted speed limit on Girdled Road is 45 mph. According to information obtained from ODOT's website, Girdled Road is classified as a local roadway.

There are six existing intersections that are currently located within the study area that are of special interest to this project; one signalized intersection and five unsignalized intersection. The six existing intersections included in this study are as follows:



SR-44 / Girdled Road Intersection:

This intersection is currently signalized utilizing a span wire configuration with strain poles located on the northwest and southeast corners of the intersection. The intersection consists of four approaches with the following lane configurations: NB & SB SR-44 – two lanes (left, thru-right), EB & WB Girdled Road– one lane (left-thru-right).

SR-44 / Colburn Road

This intersection is currently unsignalized with the Colburn Road approaches operating under stop control. The intersection consists of four approaches with the following lane configurations: NB & SB SR-44 – one lane (left-thru-right), EB & WB Colburn Road– one lane (left-thru-right).

SR-44 / Clark Road

This intersection is currently unsignalized with the Clark Road approaches operating under stop control. The intersection consists of four approaches with the following lane configurations: NB & SB SR-44 – one lane (left-thru-right), EB & WB Clark Road– one lane (left-thru-right).

SR-44 / Hosford Road

This intersection is currently unsignalized with the Hosford Road approaches operating under stop control. The intersection consists of four approaches with the following lane configurations: NB & SB SR-44 – one lane (left-thru-right), EB & WB Hosford Road– one lane (left-thru-right).

Girdled Road / Auburn Road

This intersection is currently unsignalized with all approaches operating under stop control. The intersection consists of four approaches with the following lane configurations: NB & SB Auburn Road – one lane (left-thru-right), EB & WB Girdled Road – one lane (left-thru-right).

Girdled Road / Crile Road

This intersection is currently unsignalized with the Crile Road approach operating under stop control. The intersection consists of three approaches with the following lane configurations: EB Girdled Road – one lane (left-thru), WB Girdled Road – one lane (thru-right), and SB Crile Road – one lane (left-right).

III. Traffic Volumes:

For this study, Cummins Consulting Services performed turning movement traffic counts at the six (6) study intersections on Wednesday, December 15, 2021. Based on the turning movement counts, the AM peak hour of the SR-44 corridor was found to occur from 7:15 AM – 8:15 AM, while the PM peak hour was found to occur from 3:15 PM – 4:15 PM.



'No-Build' Traffic Volumes

Utilizing the volumes from the traffic counts, Opening Year 2027 and Design Year 2047 'No-Build' traffic volumes were developed in accordance with the ODOT certified traffic development process using seasonal adjustment factors, design hour volume (DHV) factors, and an annual growth rate. These volumes were submitted to ODOT for approval on March 24, 2022. See **Appendix A** for the certified traffic plates. The certified traffic data includes the design designations, the Average Daily Traffic (ADT), the AM Peak DHV, and the PM Peak DHV.

According to the information provided by ODOT which was based on NOACA's model, the study area is anticipated to experience growth rates that vary from one intersection to another. **Table 1** shows the different growth rates anticipated throughout the study area.

Intersection	Northbound Approach	Southbound Approach	Eastbound Approach	Westbound Approach
SR-44 / Girdled Road	+0.5%	+0.5%	+1.0%	+1.0%
SR-44 / Colburn Road	+0.5%	+0.5%	+0.5%	+0.5%
SR-44 / Clark Road	+0.5%	+0.5%	+0.5%	+0.5%
SR-44 / Hosford Road	+0.5%	+0.5%	0.0%	0.0%
Girdled Road / Auburn Road	+0.5%	+0.5%	+1.0%	+1.0%
Girdled Road / Crile Road	N/A	0.0%	+1.0%	+1.0%

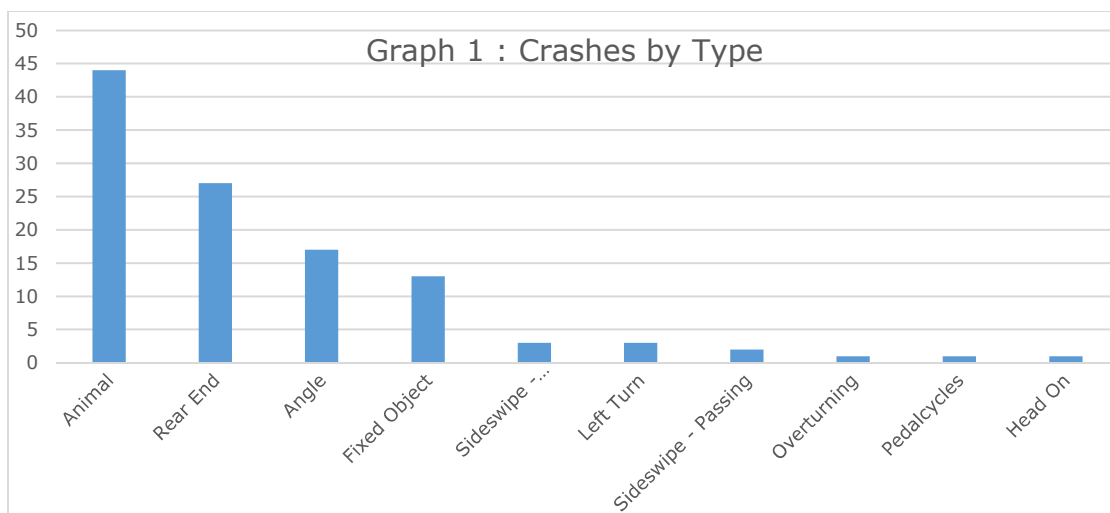
IV. Traffic Analysis:

Safety Analysis

Crash Data was obtained from ODOT's GIS Crash Analysis Tool (GCAT) for the calendar years of 2017 to 2021 for the entire study area. A total of 112 crashes were reported within the study area and were analyzed as part of this project. These crashes include 44 animal-related crashes, 27 rear-end, 17 angle, 13 fixed object, 3 sideswipe meeting, 3 left turn, 2 sideswipe passing, 1 pedal cycle, 1 Head on and 1 overturning. Of all crashes, 53% occurred in daylight, 69% occurred on dry pavement, and 24% of the crashes were injury crashes with three (3) fatal crashes reported from 2017 - 2021. See **Appendix B** for crash data summary and charts. Approximately 46% of crashes within the study limits are occurring at the study intersections (58 out of 127). Additionally, most intersection related crashes are occurring at the Hosford Road (23 crashes) and Girdled Road (20 crashes) intersections.

According to the Highway Safety Improvement Program (HSIP) there are two segments within the study area that are HSIP ranked, segment (log 0.5 – 0.6) ranked 369 and segment (log 0.4 – 0.5) ranked 116.





Graph 1 shows the main crash types in the study area. According to **Graph 1**, rear end, animal related and angle crashes are the most common crash types in the study area.

Two (2) of the three (3) fatal crashes occurred at the SR-44 / Hosford Road intersection and the third occurred on the SR-44 mainline south of Hosford Road. The first fatal crash occurred in 2017. A passenger car was traveling westbound on Hosford Road, ran the stop sign and collided with a flatbed vehicle, killing the car operator and his passenger. Neither alcohol nor drugs played a contributing factor, and the crash occurred on dry pavement.

The second fatal crash occurred in 2019. A passenger car was traveling westbound on Hosford Road, failed to yield to traffic on SR-44 causing the vehicle to collide with a Sport Utility Vehicle (SUV), killing the SUV's operator. Neither alcohol nor drugs played a contributing factor, and the crash occurred on dry pavement.

The third fatal crash occurred in 2021 on the segment of SR-44 south of Hosford Road. A passenger car was traveling northbound on SR-44 when lost control due to snow/ice on the roadway which caused it to spin in the southbound lane and collide with a southbound passenger car killing the operator of the northbound passenger car. Neither alcohol nor drugs played a contributing factor, and the crash occurred on dry pavement.

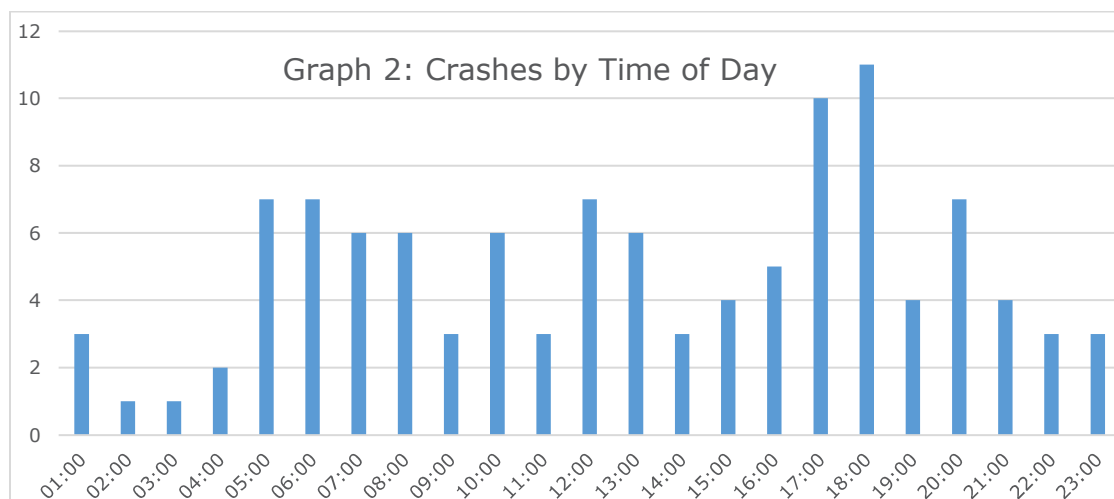
One of the leading crash types within the study area are the 27 rear-end related crashes. Crash diagrams included in **Appendix C** show that most of the rear-end related crashes occurred at the SR-44 / Girdled Road intersection which is a congested signalized intersection where these types of crashes are common. Recommendations for improvements to the Girdled Road area to reduce congestion should help to decrease the number of rear-end collisions.

Animal related type crashes are the most common type of crash that occurs in the study area. This crash type is not included in the crash diagrams as it is not related to driver behavior. ODOT could consider installing taller fences at the right-of-way line to deter the deer. However, this would not prevent all deer from reaching the road.

The third most common crash type occurring on the corridor, localized at the cross-roads (particularly Hosford Road), are angle crashes. These crashes are common at two-way stop-controlled intersections where side street approaches are controlled



with stop signs. Instead of completing a full stop at an intersection, some drivers may elect to briefly stop at a stop sign and sometime not stop at all. Failure to properly stop at a stop sign could be contributing to the angle crashes that occur along the corridor. As will be presented later in this report, a roundabout is being considered at the Hosford Road intersection which will help to reduce the number of angle crashes at this location.



Graph 2 shows the crashes by time of day in the study area. According to Graph 2 the peak of crashes during the AM peak occurs (5 AM - 7 AM) while the peak of crashes during the PM peak occurs (5 PM - 7 PM).

TOAST Scores

The Traffic Operation Assessment Systems Tool (TOAST) is a tool developed by ODOT in an effort to make data-driven decisions and determine operationally sensitive corridors throughout the state. Multiple data categories make up TOAST. For each category, data ranges were normalized into values of 0-10, then multiplied by a weighting factor. The total score for a route is calculated as a percent based on the score for each category divided by the total possible maximum score. In general, the higher the percent, the better the route is performing, whereas the lower the percent, the more likely a route is to benefit from the application of Transportation Systems Management and Operations (TSMO) strategies. **Table 2** summarizes TOAST scores for the study area which includes three TOAST segments.

Segment	Total	Bottlenecks	Travel Time Performance	TSMO Safety	Volume Per Lane	Freight Corridors	Incident Clearance	Secondary Crashes
SLAKSR00044**C_00.000_01.180	54.0%	10	0	3	4	8	4	10
SGEASR00044**C_18.450_20.720	62.0%	10	7	1	3	8	2	10
SGEASR00044**C_20.720_21.730	73.3%	10	10	4	3	8	3	10



The improvements that will be presented later in this report will help to address three of the TOAST areas, Travel Time Performance, TSMO Safety, and Volume per Lane.

Traffic Signal Warrant Analysis

Utilizing the existing and proposed traffic volumes, as specified in *Section 402-2* of the ODOT Traffic Engineering Manual (TEM), traffic signal warrant analyses were performed for each of the study intersections along the corridor. The nine (9) traffic signal warrants provided in the 2012 Ohio Manual of Uniform Traffic Control Devices (OMUTCD) define the minimum conditions under which installing traffic control signals are justified. Due to the availability of 12 and 13-hour traffic volumes, OMUTCD Warrant #'s 1,2,3, and 7 were deemed applicable and were analyzed as part of this study. Detailed descriptions of each of these warrants are described as follows.

Warrant #1 Eight-Hour Vehicular Volume

The Eight-Hour Vehicular Volume warrant is intended for application where the volume of intersection traffic is the principal reason for consideration of the signal installation. Three conditions are possible to satisfy this particular warrant. Condition A applies specifically to minimum vehicular volume requirements. Condition B deals with the interruption of continuous traffic flow. Condition C represents a combination of Conditions A and B being met at reduced volume requirements.

Warrant #2 Four-Hour Vehicular Volume

The Four-Hour Vehicular Volume warrant is satisfied when for four hours of an average day, minimum volumes are reached on both the major street (total of both approaches) and the highest volume minor street approach (one direction only).

Warrant #3 Peak Hour Vehicular Volume

The Peak Hour Vehicular Volume warrant is intended for application when traffic conditions are such that for one hour of the day, minor street traffic suffers undue delay in entering or crossing the major street. The Peak Hour Vehicular Volume warrant is satisfied when the minimum required volumes on the major and highest volume minor approach are met for any one hour (any four consecutive 15-minute periods) on an average day.

Warrant #7 Crash Experience

The Crash Experience signal warrant conditions are intended for application where the severity and frequency of crashes are the principal reasons to consider installing a traffic control signal.

It should be noted that for Warrant #'s 1-3, when the 85th percentile speed of the major street traffic exceeds 40 mph in either an urban or rural area, or when the intersection lies within a built-up area of an isolated community having a population less than 10,000, the vehicular volume requirements may be reduced to 70% of the base values. For new ODOT maintained signals, in order to use the 70% thresholds, there must be five or more correctable crashes in one year (corrected with the addition of a signal) and the speed exceeds 40 miles per hour on the major street.



All ODOT-maintained signals warranted based on the 70% values shall require the approval of the Office of Traffic Operations. This condition only applies to the intersection of Hosford Road and SR-44.

To determine whether the current traffic conditions of the study intersections warrant a traffic signal, the existing traffic volumes were compared to the 100% volume thresholds for the above warrants as well as other criteria. The results of the Existing Year 2021 traffic signal warrant analysis are shown in **Table 3**. See **Appendix D** for the traffic signal warrant analysis.

Intersection	Signal Warrant			
	Warrant #1 (Eight-Hour Vehicular Volume)	Warrant #2 (Four-Hour Vehicular Volume)	Warrant #3 (Peak Hour Vehicular Volume)	Warrant #7 (Crash Experience)
SR-44 / Girdled Road*	Met	Met	Met	N/A
SR-44 / Colburn Road	Not Satisfied	Not Satisfied	Not Satisfied	Not Satisfied
SR-44 / Clark Road	Not Satisfied	Not Satisfied	Not Satisfied	Not Satisfied
SR-44 / Hosford Road	Not Satisfied	Met	Not Satisfied	Met**
70% Values	Met	Met	Met	-
Girdled Road / Auburn Road	Not Satisfied	Not Satisfied	Not Satisfied	-
Girdled Road / Crile Road	Not Satisfied	Not Satisfied	Not Satisfied	Not Satisfied

*Currently Signalized

**The concurrence of the Office of Traffic Operations is required before ODOT will consider this warrant to be met.

As shown in **Table 3**, the Existing Year 2021 traffic signal warrant analysis determined that the existing signalized intersection of SR-44 / Girdled Road continues to meet the volume thresholds of Warrant #'s 1-3. Since Warrant #7 was met for the SR-44 / Hosford Road intersection, Warrant #'s 1-3 were also analyzed at the 70% volume thresholds per the ODOT TEM.

The Existing Year 2021 traffic signal warrant analysis also determined that the current traffic conditions at the unsignalized intersection of SR-44 / Hosford Road meet the 100 % volume thresholds of Warrant #2 and the criteria of Warrant #7 to warrant a traffic signal. Warrant #7 is met based on two separate periods where there are 5 crashes within a 12-month period that are correctable by a signal, 1/6/2017 – 6/6/2017 and 2/1/2021 – 10/30/21. All crashes in these two periods were angle crashes that would be correctable by a signal. Over the course of five years (2017 – 2021) there were a total of 15 correctable crashes by a signal, or an average of three per year.



Auxiliary Turn Lane Warrants

Auxiliary turn lane warrant analyses were performed for the unsignalized study intersections in order to determine whether a right turn lane or left turn lane will be warranted under the Design Year 2047 traffic conditions. ODOT publishes the Location & Design Manual (L&D), Volume 1 – Roadway Design which includes warrant charts for auxiliary turn lanes. These warrant charts were utilized as an initial screening to determine if auxiliary turn lanes will be required at the unsignalized study intersections. The results of the Design Year 2047 auxiliary turn lane analyses are summarized in **Table 4**. See **Appendix E** for the auxiliary turn lane warrant charts.

Table 4: Auxiliary Turn Lane Warrant Analysis Summary - Design Year 2047 'Build' Conditions	
Intersection	Auxiliary Turn Lane Warrant
SR-44 / Colburn Road	
Northbound Left Turn Lane	Satisfied
Northbound Right Turn Lane	Not Satisfied
Southbound Left Turn Lane	Satisfied
Southbound Right Turn Lane	Not Satisfied
SR-44 / Clark Road	
Northbound Left Turn Lane	Satisfied
Northbound Right Turn Lane	Not Satisfied
Southbound Left Turn Lane	Satisfied
Southbound Right Turn Lane	Not Satisfied
SR-44 / Hosford Road	
Northbound Left Turn Lane	Satisfied
Northbound Right Turn Lane	Satisfied
Southbound Left Turn Lane	Satisfied
Southbound Right Turn Lane	Not Satisfied
Girdled Road / Crile Road	
Eastbound Left Turn Lane	Satisfied
Westbound Right Turn Lane	Satisfied

As shown in **Table 4**, an eastbound left turn lane and a westbound right turn lane are anticipated to be warranted at the intersection of Girdled Road / Crile Road, however the additional westbound right turn lane will have a minimal impact on the capacity when compared to the cost of construction. Northbound and southbound left turn lanes were found to be warranted at the intersections of SR-44 / Colburn Road, SR-44 / Clark Road and SR-44 / Hosford Road. Additionally, a northbound right turn lane was also found to be warranted at SR-44 / Hosford Road intersection; however, this turn lane will not provide any additional capacity to the intersection and does not appear to be needed from a safety perspective. Therefore, the addition of this lane is not recommended.



Turn Lane Storage Length Calculations

Turn lane storage length calculations were performed to determine the required storage length for each existing and warranted turn lane based on the Design Year 2047 peak hour traffic volumes. The required storage length is a function of site conditions, lane assignments, design speed, and the vehicular demand of the individual movement and is based on *Figures 401-9 and 401-10* of the ODOT L&D Manual, Volume 1 – Roadside Design. **Table 5** shows the calculated turn lane storage lengths under the Design Year 2047 traffic conditions. See **Appendix F** for storage length calculations.

Intersection / Movement	Storage Length (ft.)	
	Calculated Length	Recommended Length
SR-44 / Girdled Road		
Eastbound Left Turn Lane	275'	200' *
Westbound Left Turn Lane	225'	225'
Northbound Left Turn Lane	175'	175'
Southbound Left Turn Lane	325'	325'
SR-44 / Colburn Road		
Northbound Left Turn Lane	225'	225'
Southbound Left Turn Lane	225'	225'
SR-44 / Clark Road		
Northbound Left Turn Lane	225'	225'
Southbound Left Turn Lane	225'	225'
SR-44 / Hosford Road		
Northbound Left Turn Lane	225'	225'
Northbound Right Turn Lane	225'	-
Southbound Left Turn Lane	320'	320'
Girdled Road / Crile Road		
Eastbound Left Turn Lane	275'	150' *
Westbound Right Turn Lane	275'	-

* Geometrically constrained
- Not recommended

As shown in **Table 5**, the storage length calculations show that the required length for the warranted eastbound left turn lanes at the Girdled Road / Crile Road and SR-44 / Girdled Road intersections is 275'. However, due to geometric constrains, these left turn lanes should be constructed to a max of 150' and 200' respectively. All other turn lanes are recommended to be constructed to their calculated storage lengths.



V. Discussion of Analysis Scenarios:

Traffic Analysis Methodology

Capacity analyses performed as part of this study were done utilizing two different computer programs: *HCS7* (developed by McTrans Corporation) and *TransModeler Version 6.0* (developed by Caliper Corporation). This study chose to utilize two different programs because each program provides a different analysis approach and serves a different purpose. *HCS7* analyzes intersections as if they were isolated and not impacted by adjacent intersections and is used to determine the required number of lanes and the lane assignments at intersections (i.e. the needed capacity). *TransModeler* provides a microscopic analysis of an entire roadway system and considers the interactions and the impacts of traffic which travels from one intersection to the next to provide a more holistic approach in determining the necessary improvements for the study area.

All capacity analysis results reported are based on the Highway Capacity Manual (HCM), 6th Edition and are reported in terms of Level-of-Service. Levels-of-Service can range from LOS A to LOS F. Since the study intersections are located within the Northeast Ohio Areawide Coordinating Agency (NOACA) Metropolitan Planning Organization (MPO) area, Levels-of-Service A, B, C, D and E are considered acceptable for movements and approaches while the overall intersection must operate at LOS D or better. Level-of-Service F is considered unacceptable with significant levels of delay experienced by vehicles. The thresholds related to average control delay for signalized, unsignalized, and roundabout controlled intersections are as follows:

<i>Level-of- Service</i>	<i>Delay Threshold – Signalized (Sec)</i>	<i>Delay Threshold – Unsignalized / Roundabout (Sec)</i>
A	< 10	< 10
B	> 10 - 20	> 10 – 15
C	> 20 - 35	> 15 – 25
D	> 35 - 55	> 25 - 35
E	> 55 - 80	> 35 - 50
F	> 80	> 50

The 'No-Build' traffic scenario represents the existing roadway conditions as they are today. While it is understood that minor signal timing adjustments would likely occur in the future, the existing signal timings at the SR-44 / Girdled Road intersection were maintained throughout each of the 'No-Build' scenarios.

SR-44 / Colburn Road

As previously identified, the SR-44 / Colburn Road intersection did not meet the requirements to warrant a traffic signal. As such, it is proposed to remain unsignalized with the Colburn Road approaches continuing to operate under stop control. With no changes being proposed to the intersection control type, the 'Build' traffic scenario only proposes to construct NB and SB left turn lanes that the previous auxiliary turn lane warrant analysis determined to be warranted.



The proposed NB and SB left turn lanes will provide additional capacity to the intersection while also improving safety conditions. The turn lanes will provide a refuge area for left turning vehicles to remove themselves from the NB and SB traffic streams which will allow for through traveling vehicles to keep flowing unimpeded through the intersection. Additionally, the proposed turn lanes should also increase the number of gaps available to side street vehicles to enter or cross SR-44 which will in turn reduce the delay they experience.

The Opening Year 2027 and Design Year 2047 traffic volumes were utilized for the analysis to determine the operating conditions of the SR-44 / Colburn Road intersection under the 'No-Build' and 'Build' traffic conditions. See **Figure 3** for a conceptual rendering of the proposed Colburn Road 'Build' traffic scenario.

HCS Intersection Capacity Analysis

Table 6 summarizes the HCS Intersection Capacity Analysis and details the Levels-of-Service and delay experienced under the Opening Year 2027 'No-Build' vs. 'Build' traffic conditions for the SR-44 / Colburn Road intersection. See **Appendix G** for the HCS analysis printouts.

Intersection / Movement	'No-Build' Conditions				'Build' Conditions			
	AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour	
	LOS	Delay (sec)	LOS	Delay (sec)	LOS	Delay (sec)	LOS	Delay (sec)
SR-44 / Colburn Road								
Eastbound Left	D	31.5	F	77.0	D	31.1	F	71.3
Eastbound Approach	D	31.5	F	77.0	D	31.1	F	71.3
Westbound Left	C	24.9	F	55.6	C	24.6	F	51.9
Westbound Approach	C	24.9	F	55.6	C	24.6	F	51.9
Northbound Left	A	8.7	A	9.5	A	8.7	A	9.5
Northbound Approach	A	0.3	A	0.4	A	0.1	A	0.1
Southbound Left	A	9.0	A	9.9	A	9.0	A	9.9
Southbound Approach	A	0.6	A	1.5	A	0.3	A	0.5

As shown in **Table 6**, the side street approaches of the SR-44 / Colburn Road intersection are anticipated to operate at an unacceptable LOS F during the PM peak hour under both the 'No-Build' and 'Build' traffic conditions. From the results shown, it appears that the proposed NB and SB left turn lanes are anticipated to provide minimal reduction in delays for the side street approaches and no reduction for the NB and SB left turn movements. However, although not explicitly shown in the table, there are the anticipated reduction in delays experienced by the NB and SB through movements.

Table 7 summarizes the HCS Intersection Capacity Analysis and details the Levels-of-Service and delay experienced under the Design Year 2047 'No-Build' vs. 'Build' traffic conditions for the SR-44 / Colburn Road intersection. See **Appendix G** for the HCS analysis printouts.



Table 7: HCS Intersection Capacity Analysis Summary – Colburn Road – Design Year 2047 'No-Build' vs. 'Build' Conditions

Intersection / Movement	'No-Build' Conditions				'Build' Conditions			
	AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour	
	LOS	Delay (sec)	LOS	Delay (sec)	LOS	Delay (sec)	LOS	Delay (sec)
SR-44 / Colburn Road								
Eastbound Left	E	39.9	F	140.0	E	39.1	F	120.5
Eastbound Approach	E	39.9	F	140.0	E	39.1	F	120.5
Westbound Left	D	29.6	F	98.8	D	29.2	F	85.3
Westbound Approach	D	29.6	F	98.8	D	29.2	F	85.3
Northbound Left	A	8.9	A	9.9	A	8.9	A	9.9
Northbound Approach	A	0.3	A	0.4	A	0.1	A	0.1
Southbound Left	A	9.1	B	10.3	A	9.1	B	10.3
Southbound Approach	A	0.6	A	2.1	A	0.3	A	0.6

As shown in **Table 7**, the Design Year 2047 'No-Build' and 'Build' traffic scenarios are expected to maintain the previously identified deficiencies as identified in the Opening Year 2027 analysis. Due to the annual growth of traffic volumes, the EB and WB approaches are anticipated to degrade to a LOS E and LOS D, respectively, during the AM peak hour. This intersection continues to have poor operating conditions for the side street approaches as the number of vehicles utilizing SR-44 has increased. These high volumes provide very few gaps for side street vehicles to enter SR-44, causing significant delays. Although there are minimal capacity improvements, the NB and SB left turn lanes provide a safety improvement for the intersection.

SR-44 / Clark Road

Similar to the SR-44 / Colburn Road intersection, the SR-44 Clark Road intersection did not meet the requirements to warrant a traffic signal. Therefore, it also is proposed to remain unsignalized with the Clark Road approaches continuing to operate under stop control. With no changes being proposed to the intersection control type, the 'Build' traffic scenario only proposes to construct NB and SB left turn lanes that the previous auxiliary turn lane warrant analysis determined to be warranted.

As previously stated, the proposed NB and SB left turn lanes will provide additional capacity to the intersection while also improving safety conditions. The turn lanes will provide a refuge area for left turning vehicles to remove themselves from the NB and SB traffic streams which will allow for through traveling vehicles to keep flowing unimpeded through the intersection. Additionally, the proposed turn lanes should also increase the number of gaps available to side street vehicles to enter or cross SR-44 which will in turn reduce the delay they experience.



The Opening Year 2027 and Design Year 2047 traffic volumes were utilized for the analysis to determine the operating conditions of the SR-44 / Clark Road intersection under the 'No-Build' and 'Build' traffic conditions. See **Figure 4** for a conceptual rendering of the proposed Clark Road 'Build' traffic scenario.

HCS Intersection Capacity Analysis

Table 8 summarizes the HCS Intersection Capacity Analysis and details the Levels-of-Service and delay experienced under the Opening Year 2027 'No-Build' vs. 'Build' traffic conditions for the SR-44 / Clark Road intersection. See **Appendix G** for the HCS analysis printouts.

Intersection / Movement	'No-Build' Conditions				'Build' Conditions			
	AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour	
	LOS	Delay (sec)	LOS	Delay (sec)	LOS	Delay (sec)	LOS	Delay (sec)
SR-44 / Clark Road								
Eastbound Left	D	32.5	F	113.6	D	32.2	F	100.9
Eastbound Approach	D	32.5	F	113.6	D	32.2	F	100.9
Westbound Left	C	27.7	F	88.8	C	27.4	F	79.0
Westbound Approach	C	27.7	F	88.8	C	27.4	F	79.0
Northbound Left	A	8.8	A	9.6	A	8.8	A	9.6
Northbound Approach	A	0.3	A	0.7	A	0.1	A	0.2
Southbound Left	A	9.0	A	9.8	A	9.0	A	9.8
Southbound Approach	A	0.3	A	1.4	A	0.2	A	0.5

As shown in **Table 8**, the side street approaches of the SR-44 / Clark Road intersection are anticipated to operate at an unacceptable LOS F during the PM peak hour under both the 'No-Build' and 'Build' traffic conditions. From the results shown, it appears that the proposed NB and SB left turn lanes are anticipated to provide minimal reduction in delays for the side street approaches and no reduction for the NB and SB left turn movements. However, although not explicitly shown in the table, are the anticipated reduction in delays experienced by the NB and SB through movements.

Table 9 summarizes the HCS Intersection Capacity Analysis and details the Levels-of-Service and delay experienced under the Design Year 2047 'No-Build' vs. 'Build' traffic conditions for the SR-44 / Clark Road intersection. See **Appendix G** for the HCS analysis printouts.



Table 9: HCS Intersection Capacity Analysis Summary – Clark Road - Design Year 2047 'No-Build' vs. 'Build' Conditions

Intersection / Movement	'No-Build' Conditions				'Build' Conditions			
	AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour	
	LOS	Delay (sec)	LOS	Delay (sec)	LOS	Delay (sec)	LOS	Delay (sec)
SR-44 / Clark Road								
Eastbound Left	E	40.2	F	234.4	E	39.6	F	196.7
Eastbound Approach	E	40.2	F	234.4	E	39.6	F	196.7
Westbound Left	D	33.9	F	180.8	D	33.4	F	144.7
Westbound Approach	D	33.9	F	180.8	D	33.4	F	144.7
Northbound Left	A	9.0	A	10.0	A	9.0	A	10.0
Northbound Approach	A	0.3	A	0.8	A	0.1	A	0.2
Southbound Left	A	9.2	B	10.2	A	9.2	B	10.2
Southbound Approach	A	0.3	A	2.0	A	0.2	A	0.6

As shown in **Table 9**, the Design Year 2047 'No-Build' and 'Build' traffic scenarios are expected to maintain the previously identified deficiencies as identified in the Opening Year 2027 analysis. Due to the annual growth of traffic volumes, the EB and WB approaches are anticipated to degrade to a LOS E and LOS D, respectively, during the AM peak hour. Although the EB and WB approaches are anticipated to operate with high amounts of delay, the proposed 'Build' improvements are anticipated to reduce the amount of delay incurred by motorists by approximately 16% and 20%, respectively, during the PM peak hour. Similar to Colburn Road, although there are minimal capacity improvements, the NB and SB left turn lanes provide a safety improvement for the intersection.

SR-44 / Hosford Road

The SR-44 / Hosford Road intersection is currently unsignalized with the Hosford Road approaches operating under stop control. Due to the higher traffic demand and number of crashes at this intersection, multiple intersection control types were investigated. The previous signal warrant analysis determined that the minimum requirements needed to warrant a traffic signal were met for this location. Therefore, one of the 'Build' scenarios will analyze the SR-44 / Hosford Road intersection under signalized control. This 'Build' scenario will be referred to as the 'Signalized' scenario.

The 'Signalized' scenario analysis assumed that dedicated NB and SB left turn lanes would be constructed while all other lane assignments would be maintained. The construction of NB and SB left turn lanes are proposed not for capacity purposes but were incorporated to increase safety operations of the intersection. Due to the larger radii of the intersection, there is concern that trailing vehicles are attempting to maneuver around a left turning vehicle via the shoulder, creating a potentially unsafe situation. The turn lanes will eliminate this issue.



The second form of intersection control analyzed for this intersection was a roundabout. This 'Build' scenario will be referred to as the 'Roundabout' scenario. Roundabouts have the ability to move traffic in a more efficient manner while also improving safety conditions. The 'Roundabout' scenario analysis assumed that the proposed roundabout would provide one circulating lane with single lane approaches.

The Opening Year 2027 and Design Year 2047 traffic volumes were utilized for the analysis to determine the operating conditions of the SR-44 / Hosford Road intersection under the 'No-Build', 'Signalized', and 'Roundabout' traffic conditions. See **Figures 5 and 6** for a conceptual rendering of each proposed Hosford Road 'Build' traffic scenario.

HCS Intersection Capacity Analysis

Table 10 summarizes the HCS Intersection Capacity Analysis and details the Levels-of-Service and delay experienced under the Opening Year 2027 'No-Build' vs. 'Signalized' traffic conditions for the SR-44 / Hosford Road intersection. See **Appendix G** for the HCS analysis printouts.

Intersection / Movement	'No-Build' Conditions				'Signalized' Conditions			
	AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour	
	LOS	Delay (sec)	LOS	Delay (sec)	LOS	Delay (sec)	LOS	Delay (sec)
SR-44 / Hosford Road								
Eastbound Left-Thru-Right	E	42.1	F	221.4	B	11.6	B	17.9
Eastbound Approach	E	42.1	F	221.4	B	11.6	B	17.9
Westbound Left-Thru-Right	E	36.3	F	129.3	B	14.4	B	19.4
Westbound Approach	E	36.3	F	129.3	B	14.4	B	19.4
Northbound Left					B	10.0	A	9.0
Northbound Thru-Right	A	8.7	A	9.1	A	6.9	A	6.9
Northbound Approach	A	0.3	A	0.3	A	7.0	A	7.0
Southbound Left	A	8.5	B	10.3	A	9.4	B	14.3
Southbound Thru-Right	A		A		A	7.5	A	6.1
Southbound Approach	A	1.6	A	4.2	A	7.7	A	7.5
Intersection Total					A	8.8	A	8.4

As shown in **Table 10**, the side street approaches of the SR-44 / Hosford Road intersection are anticipated to operate at an unacceptable LOS F during the PM peak hour under the 'No-Build' traffic conditions. The side street approaches incur excessive delay due to the high number of vehicles utilizing SR-44. These high volumes provide very few gaps for side street vehicles to enter or cross SR-44.



As can be seen from the results above, the installation of a traffic signal at this location would provide acceptable Levels-of-Service for all movements as well as the intersection overall. A traffic signal would force the heavy SR-44 movements to stop so that the side street approaches can be serviced, significantly reducing their delay. In fact, the traffic signal would provide an anticipated reduction in delay for the EB and WB approaches during the PM peak hour of approximately 92% and 85%, respectively.

Table 11 summarizes the HCS Intersection Capacity Analysis and details the Levels-of-Service and delay experienced under the Design Year 2047 'No-Build' vs. 'Signalized' traffic conditions for the SR-44 / Hosford Road intersection. See **Appendix G** for the HCS analysis printouts.

Intersection / Movement	'No-Build' Conditions				'Signalized' Conditions			
	AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour	
	LOS	Delay (sec)	LOS	Delay (sec)	LOS	Delay (sec)	LOS	Delay (sec)
SR-44 / Hosford Road								
Eastbound Left-Thru-Right	F	53.7	F	460.9	B	11.6	B	22.0
Eastbound Approach	F	53.7	F	460.9	B	11.6	B	22.0
Westbound Left-Thru-Right	E	49.0	F	284.2	B	14.4	B	24.0
Westbound Approach	E	49.0	F	284.2	B	14.4	B	24.0
Northbound Left	A	8.9	A	9.3	B	11.0	A	9.4
Northbound Thru-Right					A	7.2	A	6.7
Northbound Approach	A	0.3	A	0.4	A	7.3	A	6.7
Southbound Left	A	8.7	B	10.8	B	10.1	B	16.0
Southbound Thru-Right					A	8.0	A	5.8
Southbound Approach	A	1.6	A	4.9	A	8.2	A	7.5
Intersection Total	A		A		A	9.1	A	8.6

As shown in **Table 11**, the Design Year 2047 'No-Build' traffic scenario is expected to maintain the previously identified deficiencies as identified in the Opening Year 2027 analysis. Due to the annual growth of traffic volumes, the EB approach is anticipated to degrade to an unacceptable LOS F during the AM peak hour. This intersection is anticipated to continue to experience poor operating conditions for the side street approaches as the number of vehicles utilizing SR-44 has increased. These high volumes provide very few gaps for side street vehicles to enter SR-44, causing significant delays.

As can be seen from the results above, the installation of a traffic signal at this location is anticipated to continue to provide acceptable Levels-of-Service for all movements as well as the intersection overall through the Design Year 2047. The traffic signal would provide an anticipated reduction in delay for the EB and WB approaches during the PM peak hour of approximately 95% and 92%, respectively.



HCS Roundabout Capacity Analysis

Table 12 summarizes the HCS Intersection Capacity Analysis and details the Levels-of-Service and delay experienced under the Opening Year 2027 'No-Build' vs. 'Roundabout' traffic conditions for the SR-44 / Hosford Road intersection. It should be noted that the 'Roundabout' traffic condition was only analyzed under the Design Year 2047 conditions. See **Appendix G** for the HCS analysis printouts.

Intersection / Movement	'No-Build' Conditions				'Roundabout' Conditions			
	AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour	
	LOS	Delay (sec)	LOS	Delay (sec)	LOS	Delay (sec)	LOS	Delay (sec)
SR-44 / Hosford Road								
Eastbound Approach	F	53.7	F	460.9	A	6.3	A	8.1
Westbound Approach	E	49.0	F	284.2	A	9.0	A	9.8
Northbound Approach	A	0.3	A	0.4	A	7.4	C	18.1
Southbound Approach	A	1.6	A	4.9	A	9.3	B	13.0
Intersection Total					A	8.5	B	14.9

As shown in **Table 12**, the construction of a roundabout at this location would be anticipated to provide acceptable Levels-of-Service for all approaches as well as the intersection overall through the Design Year 2047. The roundabout would provide an anticipated reduction in delay for the EB and WB approaches during the PM peak hour of approximately 98% and 97%, respectively.

While the implementation of a roundabout at the SR-44 / Hosford Road intersection would be feasible from a traffic operations perspective, it was determined that the grading issues will need to be further investigated.

SR-44 / Girdled Road

The SR-44 / Girdled Road intersection is the busiest intersection along the study corridor. The high traffic volumes combined with the lack of sufficient roadway capacity to accommodate it, and the inefficient split-phased signal operation that is needed for this intersection creates congestion and delay for motorists. In addition to these factors, there are two adjacent intersections that exist within close proximity to the intersection that also contribute to the poor traffic operations through this area. Approximately 225' (c/c) to the east is the Girdled Road / Crile Road intersection and approximately 330' (c/c) to the west is the Girdled Road / Auburn Road intersection.

The EB and WB approaches of the SR-44 / Girdled Road intersection only provide a single lane (left-thru-right), forcing the signal to operate split-phased in order to provide protected left turn movements. ODOT changed the signal operation at this intersection to split-phasing years ago to mitigate crash problems that were occurring due to the negative offset between EB and WB left-turning vehicles.



Split-phased signal operation serves one approach at a time in order to provide protected turning movements and allow traffic to flow unimpeded. This type of signal operation typically requires a longer theoretical cycle length as compared to traditional signal operation that allows for two approaches to operate concurrently. The split-phased signal operation of the EB and WB approaches of the SR-44 / Girdled Road intersection is one of the multiple factors contributing to the poor traffic operations through this area. One of the other contributing factors is the lack of sufficient roadway capacity to accommodate the projected traffic demand.

As previously mentioned, the EB and WB approaches of the SR-44 / Girdled Road intersection only provide a single lane (left-thru-right) which is insufficient for their respective traffic demands. A single lane approach severely limits the possibility for a vehicle to turn right-on-red. Although the EB and WB approaches provide a flare out for right turning vehicles, this area becomes blocked after two or three vehicles are stopped at the stop bar or once the lead car at the stop bar wants to complete a left turn or thru movement. This situation compounds upon itself during the peak hours, particularly for the WB approach, when as much as one-third or more of vehicles utilizing the approach are destined to complete a right turn. Additionally, single NB and SB through lanes are insufficient to accommodate the projected traffic demand. This lack of capacity in conjunction with the split-phased signal operation of the SR-44 / Girdled Road intersection is not an isolated problem, as it also affects the traffic operations of the two adjacent intersections previously mentioned.

The adjacent intersection that affects the operation of the SR-44 / Girdled Road intersection the most is the Girdled Road / Auburn Road intersection to the west due to its current geometry and traffic control type. Instead of aligning perpendicularly to Auburn Road, the Girdled Road approaches come into the intersection at skewed angles. This intersection geometry creates longer travel times through the intersection while also limiting sight distances. As such, this intersection is an all-way stop controlled intersection, meaning that vehicles on every approach need to come to a complete stop and wait for their turn to proceed through the intersection. This intersection control type is not the most efficient regarding traffic operations, but it does create a safer condition for motorists traveling through it.

Typically, an intersection layout and traffic control type similar to that of the Girdled Road / Auburn Road intersection wouldn't be of much concern when isolated on its own, away from other intersections. However, due to its close proximity with the SR-44 / Girdled Road intersection, these two intersections negatively impact one another and contribute to the poor traffic operations through this area. This is particularly evident during the heavier peak demand time periods when the short segment of Girdled Road between SR-44 and Auburn Road becomes occupied by queued vehicles in both directions. With the segment of Girdled Road between SR-44 and Auburn Road being so short, approximately 220', there is not enough space to store vehicles. Assuming an average vehicle length of 25', this segment can only store approximately nine vehicles in each direction.

As mentioned above, the split-phased signal operation and lack of capacity at the SR-44 / Girdled Road intersection can create long queues which adversely affects the operation of the Girdled Road / Auburn Road intersection. With the large number of vehicles traveling EB on this short segment, it becomes quickly occupied by queued vehicles. These queues that form from the EB approach of the SR-44 intersection spillback into the Auburn Road intersection which limits the number of vehicles it is



able to service. Conversely, the inefficient operation of the all-way stop control at the Auburn Road intersection causes vehicles traveling WB on Girdled Road to spillback into the SR-44 intersection. When this occurs, vehicles from the NB, SB, and WB approaches of the SR-44 intersection destined for WB Girdled Road are unable to reach their destination, even when their approach is receiving a green light. This situation limits the number of vehicles that the SR-44 intersection can service each cycle (i.e., throughput), compounding queuing and delay.

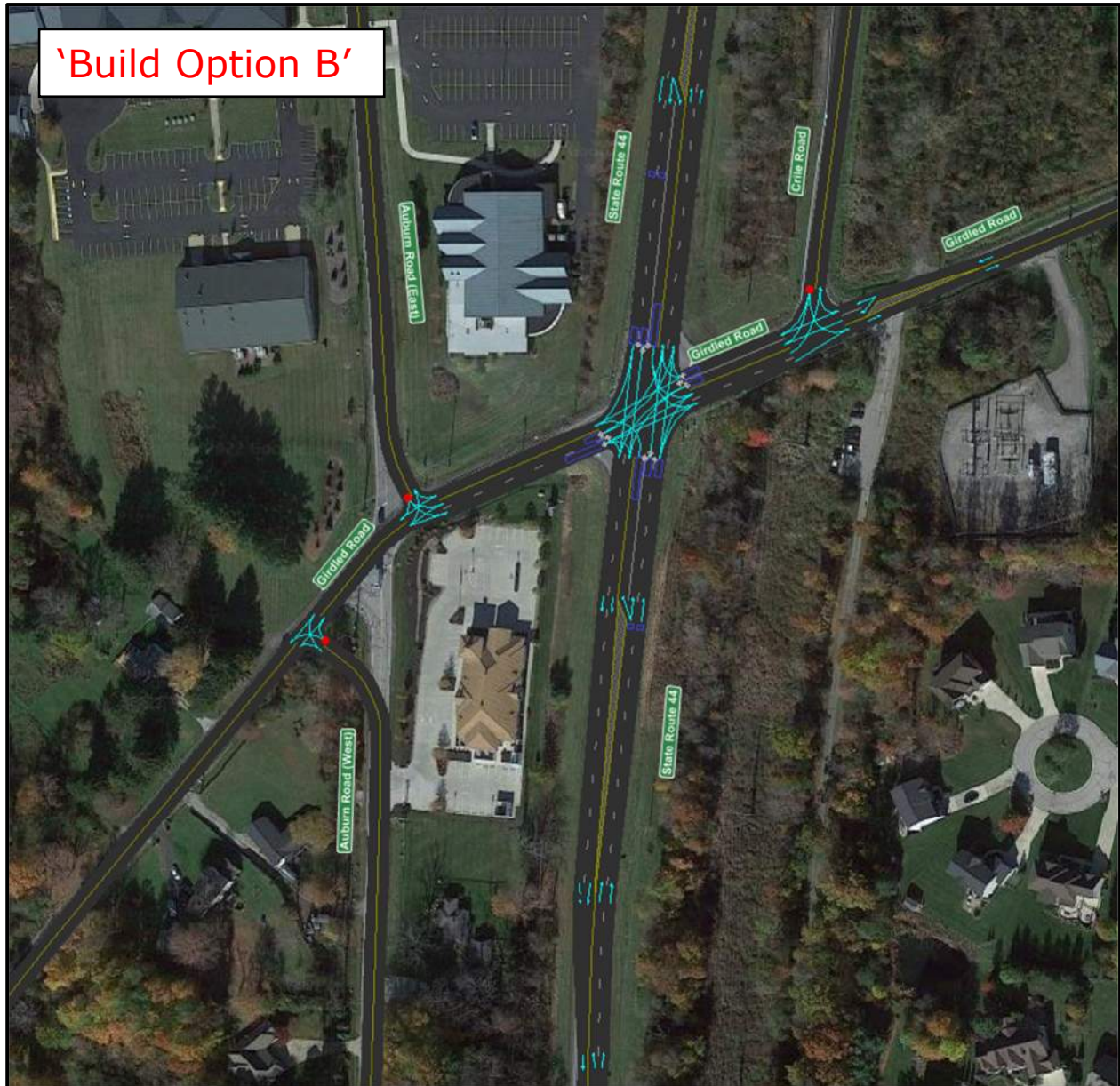
A less impactful, but similar situation exists to the east between the SR-44 and Crile Road intersections. Due to the close proximity of these two intersections, when queues form at the WB approach of the SR-44 intersection they spillback through the Crile Road intersection. When this occurs, vehicles tend to block the Crile Road approach which inhibits the ability of SB vehicles on Crile Road to turn onto Girdled Road and also the ability of EB vehicles traveling on Girdled Road to turn left onto Crile Road. This creates excessive delay for SB vehicles on Crile Road and also the potential for EB traffic on Girdled Road to spillback into the SR-44 intersection limiting the number of vehicles that the SR-44 intersection can service each cycle (i.e., throughput), further compounding queuing and delay in the area.

The identification of the multiple contributing factors leading to the poor traffic operations surrounding the SR-44 / Girdled Road intersection as discussed above has led GPD to develop four 'Build' options that would implement various improvements to increase capacity and improve traffic flow through this area. 'Build Option A' was created to address the immediate concerns of the intersection while 'Build Options B & C' were developed as conceptual improvements that would further reduce delay and promote traffic flow through the SR-44 / Girdled Road area. 'Build Option D' combines the improvements of 'Build Options A – C' to represent a future "Ultimate Build" scenario that would create the least amount of delay and promote the most efficient and effective traffic flow through the SR-44 / Girdled Road area. The four 'Build' options are discussed in greater detail below.

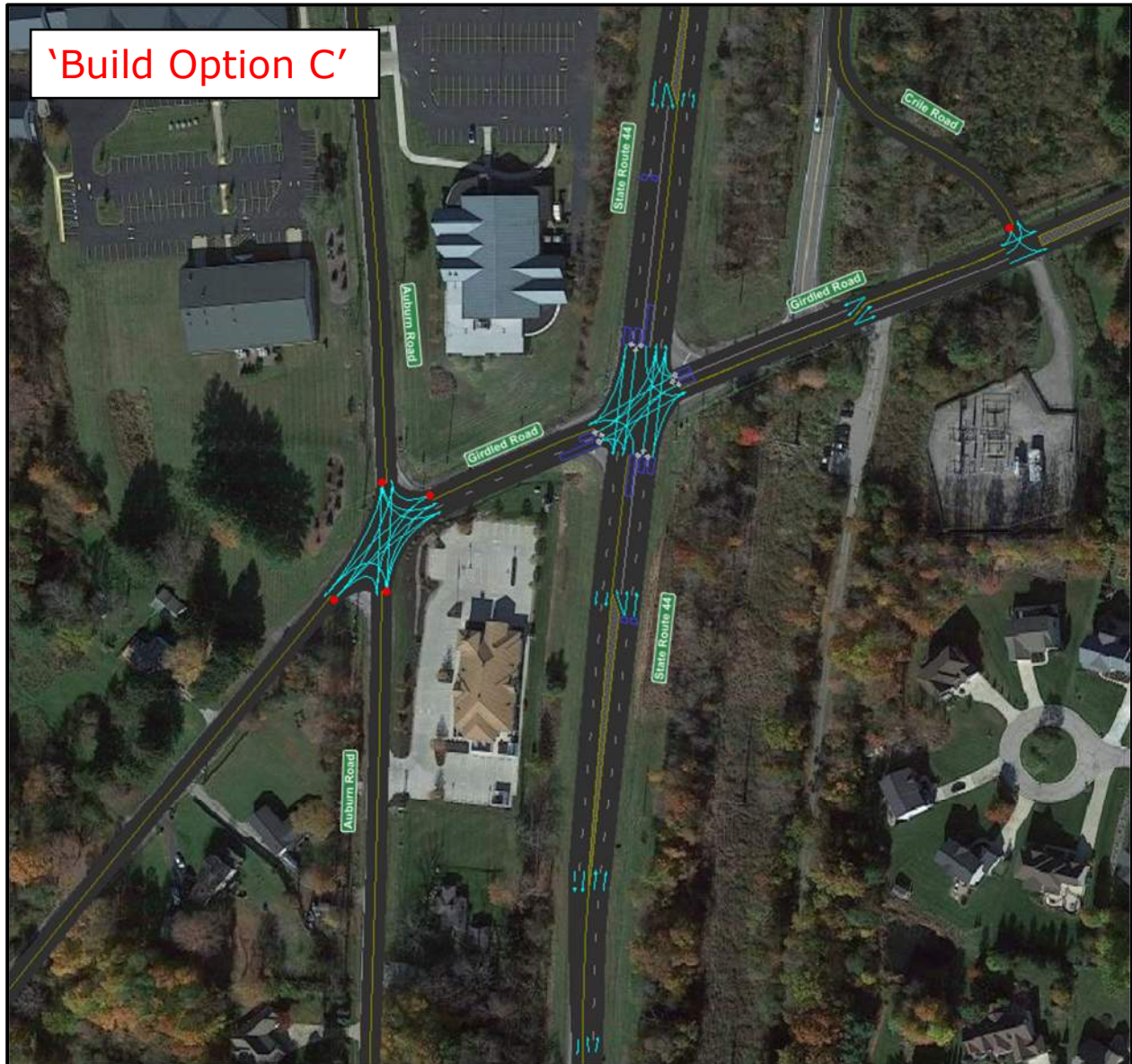
- 'Build Option A' (See **Figure 7** for a conceptual rendering)
 - o SR-44 / Girdled Road Intersection:
 - NB & SB Approaches – *lane assignment (left, thru, thru-right)*
 - Add auxiliary through lanes within the limits of the intersection.
 - EB Approach – *lane assignment (left, thru-right)*
 - Construct a dedicated left turn lane
 - WB Approach – *lane assignment (left, thru-right)*
 - Construct a dedicated left turn lane
 - Convert EB / WB approaches from split-phased signal operation to traditional concurrent operation
 - o Girdled Road / Crile Road Intersection:
 - Construct a dedicated EB left turn lane



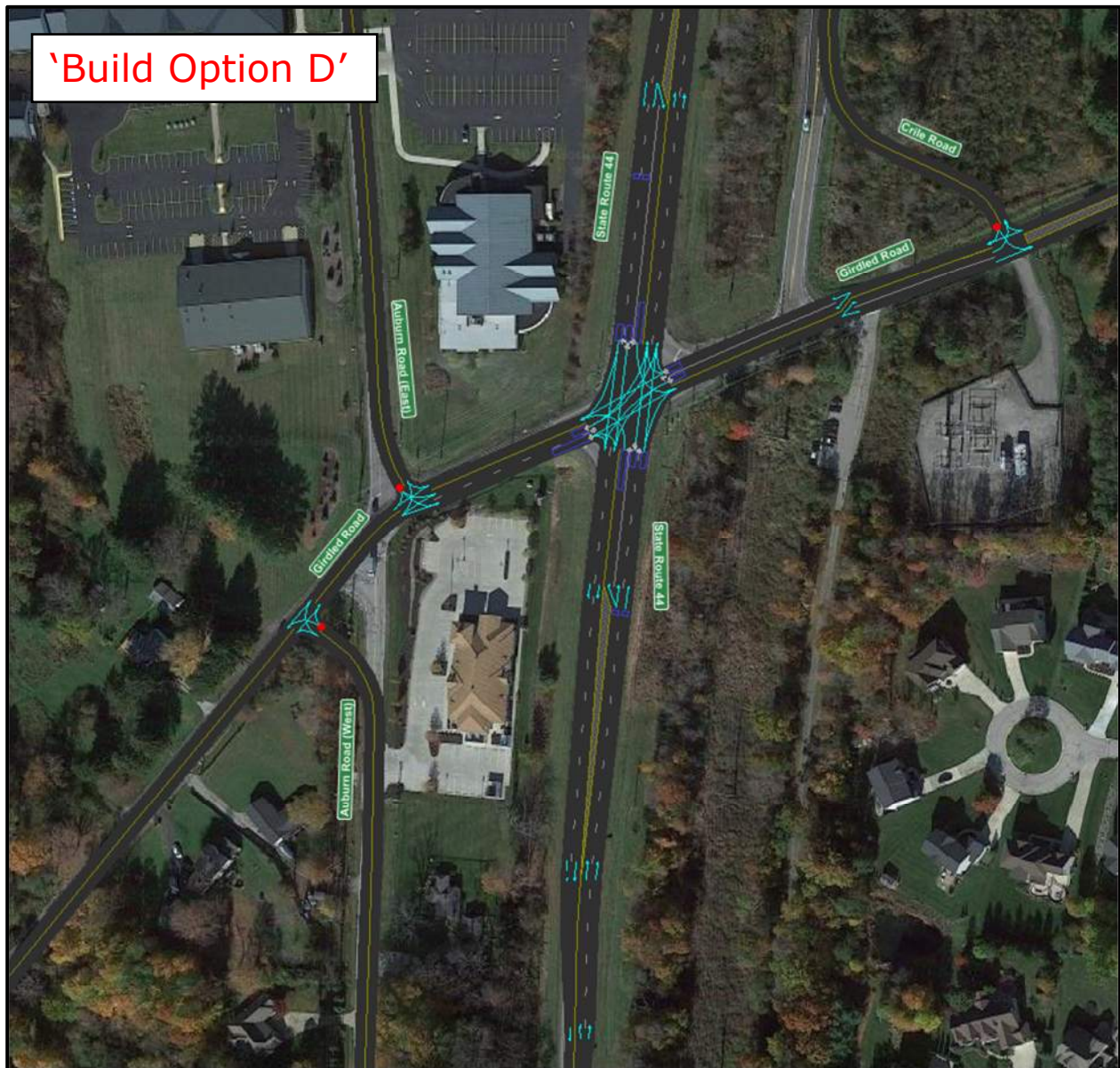
- 'Build Option B' (See screenshot of traffic model below and **Figure 8** for a conceptual rendering)
 - o Assumes all of the improvements detailed under 'Build Option A' plus the following additional improvements:
 - Girdled Road / Auburn Road Intersection:
 - Convert the intersection into two separate t-intersections to eliminate the sight distance restrictions
 - Eliminate the all-way stop control and make Auburn Road stop controlled and Girdled Road free-flow



- 'Build Option C' (See screenshot of traffic model below and **Figure 9** for a conceptual rendering)
 - o Assumes all of the improvements detailed under 'Build Option A' plus the following additional improvements:
 - Girdled Road / Crile Road
 - Relocate intersection approximately 300' to the east (past the proposed EB left turn lane to Crile Road)



- 'Build Option D' (See screenshot of traffic model below and **Figure 10** for a conceptual rendering)
 - o Constructs all of the improvements of 'Build Options A, B, and C'



As previously mentioned, the capacity analyses performed as part of this study were done utilizing two different computer programs, *HCS7* and *TransModeler*, as each program provides a different analysis approach and serves a different purpose. *HCS7* analyzes intersections as if they were isolated and not impacted by adjacent intersections where *TransModeler* provides a microscopic analysis of an entire roadway system and considers the interactions and impact of traffic which travels from one intersection to the next. It should be noted that all 'Build' options, A through D, were analyzed in *TransModeler* while 'Build Option A' is the only option analyzed in *HCS7*. Additionally, all 'Build' options were only analyzed under the Design Year 2047 traffic conditions.



HCS Intersection Capacity Analysis

'Build Option A'

Table 13 summarizes the HCS Intersection Capacity Analysis and details the Levels-of-Service and delay experienced under the Design Year 2047 'No-Build' vs. 'Build Option A' traffic conditions. See **Appendix H** for the HCS analysis printouts.

Table 13: HCS Intersection Capacity Analysis Summary – Girdled Road – Design Year 2047 'No-Build' vs. 'Build Option A' Conditions								
Intersection / Movement	'No-Build' Conditions				'Build Option A' Conditions			
	AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour	
	LOS	Delay (sec)	LOS	Delay (sec)	LOS	Delay (sec)	LOS	Delay (sec)
SR-44 / Girdled Road								
Eastbound Left	F	106.4	D	54.3	C	23.8	C	23.9
Eastbound Thru-Right	F	106.4	D	54.3	C	22.2	C	30.2
Eastbound Approach	F	106.4	D	54.3	C	23.1	C	27.8
Westbound Left	F	144.8	F	148.7	B	18.5	C	23.2
Westbound Thru-Right	F	144.8	F	148.7	D	50.1	C	34.6
Westbound Approach	F	144.8	F	148.7	D	46.3	C	31.6
Northbound Left	C	29.6	C	31.2	C	21.6	B	16.4
Northbound Thru	F	113.2	F	258.8	C	30.8	C	24.6
Northbound Right	F	113.2	F	258.8	C	30.8	C	24.7
Northbound Approach	F	108.4	F	253.2	C	30.2	C	24.4
Southbound Left	C	29.8	D	50.4	C	21.3	B	17.4
Southbound Thru	F	91.5	F	157.7	C	28.7	B	19.4
Southbound Right	F	91.5	F	157.7	C	28.8	B	19.4
Southbound Approach	F	85.4	F	138.7	C	28.0	B	19.0
Intersection Total	F	108.9	F	168.9	C	32.5	C	23.6
Girdled Road / Crile Road								
Eastbound Left	A	8.7	A	8.2	A	8.7	A	8.2
Eastbound Approach	A	2.2	A	2.5	A	1.9	A	1.9
Southbound Left-Right	B	14.5	C	22.0	B	14.5	C	21.6
Southbound Approach	B	14.5	C	22.0	B	14.5	C	21.6



Table 13: HCS Intersection Capacity Analysis Summary (Cont.) – Girdled Road - Design Year 2047 'No-Build' vs. 'Build Option A' Conditions

Intersection / Movement	'No-Build' Conditions				'Build Option A' Conditions			
	AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour	
	LOS	Delay (sec)	LOS	Delay (sec)	LOS	Delay (sec)	LOS	Delay (sec)
Girdled Road / Auburn Road								
Eastbound Left	B	10.4	B	12.6	B	10.4	B	12.6
<i>Eastbound Approach</i>	<i>B</i>	<i>10.4</i>	<i>B</i>	<i>12.6</i>	<i>B</i>	<i>10.4</i>	<i>B</i>	<i>12.6</i>
Westbound Left	B	15.0	B	14.7	B	15.0	B	14.7
<i>Westbound Approach</i>	<i>B</i>	<i>15.0</i>	<i>B</i>	<i>14.7</i>	<i>B</i>	<i>15.0</i>	<i>B</i>	<i>14.7</i>
Northbound Left	B	12.6	B	15.1	B	12.6	B	15.1
<i>Northbound Approach</i>	<i>B</i>	<i>12.6</i>	<i>B</i>	<i>15.1</i>	<i>B</i>	<i>12.6</i>	<i>B</i>	<i>15.1</i>
Southbound Left	B	10.7	B	13.8	B	10.7	B	13.8
<i>Southbound Approach</i>	<i>B</i>	<i>10.7</i>	<i>B</i>	<i>13.8</i>	<i>B</i>	<i>10.7</i>	<i>B</i>	<i>13.8</i>

As shown in **Table 13**, the analysis of the Design Year 2047 'No-Build' traffic conditions shows that the SR-44 / Girdled Road is anticipated to operate with unacceptable levels-of-service during the peak hours. The analysis indicates that this intersection does not provide sufficient capacity to accommodate the projected traffic demand. The analysis results also indicate that the SR-44 / Girdled Road intersection (individual movements, approaches, and overall intersection) are anticipated to operate with primarily LOS C or better during the peak hours under the Design Year 2047 'Build Option A' traffic conditions. The overall intersection delay is anticipated to decrease by approximately 76 seconds (70%) during the AM peak hour and 145 seconds (86%) during the PM peak hour with the recommended improvements. On average, each approach is anticipated to experience an 81% reduction in delay.

The recommended 'Build Option A' improvements have shown to improve operations at the SR-44 / Girdled Road intersection and mitigate the existing deficiencies that will continue to persist into the future without further action. The proposed improvements will allow the SR-44 / Girdled Road intersection to serve more vehicles which will in turn improve traffic flow and operations through the adjacent intersections. As the additional NB and SB thru lanes for the SR-44 / Girdled Road intersection are necessary to accommodate design year traffic volumes, its not recommended to just widen SR-44 at this intersection. While widening to two lanes in each direction and tapering back to one lane may satisfy the capacity analysis, this will create potential safety and capacity issues as vehicles must merge back into one lane. With a four-lane section on SR-44 to north, just south of the capital Parkway intersection, it is recommended to maintain the four lanes continuity, capacity and safety. As this cannot be quantified in the HCS analysis, 'Build Option A' was also analyzed utilizing TransModeler.



TransModeler Intersection Capacity Analysis

'Build Option A'

Table 14 summarizes the TransModeler Intersection Capacity Analysis and details the Levels-of-Service and delay experienced under the Design Year 2047 'No-Build' vs. 'Build Option A' traffic conditions. See **Appendix H** for the TransModeler analysis printouts.

Intersection / Movement	'No-Build' Conditions				'Build Option A' Conditions			
	AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour	
	LOS	Delay (sec)	LOS	Delay (sec)	LOS	Delay (sec)	LOS	Delay (sec)
SR-44 / Girdled Road								
Eastbound Left	E	70.8	E	68.2	C	32.1	C	31.0
Eastbound Thru					C	24.3	C	29.5
Eastbound Right	D	50.3	D	51.9				
<i>Eastbound Approach</i>	E	68.8	E	66.5	C	28.4	C	30.1
Westbound Left	F	989.9	F	280.6	F	991.7	F	411.2
Westbound Thru					F	1064.6	F	466.8
Westbound Right	F	964.6	F	258.8				
<i>Westbound Approach</i>	F	977.5	F	273.3	F	1055.4	F	451.9
Northbound Left	F	207.0	E	58.7	F	132.8	F	107.8
Northbound Thru					C	27.7	C	33.1
Northbound Thru-Right	F	146.2	D	37.6	C	26.8	C	32.3
<i>Northbound Approach</i>	F	149.1	D	38.2	C	33.1	C	34.5
Southbound Left	F	147.4	F	372.1	C	22.7	C	34.9
Southbound Thru					C	30.5	C	28.5
Southbound Thru-Right	E	55.1	F	306.3	D	39.2	C	33.5
<i>Southbound Approach</i>	E	64.2	F	318.1	C	32.6	C	31.1
Intersection Total	F	216.0	F	177.9	F	153.3	E	70.7
Girdled Road / Crile Road								
Eastbound Left	A	7.5	A	2.9	A	8.8	A	9.4
<i>Eastbound Approach</i>	A	7.5	A	2.9	A	1.9	A	2.2
Westbound Thru-Right	F	1064.7	E	39.0	F	778.7	F	173.6
<i>Westbound Approach</i>	F	1064.7	E	39.0	F	778.7	F	173.6
Southbound Left-Right	F	203.6	F	1561.0	F	82.4	F	997.9
<i>Southbound Approach</i>	F	203.6	F	1561.0	F	82.4	F	997.9
Intersection Total	F	569.9	F	185.6	F	378.8	F	201.2



Table 14: TransModeler Intersection Capacity Analysis Summary (Cont.) – Design Year 2047 'No-Build' vs. 'Build Option A' Conditions								
Intersection / Movement	'No-Build' Conditions				'Build Option A' Conditions			
	AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour	
	LOS	Delay (sec)	LOS	Delay (sec)	LOS	Delay (sec)	LOS	Delay (sec)
Girdled Road / Auburn Road								
Eastbound Left-Thru-Right	D	32.4	F	258.1	C	23.9	E	45.3
<i>Eastbound Approach</i>	D	32.4	F	258.1	C	23.9	E	45.3
Westbound Left-Thru-Right	F	64.6	E	39.7	F	82.0	F	114.5
<i>Westbound Approach</i>	F	64.6	E	39.7	F	82.0	F	114.5
Northbound Left-Thru-Right	F	360.2	F	948.8	E	46.5	F	653.8
<i>Northbound Approach</i>	F	360.2	F	948.8	E	46.5	F	653.8
Southbound Left-Thru-Right	D	26.2	F	491.2	C	19.4	F	328.4
<i>Southbound Approach</i>	D	26.2	F	491.2	C	19.4	F	328.4
Intersection Total	F	145.1	F	435.5	E	49.7	F	305.3

As shown in **Table 14**, Girdled Road in 'Build Option A' is expected to experience some improvement over the 'No-Build' conditions but there are still some concerns, primarily with the WB approach. Additionally, WB Girdled Road at Crile Road is worse in the PM peak and is still unacceptable on the WB and SB approaches. At Auburn Road, the EB approach improves, likely due to the improved operations at the SR-44 intersection. However, the WB delay increases as traffic is reaching the all-way stop faster than the 'No-Build'.



'Build Option B'

Table 15 summarizes the TransModeler Intersection Capacity Analysis and details the Levels-of-Service and delay experienced under the Design Year 2047 'No-Build' vs. 'Build Option B' traffic conditions. See **Appendix H** for the TransModeler analysis printouts.

Table 15: TransModeler Intersection Capacity Analysis Summary – Design Year 2047 'No-Build' vs. 'Build Option B' Conditions								
Intersection / Movement	'No-Build' Conditions				'Build Option B' Conditions			
	AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour	
	LOS	Delay (sec)	LOS	Delay (sec)	LOS	Delay (sec)	LOS	Delay (sec)
SR-44 / Girdled Road								
Eastbound Left	E	70.8	E	68.2	D	43.4	C	28.7
Eastbound Thru					C	27.0	D	36.2
Eastbound Right	D	50.3	D	51.9				
<i>Eastbound Approach</i>	E	68.8	E	66.5	D	35.7	C	33.4
Westbound Left	F	989.9	F	280.6	F	431.8	C	25.8
Westbound Thru					F	449.9	C	34.0
Westbound Right	F	964.6	F	258.8				
<i>Westbound Approach</i>	F	977.5	F	273.3	F	447.7	C	31.8
Northbound Left	F	207.0	E	58.7	C	31.5	C	31.7
Northbound Thru					C	28.4	C	27.1
Northbound Thru-Right	F	146.2	D	37.6	C	28.0	C	25.9
<i>Northbound Approach</i>	F	149.1	D	38.2	C	28.4	C	26.6
Southbound Left	F	147.4	F	372.1	C	22.9	C	28.3
Southbound Thru					C	26.0	B	18.7
Southbound Thru-Right	E	55.1	F	306.3	C	23.3	B	17.4
<i>Southbound Approach</i>	E	64.2	F	318.1	C	24.5	B	19.9
Intersection Total	F	216.0	F	177.9	F	111.5	C	25.4
Girdled Road / Crile Road								
Eastbound Left	A	7.5	A	2.9	B	14.7	A	8.4
<i>Eastbound Approach</i>	A	7.5	A	2.9	A	3.3	A	1.9
Westbound Thru-Right	F	1064.7	E	39.0	F	426.3	A	1.5
<i>Westbound Approach</i>	F	1064.7	E	39.0	F	425.2	A	1.5
Southbound Left-Right	F	203.6	F	1561.0	E	47.8	F	55.3
<i>Southbound Approach</i>	F	203.6	F	1561.0	E	47.8	F	55.3
Intersection Total	F	569.9	F	185.6	F	273.5	B	13.4



Table 15: TransModeler Intersection Capacity Analysis Summary (Cont.) – Design Year 2047 'No-Build' vs. 'Build Option B' Conditions								
Intersection / Movement	'No-Build' Conditions				'Build Option B' Conditions			
	AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour	
	LOS	Delay (sec)	LOS	Delay (sec)	LOS	Delay (sec)	LOS	Delay (sec)
Girdled Road / Auburn Road								
Eastbound Left-Thru-Right	D	32.4	F	258.1				
Eastbound Approach	D	32.4	F	258.1				
Westbound Left-Thru-Right	F	64.6	E	39.7				
Westbound Approach	F	64.6	E	39.7				
Northbound Left-Thru-Right	F	360.2	F	948.8				
Northbound Approach	F	360.2	F	948.8				
Southbound Left-Thru-Right	D	26.2	F	491.2				
Southbound Approach	D	26.2	F	491.2				
Intersection Approach	F	145.1	F	435.5				
Girdled Road / Auburn Road (East)								
Eastbound Left-Thru					A	2.9	A	1.8
Eastbound Approach					A	2.9	A	1.8
Westbound Thru-Right					A	0.1	A	0.2
Westbound Approach					A	0.1	A	0.2
Southbound Left-Right					B	10.1	B	13.5
Southbound Approach					B	10.1	B	13.5
Intersection Approach					A	2.9	A	4.4
Girdled Road / Auburn Road (West)								
Eastbound Thru-Right					A	0.2	A	0.2
Eastbound Approach					A	0.2	A	0.2
Westbound Left-Thru					A	1.5	A	1.9
Westbound Approach					A	1.5	A	1.9
Northbound Left-Right					B	10.2	B	11.6
Northbound Approach					B	10.2	B	11.6
Intersection Approach					A	4.6	A	4.9

As shown in Table 15, there are significant improvements at the SR-44 intersection compared to the 'No-Build'. There are better operations WB compared to 'Build Option A' due to the removal of the all-way stop at Auburn Road. As two individual intersections, all approaches at both Auburn Road intersections are anticipated to experience excellent LOS, including the stop-controlled approaches on Auburn Road. The LOS at Crile Road is an improvement over the 'No-Build' and 'Build Option A' conditions. However, there are still several movements that are operating poorly.



'Build Option C'

Table 16 summarizes the TransModeler Intersection Capacity Analysis and details the Levels-of-Service and delay experienced under the Design Year 2047 'No-Build' vs. 'Build Option C' traffic conditions. See **Appendix H** for the TransModeler analysis printouts.

Table 16: TransModeler Intersection Capacity Analysis Summary – Design Year 2047 'No-Build' vs. 'Build Option C' Conditions								
Intersection / Movement	'No-Build' Conditions				'Build Option C' Conditions			
	AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour	
	LOS	Delay (sec)	LOS	Delay (sec)	LOS	Delay (sec)	LOS	Delay (sec)
SR-44 / Girdled Road								
Eastbound Left	E	70.8	E	68.2	C	31.7	C	31.7
Eastbound Thru					C	26.5	C	29.0
Eastbound Right	D	50.3	D	51.9				
<i>Eastbound Approach</i>	E	68.8	E	66.5	C	29.2	C	30.0
Westbound Left	F	989.9	F	280.6	F	999.0	F	421.6
Westbound Thru					F	1079.5	F	538.5
Westbound Right	F	964.6	F	258.8				
<i>Westbound Approach</i>	F	977.5	F	273.3	F	1069.9	F	507.2
Northbound Left	F	207.0	E	58.7	F	189.8	F	131.7
Northbound Thru					C	27.4	C	33.4
Northbound Thru-Right	F	146.2	D	37.6	C	26.5	C	33.6
<i>Northbound Approach</i>	F	149.1	D	38.2	D	35.8	D	35.9
Southbound Left	F	147.4	F	372.1	C	23.9	D	38.6
Southbound Thru					C	31.3	C	31.6
Southbound Thru-Right	E	55.1	F	306.3	D	40.8	D	35.8
<i>Southbound Approach</i>	E	64.2	F	318.1	C	33.6	C	34.1
Intersection Total	F	216.0	F	177.9	F	159.6	E	77.3
Girdled Road / Crile Road								
Eastbound Left	A	7.5	A	2.9	B	8.0	A	8.5
<i>Eastbound Approach</i>	A	7.5	A	2.9	A	1.8	A	2.0
Westbound Thru-Right	F	1064.7	E	39.0	A	0.0	A	0.0
<i>Westbound Approach</i>	F	1064.7	E	39.0	A	0.0	A	0.0
Southbound Left-Right	F	203.6	F	1561.0	F	52.4	F	818.7
<i>Southbound Approach</i>	F	203.6	F	1561.0	F	52.4	F	818.7
Intersection Total	F	569.9	F	185.6	A	8.7	F	121.5



Table 16: TransModeler Intersection Capacity Analysis Summary (Cont.) – Design Year 2047 'No-Build' vs. 'Build Option C' Conditions

Intersection / Movement	'No-Build' Conditions				'Build Option C' Conditions			
	AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour	
	LOS	Delay (sec)	LOS	Delay (sec)	LOS	Delay (sec)	LOS	Delay (sec)
Girdled Road / Auburn Road								
Eastbound Left-Thru-Right	D	32.4	F	258.1	C	24.4	E	48.2
<i>Eastbound Approach</i>	D	32.4	F	258.1	C	24.4	E	48.2
Westbound Left-Thru-Right	F	64.6	E	39.7	F	82.4	F	115.5
<i>Westbound Approach</i>	F	64.6	E	39.7	F	82.4	F	115.5
Northbound Left-Thru-Right	F	360.2	F	948.8	F	59.8	F	636.9
<i>Northbound Approach</i>	F	360.2	F	948.8	F	59.8	F	636.9
Southbound Left-Thru-Right	D	26.2	F	491.2	C	19.5	F	335.0
<i>Southbound Approach</i>	D	26.2	F	491.2	C	19.5	F	335.0
Intersection Total	F	145.1	F	435.5	F	54.7	F	302.1

Similar to 'Build Option A', there are improvements anticipated at the SR-44 intersection, although not as much as 'Build Option B' due to the all-way stop at Auburn Road.

The EB and WB approaches at Crile Road are anticipated to experience improved operations. However, the SB approach is still expected to operate poorly, likely due to the remaining poor operations for WB traffic at SR-44.

Auburn Road sees very little improvement under 'Build Option C' except for the EB traffic related to the improvements at SR-44.



'Build Option D'

Table 17 summarizes the TransModeler Intersection Capacity Analysis and details the Levels-of-Service and delay experienced under the Design Year 2047 'No-Build' vs. 'Build Option D' traffic conditions. See **Appendix H** for the TransModeler analysis printouts.

Table 17: TransModeler Intersection Capacity Analysis Summary – Design Year 2047 'No-Build' vs. 'Build Option D' Conditions								
Intersection / Movement	'No-Build' Conditions				'Build Option D' Conditions			
	AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour	
	LOS	Delay (sec)	LOS	Delay (sec)	LOS	Delay (sec)	LOS	Delay (sec)
SR-44 / Girdled Road								
Eastbound Left	E	70.8	E	68.2	D	42.8	C	29.2
Eastbound Thru					C	26.2	D	36.3
Eastbound Right	D	50.3	D	51.9				
<i>Eastbound Approach</i>	E	68.8	E	66.5	C	35.0	C	33.6
Westbound Left	F	989.9	F	280.6	F	169.8	C	26.6
Westbound Thru					F	201.4	C	33.4
Westbound Right	F	964.6	F	258.8				
<i>Westbound Approach</i>	F	977.5	F	273.3	F	197.6	C	31.6
Northbound Left	F	207.0	E	58.7	C	34.3	C	32.6
Northbound Thru					C	29.2	C	27.7
Northbound Thru-Right	F	146.2	D	37.6	C	28.1	C	26.1
<i>Northbound Approach</i>	F	149.1	D	38.2	C	28.9	C	27.0
Southbound Left	F	147.4	F	372.1	C	25.1	C	27.6
Southbound Thru					C	25.9	B	17.9
Southbound Thru-Right	E	55.1	F	306.3	C	23.6	B	17.6
<i>Southbound Approach</i>	E	64.2	F	318.1	C	24.8	B	19.5
Intersection Total	F	216.0	F	177.9	E	65.2	C	25.3
Girdled Road / Crile Road								
Eastbound Left	A	7.5	A	2.9	A	11.1	A	4.6
<i>Eastbound Approach</i>	A	7.5	A	2.9	A	2.5	A	1.1
Westbound Thru-Right	F	1064.7	E	39.0	A	0.0	A	0.0
<i>Westbound Approach</i>	F	1064.7	E	39.0	A	0.0	A	0.0
Southbound Left-Right	F	203.6	F	1561.0	D	31.3	B	12.3
<i>Southbound Approach</i>	F	203.6	F	1561.0	D	31.3	B	12.3
Intersection Total	F	569.9	F	185.6	A	3.6	A	3.2



Table 17: TransModeler Intersection Capacity Analysis Summary (Cont.) – Design Year 2047 'No-Build' vs. 'Build Option D' Conditions

Intersection / Movement	'No-Build' Conditions				'Build Option D' Conditions			
	AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour	
	LOS	Delay (sec)	LOS	Delay (sec)	LOS	Delay (sec)	LOS	Delay (sec)
Girdled Road / Auburn Road								
Eastbound Left-Thru-Right	D	32.4	F	258.1				
Eastbound Approach	D	32.4	F	258.1				
Westbound Left-Thru-Right	F	64.6	E	39.7				
Westbound Approach	F	64.6	E	39.7				
Northbound Left-Thru-Right	F	360.2	F	948.8				
Northbound Approach	F	360.2	F	948.8				
Southbound Left-Thru-Right	D	26.2	F	491.2				
Southbound Approach	D	26.2	F	491.2				
Intersection Approach	F	145.1	F	435.5				
Girdled Road / Auburn Road (East)								
Eastbound Left-Thru					A	3.3	A	1.9
Eastbound Approach					A	3.3	A	1.9
Westbound Thru-Right					A	0.1	A	0.2
Westbound Approach					A	0.1	A	0.2
Southbound Left-Right					B	10.0	B	12.4
Southbound Approach					B	10.0	B	12.4
Intersection Approach					A	3.0	A	4.1
Girdled Road / Auburn Road (West)								
Eastbound Thru-Right					A	0.2	A	0.2
Eastbound Approach					A	0.2	A	0.2
Westbound Left-Thru					A	1.4	A	1.8
Westbound Approach					A	1.4	A	1.8
Northbound Left-Right					B	10.5	B	11.3
Northbound Approach					B	10.5	B	11.3
Intersection Approach					A	4.7	A	4.8

As shown on **Table 17**, 'Build Option D', which includes all of the recommendations of the other options combined, there are significant improvements at all intersections compared to the 'No-Build' conditions. The one remaining deficiency is the WB approach to SR-44. While this approach is anticipated to operate at a LOS F, there is significantly less delay than the 'No-Build' condition. Due to the close spacing of the intersections, the combination of the improvements has the greatest impact on LOS and delay.



V. Summary and Recommendations:

The Ohio Department of Transportation (ODOT) District 12 has embarked on an initiative to address mobility and safety issues along State Route 44 (SR-44) corridor. This initiative is focused on addressing current congestion and safety issues while providing infrastructure for potential future development. Selected results of this study will be integrated into the GEA/LAK-44-18.45/0.00 Rehab project (PID 114163) scheduled for award in 2025.

GPD Group was retained by ODOT District 12 to complete a Corridor Study along the limited access facility of the SR-44 Corridor. The purpose of this study is to analyze vehicular operating conditions along the study route to determine what capacity and/or safety improvements are necessary to correct the identified deficiencies, if any, for the projected future traffic conditions.

The limits of the corridor which are under consideration as a part of this study encompass SR-44 from just south of Capital Parkway (Lake County SLM 1.07) to just north of Mentor Road (Gauga County SLM 18.45) at the border of the City of Chardon. The study area also includes the Girdled Road / Auburn Road and the Girdled Road / Crile Road intersections. The limits of SR-44 encompassed by this study spans two townships (Chardon and Concord), and two counties (Lake and Geauga). The land uses surrounding the study corridor are primarily residential and commercial land uses.

In Summary,

1. GPD Group developed Opening Year 2027 and Design Year 2047 'No-Build' traffic volumes as part of this study and submitted a Certified Traffic Request letter to ODOT on 03/24/2022. These volumes can be found in **Appendix A.**
2. According to the information provided by ODOT which was based on NOACA's model, the study area is anticipated to experience growth rates that vary between +0.5% to +1.0% annually from one intersection to another.
3. Crash Data was obtained from ODOT's GIS Crash Analysis Tool (GCAT) for the calendar years of 2017 to 2021 for the entire study area. A total of 127 crashes were reported within the study area and were analyzed as part of this project. These crashes include 31 rear-end, 45 animal-related crashes, 21 angle, 17 fixed object, 4 sideswipe meeting, 2 sideswipe passing, 2 left turn, 2 other non-collision, 1 unknown, 1 pedal cycle, and 1 overturning. Of all crashes, 57% occurred in daylight, 52% occurred on dry pavement, and 30% of the crashes were injury crashes with three (3) fatal crashes reported from 2017 - 2021. Approximately 46% of crashes within the study limits are occurring at the study intersections (58 out of 127). Additionally, most intersection related crashes are occurring at the Hosford Road (23 crashes) and Girdled Road (20 crashes) intersections.
4. The traffic signal warrant analysis determined that the intersection of SR-44 / Hosford Road met the conditions of Warrant #'s 1-3 (70% values) as well as the conditions of Warrant # 7 under the Existing Year 2021 'No-Build' traffic conditions.



5. The auxiliary turn lane warrant analysis determined that an eastbound left turn lane and a westbound right turn lane are anticipated to be warranted at the intersection of Girdled Road / Crile Road. However, this study only recommends the eastbound left turn lane be constructed to help avoid backups into the SR-44 / Girdled Road intersection. The additional westbound right turn lane will have a minimal impact on the intersection's capacity when compared to the cost of construction and therefore, is not recommended.

Northbound and southbound left turn lanes were found to be warranted at the intersections of SR-44 / Colburn Road, SR-44 / Clark Road and SR-44 / Hosford Road. Additionally, a northbound right turn lane was also found to be warranted at SR-44 / Hosford Road intersection; however, this turn lane will not provide any additional capacity to the intersection and does not appear to be needed from a safety perspective. Therefore, the addition of this lane is not recommended.

6. The storage length calculations show that the required length for warranted eastbound left turn lanes at the Girdled Road / Crile Road and SR-44 / Girdled Road intersections is 275'. However, due to space constraints, these left turn lanes could only be constructed to a max of 150' and 200' respectively.
7. The Opening Year 2027 and Design Year 2047 'No-Build' and 'Build' traffic scenarios at the SR-44 / Colburn Road and SR-44 / Clark Road intersections show that the side street approaches will operate at unsatisfactory Level-of-Service as the number of vehicles utilizing SR-44 has increased. These high volumes provide very few gaps for side street vehicles to enter SR-44, causing significant delays. Although there are minimal capacity improvements, the NB and SB left turn lanes provide a safety improvement for the intersection.
8. Two 'Build' options were analyzed at the SR-44 / Hosford Road intersection, signalization with roadway improvements and a roundabout.
 - a. The Opening Year 2027 and Design Year 2047 'No-Build' and 'Build – Signalized' traffic scenario at the SR-44 / Hosford Road intersection show that the installation of a traffic signal at this location is anticipated to provide acceptable Levels-of-Service for all movements as well as the intersection overall.
 - b. The Opening Year 2027 and Design Year 2047 'No-Build' and 'Build Roundabout' traffic scenario at SR-44 / Hosford Road intersection show that the construction of a roundabout at this location would be anticipated to provide acceptable Levels-of-Service for all approaches as well as the intersection overall.
 - c. It was determined that a traffic signal would be anticipated to provide the lowest amount of overall delay across the peak hours.



9. The SR-44 / Girdled Road intersection is the busiest intersection along the study corridor. The high traffic volumes combined with the lack of sufficient roadway capacity to accommodate it, and the inefficient split-phased signal operation that is needed for this intersection creates congestion and delay for motorists. In addition to these factors, there are two adjacent intersections that exist within close proximity to the intersection that also contribute to the poor traffic operations through this area. Approximately 225' (c/c) to the east is the Girdled Road / Crile Road intersection and approximately 330' (c/c) to the west is the Girdled Road / Auburn Road intersection. In order to improve the traffic operation deficiencies in the SR-44 / Girdled Road vicinity, several 'Build' options were analyzed.
- a. Girdled Road in 'Build Option A', which was created to address the immediate concerns of the intersection, is expected to experience some improvement over the 'No-Build' conditions but there are still some concerns, primarily with the WB approach. Additionally, WB Girdled Road at Crile Road is worse in the PM peak and is still unacceptable on the WB and SB approaches. At Auburn Road, the EB approach improves, likely due to the improved operations at the SR-44 intersection. However, the WB delay increases as traffic is reaching the all-way stop faster than the 'No-Build'.
 - b. Girdled Road in 'Build Option B', which was created as a conceptual improvement that would further reduce delay and promote traffic flow through the SR-44/Girdled Road area, is expected to experience significant improvements at the SR-44 intersection compared to the 'No-Build'. There are better operations WB compared to 'Build Option A' due to the removal of the all-way stop at Auburn Road which will operate better as two individual intersections.
 - c. Girdled Road in 'Build Option C', which was also created as a conceptual improvement that would further reduce delay and promote traffic flow through the SR-44/Girdled Road area, is expected to experience some improvement over the 'No-Build' conditions but there are still some concerns, primarily with the WB approach. Additionally, The EB and WB approaches at Crile Road are anticipated to experience improved operations. However, the SB approach is still expected to operate poorly, likely due to the remaining poor operations for WB traffic at SR-44.
 - d. Girdled Road in 'Build Option D', which incorporates all the improvements of 'Build Options A – C' and represents the "Ultimate Build" scenario, is expected to experience significant improvements compared to the 'No-Build' conditions. The one remaining deficiency is the WB approach to SR-44. While this approach is anticipated to operate at a LOS F, there is significantly less delay than the 'No-Build' condition. Due to the close spacing of the intersections, the combination of the improvements has the greatest impact on LOS and delay.



DRAFT

FIGURES

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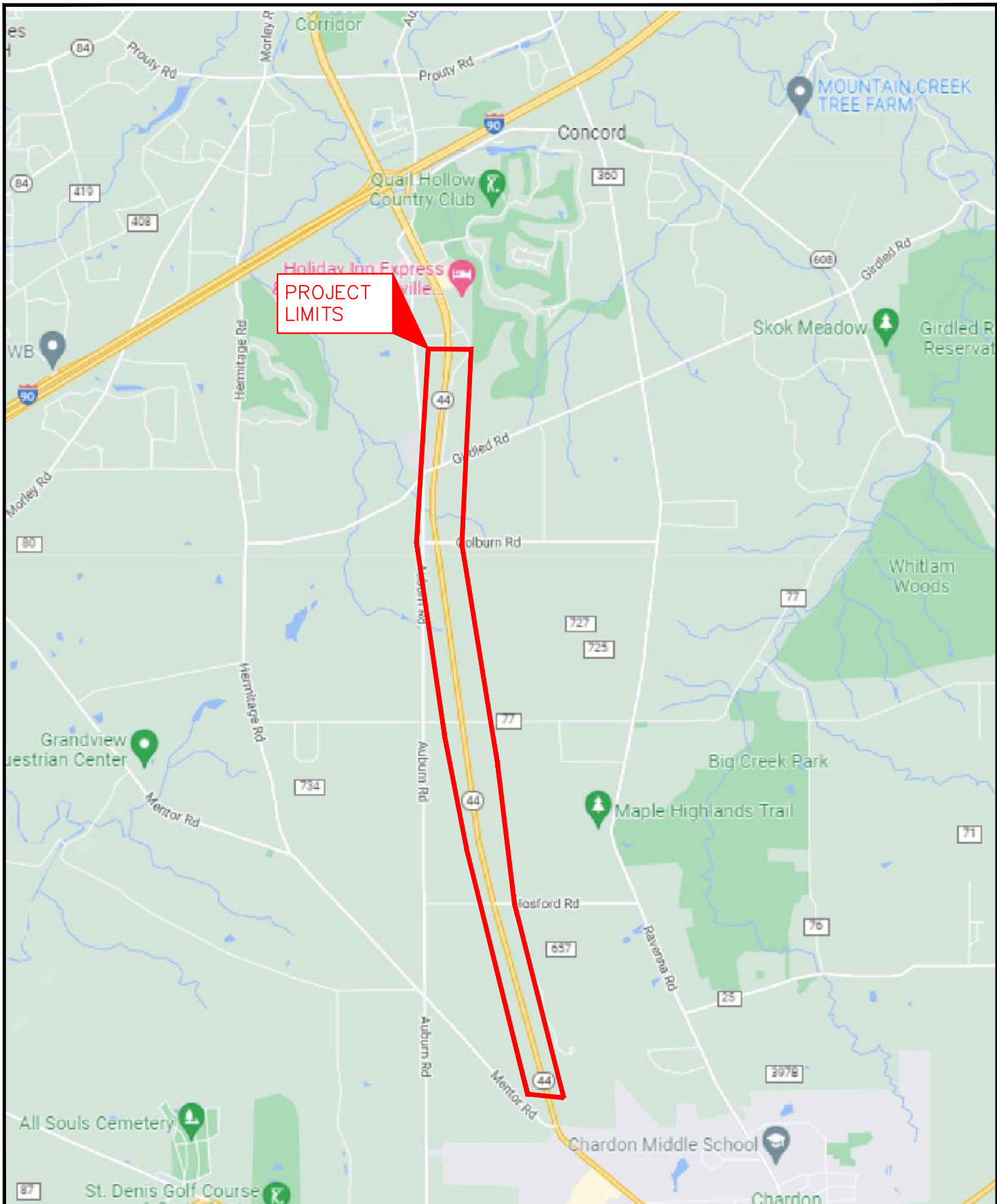


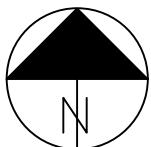
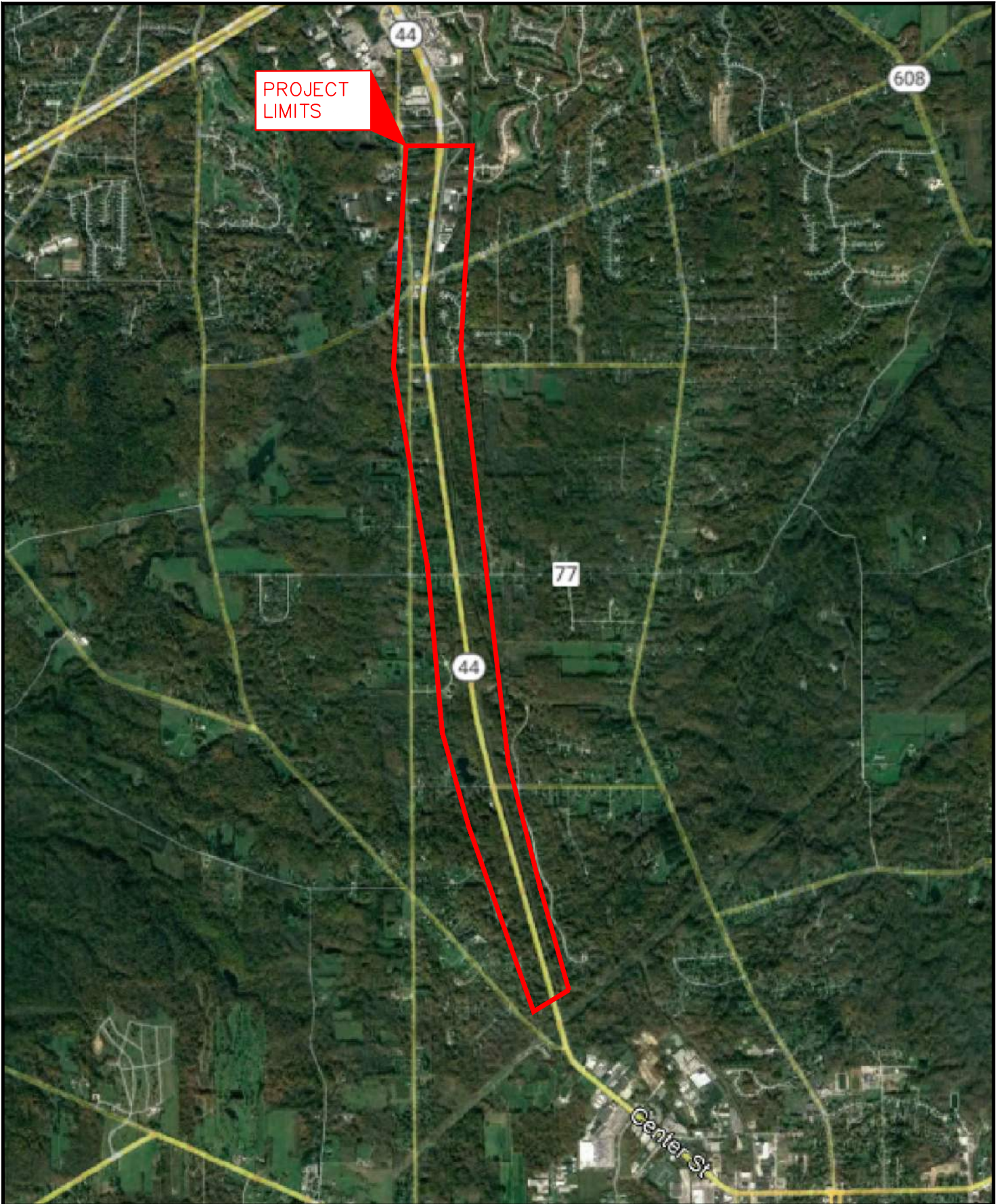
FIGURE 1

PROJECT LOCATION MAP

APRIL 2022



CAD FILE: C:\2020\2020089 CDDT D12-19 GEA-44 CORRIDOR STUDY\DESIGN\TRAFFIC\STUDY\FIGURES\FIGURE 2 - AERIAL PHOTOGRAPH.DWG
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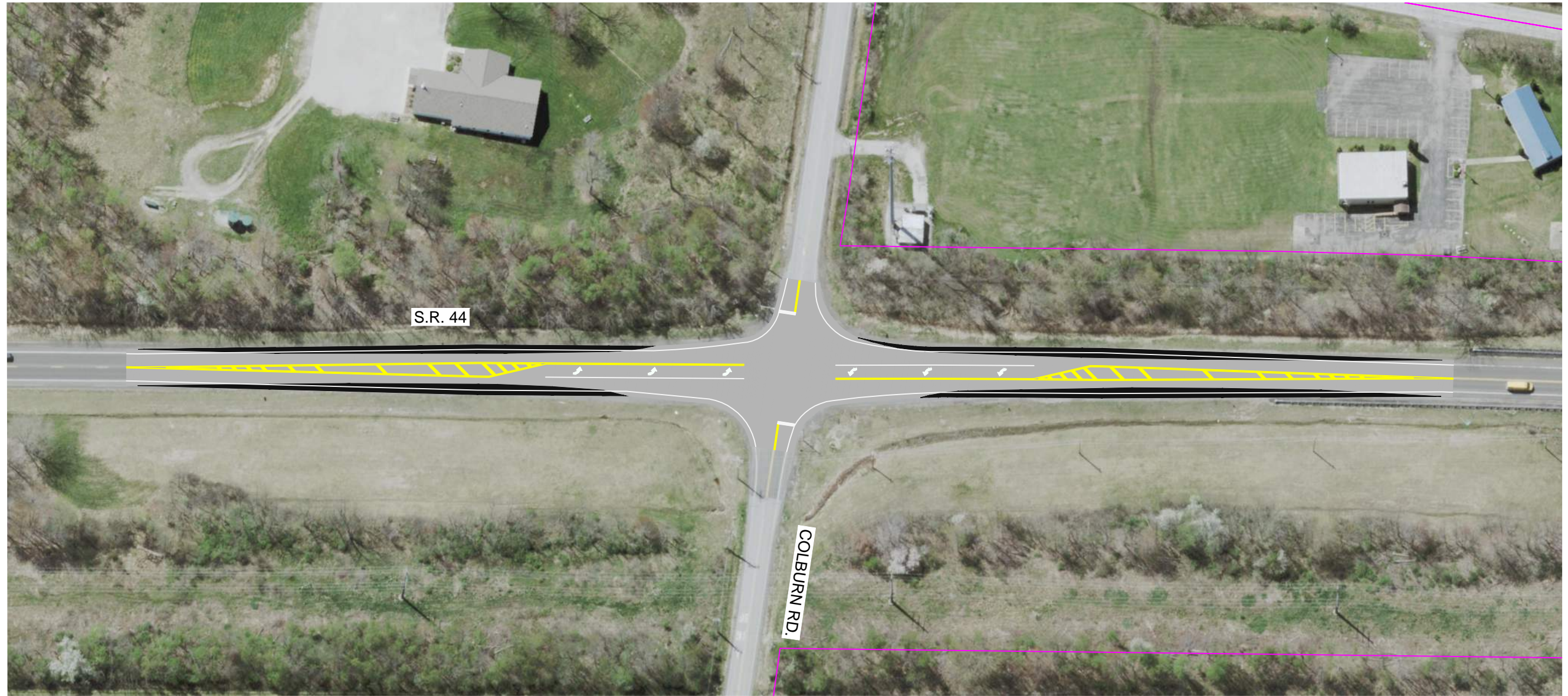
N.T.S.

FIGURE 2


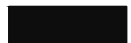

AERIAL PHOTOGRAPH

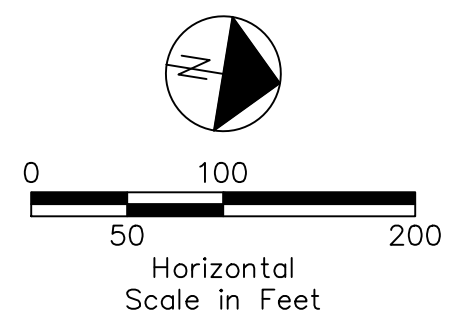
APRIL 2022




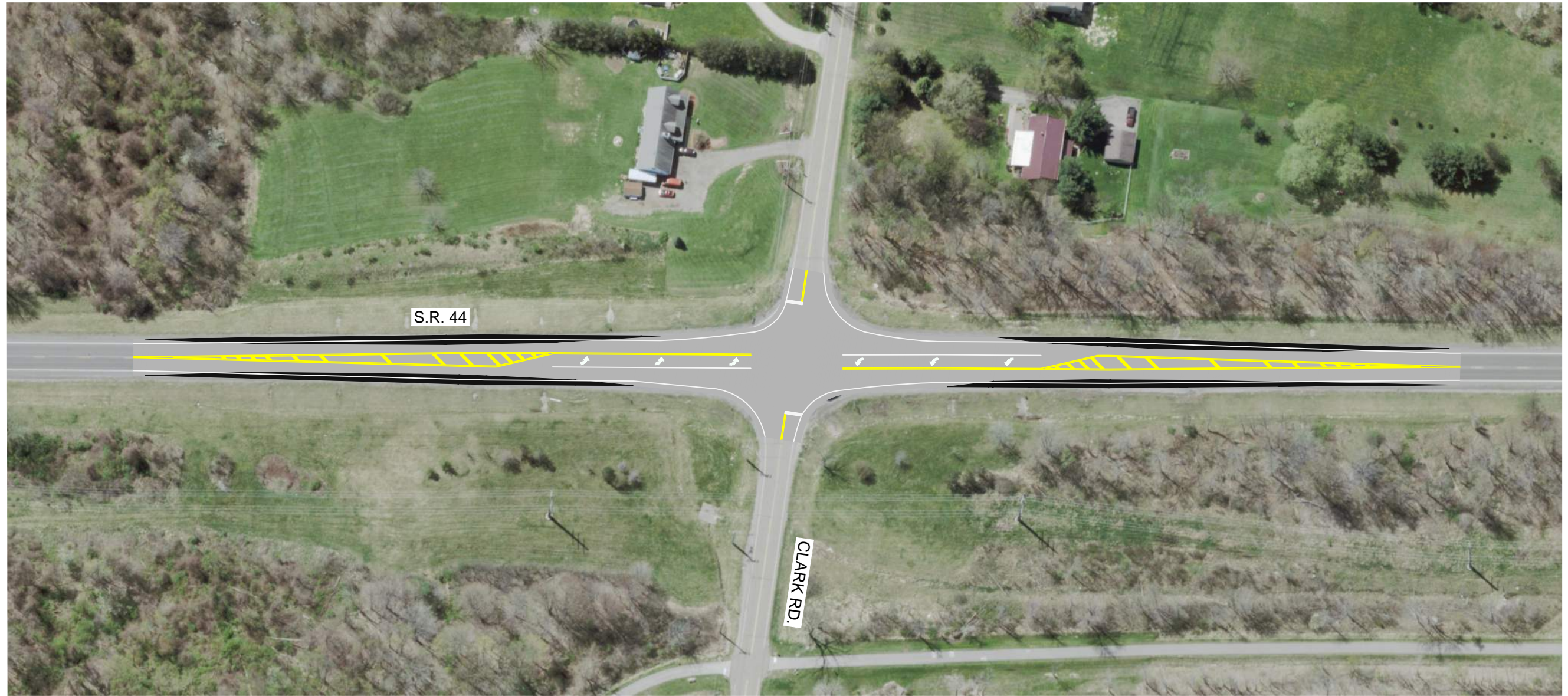


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 Date: Apr 25, 2022 Time: 7:47 am User: 0
 Technician: ntabanja

LEGEND	
	EXISTING PAVEMENT
	NEW/RECONSTRUCTED PAVEMENT
	EXISTING RIGHT OF WAY






Figure 3
CONCEPTUAL IMPROVEMENT RENDERING S.R. 44 / COLBURN RD.
APRIL 2022

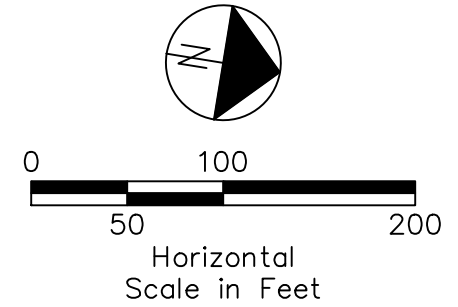



S.R. 44

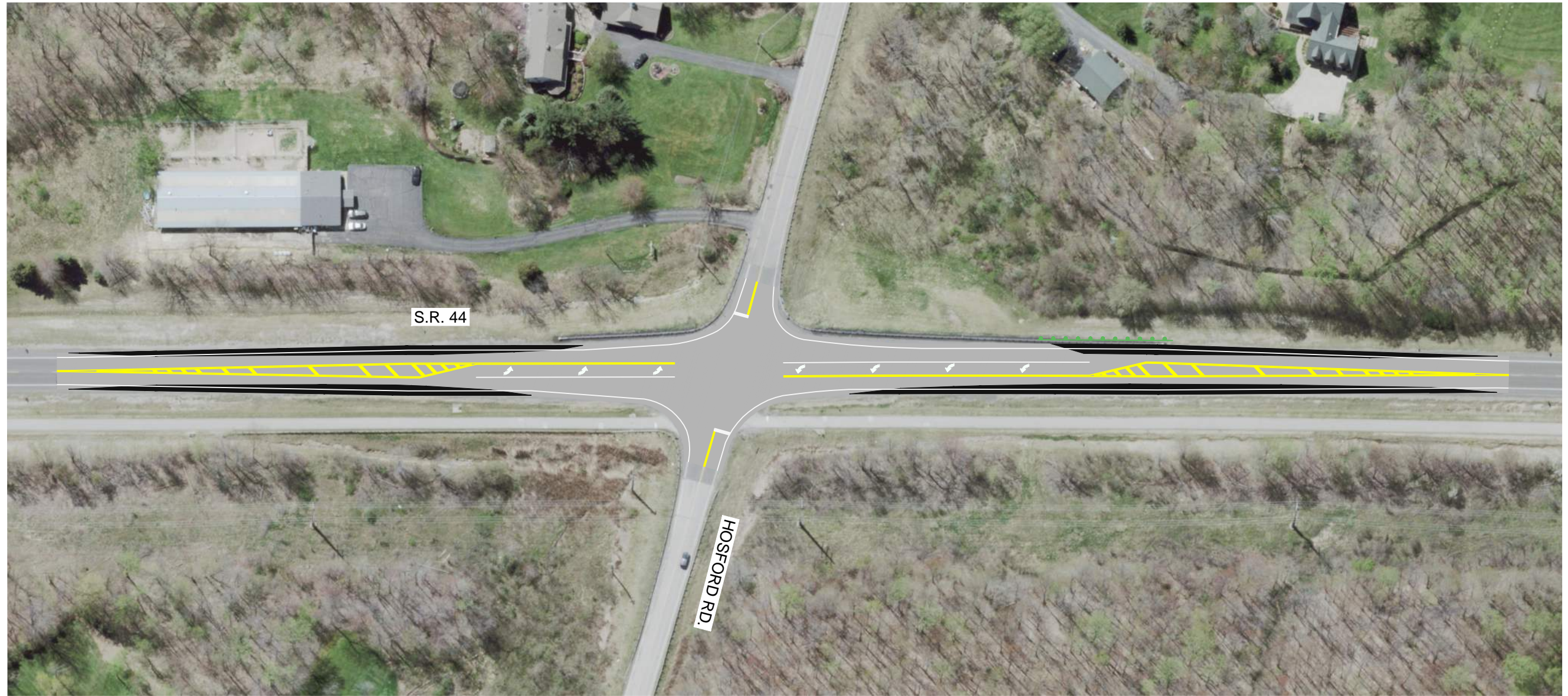
CLARK RD.

Drawing File: C:\Users\ntabanja\AppData\Local\Temp\AcPublish_20160\Rendering_Option_1.dwg Layout: Clark
 Date: Apr 25, 2022 Time: 7:48 am User: 0
 Technician: ntabanja

LEGEND	
	EXISTING PAVEMENT
	NEW/RECONSTRUCTED PAVEMENT






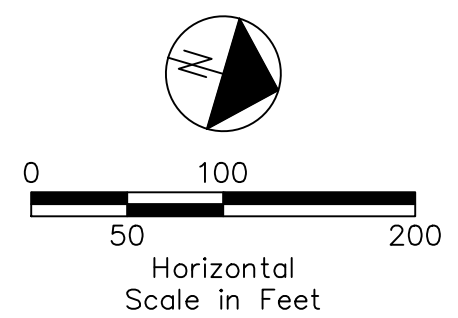

Figure 4
CONCEPTUAL IMPROVEMENT RENDERING S.R. 44 / CLARK RD.
APRIL 2022




S.R. 44

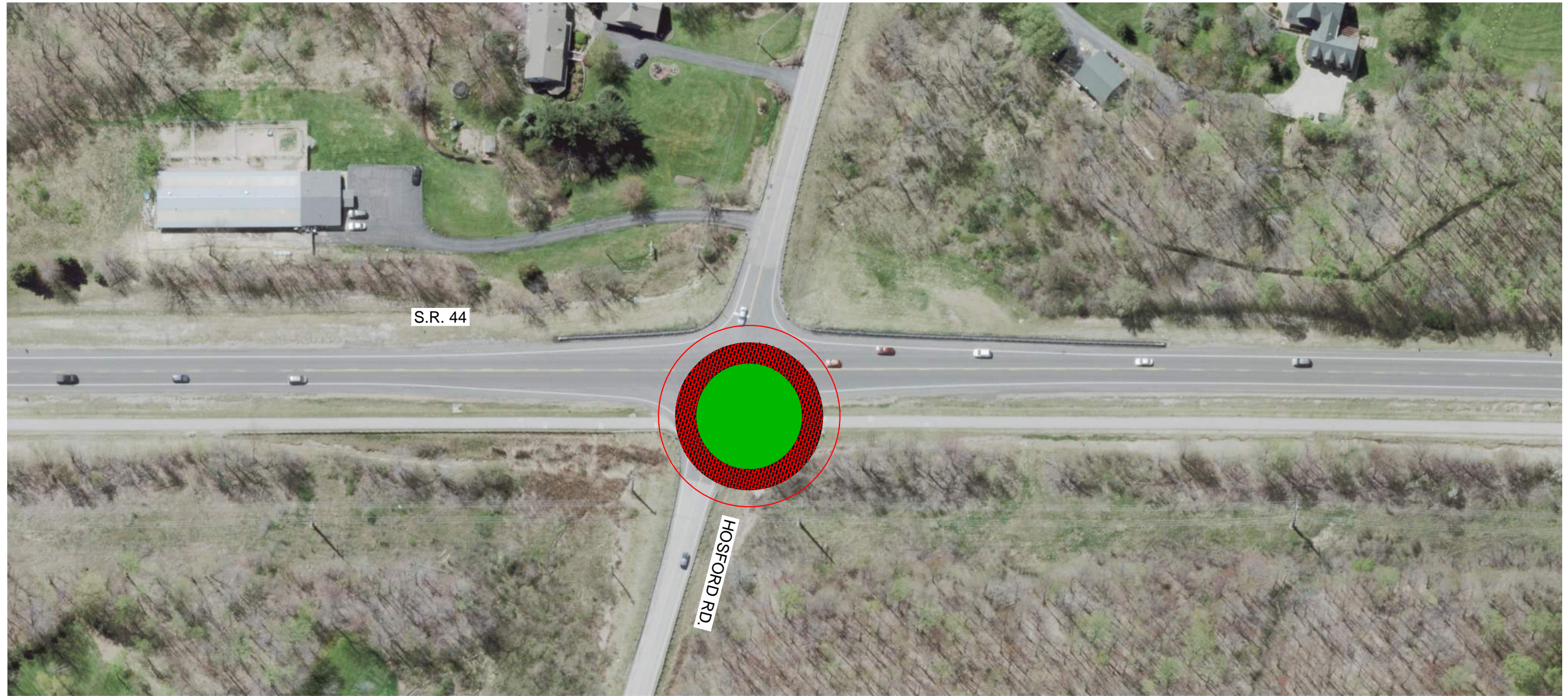
HOSFORD RD.

LEGEND	
	EXISTING PAVEMENT
	NEW/RECONSTRUCTED PAVEMENT
	PROPOSED GUARDRAIL

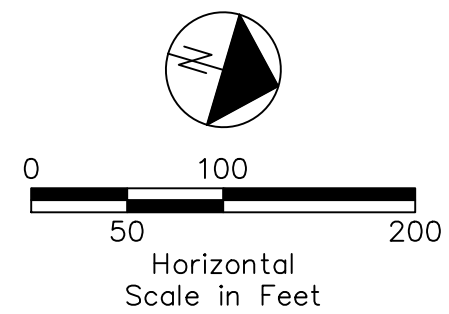




Figure 5
CONCEPTUAL IMPROVEMENT RENDERING S.R. 44 / HOSFORD RD.
APRIL 2022

Drawing File: C:\Users\ntabanja\AppData\Local\Temp\AsPublish_Visual\Render\Option 1.dwg Layout: Hosford
 Date: Apr 25, 2022 Time: 7:48 am User: ntabanja
 Technician: ntabanja

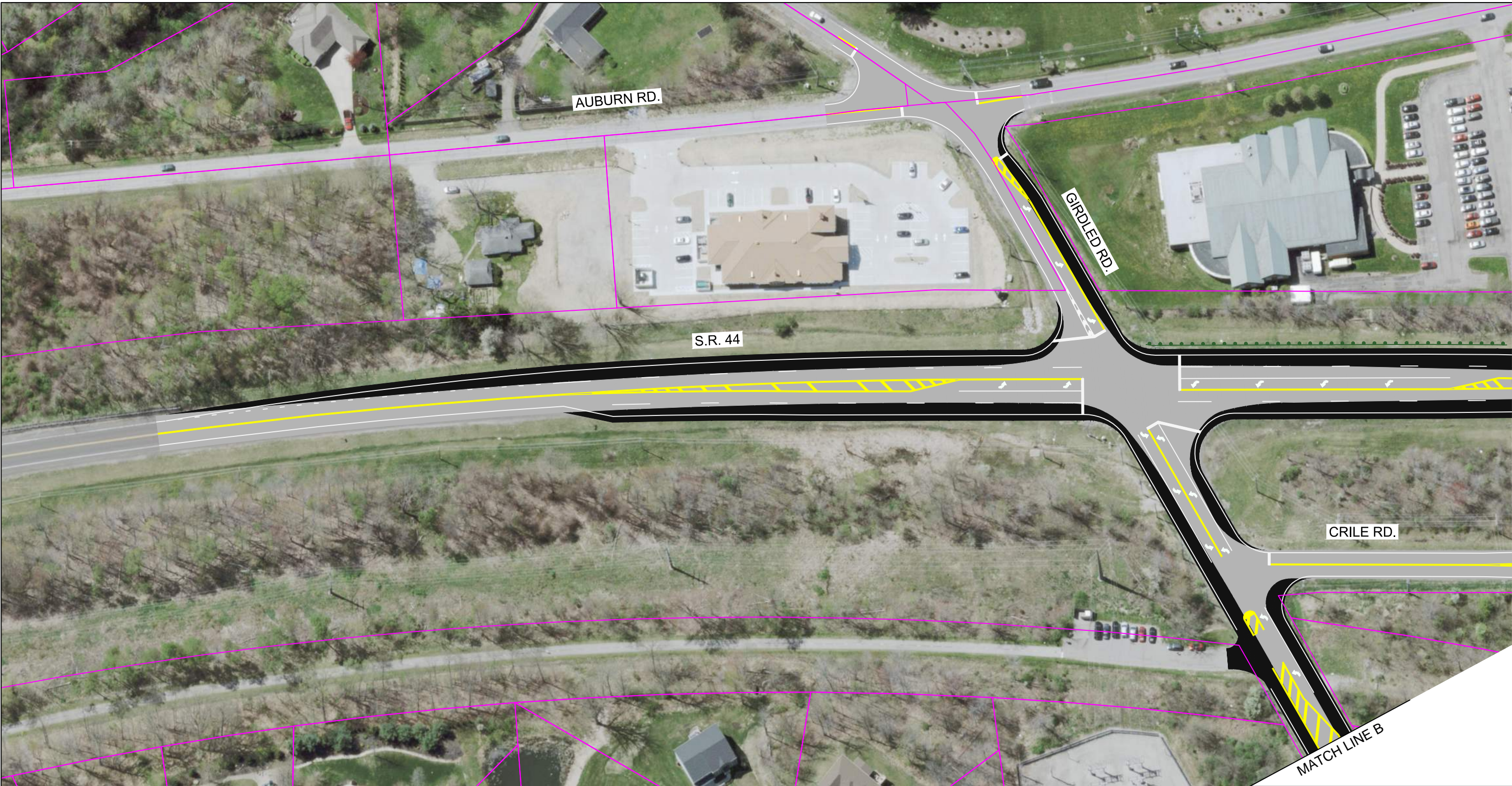






Drawing File: C:\Users\ntabanja\Desktop\Rendering_Option 2.dwg Layout: Hosford (B)
Date: Apr 26, 2022 Time: 7:55 am User: 0
Technician: ntabanja




Figure 6
CONCEPTUAL IMPROVEMENT RENDERING S.R. 44 / HOSFORD RD.
APRIL 2022

Drawing File: C:\2020\2020088_0001 D17-03 Traffic TO\12-19 GE-44 Corridor Study\Design\Traffic\Study\Figures\Rendering_Option_A.dwg Layout: Girdled_1
Date: July 05, 2022 Time: 8:44 am Sheet: 0
Technician: bferrell



LEGEND	
	EXISTING PAVEMENT
	NEW/RECONSTRUCTED PAVEMENT
	EXISTING RIGHT OF WAY
	PROPOSED GUARDRAIL


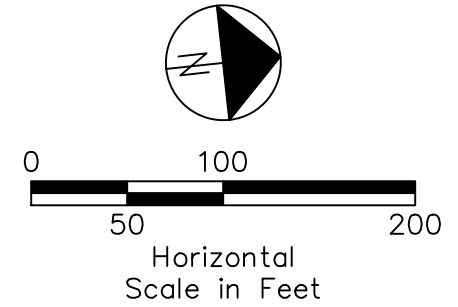






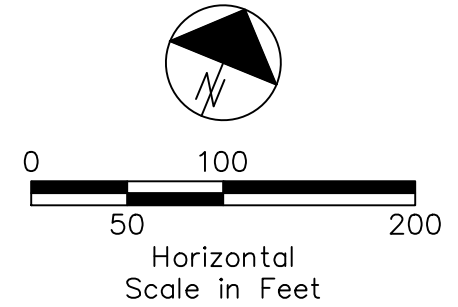
FIGURE 7
CONCEPTUAL IMPROVEMENT
RENDERING OPTION A
S.R. 44 / GIRDLED RD.
SHEET 1 OF 2
APRIL 2022


Drawing File: C:\2020\2020088_0001 D1F-03 Traffic TO\12-19 GE-44 Corridor Study\Design\Traffic\Study\Figures\Rendering\Option A.dwg Layout: Girdled_4
Date: July 05, 2022 Time: 8:45 am Sheet: 0
Technician: bferrell

MATCH LINE B

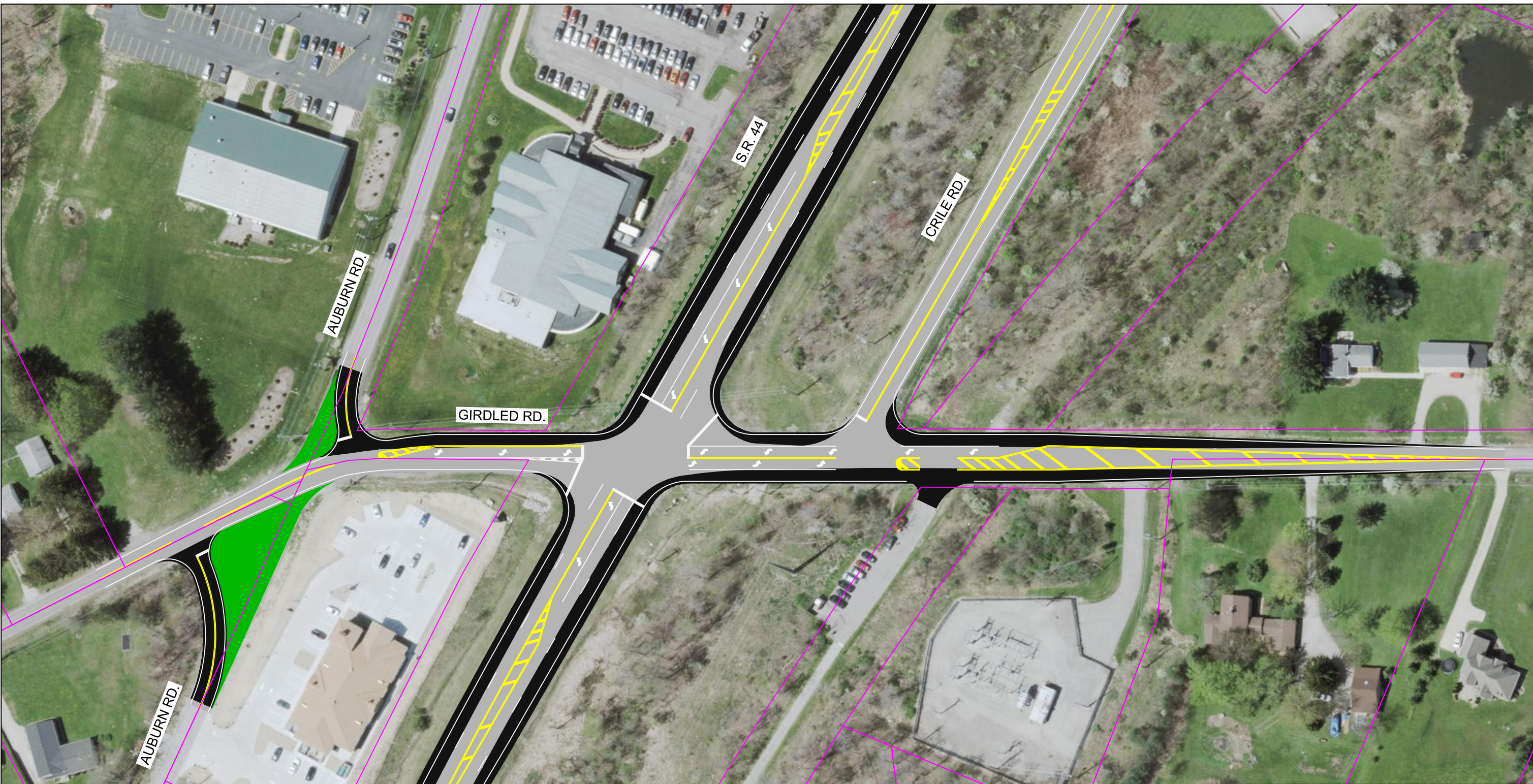






LEGEND	
	EXISTING PAVEMENT
	NEW/RECONSTRUCTED PAVEMENT
	EXISTING RIGHT OF WAY
	PROPOSED GUARDRAIL




FIGURE 7
CONCEPTUAL IMPROVEMENT RENDERING OPTION A S.R. 44 / GIRDLED RD. SHEET 2 OF 2
APRIL 2022

Drawing File: C:\2020\2020088 CADOT D12-03 Traffic TO12-19 GE4-44 Corridor Study\Design\Traffic\Study\Figures\Rendering\Option B.dwg Layout: Auburn Realignment
 Date: Apr 25, 2022 Time: 3:55 am User: 0
 Technician: ntabanja



LEGEND	
	EXISTING PAVEMENT
	NEW/RECONSTRUCTED PAVEMENT
	EXISTING RIGHT OF WAY
	PROPOSED GUARDRAIL

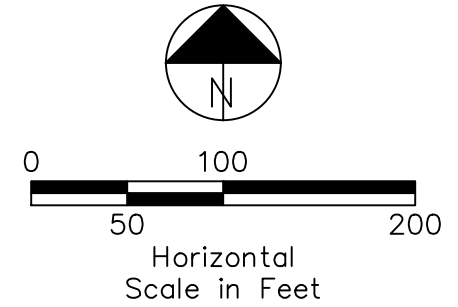
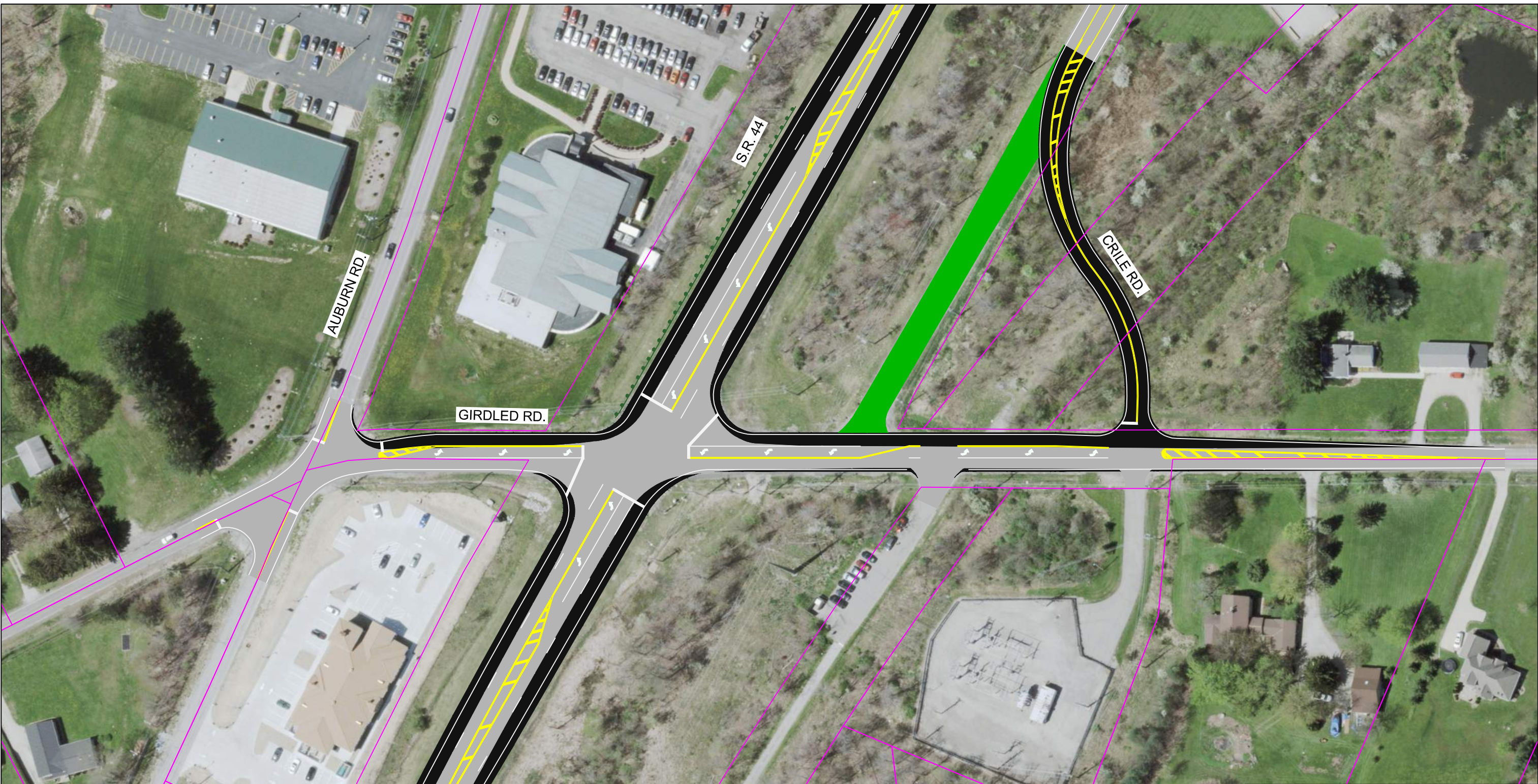






FIGURE 8

CONCEPTUAL IMPROVEMENT RENDERING
OPTION B

APRIL 2022

Drawing File: C:\2020\20200808_0001 D15-03 Traffic TO\12-19 GE-44 Corridor Study\Design\Traffic\Study\Figures\Rendering_Option_C.dwg Layout: Crite Realignment
 Date: Apr 25, 2022 Time: 8:10 am User: 0
 Technician: ntabanja



LEGEND	
	EXISTING PAVEMENT
	NEW/RECONSTRUCTED PAVEMENT
	EXISTING RIGHT OF WAY
	PROPOSED GUARDRAIL

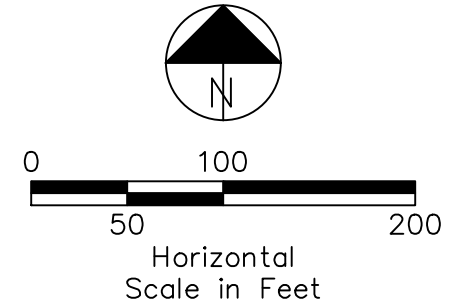
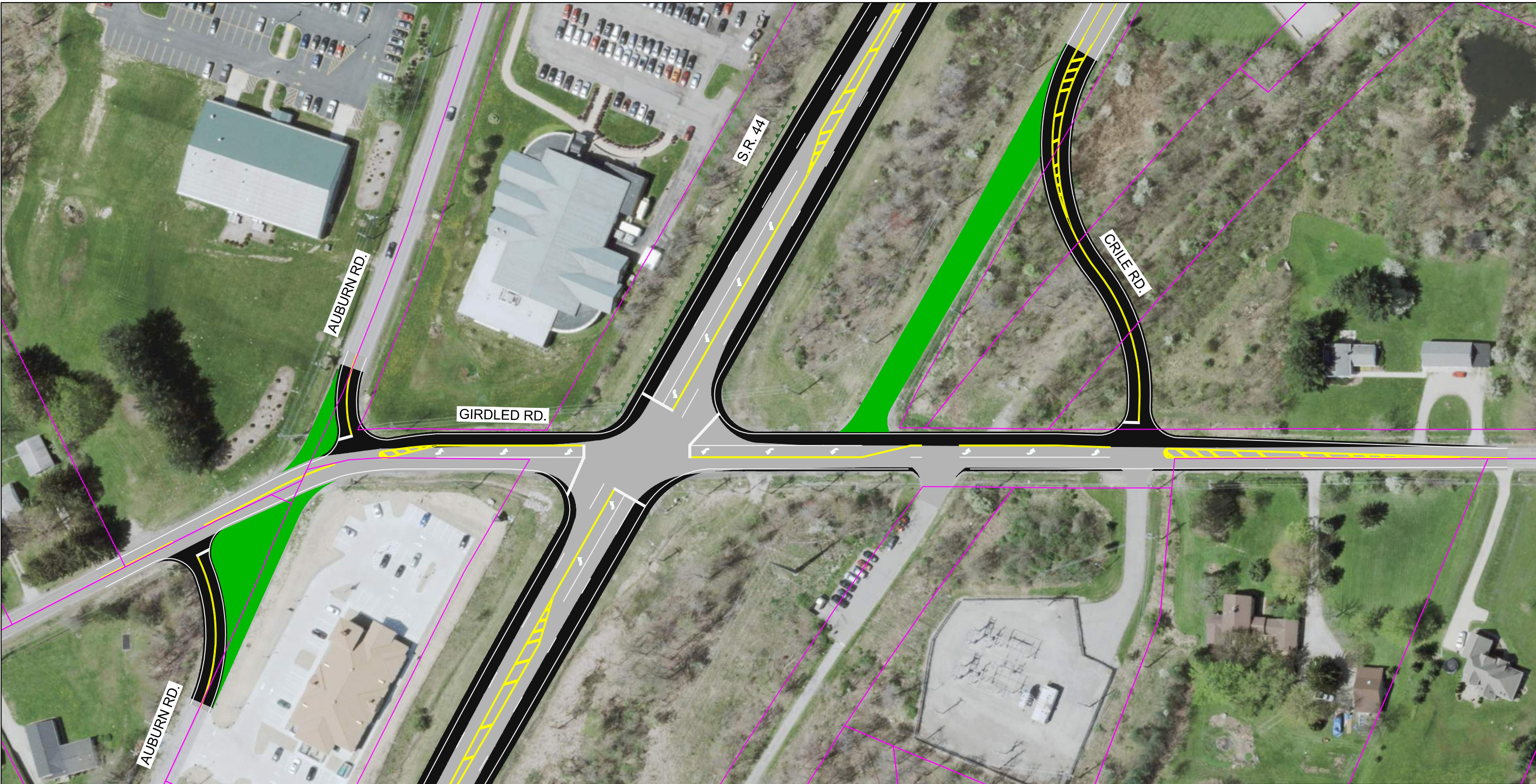






FIGURE 9
 CONCEPTUAL IMPROVEMENT RENDERING
 OPTION C
 APRIL 2022

Drawing File: C:\2020\2020088 CADOT D12-03 Traffic TO\12-19 GE-44 Corridor Study\Design\Traffic\Study\Figures\Rendering\Option D.dwg Layout: Combined Option
 Date: Apr 25, 2022 Time: 3:16 pm User: 0
 Technician: ntabanja



LEGEND	
	EXISTING PAVEMENT
	NEW/RECONSTRUCTED PAVEMENT
	EXISTING RIGHT OF WAY
	PROPOSED GUARDRAIL

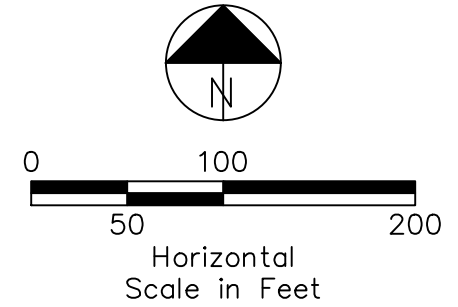


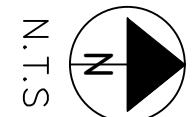
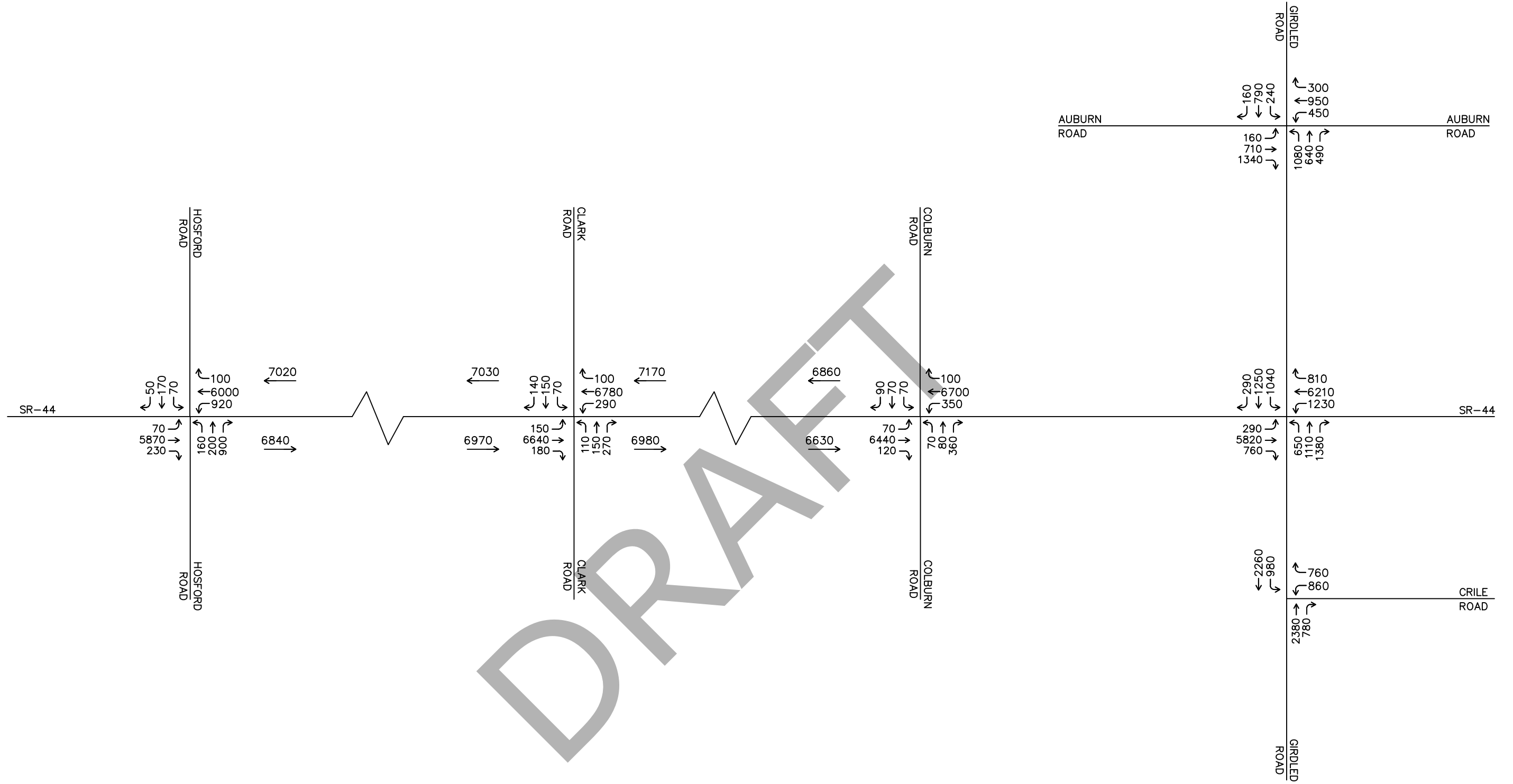
FIGURE 10

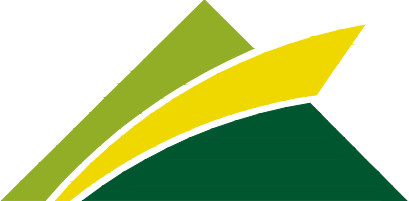
CONCEPTUAL IMPROVEMENT RENDERING
OPTION D

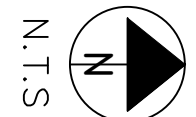
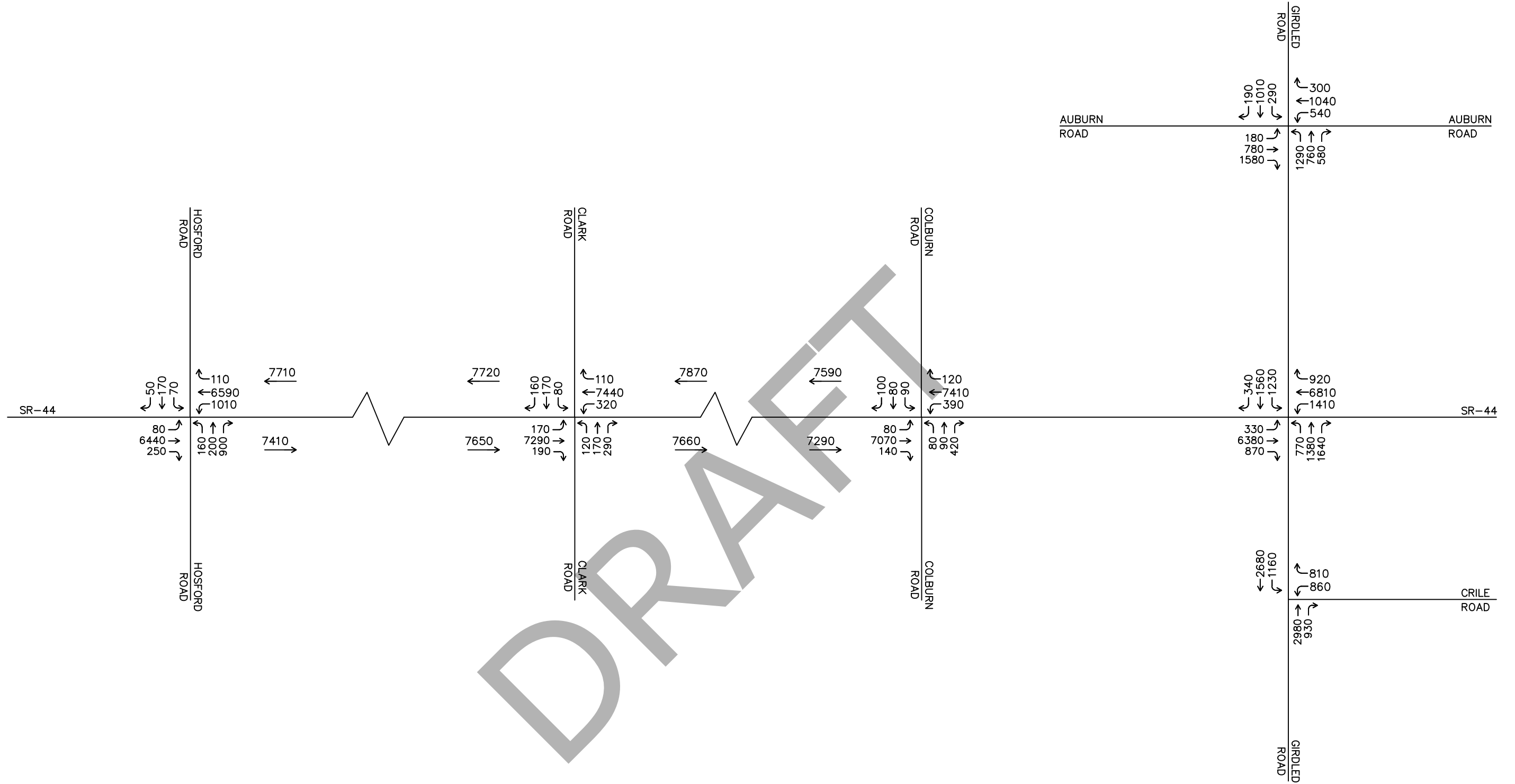
APRIL 2022

APPENDIX A
DESIGN TRAFFIC VOLUME PLATES

DRAFT




PLATE 1
OPENING YEAR 2027 ADT VOLUMES - GEA/LAK-44 CORRIDOR STUDY
MARCH 2022




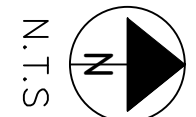
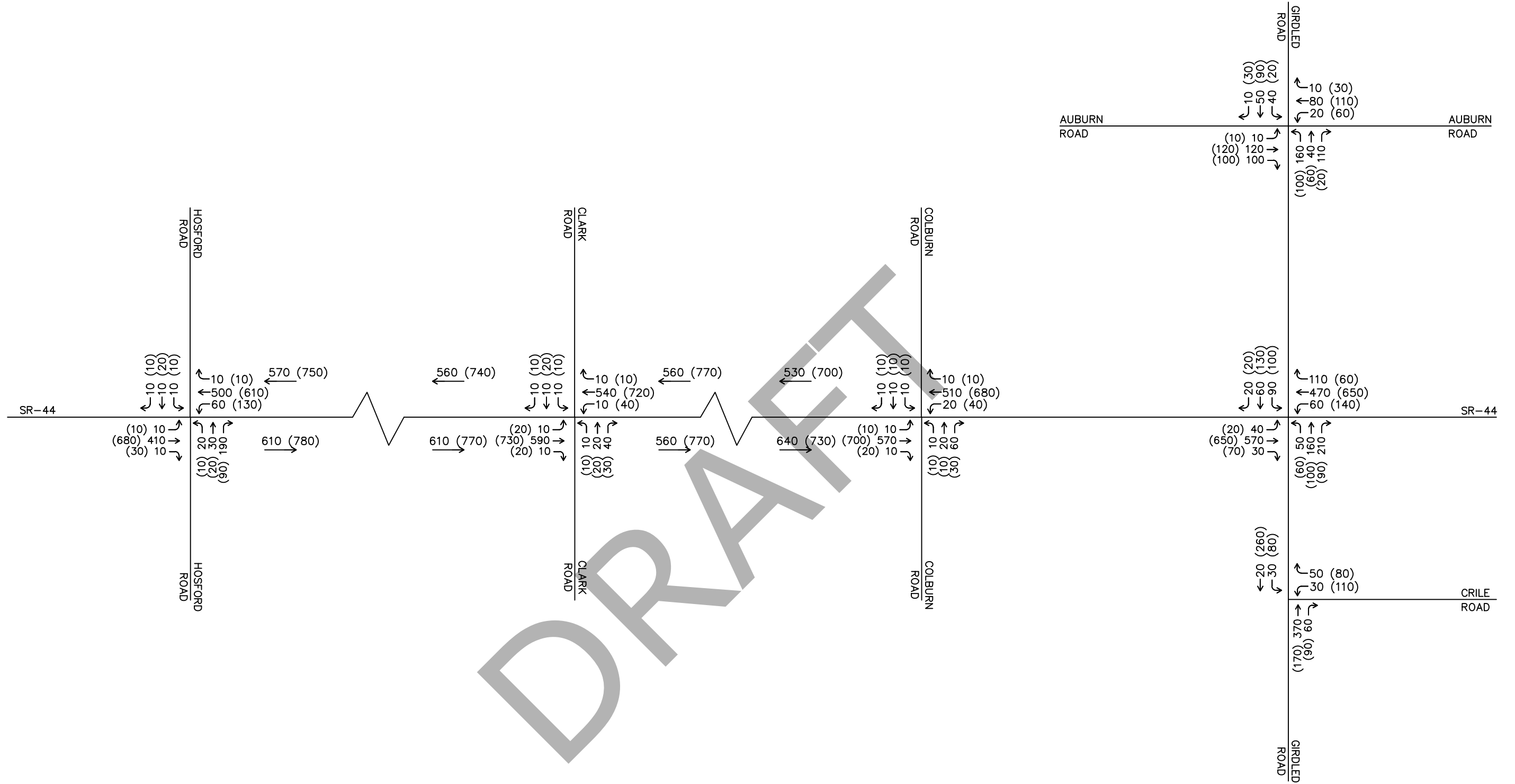



PLATE 2

**DESIGN YEAR 2047
ADT VOLUMES -
GEA/LAK-44 CORRIDOR STUDY**

MARCH 2022




PLATE 3
OPENING YEAR 2027 PEAK HOUR TRAFFIC VOLUMES GEA/LAK-44 CORRIDOR STUDY
MARCH 2022

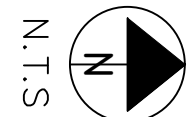
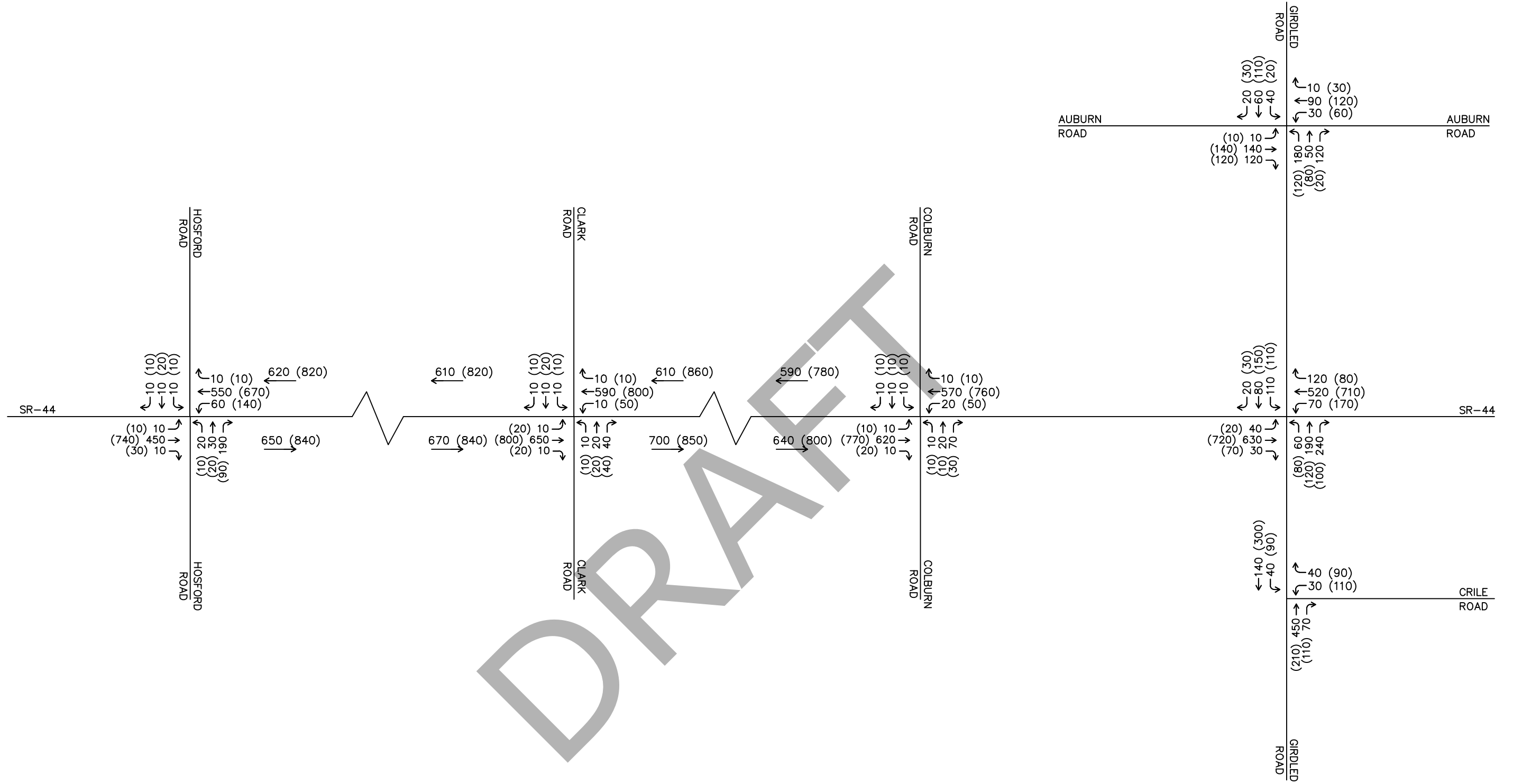


PLATE 4
DESIGN YEAR 2047 PEAK HOUR TRAFFIC VOLUMES GEA/LAK-44 CORRIDOR STUDY
MARCH 2022

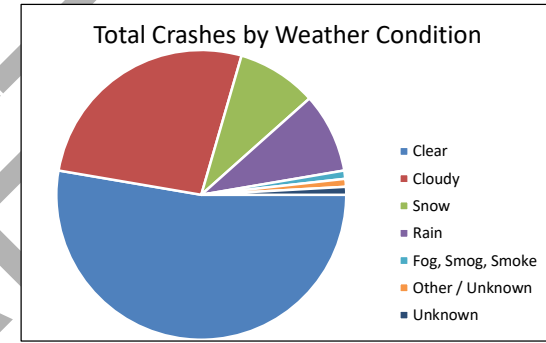
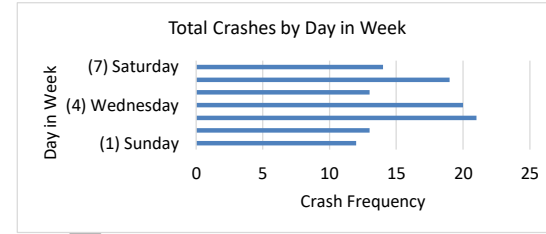
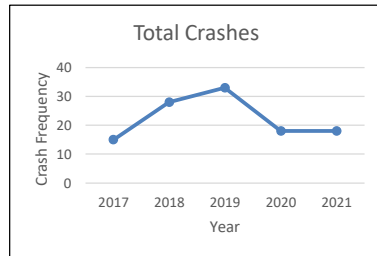
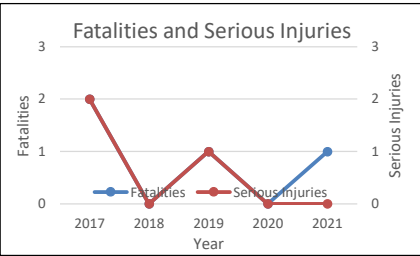
APPENDIX B
COLLISION DATA SUMMARY & CHARTS

DRAFT

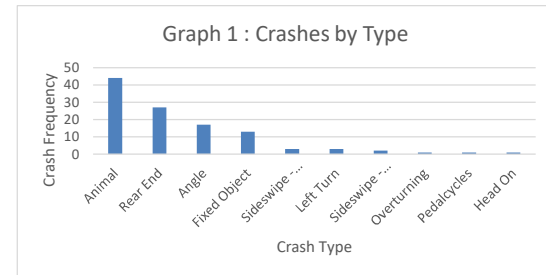
GEA/LAK-44 Corridor Study
Crash Summary Sheet

Crashes Per Year	22.40	Percent Injury	24.1%	EPDO	4.34
-------------------------	-------	-----------------------	-------	-------------	------

Year	Total Crashes	Fatalities	Serious Injuries
2017	15	2	2
2018	28	0	0
2019	33	1	1
2020	18	0	0
2021	18	1	0
Grand Total	112	4	3



Total Crashes Crash Type	Injury Level					Grand Total
	(1) Fatal	(2) Serious Inju	(3) Minor Injury	(4) Injury Possil	(5) PDO/No Inju	
Animal	0	0	2	1	41	44
Rear End	0	0	5	4	18	27
Angle	3	1	5	1	7	17
Fixed Object	0	0	1	2	10	13
Sideswipe - Meeting	0	0	0	0	3	3
Left Turn	0	0	0	0	3	3
Sideswipe - Passing	0	0	0	0	2	2
Overturning	0	0	0	0	1	1
Pedalcycles	0	0	0	1	0	1
Head On	0	1	0	0	0	1
Grand Total	3	2	13	9	85	112



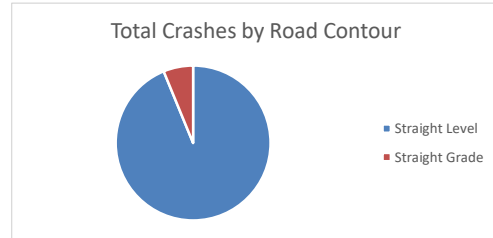
GEA/LAK-44 Corridor Study
Crash Summary Sheet

Crashes Per Year	22.40	Percent Injury	24.1%	EPDO	4.34
-------------------------	-------	-----------------------	-------	-------------	------

Road Condition	Total Crashes	Fatalities	Serious Injuries
Dry	77	3	3
Ice	1	0	0
Slush	1	1	0
Snow	5	0	0
Wet	27	0	0
Other / Unknown	1	0	0
Grand Total	112	4	3

Weather	Total Crashes	Fatalities	Serious Injuries
Clear	59	1	3
Cloudy	30	2	0
Snow	10	1	0
Rain	10	0	0
Fog, Smog, Smoke	1	0	0
Other / Unknown	1	0	0
Unknown	1	0	0
Grand Total	112	4	3

Crash Location	Total Crashes	Fatalities	Serious Injuries
Four-Way Intersection	35	3	1
Not An Intersection	74	1	2
T-Intersection	3	0	0
Grand Total	112	4	3

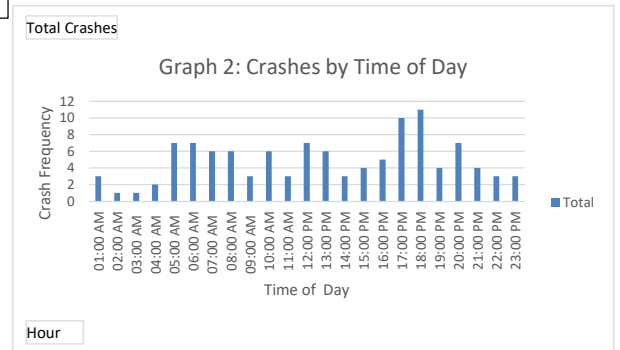
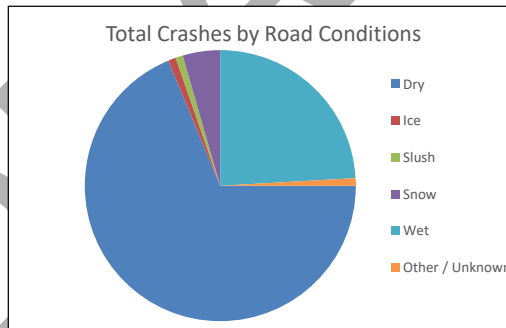


Roadway Contour	Total Crashes	Fatalities	Serious Injuries
Straight Level	105	3	3
Straight Grade	7	1	0
Grand Total	112	4	3

Hour of Day	Total Crashes
1	3
2	1
3	1
4	2
5	7
6	7
7	6
8	6
9	3
10	6
11	3
12	7
13	6
14	3
15	4
16	5
17	10
18	11
19	4
20	7
21	4
22	3
23	3
Grand Total	112

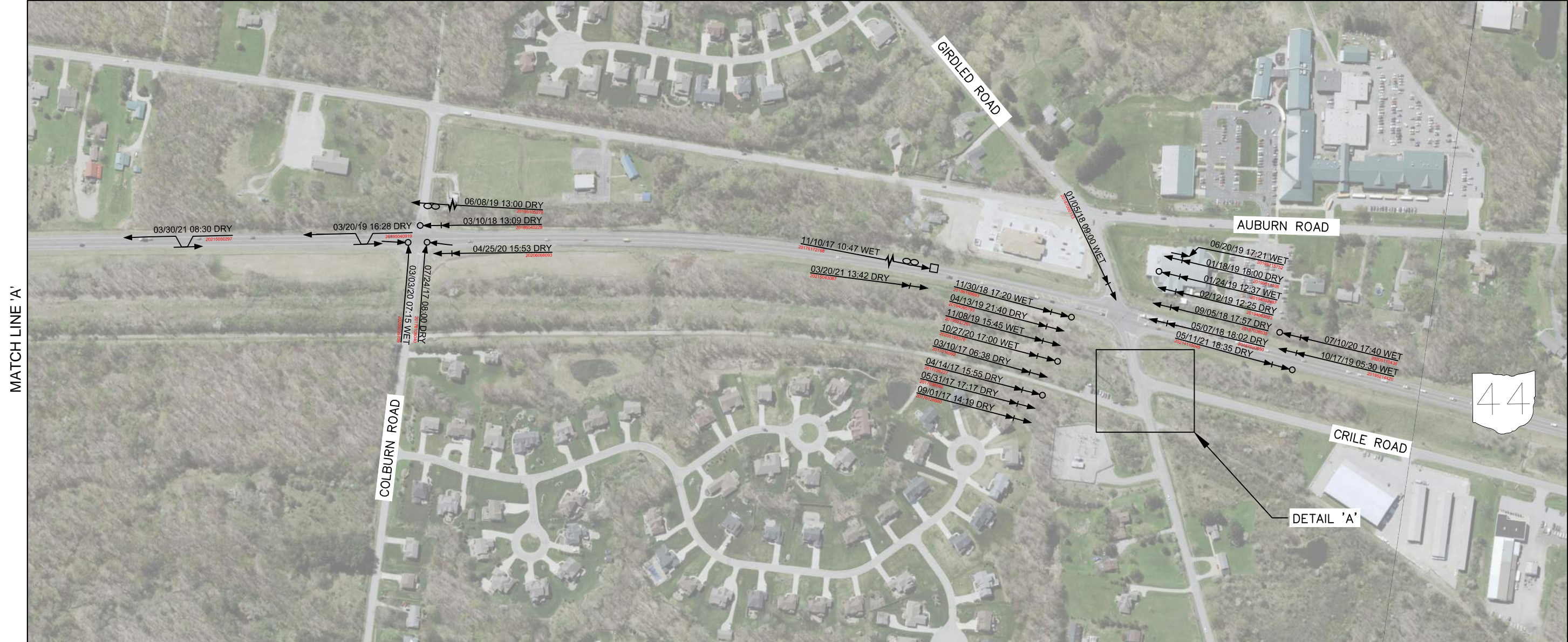
Month	Total Crashes
January	10
February	8
March	9
April	11
May	8
June	7
July	8
August	2
September	9
October	17
November	16
December	7
Grand Total	112

Day in Week	Total Crashes
(1) Sunday	12
(2) Monday	13
(3) Tuesday	21
(4) Wednesday	20
(5) Thursday	13
(6) Friday	19
(7) Saturday	14
Grand Total	112

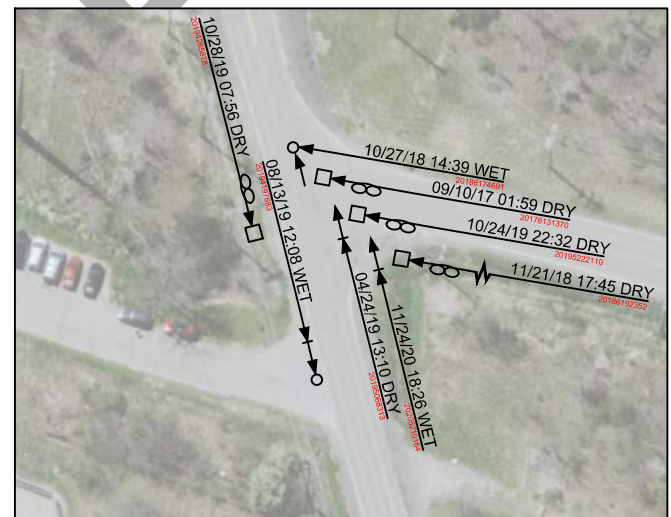
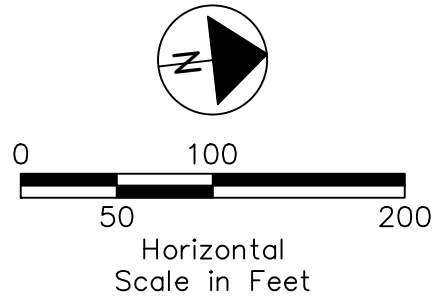


DRAFT

**APPENDIX C
COLLISION DIAGRAMS**



MATCH LINE 'A'



DETAIL 'A'

LEGEND

←	MOVING VEHICLE	→	REAR END
←	BACKING VEHICLE	→	HEAD ON
⚙️	BICYCLIST	↔	OUT OF CONTROL
🚗	PARKED VEHICLE	↔	OVERTURNED
◻	FIXED OBJECT	↔	LEFT TURN
●	FATAL CRASH	↔	SIDESWIPE
○	INJURY CRASH	↔	ANGLE
■	NO FAULT CRASHES		



APPENDIX C

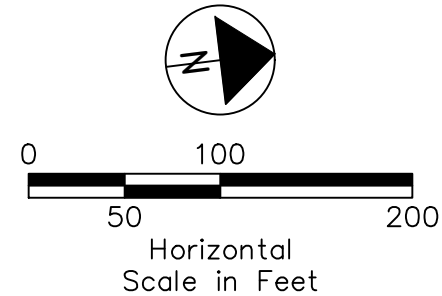
GE/LAK-44 CORRIDOR STUDY
COLLISION DIAGRAMS
1 OF 4

April 2022

MATCH LINE 'B'



MATCH LINE 'A'



LEGEND			
←	MOVING VEHICLE	→→	REAR END
←←	BACKING VEHICLE	→→	HEAD ON
↩	BICYCLIST	→	OUT OF CONTROL
□	PARKED VEHICLE	←	OVERTURNED
■	FIXED OBJECT	↩	LEFT TURN
●	FATAL CRASH	↔	SIDESWIPE
○	INJURY CRASH	↗↘	ANGLE
■	NO FAULT CRASHES		



APPENDIX C

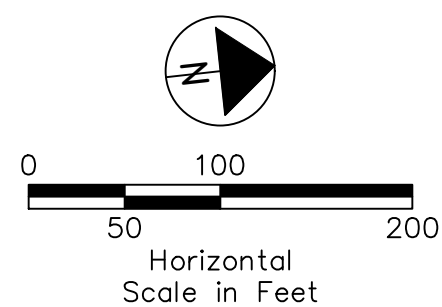
GEA/LAK-44 CORRIDOR STUDY
 COLLISION DIAGRAMS
 2 OF 4

April 2022

MATCH LINE 'C'



MATCH LINE 'B'



LEGEND	
←	MOVING VEHICLE
←←	BACKING VEHICLE
←	BICYCLIST
□	PARKED VEHICLE
□	FIXED OBJECT
●	FATAL CRASH
○	INJURY CRASH
■	NO FAULT CRASHES
→	REAR END
→→	HEAD ON
→	OUT OF CONTROL
→	OVERTURNED
→	LEFT TURN
→	SIDESWIPE
→	ANGLE

APPENDIX C

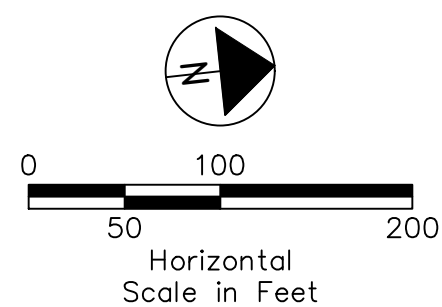
GEA/LAK-44 CORRIDOR STUDY
COLLISION DIAGRAMS
3 OF 4

April 2022



MATCH LINE 'C'

Drawing File: C:\Users\ntabanja\AppData\Local\Temp\AcPlot\Plot_20160\Crash Diagrams.dwg Layout: 4 OF 4
 Date: Apr 26, 2022 Time: 10:36 am User: ntabanja



LEGEND			
←	MOVING VEHICLE	→	REAR END
←	BACKING VEHICLE	→	HEAD ON
↺	BICYCLIST	↺	OUT OF CONTROL
□	PARKED VEHICLE	↺	OVERTURNED
□	FIXED OBJECT	↺	LEFT TURN
●	FATAL CRASH	↺	SIDESWIPE
○	INJURY CRASH	↺	ANGLE
■	NO FAULT CRASHES		

APPENDIX C

GEA/LAK-44 CORRIDOR STUDY
COLLISION DIAGRAMS
4 OF 4

April 2022

APPENDIX D
TRAFFIC SIGNAL WARRANT ANALYSIS

DRAFT

GPD Group

5595 Transportation Boulevard, Garfield Heights, Ohio 44125

Study Name: 1- Girdled Rd & Auburn Rd

Study Date : 1/13/2022

Signal Warrants - Summary

Major Street Approaches

Northbound: Auburn Road

Number of Lanes : 1

Total Approach Volume: 1,737

Southbound: Auburn Road

Number of Lanes :1

Total Approach Volume: 1,371

Minor Street Approaches

Eastbound: Girdled Road

Number of Lanes :1

Total Approach Volume: 911

Westbound: Girdled Road

Number of Lanes :1

Total Approach Volume: 1,650

Warrant Summary (Urban Values Apply)

Warrant 1 - Eight Hour Vehicular Volumes	Not Satisfied
Warrant 1A - Minimum Vehicular Volume	Not Satisfied
Required volumes reached for 0 hours, 8 are needed	
Warrant 1B - Interruption of Continuous Traffic	Not Satisfied
Required volumes reached for 0 hours, 8 are needed	
Warrant 1C - Combination of Warrants	Not Satisfied
Required 1A volumes reached for 0 hours, 8 are needed	
Required 1B volumes reached for 0 hours, 8 are needed	
Warrant 2 - Four Hour Volumes	Not Satisfied
Number of hours (0) volumes exceed minimum < minimum required (4).	
Warrant 3 - Peak Hour	Not Satisfied
Warrant 3A - Peak Hour Delay	Not Satisfied
Approach volumes on minor street don't exceed minimums for any one hour period. Delay data not evaluated.	
Warrant 3B - Peak Hour Volumes	Not Satisfied
Volumes do not exceed minimums for any one hour period.	
Warrant 4 - Pedestrian Volumes	Not Evaluated
Warrant 5 - School Crossing	Not Evaluated
Warrant 6 - Coordinated Signal System	Not Evaluated
Warrant 7 - Crash Experience	Not Satisfied
Number of accidents (7) meet minimum (5) but volumes do not.	
Warrant 8 - Roadway Network	Not Evaluated
Warrant 9 - Intersection Near a Grade Crossing	Not Evaluated

GPD Group

5595 Transportation Boulevard, Garfield Heights, Ohio 44125

Study Name: 1- Girdled Rd & Auburn Rd

Study Date : 1/13/2022

Warrant 1A - Minimum Volumes

Description

Intended for sites where the volume of intersecting traffic is the principal reason for consideration of a signal installation.

Summary

Only 0 one hour periods meet minimums.
Warrant is NOT met.

Site Data Required

Rural Settings Apply = **False**
 Number of Major Lanes = **1**
 Number of Minor Lanes = **1**

Volume Requirements

Veh/Hr Major = **500**

Veh/Hr Minor = **150**

Time	Major Road				Total	Minor Road		Met?
	Major NB	+	Major SB	=		Minor EB	Minor WB	
	Auburn Road					Girdled Road		
16:00 - 17:00	207	+	184	=	391	112	166	No
14:15 - 15:15	152	+	220	=	372	93	136	No
16:15 - 17:15	192	+	175	=	367	104	157	No
15:45 - 16:45	187	+	179	=	366	115	149	No
14:30 - 15:30	161	+	204	=	365	85	139	No
16:30 - 17:30	193	+	163	=	356	105	154	No
14:45 - 15:45	172	+	180	=	352	84	149	No
15:00 - 16:00	162	+	179	=	341	88	134	No
15:30 - 16:30	170	+	168	=	338	106	148	No
15:15 - 16:15	168	+	165	=	333	101	154	No
16:45 - 17:45	174	+	150	=	324	99	153	No
07:30 - 08:30	203	+	99	=	302	81	226	No
07:15 - 08:15	199	+	101	=	300	80	249	No
10:45 - 11:45	155	+	141	=	296	60	118	No
14:00 - 15:00	128	+	166	=	294	87	140	No
17:00 - 18:00	153	+	135	=	288	94	132	No
07:00 - 08:00	173	+	112	=	285	84	260	No
11:00 - 12:00	170	+	109	=	279	57	123	No
10:30 - 11:30	139	+	138	=	277	58	128	No
11:15 - 12:15	166	+	108	=	274	64	128	No
13:45 - 14:45	113	+	158	=	271	85	116	No
17:15 - 18:15	153	+	114	=	267	87	133	No
07:45 - 08:45	178	+	86	=	264	84	195	No
11:30 - 12:30	166	+	97	=	263	60	117	No
10:15 - 11:15	132		129		261	56	125	No

GPD Group

5595 Transportation Boulevard, Garfield Heights, Ohio 44125

Study Name: 1- Girdled Rd & Auburn Rd

Study Date : 1/13/2022

Warrant 1B - Interruption of Continuous Traffic

Description

Intended for sites where the volume of the major street is so heavy that traffic on the minor street suffers excessive delay or hazard.

Summary

Only 0 one hour periods meet minimums.
Warrant is NOT met.

Site Data Required

Rural Settings Apply = **False**
 Number of Major Lanes = **1**
 Number of Minor Lanes = **1**

Volume Requirements

Veh/Hr Major = **750**

Veh/Hr Minor = **75**

Time	Major Road				Total	Minor Road		Met?
	Major NB	+	Major SB	=		Minor EB	Minor WB	
	Auburn Road					Girdled Road		
16:00 - 17:00	207	+	184	=	391	112	166	No
14:15 - 15:15	152	+	220	=	372	93	136	No
16:15 - 17:15	192	+	175	=	367	104	157	No
15:45 - 16:45	187	+	179	=	366	115	149	No
14:30 - 15:30	161	+	204	=	365	85	139	No
16:30 - 17:30	193	+	163	=	356	105	154	No
14:45 - 15:45	172	+	180	=	352	84	149	No
15:00 - 16:00	162	+	179	=	341	88	134	No
15:30 - 16:30	170	+	168	=	338	106	148	No
15:15 - 16:15	168	+	165	=	333	101	154	No
16:45 - 17:45	174	+	150	=	324	99	153	No
07:30 - 08:30	203	+	99	=	302	81	226	No
07:15 - 08:15	199	+	101	=	300	80	249	No
10:45 - 11:45	155	+	141	=	296	60	118	No
14:00 - 15:00	128	+	166	=	294	87	140	No
17:00 - 18:00	153	+	135	=	288	94	132	No
07:00 - 08:00	173	+	112	=	285	84	260	No
11:00 - 12:00	170	+	109	=	279	57	123	No
10:30 - 11:30	139	+	138	=	277	58	128	No
11:15 - 12:15	166	+	108	=	274	64	128	No
13:45 - 14:45	113	+	158	=	271	85	116	No
17:15 - 18:15	153	+	114	=	267	87	133	No
07:45 - 08:45	178	+	86	=	264	84	195	No
11:30 - 12:30	166	+	97	=	263	60	117	No
10:15 - 11:15	132		129		261	56	125	No

GPD Group

5595 Transportation Boulevard, Garfield Heights, Ohio 44125

Study Name: 1- Girdled Rd & Auburn Rd

Study Date : 1/13/2022

Warrant 1C Combination of Warrants

Description

Intended for sites where the traffic volumes don't meet individual warrants but where Warrants 1A and 1B are both met to 80% of their stated values.

Summary

Only 0 hours meet 1A minimums.
Only 0 hours meet 1B minimums.
Warrant is NOT met.

Site Data Required

Rural Settings Apply = **False**
Number of Major Lanes = **1**
Number of Minor Lanes = **1**

Volume Requirements

Warrant 1A 1B
Veh/Hr Major = **400** **600**

Veh/Hr Minor = **120** **60**

Major Road Auburn Road

Minor Road Girdled Road

Time	Major NB	+	Major SB	=	Total	Minor EB	Minor WB	Met1A?
16:00 - 17:00	207	+	184	=	391	112	166	No
14:15 - 15:15	152	+	220	=	372	93	136	No
16:15 - 17:15	192	+	175	=	367	104	157	No
15:45 - 16:45	187	+	179	=	366	115	149	No
14:30 - 15:30	161	+	204	=	365	85	139	No
16:30 - 17:30	193	+	163	=	356	105	154	No
14:45 - 15:45	172	+	180	=	352	84	149	No
15:00 - 16:00	162	+	179	=	341	88	134	No
15:30 - 16:30	170	+	168	=	338	106	148	No
15:15 - 16:15	168	+	165	=	333	101	154	No
16:45 - 17:45	174	+	150	=	324	99	153	No
07:30 - 08:30	203		99		302	81	226	No

Time	Major NB	+	Major SB	=	Total	Minor EB	Minor WB	Met1B?
16:00 - 17:00	207	+	184	=	391	112	166	No
14:15 - 15:15	152	+	220	=	372	93	136	No
16:15 - 17:15	192	+	175	=	367	104	157	No
15:45 - 16:45	187	+	179	=	366	115	149	No
14:30 - 15:30	161	+	204	=	365	85	139	No
16:30 - 17:30	193	+	163	=	356	105	154	No
14:45 - 15:45	172	+	180	=	352	84	149	No
15:00 - 16:00	162	+	179	=	341	88	134	No
15:30 - 16:30	170	+	168	=	338	106	148	No
15:15 - 16:15	168	+	165	=	333	101	154	No
16:45 - 17:45	174	+	150	=	324	99	153	No
07:30 - 08:30	203		99		302	81	226	No

GPD Group

5595 Transportation Boulevard, Garfield Heights, Ohio 44125

Study Name: 1- Girdled Rd & Auburn Rd

Study Date : 1/13/2022

Warrant 2 - Four Hour Volumes

Description

Intended for sites where the volume of intersecting traffic during any four hours of the day is the principal reason for consideration of a signal installation.

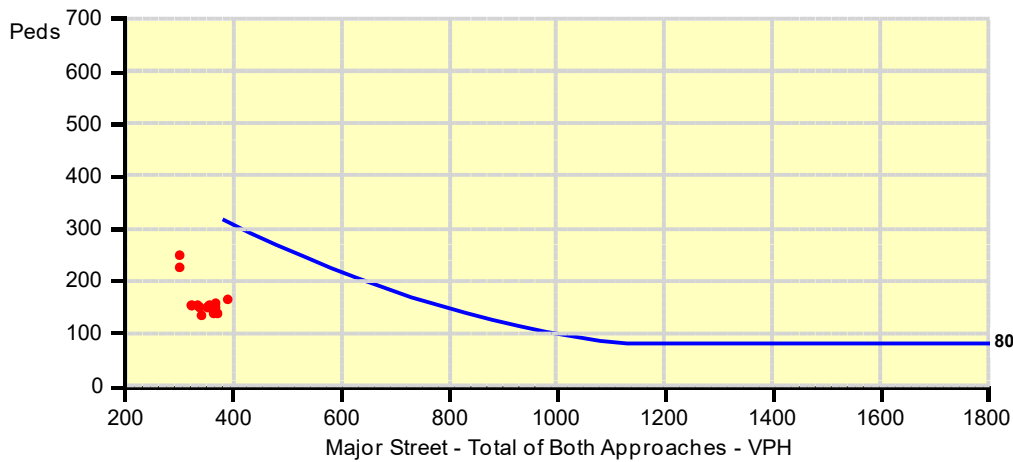
Summary

Only 0 one hour periods meet minimums.
Warrant is NOT met.

Site Data Required

Rural Settings Apply = **False**
 Number of Major Lanes = **1**
 Number of Minor Lanes = **1**

Time	Major Road Auburn Road				=	Total	Minor Road Girdled Road		Met?
	Major NB	+	Major SB				Minor EB	Minor WB	
16:00 - 17:00	207	+	184	=	391	112	166	No	
14:15 - 15:15	152	+	220	=	372	93	136	No	
16:15 - 17:15	192	+	175	=	367	104	157	No	
15:45 - 16:45	187	+	179	=	366	115	149	No	
14:30 - 15:30	161	+	204	=	365	85	139	No	
16:30 - 17:30	193	+	163	=	356	105	154	No	
14:45 - 15:45	172	+	180	=	352	84	149	No	
15:00 - 16:00	162	+	179	=	341	88	134	No	
15:30 - 16:30	170	+	168	=	338	106	148	No	
15:15 - 16:15	168	+	165	=	333	101	154	No	
16:45 - 17:45	174	+	150	=	324	99	153	No	
							226	No	



GPD Group

5595 Transportation Boulevard, Garfield Heights, Ohio 44125

Study Name: 1- Girdled Rd & Auburn Rd

Study Date : 1/13/2022

Warrant 3A - Peak Hour Delay

Description

Intended for sites where for one hour of the day minor street traffic suffers undue traffic delay entering or crossing the major street.

Summary

Only 0 one hour periods meet minimums.
Warrant is NOT met.

Site Data Required

Number of Minor Lanes = 1

Volume and Delay Requirements

Veh/Hr All Approaches = **800**
Veh/Hr Minor = **100**
Total Delay (Veh-Hrs) = **4**

Time	Major Road Auburn Road			Minor Road Girdled Road			Warrant Met?		
	Total of All Approaches	Met?	Minor EB	Delay EB	Met?	Minor WB		Delay WB	Met?
16:00 - 17:00	669	No	112	-	---	166	-	Yes	No
15:45 - 16:45	630	No	115	-	---	149	-	Yes	No
07:15 - 08:15	629	No	80	-	---	249	-	Yes	No
07:00 - 08:00	629	No	84	-	---	260	-	Yes	No
16:15 - 17:15	628	No	104	-	---	157	-	Yes	No
16:30 - 17:30	615	No	105	-	---	154	-	Yes	No
07:30 - 08:30	609	No	81	-	---	226	-	Yes	No
14:15 - 15:15	601	No	93	-	---	136	-	Yes	No
15:30 - 16:30	592	No	106	-	---	148	-	Yes	No
14:30 - 15:30	589	No	85	-	---	139	-	Yes	No
15:15 - 16:15	588	No	101	-	---	154	-	Yes	No
14:45 - 15:45	585	No	84	-	---	149	-	Yes	No
16:45 - 17:45	576	No	99	-	---	153	-	Yes	No
15:00 - 16:00	563	No	88	-	---	134	-	Yes	No
07:45 - 08:45	543	No	84	-	---	195	-	Yes	No
14:00 - 15:00	521	No	87	-	---	140	-	Yes	No
17:00 - 18:00	514	No	94	-	---	132	-	Yes	No
17:15 - 18:15	487	No	87	-	---	133	-	Yes	No
10:45 - 11:45	474	No	60	-	---	118	-	Yes	No
13:45 - 14:45	472	No	85	-	---	116	-	Yes	No
11:15 - 12:15	466	No	64	-	---	128	-	Yes	No
10:30 - 11:30	463	No	58	-	---	128	-	Yes	No
08:00 - 09:00	463	No	84	-	---	160	-	Yes	No
17:30 - 18:30	460	No	77	-	---	131	-	Yes	No
11:00 - 12:00	459	No	57	-	---	123	-	Yes	No

GPD Group

5595 Transportation Boulevard, Garfield Heights, Ohio 44125

Study Name: 1- Girdled Rd & Auburn Rd

Study Date : 1/13/2022

Warrant 3B - Peak Hour Volumes

Description

Intended for sites where the volume of intersecting traffic during one hour of the day is the principal reason for consideration of a signal installation.

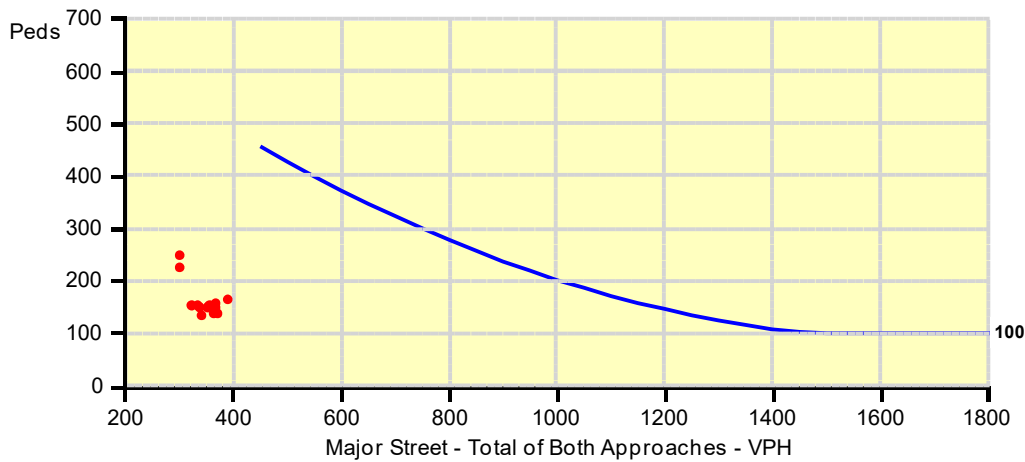
Summary

Only 0 one hour periods meet minimums.
Warrant is NOT met.

Site Data Required

Rural Settings Apply = **False**
 Number of Major Lanes = **1**
 Number of Minor Lanes = **1**

Time	Major Road Auburn Road				=	Total	Minor Road Girdled Road		Met?
	Major NB	+	Major SB				Minor EB	Minor WB	
16:00 - 17:00	207	+	184	=	391	112	166	No	
14:15 - 15:15	152	+	220	=	372	93	136	No	
16:15 - 17:15	192	+	175	=	367	104	157	No	
15:45 - 16:45	187	+	179	=	366	115	149	No	
14:30 - 15:30	161	+	204	=	365	85	139	No	
16:30 - 17:30	193	+	163	=	356	105	154	No	
14:45 - 15:45	172	+	180	=	352	84	149	No	
15:00 - 16:00	162	+	179	=	341	88	134	No	
15:30 - 16:30	170	+	168	=	338	106	148	No	
15:15 - 16:15	168	+	165	=	333	101	154	No	
16:45 - 17:45	174	+	150	=	324	99	153	No	
							226	No	



GPD Group

5595 Transportation Boulevard, Garfield Heights, Ohio 44125

Study Name: 1- Girdled Rd & Auburn Rd

Study Date : 1/13/2022

Warrant 7 - Crash Experience

Description

Intended for sites where the frequency of correctible crashes in the past 12 months is the primary motivation for installing a traffic signal.

Summary

Number of crashes meet minimum.
 Pedestrian volumes do not meet the 80% criteria.
 War 1A or 1B volumes do not meet the 80% criteria.
 Warrant is NOT met.

Site Data Required

Number of crashes in last 12 months = 7

Rural Settings Apply = **False**
 Number of Major Lanes = **1**
 Number of Minor Lanes = **1**

Crash and Volume Requirements

Minimum number of crashes = 5

Veh/Hr Major: War 1A = **400** War 1B = **600**

Veh/Hr Minor: War 1A = **120** War 1B = **60**

Volume and Pedestrian Data

Hours data meets 80% requirements of Warrant 1A (8 needed) **0** Met? **No**

Hours data meets 80% requirements of Warrant 1B (8 needed) **0** Met? **No**

Hours data meets 80% requirements of Warrant 4 (4,1 needed) **0 0** Met? **No**

Major Road
Auburn Road

Minor Road
Girdled Road

Warrant 1A Details

Time	Major NB	+	Major SB	=	Total	Minor EB	Minor WB	Met1A?
16:00 - 17:00	207	+	184	=	391	112	166	No
14:15 - 15:15	152	+	220	=	372	93	136	No
16:15 - 17:15	192	+	175	=	367	104	157	No
15:45 - 16:45	187	+	179	=	366	115	149	No
14:30 - 15:30	161	+	204	=	365	85	139	No
16:30 - 17:30	193	+	163	=	356	105	154	No
14:45 - 15:45	172	+	180	=	352	84	149	No
15:00 - 16:00	162	+	179	=	341	88	134	No
15:30 - 16:30	170	+	168	=	338	106	148	No
15:15 - 16:15	168	+	165	=	333	101	154	No
16:45 - 17:45	174	+	150	=	324	99	153	No
07:30 - 08:30	203		99		302	81	226	No

Warrant 1B Details

Time	Major NB	+	Major SB	=	Total	Minor EB	Minor WB	Met1B?
16:00 - 17:00	207	+	184	=	391	112	166	No
14:15 - 15:15	152	+	220	=	372	93	136	No
16:15 - 17:15	192	+	175	=	367	104	157	No
15:45 - 16:45	187	+	179	=	366	115	149	No
14:30 - 15:30	161	+	204	=	365	85	139	No
16:30 - 17:30	193	+	163	=	356	105	154	No
14:45 - 15:45	172	+	180	=	352	84	149	No
15:00 - 16:00	162	+	179	=	341	88	134	No
15:30 - 16:30	170	+	168	=	338	106	148	No
15:15 - 16:15	168	+	165	=	333	101	154	No
16:45 - 17:45	174	+	150	=	324	99	153	No
07:30 - 08:30	203		99		302	81	226	No

GPD Group

5595 Transportation Boulevard, Garfield Heights, Ohio 44125

Study Name: 1- Girdled Rd & Auburn Rd

Study Date : 1/13/2022

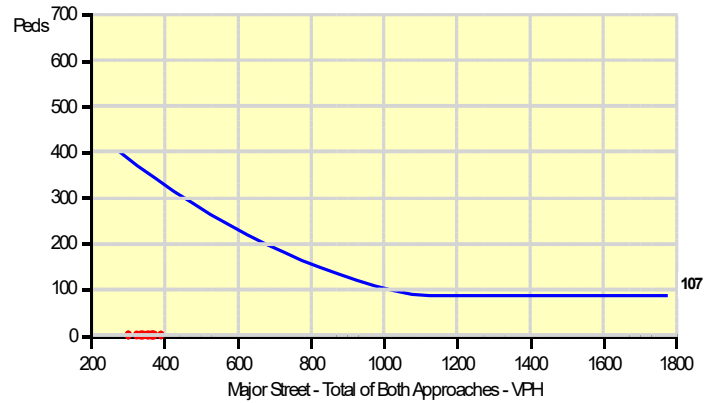
Warrant 7 - Crash Experience

Major Road

Auburn Road

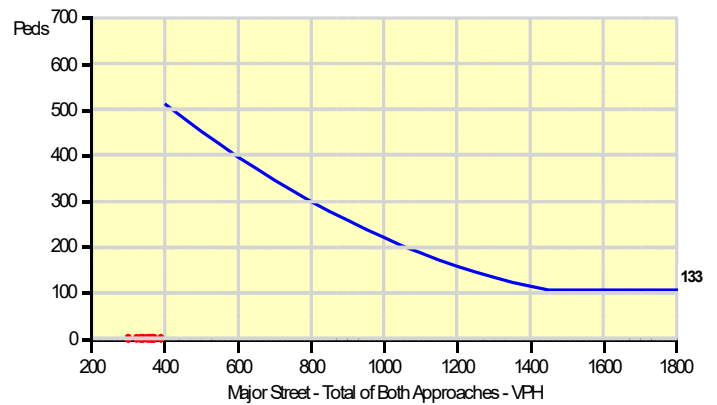
80% of Warrant 4 - 4 Hr Pedestrian Data

Time	NB Vehs	+	SB Vehs	=	Total Vehs	NB Peds	+	SB Peds	=	Ped Total	Met?
16:00 - 17:00	207	+	184	=	391	0	+	0	=	0	No
14:15 - 15:15	152	+	220	=	372	0	+	0	=	0	No
16:15 - 17:15	192	+	175	=	367	0	+	0	=	0	No
15:45 - 16:45	187	+	179	=	366	0	+	0	=	0	No
14:30 - 15:30	161	+	204	=	365	0	+	0	=	0	No
16:30 - 17:30	193	+	163	=	356	0	+	0	=	0	No
14:45 - 15:45	172	+	180	=	352	0	+	0	=	0	No
15:00 - 16:00	162	+	179	=	341	0	+	0	=	0	No
15:30 - 16:30	170	+	168	=	338	0	+	0	=	0	No
15:15 - 16:15	168	+	165	=	333	0	+	0	=	0	No
16:45 - 17:45	174	+	150	=	324	0	+	0	=	0	No
07:30 - 08:30	203	+	99	=	302	0	+	0	=	0	No



80% of Warrant 4 - 1 Hr Pedestrian Data

Time	NB Vehs	+	SB Vehs	=	Total Vehs	NB Peds	+	SB Peds	=	Ped Total	Met?
16:00 - 17:00	207	+	184	=	391	0	+	0	=	0	No
14:15 - 15:15	152	+	220	=	372	0	+	0	=	0	No
16:15 - 17:15	192	+	175	=	367	0	+	0	=	0	No
15:45 - 16:45	187	+	179	=	366	0	+	0	=	0	No
14:30 - 15:30	161	+	204	=	365	0	+	0	=	0	No
16:30 - 17:30	193	+	163	=	356	0	+	0	=	0	No
14:45 - 15:45	172	+	180	=	352	0	+	0	=	0	No
15:00 - 16:00	162	+	179	=	341	0	+	0	=	0	No
15:30 - 16:30	170	+	168	=	338	0	+	0	=	0	No
15:15 - 16:15	168	+	165	=	333	0	+	0	=	0	No
16:45 - 17:45	174	+	150	=	324	0	+	0	=	0	No
07:30 - 08:30	203	+	99	=	302	0	+	0	=	0	No



GPD Group

520 South Main Street, Suite 2531 Akron, OH 44311
(330) 572-2100

Study Name: 2- SR-44 & Girdled Road

Study Date : 1/14/2022

Signal Warrants - Summary

Major Street Approaches

Northbound: SR-44

Number of Lanes : 2+

Total Approach Volume: 5,524

Southbound: SR-44

Number of Lanes :2+

Total Approach Volume: 6,491

Minor Street Approaches

Eastbound: Girdled Road

Number of Lanes :1

Total Approach Volume: 1,946

Westbound: Girdled Road

Number of Lanes :1

Total Approach Volume: 2,449

Warrant Summary (Urban Values Apply)

Warrant 1 - Eight Hour Vehicular Volumes	Satisfied
Warrant 1A - Minimum Vehicular Volume	Satisfied
Required volumes reached for 12 hours, 8 are needed	
Warrant 1B - Interruption of Continuous Traffic	Satisfied
Required volumes reached for 8 hours, 8 are needed	
Warrant 1C - Combination of Warrants	Satisfied
Required 1A volumes reached for 12 hours, 8 are needed	
Required 1B volumes reached for 12 hours, 8 are needed	
Warrant 2 - Four Hour Volumes	Satisfied
Number of hours (9) volumes exceed minimum >= minimum required (4).	
Warrant 3 - Peak Hour	Satisfied
Warrant 3A - Peak Hour Delay	Satisfied
Number of one hour periods (47) volumes exceed minimum >= required (1). Delay data not evaluated.	
Warrant 3B - Peak Hour Volumes	Satisfied
Volumes exceed minimums for at least one hour period.	
Warrant 4 - Pedestrian Volumes	Not Evaluated
Warrant 5 - School Crossing	Not Evaluated
Warrant 6 - Coordinated Signal System	Not Evaluated
Warrant 7 - Crash Experience	Not Evaluated
Warrant 8 - Roadway Network	Not Evaluated
Warrant 9 - Intersection Near a Grade Crossing	Not Evaluated

GPD Group

520 South Main Street, Suite 2531 Akron, OH 44311
(330) 572-2100

Study Name: 2- SR-44 & Girdled Road

Study Date : 1/14/2022

Warrant 1A - Minimum Volumes

Description

Intended for sites where the volume of intersecting traffic is the principal reason for consideration of a signal installation.

Summary

12 one hour periods meet minimums.
Warrant IS met.

Site Data Required

Rural Settings Apply = **False**
Number of Major Lanes = **2 or more**
Number of Minor Lanes = **1**

Volume Requirements

Veh/Hr Major = **600**

Veh/Hr Minor = **150**

Time	Major Road				Minor Road			Met?
	Major NB	+	Major SB	=	Total	Minor EB	Minor WB	
16:45 - 17:45	586	+	756	=	1342	223	218	Yes
15:45 - 16:45	577	+	723	=	1300	236	215	Yes
14:45 - 15:45	553	+	629	=	1182	203	211	Yes
13:45 - 14:45	419	+	579	=	998	180	194	Yes
17:45 - 18:45	413	+	584	=	997	163	168	Yes
07:45 - 08:45	456	+	531	=	987	136	274	Yes
11:45 - 12:45	443	+	483	=	926	149	179	Yes
12:45 - 13:45	411	+	501	=	912	127	158	Yes
10:45 - 11:45	428	+	420	=	848	179	183	Yes
08:45 - 09:45	409	+	438	=	847	107	177	Yes
09:45 - 10:45	380	+	373	=	753	107	183	Yes
06:45 - 07:45	371	+	374	=	745	103	256	Yes
06:30 - 07:30	218	+	252	=	470	69	158	No
06:15 - 07:15	91	+	104	=	195	38	69	No
18:45 - 19:45	78	+	100	=	178	33	33	No
00:00 - 01:00	0	+	0	=	0	0	0	No
00:15 - 01:15	0	+	0	=	0	0	0	No
00:30 - 01:30	0	+	0	=	0	0	0	No
00:45 - 01:45	0	+	0	=	0	0	0	No
01:00 - 02:00	0	+	0	=	0	0	0	No
01:15 - 02:15	0	+	0	=	0	0	0	No
01:30 - 02:30	0	+	0	=	0	0	0	No
01:45 - 02:45	0	+	0	=	0	0	0	No
02:00 - 03:00	0	+	0	=	0	0	0	No
02:15 - 03:15	0		0		0	0	0	No

GPD Group

520 South Main Street, Suite 2531 Akron, OH 44311
(330) 572-2100

Study Name: 2- SR-44 & Girdled Road

Study Date : 1/14/2022

Warrant 1B - Interruption of Continuous Traffic

Description

Intended for sites where the volume of the major street is so heavy that traffic on the minor street suffers excessive delay or hazard.

Summary

8 one hour periods meet minimums.
Warrant IS met.

Site Data Required

Rural Settings Apply = **False**
Number of Major Lanes = **2 or more**
Number of Minor Lanes = **1**

Volume Requirements

Veh/Hr Major = **900**

Veh/Hr Minor = **75**

Time	Major Road SR-44				Total	Minor Road Girdled Road		Met?
	Major NB	+	Major SB	=		Minor EB	Minor WB	
15:30 - 16:30	584	+	757	=	1341	224	202	Yes
16:30 - 17:30	601	+	722	=	1323	231	222	Yes
14:30 - 15:30	507	+	607	=	1114	212	219	Yes
17:30 - 18:30	446	+	649	=	1095	191	192	Yes
07:00 - 08:00	515	+	533	=	1048	138	337	Yes
13:30 - 14:30	433	+	544	=	977	146	176	Yes
11:15 - 12:15	450	+	461	=	911	168	178	Yes
12:30 - 13:30	399	+	509	=	908	123	154	Yes
08:00 - 09:00	400	+	495	=	895	130	239	No
12:15 - 13:15	395	+	496	=	891	127	156	No
11:00 - 12:00	428	+	459	=	887	168	182	No
08:15 - 09:15	398	+	480	=	878	113	210	No
08:30 - 09:30	400	+	452	=	852	109	189	No
10:45 - 11:45	428	+	420	=	848	179	183	No
08:45 - 09:45	409	+	438	=	847	107	177	No
09:00 - 10:00	417	+	417	=	834	112	179	No
10:30 - 11:30	433	+	398	=	831	152	203	No
09:15 - 10:15	392	+	403	=	795	109	176	No
10:15 - 11:15	419	+	374	=	793	142	189	No
09:30 - 10:30	374	+	403	=	777	101	180	No
10:00 - 11:00	405	+	357	=	762	132	181	No
09:45 - 10:45	380	+	373	=	753	107	183	No
06:45 - 07:45	371	+	374	=	745	103	256	No
06:30 - 07:30	218	+	252	=	470	69	158	No
18:30 - 19:30	178		222		400	67	69	No

GPD Group

520 South Main Street, Suite 2531 Akron, OH 44311
(330) 572-2100

Study Name: 2- SR-44 & Girdled Road

Study Date : 1/14/2022

Warrant 1C Combination of Warrants

Description

Intended for sites where the traffic volumes don't meet individual warrants but where Warrants 1A and 1B are both met to 80% of their stated values.

Summary

12 hours meet 1A minimums.
12 hours meet 1B minimums.
Warrant IS met.

Site Data Required

Rural Settings Apply = **False**
Number of Major Lanes = **2 or more**
Number of Minor Lanes = **1**

Volume Requirements

Warrant 1A 1B
Veh/Hr Major = **480 720**

Veh/Hr Minor = **120 60**

Major Road SR-44

Minor Road Girdled Road

Time	Major NB	+	Major SB	=	Total	Minor EB	Minor WB	Met1A?
16:45 - 17:45	586	+	756	=	1342	223	218	Yes
15:45 - 16:45	577	+	723	=	1300	236	215	Yes
14:45 - 15:45	553	+	629	=	1182	203	211	Yes
13:45 - 14:45	419	+	579	=	998	180	194	Yes
17:45 - 18:45	413	+	584	=	997	163	168	Yes
07:45 - 08:45	456	+	531	=	987	136	274	Yes
11:45 - 12:45	443	+	483	=	926	149	179	Yes
12:45 - 13:45	411	+	501	=	912	127	158	Yes
10:45 - 11:45	428	+	420	=	848	179	183	Yes
08:45 - 09:45	409	+	438	=	847	107	177	Yes
09:45 - 10:45	380	+	373	=	753	107	183	Yes
06:45 - 07:45	371		374		745	103	256	Yes

Time	Major NB	+	Major SB	=	Total	Minor EB	Minor WB	Met1B?
16:45 - 17:45	586	+	756	=	1342	223	218	Yes
15:45 - 16:45	577	+	723	=	1300	236	215	Yes
14:45 - 15:45	553	+	629	=	1182	203	211	Yes
13:45 - 14:45	419	+	579	=	998	180	194	Yes
17:45 - 18:45	413	+	584	=	997	163	168	Yes
07:45 - 08:45	456	+	531	=	987	136	274	Yes
11:45 - 12:45	443	+	483	=	926	149	179	Yes
12:45 - 13:45	411	+	501	=	912	127	158	Yes
10:45 - 11:45	428	+	420	=	848	179	183	Yes
08:45 - 09:45	409	+	438	=	847	107	177	Yes
09:45 - 10:45	380	+	373	=	753	107	183	Yes
06:45 - 07:45	371		374		745	103	256	Yes

GPD Group

520 South Main Street, Suite 2531 Akron, OH 44311
(330) 572-2100

Study Name: 2- SR-44 & Girdled Road

Study Date : 1/14/2022

Warrant 2 - Four Hour Volumes

Description

Intended for sites where the volume of intersecting traffic during any four hours of the day is the principal reason for consideration of a signal installation.

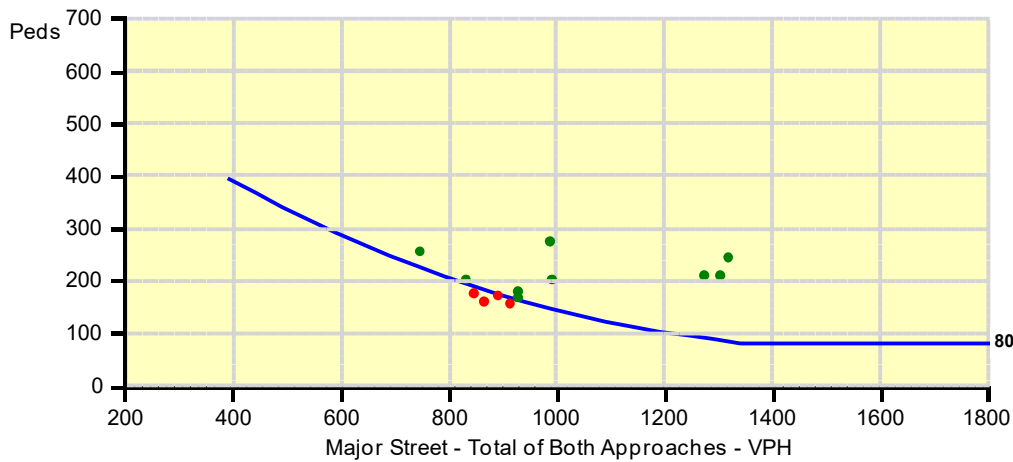
Summary

9 one hour periods meet minimums.
Warrant IS met.

Site Data Required

Rural Settings Apply = **False**
 Number of Major Lanes = **2 or more**
 Number of Minor Lanes = **1**

Time	Major Road SR-44				=	Total	Minor Road Girdled Road		Met?
	Major NB	+	Major SB				Minor EB	Minor WB	
16:00 - 17:00	561	+	755	=	1316	245	233	Yes	
15:00 - 16:00	612	+	690	=	1302	210	204	Yes	
17:00 - 18:00	572	+	702	=	1274	210	189	Yes	
14:00 - 15:00	410	+	579	=	989	182	203	Yes	
07:45 - 08:45	456	+	531	=	987	136	274	Yes	
13:00 - 14:00	422	+	506	=	928	139	168	Yes	
11:45 - 12:45	443	+	483	=	926	149	179	Yes	
10:30 - 11:30	433	+	398	=	831	152	203	Yes	
06:45 - 07:45	371	+	374	=	745	103	256	Yes	
12:45 - 13:45	411	+	501	=	912	127	158	No	
11:30 - 12:30	437	+	452	=	889	173	173	No	
							160	No	



GPD Group

520 South Main Street, Suite 2531 Akron, OH 44311
(330) 572-2100

Study Name: 2- SR-44 & Girdled Road

Study Date : 1/14/2022

Warrant 3A - Peak Hour Delay

Description

Intended for sites where for one hour of the day minor street traffic suffers undue traffic delay entering or crossing the major street.

Summary

47 one hour periods meet minimums.
Warrant IS met.

Site Data Required

Number of Minor Lanes = 1

Volume and Delay Requirements

Veh/Hr All Approaches = **800**
Veh/Hr Minor = **100**
Total Delay (Veh-Hrs) = **4**

Time	Major Road SR-44			Minor Road Girdled Road			Warrant Met?		
	Total of All Approaches	Met?	Minor EB	Delay EB	Met?	Minor WB		Delay WB	Met?
16:00 - 17:00	1794	Yes	245	-	Yes	233	-	---	Yes
16:45 - 17:45	1783	Yes	223	-	Yes	218	-	---	Yes
15:15 - 16:15	1780	Yes	208	-	---	208	-	Yes	Yes
16:30 - 17:30	1776	Yes	231	-	Yes	222	-	---	Yes
16:15 - 17:15	1771	Yes	236	-	Yes	219	-	---	Yes
15:30 - 16:30	1767	Yes	224	-	Yes	202	-	---	Yes
15:45 - 16:45	1751	Yes	236	-	Yes	215	-	---	Yes
15:00 - 16:00	1716	Yes	210	-	Yes	204	-	---	Yes
17:00 - 18:00	1673	Yes	210	-	Yes	189	-	---	Yes
14:45 - 15:45	1596	Yes	203	-	---	211	-	Yes	Yes
17:15 - 18:15	1586	Yes	206	-	---	207	-	Yes	Yes
07:15 - 08:15	1574	Yes	146	-	---	346	-	Yes	Yes
14:30 - 15:30	1545	Yes	212	-	---	219	-	Yes	Yes
07:00 - 08:00	1523	Yes	138	-	---	337	-	Yes	Yes
07:30 - 08:30	1498	Yes	148	-	---	312	-	Yes	Yes
17:30 - 18:30	1478	Yes	191	-	---	192	-	Yes	Yes
14:15 - 15:15	1459	Yes	219	-	Yes	214	-	---	Yes
07:45 - 08:45	1397	Yes	136	-	---	274	-	Yes	Yes
14:00 - 15:00	1374	Yes	182	-	---	203	-	Yes	Yes
13:45 - 14:45	1372	Yes	180	-	---	194	-	Yes	Yes
17:45 - 18:45	1328	Yes	163	-	---	168	-	Yes	Yes
13:30 - 14:30	1299	Yes	146	-	---	176	-	Yes	Yes
08:00 - 09:00	1264	Yes	130	-	---	239	-	Yes	Yes
13:15 - 14:15	1263	Yes	127	-	---	175	-	Yes	Yes
11:15 - 12:15	1257	Yes	168	-	---	178	-	Yes	Yes

GPD Group

520 South Main Street, Suite 2531 Akron, OH 44311
(330) 572-2100

Study Name: 2- SR-44 & Girdled Road

Study Date : 1/14/2022

Warrant 3B - Peak Hour Volumes

Description

Intended for sites where the volume of intersecting traffic during one hour of the day is the principal reason for consideration of a signal installation.

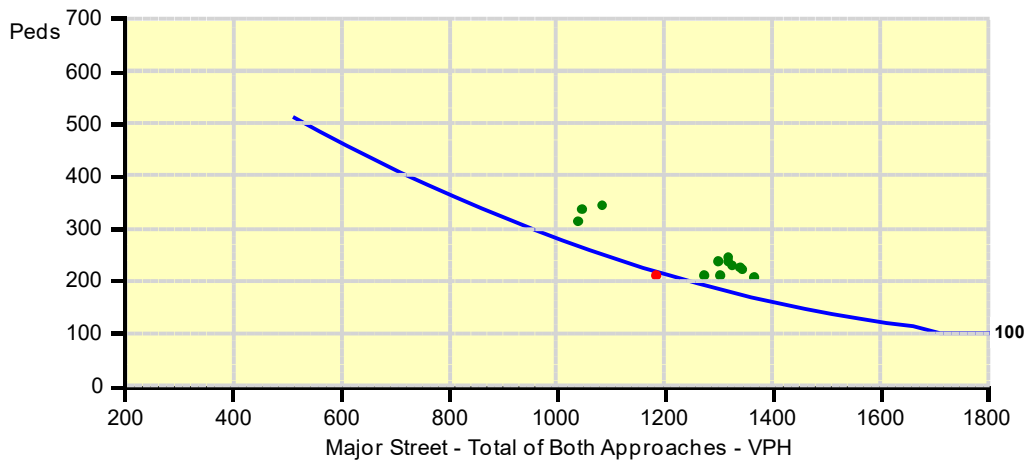
Summary

12 one hour periods meet minimums.
Warrant IS met.

Site Data Required

Rural Settings Apply = **False**
 Number of Major Lanes = **2 or more**
 Number of Minor Lanes = **1**

Time	Major Road SR-44				Total	Minor Road Girdled Road		Met?
	Major NB	+	Major SB	=		Minor EB	Minor WB	
15:15 - 16:15	638	+	726	=	1364	208	208	Yes
16:45 - 17:45	586	+	756	=	1342	223	218	Yes
15:30 - 16:30	584	+	757	=	1341	224	202	Yes
16:30 - 17:30	601	+	722	=	1323	231	222	Yes
16:15 - 17:15	576	+	740	=	1316	236	219	Yes
16:00 - 17:00	561	+	755	=	1316	245	233	Yes
15:00 - 16:00	612	+	690	=	1302	210	204	Yes
15:45 - 16:45	577	+	723	=	1300	236	215	Yes
17:00 - 18:00	572	+	702	=	1274	210	189	Yes
07:15 - 08:15	533	+	549	=	1082	146	346	Yes
07:00 - 08:00	515	+	533	=	1048	138	337	Yes
							312	Yes



GPD Group

520 South Main Street, Suite 2531 Akron, OH 44311
(330) 572-2100

Study Name: 3- Girdled Road & Crile Rd

Study Date : 1/14/2022

Signal Warrants - Summary

Major Street Approaches

Eastbound: Girdled Road

Number of Lanes : 1

Total Approach Volume: 1,705

Westbound: Girdled Road

Number of Lanes :1

Total Approach Volume: 2,477

Minor Street Approaches

Northbound: N/A

Number of Lanes :1

Total Approach Volume: 1,362

Southbound: Crile Road

Number of Lanes :1

Total Approach Volume: 0

Warrant Summary (Urban Values Apply)

Warrant 1 - Eight Hour Vehicular Volumes	Not Satisfied
Warrant 1A - Minimum Vehicular Volume	Not Satisfied
Required volumes reached for 0 hours, 8 are needed	
Warrant 1B - Interruption of Continuous Traffic	Not Satisfied
Required volumes reached for 0 hours, 8 are needed	
Warrant 1C - Combination of Warrants	Not Satisfied
Required 1A volumes reached for 4 hours, 8 are needed	
Required 1B volumes reached for 0 hours, 8 are needed	
Warrant 2 - Four Hour Volumes	Not Satisfied
Number of hours (0) volumes exceed minimum < minimum required (4).	
Warrant 3 - Peak Hour	Not Satisfied
Warrant 3A - Peak Hour Delay	Not Satisfied
Approach volumes on minor street don't exceed minimums for any one hour period. Delay data not evaluated.	
Warrant 3B - Peak Hour Volumes	Not Satisfied
Volumes do not exceed minimums for any one hour period.	
Warrant 4 - Pedestrian Volumes	Not Evaluated
Warrant 5 - School Crossing	Not Evaluated
Warrant 6 - Coordinated Signal System	Not Evaluated
Warrant 7 - Crash Experience	Not Evaluated
Warrant 8 - Roadway Network	Not Evaluated
Warrant 9 - Intersection Near a Grade Crossing	Not Evaluated

GPD Group

520 South Main Street, Suite 2531 Akron, OH 44311
(330) 572-2100

Study Name: 3- Girdled Road & Crile Rd

Study Date : 1/14/2022

Warrant 1A - Minimum Volumes

Description

Intended for sites where the volume of intersecting traffic is the principal reason for consideration of a signal installation.

Summary

Only 0 one hour periods meet minimums.
Warrant is NOT met.

Site Data Required

Rural Settings Apply = **False**
Number of Major Lanes = **1**
Number of Minor Lanes = **1**

Volume Requirements

Veh/Hr Major = **500**

Veh/Hr Minor = **150**

Time	Major Road				Minor Road			Met?	
	Major EB	+	Major WB	=	Total	Minor NB	Minor SB		
	Girdled Road					N/A			
16:00 - 17:00	256	+	240	=	496	190	0	No	
15:45 - 16:45	244	+	233	=	477	171	0	No	
15:30 - 16:30	249	+	221	=	470	161	0	No	
16:15 - 17:15	248	+	218	=	466	184	0	No	
07:15 - 08:15	101	+	357	=	458	60	0	No	
07:00 - 08:00	85	+	344	=	429	57	0	No	
15:15 - 16:15	215	+	213	=	428	175	0	No	
07:30 - 08:30	97	+	327	=	424	57	0	No	
16:30 - 17:30	219	+	204	=	423	193	0	No	
16:45 - 17:45	218	+	205	=	423	180	0	No	
15:00 - 16:00	210	+	203	=	413	158	0	No	
14:30 - 15:30	197	+	214	=	411	139	0	No	
17:15 - 18:15	212	+	197	=	409	151	0	No	
17:00 - 18:00	217	+	191	=	408	153	0	No	
14:15 - 15:15	200	+	207	=	407	122	0	No	
07:45 - 08:45	106	+	301	=	407	58	0	No	
14:45 - 15:45	202	+	200	=	402	140	0	No	
17:30 - 18:30	207	+	193	=	400	135	0	No	
08:00 - 09:00	105	+	268	=	373	62	0	No	
14:00 - 15:00	174	+	183	=	357	126	0	No	
17:45 - 18:45	188	+	160	=	348	128	0	No	
13:45 - 14:45	164	+	177	=	341	132	0	No	
08:15 - 09:15	97	+	242	=	339	63	0	No	
18:00 - 19:00	171	+	143	=	314	115	0	No	
06:45 - 07:45	59		253		312	46	0	No	

GPD Group

520 South Main Street, Suite 2531 Akron, OH 44311
(330) 572-2100

Study Name: 3- Girdled Road & Crile Rd

Study Date : 1/14/2022

Warrant 1B - Interruption of Continuous Traffic

Description

Intended for sites where the volume of the major street is so heavy that traffic on the minor street suffers excessive delay or hazard.

Summary

Only 0 one hour periods meet minimums.
Warrant is NOT met.

Site Data Required

Rural Settings Apply = **False**
Number of Major Lanes = **1**
Number of Minor Lanes = **1**

Volume Requirements

Veh/Hr Major = **750**

Veh/Hr Minor = **75**

Time	Major Road				Minor Road			Met?
	Major EB	+	Major WB	=	Total	Minor NB	Minor SB	
16:00 - 17:00	256	+	240	=	496	190	0	No
15:45 - 16:45	244	+	233	=	477	171	0	No
15:30 - 16:30	249	+	221	=	470	161	0	No
16:15 - 17:15	248	+	218	=	466	184	0	No
07:15 - 08:15	101	+	357	=	458	60	0	No
07:00 - 08:00	85	+	344	=	429	57	0	No
15:15 - 16:15	215	+	213	=	428	175	0	No
07:30 - 08:30	97	+	327	=	424	57	0	No
16:30 - 17:30	219	+	204	=	423	193	0	No
16:45 - 17:45	218	+	205	=	423	180	0	No
15:00 - 16:00	210	+	203	=	413	158	0	No
14:30 - 15:30	197	+	214	=	411	139	0	No
17:15 - 18:15	212	+	197	=	409	151	0	No
17:00 - 18:00	217	+	191	=	408	153	0	No
14:15 - 15:15	200	+	207	=	407	122	0	No
07:45 - 08:45	106	+	301	=	407	58	0	No
14:45 - 15:45	202	+	200	=	402	140	0	No
17:30 - 18:30	207	+	193	=	400	135	0	No
08:00 - 09:00	105	+	268	=	373	62	0	No
14:00 - 15:00	174	+	183	=	357	126	0	No
17:45 - 18:45	188	+	160	=	348	128	0	No
13:45 - 14:45	164	+	177	=	341	132	0	No
08:15 - 09:15	97	+	242	=	339	63	0	No
18:00 - 19:00	171	+	143	=	314	115	0	No
06:45 - 07:45	59		253		312	46	0	No

GPD Group

520 South Main Street, Suite 2531 Akron, OH 44311
(330) 572-2100

Study Name: 3- Girdled Road & Crile Rd

Study Date : 1/14/2022

Warrant 1C Combination of Warrants

Description

Intended for sites where the traffic volumes don't meet individual warrants but where Warrants 1A and 1B are both met to 80% of their stated values.

Summary

Only 4 hours meet 1A minimums.
Only 0 hours meet 1B minimums.
Warrant is NOT met.

Site Data Required

Rural Settings Apply = **False**
Number of Major Lanes = **1**
Number of Minor Lanes = **1**

Volume Requirements

Warrant 1A 1B
Veh/Hr Major = **400 600**

Veh/Hr Minor = **120 60**

Major Road
Girdled Road

Minor Road
N/A

Time	Major EB	+	Major WB	=	Total	Minor NB	Minor SB	Met1A?
16:15 - 17:15	248	+	218	=	466	184	0	Yes
15:15 - 16:15	215	+	213	=	428	175	0	Yes
17:15 - 18:15	212	+	197	=	409	151	0	Yes
14:15 - 15:15	200	+	207	=	407	122	0	Yes
07:15 - 08:15	101	+	357	=	458	60	0	No
07:00 - 08:00	85	+	344	=	429	57	0	No
07:30 - 08:30	97	+	327	=	424	57	0	No
07:45 - 08:45	106	+	301	=	407	58	0	No
08:00 - 09:00	105	+	268	=	373	62	0	No
14:00 - 15:00	174	+	183	=	357	126	0	No
13:45 - 14:45	164	+	177	=	341	132	0	No
08:15 - 09:15	97	+	242	=	339	63	0	No

Time	Major EB	+	Major WB	=	Total	Minor NB	Minor SB	Met1B?
16:00 - 17:00	256	+	240	=	496	190	0	No
15:45 - 16:45	244	+	233	=	477	171	0	No
15:30 - 16:30	249	+	221	=	470	161	0	No
16:15 - 17:15	248	+	218	=	466	184	0	No
07:15 - 08:15	101	+	357	=	458	60	0	No
07:00 - 08:00	85	+	344	=	429	57	0	No
15:15 - 16:15	215	+	213	=	428	175	0	No
07:30 - 08:30	97	+	327	=	424	57	0	No
16:30 - 17:30	219	+	204	=	423	193	0	No
16:45 - 17:45	218	+	205	=	423	180	0	No
15:00 - 16:00	210	+	203	=	413	158	0	No
14:30 - 15:30	197	+	214	=	411	139	0	No

GPD Group

520 South Main Street, Suite 2531 Akron, OH 44311
(330) 572-2100

Study Name: 3- Girdled Road & Crile Rd

Study Date : 1/14/2022

Warrant 2 - Four Hour Volumes

Description

Intended for sites where the volume of intersecting traffic during any four hours of the day is the principal reason for consideration of a signal installation.

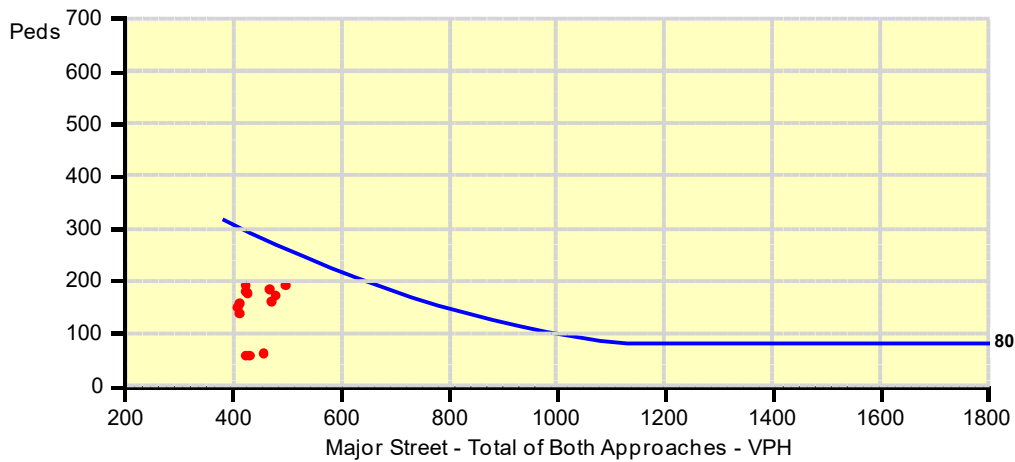
Summary

Only 0 one hour periods meet minimums.
Warrant is NOT met.

Site Data Required

Rural Settings Apply = **False**
 Number of Major Lanes = **1**
 Number of Minor Lanes = **1**

Time	Major Road Girdled Road				Total	Minor Road N/A		Met?
	Major EB	+	Major WB	=		Minor NB	Minor SB	
16:00 - 17:00	256	+	240	=	496	190	0	No
15:45 - 16:45	244	+	233	=	477	171	0	No
15:30 - 16:30	249	+	221	=	470	161	0	No
16:15 - 17:15	248	+	218	=	466	184	0	No
07:15 - 08:15	101	+	357	=	458	60	0	No
07:00 - 08:00	85	+	344	=	429	57	0	No
15:15 - 16:15	215	+	213	=	428	175	0	No
07:30 - 08:30	97	+	327	=	424	57	0	No
16:30 - 17:30	219	+	204	=	423	193	0	No
16:45 - 17:45	218	+	205	=	423	180	0	No
15:00 - 16:00	210	+	203	=	413	158	0	No



GPD Group

520 South Main Street, Suite 2531 Akron, OH 44311
(330) 572-2100

Study Name: 3- Girdled Road & Crile Rd

Study Date : 1/14/2022

Warrant 3A - Peak Hour Delay

Description

Intended for sites where for one hour of the day minor street traffic suffers undue traffic delay entering or crossing the major street.

Summary

Only 0 one hour periods meet minimums.
Warrant is NOT met.

Site Data Required

Number of Minor Lanes = 1

Volume and Delay Requirements

Veh/Hr All Approaches = **800**
Veh/Hr Minor = **100**
Total Delay (Veh-Hrs) = **4**

Time	Major Road			Minor Road			Warrant Met?
	Total of All Approaches	Met?	Girdled Road	Minor SB	Delay SB	Met?	
16:00 - 17:00	686	No	190	0	-	Yes	No
16:15 - 17:15	650	No	184	0	-	Yes	No
15:45 - 16:45	648	No	171	0	-	Yes	No
15:30 - 16:30	631	No	161	0	-	Yes	No
16:30 - 17:30	616	No	193	0	-	Yes	No
15:15 - 16:15	603	No	175	0	-	Yes	No
16:45 - 17:45	603	No	180	0	-	Yes	No
15:00 - 16:00	571	No	158	0	-	Yes	No
17:00 - 18:00	561	No	153	0	-	Yes	No
17:15 - 18:15	560	No	151	0	-	Yes	No
14:30 - 15:30	550	No	139	0	-	Yes	No
14:45 - 15:45	542	No	140	0	-	Yes	No
17:30 - 18:30	535	No	135	0	-	Yes	No
14:15 - 15:15	529	No	122	0	-	Yes	No
07:15 - 08:15	518	No	60	0	-	No	No
07:00 - 08:00	486	No	57	0	-	No	No
14:00 - 15:00	483	No	126	0	-	Yes	No
07:30 - 08:30	481	No	57	0	-	No	No
17:45 - 18:45	476	No	128	0	-	Yes	No
13:45 - 14:45	473	No	132	0	-	Yes	No
07:45 - 08:45	465	No	58	0	-	No	No
08:00 - 09:00	435	No	62	0	-	No	No
18:00 - 19:00	429	No	115	0	-	Yes	No
12:00 - 13:00	423	No	120	0	-	Yes	No
13:30 - 14:30	420	No	130	0	-	Yes	No

GPD Group

520 South Main Street, Suite 2531 Akron, OH 44311
(330) 572-2100

Study Name: 3- Girdled Road & Crile Rd

Study Date : 1/14/2022

Warrant 3B - Peak Hour Volumes

Description

Intended for sites where the volume of intersecting traffic during one hour of the day is the principal reason for consideration of a signal installation.

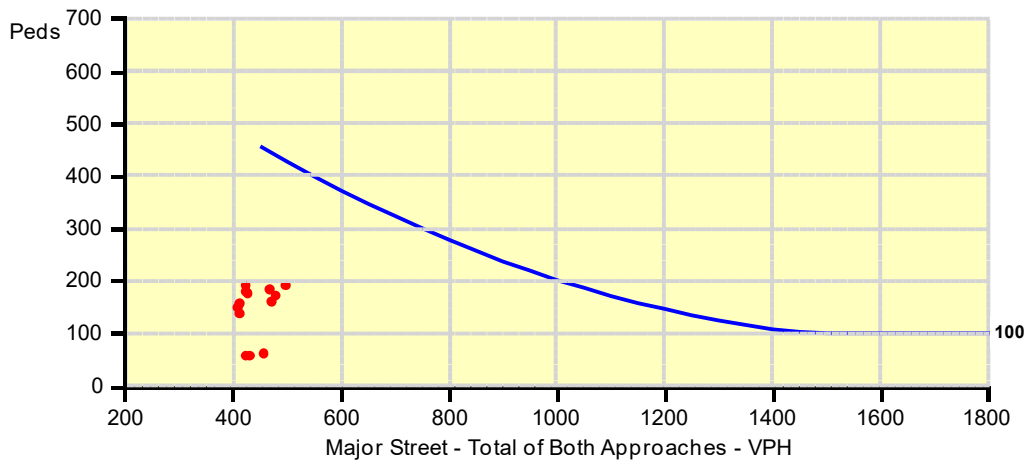
Summary

Only 0 one hour periods meet minimums.
Warrant is NOT met.

Site Data Required

Rural Settings Apply = **False**
 Number of Major Lanes = **1**
 Number of Minor Lanes = **1**

Time	Major Road Girdled Road				=	Total	Minor Road N/A		Met?
	Major EB	+	Major WB				Minor NB	Minor SB	
16:00 - 17:00	256	+	240	=	496	190	0	No	
15:45 - 16:45	244	+	233	=	477	171	0	No	
15:30 - 16:30	249	+	221	=	470	161	0	No	
16:15 - 17:15	248	+	218	=	466	184	0	No	
07:15 - 08:15	101	+	357	=	458	60	0	No	
07:00 - 08:00	85	+	344	=	429	57	0	No	
15:15 - 16:15	215	+	213	=	428	175	0	No	
07:30 - 08:30	97	+	327	=	424	57	0	No	
16:30 - 17:30	219	+	204	=	423	193	0	No	
16:45 - 17:45	218	+	205	=	423	180	0	No	
15:00 - 16:00	210	+	203	=	413	158	0	No	



GPD Group

520 South Main Street, Suite 2531 Akron, OH 44311
(330) 572-2100

Study Name: 4- SR-44 & Colburn Road

Study Date : 1/17/2022

Signal Warrants - Summary

Major Street Approaches

Northbound: SR-44

Number of Lanes : 1

Total Approach Volume: 5,365

Southbound: SR-44

Number of Lanes :1

Total Approach Volume: 5,726

Minor Street Approaches

Eastbound: Colburn Road

Number of Lanes :1

Total Approach Volume: 209

Westbound: Colburn Road

Number of Lanes :1

Total Approach Volume: 426

Warrant Summary (Urban Values Apply)

Warrant 1 - Eight Hour Vehicular Volumes	Not Satisfied
Warrant 1A - Minimum Vehicular Volume	Not Satisfied
Required volumes reached for 0 hours, 8 are needed	
Warrant 1B - Interruption of Continuous Traffic	Not Satisfied
Required volumes reached for 1 hours, 8 are needed	
Warrant 1C - Combination of Warrants	Not Satisfied
Required 1A volumes reached for 0 hours, 8 are needed	
Required 1B volumes reached for 2 hours, 8 are needed	
Warrant 2 - Four Hour Volumes	Not Satisfied
Number of hours (0) volumes exceed minimum < minimum required (4).	
Warrant 3 - Peak Hour	Not Satisfied
Warrant 3A - Peak Hour Delay	Not Satisfied
Approach volumes on minor street don't exceed minimums for any one hour period. Delay data not evaluated.	
Warrant 3B - Peak Hour Volumes	Not Satisfied
Volumes do not exceed minimums for any one hour period.	
Warrant 4 - Pedestrian Volumes	Not Evaluated
Warrant 5 - School Crossing	Not Evaluated
Warrant 6 - Coordinated Signal System	Not Evaluated
Warrant 7 - Crash Experience	Not Evaluated
Warrant 8 - Roadway Network	Not Evaluated
Warrant 9 - Intersection Near a Grade Crossing	Not Evaluated

GPD Group

520 South Main Street, Suite 2531 Akron, OH 44311
(330) 572-2100

Study Name: 4- SR-44 & Colburn Road

Study Date : 1/17/2022

Warrant 1A - Minimum Volumes

Description

Intended for sites where the volume of intersecting traffic is the principal reason for consideration of a signal installation.

Summary

Only 0 one hour periods meet minimums.
Warrant is NOT met.

Site Data Required

Rural Settings Apply = **False**
Number of Major Lanes = **1**
Number of Minor Lanes = **1**

Volume Requirements

Veh/Hr Major = **500**

Veh/Hr Minor = **150**

Time	Major Road				Minor Road			Met?
	Major NB	+	Major SB	=	Total	Minor EB	Minor WB	
15:15 - 16:15	624	+	632	=	1256	16	32	No
15:00 - 16:00	615	+	627	=	1242	17	28	No
15:30 - 16:30	578	+	650	=	1228	16	35	No
15:45 - 16:45	583	+	627	=	1210	20	36	No
16:45 - 17:45	578	+	631	=	1209	20	25	No
16:30 - 17:30	592	+	606	=	1198	26	30	No
16:15 - 17:15	573	+	603	=	1176	22	31	No
16:00 - 17:00	555	+	608	=	1163	22	29	No
17:00 - 18:00	559	+	595	=	1154	19	40	No
14:45 - 15:45	557	+	553	=	1110	15	25	No
14:30 - 15:30	525	+	545	=	1070	23	22	No
17:15 - 18:15	487	+	559	=	1046	16	35	No
14:15 - 15:15	459	+	516	=	975	25	23	No
07:15 - 08:15	497	+	466	=	963	17	76	No
07:30 - 08:30	489	+	469	=	958	20	69	No
13:45 - 14:45	432	+	513	=	945	24	30	No
17:30 - 18:30	421	+	524	=	945	10	34	No
13:30 - 14:30	438	+	492	=	930	13	31	No
14:00 - 15:00	428	+	499	=	927	20	31	No
13:15 - 14:15	428	+	493	=	921	13	34	No
07:00 - 08:00	468	+	445	=	913	15	76	No
07:45 - 08:45	435	+	455	=	890	18	61	No
11:15 - 12:15	434	+	448	=	882	25	33	No
13:00 - 14:00	407	+	474	=	881	14	29	No
10:30 - 11:30	430		435		865	20	27	No

GPD Group

520 South Main Street, Suite 2531 Akron, OH 44311
(330) 572-2100

Study Name: 4- SR-44 & Colburn Road

Study Date : 1/17/2022

Warrant 1B - Interruption of Continuous Traffic

Description

Intended for sites where the volume of the major street is so heavy that traffic on the minor street suffers excessive delay or hazard.

Summary

Only 1 one hour periods meet minimums.
Warrant is NOT met.

Site Data Required

Rural Settings Apply = **False**
Number of Major Lanes = **1**
Number of Minor Lanes = **1**

Volume Requirements

Veh/Hr Major = **750**

Veh/Hr Minor = **75**

Time	Major Road				Minor Road			Met?
	Major NB	+	Major SB	=	Total	Minor EB	Minor WB	
07:00 - 08:00	468	+	445	=	913	15	76	Yes
15:15 - 16:15	624	+	632	=	1256	16	32	No
15:00 - 16:00	615	+	627	=	1242	17	28	No
15:30 - 16:30	578	+	650	=	1228	16	35	No
15:45 - 16:45	583	+	627	=	1210	20	36	No
16:45 - 17:45	578	+	631	=	1209	20	25	No
16:30 - 17:30	592	+	606	=	1198	26	30	No
16:15 - 17:15	573	+	603	=	1176	22	31	No
16:00 - 17:00	555	+	608	=	1163	22	29	No
17:00 - 18:00	559	+	595	=	1154	19	40	No
14:45 - 15:45	557	+	553	=	1110	15	25	No
14:30 - 15:30	525	+	545	=	1070	23	22	No
17:15 - 18:15	487	+	559	=	1046	16	35	No
14:15 - 15:15	459	+	516	=	975	25	23	No
13:45 - 14:45	432	+	513	=	945	24	30	No
17:30 - 18:30	421	+	524	=	945	10	34	No
13:30 - 14:30	438	+	492	=	930	13	31	No
14:00 - 15:00	428	+	499	=	927	20	31	No
13:15 - 14:15	428	+	493	=	921	13	34	No
11:15 - 12:15	434	+	448	=	882	25	33	No
13:00 - 14:00	407	+	474	=	881	14	29	No
10:30 - 11:30	430	+	435	=	865	20	27	No
10:45 - 11:45	428	+	437	=	865	25	30	No
11:45 - 12:45	423	+	435	=	858	19	29	No
11:00 - 12:00	409		448		857	25	30	No

GPD Group

520 South Main Street, Suite 2531 Akron, OH 44311
(330) 572-2100

Study Name: 4- SR-44 & Colburn Road

Study Date : 1/17/2022

Warrant 1C Combination of Warrants

Description

Intended for sites where the traffic volumes don't meet individual warrants but where Warrants 1A and 1B are both met to 80% of their stated values.

Summary

Only 0 hours meet 1A minimums.
Only 2 hours meet 1B minimums.
Warrant is NOT met.

Site Data Required

Rural Settings Apply = **False**
Number of Major Lanes = **1**
Number of Minor Lanes = **1**

Volume Requirements

Warrant 1A 1B
Veh/Hr Major = **400 600**

Veh/Hr Minor = **120 60**

Major Road SR-44

Minor Road Colburn Road

Time	Major NB	+	Major SB	=	Total	Minor EB	Minor WB	Met1A?
15:15 - 16:15	624	+	632	=	1256	16	32	No
15:00 - 16:00	615	+	627	=	1242	17	28	No
15:30 - 16:30	578	+	650	=	1228	16	35	No
15:45 - 16:45	583	+	627	=	1210	20	36	No
16:45 - 17:45	578	+	631	=	1209	20	25	No
16:30 - 17:30	592	+	606	=	1198	26	30	No
16:15 - 17:15	573	+	603	=	1176	22	31	No
16:00 - 17:00	555	+	608	=	1163	22	29	No
17:00 - 18:00	559	+	595	=	1154	19	40	No
14:45 - 15:45	557	+	553	=	1110	15	25	No
14:30 - 15:30	525	+	545	=	1070	23	22	No
17:15 - 18:15	487		559		1046	16	35	No

Time	Major NB	+	Major SB	=	Total	Minor EB	Minor WB	Met1B?
07:45 - 08:45	435	+	455	=	890	18	61	Yes
06:45 - 07:45	337	+	315	=	652	12	61	Yes
15:15 - 16:15	624	+	632	=	1256	16	32	No
15:00 - 16:00	615	+	627	=	1242	17	28	No
15:30 - 16:30	578	+	650	=	1228	16	35	No
15:45 - 16:45	583	+	627	=	1210	20	36	No
16:45 - 17:45	578	+	631	=	1209	20	25	No
16:30 - 17:30	592	+	606	=	1198	26	30	No
16:15 - 17:15	573	+	603	=	1176	22	31	No
16:00 - 17:00	555	+	608	=	1163	22	29	No
17:00 - 18:00	559	+	595	=	1154	19	40	No
14:45 - 15:45	557		553		1110	15	25	No

GPD Group

520 South Main Street, Suite 2531 Akron, OH 44311
(330) 572-2100

Study Name: 4- SR-44 & Colburn Road

Study Date : 1/17/2022

Warrant 2 - Four Hour Volumes

Description

Intended for sites where the volume of intersecting traffic during any four hours of the day is the principal reason for consideration of a signal installation.

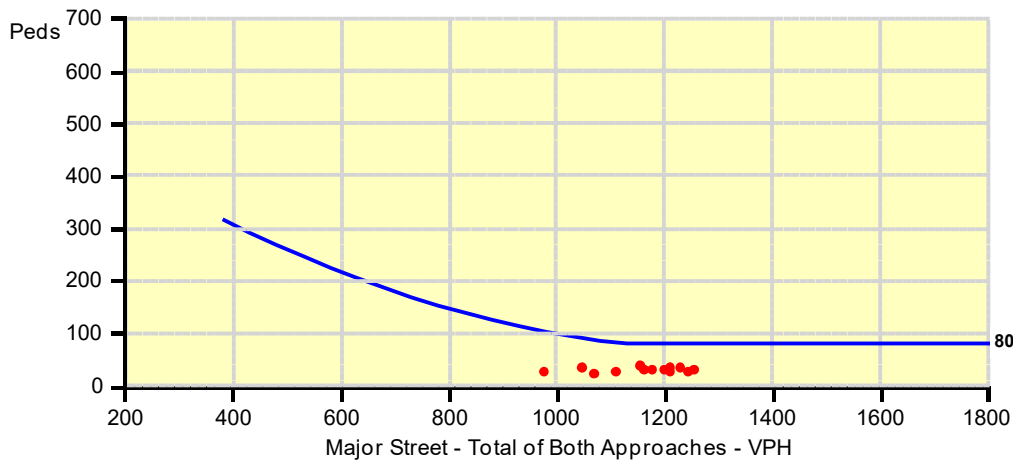
Summary

Only 0 one hour periods meet minimums.
Warrant is NOT met.

Site Data Required

Rural Settings Apply = **False**
 Number of Major Lanes = **1**
 Number of Minor Lanes = **1**

Time	Major Road SR-44				Total	Minor Road Colburn Road		Met?
	Major NB	+	Major SB	=		Minor EB	Minor WB	
15:15 - 16:15	624	+	632	=	1256	16	32	No
15:00 - 16:00	615	+	627	=	1242	17	28	No
15:30 - 16:30	578	+	650	=	1228	16	35	No
15:45 - 16:45	583	+	627	=	1210	20	36	No
16:45 - 17:45	578	+	631	=	1209	20	25	No
16:30 - 17:30	592	+	606	=	1198	26	30	No
16:15 - 17:15	573	+	603	=	1176	22	31	No
16:00 - 17:00	555	+	608	=	1163	22	29	No
17:00 - 18:00	559	+	595	=	1154	19	40	No
14:45 - 15:45	557	+	553	=	1110	15	25	No
14:30 - 15:30	525	+	545	=	1070	23	22	No
							35	No



GPD Group

520 South Main Street, Suite 2531 Akron, OH 44311
(330) 572-2100

Study Name: 4- SR-44 & Colburn Road

Study Date : 1/17/2022

Warrant 3A - Peak Hour Delay

Description

Intended for sites where for one hour of the day minor street traffic suffers undue traffic delay entering or crossing the major street.

Summary

41 one hour periods meet minimums.
Warrant is NOT met.

Site Data Required

Number of Minor Lanes = 1

Volume and Delay Requirements

Veh/Hr All Approaches = **800**
Veh/Hr Minor = **100**
Total Delay (Veh-Hrs) = **4**

Time	Major Road SR-44			Minor Road Colburn Road			Warrant Met?		
	Total of All Approaches	Met?	Minor EB	Delay EB	Met?	Minor WB		Delay WB	Met?
15:15 - 16:15	1304	Yes	16	-	---	32	-	No	No
15:00 - 16:00	1287	Yes	17	-	---	28	-	No	No
15:30 - 16:30	1279	Yes	16	-	---	35	-	No	No
15:45 - 16:45	1266	Yes	20	-	---	36	-	No	No
16:30 - 17:30	1254	Yes	26	-	---	30	-	No	No
16:45 - 17:45	1254	Yes	20	-	---	25	-	No	No
16:15 - 17:15	1229	Yes	22	-	---	31	-	No	No
16:00 - 17:00	1214	Yes	22	-	---	29	-	No	No
17:00 - 18:00	1213	Yes	19	-	---	40	-	No	No
14:45 - 15:45	1150	Yes	15	-	---	25	-	No	No
14:30 - 15:30	1115	Yes	23	-	No	22	-	---	No
17:15 - 18:15	1097	Yes	16	-	---	35	-	No	No
07:15 - 08:15	1056	Yes	17	-	---	76	-	No	No
07:30 - 08:30	1047	Yes	20	-	---	69	-	No	No
14:15 - 15:15	1023	Yes	25	-	No	23	-	---	No
07:00 - 08:00	1004	Yes	15	-	---	76	-	No	No
13:45 - 14:45	999	Yes	24	-	---	30	-	No	No
17:30 - 18:30	989	Yes	10	-	---	34	-	No	No
14:00 - 15:00	978	Yes	20	-	---	31	-	No	No
13:30 - 14:30	974	Yes	13	-	---	31	-	No	No
07:45 - 08:45	969	Yes	18	-	---	61	-	No	No
13:15 - 14:15	968	Yes	13	-	---	34	-	No	No
11:15 - 12:15	940	Yes	25	-	---	33	-	No	No
13:00 - 14:00	924	Yes	14	-	---	29	-	No	No
10:45 - 11:45	920	Yes	25	-	---	30	-	No	No

GPD Group

520 South Main Street, Suite 2531 Akron, OH 44311
(330) 572-2100

Study Name: 4- SR-44 & Colburn Road

Study Date : 1/17/2022

Warrant 3B - Peak Hour Volumes

Description

Intended for sites where the volume of intersecting traffic during one hour of the day is the principal reason for consideration of a signal installation.

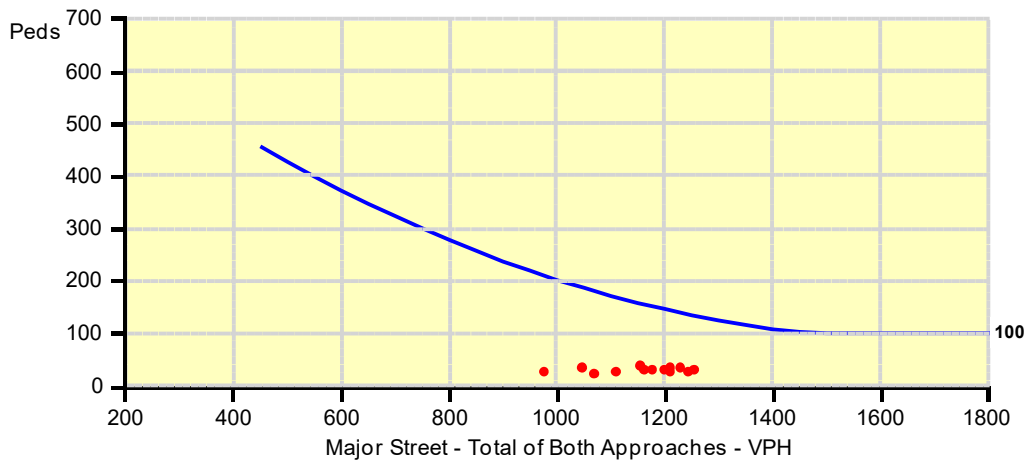
Summary

Only 0 one hour periods meet minimums.
Warrant is NOT met.

Site Data Required

Rural Settings Apply = **False**
 Number of Major Lanes = **1**
 Number of Minor Lanes = **1**

Time	Major Road SR-44				Total	Minor Road Colburn Road		Met?
	Major NB	+	Major SB	=		Minor EB	Minor WB	
15:15 - 16:15	624	+	632	=	1256	16	32	No
15:00 - 16:00	615	+	627	=	1242	17	28	No
15:30 - 16:30	578	+	650	=	1228	16	35	No
15:45 - 16:45	583	+	627	=	1210	20	36	No
16:45 - 17:45	578	+	631	=	1209	20	25	No
16:30 - 17:30	592	+	606	=	1198	26	30	No
16:15 - 17:15	573	+	603	=	1176	22	31	No
16:00 - 17:00	555	+	608	=	1163	22	29	No
17:00 - 18:00	559	+	595	=	1154	19	40	No
14:45 - 15:45	557	+	553	=	1110	15	25	No
14:30 - 15:30	525	+	545	=	1070	23	22	No
							35	No



GPD Group

520 South Main Street, Suite 2531 Akron, OH 44311
(330) 572-2100

Study Name: 5- SR-44 & Clark Road

Study Date : 1/17/2022

Signal Warrants - Summary

Major Street Approaches

Northbound: SR-44

Number of Lanes : 1

Total Approach Volume: 5,325

Southbound: SR-44

Number of Lanes :1

Total Approach Volume: 5,481

Minor Street Approaches

Eastbound: Clark Road

Number of Lanes :1

Total Approach Volume: 304

Westbound: Clark Road

Number of Lanes :1

Total Approach Volume: 440

Warrant Summary (Urban Values Apply)

Warrant 1 - Eight Hour Vehicular Volumes	Not Satisfied
Warrant 1A - Minimum Vehicular Volume	Not Satisfied
Required volumes reached for 0 hours, 8 are needed	
Warrant 1B - Interruption of Continuous Traffic	Not Satisfied
Required volumes reached for 0 hours, 8 are needed	
Warrant 1C - Combination of Warrants	Not Satisfied
Required 1A volumes reached for 0 hours, 8 are needed	
Required 1B volumes reached for 1 hours, 8 are needed	
Warrant 2 - Four Hour Volumes	Not Satisfied
Number of hours (0) volumes exceed minimum < minimum required (4).	
Warrant 3 - Peak Hour	Not Satisfied
Warrant 3A - Peak Hour Delay	Not Satisfied
Approach volumes on minor street don't exceed minimums for any one hour period. Delay data not evaluated.	
Warrant 3B - Peak Hour Volumes	Not Satisfied
Volumes do not exceed minimums for any one hour period.	
Warrant 4 - Pedestrian Volumes	Not Evaluated
Warrant 5 - School Crossing	Not Evaluated
Warrant 6 - Coordinated Signal System	Not Evaluated
Warrant 7 - Crash Experience	Not Evaluated
Warrant 8 - Roadway Network	Not Evaluated
Warrant 9 - Intersection Near a Grade Crossing	Not Evaluated

GPD Group

520 South Main Street, Suite 2531 Akron, OH 44311
(330) 572-2100

Study Name: 5- SR-44 & Clark Road

Study Date : 1/17/2022

Warrant 1A - Minimum Volumes

Description

Intended for sites where the volume of intersecting traffic is the principal reason for consideration of a signal installation.

Summary

Only 0 one hour periods meet minimums.
Warrant is NOT met.

Site Data Required

Rural Settings Apply = **False**
Number of Major Lanes = **1**
Number of Minor Lanes = **1**

Volume Requirements

Veh/Hr Major = **500**

Veh/Hr Minor = **150**

Time	Major Road				Minor Road		Met?	
	Major NB	+	Major SB	=	Total	Minor EB		Minor WB
15:15 - 16:15	609	+	613	=	1222	37	49	No
15:00 - 16:00	610	+	584	=	1194	30	52	No
15:30 - 16:30	572	+	614	=	1186	41	45	No
15:45 - 16:45	572	+	608	=	1180	38	37	No
16:30 - 17:30	612	+	564	=	1176	27	45	No
16:45 - 17:45	590	+	573	=	1163	29	43	No
16:15 - 17:15	589	+	555	=	1144	32	38	No
16:00 - 17:00	547	+	582	=	1129	33	35	No
17:00 - 18:00	569	+	546	=	1115	30	41	No
14:45 - 15:45	552	+	521	=	1073	28	54	No
14:30 - 15:30	519	+	527	=	1046	33	48	No
17:15 - 18:15	482	+	517	=	999	25	33	No
14:15 - 15:15	465	+	508	=	973	32	44	No
13:45 - 14:45	438	+	516	=	954	27	37	No
14:00 - 15:00	432	+	496	=	928	32	42	No
07:15 - 08:15	472	+	444	=	916	26	53	No
13:30 - 14:30	434	+	480	=	914	21	35	No
07:30 - 08:30	460	+	443	=	903	29	45	No
17:30 - 18:30	411	+	489	=	900	28	22	No
13:15 - 14:15	422	+	476	=	898	17	31	No
07:00 - 08:00	451	+	431	=	882	25	61	No
11:15 - 12:15	432	+	438	=	870	25	36	No
10:30 - 11:30	431	+	422	=	853	27	36	No
11:45 - 12:45	427	+	422	=	849	18	23	No
10:45 - 11:45	420		426		846	29	42	No

GPD Group

520 South Main Street, Suite 2531 Akron, OH 44311
(330) 572-2100

Study Name: 5- SR-44 & Clark Road

Study Date : 1/17/2022

Warrant 1B - Interruption of Continuous Traffic

Description

Intended for sites where the volume of the major street is so heavy that traffic on the minor street suffers excessive delay or hazard.

Summary

Only 0 one hour periods meet minimums.
Warrant is NOT met.

Site Data Required

Rural Settings Apply = **False**
Number of Major Lanes = **1**
Number of Minor Lanes = **1**

Volume Requirements

Veh/Hr Major = **750**

Veh/Hr Minor = **75**

Time	Major Road				Minor Road		Met?	
	Major NB	+	Major SB	=	Total	Minor EB		Minor WB
15:15 - 16:15	609	+	613	=	1222	37	49	No
15:00 - 16:00	610	+	584	=	1194	30	52	No
15:30 - 16:30	572	+	614	=	1186	41	45	No
15:45 - 16:45	572	+	608	=	1180	38	37	No
16:30 - 17:30	612	+	564	=	1176	27	45	No
16:45 - 17:45	590	+	573	=	1163	29	43	No
16:15 - 17:15	589	+	555	=	1144	32	38	No
16:00 - 17:00	547	+	582	=	1129	33	35	No
17:00 - 18:00	569	+	546	=	1115	30	41	No
14:45 - 15:45	552	+	521	=	1073	28	54	No
14:30 - 15:30	519	+	527	=	1046	33	48	No
17:15 - 18:15	482	+	517	=	999	25	33	No
14:15 - 15:15	465	+	508	=	973	32	44	No
13:45 - 14:45	438	+	516	=	954	27	37	No
14:00 - 15:00	432	+	496	=	928	32	42	No
07:15 - 08:15	472	+	444	=	916	26	53	No
13:30 - 14:30	434	+	480	=	914	21	35	No
07:30 - 08:30	460	+	443	=	903	29	45	No
17:30 - 18:30	411	+	489	=	900	28	22	No
13:15 - 14:15	422	+	476	=	898	17	31	No
07:00 - 08:00	451	+	431	=	882	25	61	No
11:15 - 12:15	432	+	438	=	870	25	36	No
10:30 - 11:30	431	+	422	=	853	27	36	No
11:45 - 12:45	427	+	422	=	849	18	23	No
10:45 - 11:45	420		426		846	29	42	No

GPD Group

520 South Main Street, Suite 2531 Akron, OH 44311
(330) 572-2100

Study Name: 5- SR-44 & Clark Road

Study Date : 1/17/2022

Warrant 1C Combination of Warrants

Description

Intended for sites where the traffic volumes don't meet individual warrants but where Warrants 1A and 1B are both met to 80% of their stated values.

Summary

Only 0 hours meet 1A minimums.
Only 1 hours meet 1B minimums.
Warrant is NOT met.

Site Data Required

Rural Settings Apply = **False**
Number of Major Lanes = **1**
Number of Minor Lanes = **1**

Volume Requirements

Warrant 1A 1B
Veh/Hr Major = **400 600**

Veh/Hr Minor = **120 60**

Major Road SR-44

Minor Road Clark Road

Time	Major NB	+	Major SB	=	Total	Minor EB	Minor WB	Met1A?
15:15 - 16:15	609	+	613	=	1222	37	49	No
15:00 - 16:00	610	+	584	=	1194	30	52	No
15:30 - 16:30	572	+	614	=	1186	41	45	No
15:45 - 16:45	572	+	608	=	1180	38	37	No
16:30 - 17:30	612	+	564	=	1176	27	45	No
16:45 - 17:45	590	+	573	=	1163	29	43	No
16:15 - 17:15	589	+	555	=	1144	32	38	No
16:00 - 17:00	547	+	582	=	1129	33	35	No
17:00 - 18:00	569	+	546	=	1115	30	41	No
14:45 - 15:45	552	+	521	=	1073	28	54	No
14:30 - 15:30	519	+	527	=	1046	33	48	No
17:15 - 18:15	482		517		999	25	33	No

Time	Major NB	+	Major SB	=	Total	Minor EB	Minor WB	Met1B?
07:00 - 08:00	451	+	431	=	882	25	61	Yes
15:15 - 16:15	609	+	613	=	1222	37	49	No
15:00 - 16:00	610	+	584	=	1194	30	52	No
15:30 - 16:30	572	+	614	=	1186	41	45	No
15:45 - 16:45	572	+	608	=	1180	38	37	No
16:30 - 17:30	612	+	564	=	1176	27	45	No
16:45 - 17:45	590	+	573	=	1163	29	43	No
16:15 - 17:15	589	+	555	=	1144	32	38	No
16:00 - 17:00	547	+	582	=	1129	33	35	No
17:00 - 18:00	569	+	546	=	1115	30	41	No
14:45 - 15:45	552	+	521	=	1073	28	54	No
14:30 - 15:30	519		527		1046	33	48	No

GPD Group

520 South Main Street, Suite 2531 Akron, OH 44311
(330) 572-2100

Study Name: 5- SR-44 & Clark Road

Study Date : 1/17/2022

Warrant 2 - Four Hour Volumes

Description

Intended for sites where the volume of intersecting traffic during any four hours of the day is the principal reason for consideration of a signal installation.

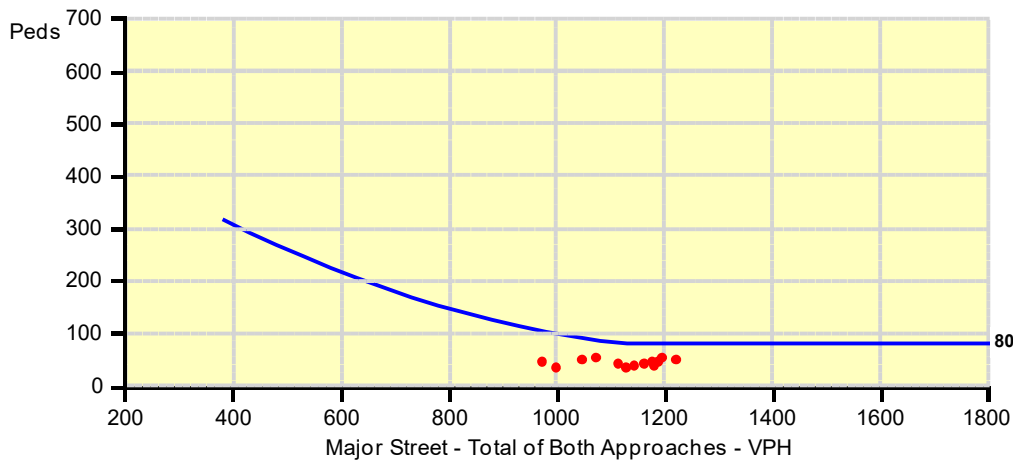
Summary

Only 0 one hour periods meet minimums.
Warrant is NOT met.

Site Data Required

Rural Settings Apply = **False**
 Number of Major Lanes = **1**
 Number of Minor Lanes = **1**

Time	Major Road SR-44				Total	Minor Road Clark Road		Met?
	Major NB	+	Major SB	=		Minor EB	Minor WB	
15:15 - 16:15	609	+	613	=	1222	37	49	No
15:00 - 16:00	610	+	584	=	1194	30	52	No
15:30 - 16:30	572	+	614	=	1186	41	45	No
15:45 - 16:45	572	+	608	=	1180	38	37	No
16:30 - 17:30	612	+	564	=	1176	27	45	No
16:45 - 17:45	590	+	573	=	1163	29	43	No
16:15 - 17:15	589	+	555	=	1144	32	38	No
16:00 - 17:00	547	+	582	=	1129	33	35	No
17:00 - 18:00	569	+	546	=	1115	30	41	No
14:45 - 15:45	552	+	521	=	1073	28	54	No
14:30 - 15:30	519	+	527	=	1046	33	48	No
							33	No



GPD Group

520 South Main Street, Suite 2531 Akron, OH 44311
(330) 572-2100

Study Name: 5- SR-44 & Clark Road

Study Date : 1/17/2022

Warrant 3A - Peak Hour Delay

Description

Intended for sites where for one hour of the day minor street traffic suffers undue traffic delay entering or crossing the major street.

Summary

40 one hour periods meet minimums.
Warrant is NOT met.

Site Data Required

Number of Minor Lanes = 1

Volume and Delay Requirements

Veh/Hr All Approaches = **800**
Veh/Hr Minor = **100**
Total Delay (Veh-Hrs) = **4**

Time	Major Road SR-44			Minor Road Clark Road			Warrant Met?		
	Total of All Approaches	Met?	Minor EB	Delay EB	Met?	Minor WB		Delay WB	Met?
15:15 - 16:15	1308	Yes	37	-	---	49	-	No	No
15:00 - 16:00	1276	Yes	30	-	---	52	-	No	No
15:30 - 16:30	1272	Yes	41	-	---	45	-	No	No
15:45 - 16:45	1255	Yes	38	-	No	37	-	---	No
16:30 - 17:30	1248	Yes	27	-	---	45	-	No	No
16:45 - 17:45	1235	Yes	29	-	---	43	-	No	No
16:15 - 17:15	1214	Yes	32	-	---	38	-	No	No
16:00 - 17:00	1197	Yes	33	-	---	35	-	No	No
17:00 - 18:00	1186	Yes	30	-	---	41	-	No	No
14:45 - 15:45	1155	Yes	28	-	---	54	-	No	No
14:30 - 15:30	1127	Yes	33	-	---	48	-	No	No
17:15 - 18:15	1057	Yes	25	-	---	33	-	No	No
14:15 - 15:15	1049	Yes	32	-	---	44	-	No	No
13:45 - 14:45	1018	Yes	27	-	---	37	-	No	No
14:00 - 15:00	1002	Yes	32	-	---	42	-	No	No
07:15 - 08:15	995	Yes	26	-	---	53	-	No	No
07:30 - 08:30	977	Yes	29	-	---	45	-	No	No
13:30 - 14:30	970	Yes	21	-	---	35	-	No	No
07:00 - 08:00	968	Yes	25	-	---	61	-	No	No
17:30 - 18:30	950	Yes	28	-	No	22	-	---	No
13:15 - 14:15	946	Yes	17	-	---	31	-	No	No
11:15 - 12:15	931	Yes	25	-	---	36	-	No	No
10:45 - 11:45	917	Yes	29	-	---	42	-	No	No
10:30 - 11:30	916	Yes	27	-	---	36	-	No	No
07:45 - 08:45	910	Yes	34	-	---	45	-	No	No

GPD Group

520 South Main Street, Suite 2531 Akron, OH 44311
(330) 572-2100

Study Name: 5- SR-44 & Clark Road

Study Date : 1/17/2022

Warrant 3B - Peak Hour Volumes

Description

Intended for sites where the volume of intersecting traffic during one hour of the day is the principal reason for consideration of a signal installation.

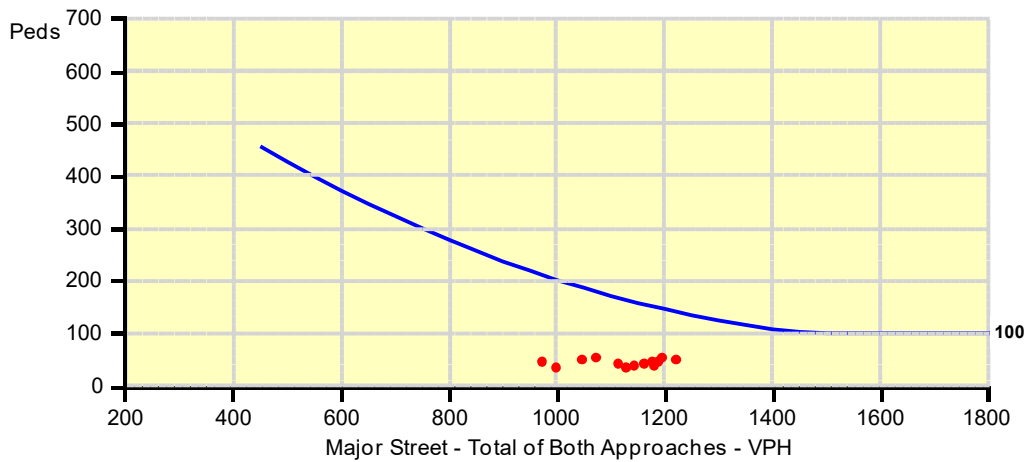
Summary

Only 0 one hour periods meet minimums.
Warrant is NOT met.

Site Data Required

Rural Settings Apply = **False**
 Number of Major Lanes = **1**
 Number of Minor Lanes = **1**

Time	Major Road SR-44				=	Total	Minor Road Clark Road		Met?
	Major NB	+	Major SB	Minor EB			Minor WB		
15:15 - 16:15	609	+	613	=	1222	37	49	No	
15:00 - 16:00	610	+	584	=	1194	30	52	No	
15:30 - 16:30	572	+	614	=	1186	41	45	No	
15:45 - 16:45	572	+	608	=	1180	38	37	No	
16:30 - 17:30	612	+	564	=	1176	27	45	No	
16:45 - 17:45	590	+	573	=	1163	29	43	No	
16:15 - 17:15	589	+	555	=	1144	32	38	No	
16:00 - 17:00	547	+	582	=	1129	33	35	No	
17:00 - 18:00	569	+	546	=	1115	30	41	No	
14:45 - 15:45	552	+	521	=	1073	28	54	No	
14:30 - 15:30	519	+	527	=	1046	33	48	No	
							33	No	



GPD Group

5595 Transportation Boulevard, Garfield Heights, Ohio 44125

Study Name: 6- SR-44 & Hosford Road

Study Date : 1/17/2022

Signal Warrants - Summary

Major Street Approaches

Northbound: SR-44

Number of Lanes : 1

Total Approach Volume: 4,716

Southbound: SR-44

Number of Lanes :1

Total Approach Volume: 5,373

Minor Street Approaches

Eastbound: Hosford Road

Number of Lanes :1

Total Approach Volume: 247

Westbound: Hosford Road

Number of Lanes :1

Total Approach Volume: 1,067

Warrant Summary (Urban Values Apply)

Warrant 1 - Eight Hour Vehicular Volumes	Not Satisfied
Warrant 1A - Minimum Vehicular Volume	Not Satisfied
Required volumes reached for 1 hours, 8 are needed	
Warrant 1B - Interruption of Continuous Traffic	Not Satisfied
Required volumes reached for 5 hours, 8 are needed	
Warrant 1C - Combination of Warrants	Not Satisfied
Required 1A volumes reached for 2 hours, 8 are needed	
Required 1B volumes reached for 11 hours, 8 are needed	
Warrant 2 - Four Hour Volumes	Satisfied
Number of hours (4) volumes exceed minimum >= minimum required (4).	
Warrant 3 - Peak Hour	Satisfied
Warrant 3A - Peak Hour Delay	Satisfied
Number of one hour periods (10) volumes exceed minimum >= required (1). Delay data not evaluated.	
Warrant 3B - Peak Hour Volumes	Not Satisfied
Volumes do not exceed minimums for any one hour period.	
Warrant 4 - Pedestrian Volumes	Not Evaluated
Warrant 5 - School Crossing	Not Evaluated
Warrant 6 - Coordinated Signal System	Not Evaluated
Warrant 7 - Crash Experience	Satisfied
Number of accidents (5) is more than minimum (5) and volume requirements are met.	
Warrant 8 - Roadway Network	Not Evaluated
Warrant 9 - Intersection Near a Grade Crossing	Not Evaluated

GPD Group

5595 Transportation Boulevard, Garfield Heights, Ohio 44125

Study Name: 6- SR-44 & Hosford Road

Study Date : 1/17/2022

Warrant 1A - Minimum Volumes

Description

Intended for sites where the volume of intersecting traffic is the principal reason for consideration of a signal installation.

Summary

Only 1 one hour periods meet minimums.
Warrant is NOT met.

Site Data Required

Rural Settings Apply = **False**
 Number of Major Lanes = **1**
 Number of Minor Lanes = **1**

Volume Requirements

Veh/Hr Major = **500**

Veh/Hr Minor = **150**

Time	Major Road SR-44				Total	Minor Road Hosford Road		Met?
	Major NB	+	Major SB	=		Minor EB	Minor WB	
07:00 - 08:00	315	+	422	=	737	21	176	Yes
15:15 - 16:15	561	+	590	=	1151	29	93	No
15:00 - 16:00	575	+	566	=	1141	23	85	No
15:30 - 16:30	524	+	592	=	1116	32	85	No
15:45 - 16:45	534	+	570	=	1104	29	90	No
16:30 - 17:30	551	+	548	=	1099	22	92	No
16:15 - 17:15	539	+	535	=	1074	24	99	No
16:45 - 17:45	506	+	560	=	1066	23	95	No
16:00 - 17:00	501	+	555	=	1056	26	103	No
14:45 - 15:45	508	+	501	=	1009	23	94	No
17:00 - 18:00	480	+	528	=	1008	25	78	No
14:30 - 15:30	478	+	509	=	987	21	104	No
17:15 - 18:15	416	+	503	=	919	20	62	No
14:15 - 15:15	425	+	492	=	917	22	96	No
13:45 - 14:45	406	+	505	=	911	20	78	No
14:00 - 15:00	395	+	483	=	878	22	93	No
13:30 - 14:30	403	+	459	=	862	16	75	No
13:15 - 14:15	397	+	450	=	847	15	74	No
17:30 - 18:30	367	+	475	=	842	18	65	No
11:15 - 12:15	407	+	424	=	831	21	64	No
10:30 - 11:30	401	+	429	=	830	13	59	No
12:00 - 13:00	394	+	424	=	818	18	56	No
10:45 - 11:45	397	+	420	=	817	16	55	No
11:45 - 12:45	402	+	413	=	815	22	66	No
11:00 - 12:00	381		427		808	19	65	No

GPD Group

5595 Transportation Boulevard, Garfield Heights, Ohio 44125

Study Name: 6- SR-44 & Hosford Road

Study Date : 1/17/2022

Warrant 1B - Interruption of Continuous Traffic

Description

Intended for sites where the volume of the major street is so heavy that traffic on the minor street suffers excessive delay or hazard.

Summary

Only 5 one hour periods meet minimums.
Warrant is NOT met.

Site Data Required

Rural Settings Apply = **False**
 Number of Major Lanes = **1**
 Number of Minor Lanes = **1**

Volume Requirements

Veh/Hr Major = **750**

Veh/Hr Minor = **75**

Time	Major Road SR-44				=	Total	Minor Road Hosford Road		Met?
	Major NB	+	Major SB				Minor EB	Minor WB	
15:30 - 16:30	524	+	592	=	1116	32	85	Yes	
16:30 - 17:30	551	+	548	=	1099	22	92	Yes	
14:30 - 15:30	478	+	509	=	987	21	104	Yes	
13:30 - 14:30	403	+	459	=	862	16	75	Yes	
07:15 - 08:15	328	+	448	=	776	23	191	Yes	
13:15 - 14:15	397	+	450	=	847	15	74	No	
17:30 - 18:30	367	+	475	=	842	18	65	No	
11:15 - 12:15	407	+	424	=	831	21	64	No	
10:30 - 11:30	401	+	429	=	830	13	59	No	
12:00 - 13:00	394	+	424	=	818	18	56	No	
10:45 - 11:45	397	+	420	=	817	16	55	No	
11:45 - 12:45	402	+	413	=	815	22	66	No	
11:00 - 12:00	381	+	427	=	808	19	65	No	
13:00 - 14:00	378	+	425	=	803	13	71	No	
11:30 - 12:30	403	+	399	=	802	17	63	No	
12:30 - 13:30	373	+	416	=	789	15	64	No	
12:45 - 13:45	374	+	413	=	787	11	70	No	
10:15 - 11:15	395	+	385	=	780	12	61	No	
12:15 - 13:15	374	+	405	=	779	13	55	No	
10:00 - 11:00	393	+	384	=	777	11	61	No	
17:45 - 18:45	338	+	418	=	756	10	74	No	
07:00 - 08:00	315	+	422	=	737	21	176	No	
09:45 - 10:45	352	+	384	=	736	11	59	No	
08:15 - 09:15	285	+	417	=	702	37	110	No	
09:30 - 10:30	326		372		698	13	64	No	

GPD Group

5595 Transportation Boulevard, Garfield Heights, Ohio 44125

Study Name: 6- SR-44 & Hosford Road

Study Date : 1/17/2022

Warrant 1C Combination of Warrants

Description

Intended for sites where the traffic volumes don't meet individual warrants but where Warrants 1A and 1B are both met to 80% of their stated values.

Summary

Only 2 hours meet 1A minimums.
11 hours meet 1B minimums.
Warrant is NOT met.

Site Data Required

Rural Settings Apply = **False**
Number of Major Lanes = **1**
Number of Minor Lanes = **1**

Volume Requirements

Warrant 1A 1B
Veh/Hr Major = **400** **600**

Veh/Hr Minor = **120** **60**

Major Road SR-44

Minor Road Hosford Road

Time	Major NB	+	Major SB	=	Total	Minor EB	Minor WB	Met1A?
07:00 - 08:00	315	+	422	=	737	21	176	Yes
08:00 - 09:00	277	+	435	=	712	41	125	Yes
15:15 - 16:15	561	+	590	=	1151	29	93	No
15:00 - 16:00	575	+	566	=	1141	23	85	No
15:30 - 16:30	524	+	592	=	1116	32	85	No
15:45 - 16:45	534	+	570	=	1104	29	90	No
16:30 - 17:30	551	+	548	=	1099	22	92	No
16:15 - 17:15	539	+	535	=	1074	24	99	No
16:45 - 17:45	506	+	560	=	1066	23	95	No
16:00 - 17:00	501	+	555	=	1056	26	103	No
14:45 - 15:45	508	+	501	=	1009	23	94	No
17:00 - 18:00	480		528		1008	25	78	No

Time	Major NB	+	Major SB	=	Total	Minor EB	Minor WB	Met1B?
15:30 - 16:30	524	+	592	=	1116	32	85	Yes
16:30 - 17:30	551	+	548	=	1099	22	92	Yes
14:30 - 15:30	478	+	509	=	987	21	104	Yes
13:30 - 14:30	403	+	459	=	862	16	75	Yes
17:30 - 18:30	367	+	475	=	842	18	65	Yes
11:00 - 12:00	381	+	427	=	808	19	65	Yes
12:30 - 13:30	373	+	416	=	789	15	64	Yes
10:00 - 11:00	393	+	384	=	777	11	61	Yes
07:00 - 08:00	315	+	422	=	737	21	176	Yes
08:00 - 09:00	277	+	435	=	712	41	125	Yes
09:00 - 10:00	314	+	357	=	671	19	88	Yes
12:00 - 13:00	394		424		818	18	56	No

GPD Group

5595 Transportation Boulevard, Garfield Heights, Ohio 44125

Study Name: 6- SR-44 & Hosford Road

Study Date : 1/17/2022

Warrant 2 - Four Hour Volumes

Description

Intended for sites where the volume of intersecting traffic during any four hours of the day is the principal reason for consideration of a signal installation.

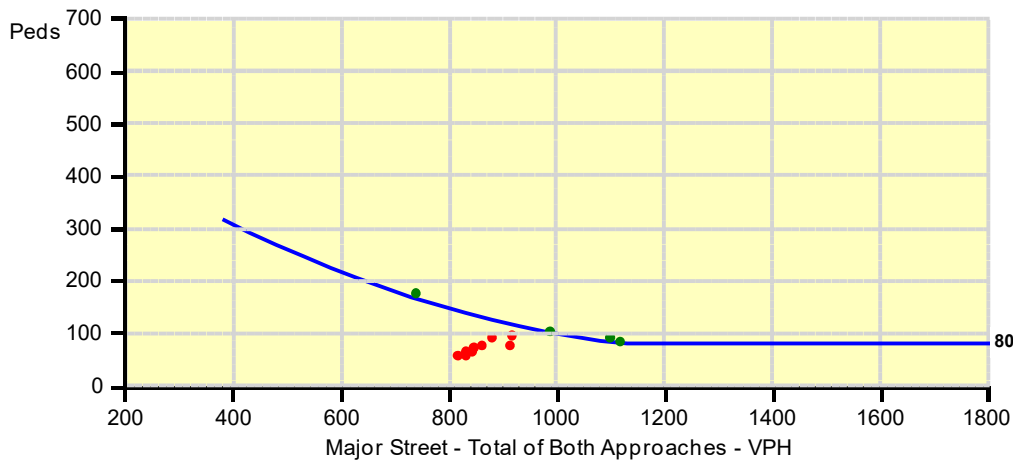
Summary

4 one hour periods meet minimums.
Warrant IS met.

Site Data Required

Rural Settings Apply = **False**
 Number of Major Lanes = **1**
 Number of Minor Lanes = **1**

Time	Major Road SR-44				Total	Minor Road Hosford Road		Met?
	Major NB	+	Major SB	=		Minor EB	Minor WB	
15:30 - 16:30	524	+	592	=	1116	32	85	Yes
16:30 - 17:30	551	+	548	=	1099	22	92	Yes
14:30 - 15:30	478	+	509	=	987	21	104	Yes
07:00 - 08:00	315	+	422	=	737	21	176	Yes
14:15 - 15:15	425	+	492	=	917	22	96	No
13:45 - 14:45	406	+	505	=	911	20	78	No
14:00 - 15:00	395	+	483	=	878	22	93	No
13:30 - 14:30	403	+	459	=	862	16	75	No
13:15 - 14:15	397	+	450	=	847	15	74	No
17:30 - 18:30	367	+	475	=	842	18	65	No
11:15 - 12:15	407	+	424	=	831	21	64	No
							59	No



GPD Group

5595 Transportation Boulevard, Garfield Heights, Ohio 44125

Study Name: 6- SR-44 & Hosford Road

Study Date : 1/17/2022

Warrant 3A - Peak Hour Delay

Description

Intended for sites where for one hour of the day minor street traffic suffers undue traffic delay entering or crossing the major street.

Summary

41 one hour periods meet minimums.
Warrant IS met.

Site Data Required

Number of Minor Lanes = 1

Volume and Delay Requirements

Veh/Hr All Approaches = **800**
Veh/Hr Minor = **100**
Total Delay (Veh-Hrs) = **4**

Time	Major Road SR-44			Minor Road Hosford Road			Warrant Met?		
	Total of All Approaches	Met?	Minor EB	Delay EB	Met?	Minor WB		Delay WB	Met?
16:00 - 17:00	1185	Yes	26	-	---	103	-	Yes	Yes
14:30 - 15:30	1112	Yes	21	-	---	104	-	Yes	Yes
07:15 - 08:15	990	Yes	23	-	---	191	-	Yes	Yes
07:30 - 08:30	972	Yes	29	-	---	180	-	Yes	Yes
07:00 - 08:00	934	Yes	21	-	---	176	-	Yes	Yes
07:45 - 08:45	922	Yes	34	-	---	153	-	Yes	Yes
08:00 - 09:00	878	Yes	41	-	---	125	-	Yes	Yes
08:15 - 09:15	849	Yes	37	-	---	110	-	Yes	Yes
08:30 - 09:30	835	Yes	37	-	---	112	-	Yes	Yes
08:45 - 09:45	822	Yes	29	-	---	107	-	Yes	Yes
15:15 - 16:15	1273	Yes	29	-	---	93	-	No	No
15:00 - 16:00	1249	Yes	23	-	---	85	-	No	No
15:30 - 16:30	1233	Yes	32	-	---	85	-	No	No
15:45 - 16:45	1223	Yes	29	-	---	90	-	No	No
16:30 - 17:30	1213	Yes	22	-	---	92	-	No	No
16:15 - 17:15	1197	Yes	24	-	---	99	-	No	No
16:45 - 17:45	1184	Yes	23	-	---	95	-	No	No
14:45 - 15:45	1126	Yes	23	-	---	94	-	No	No
17:00 - 18:00	1111	Yes	25	-	---	78	-	No	No
14:15 - 15:15	1035	Yes	22	-	---	96	-	No	No
13:45 - 14:45	1009	Yes	20	-	---	78	-	No	No
17:15 - 18:15	1001	Yes	20	-	---	62	-	No	No
14:00 - 15:00	993	Yes	22	-	---	93	-	No	No
13:30 - 14:30	953	Yes	16	-	---	75	-	No	No
13:15 - 14:15	936	Yes	15	-	---	74	-	No	No

GPD Group

5595 Transportation Boulevard, Garfield Heights, Ohio 44125

Study Name: 6- SR-44 & Hosford Road

Study Date : 1/17/2022

Warrant 3B - Peak Hour Volumes

Description

Intended for sites where the volume of intersecting traffic during one hour of the day is the principal reason for consideration of a signal installation.

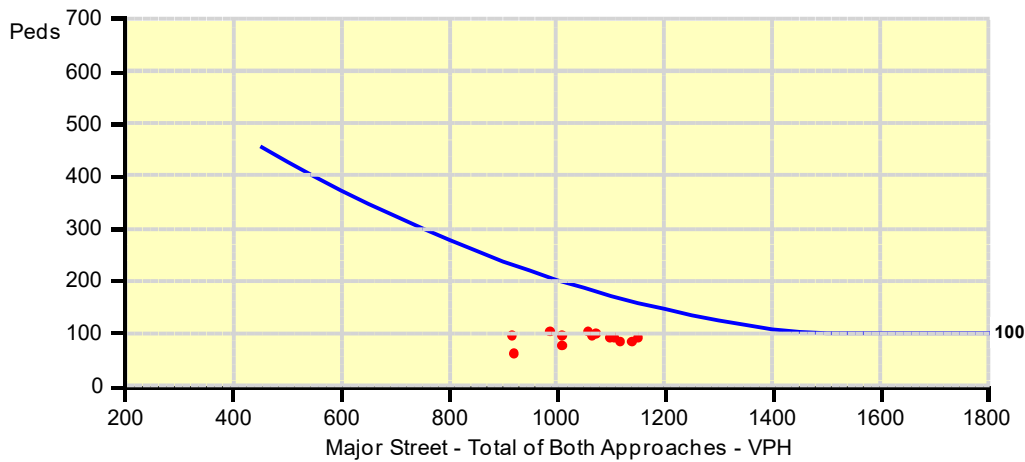
Summary

Only 0 one hour periods meet minimums.
Warrant is NOT met.

Site Data Required

Rural Settings Apply = **False**
 Number of Major Lanes = **1**
 Number of Minor Lanes = **1**

Time	Major Road SR-44				Total	Minor Road Hosford Road		Met?
	Major NB	+	Major SB	=		Minor EB	Minor WB	
15:15 - 16:15	561	+	590	=	1151	29	93	No
15:00 - 16:00	575	+	566	=	1141	23	85	No
15:30 - 16:30	524	+	592	=	1116	32	85	No
15:45 - 16:45	534	+	570	=	1104	29	90	No
16:30 - 17:30	551	+	548	=	1099	22	92	No
16:15 - 17:15	539	+	535	=	1074	24	99	No
16:45 - 17:45	506	+	560	=	1066	23	95	No
16:00 - 17:00	501	+	555	=	1056	26	103	No
14:45 - 15:45	508	+	501	=	1009	23	94	No
17:00 - 18:00	480	+	528	=	1008	25	78	No
14:30 - 15:30	478	+	509	=	987	21	104	No
							62	No



GPD Group

5595 Transportation Boulevard, Garfield Heights, Ohio 44125

Study Name: 6- SR-44 & Hosford Road

Study Date : 1/17/2022

Warrant 7 - Crash Experience

Description

Intended for sites where the frequency of correctible crashes in the past 12 months is the primary motivation for installing a traffic signal.

Summary

Number of crashes meet minimum.
 Pedestrian volumes do not meet the 80% criteria.
 War 1A or 1B volumes meet the 80% criteria.
 Warrant IS met.

Site Data Required

Number of crashes in last 12 months = **5**

Rural Settings Apply = **False**
 Number of Major Lanes = **1**
 Number of Minor Lanes = **1**

Crash and Volume Requirements

Minimum number of crashes = **5**

Veh/Hr Major: War 1A = **400** War 1B = **600**

Veh/Hr Minor: War 1A = **120** War 1B = **60**

Volume and Pedestrian Data

Hours data meets 80% requirements of Warrant 1A (8 needed) **2** Met? **No**
 Hours data meets 80% requirements of Warrant 1B (8 needed) **11** Met? **Yes**
 Hours data meets 80% requirements of Warrant 4 (4,1 needed) **0 0** Met? **No**

Major Road
SR-44

Minor Road
Hosford Road

Warrant 1A Details

Time	Major NB	+	Major SB	=	Total	Minor EB	Minor WB	Met1A?
07:00 - 08:00	315	+	422	=	737	21	176	Yes
08:00 - 09:00	277	+	435	=	712	41	125	Yes
15:15 - 16:15	561	+	590	=	1151	29	93	No
15:00 - 16:00	575	+	566	=	1141	23	85	No
15:30 - 16:30	524	+	592	=	1116	32	85	No
15:45 - 16:45	534	+	570	=	1104	29	90	No
16:30 - 17:30	551	+	548	=	1099	22	92	No
16:15 - 17:15	539	+	535	=	1074	24	99	No
16:45 - 17:45	506	+	560	=	1066	23	95	No
16:00 - 17:00	501	+	555	=	1056	26	103	No
14:45 - 15:45	508	+	501	=	1009	23	94	No
17:00 - 18:00	480	+	528	=	1008	25	78	No

Warrant 1B Details

Time	Major NB	+	Major SB	=	Total	Minor EB	Minor WB	Met1B?
15:30 - 16:30	524	+	592	=	1116	32	85	Yes
16:30 - 17:30	551	+	548	=	1099	22	92	Yes
14:30 - 15:30	478	+	509	=	987	21	104	Yes
13:30 - 14:30	403	+	459	=	862	16	75	Yes
17:30 - 18:30	367	+	475	=	842	18	65	Yes
11:00 - 12:00	381	+	427	=	808	19	65	Yes
12:30 - 13:30	373	+	416	=	789	15	64	Yes
10:00 - 11:00	393	+	384	=	777	11	61	Yes
07:00 - 08:00	315	+	422	=	737	21	176	Yes
08:00 - 09:00	277	+	435	=	712	41	125	Yes
09:00 - 10:00	314	+	357	=	671	19	88	Yes
12:00 - 13:00	394	+	424	=	818	18	56	No

GPD Group

5595 Transportation Boulevard, Garfield Heights, Ohio 44125

Study Name: 6- SR-44 & Hosford Road

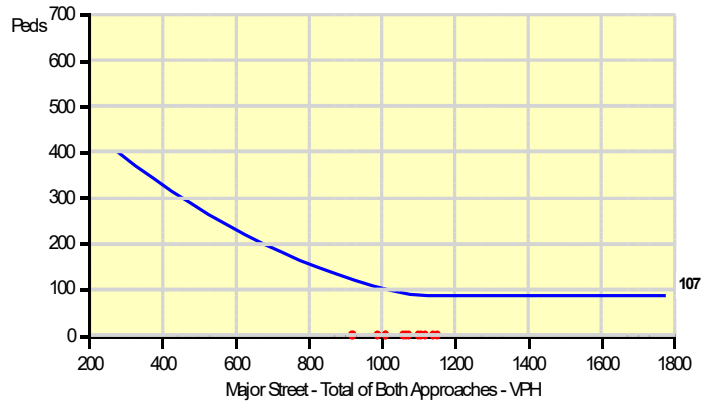
Study Date : 1/17/2022

Warrant 7 - Crash Experience

Major Road
SR-44

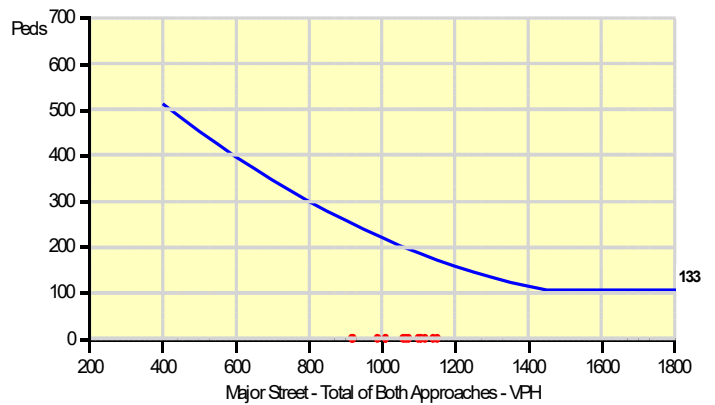
80% of Warrant 4 - 4 Hr Pedestrian Data

Time	NB Vehs	+	SB Vehs	=	Total Vehs	NB Peds	+	SB Peds	=	Ped Total	Met?
15:15 - 16:15	561	+	590	=	1151	0	+	0	=	0	No
15:00 - 16:00	575	+	566	=	1141	0	+	0	=	0	No
15:30 - 16:30	524	+	592	=	1116	0	+	0	=	0	No
15:45 - 16:45	534	+	570	=	1104	0	+	0	=	0	No
16:30 - 17:30	551	+	548	=	1099	0	+	0	=	0	No
16:15 - 17:15	539	+	535	=	1074	0	+	0	=	0	No
16:45 - 17:45	506	+	560	=	1066	0	+	0	=	0	No
16:00 - 17:00	501	+	555	=	1056	0	+	0	=	0	No
14:45 - 15:45	508	+	501	=	1009	0	+	0	=	0	No
17:00 - 18:00	480	+	528	=	1008	0	+	0	=	0	No
14:30 - 15:30	478	+	509	=	987	0	+	0	=	0	No
17:15 - 18:15	416	+	503	=	919	0	+	0	=	0	No



80% of Warrant 4 - 1 Hr Pedestrian Data

Time	NB Vehs	+	SB Vehs	=	Total Vehs	NB Peds	+	SB Peds	=	Ped Total	Met?
15:15 - 16:15	561	+	590	=	1151	0	+	0	=	0	No
15:00 - 16:00	575	+	566	=	1141	0	+	0	=	0	No
15:30 - 16:30	524	+	592	=	1116	0	+	0	=	0	No
15:45 - 16:45	534	+	570	=	1104	0	+	0	=	0	No
16:30 - 17:30	551	+	548	=	1099	0	+	0	=	0	No
16:15 - 17:15	539	+	535	=	1074	0	+	0	=	0	No
16:45 - 17:45	506	+	560	=	1066	0	+	0	=	0	No
16:00 - 17:00	501	+	555	=	1056	0	+	0	=	0	No
14:45 - 15:45	508	+	501	=	1009	0	+	0	=	0	No
17:00 - 18:00	480	+	528	=	1008	0	+	0	=	0	No
14:30 - 15:30	478	+	509	=	987	0	+	0	=	0	No
17:15 - 18:15	416	+	503	=	919	0	+	0	=	0	No



GPD Group

520 South Main Street, Suite 2531, Akron, OH 44311

(330) 572-2100

Study Name: 6- SR-44 & Hosford Road 70%

Study Date : 1/17/2022

Signal Warrants - Summary

Major Street Approaches

Northbound: SR-44

Number of Lanes : 1

Total Approach Volume: 4,716

Southbound: SR-44

Number of Lanes :1

Total Approach Volume: 5,373

Minor Street Approaches

Eastbound: Hosford Road

Number of Lanes :1

Total Approach Volume: 247

Westbound: Hosford Road

Number of Lanes :1

Total Approach Volume: 1,067

Warrant Summary (Rural Values Apply)

Warrant 1 - Eight Hour Vehicular Volumes	Satisfied
Warrant 1A - Minimum Vehicular Volume	Not Satisfied
Required volumes reached for 3 hours, 8 are needed	
Warrant 1B - Interruption of Continuous Traffic	Satisfied
Required volumes reached for 12 hours, 8 are needed	
Warrant 1C - Combination of Warrants	Not Satisfied
Required 1A volumes reached for 6 hours, 8 are needed	
Required 1B volumes reached for 12 hours, 8 are needed	
Warrant 2 - Four Hour Volumes	Satisfied
Number of hours (11) volumes exceed minimum >= minimum required (4).	
Warrant 3 - Peak Hour	Satisfied
Warrant 3A - Peak Hour Delay	Not Satisfied
Total approach volumes and delays on minor street do not exceed minimums for any one hour period.	
Warrant 3B - Peak Hour Volumes	Satisfied
Volumes exceed minimums for at least one hour period.	
Warrant 4 - Pedestrian Volumes	Not Evaluated
Warrant 5 - School Crossing	Not Evaluated
Warrant 6 - Coordinated Signal System	Not Evaluated
Warrant 7 - Crash Experience	Not Evaluated
Warrant 8 - Roadway Network	Not Evaluated
Warrant 9 - Intersection Near a Grade Crossing	Not Evaluated

GPD Group

520 South Main Street, Suite 2531, Akron, OH 44311
(330) 572-2100

Study Name: 6- SR-44 & Hosford Road 70%

Study Date : 1/17/2022

Warrant 1A - Minimum Volumes

Description

Intended for sites where the volume of intersecting traffic is the principal reason for consideration of a signal installation.

Summary

Only 3 one hour periods meet minimums.
Warrant is NOT met.

Site Data Required

Rural Settings Apply = **True**
Number of Major Lanes = **1**
Number of Minor Lanes = **1**

Volume Requirements

Rural Factor of 70 % applied
Veh/Hr Major = **350**

Veh/Hr Minor = **105**

Time	Major Road SR-44				Total	Minor Road Hosford Road		Met?
	Major NB	+	Major SB	=		Minor EB	Minor WB	
07:45 - 08:45	284	+	451	=	735	34	153	Yes
08:45 - 09:45	304	+	382	=	686	29	107	Yes
06:45 - 07:45	238	+	284	=	522	15	118	Yes
15:15 - 16:15	561	+	590	=	1151	29	93	No
15:00 - 16:00	575	+	566	=	1141	23	85	No
15:30 - 16:30	524	+	592	=	1116	32	85	No
15:45 - 16:45	534	+	570	=	1104	29	90	No
16:30 - 17:30	551	+	548	=	1099	22	92	No
16:15 - 17:15	539	+	535	=	1074	24	99	No
16:45 - 17:45	506	+	560	=	1066	23	95	No
16:00 - 17:00	501	+	555	=	1056	26	103	No
14:45 - 15:45	508	+	501	=	1009	23	94	No
17:00 - 18:00	480	+	528	=	1008	25	78	No
14:30 - 15:30	478	+	509	=	987	21	104	No
17:15 - 18:15	416	+	503	=	919	20	62	No
14:15 - 15:15	425	+	492	=	917	22	96	No
13:45 - 14:45	406	+	505	=	911	20	78	No
14:00 - 15:00	395	+	483	=	878	22	93	No
13:30 - 14:30	403	+	459	=	862	16	75	No
13:15 - 14:15	397	+	450	=	847	15	74	No
17:30 - 18:30	367	+	475	=	842	18	65	No
11:15 - 12:15	407	+	424	=	831	21	64	No
10:30 - 11:30	401	+	429	=	830	13	59	No
12:00 - 13:00	394	+	424	=	818	18	56	No
10:45 - 11:45	397		420		817	16	55	No

GPD Group

520 South Main Street, Suite 2531, Akron, OH 44311

(330) 572-2100

Study Name: 6- SR-44 & Hosford Road 70%

Study Date : 1/17/2022

Warrant 1B - Interruption of Continuous Traffic

Description

Intended for sites where the volume of the major street is so heavy that traffic on the minor street suffers excessive delay or hazard.

Summary

12 one hour periods meet minimums.
Warrant IS met.

Site Data Required

Rural Settings Apply = **True**
 Number of Major Lanes = **1**
 Number of Minor Lanes = **1**

Volume Requirements

Rural Factor of 70 % applied
 Veh/Hr Major = **525**
 Veh/Hr Minor = **52**

Time	Major Road SR-44				Total	Minor Road Hosford Road		Met?
	Major NB	+	Major SB	=		Minor EB	Minor WB	
15:00 - 16:00	575	+	566	=	1141	23	85	Yes
16:00 - 17:00	501	+	555	=	1056	26	103	Yes
17:00 - 18:00	480	+	528	=	1008	25	78	Yes
14:00 - 15:00	395	+	483	=	878	22	93	Yes
12:00 - 13:00	394	+	424	=	818	18	56	Yes
11:00 - 12:00	381	+	427	=	808	19	65	Yes
13:00 - 14:00	378	+	425	=	803	13	71	Yes
10:00 - 11:00	393	+	384	=	777	11	61	Yes
07:00 - 08:00	315	+	422	=	737	21	176	Yes
08:00 - 09:00	277	+	435	=	712	41	125	Yes
18:00 - 19:00	313	+	367	=	680	9	66	Yes
09:00 - 10:00	314	+	357	=	671	19	88	Yes
06:45 - 07:45	238	+	284	=	522	15	118	No
06:30 - 07:30	141	+	179	=	320	9	61	No
06:15 - 07:15	52	+	78	=	130	5	27	No
00:30 - 01:30	0	+	0	=	0	0	0	No
22:15 - 23:15	0	+	0	=	0	0	0	No
21:45 - 22:45	0	+	0	=	0	0	0	No
22:00 - 23:00	0	+	0	=	0	0	0	No
00:00 - 01:00	0	+	0	=	0	0	0	No
22:30 - 23:30	0	+	0	=	0	0	0	No
22:45 - 23:45	0	+	0	=	0	0	0	No
23:30 - 00:30	0	+	0	=	0	0	0	No
00:15 - 01:15	0	+	0	=	0	0	0	No
23:45 - 00:45	0		0		0	0	0	No

GPD Group

520 South Main Street, Suite 2531, Akron, OH 44311

(330) 572-2100

Study Name: 6- SR-44 & Hosford Road 70%

Study Date : 1/17/2022

Warrant 1C Combination of Warrants

Description

Intended for sites where the traffic volumes don't meet individual warrants but where Warrants 1A and 1B are both met to 80% of their stated values.

Summary

Only 6 hours meet 1A minimums.
12 hours meet 1B minimums.
Warrant is NOT met.

Site Data Required

Rural Settings Apply = **True**
Number of Major Lanes = **1**
Number of Minor Lanes = **1**

Volume Requirements

Rural Factor of 70% applied
Warrant 1A 1B
Veh/Hr Major = **280 420**

Veh/Hr Minor = **84 42**

Major Road
SR-44

Minor Road
Hosford Road

Time	Major NB	+	Major SB	=	Total	Minor EB	Minor WB	Met1A?
15:00 - 16:00	575	+	566	=	1141	23	85	Yes
16:00 - 17:00	501	+	555	=	1056	26	103	Yes
14:00 - 15:00	395	+	483	=	878	22	93	Yes
07:45 - 08:45	284	+	451	=	735	34	153	Yes
08:45 - 09:45	304	+	382	=	686	29	107	Yes
06:45 - 07:45	238	+	284	=	522	15	118	Yes
17:00 - 18:00	480	+	528	=	1008	25	78	No
17:15 - 18:15	416	+	503	=	919	20	62	No
13:45 - 14:45	406	+	505	=	911	20	78	No
13:30 - 14:30	403	+	459	=	862	16	75	No
13:15 - 14:15	397	+	450	=	847	15	74	No
17:30 - 18:30	367	+	475	=	842	18	65	No

Time	Major NB	+	Major SB	=	Total	Minor EB	Minor WB	Met1B?
15:45 - 16:45	534	+	570	=	1104	29	90	Yes
16:45 - 17:45	506	+	560	=	1066	23	95	Yes
14:45 - 15:45	508	+	501	=	1009	23	94	Yes
13:45 - 14:45	406	+	505	=	911	20	78	Yes
10:45 - 11:45	397	+	420	=	817	16	55	Yes
11:45 - 12:45	402	+	413	=	815	22	66	Yes
12:45 - 13:45	374	+	413	=	787	11	70	Yes
17:45 - 18:45	338	+	418	=	756	10	74	Yes
09:45 - 10:45	352	+	384	=	736	11	59	Yes
07:45 - 08:45	284	+	451	=	735	34	153	Yes
08:45 - 09:45	304	+	382	=	686	29	107	Yes
06:45 - 07:45	238	+	284	=	522	15	118	Yes

GPD Group

520 South Main Street, Suite 2531, Akron, OH 44311
(330) 572-2100

Study Name: 6- SR-44 & Hosford Road 70%

Study Date : 1/17/2022

Warrant 2 - Four Hour Volumes

Description

Intended for sites where the volume of intersecting traffic during any four hours of the day is the principal reason for consideration of a signal installation.

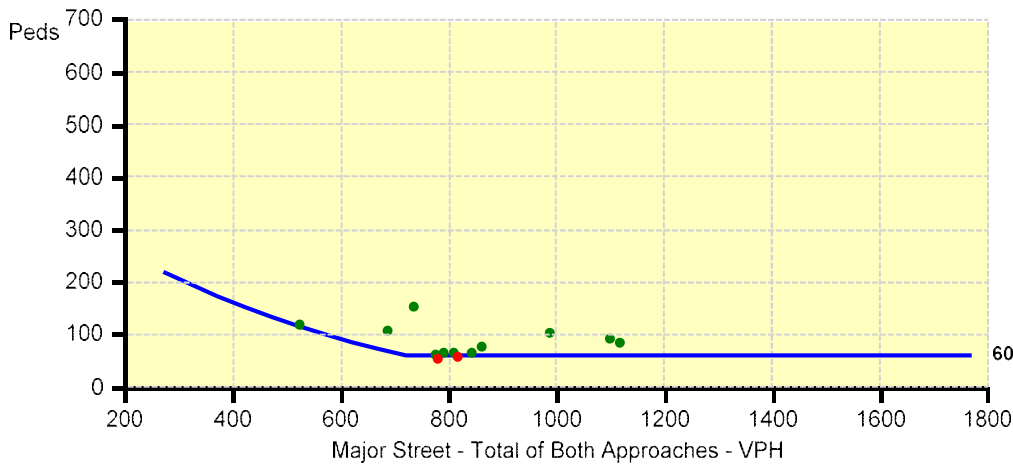
Summary

11 one hour periods meet minimums.
Warrant IS met.

Site Data Required

Rural Settings Apply = **True**
Number of Major Lanes = **1**
Number of Minor Lanes = **1**

Time	Major Road SR-44				Total	Minor Road Hosford Road		Met?
	Major NB	+	Major SB	=		Minor EB	Minor WB	
15:30 - 16:30	524	+	592	=	1116	32	85	Yes
16:30 - 17:30	551	+	548	=	1099	22	92	Yes
14:30 - 15:30	478	+	509	=	987	21	104	Yes
13:30 - 14:30	403	+	459	=	862	16	75	Yes
17:30 - 18:30	367	+	475	=	842	18	65	Yes
11:00 - 12:00	381	+	427	=	808	19	65	Yes
12:30 - 13:30	373	+	416	=	789	15	64	Yes
10:00 - 11:00	393	+	384	=	777	11	61	Yes
07:45 - 08:45	284	+	451	=	735	34	153	Yes
08:45 - 09:45	304	+	382	=	686	29	107	Yes
06:45 - 07:45	238	+	284	=	522	15	118	Yes
							56	No



GPD Group

520 South Main Street, Suite 2531, Akron, OH 44311

(330) 572-2100

Study Name: 6- SR-44 & Hosford Road 70%

Study Date : 1/17/2022

Warrant 3A - Peak Hour Delay

Description

Intended for sites where for one hour of the day minor street traffic suffers undue traffic delay entering or crossing the major street.

Summary

41 one hour periods meet minimums.
Warrant is NOT met.

Site Data Required

Number of Minor Lanes = 1

Volume and Delay Requirements

Veh/Hr All Approaches = **800**
Veh/Hr Minor = **100**
Total Delay (Veh-Hrs) = **4**

Time	Major Road SR-44			Minor Road Hosford Road			Warrant Met?		
	Total of All Approaches	Met?	Minor EB	Delay EB	Met?	Minor WB		Delay WB	Met?
15:15 - 16:15	1273	Yes	29	0.0	---	93	0.0	---	No
15:00 - 16:00	1249	Yes	23	0.0	---	85	0.0	---	No
15:30 - 16:30	1233	Yes	32	0.0	---	85	0.0	---	No
15:45 - 16:45	1223	Yes	29	0.0	---	90	0.0	---	No
16:30 - 17:30	1213	Yes	22	0.0	---	92	0.0	---	No
16:15 - 17:15	1197	Yes	24	0.0	---	99	0.0	---	No
16:00 - 17:00	1185	Yes	26	0.0	---	103	0.0	---	No
16:45 - 17:45	1184	Yes	23	0.0	---	95	0.0	---	No
14:45 - 15:45	1126	Yes	23	0.0	---	94	0.0	---	No
14:30 - 15:30	1112	Yes	21	0.0	---	104	0.0	---	No
17:00 - 18:00	1111	Yes	25	0.0	---	78	0.0	---	No
14:15 - 15:15	1035	Yes	22	0.0	---	96	0.0	---	No
13:45 - 14:45	1009	Yes	20	0.0	---	78	0.0	---	No
17:15 - 18:15	1001	Yes	20	0.0	---	62	0.0	---	No
14:00 - 15:00	993	Yes	22	0.0	---	93	0.0	---	No
07:15 - 08:15	990	Yes	23	0.0	---	191	0.0	---	No
07:30 - 08:30	972	Yes	29	0.0	---	180	0.0	---	No
13:30 - 14:30	953	Yes	16	0.0	---	75	0.0	---	No
13:15 - 14:15	936	Yes	15	0.0	---	74	0.0	---	No
07:00 - 08:00	934	Yes	21	0.0	---	176	0.0	---	No
17:30 - 18:30	925	Yes	18	0.0	---	65	0.0	---	No
07:45 - 08:45	922	Yes	34	0.0	---	153	0.0	---	No
11:15 - 12:15	916	Yes	21	0.0	---	64	0.0	---	No
11:45 - 12:45	903	Yes	22	0.0	---	66	0.0	---	No
10:30 - 11:30	902	Yes	13	0.0	---	59	0.0	---	No

GPD Group

520 South Main Street, Suite 2531, Akron, OH 44311
(330) 572-2100

Study Name: 6- SR-44 & Hosford Road 70%

Study Date : 1/17/2022

Warrant 3B - Peak Hour Volumes

Description

Intended for sites where the volume of intersecting traffic during one hour of the day is the principal reason for consideration of a signal installation.

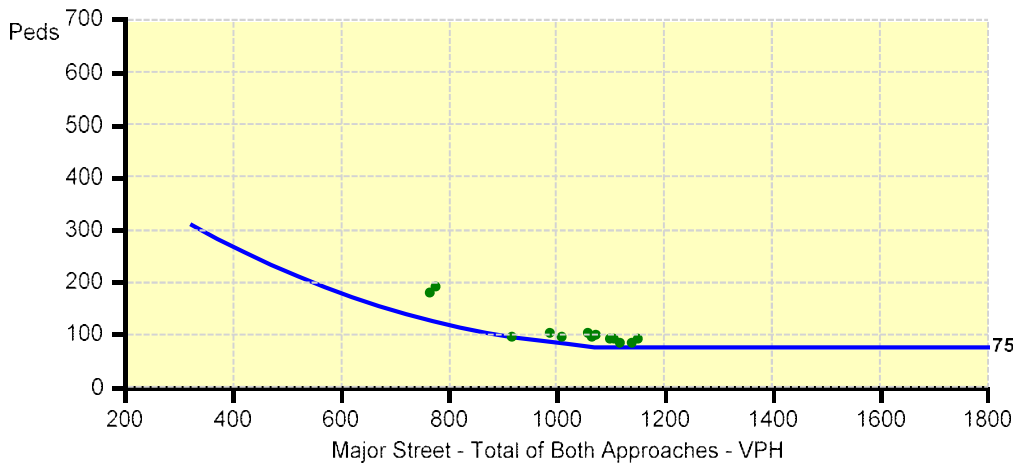
Summary

15 one hour periods meet minimums.
Warrant IS met.

Site Data Required

Rural Settings Apply = **True**
Number of Major Lanes = **1**
Number of Minor Lanes = **1**

Time	Major Road SR-44				Total	Minor Road Hosford Road		Met?
	Major NB	+	Major SB	=		Minor EB	Minor WB	
15:15 - 16:15	561	+	590	=	1151	29	93	Yes
15:00 - 16:00	575	+	566	=	1141	23	85	Yes
15:30 - 16:30	524	+	592	=	1116	32	85	Yes
15:45 - 16:45	534	+	570	=	1104	29	90	Yes
16:30 - 17:30	551	+	548	=	1099	22	92	Yes
16:15 - 17:15	539	+	535	=	1074	24	99	Yes
16:45 - 17:45	506	+	560	=	1066	23	95	Yes
16:00 - 17:00	501	+	555	=	1056	26	103	Yes
14:45 - 15:45	508	+	501	=	1009	23	94	Yes
14:30 - 15:30	478	+	509	=	987	21	104	Yes
14:15 - 15:15	425	+	492	=	917	22	96	Yes
							191	Yes

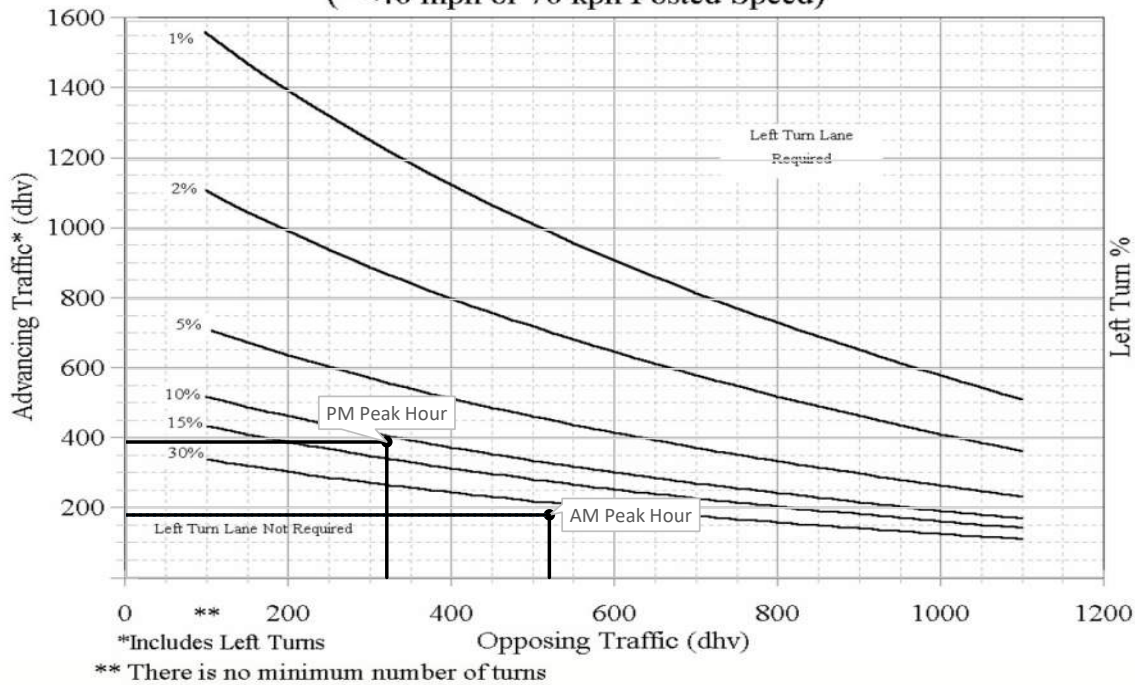


APPENDIX E
AUXILIARY TURN LANE WARRANT ANALYSIS

DRAFT

Girdled Road / Crile Road Intersection
Eastbound Left Turn Lane ▲

2-Lane Highway Left Turn Lane Warrant
(= \leq 40 mph or 70 kph Posted Speed)



Design Year 2047 'Build' Conditions

AM Peak Hour:

Advancing Traffic = 180 Veh
Left Turn Traffic = 40 Veh
Opposing Traffic = 520 Veh
Left Turn % = 22.2 %

PM Peak Hour:

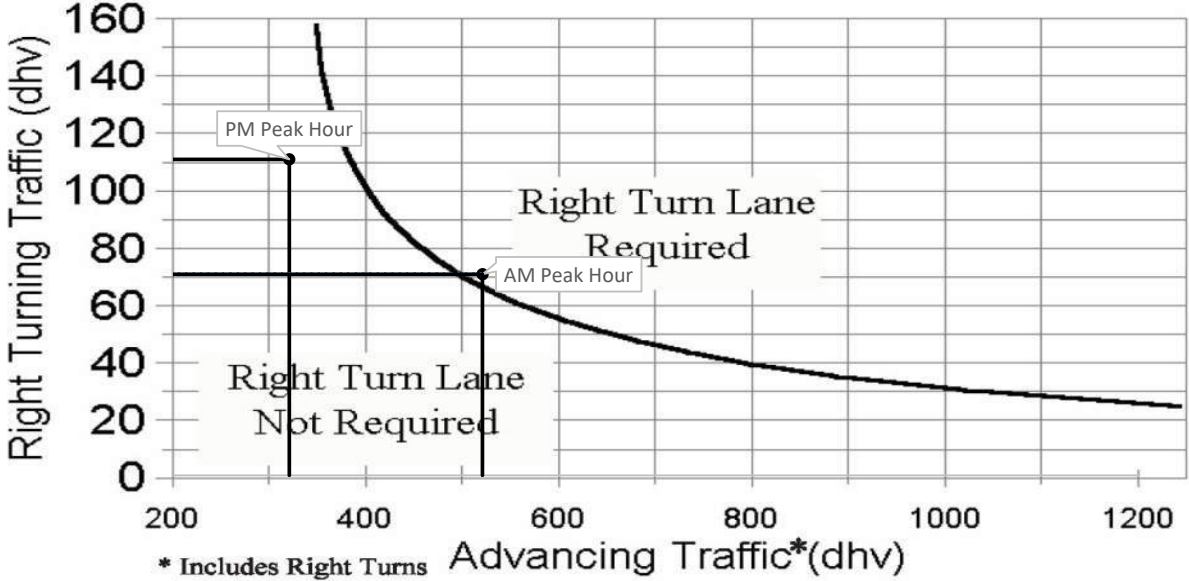
Advancing Traffic = 390 Veh
Left Turn Traffic = 90 Veh
Opposing Traffic = 320 Veh
Left Turn % = 23.1 %

Turn Lane Warranted



Girdled Road / Crile Road Intersection
Westbound Right Turn Lane

2-Lane Highway Right Turn Lane Warrant
=< 40 mph or 70 kph Posted Speed



Design Year 2047 'Build' Conditions

AM Peak Hour:
Advancing Traffic = 520 Veh
Right Turn Traffic = 70 Veh

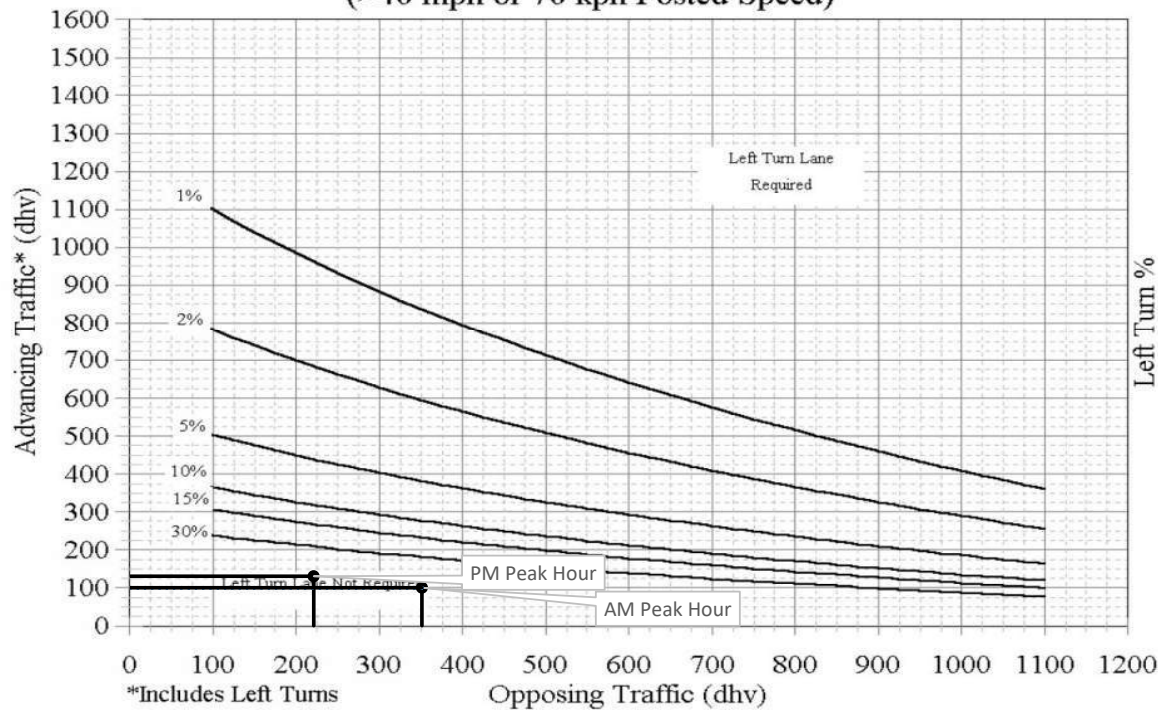
PM Peak Hour:
Advancing Traffic = 320 Veh
Right Turn Traffic = 110 Veh

Turn Lane Warranted



SR-44 / Auburn Road Intersection
Eastbound Left Turn Lane

2-Lane Highway Left Turn Lane Warrant
(>40 mph or 70 kph Posted Speed)



Design Year 2047 'Build' Conditions

AM Peak Hour:

Advancing Traffic = 100 Veh
Left Turn Traffic = 40 Veh
Opposing Traffic = 350 Veh
Left Turn % = 40%

PM Peak Hour:

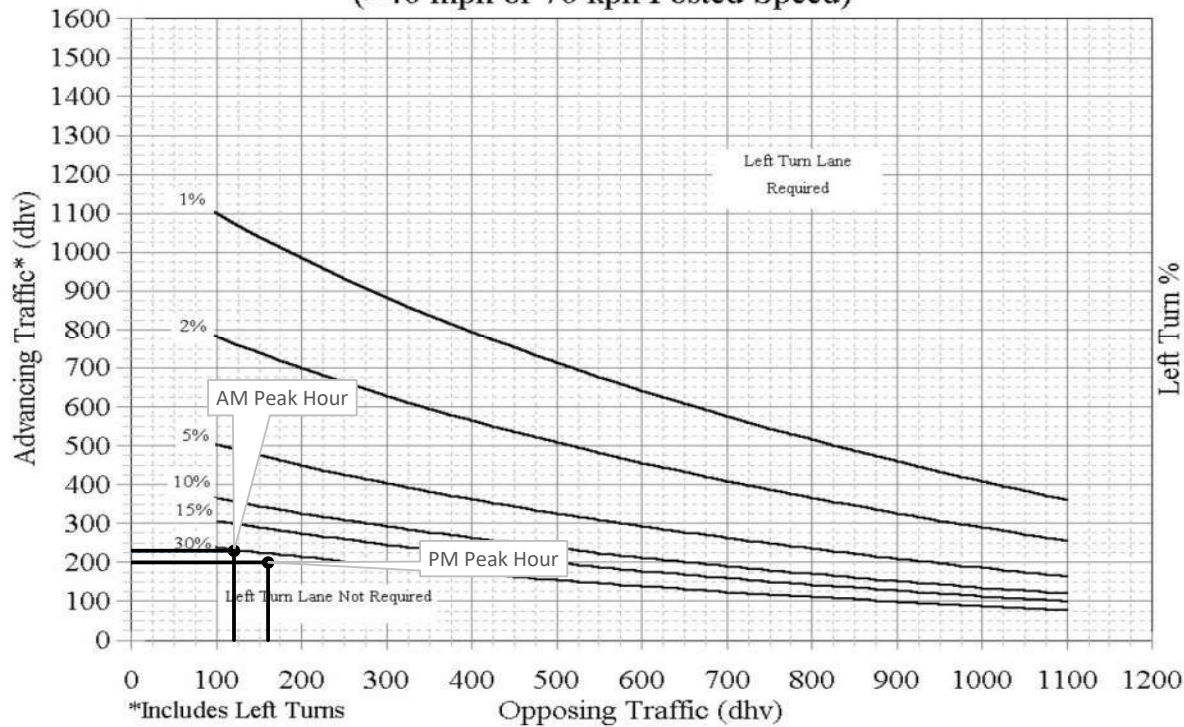
Advancing Traffic = 130 Veh
Left Turn Traffic = 20 Veh
Opposing Traffic = 220 Veh
Left Turn % = 15.4%

Turn Lane NOT Warranted



SR-44 / Auburn Road Intersection
Westbound Left Turn Lane

2-Lane Highway Left Turn Lane Warrant
(>40 mph or 70 kph Posted Speed)



Design Year 2047 'Build' Conditions

AM Peak Hour:

Advancing Traffic = 230 Veh
Left Turn Traffic = 180 Veh
Opposing Traffic = 120 Veh
Left Turn % = 78.3%

PM Peak Hour:

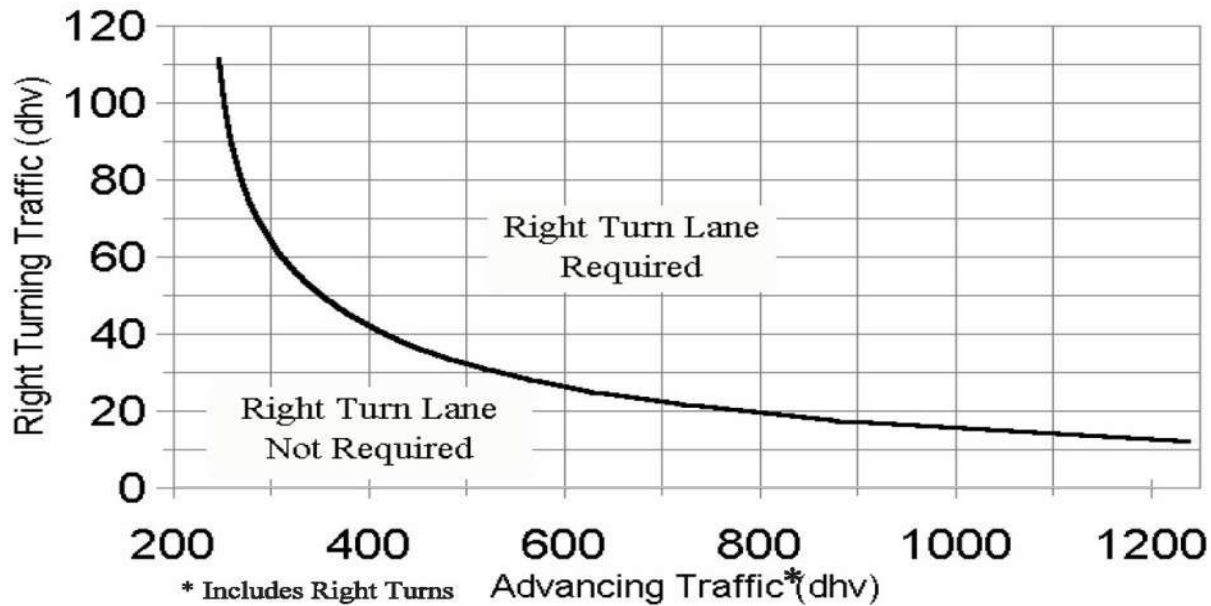
Advancing Traffic = 200 Veh
Left Turn Traffic = 120 Veh
Opposing Traffic = 160 Veh
Left Turn % = 60%

Turn Lane Warranted



Girdled Road / Auburn Road Intersection
Eastbound Right Turn Lane

2-Lane Highway Right Turn Lane Warrant
> 40 mph or 70 kph Posted Speed



Design Year 2047 'Build' Conditions

AM Peak Hour:

Advancing Traffic = 120 Veh

Right Turn Traffic = 20 Veh

PM Peak Hour:

Advancing Traffic = 160 Veh

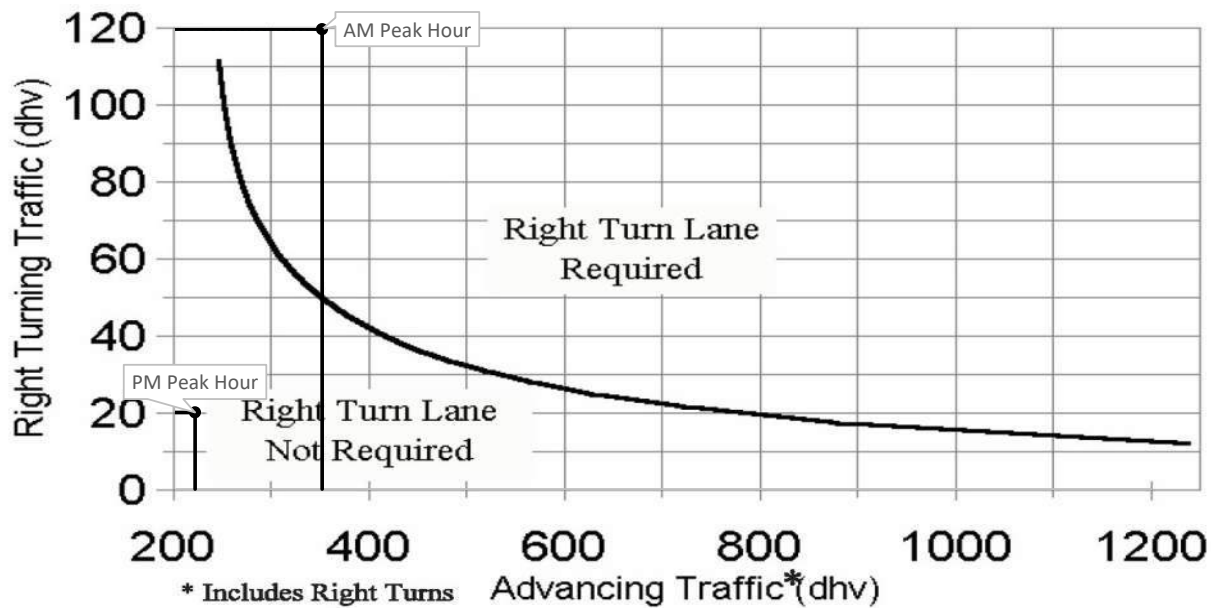
Right Turn Traffic = 30 Veh

Turn Lane NOT Warranted



Girdled Road / Auburn Road Intersection
Westbound Right Turn Lane

2-Lane Highway Right Turn Lane Warrant
> 40 mph or 70 kph Posted Speed



Design Year 2047 'Build' Conditions

AM Peak Hour:

Advancing Traffic = 350 Veh

Right Turn Traffic = 120 Veh

PM Peak Hour:

Advancing Traffic = 220 Veh

Right Turn Traffic = 20 Veh

Turn Lane Warranted



SR-44 / Colburn Road Intersection
Northbound Left Turn Lane

Design Year 2047 'Build' Conditions

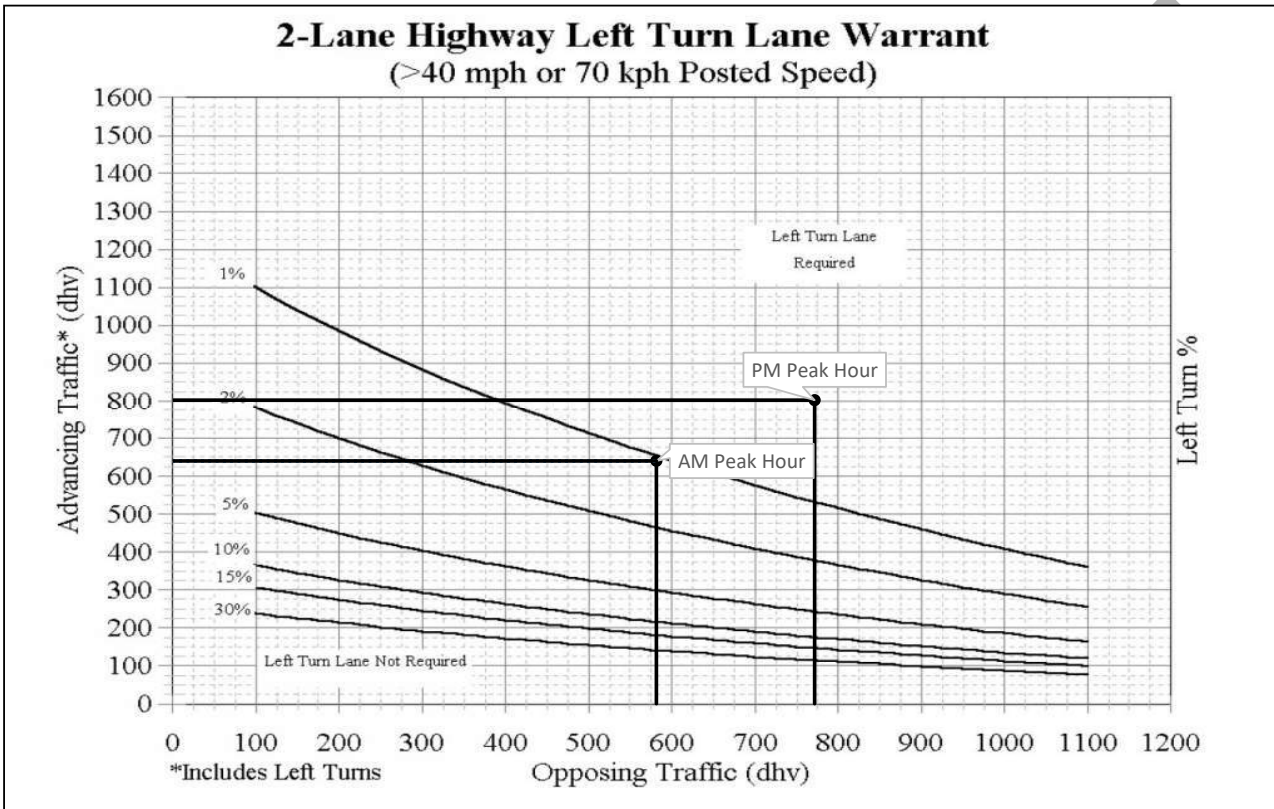
AM Peak Hour:

Advancing Traffic = 640 Veh
Left Turn Traffic = 10 Veh
Opposing Traffic = 580 Veh
Left Turn % = 1.6%

PM Peak Hour:

Advancing Traffic = 800 Veh
Left Turn Traffic = 10 Veh
Opposing Traffic = 770 Veh
Left Turn % = 1.3%

Turn Lane Warranted



SR-44 / Colburn Road Intersection
Southbound Left Turn Lane

Design Year 2047 'Build' Conditions

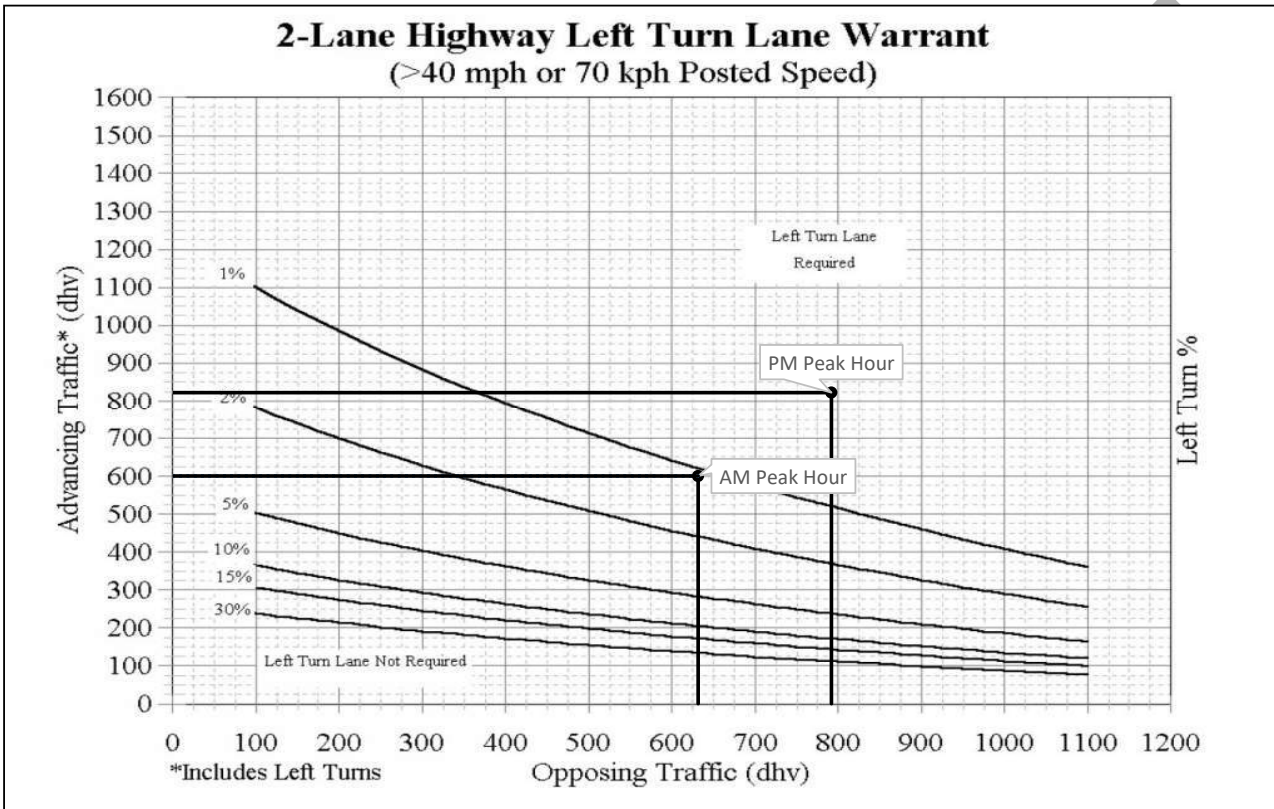
AM Peak Hour:

Advancing Traffic = 600 Veh
Left Turn Traffic = 20 Veh
Opposing Traffic = 630 Veh
Left Turn % = 3.3%

PM Peak Hour:

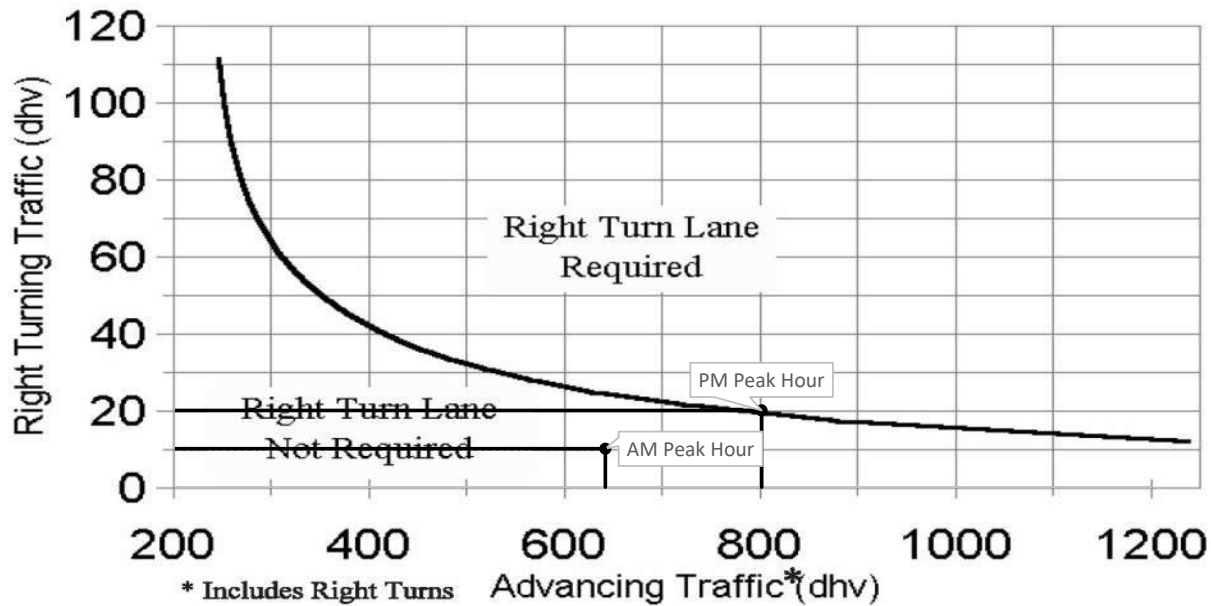
Advancing Traffic = 820 Veh
Left Turn Traffic = 50 Veh
Opposing Traffic = 790 Veh
Left Turn % = 6.1%

Turn Lane Warranted



SR-44 / Colburn Road Intersection
Northbound Right Turn Lane

2-Lane Highway Right Turn Lane Warrant
> 40 mph or 70 kph Posted Speed



Design Year 2047 'Build' Conditions

AM Peak Hour:

Advancing Traffic = 640 Veh

Right Turn Traffic = 10 Veh

PM Peak Hour:

Advancing Traffic = 800 Veh

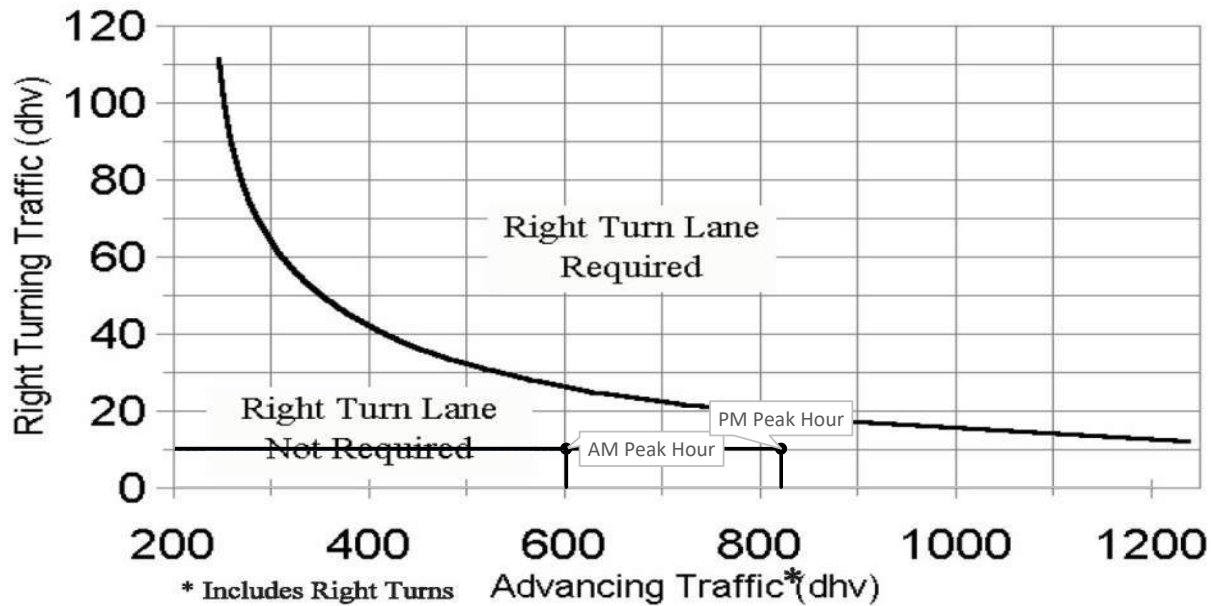
Right Turn Traffic = 20 Veh

Turn Lane NOT Warranted



SR-44 / Colburn Road Intersection
Northbound Right Turn Lane

2-Lane Highway Right Turn Lane Warrant
> 40 mph or 70 kph Posted Speed



Design Year 2047 'Build' Conditions

AM Peak Hour:
Advancing Traffic = 600 Veh
Right Turn Traffic = 10 Veh

PM Peak Hour:
Advancing Traffic = 820 Veh
Right Turn Traffic = 10 Veh

Turn Lane NOT Warranted



SR-44 / Clark Road Intersection
Northbound Left Turn Lane

Design Year 2047 'Build' Conditions

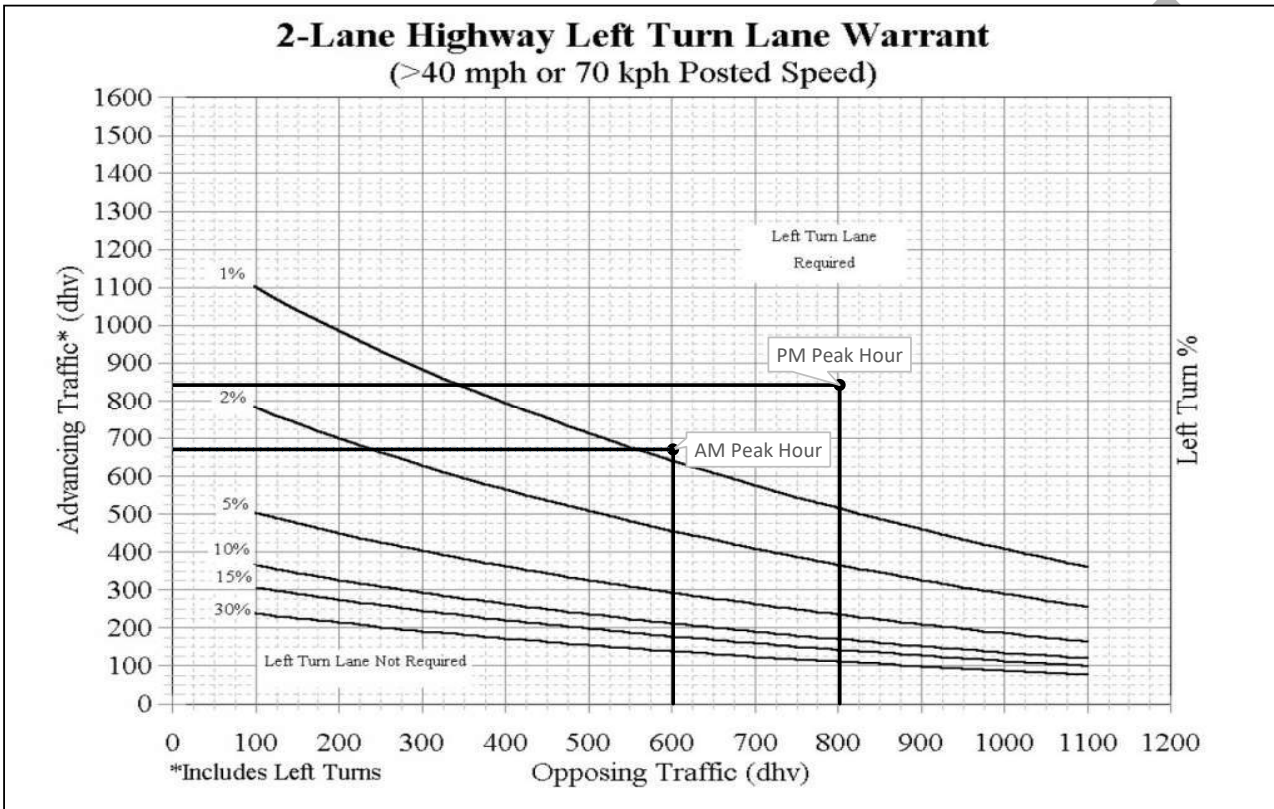
AM Peak Hour:

Advancing Traffic = 670 Veh
Left Turn Traffic = 10 Veh
Opposing Traffic = 600 Veh
Left Turn % = 1.5%

PM Peak Hour:

Advancing Traffic = 840 Veh
Left Turn Traffic = 20 Veh
Opposing Traffic = 800 Veh
Left Turn % = 2.4%

Turn Lane Warranted



SR-44 / Clark Road Intersection
Southbound Left Turn Lane

Design Year 2047 'Build' Conditions

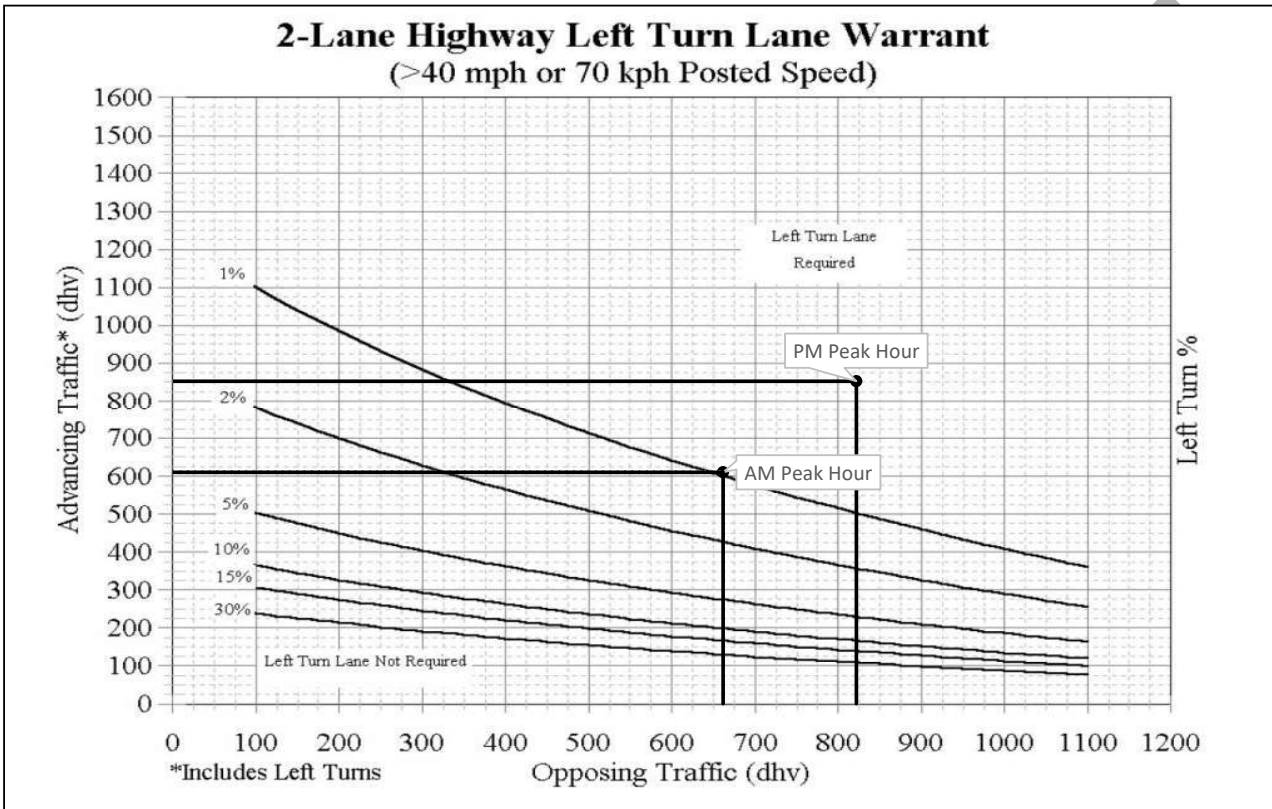
AM Peak Hour:

Advancing Traffic = 610 Veh
Left Turn Traffic = 10 Veh
Opposing Traffic = 660 Veh
Left Turn % = 1.6%

PM Peak Hour:

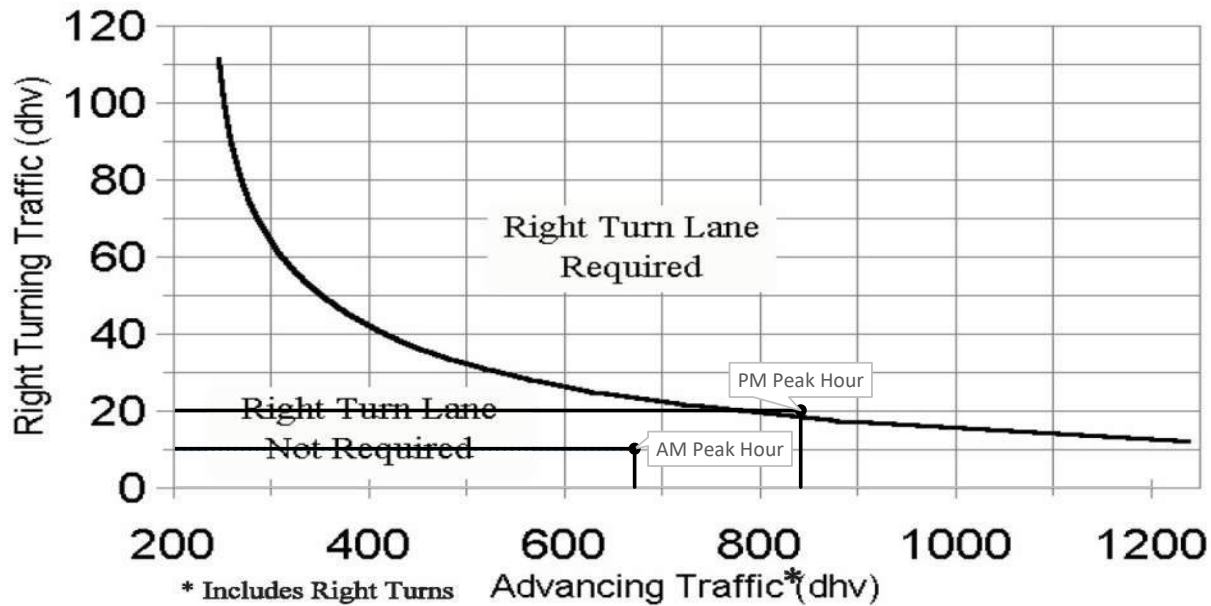
Advancing Traffic = 850 Veh
Left Turn Traffic = 50 Veh
Opposing Traffic = 820 Veh
Left Turn % = 5.9%

Turn Lane Warranted



SR-44 / Clark Road Intersection
Northbound Right Turn Lane

2-Lane Highway Right Turn Lane Warrant
> 40 mph or 70 kph Posted Speed



Design Year 2047 'Build' Conditions

AM Peak Hour:

Advancing Traffic = 670 Veh

Right Turn Traffic = 10 Veh

PM Peak Hour:

Advancing Traffic = 840 Veh

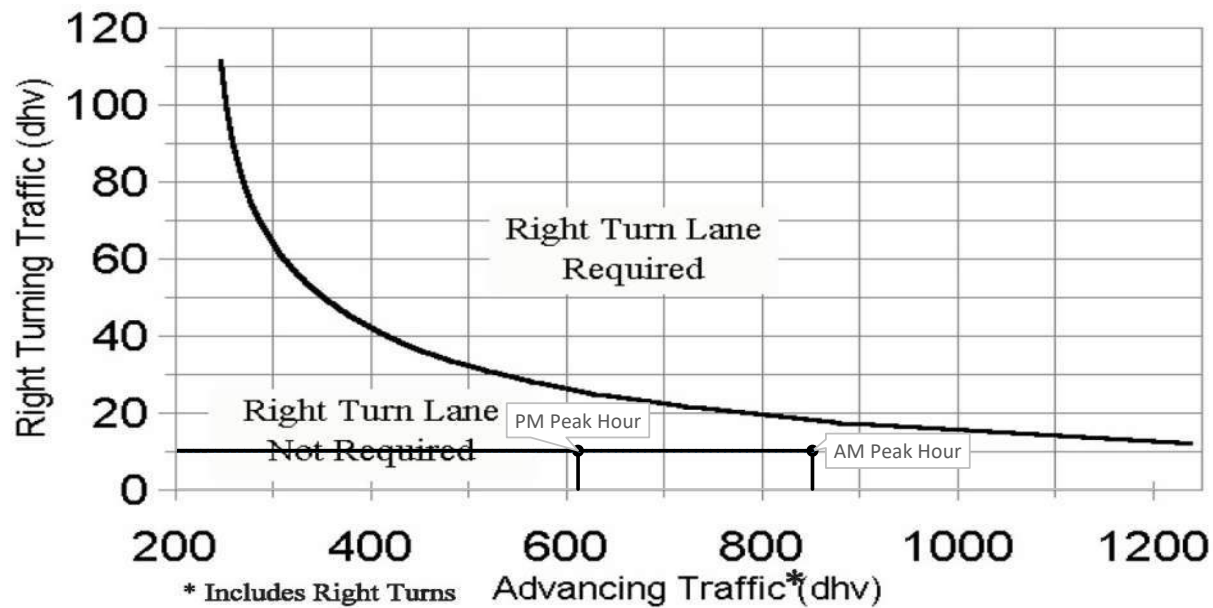
Right Turn Traffic = 20 Veh

Turn Lane NOT Warranted



SR-44 / Clark Road Intersection
Southbound Right Turn Lane

2-Lane Highway Right Turn Lane Warrant
> 40 mph or 70 kph Posted Speed



Design Year 2047 'Build' Conditions

AM Peak Hour:
Advancing Traffic = 850 Veh
Right Turn Traffic = 10 Veh

PM Peak Hour:
Advancing Traffic = 610 Veh
Right Turn Traffic = 10 Veh

Turn Lane NOT Warranted



SR-44 / Hosford Road Intersection
Northbound Left Turn Lane

Opening Year 2026 'Build' Conditions

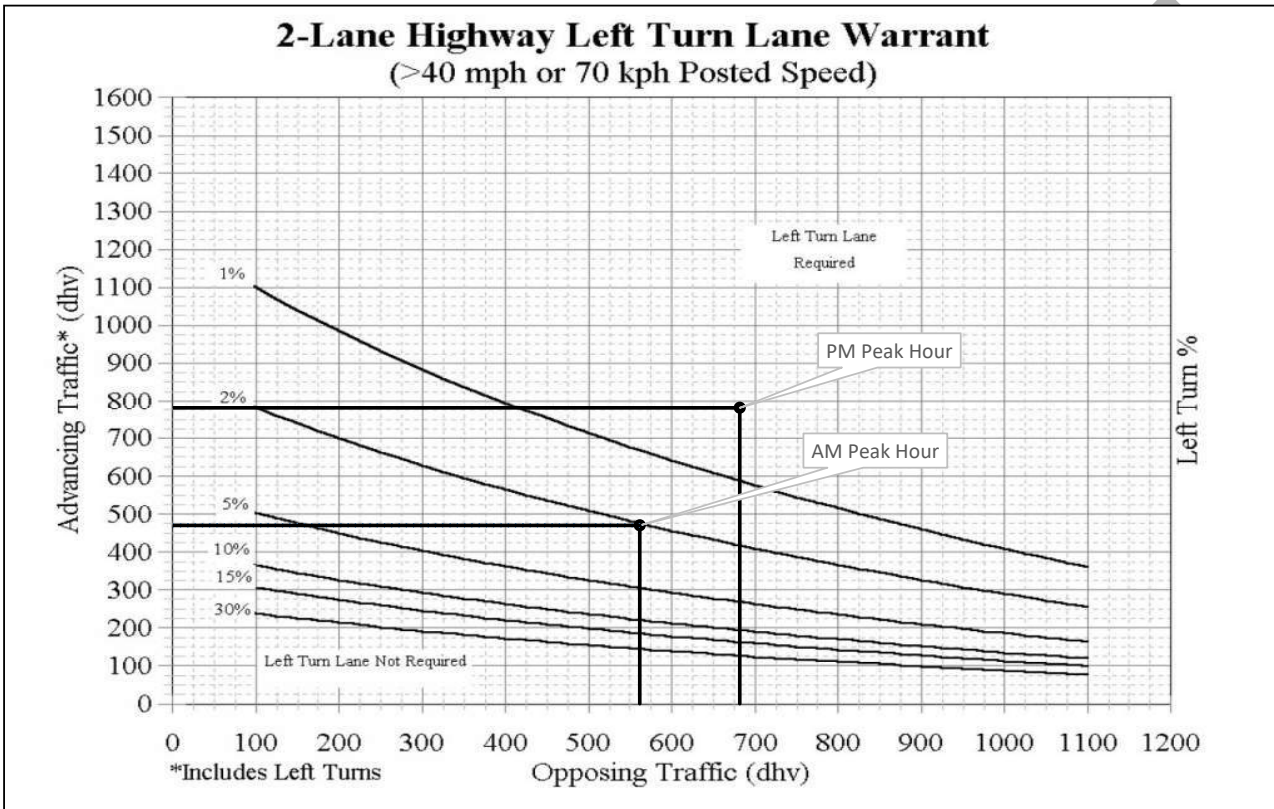
AM Peak Hour:

Advancing Traffic = 470 Veh
Left Turn Traffic = 10 Veh
Opposing Traffic = 560 Veh
Left Turn % = 2.1%

PM Peak Hour:

Advancing Traffic = 780 Veh
Left Turn Traffic = 10 Veh
Opposing Traffic = 680 Veh
Left Turn % = 1.3%

Turn Lane Warranted



SR-44 / Hosford Road Intersection
Southbound Left Turn Lane

Design Year 2047 'Build' Conditions

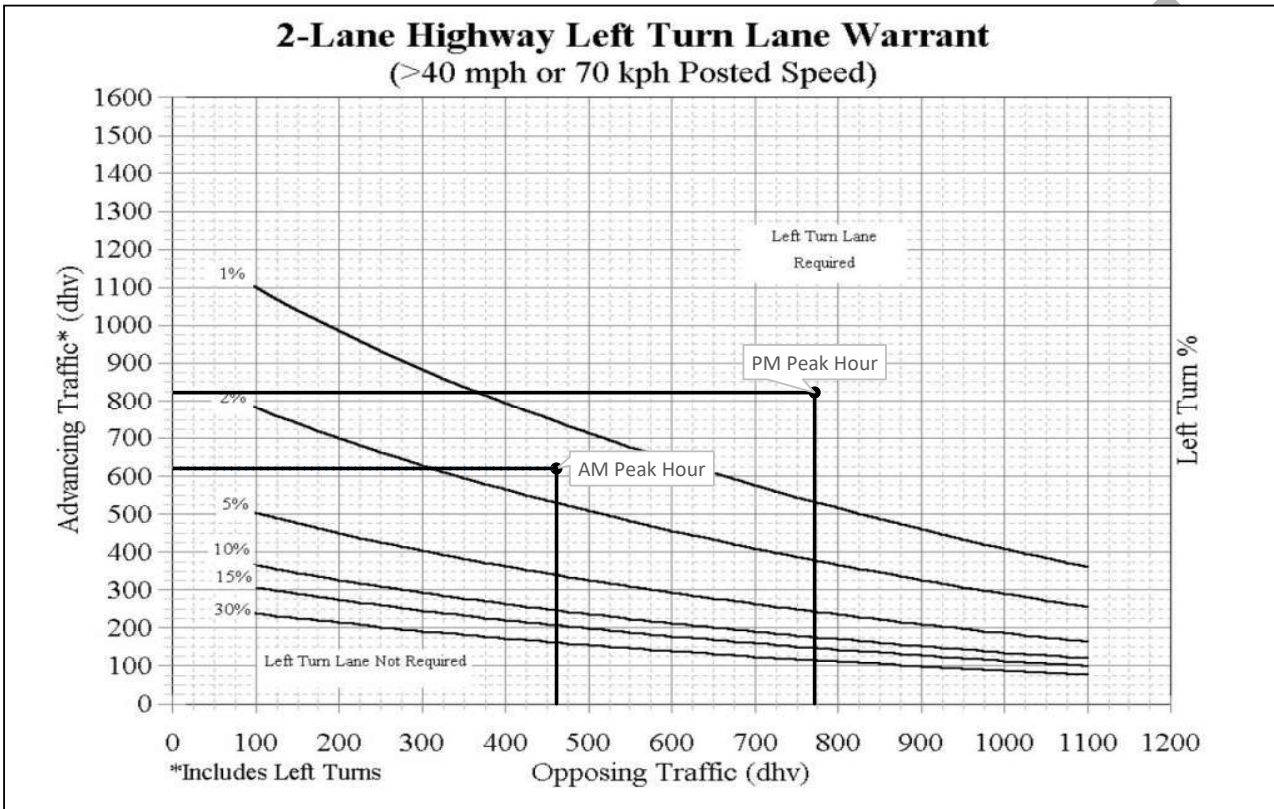
AM Peak Hour:

Advancing Traffic = 620 Veh
Left Turn Traffic = 60 Veh
Opposing Traffic = 460 Veh
Left Turn % = 9.7%

PM Peak Hour:

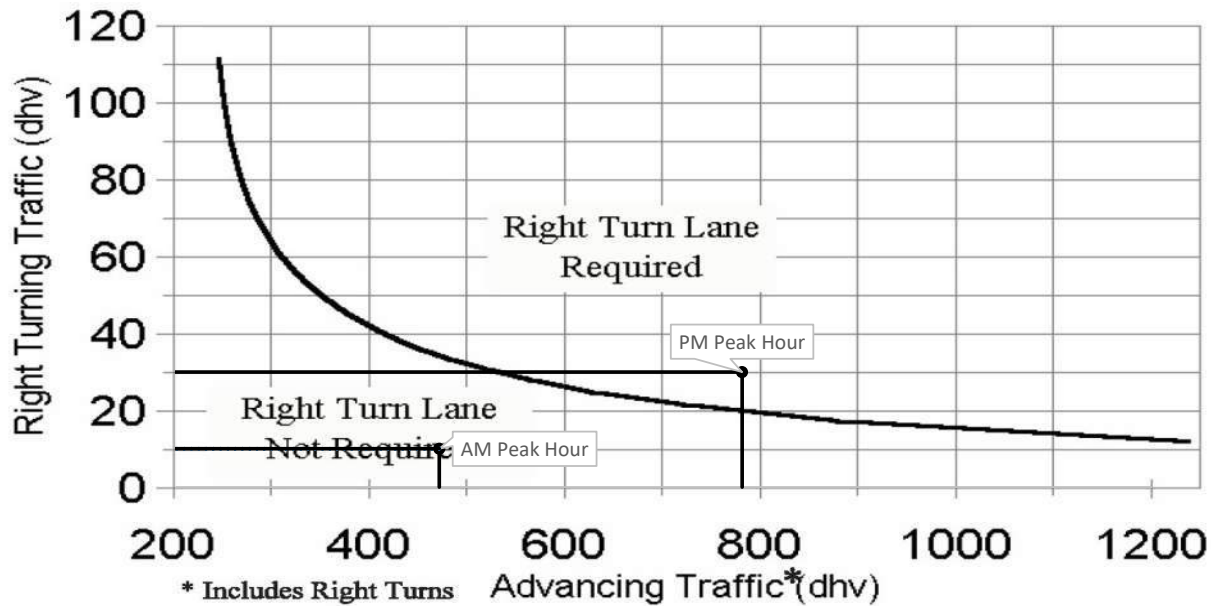
Advancing Traffic = 820 Veh
Left Turn Traffic = 140 Veh
Opposing Traffic = 770 Veh
Left Turn % = 17.1%

Turn Lane Warranted



SR-44 / Hosford Road Intersection
Northbound Right Turn Lane

2-Lane Highway Right Turn Lane Warrant
> 40 mph or 70 kph Posted Speed



Design Year 2047 'Build' Conditions

AM Peak Hour:
Advancing Traffic = 470 Veh
Right Turn Traffic = 10 Veh

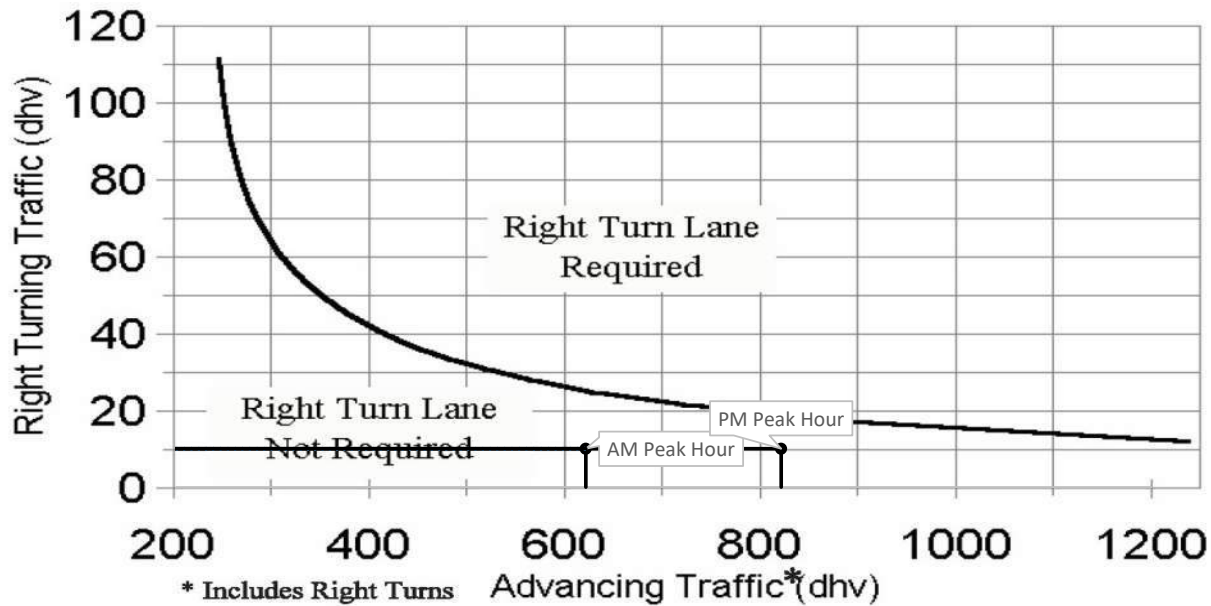
PM Peak Hour:
Advancing Traffic = 780 Veh
Right Turn Traffic = 30 Veh

Turn Lane Warranted



SR-44 / Hosford Road Intersection
Southbound Right Turn Lane

2-Lane Highway Right Turn Lane Warrant
> 40 mph or 70 kph Posted Speed



Design Year 2047 'Build' Conditions

AM Peak Hour:

Advancing Traffic = 620 Veh

Right Turn Traffic = 10 Veh

PM Peak Hour:

Advancing Traffic = 820 Veh

Right Turn Traffic = 10 Veh

Turn Lane Warranted



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**APPENDIX F
STORAGE LENGTH ANALYSIS**

STORAGE LENGTH CALCULATIONS

DESIGN YEAR 2047 'BUILD' TRAFFIC VOLUMES - AM PEAK HOUR



GIRDLED ROAD / SR-44

ANTICIPATED CYCLE LENGTH: 90 SEC.

EB GIRDLED ROAD

DESIGN SPEED: 45 MPH

MOVEMENT:	LEFT		THRU		RIGHT
VOLUME:	110		80		20
% OF APPROACH VOLUME:	37.9%		27.6%		6.9%
LANE GROUP:	LEFT		THRU/RIGHT		
LANE GROUP VOLUME:	110				
NUMBER OF LANES:	1				
VEHICLES PER CYCLE:	3				
CONTROLLING LANE GROUP:	X				
DECELERATION LENGTH:	125				
STORAGE LENGTH:	150				
TOTAL TURN LANE LENGTH:	275				

WB GIRDLED ROAD

DESIGN SPEED: 45 MPH

MOVEMENT:	LEFT		THRU		RIGHT
VOLUME:	60		190		240
% OF APPROACH VOLUME:	12.2%		38.8%		49.0%
LANE GROUP:	LEFT		THRU/RIGHT		
LANE GROUP VOLUME:	60				
NUMBER OF LANES:	1				
VEHICLES PER CYCLE:	2				
CONTROLLING LANE GROUP:	X				
DECELERATION LENGTH:	125				
STORAGE LENGTH:	100				
TOTAL TURN LANE LENGTH:	225				

NB SR-44

DESIGN SPEED: 45 MPH

MOVEMENT:	LEFT		THRU		RIGHT
VOLUME:	40		630		30
% OF APPROACH VOLUME:	5.7%		90.0%		4.3%
LANE GROUP:	LEFT		THRU		RIGHT
LANE GROUP VOLUME:	40				
NUMBER OF LANES:	1				
VEHICLES PER CYCLE:	1				
CONTROLLING LANE GROUP:	X				
DECELERATION LENGTH:	125				
STORAGE LENGTH:	50				
TOTAL TURN LANE LENGTH:	175				

SB SR-44

DESIGN SPEED: 45 MPH

MOVEMENT:	LEFT		THRU		RIGHT
VOLUME:	70		520		120
% OF APPROACH VOLUME:	9.9%		73.2%		16.9%
LANE GROUP:	LEFT		THRU		RIGHT
LANE GROUP VOLUME:	70				
NUMBER OF LANES:	1				
VEHICLES PER CYCLE:	2				
CONTROLLING LANE GROUP:					
DECELERATION LENGTH:	125				
STORAGE LENGTH:	100				
TOTAL TURN LANE LENGTH:	225				

RECOMMENDED STORAGE LENGTHS INCLUDE 50' DIVERGING TAPER

STORAGE LENGTH CALCULATIONS

DESIGN YEAR 2047 'BUILD' TRAFFIC VOLUMES - PM PEAK HOUR



GIRDLED ROAD / SR-44

ANTICIPATED CYCLE LENGTH: 90 SEC.

EB GIRDLED ROAD

DESIGN SPEED: 45 MPH

MOVEMENT:	LEFT		THRU		RIGHT
VOLUME:	110		150		30
% OF APPROACH VOLUME:	37.9%		51.7%		10.3%
LANE GROUP:	LEFT		THRU/RIGHT		
LANE GROUP VOLUME:	110				
NUMBER OF LANES:	1				
VEHICLES PER CYCLE:	3				
CONTROLLING LANE GROUP:	X				
DECELERATION LENGTH:	125				
STORAGE LENGTH:	150				
TOTAL TURN LANE LENGTH:	275				

WB GIRDLED ROAD

DESIGN SPEED: 45 MPH

MOVEMENT:	LEFT		THRU		RIGHT
VOLUME:	80		120		100
% OF APPROACH VOLUME:	26.7%		40.0%		33.3%
LANE GROUP:	LEFT		THRU		RIGHT
LANE GROUP VOLUME:	80				
NUMBER OF LANES:	1				
VEHICLES PER CYCLE:	2				
CONTROLLING LANE GROUP:	X				
DECELERATION LENGTH:	125				
STORAGE LENGTH:	100				
TOTAL TURN LANE LENGTH:	225				

NB SR-44

DESIGN SPEED: 45 MPH

MOVEMENT:	LEFT		THRU		RIGHT
VOLUME:	20		720		70
% OF APPROACH VOLUME:	2.5%		88.9%		8.6%
LANE GROUP:	LEFT		THRU		RIGHT
LANE GROUP VOLUME:	20				
NUMBER OF LANES:	1				
VEHICLES PER CYCLE:	1				
CONTROLLING LANE GROUP:	X				
DECELERATION LENGTH:	125				
STORAGE LENGTH:	50				
TOTAL TURN LANE LENGTH:	175				

SB SR-44

DESIGN SPEED: 45 MPH

MOVEMENT:	LEFT		THRU		RIGHT
VOLUME:	170		710		80
% OF APPROACH VOLUME:	17.7%		74.0%		8.3%
LANE GROUP:	LEFT		THRU		RIGHT
LANE GROUP VOLUME:	170				
NUMBER OF LANES:	1				
VEHICLES PER CYCLE:	5				
CONTROLLING LANE GROUP:	X				
DECELERATION LENGTH:	125				
STORAGE LENGTH:	200				
TOTAL TURN LANE LENGTH:	325				

RECOMMENDED STORAGE LENGTHS INCLUDE 50' DIVERGING TAPER

STORAGE LENGTH CALCULATIONS

DESIGN YEAR 2047 'BUILD' TRAFFIC VOLUMES - AM PEAK HOUR



GIRDLED ROAD / CRILE ROAD

ANTICIPATED CYCLE LENGTH: 90 SEC.

EB CRILE ROAD

DESIGN SPEED: 45 MPH

MOVEMENT:	LEFT		THRU		
VOLUME:	40		140		
% OF APPROACH VOLUME:	10.3%		35.9%		
LANE GROUP:	LEFT		THRU		
LANE GROUP VOLUME:	40				
NUMBER OF LANES:	1				
VEHICLES PER CYCLE:	1				
CONTROLLING LANE GROUP:	X				
DECELERATION LENGTH:	125				
STORAGE LENGTH:	50				
TOTAL TURN LANE LENGTH:	175				

WB CRILE ROAD

DESIGN SPEED: 45 MPH

MOVEMENT:			THRU		RIGHT
VOLUME:			450		70
% OF APPROACH VOLUME:			86.5%		13.5%
LANE GROUP:			THRU		RIGHT
LANE GROUP VOLUME:					70
NUMBER OF LANES:					1
VEHICLES PER CYCLE:					2
CONTROLLING LANE GROUP:					X
DECELERATION LENGTH:					125
STORAGE LENGTH:					100
TOTAL TURN LANE LENGTH:					225

DESIGN SPEED: 45 MPH

MOVEMENT:					
VOLUME:					
% OF APPROACH VOLUME:					
LANE GROUP:					
LANE GROUP VOLUME:					
NUMBER OF LANES:					
VEHICLES PER CYCLE:					
CONTROLLING LANE GROUP:					
DECELERATION LENGTH:					
STORAGE LENGTH:					
TOTAL TURN LANE LENGTH:					

SB CRILE ROAD

DESIGN SPEED: 45 MPH

MOVEMENT:	LEFT				RIGHT
VOLUME:	30				40
% OF APPROACH VOLUME:	42.9%				57.1%
LANE GROUP:	LEFT/RIGHT				
LANE GROUP VOLUME:					
NUMBER OF LANES:					
VEHICLES PER CYCLE:					
CONTROLLING LANE GROUP:					
DECELERATION LENGTH:					
STORAGE LENGTH:					
TOTAL TURN LANE LENGTH:					

RECOMMENDED STORAGE LENGTHS INCLUDE 50' DIVERGING TAPER

STORAGE LENGTH CALCULATIONS

DESIGN YEAR 2047 'BUILD' TRAFFIC VOLUMES - PM PEAK HOUR



GIRDLED ROAD / CRILE ROAD

ANTICIPATED CYCLE LENGTH: 90 SEC.

EB CRILE ROAD

DESIGN SPEED: 45 MPH

MOVEMENT:	LEFT		THRU		
VOLUME:	90		300		
% OF APPROACH VOLUME:	23.1%		76.9%		
LANE GROUP:	LEFT		THRU		
LANE GROUP VOLUME:	90				
NUMBER OF LANES:	1				
VEHICLES PER CYCLE:	3				
CONTROLLING LANE GROUP:	X				
DECELERATION LENGTH:	125				
STORAGE LENGTH:	150				
TOTAL TURN LANE LENGTH:	275				

WB CRILE ROAD

DESIGN SPEED: 45 MPH

MOVEMENT:			THRU		RIGHT
VOLUME:			210		110
% OF APPROACH VOLUME:			65.6%		34.4%
LANE GROUP:			THRU		RIGHT
LANE GROUP VOLUME:					110
NUMBER OF LANES:					1
VEHICLES PER CYCLE:					3
CONTROLLING LANE GROUP:					X
DECELERATION LENGTH:					125
STORAGE LENGTH:					150
TOTAL TURN LANE LENGTH:					275

DESIGN SPEED: 45 MPH

MOVEMENT:					
VOLUME:					
% OF APPROACH VOLUME:					
LANE GROUP:					
LANE GROUP VOLUME:					
NUMBER OF LANES:					
VEHICLES PER CYCLE:					
CONTROLLING LANE GROUP:					
DECELERATION LENGTH:					
STORAGE LENGTH:					
TOTAL TURN LANE LENGTH:					

SB CRILE ROAD

DESIGN SPEED: 45 MPH

MOVEMENT:	LEFT				RIGHT
VOLUME:	110				90
% OF APPROACH VOLUME:	55.0%				45.0%
LANE GROUP:	LEFT/RIGHT				
LANE GROUP VOLUME:					
NUMBER OF LANES:					
VEHICLES PER CYCLE:					
CONTROLLING LANE GROUP:					
DECELERATION LENGTH:					
STORAGE LENGTH:					
TOTAL TURN LANE LENGTH:					

RECOMMENDED STORAGE LENGTHS INCLUDE 50' DIVERGING TAPER

STORAGE LENGTH CALCULATIONS

DESIGN YEAR 2047 'BUILD' TRAFFIC VOLUMES - AM PEAK HOUR



SR-44 / COLBURN ROAD

ANTICIPATED CYCLE LENGTH: 60 SEC.

EB COLBURN ROAD

DESIGN SPEED: 45 MPH

MOVEMENT:	LEFT		THRU		RIGHT
VOLUME:	10		10		10
% OF APPROACH VOLUME:	33.3%		33.3%		33.3%
LANE GROUP:	LEFT/THRU/RIGHT				
LANE GROUP VOLUME:					
NUMBER OF LANES:					
VEHICLES PER CYCLE:					
CONTROLLING LANE GROUP:					
DECELERATION LENGTH:					
STORAGE LENGTH:					
TOTAL TURN LANE LENGTH:					

WB COLBURN ROAD

DESIGN SPEED: 45 MPH

MOVEMENT:	LEFT		THRU		RIGHT
VOLUME:	10		20		70
% OF APPROACH VOLUME:	10.0%		20.0%		70.0%
LANE GROUP:	LEFT/THRU/RIGHT				
LANE GROUP VOLUME:					
NUMBER OF LANES:					
VEHICLES PER CYCLE:					
CONTROLLING LANE GROUP:					
DECELERATION LENGTH:					
STORAGE LENGTH:					
TOTAL TURN LANE LENGTH:					

NB SR-44

DESIGN SPEED: 50 MPH

MOVEMENT:	LEFT		THRU		RIGHT
VOLUME:	10		620		10
% OF APPROACH VOLUME:	1.6%		96.9%		1.6%
LANE GROUP:	LEFT		THRU		RIGHT
LANE GROUP VOLUME:	10				
NUMBER OF LANES:	1				
VEHICLES PER CYCLE:	1				
CONTROLLING LANE GROUP:	X				
DECELERATION LENGTH:	225				
STORAGE LENGTH:	0				
TOTAL TURN LANE LENGTH:	225				

SB SR-44

DESIGN SPEED: 50 MPH

MOVEMENT:	LEFT		THRU		RIGHT
VOLUME:	20		570		10
% OF APPROACH VOLUME:	3.3%		95.0%		1.7%
LANE GROUP:	LEFT		THRU		RIGHT
LANE GROUP VOLUME:	20				
NUMBER OF LANES:	1				
VEHICLES PER CYCLE:	1				
CONTROLLING LANE GROUP:					
DECELERATION LENGTH:	225				
STORAGE LENGTH:	0				
TOTAL TURN LANE LENGTH:	225				

RECOMMENDED STORAGE LENGTHS INCLUDE 50' DIVERGING TAPER

STORAGE LENGTH CALCULATIONS

DESIGN YEAR 2047 'BUILD' TRAFFIC VOLUMES - PM PEAK HOUR



SR-44 / COLBURN ROAD

ANTICIPATED CYCLE LENGTH: 60 SEC.

EB COLBURN ROAD

DESIGN SPEED: 45 MPH

MOVEMENT:	LEFT		THRU		RIGHT
VOLUME:	10		10		10
% OF APPROACH VOLUME:	33.3%		33.3%		33.3%
LANE GROUP:	LEFT/THRU/RIGHT				
LANE GROUP VOLUME:					
NUMBER OF LANES:					
VEHICLES PER CYCLE:					
CONTROLLING LANE GROUP:					
DECELERATION LENGTH:					
STORAGE LENGTH:					
TOTAL TURN LANE LENGTH:					

WB COLBURN ROAD

DESIGN SPEED: 45 MPH

MOVEMENT:	LEFT		THRU		RIGHT
VOLUME:	10		10		30
% OF APPROACH VOLUME:	20.0%		20.0%		60.0%
LANE GROUP:	LEFT/THRU/RIGHT				
LANE GROUP VOLUME:					
NUMBER OF LANES:					
VEHICLES PER CYCLE:					
CONTROLLING LANE GROUP:					
DECELERATION LENGTH:					
STORAGE LENGTH:					
TOTAL TURN LANE LENGTH:					

NB SR-44

DESIGN SPEED: 50 MPH

MOVEMENT:	LEFT		THRU		RIGHT
VOLUME:	10		770		20
% OF APPROACH VOLUME:	1.3%		96.3%		2.5%
LANE GROUP:	LEFT		THRU		RIGHT
LANE GROUP VOLUME:	10				
NUMBER OF LANES:	1				
VEHICLES PER CYCLE:	1				
CONTROLLING LANE GROUP:	X				
DECELERATION LENGTH:	225				
STORAGE LENGTH:	0				
TOTAL TURN LANE LENGTH:	225				

SB SR-44

DESIGN SPEED: 50 MPH

MOVEMENT:	LEFT		THRU		RIGHT
VOLUME:	50		760		10
% OF APPROACH VOLUME:	6.1%		92.7%		1.2%
LANE GROUP:	LEFT		THRU		RIGHT
LANE GROUP VOLUME:	50				
NUMBER OF LANES:	1				
VEHICLES PER CYCLE:	1				
CONTROLLING LANE GROUP:	X				
DECELERATION LENGTH:	225				
STORAGE LENGTH:	0				
TOTAL TURN LANE LENGTH:	225				

RECOMMENDED STORAGE LENGTHS INCLUDE 50' DIVERGING TAPER

STORAGE LENGTH CALCULATIONS

DESIGN YEAR 2047 'BUILD' TRAFFIC VOLUMES - AM PEAK HOUR



SR-44 / CLARK ROAD

ANTICIPATED CYCLE LENGTH: 60 SEC.

EB CLARK ROAD

DESIGN SPEED: 45 MPH

MOVEMENT:	LEFT		THRU		RIGHT
VOLUME:	10		10		10
% OF APPROACH VOLUME:	33.3%		33.3%		33.3%
LANE GROUP:	LEFT/THRU/RIGHT				
LANE GROUP VOLUME:					
NUMBER OF LANES:					
VEHICLES PER CYCLE:					
CONTROLLING LANE GROUP:					
DECELERATION LENGTH:					
STORAGE LENGTH:					
TOTAL TURN LANE LENGTH:					

WB CLARK ROAD

DESIGN SPEED: 45 MPH

MOVEMENT:	LEFT		THRU		RIGHT
VOLUME:	10		20		40
% OF APPROACH VOLUME:	14.3%		28.6%		57.1%
LANE GROUP:	LEFT/THRU/RIGHT				
LANE GROUP VOLUME:					
NUMBER OF LANES:					
VEHICLES PER CYCLE:					
CONTROLLING LANE GROUP:					
DECELERATION LENGTH:					
STORAGE LENGTH:					
TOTAL TURN LANE LENGTH:					

NB SR-44

DESIGN SPEED: 50 MPH

MOVEMENT:	LEFT		THRU		RIGHT
VOLUME:	10		650		10
% OF APPROACH VOLUME:	1.5%		97.0%		1.5%
LANE GROUP:	LEFT		THRU		RIGHT
LANE GROUP VOLUME:	10				
NUMBER OF LANES:	1				
VEHICLES PER CYCLE:	1				
CONTROLLING LANE GROUP:	X				
DECELERATION LENGTH:	225				
STORAGE LENGTH:	0				
TOTAL TURN LANE LENGTH:	225				

SB SR-44

DESIGN SPEED: 50 MPH

MOVEMENT:	LEFT		THRU		RIGHT
VOLUME:	10		590		10
% OF APPROACH VOLUME:	1.6%		96.7%		1.6%
LANE GROUP:	LEFT		THRU		RIGHT
LANE GROUP VOLUME:	10				
NUMBER OF LANES:	1				
VEHICLES PER CYCLE:	1				
CONTROLLING LANE GROUP:					
DECELERATION LENGTH:	225				
STORAGE LENGTH:	0				
TOTAL TURN LANE LENGTH:	225				

RECOMMENDED STORAGE LENGTHS INCLUDE 50' DIVERGING TAPER

STORAGE LENGTH CALCULATIONS

DESIGN YEAR 2047 'BUILD' TRAFFIC VOLUMES - PM PEAK HOUR



SR-44 / CLARK ROAD

ANTICIPATED CYCLE LENGTH: 60 SEC.

EB CLARK ROAD

DESIGN SPEED: 45 MPH

MOVEMENT:	LEFT		THRU		RIGHT
VOLUME:	10		20		10
% OF APPROACH VOLUME:	25.0%		50.0%		25.0%
LANE GROUP:	LEFT/THRU/RIGHT				
LANE GROUP VOLUME:					
NUMBER OF LANES:					
VEHICLES PER CYCLE:					
CONTROLLING LANE GROUP:					
DECELERATION LENGTH:					
STORAGE LENGTH:					
TOTAL TURN LANE LENGTH:					

WB CLARK ROAD

DESIGN SPEED: 45 MPH

MOVEMENT:	LEFT		THRU		RIGHT
VOLUME:	10		20		40
% OF APPROACH VOLUME:	14.3%		28.6%		57.1%
LANE GROUP:	LEFT/THRU/RIGHT				
LANE GROUP VOLUME:					
NUMBER OF LANES:					
VEHICLES PER CYCLE:					
CONTROLLING LANE GROUP:					
DECELERATION LENGTH:					
STORAGE LENGTH:					
TOTAL TURN LANE LENGTH:					

NB SR-44

DESIGN SPEED: 50 MPH

MOVEMENT:	LEFT		THRU		RIGHT
VOLUME:	20		800		20
% OF APPROACH VOLUME:	2.4%		95.2%		2.4%
LANE GROUP:	LEFT		THRU		RIGHT
LANE GROUP VOLUME:	20				
NUMBER OF LANES:	1				
VEHICLES PER CYCLE:	1				
CONTROLLING LANE GROUP:	X				
DECELERATION LENGTH:	225				
STORAGE LENGTH:	0				
TOTAL TURN LANE LENGTH:	225				

SB SR-44

DESIGN SPEED: 50 MPH

MOVEMENT:	LEFT		THRU		RIGHT
VOLUME:	50		800		10
% OF APPROACH VOLUME:	5.8%		93.0%		1.2%
LANE GROUP:	LEFT		THRU		RIGHT
LANE GROUP VOLUME:	50				
NUMBER OF LANES:	1				
VEHICLES PER CYCLE:	1				
CONTROLLING LANE GROUP:	X				
DECELERATION LENGTH:	225				
STORAGE LENGTH:	0				
TOTAL TURN LANE LENGTH:	225				

RECOMMENDED STORAGE LENGTHS INCLUDE 50' DIVERGING TAPER

STORAGE LENGTH CALCULATIONS

DESIGN YEAR 2047 'BUILD' TRAFFIC VOLUMES - AM PEAK HOUR



SR-44 / HOSFORD ROAD

ANTICIPATED CYCLE LENGTH: 90 SEC.

EB CLARK ROAD

DESIGN SPEED: 45 MPH

MOVEMENT:	LEFT		THRU		RIGHT
VOLUME:	10		10		10
% OF APPROACH VOLUME:	33.3%		33.3%		33.3%
LANE GROUP:	LEFT/THRU/RIGHT				
LANE GROUP VOLUME:					
NUMBER OF LANES:					
VEHICLES PER CYCLE:					
CONTROLLING LANE GROUP:					
DECELERATION LENGTH:					
STORAGE LENGTH:					
TOTAL TURN LANE LENGTH:					

WB CLARK ROAD

DESIGN SPEED: 45 MPH

MOVEMENT:	LEFT		THRU		RIGHT
VOLUME:	20		30		190
% OF APPROACH VOLUME:	8.3%		12.5%		79.2%
LANE GROUP:	LEFT/THRU/RIGHT				
LANE GROUP VOLUME:					
NUMBER OF LANES:					
VEHICLES PER CYCLE:					
CONTROLLING LANE GROUP:					
DECELERATION LENGTH:					
STORAGE LENGTH:					
TOTAL TURN LANE LENGTH:					

NB SR-44

DESIGN SPEED: 50 MPH

MOVEMENT:	LEFT		THRU		RIGHT
VOLUME:	10		450		10
% OF APPROACH VOLUME:	2.1%		95.7%		2.1%
LANE GROUP:	LEFT		THRU		RIGHT
LANE GROUP VOLUME:	10				
NUMBER OF LANES:	1				
VEHICLES PER CYCLE:	1				
CONTROLLING LANE GROUP:	X				
DECELERATION LENGTH:	225				
STORAGE LENGTH:	0				
TOTAL TURN LANE LENGTH:	225				

SB SR-44

DESIGN SPEED: 50 MPH

MOVEMENT:	LEFT		THRU		RIGHT
VOLUME:	60		550		10
% OF APPROACH VOLUME:	9.7%		88.7%		1.6%
LANE GROUP:	LEFT		THRU		RIGHT
LANE GROUP VOLUME:	60				
NUMBER OF LANES:	1				
VEHICLES PER CYCLE:	2				
CONTROLLING LANE GROUP:					
DECELERATION LENGTH:	145				
STORAGE LENGTH:	100				
TOTAL TURN LANE LENGTH:	245				

RECOMMENDED STORAGE LENGTHS INCLUDE 50' DIVERGING TAPER

STORAGE LENGTH CALCULATIONS

DESIGN YEAR 2047 'BUILD' TRAFFIC VOLUMES - PM PEAK HOUR



SR-44 / HOSFORD ROAD

ANTICIPATED CYCLE LENGTH: 90 SEC.

EB CLARK ROAD

DESIGN SPEED: 45 MPH

MOVEMENT:	LEFT		THRU		RIGHT
VOLUME:	10		20		10
% OF APPROACH VOLUME:	25.0%		50.0%		25.0%
LANE GROUP:	LEFT/THRU/RIGHT				
LANE GROUP VOLUME:					
NUMBER OF LANES:					
VEHICLES PER CYCLE:					
CONTROLLING LANE GROUP:					
DECELERATION LENGTH:					
STORAGE LENGTH:					
TOTAL TURN LANE LENGTH:					

WB CLARK ROAD

DESIGN SPEED: 45 MPH

MOVEMENT:	LEFT		THRU		RIGHT
VOLUME:	10		20		90
% OF APPROACH VOLUME:	8.3%		16.7%		75.0%
LANE GROUP:	LEFT/THRU/RIGHT				
LANE GROUP VOLUME:					
NUMBER OF LANES:					
VEHICLES PER CYCLE:					
CONTROLLING LANE GROUP:					
DECELERATION LENGTH:					
STORAGE LENGTH:					
TOTAL TURN LANE LENGTH:					

NB SR-44

DESIGN SPEED: 50 MPH

MOVEMENT:	LEFT		THRU		RIGHT
VOLUME:	10		740		30
% OF APPROACH VOLUME:	1.3%		94.9%		3.8%
LANE GROUP:	LEFT		THRU		RIGHT
LANE GROUP VOLUME:	10				
NUMBER OF LANES:	1				
VEHICLES PER CYCLE:	1				
CONTROLLING LANE GROUP:	X				
DECELERATION LENGTH:	225				
STORAGE LENGTH:	0				
TOTAL TURN LANE LENGTH:	225				

SB SR-44

DESIGN SPEED: 50 MPH

MOVEMENT:	LEFT		THRU		RIGHT
VOLUME:	140		670		10
% OF APPROACH VOLUME:	17.1%		81.7%		1.2%
LANE GROUP:	LEFT		THRU		RIGHT
LANE GROUP VOLUME:	140				
NUMBER OF LANES:	1				
VEHICLES PER CYCLE:	4				
CONTROLLING LANE GROUP:	X				
DECELERATION LENGTH:	145				
STORAGE LENGTH:	175				
TOTAL TURN LANE LENGTH:	320				

RECOMMENDED STORAGE LENGTHS INCLUDE 50' DIVERGING TAPER

STORAGE LENGTH CALCULATIONS

DESIGN YEAR 2047 'BUILD' TRAFFIC VOLUMES - AM PEAK HOUR



GIRDLED ROAD / AUBURN ROAD

ANTICIPATED CYCLE LENGTH: 90 SEC.

EB GIRDLED ROAD

DESIGN SPEED: 45 MPH

MOVEMENT:	LEFT		THRU		RIGHT
VOLUME:	40		60		20
% OF APPROACH VOLUME:	25.0%		37.5%		16.7%
LANE GROUP:	LEFT		THRU		RIGHT
LANE GROUP VOLUME:					
NUMBER OF LANES:					
VEHICLES PER CYCLE:					
CONTROLLING LANE GROUP:					
DECELERATION LENGTH:					
STORAGE LENGTH:					
TOTAL TURN LANE LENGTH:					

WB GIRDLED ROAD

DESIGN SPEED: 45 MPH

MOVEMENT:	LEFT		THRU		RIGHT
VOLUME:	180		50		120
% OF APPROACH VOLUME:	81.8%		14.3%		34.3%
LANE GROUP:	LEFT		THRU		RIGHT
LANE GROUP VOLUME:	180				120
NUMBER OF LANES:	1				1
VEHICLES PER CYCLE:	5				3
CONTROLLING LANE GROUP:	X				X
DECELERATION LENGTH:	125				125
STORAGE LENGTH:	200				150
TOTAL TURN LANE LENGTH:	325				275

NB AUBURN ROAD

DESIGN SPEED: 45 MPH

MOVEMENT:	LEFT		THRU		RIGHT
VOLUME:	10		140		120
% OF APPROACH VOLUME:	3.7%		51.9%		44.4%
LANE GROUP:	LEFT/THRU/RIGHT				
LANE GROUP VOLUME:					
NUMBER OF LANES:					
VEHICLES PER CYCLE:					
CONTROLLING LANE GROUP:					
DECELERATION LENGTH:					
STORAGE LENGTH:					
TOTAL TURN LANE LENGTH:					

SB AUBURN ROAD

DESIGN SPEED: 45 MPH

MOVEMENT:	LEFT		THRU		RIGHT
VOLUME:	30		90		10
% OF APPROACH VOLUME:	23.1%		69.2%		7.7%
LANE GROUP:	LEFT/THRU/RIGHT				
LANE GROUP VOLUME:					
NUMBER OF LANES:					
VEHICLES PER CYCLE:					
CONTROLLING LANE GROUP:					
DECELERATION LENGTH:					
STORAGE LENGTH:					
TOTAL TURN LANE LENGTH:					

RECOMMENDED STORAGE LENGTHS INCLUDE 50' DIVERGING TAPER

STORAGE LENGTH CALCULATIONS

DESIGN YEAR 2047 'BUILD' TRAFFIC VOLUMES - PM PEAK HOUR



GIRDLED ROAD / AUBURN ROAD

ANTICIPATED CYCLE LENGTH: 90 SEC.

EB GIRDLED ROAD

DESIGN SPEED: 45 MPH

MOVEMENT:	LEFT		THRU		RIGHT
VOLUME:	20		110		30
% OF APPROACH VOLUME:	12.5%		68.8%		18.8%
LANE GROUP:	LEFT		THRU		RIGHT
LANE GROUP VOLUME:					
NUMBER OF LANES:					
VEHICLES PER CYCLE:					
CONTROLLING LANE GROUP:					
DECELERATION LENGTH:					
STORAGE LENGTH:					
TOTAL TURN LANE LENGTH:					

WB GIRDLED ROAD

DESIGN SPEED: 45 MPH

MOVEMENT:	LEFT		THRU		RIGHT
VOLUME:	120		80		20
% OF APPROACH VOLUME:	54.5%		36.4%		9.1%
LANE GROUP:	LEFT		THRU		RIGHT
LANE GROUP VOLUME:	120				20
NUMBER OF LANES:	1				1
VEHICLES PER CYCLE:	3				1
CONTROLLING LANE GROUP:					
DECELERATION LENGTH:	125				125
STORAGE LENGTH:	150				50
TOTAL TURN LANE LENGTH:	275				175

NB AUBURN ROAD

DESIGN SPEED: 45 MPH

MOVEMENT:	LEFT		THRU		RIGHT
VOLUME:	10		140		120
% OF APPROACH VOLUME:	3.7%		51.9%		44.4%
LANE GROUP:	LEFT/THRU/RIGHT				
LANE GROUP VOLUME:					
NUMBER OF LANES:					
VEHICLES PER CYCLE:					
CONTROLLING LANE GROUP:					
DECELERATION LENGTH:					
STORAGE LENGTH:					
TOTAL TURN LANE LENGTH:					

SB AUBURN ROAD

DESIGN SPEED: 45 MPH

MOVEMENT:	LEFT		THRU		RIGHT
VOLUME:	60		120		30
% OF APPROACH VOLUME:	28.6%		57.1%		14.3%
LANE GROUP:	LEFT/THRU/RIGHT				
LANE GROUP VOLUME:					
NUMBER OF LANES:					
VEHICLES PER CYCLE:					
CONTROLLING LANE GROUP:					
DECELERATION LENGTH:					
STORAGE LENGTH:					
TOTAL TURN LANE LENGTH:					

RECOMMENDED STORAGE LENGTHS INCLUDE 50' DIVERGING TAPER

APPENDIX G
HCS INTERSECTION CAPACITY ANALYSIS

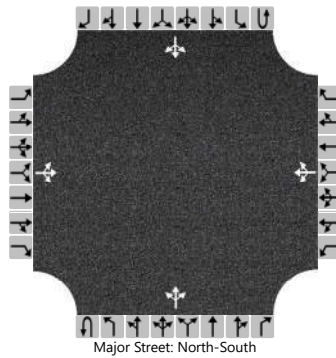
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OPENING YEAR 2027 'NO-BUILD' CONDITIONS

HCS7 Two-Way Stop-Control Report

General Information				Site Information			
Analyst	Naser Tabanja			Intersection	SR-44 / Colburn Road		
Agency/Co.	GPD Group			Jurisdiction	ODOT District 12		
Date Performed	03/11/2022			East/West Street	Colburn Road		
Analysis Year	2027			North/South Street	SR-44		
Time Analyzed	AM Peak 'No-Build'			Peak Hour Factor	0.92		
Intersection Orientation	North-South			Analysis Time Period (hrs)	0.25		
Project Description	GEA/LAK-44 Corridor Study						

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	1	0	0	0	1	0	0	0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume (veh/h)		10	10	10		10	20	60		10	570	10		20	510	10
Percent Heavy Vehicles (%)		5	5	5		3	3	3		5				6		
Proportion Time Blocked																
Percent Grade (%)	0				0											
Right Turn Channelized																
Median Type Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		7.1	6.5	6.2		7.1	6.5	6.2		4.1				4.1		
Critical Headway (sec)		7.15	6.55	6.25		7.13	6.53	6.23		4.15				4.16		
Base Follow-Up Headway (sec)		3.5	4.0	3.3		3.5	4.0	3.3		2.2				2.2		
Follow-Up Headway (sec)		3.55	4.05	3.35		3.53	4.03	3.33		2.25				2.25		

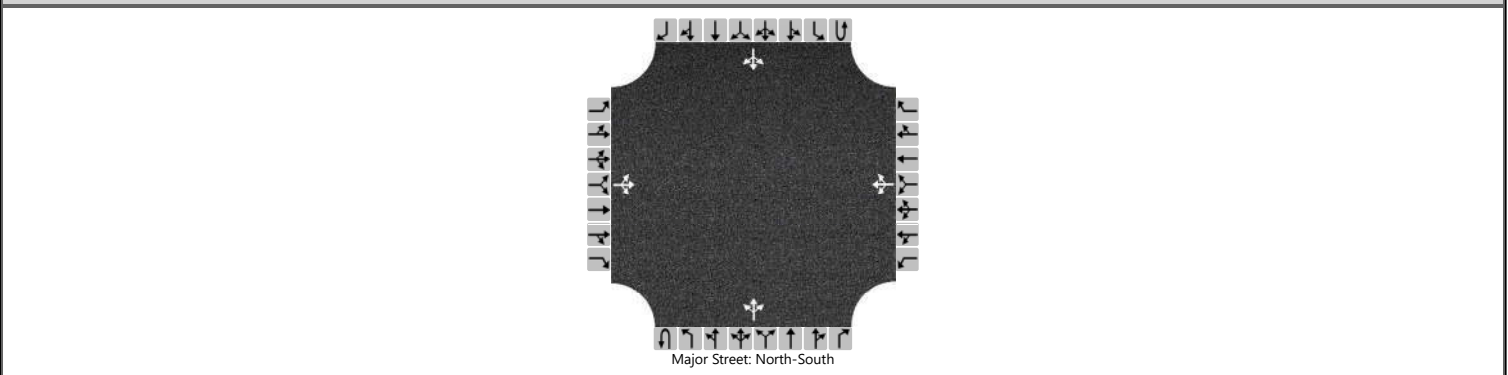
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			33				98			11				22		
Capacity, c (veh/h)			168				278			992				933		
v/c Ratio			0.19				0.35			0.01				0.02		
95% Queue Length, Q ₉₅ (veh)			0.7				1.5			0.0				0.1		
Control Delay (s/veh)			31.5				24.9			8.7				9.0		
Level of Service (LOS)			D				C			A				A		
Approach Delay (s/veh)	31.5				24.9				0.3				0.6			
Approach LOS	D				C											

HCS7 Two-Way Stop-Control Report

General Information				Site Information			
Analyst	Naser Tabanja			Intersection	SR-44 / Colburn Road		
Agency/Co.	GPD Group			Jurisdiction	ODOT District 12		
Date Performed	03/11/2022			East/West Street	Colburn Road		
Analysis Year	2027			North/South Street	SR-44		
Time Analyzed	PM Peak 'No-Build'			Peak Hour Factor	0.87		
Intersection Orientation	North-South			Analysis Time Period (hrs)	0.25		
Project Description	GEA/LAK-44 Corridor Study						

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	1	0	0	0	1	0	0	0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume (veh/h)		10	10	10		10	10	30		10	700	20		40	680	10
Percent Heavy Vehicles (%)		5	5	5		3	3	3		5				6		
Proportion Time Blocked																
Percent Grade (%)	0				0											
Right Turn Channelized																
Median Type Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		7.1	6.5	6.2		7.1	6.5	6.2		4.1				4.1		
Critical Headway (sec)		7.15	6.55	6.25		7.13	6.53	6.23		4.15				4.16		
Base Follow-Up Headway (sec)		3.5	4.0	3.3		3.5	4.0	3.3		2.2				2.2		
Follow-Up Headway (sec)		3.55	4.05	3.35		3.53	4.03	3.33		2.25				2.25		

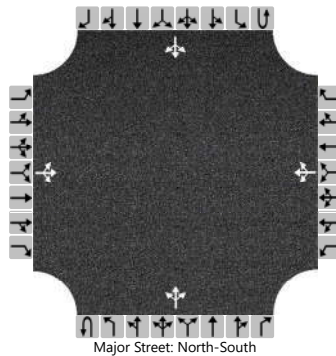
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			34				57							46		
Capacity, c (veh/h)			82				126							786		
v/c Ratio			0.42				0.46							0.06		
95% Queue Length, Q ₉₅ (veh)			1.7				2.0							0.2		
Control Delay (s/veh)			77.0				55.6							9.9		
Level of Service (LOS)			F				F							A		
Approach Delay (s/veh)	77.0				55.6				0.4				1.5			
Approach LOS	F				F											

HCS7 Two-Way Stop-Control Report

General Information				Site Information			
Analyst	Naser Tabanja			Intersection	SR-44 / Clark Road		
Agency/Co.	GPD Group			Jurisdiction	ODOT District 12		
Date Performed	03/11/2022			East/West Street	Clark Road		
Analysis Year	2027			North/South Street	SR-44		
Time Analyzed	AM Peak 'No-Build'			Peak Hour Factor	0.91		
Intersection Orientation	North-South			Analysis Time Period (hrs)	0.25		
Project Description	GEA/LAK-44 Corridor Study						

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	1	0		0	1	0		0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume (veh/h)		10	10	10		10	20	40		10	590	10		10	540	10
Percent Heavy Vehicles (%)		5	5	5		4	4	4		5				4		
Proportion Time Blocked																
Percent Grade (%)	0				0											
Right Turn Channelized																
Median Type Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		7.1	6.5	6.2		7.1	6.5	6.2		4.1				4.1		
Critical Headway (sec)		7.15	6.55	6.25		7.14	6.54	6.24		4.15				4.14		
Base Follow-Up Headway (sec)		3.5	4.0	3.3		3.5	4.0	3.3		2.2				2.2		
Follow-Up Headway (sec)		3.55	4.05	3.35		3.54	4.04	3.34		2.25				2.24		

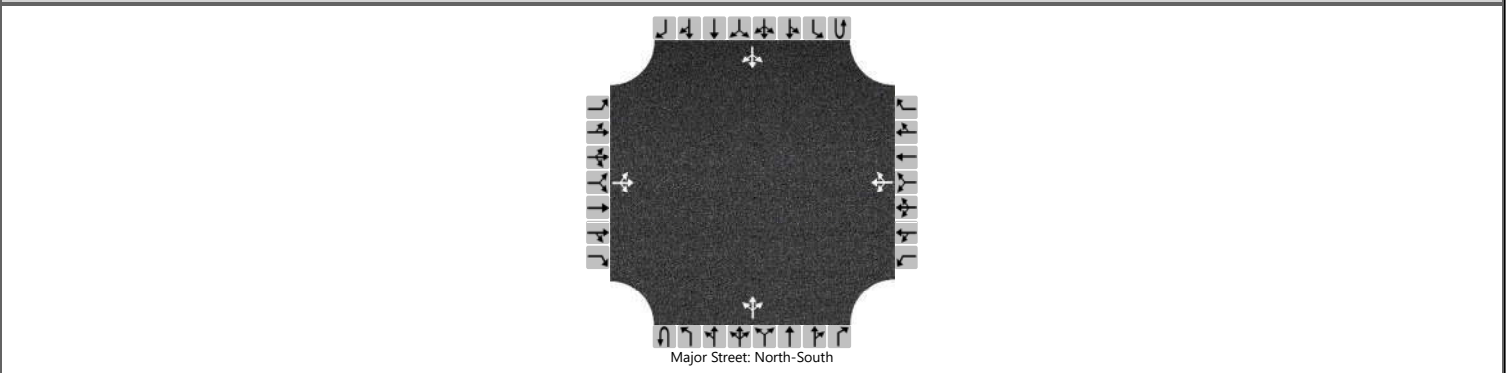
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			33				77				11				11	
Capacity, c (veh/h)			163				234				959				919	
v/c Ratio			0.20				0.33				0.01				0.01	
95% Queue Length, Q ₉₅ (veh)			0.7				1.4				0.0				0.0	
Control Delay (s/veh)			32.5				27.7				8.8				9.0	
Level of Service (LOS)			D				D				A				A	
Approach Delay (s/veh)	32.5				27.7				0.3				0.3			
Approach LOS	D				D											

HCS7 Two-Way Stop-Control Report

General Information				Site Information			
Analyst	Naser Tabanja			Intersection	SR-44 / Clark Road		
Agency/Co.	GPD Group			Jurisdiction	ODOT District 12		
Date Performed	1/17/2022			East/West Street	Clark Road		
Analysis Year	2027			North/South Street	SR-44		
Time Analyzed	PM Peak 'No-Build'			Peak Hour Factor	0.91		
Intersection Orientation	North-South			Analysis Time Period (hrs)	0.25		
Project Description	GEA/LAK-44 Corridor Study						

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	1	0	0	0	1	0	0	0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume (veh/h)		10	20	10		10	20	30		20	730	20		40	720	10
Percent Heavy Vehicles (%)		5	5	5		4	4	4		5				4		
Proportion Time Blocked																
Percent Grade (%)	0				0											
Right Turn Channelized																
Median Type Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		7.1	6.5	6.2		7.1	6.5	6.2		4.1				4.1		
Critical Headway (sec)		7.15	6.55	6.25		7.14	6.54	6.24		4.15				4.14		
Base Follow-Up Headway (sec)		3.5	4.0	3.3		3.5	4.0	3.3		2.2				2.2		
Follow-Up Headway (sec)		3.55	4.05	3.35		3.54	4.04	3.34		2.25				2.24		

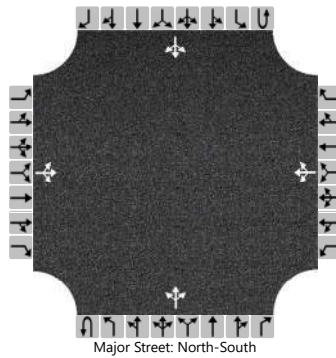
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			44				66				22				44	
Capacity, c (veh/h)			72				102				808				797	
v/c Ratio			0.61				0.64				0.03				0.06	
95% Queue Length, Q ₉₅ (veh)			2.7				3.2				0.1				0.2	
Control Delay (s/veh)			113.6				88.8				9.6				9.8	
Level of Service (LOS)			F				F				A				A	
Approach Delay (s/veh)	113.6				88.8				0.7				1.4			
Approach LOS	F				F											

HCS7 Two-Way Stop-Control Report

General Information				Site Information			
Analyst	Naser Tabanja			Intersection	SR-44 / Hosford Road		
Agency/Co.	GPD Group			Jurisdiction	ODOT District 12		
Date Performed	03/11/2022			East/West Street	Hosford Road		
Analysis Year	2027			North/South Street	SR-44		
Time Analyzed	AM Peak 'No-Build'			Peak Hour Factor	0.89		
Intersection Orientation	North-South			Analysis Time Period (hrs)	0.25		
Project Description	GEA/LAK-44 Corridor Study						

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	1	0	0	0	1	0	0	0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume (veh/h)		10	10	10		20	30	190		10	410	10		60	500	10
Percent Heavy Vehicles (%)		5	5	5		2	2	2		5				3		
Proportion Time Blocked																
Percent Grade (%)	0				0											
Right Turn Channelized																
Median Type Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		7.1	6.5	6.2		7.1	6.5	6.2		4.1				4.1		
Critical Headway (sec)		7.15	6.55	6.25		7.12	6.52	6.22		4.15				4.13		
Base Follow-Up Headway (sec)		3.5	4.0	3.3		3.5	4.0	3.3		2.2				2.2		
Follow-Up Headway (sec)		3.55	4.05	3.35		3.52	4.02	3.32		2.25				2.23		

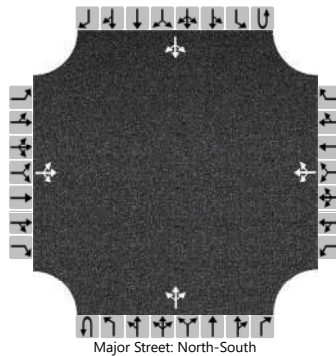
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			34				270							67		
Capacity, c (veh/h)			130				373							1085		
v/c Ratio			0.26				0.72							0.06		
95% Queue Length, Q ₉₅ (veh)			1.0				5.5							0.2		
Control Delay (s/veh)			42.1				36.3							8.5		
Level of Service (LOS)			E				E							A		
Approach Delay (s/veh)	42.1				36.3				0.3				1.6			
Approach LOS	E				E											

HCS7 Two-Way Stop-Control Report

General Information		Site Information	
Analyst	Naser Tabanja	Intersection	SR-44 / Hosford Road
Agency/Co.	GPD Group	Jurisdiction	ODOT District 12
Date Performed	03/11/2022	East/West Street	Hosford Road
Analysis Year	2027	North/South Street	SR-44
Time Analyzed	PM Peak 'No-Build'	Peak Hour Factor	0.90
Intersection Orientation	North-South	Analysis Time Period (hrs)	0.25
Project Description	GEA/LAK-44 Corridor Study		

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	1	0	0	0	1	0	0	0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume (veh/h)		10	20	10		10	20	90		10	680	30		130	610	10
Percent Heavy Vehicles (%)		5	5	5		2	2	2		5				3		
Proportion Time Blocked																
Percent Grade (%)	0				0											
Right Turn Channelized																
Median Type Storage	Undivided															

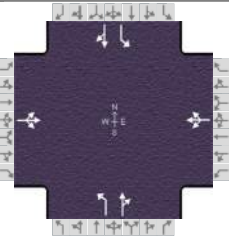
Critical and Follow-up Headways

Base Critical Headway (sec)		7.1	6.5	6.2		7.1	6.5	6.2		4.1				4.1		
Critical Headway (sec)		7.15	6.55	6.25		7.12	6.52	6.22		4.15				4.13		
Base Follow-Up Headway (sec)		3.5	4.0	3.3		3.5	4.0	3.3		2.2				2.2		
Follow-Up Headway (sec)		3.55	4.05	3.35		3.52	4.02	3.32		2.25				2.23		

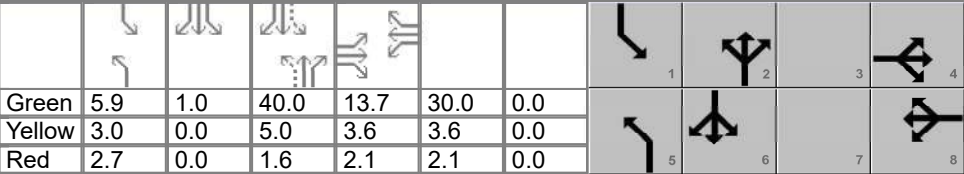
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			44				133				11				144	
Capacity, c (veh/h)			50				138				892				826	
v/c Ratio			0.88				0.96				0.01				0.17	
95% Queue Length, Q ₉₅ (veh)			3.7				6.8				0.0				0.6	
Control Delay (s/veh)			221.4				129.3				9.1				10.3	
Level of Service (LOS)			F				F				A				B	
Approach Delay (s/veh)	221.4				129.3				0.3				4.2			
Approach LOS	F				F											

HCS7 Signalized Intersection Results Summary

General Information				Intersection Information		
Agency	GPD Group			Duration, h	0.250	
Analyst	Naser J Tabanja	Analysis Date	3/15/2022	Area Type	Other	
Jurisdiction	ODOT - D12	Time Period	AM Peak	PHF	0.94	
Urban Street	SR-44	Analysis Year	2027	Analysis Period	1 > 7:00	
Intersection	SR-44 / Girdled Road	File Name	2- SR-44_Girdled Rd_OY AM_No-Build.xus			
Project Description	SR-44 Corridor Study					

Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (v), veh/h	90	60	20	50	160	210	40	570	30	60	470	110

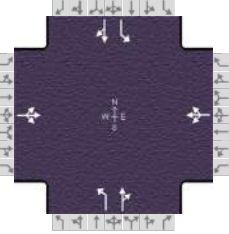
Signal Information																								
Cycle, s	114.3	Reference Phase	2	Green	5.9	1.0	40.0	13.7	30.0	0.0	Yellow	3.0	0.0	5.0	3.6	3.6	0.0	Red	2.7	0.0	1.6	2.1	2.1	0.0
Offset, s	0	Reference Point	End	Uncoordinated	Yes	Simult. Gap E/W	On	Force Mode	Fixed	Simult. Gap N/S	On													

Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase		4		8	5	2	1	6
Case Number		12.0		12.0	1.1	4.0	1.1	4.0
Phase Duration, s		19.4		35.7	11.6	46.6	12.6	47.6
Change Period, (Y+R _c), s		5.7		5.7	5.7	6.6	5.7	6.6
Max Allow Headway (MAH), s		3.7		3.8	3.7	3.6	3.7	3.6
Queue Clearance Time (g _s), s		13.7		31.9	3.7	42.0	4.5	40.4
Green Extension Time (g _e), s		0.1		0.0	0.0	0.0	0.1	0.0
Phase Call Probability		1.00		1.00	0.74	1.00	0.87	1.00
Max Out Probability		1.00		1.00	0.00	1.00	0.00	1.00

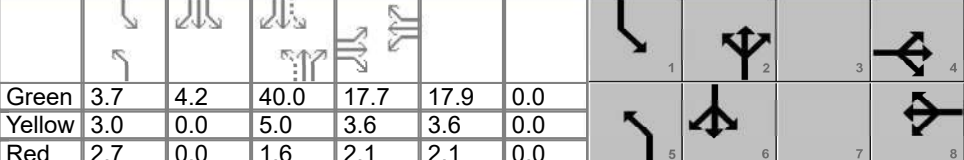
Movement Group Results	EB			WB			NB			SB			
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R	
Assigned Movement	7	4	14	3	8	18	5	2	12	1	6	16	
Adjusted Flow Rate (v), veh/h	181			447			43	638		64	617		
Adjusted Saturation Flow Rate (s), veh/h/ln	1743			1707			1739	1810		1767	1794		
Queue Service Time (g _s), s	11.7			29.9			1.7	40.0		2.5	38.4		
Cycle Queue Clearance Time (g _c), s	11.7			29.9			1.7	40.0		2.5	38.4		
Green Ratio (g/C)	0.12			0.26			0.40	0.35		0.41	0.36		
Capacity (c), veh/h	208			448			157	633		170	644		
Volume-to-Capacity Ratio (X)	0.868			0.998			0.271	1.008		0.375	0.958		
Back of Queue (Q), ft/ln (95 th percentile)	275.8			610.4			33.3	815.7		49.1	710.2		
Back of Queue (Q), veh/ln (95 th percentile)	10.6			24.0			1.3	31.4		1.9	27.7		
Queue Storage Ratio (RQ) (95 th percentile)	0.00			0.00			0.00	0.00		0.00	0.00		
Uniform Delay (d ₁), s/veh	49.4			42.1			27.9	37.2		27.6	35.8		
Incremental Delay (d ₂), s/veh	26.4			41.9			0.9	37.8		1.4	25.5		
Initial Queue Delay (d ₃), s/veh	0.0			0.0			0.0	0.0		0.0	0.0		
Control Delay (d), s/veh	75.8			84.0			28.9	74.9		29.0	61.3		
Level of Service (LOS)	E			F			C	F		C	E		
Approach Delay, s/veh / LOS	75.8	E		84.0	F		72.0	E		58.3	E		
Intersection Delay, s/veh / LOS	70.4												E

Multimodal Results	EB	WB	NB	SB
Pedestrian LOS Score / LOS				
Bicycle LOS Score / LOS				

HCS7 Signalized Intersection Results Summary

General Information				Intersection Information		
Agency	GPD Group			Duration, h	0.250	
Analyst	Naser J Tabanja	Analysis Date	3/15/2022	Area Type	Other	
Jurisdiction	ODOT - D12	Time Period	PM Peak	PHF	0.96	
Urban Street	SR-44	Analysis Year	2027	Analysis Period	1 > 7:00	
Intersection	SR-44 / Girdled Road		File Name	2- SR-44_Girdled Rd_OY PM_No-Build.xus		
Project Description	SR-44 Corridor Study					

Demand Information	EB			WB			NB			SB		
	L	T	R	L	T	R	L	T	R	L	T	R
Approach Movement												
Demand (v), veh/h	100	130	20	60	100	90	20	650	70	140	650	60

Signal Information														
Cycle, s	107.2	Reference Phase	2	Green	3.7	4.2	40.0	17.7	17.9	0.0				
Offset, s	0	Reference Point	End	Yellow	3.0	0.0	5.0	3.6	3.6	0.0				
Uncoordinated	Yes	Simult. Gap E/W	On	Red	2.7	0.0	1.6	2.1	2.1	0.0				
Force Mode	Fixed	Simult. Gap N/S	On											

Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase		4		8	5	2	1	6
Case Number		12.0		12.0	1.1	4.0	1.1	4.0
Phase Duration, s		23.4		23.6	9.4	46.6	13.6	50.8
Change Period, (Y+R _c), s		5.7		5.7	5.7	6.6	5.7	6.6
Max Allow Headway (MAH), s		3.7		3.7	3.7	3.6	3.7	3.6
Queue Clearance Time (g _s), s		17.5		17.7	2.8	42.0	7.3	44.8
Green Extension Time (g _e), s		0.2		0.2	0.0	0.0	0.2	0.0
Phase Call Probability		1.00		1.00	0.46	1.00	0.99	1.00
Max Out Probability		1.00		1.00	0.00	1.00	0.02	1.00

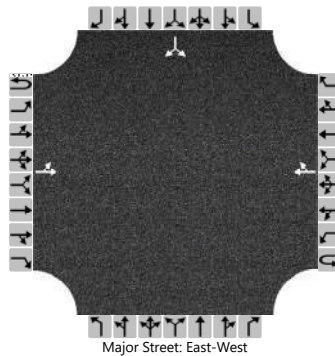
Movement Group Results	EB			WB			NB			SB		
	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	7	4	14	3	8	18	5	2	12	1	6	16
Adjusted Flow Rate (v), veh/h	260			260			21	750		146	740	
Adjusted Saturation Flow Rate (s), veh/h/ln	1765			1737			1739	1794		1767	1828	
Queue Service Time (g _s), s	15.5			15.7			0.8	40.0		5.3	42.8	
Cycle Queue Clearance Time (g _c), s	15.5			15.7			0.8	40.0		5.3	42.8	
Green Ratio (g/C)	0.16			0.17			0.41	0.37		0.45	0.41	
Capacity (c), veh/h	291			290			127	670		197	754	
Volume-to-Capacity Ratio (X)	0.895			0.897			0.164	1.120		0.739	0.981	
Back of Queue (Q), ft/ln (95 th percentile)	342.5			336.5			14.8	1082.5		106.8	795.7	
Back of Queue (Q), veh/ln (95 th percentile)	13.2			13.2			0.6	41.6		4.2	31.1	
Queue Storage Ratio (RQ) (95 th percentile)	0.00			0.00			0.00	0.00		0.00	0.00	
Uniform Delay (d ₁), s/veh	43.8			43.7			26.5	33.6		25.2	31.1	
Incremental Delay (d ₂), s/veh	23.6			24.5			0.6	72.6		5.3	28.0	
Initial Queue Delay (d ₃), s/veh	0.0			0.0			0.0	0.0		0.0	0.0	
Control Delay (d), s/veh	67.4			68.2			27.1	106.2		30.6	59.1	
Level of Service (LOS)	E			E			C	F		C	E	
Approach Delay, s/veh / LOS	67.4	E		68.2	E		104.0	F		54.4	D	
Intersection Delay, s/veh / LOS	75.2						E					

Multimodal Results	EB	WB	NB	SB
Pedestrian LOS Score / LOS				
Bicycle LOS Score / LOS				

HCS7 Two-Way Stop-Control Report

General Information		Site Information	
Analyst	Naser Tabanja	Intersection	Girdled Road / Crile Road
Agency/Co.	GPD Group	Jurisdiction	ODOT District 12
Date Performed	03/11/2022	East/West Street	Girdled Road
Analysis Year	2027	North/South Street	Crile Road
Time Analyzed	AM Peak 'No-Build'	Peak Hour Factor	0.94
Intersection Orientation	East-West	Analysis Time Period (hrs)	0.25
Project Description	GEA/LAK-44 Corridor Study		

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Movement	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Priority																
Number of Lanes	0	0	1	0	0	0	1	0		0	0	0		0	1	0
Configuration		LT						TR							LR	
Volume (veh/h)		30	120				370	60						30		50
Percent Heavy Vehicles (%)		1												2		2
Proportion Time Blocked																
Percent Grade (%)													0			
Right Turn Channelized																
Median Type Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		4.1													7.1		6.2
Critical Headway (sec)		4.11													6.42		6.22
Base Follow-Up Headway (sec)		2.2													3.5		3.3
Follow-Up Headway (sec)		2.21													3.52		3.32

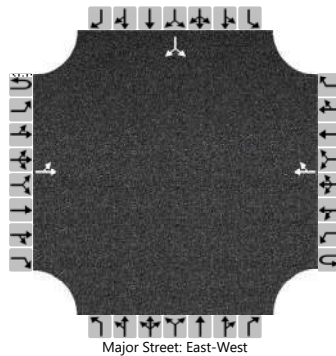
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		32														85	
Capacity, c (veh/h)		1109														541	
v/c Ratio		0.03														0.16	
95% Queue Length, Q ₉₅ (veh)		0.1														0.6	
Control Delay (s/veh)		8.3														12.9	
Level of Service (LOS)		A														B	
Approach Delay (s/veh)	1.9												12.9				
Approach LOS													B				

HCS7 Two-Way Stop-Control Report

General Information				Site Information			
Analyst	Naser Tabanja			Intersection	Girdled Road / Crile Road		
Agency/Co.	GPD Group			Jurisdiction	ODOT District 12		
Date Performed	03/11/2022			East/West Street	Girdled Road		
Analysis Year	2027			North/South Street	Crile Road		
Time Analyzed	PM Peak 'No-Build'			Peak Hour Factor	0.92		
Intersection Orientation	East-West			Analysis Time Period (hrs)	0.25		
Project Description	GEA/LAK-44 Corridor Study						

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Movement	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Priority																
Number of Lanes	0	0	1	0	0	0	1	0		0	0	0		0	1	0
Configuration		LT						TR							LR	
Volume (veh/h)		80	260				170	90						110		80
Percent Heavy Vehicles (%)		3												3		3
Proportion Time Blocked																
Percent Grade (%)														0		
Right Turn Channelized																
Median Type Storage	Undivided															

Critical and Follow-up Headways

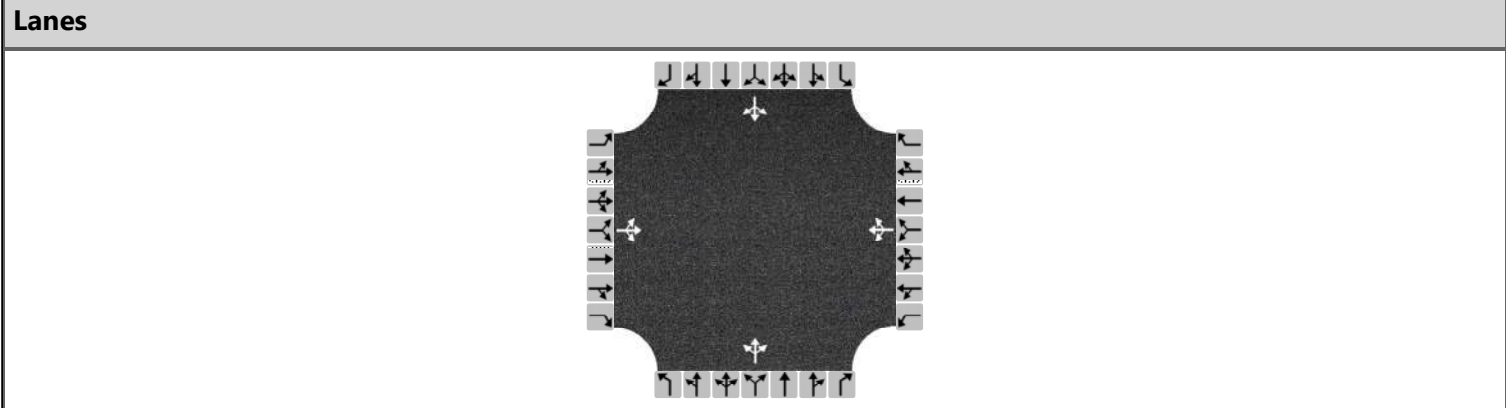
Base Critical Headway (sec)		4.1												7.1		6.2
Critical Headway (sec)		4.13												6.43		6.23
Base Follow-Up Headway (sec)		2.2												3.5		3.3
Follow-Up Headway (sec)		2.23												3.53		3.33

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		87														207	
Capacity, c (veh/h)		1274														485	
v/c Ratio		0.07														0.43	
95% Queue Length, Q ₉₅ (veh)		0.2														2.1	
Control Delay (s/veh)		8.0														17.8	
Level of Service (LOS)		A														C	
Approach Delay (s/veh)		2.4												17.8			
Approach LOS														C			

HCS7 All-Way Stop Control Report

General Information		Site Information	
Analyst	Nasr Tabanja	Intersection	Girdled Road /Auburn Road
Agency/Co.	GPD Group	Jurisdiction	ODOT District 12
Date Performed	03/11/2022	East/West Street	Girdled Road
Analysis Year	2027	North/South Street	Auburn Road
Analysis Time Period (hrs)	0.25	Peak Hour Factor	0.92
Time Analyzed	AM Peak 'No-Build'		
Project Description	GEA/LAK-44 Corridor Study		



Vehicle Volume and Adjustments

Approach	Eastbound			Westbound			Northbound			Southbound		
	L	T	R	L	T	R	L	T	R	L	T	R
Movement												
Volume	40	50	10	160	40	110	10	120	100	20	80	10
% Thrus in Shared Lane												
Lane	L1	L2	L3	L1	L2	L3	L1	L2	L3	L1	L2	L3
Configuration	LTR			LTR			LTR			LTR		
Flow Rate, v (veh/h)	109			337			250			120		
Percent Heavy Vehicles	3			3			4			2		

Departure Headway and Service Time

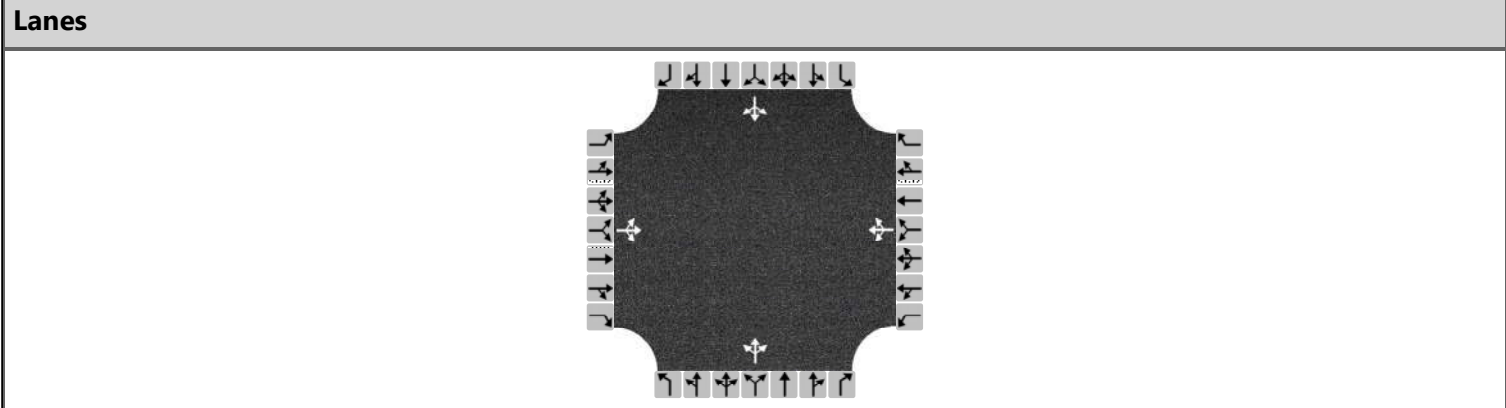
Initial Departure Headway, hd (s)	3.20			3.20			3.20			3.20		
Initial Degree of Utilization, x	0.097			0.300			0.222			0.106		
Final Departure Headway, hd (s)	5.50			5.02			5.11			5.51		
Final Degree of Utilization, x	0.166			0.470			0.355			0.183		
Move-Up Time, m (s)	2.0			2.0			2.0			2.0		
Service Time, ts (s)	3.50			3.02			3.11			3.51		

Capacity, Delay and Level of Service

Flow Rate, v (veh/h)	109			337			250			120		
Capacity	655			717			705			653		
95% Queue Length, Q ₉₅ (veh)	0.6			2.5			1.6			0.7		
Control Delay (s/veh)	9.6			12.4			10.9			9.7		
Level of Service, LOS	A			B			B			A		
Approach Delay (s/veh)	9.6			12.4			10.9			9.7		
Approach LOS	A			B			B			A		
Intersection Delay, s/veh LOS	11.2						B					

HCS7 All-Way Stop Control Report

General Information		Site Information	
Analyst	Naser Tabanja	Intersection	Girdled Road /Auburn Road
Agency/Co.	GPD Group	Jurisdiction	ODOT District 12
Date Performed	03/11/2022	East/West Street	Girdled Road
Analysis Year	2027	North/South Street	Auburn Road
Analysis Time Period (hrs)	0.25	Peak Hour Factor	0.81
Time Analyzed	PM Peak 'No-Build'		
Project Description	GEA/LAK-44 Corridor Study		



Vehicle Volume and Adjustments

Approach	Eastbound			Westbound			Northbound			Southbound		
	L	T	R	L	T	R	L	T	R	L	T	R
Movement												
Volume	20	90	30	100	60	20	10	120	100	60	110	30
% Thrus in Shared Lane												
Lane	L1	L2	L3	L1	L2	L3	L1	L2	L3	L1	L2	L3
Configuration	LTR			LTR			LTR			LTR		
Flow Rate, v (veh/h)	173			222			284			247		
Percent Heavy Vehicles	3			3			4			2		

Departure Headway and Service Time

Initial Departure Headway, hd (s)	3.20			3.20			3.20			3.20		
Initial Degree of Utilization, x	0.154			0.198			0.252			0.219		
Final Departure Headway, hd (s)	5.76			5.79			5.32			5.56		
Final Degree of Utilization, x	0.276			0.358			0.420			0.381		
Move-Up Time, m (s)	2.0			2.0			2.0			2.0		
Service Time, ts (s)	3.76			3.79			3.32			3.56		

Capacity, Delay and Level of Service

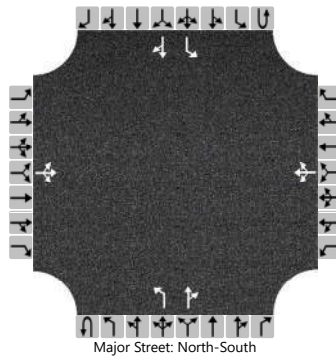
Flow Rate, v (veh/h)	173			222			284			247		
Capacity	625			621			677			648		
95% Queue Length, Q ₉₅ (veh)	1.1			1.6			2.1			1.8		
Control Delay (s/veh)	10.9			12.0			12.1			11.9		
Level of Service, LOS	B			B			B			B		
Approach Delay (s/veh)	10.9			12.0			12.1			11.9		
Approach LOS	B			B			B			B		
Intersection Delay, s/veh LOS	11.8						B					

OPENING YEAR 2027 'BUILD' CONDITIONS

HCS7 Two-Way Stop-Control Report

General Information				Site Information			
Analyst	Naser Tabanja			Intersection	SR-44 / Colburn Road		
Agency/Co.	GPD Group			Jurisdiction	ODOT District 12		
Date Performed	03/11/2022			East/West Street	Colburn Road		
Analysis Year	2027			North/South Street	SR-44		
Time Analyzed	AM Peak 'Build'			Peak Hour Factor	0.92		
Intersection Orientation	North-South			Analysis Time Period (hrs)	0.25		
Project Description	GEA/LAK-44 Corridor Study						

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	1	0	0	1	1	0	0	1	1	0
Configuration			LTR				LTR			L		TR		L		TR
Volume (veh/h)		10	10	10		10	20	60		10	570	10		20	510	10
Percent Heavy Vehicles (%)		5	5	5		3	3	3		5				6		
Proportion Time Blocked																
Percent Grade (%)	0				0											
Right Turn Channelized																
Median Type Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		7.1	6.5	6.2		7.1	6.5	6.2		4.1				4.1		
Critical Headway (sec)		7.15	6.55	6.25		7.13	6.53	6.23		4.15				4.16		
Base Follow-Up Headway (sec)		3.5	4.0	3.3		3.5	4.0	3.3		2.2				2.2		
Follow-Up Headway (sec)		3.55	4.05	3.35		3.53	4.03	3.33		2.25				2.25		

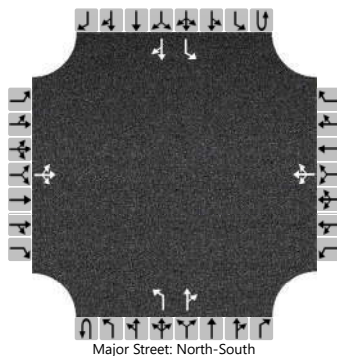
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			33				98			11				22		
Capacity, c (veh/h)			170				280			992				933		
v/c Ratio			0.19				0.35			0.01				0.02		
95% Queue Length, Q ₉₅ (veh)			0.7				1.5			0.0				0.1		
Control Delay (s/veh)			31.1				24.6			8.7				9.0		
Level of Service (LOS)			D				C			A				A		
Approach Delay (s/veh)	31.1				24.6				0.1				0.3			
Approach LOS	D				C											

HCS7 Two-Way Stop-Control Report

General Information				Site Information			
Analyst	Naser Tabanja	Intersection	SR-44 / Colburn Road				
Agency/Co.	GPD Group	Jurisdiction	ODOT District 12				
Date Performed	03/11/2022	East/West Street	Colburn Road				
Analysis Year	2027	North/South Street	SR-44				
Time Analyzed	PM Peak 'Build'	Peak Hour Factor	0.87				
Intersection Orientation	North-South	Analysis Time Period (hrs)	0.25				
Project Description	GEA/LAK-44 Corridor Study						

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	1	0	0	1	1	0	0	1	1	0
Configuration			LTR				LTR			L		TR		L		TR
Volume (veh/h)		10	10	10		10	10	30		10	700	20		40	680	10
Percent Heavy Vehicles (%)		5	5	5		3	3	3		5				6		
Proportion Time Blocked																
Percent Grade (%)	0				0											
Right Turn Channelized																
Median Type Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		7.1	6.5	6.2		7.1	6.5	6.2		4.1				4.1		
Critical Headway (sec)		7.15	6.55	6.25		7.13	6.53	6.23		4.15				4.16		
Base Follow-Up Headway (sec)		3.5	4.0	3.3		3.5	4.0	3.3		2.2				2.2		
Follow-Up Headway (sec)		3.55	4.05	3.35		3.53	4.03	3.33		2.25				2.25		

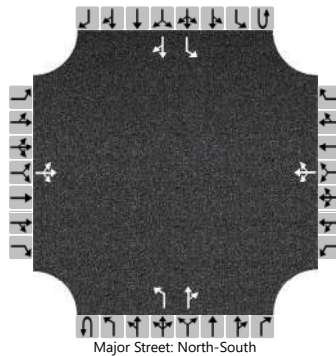
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			34				57							46		
Capacity, c (veh/h)			87				132							786		
v/c Ratio			0.40				0.44							0.06		
95% Queue Length, Q ₉₅ (veh)			1.6				1.9							0.2		
Control Delay (s/veh)			71.3				51.9							9.9		
Level of Service (LOS)			F				F							A		
Approach Delay (s/veh)	71.3				51.9				0.1				0.5			
Approach LOS	F				F											

HCS7 Two-Way Stop-Control Report

General Information				Site Information			
Analyst	Naser Tabanja			Intersection	SR-44 / Clark Road		
Agency/Co.	GPD Group			Jurisdiction	ODOT District 12		
Date Performed	03/11/2022			East/West Street	Clark Road		
Analysis Year	2027			North/South Street	SR-44		
Time Analyzed	AM Peak 'Build'			Peak Hour Factor	0.91		
Intersection Orientation	North-South			Analysis Time Period (hrs)	0.25		
Project Description	GEA/LAK-44 Corridor Study						

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	1	0	0	1	1	0	0	1	1	0
Configuration			LTR				LTR			L		TR		L		TR
Volume (veh/h)		10	10	10		10	20	40		10	590	10		10	540	10
Percent Heavy Vehicles (%)		5	5	5		4	4	4		5				4		
Proportion Time Blocked																
Percent Grade (%)		0				0										
Right Turn Channelized																
Median Type Storage		Undivided														

Critical and Follow-up Headways

Base Critical Headway (sec)		7.1	6.5	6.2		7.1	6.5	6.2		4.1				4.1		
Critical Headway (sec)		7.15	6.55	6.25		7.14	6.54	6.24		4.15				4.14		
Base Follow-Up Headway (sec)		3.5	4.0	3.3		3.5	4.0	3.3		2.2				2.2		
Follow-Up Headway (sec)		3.55	4.05	3.35		3.54	4.04	3.34		2.25				2.24		

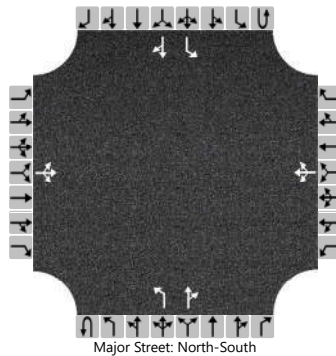
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			33				77							11			
Capacity, c (veh/h)			165				236							959			
v/c Ratio			0.20				0.33							0.01			
95% Queue Length, Q ₉₅ (veh)			0.7				1.4							0.0			
Control Delay (s/veh)			32.2				27.4							8.8			
Level of Service (LOS)			D				D							A			
Approach Delay (s/veh)		32.2				27.4				0.1				0.2			
Approach LOS		D				D				A				A			

HCS7 Two-Way Stop-Control Report

General Information				Site Information			
Analyst	Naser Tabanja			Intersection	SR-44 / Clark Road		
Agency/Co.	GPD Group			Jurisdiction	ODOT District 12		
Date Performed	1/17/2022			East/West Street	Clark Road		
Analysis Year	2027			North/South Street	SR-44		
Time Analyzed	PM Peak 'Build'			Peak Hour Factor	0.91		
Intersection Orientation	North-South			Analysis Time Period (hrs)	0.25		
Project Description	GEA/LAK-44 Corridor Study						

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	1	0	0	1	1	0	0	1	1	0
Configuration			LTR				LTR			L		TR		L		TR
Volume (veh/h)		10	20	10		10	20	30		20	730	20		40	720	10
Percent Heavy Vehicles (%)		5	5	5		4	4	4		5				4		
Proportion Time Blocked																
Percent Grade (%)	0				0											
Right Turn Channelized																
Median Type Storage	Undivided															

Critical and Follow-up Headways

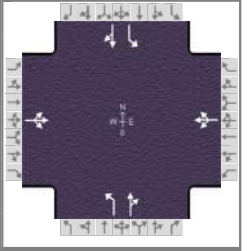
Base Critical Headway (sec)		7.1	6.5	6.2		7.1	6.5	6.2		4.1				4.1		
Critical Headway (sec)		7.15	6.55	6.25		7.14	6.54	6.24		4.15				4.14		
Base Follow-Up Headway (sec)		3.5	4.0	3.3		3.5	4.0	3.3		2.2				2.2		
Follow-Up Headway (sec)		3.55	4.05	3.35		3.54	4.04	3.34		2.25				2.24		

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			44				66			22				44		
Capacity, c (veh/h)			77				109			808				797		
v/c Ratio			0.57				0.60			0.03				0.06		
95% Queue Length, Q ₉₅ (veh)			2.5				3.0			0.1				0.2		
Control Delay (s/veh)			100.9				79.0			9.6				9.8		
Level of Service (LOS)			F				F			A				A		
Approach Delay (s/veh)	100.9				79.0				0.2				0.5			
Approach LOS	F				F											

HCS7 Signalized Intersection Results Summary

General Information				Intersection Information	
Agency	GPD GROUP			Duration, h	0.250
Analyst	Naser J Tabanja	Analysis Date	3/16/2022	Area Type	Other
Jurisdiction	ODOT - D12	Time Period	AM Peak 'Build'	PHF	0.92
Urban Street	SR-44	Analysis Year	2027	Analysis Period	1 > 7:00
Intersection	SR-44 / Hosford Road	File Name	6- SR-44_Hosford Rd_OY 2027_AM_Build.xus		
Project Description	GEA/LAK-44 Corridor Study				



Demand Information	EB			WB			NB			SB		
	L	T	R	L	T	R	L	T	R	L	T	R
Approach Movement												
Demand (v), veh/h	10	10	10	20	30	190	10	410	10	60	500	10

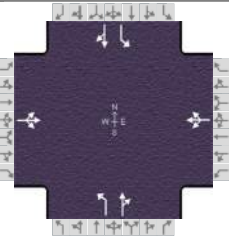
Signal Information				Signal Timing (s)								Signal Phases				
Cycle, s	39.6	Reference Phase	2	Green	20.0	9.6	0.0	0.0	0.0	0.0	0.0	0.0	1	2	3	4
Offset, s	0	Reference Point	End	Yellow	3.0	3.0	0.0	0.0	0.0	0.0	0.0	0.0	5	6	7	8
Uncoordinated	Yes	Simult. Gap E/W	On	Red	2.0	2.0	0.0	0.0	0.0	0.0	0.0	0.0				
Force Mode	Fixed	Simult. Gap N/S	On													

Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase		4		8		2		6
Case Number		8.0		8.0		6.0		6.0
Phase Duration, s		14.6		14.6		25.0		25.0
Change Period, (Y+R _c), s		5.0		5.0		5.0		5.0
Max Allow Headway (MAH), s		3.8		3.8		3.6		3.6
Queue Clearance Time (g _s), s		2.6		7.7		10.8		10.5
Green Extension Time (g _e), s		0.9		0.8		3.5		3.5
Phase Call Probability		0.96		0.96		1.00		1.00
Max Out Probability		0.00		0.00		0.00		0.00

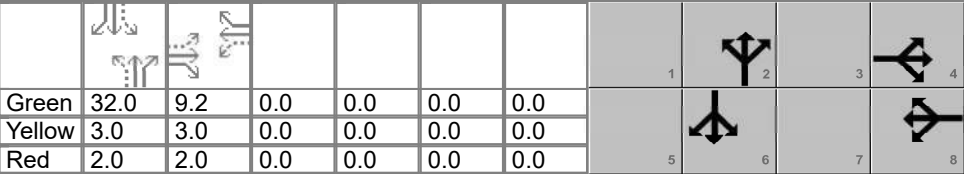
Movement Group Results	EB			WB			NB			SB		
	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	7	4	14	3	8	18	5	2	12	1	6	16
Adjusted Flow Rate (v), veh/h	33			261			11 457			65 554		
Adjusted Saturation Flow Rate (s), veh/h/ln	1554			1617			834 1818			927 1849		
Queue Service Time (g _s), s	0.0			0.9			0.4 6.6			2.0 8.4		
Cycle Queue Clearance Time (g _c), s	0.6			5.7			8.8 6.6			8.5 8.4		
Green Ratio (g/C)	0.24			0.24			0.50 0.50			0.50 0.50		
Capacity (c), veh/h	498			491			426 918			496 934		
Volume-to-Capacity Ratio (X)	0.065			0.532			0.025 0.497			0.131 0.594		
Back of Queue (Q), ft/ln (95 th percentile)	7.1			66.9			2.1 45.9			11.2 59.8		
Back of Queue (Q), veh/ln (95 th percentile)	0.3			2.6			0.1 1.8			0.4 2.3		
Queue Storage Ratio (RQ) (95 th percentile)	0.00			0.00			0.00 0.00			0.00 0.00		
Uniform Delay (d ₁), s/veh	11.6			13.5			10.0 6.5			9.3 6.9		
Incremental Delay (d ₂), s/veh	0.1			0.9			0.0 0.4			0.1 0.6		
Initial Queue Delay (d ₃), s/veh	0.0			0.0			0.0 0.0			0.0 0.0		
Control Delay (d), s/veh	11.6			14.4			10.0 6.9			9.4 7.5		
Level of Service (LOS)	B			B			B A			A A		
Approach Delay, s/veh / LOS	11.6	B		14.4	B		7.0	A		7.7	A	
Intersection Delay, s/veh / LOS	8.8						A					

Multimodal Results	EB	WB	NB	SB
Pedestrian LOS Score / LOS				
Bicycle LOS Score / LOS				

HCS7 Signalized Intersection Results Summary

General Information				Intersection Information		
Agency	GPD GROUP			Duration, h	0.250	
Analyst	Naser J Tabanja	Analysis Date	3/16/2022	Area Type	Other	
Jurisdiction	ODOT - D12	Time Period	PM Peak 'Build'	PHF	0.92	
Urban Street	SR-44	Analysis Year	2027	Analysis Period	1 > 7:00	
Intersection	SR-44 / Hosford Road	File Name	6- SR-44_Hosford Rd_OY 2027_PM_Build.xus			
Project Description	GEA/LAK-44 Corridor Study					

Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (v), veh/h	10	20	10	10	20	90	10	680	30	130	610	10

Signal Information													
Cycle, s	51.2	Reference Phase	2	Green	32.0	9.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Offset, s	0	Reference Point	End	Yellow	3.0	3.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Uncoordinated	Yes	Simult. Gap E/W	On	Red	2.0	2.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Force Mode	Fixed	Simult. Gap N/S	On										

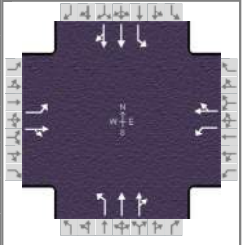
Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase		4		8		2		6
Case Number		8.0		8.0		6.0		6.0
Phase Duration, s		14.2		14.2		37.0		37.0
Change Period, (Y+R _c), s		5.0		5.0		5.0		5.0
Max Allow Headway (MAH), s		3.8		3.8		3.8		3.8
Queue Clearance Time (g _s), s		3.1		5.6		16.2		24.9
Green Extension Time (g _e), s		0.5		0.5		7.0		7.0
Phase Call Probability		0.92		0.92		1.00		1.00
Max Out Probability		0.00		0.00		0.00		0.00

Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	7	4	14	3	8	18	5	2	12	1	6	16
Adjusted Flow Rate (v), veh/h	43			130			11	772		141	674	
Adjusted Saturation Flow Rate (s), veh/h/ln	1655			1629			746	1812		692	1850	
Queue Service Time (g _s), s	0.0			0.0			0.4	14.2		8.6	11.0	
Cycle Queue Clearance Time (g _c), s	1.1			3.6			11.5	14.2		22.9	11.0	
Green Ratio (g/C)	0.18			0.18			0.63	0.63		0.63	0.63	
Capacity (c), veh/h	383			366			448	1136		382	1160	
Volume-to-Capacity Ratio (X)	0.114			0.356			0.024	0.679		0.370	0.581	
Back of Queue (Q), ft/ln (95 th percentile)	16.8			52.6			2.4	92.9		46	70.7	
Back of Queue (Q), veh/ln (95 th percentile)	0.6			2.1			0.1	3.6		1.8	2.8	
Queue Storage Ratio (RQ) (95 th percentile)	0.00			0.00			0.00	0.00		0.00	0.00	
Uniform Delay (d ₁), s/veh	17.8			18.8			9.0	6.2		13.7	5.6	
Incremental Delay (d ₂), s/veh	0.1			0.6			0.0	0.7		0.6	0.5	
Initial Queue Delay (d ₃), s/veh	0.0			0.0			0.0	0.0		0.0	0.0	
Control Delay (d), s/veh	17.9			19.4			9.0	6.9		14.3	6.1	
Level of Service (LOS)	B			B			A	A		B	A	
Approach Delay, s/veh / LOS	17.9	B		19.4	B		7.0	A		7.5	A	
Intersection Delay, s/veh / LOS	8.4						A					

Multimodal Results	EB	WB	NB	SB
Pedestrian LOS Score / LOS				
Bicycle LOS Score / LOS				

HCS7 Signalized Intersection Results Summary

General Information				Intersection Information			
Agency	GPD Group			Duration, h	0.250		
Analyst	Naser J Tabanja	Analysis Date	3/15/2022	Area Type	Other		
Jurisdiction	ODOT - D12	Time Period	AM Peak	PHF	0.89		
Urban Street	SR-44	Analysis Year	2027	Analysis Period	1 > 7:00		
Intersection	SR-44 / Girdled Road	File Name	2- SR-44_Girdled Rd_OY AM_Build.xus				
Project Description	SR-44 Corridor Study						



Demand Information	EB			WB			NB			SB		
	L	T	R	L	T	R	L	T	R	L	T	R
Approach Movement												
Demand (v), veh/h	90	60	20	50	160	210	40	570	30	60	470	110

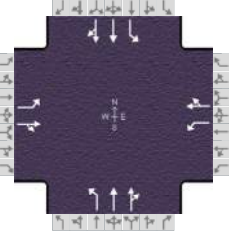
Signal Information													
Cycle, s	83.4	Reference Phase	2										
Offset, s	0	Reference Point	End										
Uncoordinated	Yes	Simult. Gap E/W	On	Green	5.2	1.1	25.0	5.1	1.2	22.8			
Force Mode	Fixed	Simult. Gap N/S	On	Yellow	3.0	0.0	5.0	3.0	0.0	3.6			
				Red	2.7	0.0	1.6	2.0	0.0	2.1			

Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	7	4	3	8	5	2	1	6
Case Number	1.1	4.0	1.1	4.0	1.1	4.0	1.1	4.0
Phase Duration, s	11.3	29.7	10.1	28.5	10.9	31.6	12.0	32.7
Change Period, (Y+R _c), s	5.0	5.7	5.0	5.7	5.7	6.6	5.7	6.6
Max Allow Headway (MAH), s	3.7	3.8	3.7	3.8	3.7	3.6	3.7	3.6
Queue Clearance Time (g _s), s	5.4	5.2	3.8	21.7	3.4	15.4	4.1	14.8
Green Extension Time (g _e), s	0.1	1.6	0.1	1.1	0.0	4.0	0.1	4.1
Phase Call Probability	0.90	1.00	0.73	1.00	0.65	1.00	0.79	1.00
Max Out Probability	0.00	0.00	0.00	0.14	0.00	0.02	0.00	0.02

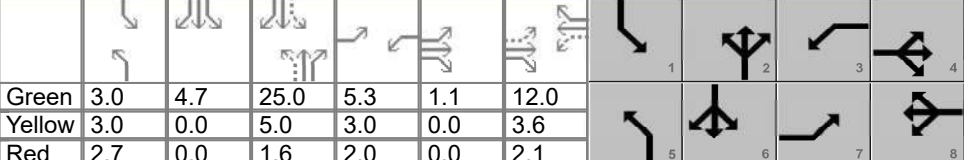
Movement Group Results	EB			WB			NB			SB		
	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	7	4	14	3	8	18	5	2	12	1	6	16
Adjusted Flow Rate (v), veh/h	101	90		56	416		45	340	334	67	336	316
Adjusted Saturation Flow Rate (s), veh/h/ln	1739	1747		1781	1697		1739	1826	1793	1767	1856	1733
Queue Service Time (g _s), s	3.4	3.2		1.8	19.7		1.4	13.4	13.4	2.1	12.7	12.8
Cycle Queue Clearance Time (g _c), s	3.4	3.2		1.8	19.7		1.4	13.4	13.4	2.1	12.7	12.8
Green Ratio (g/C)	0.35	0.29		0.33	0.27		0.36	0.30	0.30	0.38	0.31	0.31
Capacity (c), veh/h	254	503		490	463		298	547	537	326	581	543
Volume-to-Capacity Ratio (X)	0.399	0.179		0.115	0.897		0.151	0.621	0.622	0.207	0.578	0.582
Back of Queue (Q), ft/ln (95 th percentile)	61.2	58.5		32	353.8		25	241.7	229.5	36.4	229.2	214.1
Back of Queue (Q), veh/ln (95 th percentile)	2.4	2.2		1.3	13.9		1.0	9.3	9.2	1.4	9.0	8.6
Queue Storage Ratio (RQ) (95 th percentile)	0.00	0.00		0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00
Uniform Delay (d ₁), s/veh	21.4	22.3		19.2	29.2		18.6	25.1	25.2	18.1	24.0	24.1
Incremental Delay (d ₂), s/veh	1.0	0.2		0.1	13.2		0.2	1.2	1.2	0.3	0.9	1.0
Initial Queue Delay (d ₃), s/veh	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	22.4	22.5		19.3	42.4		18.9	26.3	26.3	18.4	24.9	25.0
Level of Service (LOS)	C	C		B	D		B	C	C	B	C	C
Approach Delay, s/veh / LOS	22.4	C		39.6	D		25.9	C		24.4	C	
Intersection Delay, s/veh / LOS	28.1						C					

Multimodal Results	EB	WB	NB	SB
Pedestrian LOS Score / LOS				
Bicycle LOS Score / LOS				

HCS7 Signalized Intersection Results Summary

General Information				Intersection Information		
Agency	GPD Group			Duration, h	0.250	
Analyst	Naser J Tabanja	Analysis Date	3/15/2022	Area Type	Other	
Jurisdiction	ODOT - D12	Time Period	PM Peak	PHF	0.89	
Urban Street	SR-44	Analysis Year	2027	Analysis Period	1 > 7:00	
Intersection	SR-44 / Girdled Road	File Name	2- SR-44_Girdled Rd_OY PM_Build.xus			
Project Description	SR-44 Corridor Study					

Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (v), veh/h	100	130	20	60	100	90	20	650	70	140	650	60

Signal Information																								
Cycle, s	74.0	Reference Phase	2	Green	3.0	4.7	25.0	5.3	1.1	12.0	Yellow	3.0	0.0	5.0	3.0	0.0	3.6	Red	2.7	0.0	1.6	2.0	0.0	2.1
Offset, s	0	Reference Point	End	Uncoordinated	Yes	Simult. Gap E/W	On	Force Mode	Fixed	Simult. Gap N/S	On													

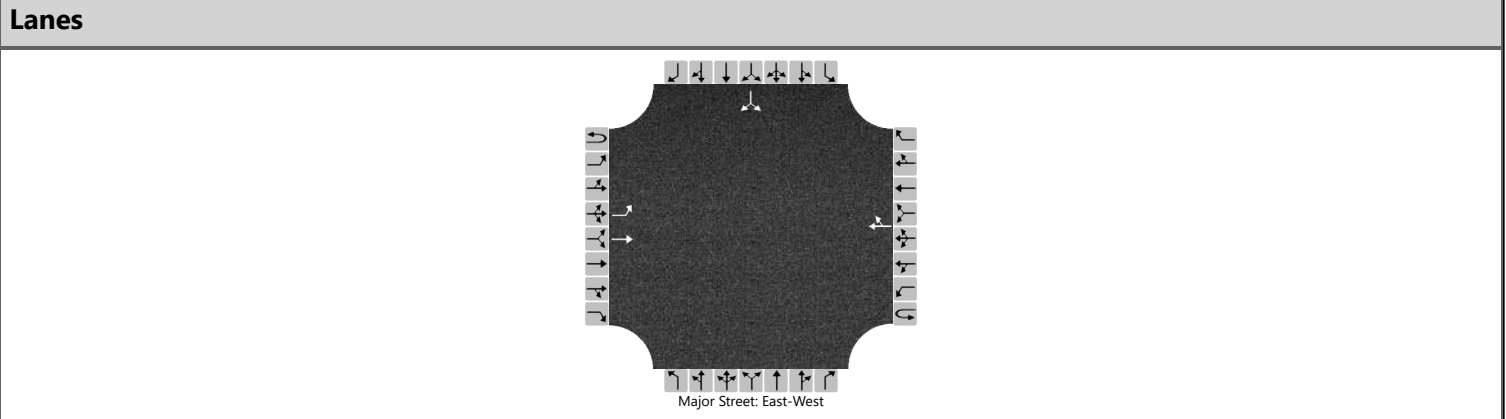
Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	7	4	3	8	5	2	1	6
Case Number	1.1	4.0	1.1	4.0	1.1	4.0	1.1	4.0
Phase Duration, s	11.3	18.8	10.3	17.7	8.7	31.6	13.4	36.3
Change Period, (Y+R _c), s	5.0	5.7	5.0	5.7	5.7	6.6	5.7	6.6
Max Allow Headway (MAH), s	3.7	3.7	3.7	3.7	3.7	3.6	3.7	3.6
Queue Clearance Time (g _s), s	5.8	8.4	4.2	10.8	2.6	16.3	5.9	14.4
Green Extension Time (g _e), s	0.2	1.0	0.1	1.0	0.0	5.2	0.2	5.2
Phase Call Probability	0.90	1.00	0.75	1.00	0.37	1.00	0.96	1.00
Max Out Probability	0.00	0.00	0.00	0.00	0.00	0.06	0.01	0.05

Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	7	4	14	3	8	18	5	2	12	1	6	16
Adjusted Flow Rate (v), veh/h	112	169		67	213		22	411	398	157	405	393
Adjusted Saturation Flow Rate (s), veh/h/ln	1739	1783		1781	1723		1739	1826	1763	1767	1856	1800
Queue Service Time (g _s), s	3.8	6.4		2.2	8.8		0.6	14.2	14.3	3.9	12.4	12.4
Cycle Queue Clearance Time (g _c), s	3.8	6.4		2.2	8.8		0.6	14.2	14.3	3.9	12.4	12.4
Green Ratio (g/C)	0.25	0.18		0.23	0.16		0.38	0.34	0.34	0.46	0.40	0.40
Capacity (c), veh/h	296	315		301	280		305	617	596	378	745	723
Volume-to-Capacity Ratio (X)	0.380	0.536		0.224	0.764		0.074	0.667	0.667	0.416	0.543	0.544
Back of Queue (Q), ft/ln (95 th percentile)	69.7	122.3		40.4	167.4		10.2	244.8	229.3	63.9	209.5	200
Back of Queue (Q), veh/ln (95 th percentile)	2.7	4.7		1.6	6.6		0.4	9.4	9.2	2.5	8.2	8.0
Queue Storage Ratio (RQ) (95 th percentile)	0.00	0.00		0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00
Uniform Delay (d ₁), s/veh	23.0	27.7		23.0	29.6		15.2	20.9	20.9	14.1	16.9	16.9
Incremental Delay (d ₂), s/veh	0.8	1.4		0.4	4.3		0.1	1.3	1.3	0.7	0.6	0.6
Initial Queue Delay (d ₃), s/veh	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	23.8	29.1		23.4	34.0		15.3	22.2	22.2	14.8	17.6	17.6
Level of Service (LOS)	C	C		C	C		B	C	C	B	B	B
Approach Delay, s/veh / LOS	27.0	C		31.4	C		22.0	C		17.1		B
Intersection Delay, s/veh / LOS	21.7						C					

Multimodal Results	EB	WB	NB	SB
Pedestrian LOS Score / LOS				
Bicycle LOS Score / LOS				

HCS7 Two-Way Stop-Control Report

General Information		Site Information	
Analyst	NJT	Intersection	Girdled Road / Crile Road
Agency/Co.	GPD Group	Jurisdiction	ODOT District 12
Date Performed	03/11/2022	East/West Street	Girdled Road
Analysis Year	2027	North/South Street	Crile Road
Time Analyzed	AM Peak 'Build'	Peak Hour Factor	0.94
Intersection Orientation	East-West	Analysis Time Period (hrs)	0.25
Project Description	GEA/LAK-44 Corridor Study		



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Movement	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Priority																
Number of Lanes	0	1	1	0	0	0	1	0		0	0	0		0	1	0
Configuration		L	T					TR							LR	
Volume (veh/h)		30	120				370	60						30		50
Percent Heavy Vehicles (%)		1												2		2
Proportion Time Blocked																
Percent Grade (%)														0		
Right Turn Channelized																
Median Type Storage		Undivided														

Critical and Follow-up Headways

Base Critical Headway (sec)		4.1												7.1		6.2
Critical Headway (sec)		4.11												6.42		6.22
Base Follow-Up Headway (sec)		2.2												3.5		3.3
Follow-Up Headway (sec)		2.21												3.52		3.32

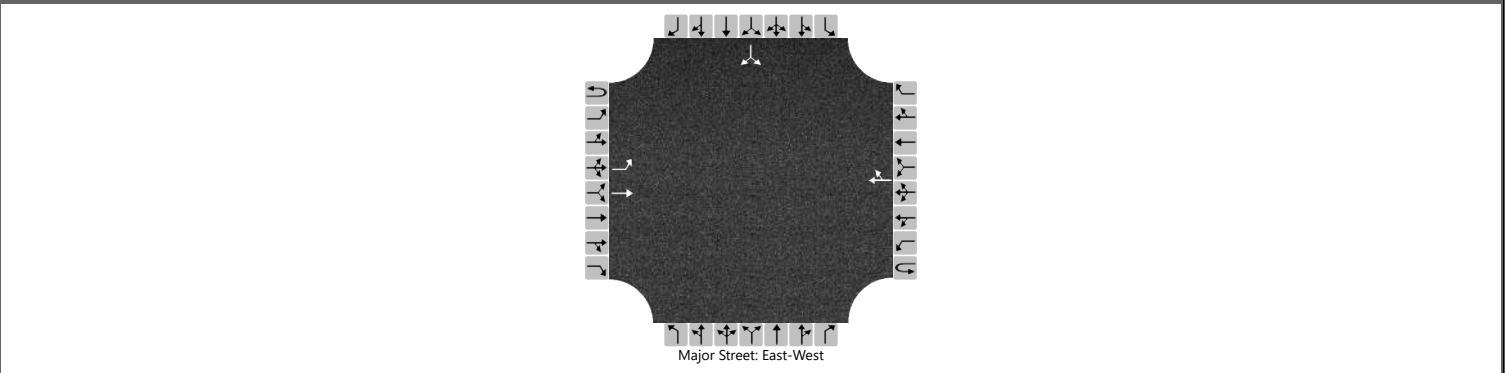
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		32														85	
Capacity, c (veh/h)		1109														542	
v/c Ratio		0.03														0.16	
95% Queue Length, Q ₉₅ (veh)		0.1														0.6	
Control Delay (s/veh)		8.3														12.9	
Level of Service (LOS)		A														B	
Approach Delay (s/veh)		1.7												12.9			
Approach LOS		B												B			

HCS7 Two-Way Stop-Control Report

General Information		Site Information	
Analyst	NJT	Intersection	Girdled Road / Crile Road
Agency/Co.	GPD Group	Jurisdiction	ODOT District 12
Date Performed	03/11/2022	East/West Street	Girdled Road
Analysis Year	2027	North/South Street	Crile Road
Time Analyzed	PM Peak 'Build'	Peak Hour Factor	0.92
Intersection Orientation	East-West	Analysis Time Period (hrs)	0.25
Project Description	GEA/LAK-44 Corridor Study		

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Movement	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Priority																
Number of Lanes	0	1	1	0	0	0	1	0		0	0	0		0	1	0
Configuration		L	T					TR							LR	
Volume (veh/h)		80	260				170	90						110		80
Percent Heavy Vehicles (%)		3												3		3
Proportion Time Blocked																
Percent Grade (%)														0		
Right Turn Channelized																
Median Type Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		4.1												7.1		6.2
Critical Headway (sec)		4.13												6.43		6.23
Base Follow-Up Headway (sec)		2.2												3.5		3.3
Follow-Up Headway (sec)		2.23												3.53		3.33

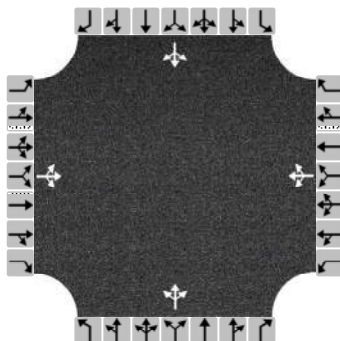
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		87														207	
Capacity, c (veh/h)		1274														490	
v/c Ratio		0.07														0.42	
95% Queue Length, Q ₉₅ (veh)		0.2														2.1	
Control Delay (s/veh)		8.0														17.6	
Level of Service (LOS)		A														C	
Approach Delay (s/veh)		1.9												17.6			
Approach LOS														C			

HCS7 All-Way Stop Control Report

General Information		Site Information	
Analyst	Naser Tabanja	Intersection	Girdled Road /Auburn Road
Agency/Co.	GPD Group	Jurisdiction	ODOT District 12
Date Performed	03/11/2022	East/West Street	Girdled Road
Analysis Year	2027	North/South Street	Auburn Road
Analysis Time Period (hrs)	0.25	Peak Hour Factor	0.92
Time Analyzed	AM Peak 'Build'		
Project Description	GEA/LAK-44 Corridor Study		

Lanes



Vehicle Volume and Adjustments

Approach	Eastbound			Westbound			Northbound			Southbound		
	L	T	R	L	T	R	L	T	R	L	T	R
Movement												
Volume	40	50	10	160	40	110	10	120	100	20	80	10
% Thrus in Shared Lane												
Lane	L1	L2	L3	L1	L2	L3	L1	L2	L3	L1	L2	L3
Configuration	LTR			LTR			LTR			LTR		
Flow Rate, v (veh/h)	109			337			250			120		
Percent Heavy Vehicles	3			3			4			2		

Departure Headway and Service Time

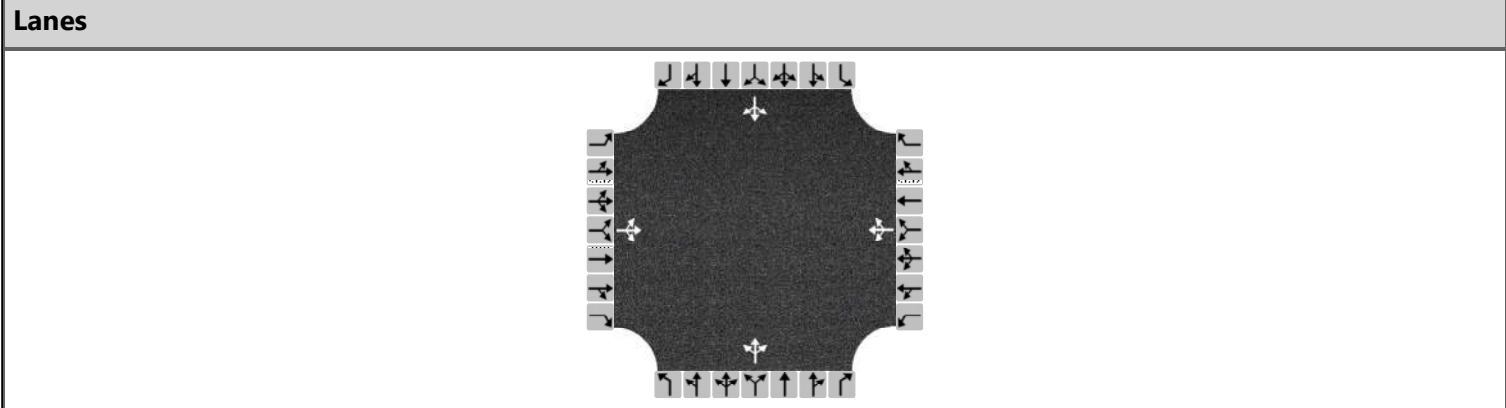
Initial Departure Headway, hd (s)	3.20			3.20			3.20			3.20		
Initial Degree of Utilization, x	0.097			0.300			0.222			0.106		
Final Departure Headway, hd (s)	5.50			5.02			5.11			5.51		
Final Degree of Utilization, x	0.166			0.470			0.355			0.183		
Move-Up Time, m (s)	2.0			2.0			2.0			2.0		
Service Time, ts (s)	3.50			3.02			3.11			3.51		

Capacity, Delay and Level of Service

Flow Rate, v (veh/h)	109			337			250			120		
Capacity	655			717			705			653		
95% Queue Length, Q ₉₅ (veh)	0.6			2.5			1.6			0.7		
Control Delay (s/veh)	9.6			12.4			10.9			9.7		
Level of Service, LOS	A			B			B			A		
Approach Delay (s/veh)	9.6			12.4			10.9			9.7		
Approach LOS	A			B			B			A		
Intersection Delay, s/veh LOS	11.2						B					

HCS7 All-Way Stop Control Report

General Information		Site Information	
Analyst	Naser Tabanja	Intersection	Girdled Road /Auburn Road
Agency/Co.	GPD Group	Jurisdiction	ODOT District 12
Date Performed	03/11/2022	East/West Street	Girdled Road
Analysis Year	2027	North/South Street	Auburn Road
Analysis Time Period (hrs)	0.25	Peak Hour Factor	0.81
Time Analyzed	PM Peak 'Build'		
Project Description	GEA/LAK-44 Corridor Study		



Vehicle Volume and Adjustments

Approach	Eastbound			Westbound			Northbound			Southbound		
	L	T	R	L	T	R	L	T	R	L	T	R
Movement												
Volume	20	90	30	100	60	20	10	120	100	60	110	30
% Thrus in Shared Lane												
Lane	L1	L2	L3	L1	L2	L3	L1	L2	L3	L1	L2	L3
Configuration	LTR			LTR			LTR			LTR		
Flow Rate, v (veh/h)	173			222			284			247		
Percent Heavy Vehicles	3			3			4			2		

Departure Headway and Service Time

Initial Departure Headway, hd (s)	3.20			3.20			3.20			3.20		
Initial Degree of Utilization, x	0.154			0.198			0.252			0.219		
Final Departure Headway, hd (s)	5.76			5.79			5.32			5.56		
Final Degree of Utilization, x	0.276			0.358			0.420			0.381		
Move-Up Time, m (s)	2.0			2.0			2.0			2.0		
Service Time, ts (s)	3.76			3.79			3.32			3.56		

Capacity, Delay and Level of Service

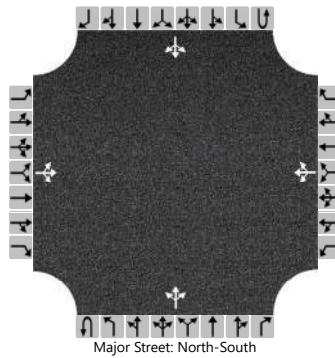
Flow Rate, v (veh/h)	173			222			284			247		
Capacity	625			621			677			648		
95% Queue Length, Q ₉₅ (veh)	1.1			1.6			2.1			1.8		
Control Delay (s/veh)	10.9			12.0			12.1			11.9		
Level of Service, LOS	B			B			B			B		
Approach Delay (s/veh)	10.9			12.0			12.1			11.9		
Approach LOS	B			B			B			B		
Intersection Delay, s/veh LOS	11.8						B					

DESIGN YEAR 2047 'NO-BUILD' CONDITIONS

HCS7 Two-Way Stop-Control Report

General Information				Site Information			
Analyst	Naser Tabanja			Intersection	SR-44 / Colburn Road		
Agency/Co.	GPD Group			Jurisdiction	ODOT District 12		
Date Performed	03/11/2022			East/West Street	Colburn Road		
Analysis Year	2047			North/South Street	SR-44		
Time Analyzed	AM Peak 'No-Build'			Peak Hour Factor	0.92		
Intersection Orientation	North-South			Analysis Time Period (hrs)	0.25		
Project Description	GEA/LAK-44 Corridor Study						

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	1	0	0	0	1	0	0	0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume (veh/h)		10	10	10		10	20	70		10	620	10		20	570	10
Percent Heavy Vehicles (%)		5	5	5		3	3	3		5				6		
Proportion Time Blocked																
Percent Grade (%)	0				0											
Right Turn Channelized																
Median Type Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		7.1	6.5	6.2		7.1	6.5	6.2		4.1				4.1		
Critical Headway (sec)		7.15	6.55	6.25		7.13	6.53	6.23		4.15				4.16		
Base Follow-Up Headway (sec)		3.5	4.0	3.3		3.5	4.0	3.3		2.2				2.2		
Follow-Up Headway (sec)		3.55	4.05	3.35		3.53	4.03	3.33		2.25				2.25		

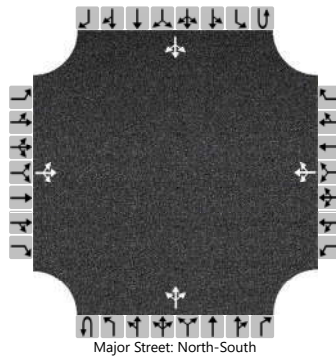
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			33				109							22		
Capacity, c (veh/h)			135				252							890		
v/c Ratio			0.24				0.43							0.02		
95% Queue Length, Q ₉₅ (veh)			0.9				2.0							0.1		
Control Delay (s/veh)			39.9				29.6							8.9		9.1
Level of Service (LOS)			E				D							A		A
Approach Delay (s/veh)	39.9				29.6				0.3				0.6			
Approach LOS	E				D											

HCS7 Two-Way Stop-Control Report

General Information				Site Information			
Analyst	Naser Tabanja			Intersection	SR-44 / Colburn Road		
Agency/Co.	GPD Group			Jurisdiction	ODOT District 12		
Date Performed	03/11/2022			East/West Street	Colburn Road		
Analysis Year	2047			North/South Street	SR-44		
Time Analyzed	PM Peak 'No-Build'			Peak Hour Factor	0.87		
Intersection Orientation	North-South			Analysis Time Period (hrs)	0.25		
Project Description	GEA/LAK-44 Corridor Study						

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	1	0	0	0	1	0	0	0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume (veh/h)		10	10	10		10	10	30		10	770	20		50	760	10
Percent Heavy Vehicles (%)		5	5	5		3	3	3		5				6		
Proportion Time Blocked																
Percent Grade (%)	0				0											
Right Turn Channelized																
Median Type Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		7.1	6.5	6.2		7.1	6.5	6.2		4.1				4.1		
Critical Headway (sec)		7.15	6.55	6.25		7.13	6.53	6.23		4.15				4.16		
Base Follow-Up Headway (sec)		3.5	4.0	3.3		3.5	4.0	3.3		2.2				2.2		
Follow-Up Headway (sec)		3.55	4.05	3.35		3.53	4.03	3.33		2.25				2.25		

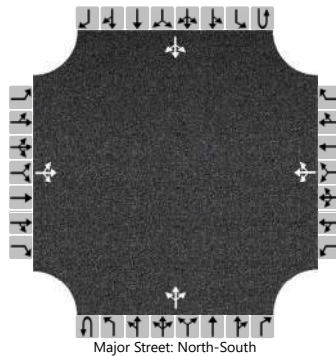
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			34				57							57		
Capacity, c (veh/h)			56				90							733		
v/c Ratio			0.61				0.64							0.08		
95% Queue Length, Q ₉₅ (veh)			2.5				3.0							0.3		
Control Delay (s/veh)			140.0				98.8							10.3		
Level of Service (LOS)			F				F							B		
Approach Delay (s/veh)	140.0				98.8				0.4				2.1			
Approach LOS	F				F											

HCS7 Two-Way Stop-Control Report

General Information				Site Information			
Analyst	Naser Tabanja			Intersection	SR-44 / Clark Road		
Agency/Co.	GPD Group			Jurisdiction	ODOT District 12		
Date Performed	03/11/2022			East/West Street	Clark Road		
Analysis Year	2047			North/South Street	SR-44		
Time Analyzed	AM Peak 'No-Build'			Peak Hour Factor	0.91		
Intersection Orientation	North-South			Analysis Time Period (hrs)	0.25		
Project Description	GEA/LAK-44 Corridor Study						

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	1	0	0	0	1	0	0	0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume (veh/h)		10	10	10		10	20	40		10	650	10		10	590	10
Percent Heavy Vehicles (%)		5	5	5		4	4	4		5				4		
Proportion Time Blocked																
Percent Grade (%)	0				0											
Right Turn Channelized																
Median Type Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		7.1	6.5	6.2		7.1	6.5	6.2		4.1				4.1		
Critical Headway (sec)		7.15	6.55	6.25		7.14	6.54	6.24		4.15				4.14		
Base Follow-Up Headway (sec)		3.5	4.0	3.3		3.5	4.0	3.3		2.2				2.2		
Follow-Up Headway (sec)		3.55	4.05	3.35		3.54	4.04	3.34		2.25				2.24		

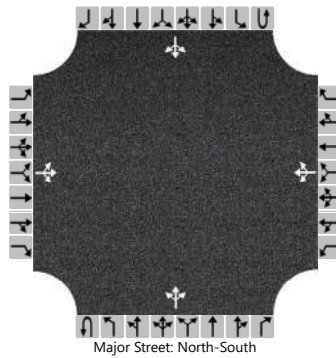
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			33				77							11		
Capacity, c (veh/h)			135				200							915		868
v/c Ratio			0.25				0.39							0.01		0.01
95% Queue Length, Q ₉₅ (veh)			0.9				1.7							0.0		0.0
Control Delay (s/veh)			40.2				33.9							9.0		9.2
Level of Service (LOS)			E				D							A		A
Approach Delay (s/veh)	40.2				33.9				0.3				0.3			
Approach LOS	E				D											

HCS7 Two-Way Stop-Control Report

General Information				Site Information			
Analyst	Naser Tabanja			Intersection	SR-44 / Clark Road		
Agency/Co.	GPD Group			Jurisdiction	ODOT District 12		
Date Performed	1/17/2022			East/West Street	Clark Road		
Analysis Year	2047			North/South Street	SR-44		
Time Analyzed	PM Peak 'No-Build'			Peak Hour Factor	0.91		
Intersection Orientation	North-South			Analysis Time Period (hrs)	0.25		
Project Description	GEA/LAK-44 Corridor Study						

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	1	0	0	0	1	0	0	0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume (veh/h)		10	20	10		10	20	40		20	800	20		50	800	10
Percent Heavy Vehicles (%)		5	5	5		4	4	4		5				4		
Proportion Time Blocked																
Percent Grade (%)	0				0											
Right Turn Channelized																
Median Type Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		7.1	6.5	6.2		7.1	6.5	6.2		4.1				4.1		
Critical Headway (sec)		7.15	6.55	6.25		7.14	6.54	6.24		4.15				4.14		
Base Follow-Up Headway (sec)		3.5	4.0	3.3		3.5	4.0	3.3		2.2				2.2		
Follow-Up Headway (sec)		3.55	4.05	3.35		3.54	4.04	3.34		2.25				2.24		

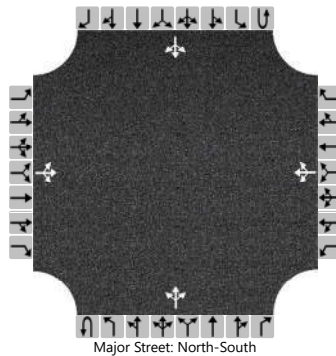
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			44				77			22				55		
Capacity, c (veh/h)			47				80			749				746		
v/c Ratio			0.93				0.96			0.03				0.07		
95% Queue Length, Q ₉₅ (veh)			3.9				5.2			0.1				0.2		
Control Delay (s/veh)			243.4				180.8			10.0				10.2		
Level of Service (LOS)			F				F			A				B		
Approach Delay (s/veh)	243.4				180.8				0.8				2.0			
Approach LOS	F				F											

HCS7 Two-Way Stop-Control Report

General Information				Site Information			
Analyst	Naser Tabanja			Intersection	SR-44 / Hosford Road		
Agency/Co.	GPD Group			Jurisdiction	ODOT District 12		
Date Performed	03/11/2022			East/West Street	Hosford Road		
Analysis Year	2047			North/South Street	SR-44		
Time Analyzed	AM Peak 'No-Build'			Peak Hour Factor	0.89		
Intersection Orientation	North-South			Analysis Time Period (hrs)	0.25		
Project Description	GEA/LAK-44 Corridor Study						

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	1	0	0	0	1	0	0	0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume (veh/h)		10	10	10		20	30	190		10	450	10		60	550	10
Percent Heavy Vehicles (%)		5	5	5		2	2	2		5				3		
Proportion Time Blocked																
Percent Grade (%)	0				0											
Right Turn Channelized																
Median Type Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		7.1	6.5	6.2		7.1	6.5	6.2		4.1				4.1		
Critical Headway (sec)		7.15	6.55	6.25		7.12	6.52	6.22		4.15				4.13		
Base Follow-Up Headway (sec)		3.5	4.0	3.3		3.5	4.0	3.3		2.2				2.2		
Follow-Up Headway (sec)		3.55	4.05	3.35		3.52	4.02	3.32		2.25				2.23		

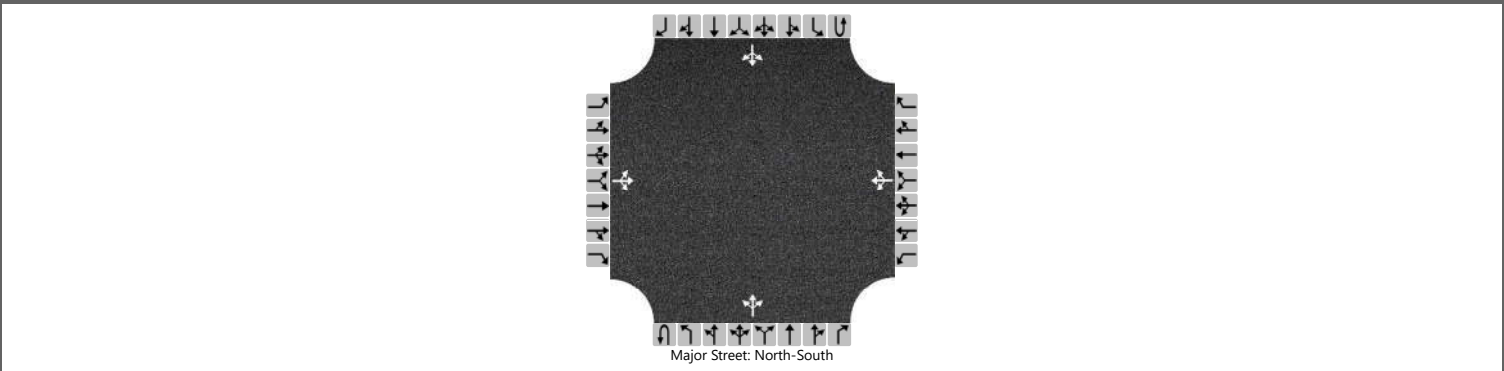
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			34				270							67		
Capacity, c (veh/h)			107				333							1044		
v/c Ratio			0.32				0.81							0.06		
95% Queue Length, Q ₉₅ (veh)			1.2				6.9							0.2		
Control Delay (s/veh)			53.7				49.0							8.7		
Level of Service (LOS)			F				E							A		
Approach Delay (s/veh)	53.7				49.0				0.3				1.6			
Approach LOS	F				E											

HCS7 Two-Way Stop-Control Report

General Information				Site Information			
Analyst	Naser Tabanja			Intersection	SR-44 / Hosford Road		
Agency/Co.	GPD Group			Jurisdiction	ODOT District 12		
Date Performed	03/11/2022			East/West Street	Hosford Road		
Analysis Year	2047			North/South Street	SR-44		
Time Analyzed	PM Peak 'No-Build'			Peak Hour Factor	0.90		
Intersection Orientation	North-South			Analysis Time Period (hrs)	0.25		
Project Description	GEA/LAK-44 Corridor Study						

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	1	0	0	0	1	0	0	0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume (veh/h)		10	20	10		10	20	90		10	740	30		140	670	10
Percent Heavy Vehicles (%)		5	5	5		2	2	2		5				3		
Proportion Time Blocked																
Percent Grade (%)	0				0											
Right Turn Channelized																
Median Type Storage	Undivided															

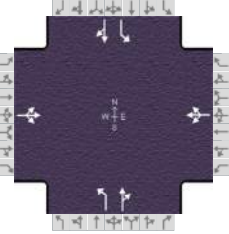
Critical and Follow-up Headways

Base Critical Headway (sec)		7.1	6.5	6.2		7.1	6.5	6.2		4.1				4.1		
Critical Headway (sec)		7.15	6.55	6.25		7.12	6.52	6.22		4.15				4.13		
Base Follow-Up Headway (sec)		3.5	4.0	3.3		3.5	4.0	3.3		2.2				2.2		
Follow-Up Headway (sec)		3.55	4.05	3.35		3.52	4.02	3.32		2.25				2.23		

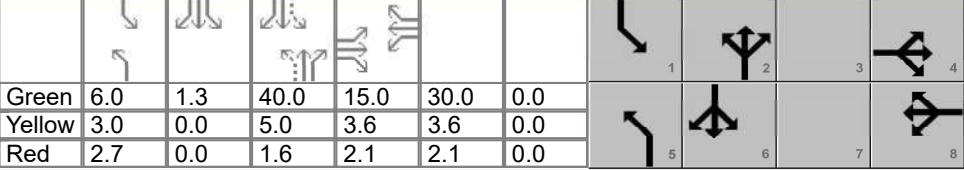
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			44				133							156		
Capacity, c (veh/h)			33				99							780		
v/c Ratio			1.35				1.34							0.20		
95% Queue Length, Q ₉₅ (veh)			4.9				9.5							0.7		
Control Delay (s/veh)			460.9				284.2							9.3		10.8
Level of Service (LOS)			F				F							A		B
Approach Delay (s/veh)	460.9				284.2				0.4				4.9			
Approach LOS	F				F											

HCS7 Signalized Intersection Results Summary

General Information				Intersection Information		
Agency	GPD Group			Duration, h	0.250	
Analyst	Naser J Tabanja	Analysis Date	3/15/2022	Area Type	Other	
Jurisdiction	ODOT - D12	Time Period	AM Peak	PHF	0.94	
Urban Street	SR-44	Analysis Year	2047	Analysis Period	1 > 7:00	
Intersection	SR-44 / Girdled Road	File Name	2- SR-44_Girdled Rd_DY AM_No-Build.xus			
Project Description	SR-44 Corridor Study					

Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (v), veh/h	110	80	20	60	190	240	40	630	30	70	520	120

Signal Information													
Cycle, s	116.0	Reference Phase	2										
Offset, s	0	Reference Point	End	Green	6.0	1.3	40.0	15.0	30.0	0.0			
Uncoordinated	Yes	Simult. Gap E/W	On	Yellow	3.0	0.0	5.0	3.6	3.6	0.0			
Force Mode	Fixed	Simult. Gap N/S	On	Red	2.7	0.0	1.6	2.1	2.1	0.0			

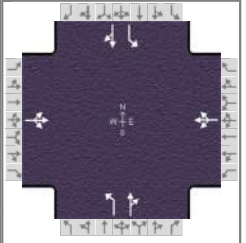
Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase		4		8	5	2	1	6
Case Number		12.0		12.0	1.1	4.0	1.1	4.0
Phase Duration, s		20.7		35.7	11.7	46.6	13.0	47.9
Change Period, (Y+R _c), s		5.7		5.7	5.7	6.6	5.7	6.6
Max Allow Headway (MAH), s		3.7		3.8	3.7	3.6	3.7	3.6
Queue Clearance Time (g _s), s		16.8		32.0	3.8	42.0	5.0	43.3
Green Extension Time (g _e), s		0.0		0.0	0.0	0.0	0.1	0.0
Phase Call Probability		1.00		1.00	0.75	1.00	0.91	1.00
Max Out Probability		1.00		1.00	0.00	1.00	0.00	1.00

Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	7	4	14	3	8	18	5	2	12	1	6	16
Adjusted Flow Rate (v), veh/h	223			521			43	702		74	681	
Adjusted Saturation Flow Rate (s), veh/h/ln	1750			1709			1739	1811		1767	1795	
Queue Service Time (g _s), s	14.8			30.0			1.8	40.0		3.0	41.3	
Cycle Queue Clearance Time (g _c), s	14.8			30.0			1.8	40.0		3.0	41.3	
Green Ratio (g/C)	0.13			0.26			0.40	0.34		0.41	0.36	
Capacity (c), veh/h	226			442			152	625		173	639	
Volume-to-Capacity Ratio (X)	0.987			1.179			0.281	1.124		0.431	1.065	
Back of Queue (Q), ft/ln (95 th percentile)	388			913.3			34.3	1087.5		59.1	939.9	
Back of Queue (Q), veh/ln (95 th percentile)	14.9			36.0			1.3	41.8		2.3	36.7	
Queue Storage Ratio (RQ) (95 th percentile)	0.00			0.00			0.34	0.00		0.49	0.00	
Uniform Delay (d ₁), s/veh	50.4			43.0			28.6	38.0		28.1	37.3	
Incremental Delay (d ₂), s/veh	56.0			101.8			1.0	75.2		1.7	54.2	
Initial Queue Delay (d ₃), s/veh	0.0			0.0			0.0	0.0		0.0	0.0	
Control Delay (d), s/veh	106.4			144.8			29.6	113.2		29.8	91.5	
Level of Service (LOS)	F			F			C	F		C	F	
Approach Delay, s/veh / LOS	106.4	F		144.8	F		108.4	F		85.4	F	
Intersection Delay, s/veh / LOS	108.9						F					

Multimodal Results	EB	WB	NB	SB
Pedestrian LOS Score / LOS				
Bicycle LOS Score / LOS				

HCS7 Signalized Intersection Results Summary

General Information				Intersection Information			
Agency	GPD Group			Duration, h	0.250		
Analyst	Naser J Tabanja	Analysis Date	3/15/2022	Area Type	Other		
Jurisdiction	ODOT - D12	Time Period	PM Peak	PHF	0.89		
Urban Street	SR-44	Analysis Year	2047	Analysis Period	1 > 7:00		
Intersection	SR-44 / Girdled Road	File Name	2- SR-44_Girdled Rd_DY PM_No-Build.xus				
Project Description	SR-44 Corridor Study						



Demand Information	EB			WB			NB			SB		
	L	T	R	L	T	R	L	T	R	L	T	R
Approach Movement												
Demand (v), veh/h	110	150	30	80	120	100	20	720	70	170	710	80

Signal Information														
Cycle, s	118.8	Reference Phase	2											
Offset, s	0	Reference Point	End											
Uncoordinated	Yes	Simult. Gap E/W	On											
Force Mode	Fixed	Simult. Gap N/S	On											
		Green	4.2	0.8	40.0	24.4	20.0	0.0						
		Yellow	3.0	3.0	5.0	3.6	3.6	0.0						
		Red	2.7	2.7	1.6	2.1	2.1	0.0						

Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase		4		8	5	2	1	6
Case Number		12.0		12.0	1.1	4.0	1.1	4.0
Phase Duration, s		30.1		25.7	9.9	46.6	16.4	53.1
Change Period, (Y+R _c), s		5.7		5.7	5.7	6.6	5.7	6.6
Max Allow Headway (MAH), s		3.7		3.7	3.7	3.6	3.7	3.6
Queue Clearance Time (g _s), s		23.5		22.0	3.0	42.0	10.5	48.5
Green Extension Time (g _e), s		0.9		0.0	0.0	0.0	0.2	0.0
Phase Call Probability		1.00		1.00	0.52	1.00	1.00	1.00
Max Out Probability		0.00		1.00	0.00	1.00	0.53	1.00

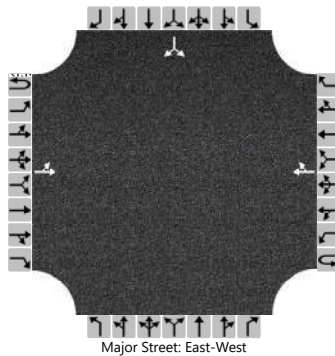
Movement Group Results	EB			WB			NB			SB		
	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	7	4	14	3	8	18	5	2	12	1	6	16
Adjusted Flow Rate (v), veh/h	326			337			22	888		191	888	
Adjusted Saturation Flow Rate (s), veh/h/ln	1760			1743			1739	1797		1767	1822	
Queue Service Time (g _s), s	21.5			20.0			1.0	40.0		8.5	46.5	
Cycle Queue Clearance Time (g _c), s	21.5			20.0			1.0	40.0		8.5	46.5	
Green Ratio (g/C)	0.21			0.17			0.37	0.34		0.44	0.39	
Capacity (c), veh/h	362			293			122	605		220	713	
Volume-to-Capacity Ratio (X)	0.901			1.150			0.184	1.468		0.868	1.244	
Back of Queue (Q), ft/ln (95 th percentile)	391.2			629.3			19.4	2104.1		199.5	1602.6	
Back of Queue (Q), veh/ln (95 th percentile)	15.0			24.8			0.7	80.9		7.8	62.6	
Queue Storage Ratio (RQ) (95 th percentile)	0.00			0.00			0.00	0.00		0.00	0.00	
Uniform Delay (d ₁), s/veh	46.0			49.4			30.5	39.4		30.7	36.2	
Incremental Delay (d ₂), s/veh	8.2			99.3			0.7	219.4		19.7	121.5	
Initial Queue Delay (d ₃), s/veh	0.0			0.0			0.0	0.0		0.0	0.0	
Control Delay (d), s/veh	54.3			148.7			31.2	258.8		50.4	157.7	
Level of Service (LOS)	D			F			C	F		D	F	
Approach Delay, s/veh / LOS	54.3	D		148.7	F		253.2	F		138.7	F	
Intersection Delay, s/veh / LOS	168.9						F					

Multimodal Results	EB	WB	NB	SB
Pedestrian LOS Score / LOS				
Bicycle LOS Score / LOS				

HCS7 Two-Way Stop-Control Report

General Information				Site Information			
Analyst	Naser Tabanja			Intersection	Girdled Road / Crile Road		
Agency/Co.	GPD Group			Jurisdiction	ODOT District 12		
Date Performed	03/11/2022			East/West Street	Girdled Road		
Analysis Year	2047			North/South Street	Crile Road		
Time Analyzed	AM Peak 'No-Build'			Peak Hour Factor	0.94		
Intersection Orientation	East-West			Analysis Time Period (hrs)	0.25		
Project Description	GEA/LAK-44 Corridor Study						

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Movement	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Priority																
Number of Lanes	0	0	1	0	0	0	1	0		0	0	0		0	1	0
Configuration		LT						TR							LR	
Volume (veh/h)		40	140				450	70						30		40
Percent Heavy Vehicles (%)		1												2		2
Proportion Time Blocked																
Percent Grade (%)														0		
Right Turn Channelized																
Median Type Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		4.1												7.1		6.2
Critical Headway (sec)		4.11												6.42		6.22
Base Follow-Up Headway (sec)		2.2												3.5		3.3
Follow-Up Headway (sec)		2.21												3.52		3.32

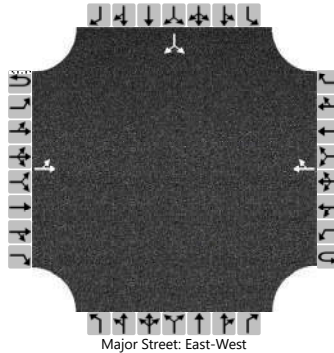
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		43														74	
Capacity, c (veh/h)		1022														453	
v/c Ratio		0.04														0.16	
95% Queue Length, Q ₉₅ (veh)		0.1														0.6	
Control Delay (s/veh)		8.7														14.5	
Level of Service (LOS)		A														B	
Approach Delay (s/veh)		2.2												14.5			
Approach LOS														B			

HCS7 Two-Way Stop-Control Report

General Information				Site Information			
Analyst	Naser Tabanja			Intersection	Girdled Road / Crile Road		
Agency/Co.	GPD Group			Jurisdiction	ODOT District 12		
Date Performed	03/11/2022			East/West Street	Girdled Road		
Analysis Year	2047			North/South Street	Crile Road		
Time Analyzed	PM Peak 'No-Build'			Peak Hour Factor	0.92		
Intersection Orientation	East-West			Analysis Time Period (hrs)	0.25		
Project Description	GEA/LAK-44 Corridor Study						

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Movement	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Priority																
Number of Lanes	0	0	1	0	0	0	1	0		0	0	0		0	1	0
Configuration		LT						TR							LR	
Volume (veh/h)		90	300				210	110						110		90
Percent Heavy Vehicles (%)		3												3		3
Proportion Time Blocked																
Percent Grade (%)														0		
Right Turn Channelized																
Median Type Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		4.1												7.1		6.2
Critical Headway (sec)		4.13												6.43		6.23
Base Follow-Up Headway (sec)		2.2												3.5		3.3
Follow-Up Headway (sec)		2.23												3.53		3.33

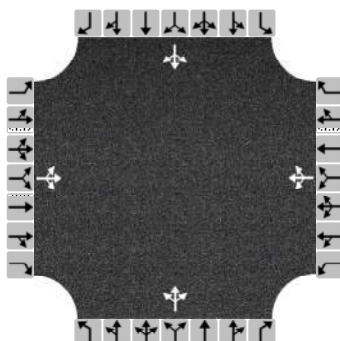
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		98														217	
Capacity, c (veh/h)		1206														425	
v/c Ratio		0.08														0.51	
95% Queue Length, Q ₉₅ (veh)		0.3														2.8	
Control Delay (s/veh)		8.2														22.0	
Level of Service (LOS)		A														C	
Approach Delay (s/veh)		2.5												22.0			
Approach LOS														C			

HCS7 All-Way Stop Control Report

General Information		Site Information	
Analyst	NJT	Intersection	Girdled Road /Auburn Road
Agency/Co.	GPD Group	Jurisdiction	ODOT District 12
Date Performed	03/11/2022	East/West Street	Girdled Road
Analysis Year	2047	North/South Street	Auburn Road
Analysis Time Period (hrs)	0.25	Peak Hour Factor	0.92
Time Analyzed	AM Peak 'No-Build'		
Project Description	GEA/LAK-44 Corridor Study		

Lanes



Vehicle Volume and Adjustments

Approach	Eastbound			Westbound			Northbound			Southbound		
	L	T	R	L	T	R	L	T	R	L	T	R
Movement												
Volume	40	60	20	180	50	120	10	140	120	30	90	10
% Thrus in Shared Lane												
Lane	L1	L2	L3	L1	L2	L3	L1	L2	L3	L1	L2	L3
Configuration	LTR			LTR			LTR			LTR		
Flow Rate, v (veh/h)	130			380			293			141		
Percent Heavy Vehicles	3			3			4			2		

Departure Headway and Service Time

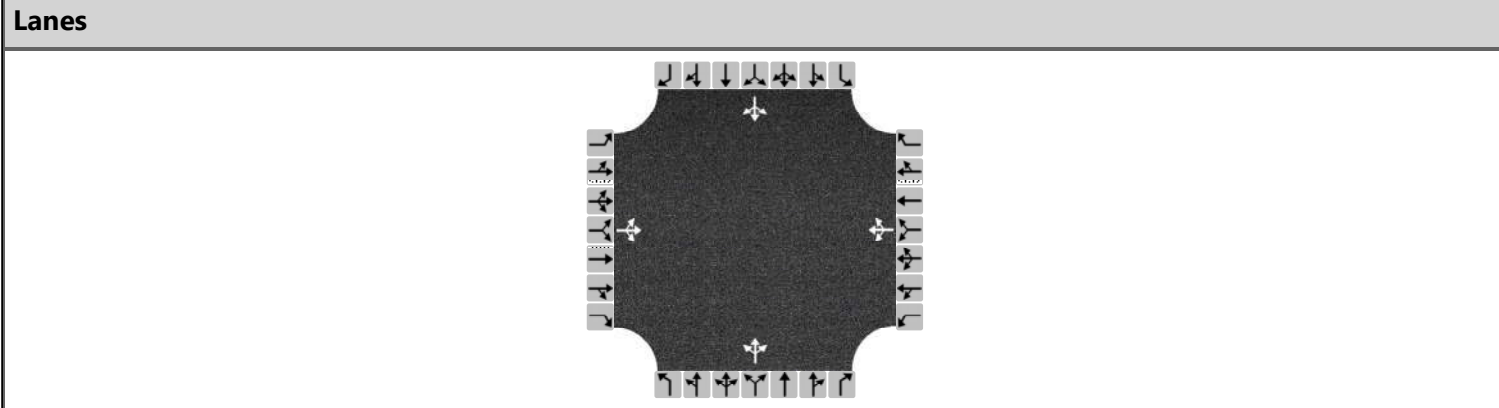
Initial Departure Headway, hd (s)	3.20			3.20			3.20			3.20		
Initial Degree of Utilization, x	0.116			0.338			0.261			0.126		
Final Departure Headway, hd (s)	5.83			5.33			5.41			5.91		
Final Degree of Utilization, x	0.211			0.563			0.441			0.232		
Move-Up Time, m (s)	2.0			2.0			2.0			2.0		
Service Time, ts (s)	3.83			3.33			3.41			3.91		

Capacity, Delay and Level of Service

Flow Rate, v (veh/h)	130			380			293			141		
Capacity	618			676			665			610		
95% Queue Length, Q ₉₅ (veh)	0.8			3.5			2.3			0.9		
Control Delay (s/veh)	10.4			15.0			12.6			10.7		
Level of Service, LOS	B			B			B			B		
Approach Delay (s/veh)	10.4			15.0			12.6			10.7		
Approach LOS	B			B			B			B		
Intersection Delay, s/veh LOS	13.0						B					

HCS7 All-Way Stop Control Report

General Information		Site Information	
Analyst	NJT	Intersection	Girdled Road /Auburn Road
Agency/Co.	GPD Group	Jurisdiction	ODOT District 12
Date Performed	03/11/2022	East/West Street	Girdled Road
Analysis Year	2047	North/South Street	Auburn Road
Analysis Time Period (hrs)	0.25	Peak Hour Factor	0.81
Time Analyzed	PM Peak 'No-Build'		
Project Description	GEA/LAK-44 Corridor Study		



Vehicle Volume and Adjustments

Approach	Eastbound			Westbound			Northbound			Southbound		
	L	T	R	L	T	R	L	T	R	L	T	R
Movement												
Volume	20	110	30	120	80	20	10	140	120	60	120	30
% Thrus in Shared Lane												
Lane	L1	L2	L3	L1	L2	L3	L1	L2	L3	L1	L2	L3
Configuration	LTR			LTR			LTR			LTR		
Flow Rate, v (veh/h)	198			272			333			259		
Percent Heavy Vehicles	3			3			4			2		

Departure Headway and Service Time

Initial Departure Headway, hd (s)	3.20			3.20			3.20			3.20		
Initial Degree of Utilization, x	0.176			0.241			0.296			0.230		
Final Departure Headway, hd (s)	6.28			6.24			5.76			6.09		
Final Degree of Utilization, x	0.345			0.471			0.533			0.438		
Move-Up Time, m (s)	2.0			2.0			2.0			2.0		
Service Time, ts (s)	4.28			4.24			3.76			4.09		

Capacity, Delay and Level of Service

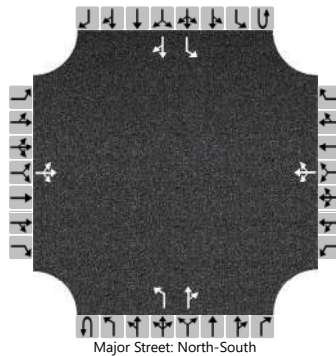
Flow Rate, v (veh/h)	198			272			333			259		
Capacity	573			577			625			591		
95% Queue Length, Q ₉₅ (veh)	1.5			2.5			3.2			2.2		
Control Delay (s/veh)	12.6			14.7			15.1			13.8		
Level of Service, LOS	B			B			C			B		
Approach Delay (s/veh)	12.6			14.7			15.1			13.8		
Approach LOS	B			B			C			B		
Intersection Delay, s/veh LOS	14.2						B					

DESIGN YEAR 2047 'BUILD' CONDITIONS

HCS7 Two-Way Stop-Control Report

General Information				Site Information			
Analyst	Naser Tabanja			Intersection	SR-44 / Colburn Road		
Agency/Co.	GPD Group			Jurisdiction	ODOT District 12		
Date Performed	03/11/2022			East/West Street	Colburn Road		
Analysis Year	2047			North/South Street	SR-44		
Time Analyzed	AM Peak 'Build'			Peak Hour Factor	0.92		
Intersection Orientation	North-South			Analysis Time Period (hrs)	0.25		
Project Description	GEA/LAK-44 Corridor Study						

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	1	0	0	1	1	0	0	1	1	0
Configuration			LTR				LTR			L		TR		L		TR
Volume (veh/h)		10	10	10		10	20	70		10	620	10		20	570	10
Percent Heavy Vehicles (%)		5	5	5		3	3	3		5				6		
Proportion Time Blocked																
Percent Grade (%)	0				0											
Right Turn Channelized																
Median Type Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		7.1	6.5	6.2		7.1	6.5	6.2		4.1				4.1		
Critical Headway (sec)		7.15	6.55	6.25		7.13	6.53	6.23		4.15				4.16		
Base Follow-Up Headway (sec)		3.5	4.0	3.3		3.5	4.0	3.3		2.2				2.2		
Follow-Up Headway (sec)		3.55	4.05	3.35		3.53	4.03	3.33		2.25				2.25		

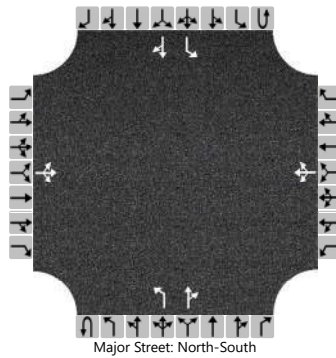
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			33				109							22		
Capacity, c (veh/h)			138				255							890		
v/c Ratio			0.24				0.43							0.02		
95% Queue Length, Q ₉₅ (veh)			0.9				2.0							0.1		
Control Delay (s/veh)			39.1				29.2							8.9		9.1
Level of Service (LOS)			E				D							A		A
Approach Delay (s/veh)	39.1				29.2				0.1				0.3			
Approach LOS	E				D											

HCS7 Two-Way Stop-Control Report

General Information				Site Information			
Analyst	Naser Tabanja			Intersection	SR-44 / Colburn Road		
Agency/Co.	GPD Group			Jurisdiction	ODOT District 12		
Date Performed	03/11/2022			East/West Street	Colburn Road		
Analysis Year	2047			North/South Street	SR-44		
Time Analyzed	PM Peak 'Build'			Peak Hour Factor	0.87		
Intersection Orientation	North-South			Analysis Time Period (hrs)	0.25		
Project Description	GEA/LAK-44 Corridor Study						

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	1	0	0	1	1	0	0	1	1	0
Configuration			LTR				LTR			L		TR		L		TR
Volume (veh/h)		10	10	10		10	10	30		10	770	20		50	760	10
Percent Heavy Vehicles (%)		5	5	5		3	3	3		5				6		
Proportion Time Blocked																
Percent Grade (%)	0				0											
Right Turn Channelized																
Median Type Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		7.1	6.5	6.2		7.1	6.5	6.2		4.1				4.1		
Critical Headway (sec)		7.15	6.55	6.25		7.13	6.53	6.23		4.15				4.16		
Base Follow-Up Headway (sec)		3.5	4.0	3.3		3.5	4.0	3.3		2.2				2.2		
Follow-Up Headway (sec)		3.55	4.05	3.35		3.53	4.03	3.33		2.25				2.25		

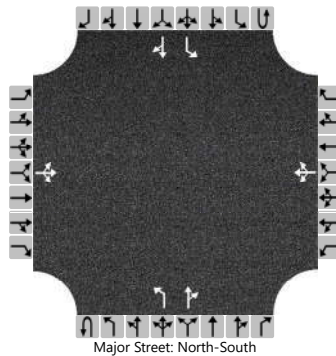
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			34				57							57		
Capacity, c (veh/h)			62				97							733		
v/c Ratio			0.56				0.59							0.08		
95% Queue Length, Q ₉₅ (veh)			2.3				2.8							0.3		
Control Delay (s/veh)			120.5				85.3							9.9		10.3
Level of Service (LOS)			F				F							A		B
Approach Delay (s/veh)	120.5				85.3				0.1				0.6			
Approach LOS	F				F											

HCS7 Two-Way Stop-Control Report

General Information				Site Information			
Analyst	Naser Tabanja			Intersection	SR-44 / Clark Road		
Agency/Co.	GPD Group			Jurisdiction	ODOT District 12		
Date Performed	03/11/2022			East/West Street	Clark Road		
Analysis Year	2047			North/South Street	SR-44		
Time Analyzed	AM Peak 'Build'			Peak Hour Factor	0.91		
Intersection Orientation	North-South			Analysis Time Period (hrs)	0.25		
Project Description	GEA/LAK-44 Corridor Study						

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	1	0	0	1	1	0	0	1	1	0
Configuration			LTR				LTR			L		TR		L		TR
Volume (veh/h)		10	10	10		10	20	40		10	650	10		10	590	10
Percent Heavy Vehicles (%)		5	5	5		4	4	4		5				4		
Proportion Time Blocked																
Percent Grade (%)		0				0										
Right Turn Channelized																
Median Type Storage		Undivided														

Critical and Follow-up Headways

Base Critical Headway (sec)		7.1	6.5	6.2		7.1	6.5	6.2		4.1				4.1		
Critical Headway (sec)		7.15	6.55	6.25		7.14	6.54	6.24		4.15				4.14		
Base Follow-Up Headway (sec)		3.5	4.0	3.3		3.5	4.0	3.3		2.2				2.2		
Follow-Up Headway (sec)		3.55	4.05	3.35		3.54	4.04	3.34		2.25				2.24		

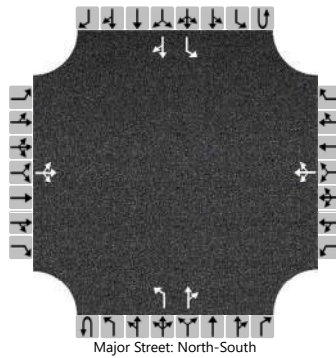
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			33				77			11				11			
Capacity, c (veh/h)			136				202			915				868			
v/c Ratio			0.24				0.38			0.01				0.01			
95% Queue Length, Q ₉₅ (veh)			0.9				1.7			0.0				0.0			
Control Delay (s/veh)			39.6				33.4			9.0				9.2			
Level of Service (LOS)			E				D			A				A			
Approach Delay (s/veh)		39.6				33.4				0.1				0.2			
Approach LOS		E				D											

HCS7 Two-Way Stop-Control Report

General Information				Site Information			
Analyst	Naser Tabanja			Intersection	SR-44 / Clark Road		
Agency/Co.	GPD Group			Jurisdiction	ODOT District 12		
Date Performed	1/17/2022			East/West Street	Clark Road		
Analysis Year	2047			North/South Street	SR-44		
Time Analyzed	PM Peak 'Build'			Peak Hour Factor	0.91		
Intersection Orientation	North-South			Analysis Time Period (hrs)	0.25		
Project Description	GEA/LAK-44 Corridor Study						

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	1	0	0	1	1	0	0	1	1	0
Configuration			LTR				LTR			L		TR		L		TR
Volume (veh/h)		10	20	10		10	20	40		20	800	20		50	800	10
Percent Heavy Vehicles (%)		5	5	5		4	4	4		5				4		
Proportion Time Blocked																
Percent Grade (%)	0				0											
Right Turn Channelized																
Median Type Storage	Undivided															

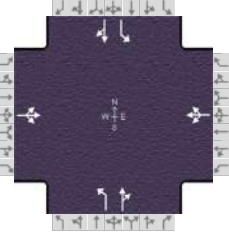
Critical and Follow-up Headways

Base Critical Headway (sec)		7.1	6.5	6.2		7.1	6.5	6.2		4.1				4.1		
Critical Headway (sec)		7.15	6.55	6.25		7.14	6.54	6.24		4.15				4.14		
Base Follow-Up Headway (sec)		3.5	4.0	3.3		3.5	4.0	3.3		2.2				2.2		
Follow-Up Headway (sec)		3.55	4.05	3.35		3.54	4.04	3.34		2.25				2.24		

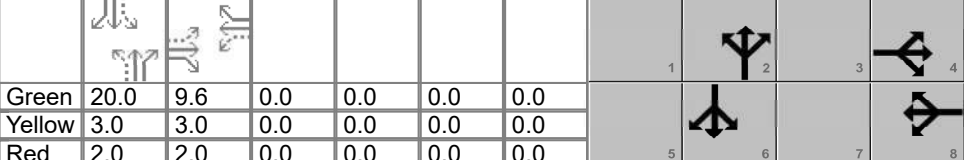
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			44				77			22				55		
Capacity, c (veh/h)			53				89			749				746		
v/c Ratio			0.83				0.87			0.03				0.07		
95% Queue Length, Q ₉₅ (veh)			3.5				4.7			0.1				0.2		
Control Delay (s/veh)			196.7				144.7			10.0				10.2		
Level of Service (LOS)			F				F			A				B		
Approach Delay (s/veh)	196.7				144.7				0.2				0.6			
Approach LOS	F				F											

HCS7 Signalized Intersection Results Summary

General Information				Intersection Information		
Agency	GPD GROUP			Duration, h	0.250	
Analyst	Naser J Tabanja	Analysis Date	3/16/2022	Area Type	Other	
Jurisdiction	ODOT - D12	Time Period	AM Peak	PHF	0.92	
Urban Street	SR-44	Analysis Year	2047	Analysis Period	1 > 7:00	
Intersection	SR-44 / Hosford Road	File Name	6- SR-44_Hosford Rd_DY 2047_AM_Build.xus			
Project Description	GEA/LAK-44 Corridor Study					

Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (v), veh/h	10	10	10	20	30	190	10	450	10	60	550	10

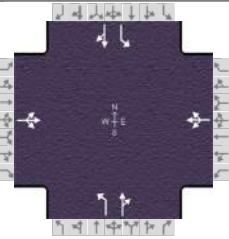
Signal Information												
Cycle, s	39.6	Reference Phase	2	Green	20.0	9.6	0.0	0.0	0.0	0.0	0.0	0.0
Offset, s	0	Reference Point	End	Yellow	3.0	3.0	0.0	0.0	0.0	0.0	0.0	0.0
Uncoordinated	Yes	Simult. Gap E/W	On	Red	2.0	2.0	0.0	0.0	0.0	0.0	0.0	0.0
Force Mode	Fixed	Simult. Gap N/S	On									

Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase		4		8		2		6
Case Number		8.0		8.0		6.0		6.0
Phase Duration, s		14.6		14.6		25.0		25.0
Change Period, (Y+R _c), s		5.0		5.0		5.0		5.0
Max Allow Headway (MAH), s		3.8		3.8		3.6		3.6
Queue Clearance Time (g _s), s		2.6		7.7		12.0		11.6
Green Extension Time (g _e), s		0.9		0.8		4.0		4.0
Phase Call Probability		0.96		0.96		1.00		1.00
Max Out Probability		0.00		0.00		0.00		0.00

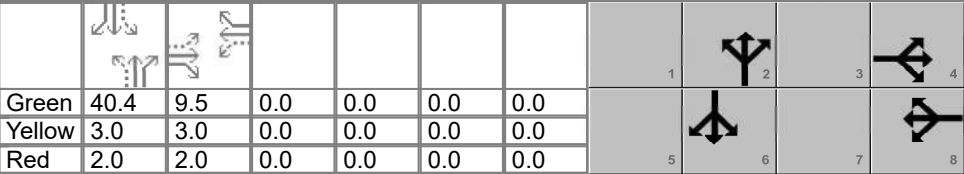
Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	7	4	14	3	8	18	5	2	12	1	6	16
Adjusted Flow Rate (v), veh/h	33			261			11	500		65	609	
Adjusted Saturation Flow Rate (s), veh/h/ln	1554			1617			793	1819		891	1850	
Queue Service Time (g _s), s	0.0			0.9			0.4	7.4		2.1	9.6	
Cycle Queue Clearance Time (g _c), s	0.6			5.7			10.0	7.4		9.6	9.6	
Green Ratio (g/C)	0.24			0.24			0.50	0.50		0.50	0.50	
Capacity (c), veh/h	498			491			390	918		465	934	
Volume-to-Capacity Ratio (X)	0.065			0.532			0.028	0.544		0.140	0.652	
Back of Queue (Q), ft/ln (95 th percentile)	7.1			66.9			2.3	52.8		12.2	70	
Back of Queue (Q), veh/ln (95 th percentile)	0.3			2.6			0.1	2.0		0.5	2.7	
Queue Storage Ratio (RQ) (95 th percentile)	0.00			0.00			0.00	0.00		0.00	0.00	
Uniform Delay (d ₁), s/veh	11.6			13.5			10.9	6.7		10.0	7.2	
Incremental Delay (d ₂), s/veh	0.1			0.9			0.0	0.5		0.1	0.8	
Initial Queue Delay (d ₃), s/veh	0.0			0.0			0.0	0.0		0.0	0.0	
Control Delay (d), s/veh	11.6			14.4			11.0	7.2		10.1	8.0	
Level of Service (LOS)	B			B			B	A		B	A	
Approach Delay, s/veh / LOS	11.6	B		14.4	B		7.3	A		8.2	A	
Intersection Delay, s/veh / LOS	9.1						A					

Multimodal Results	EB	WB	NB	SB
Pedestrian LOS Score / LOS				
Bicycle LOS Score / LOS				

HCS7 Signalized Intersection Results Summary

General Information				Intersection Information		
Agency	GPD GROUP			Duration, h	0.250	
Analyst	Naser J Tabanja	Analysis Date	3/16/2022	Area Type	Other	
Jurisdiction	ODOT - D12	Time Period	PM Peak	PHF	0.90	
Urban Street	SR-44	Analysis Year	2047	Analysis Period	1 > 7:00	
Intersection	SR-44 / Hosford Road	File Name	6- SR-44_Hosford Rd_DY 2047_PM_Build.xus			
Project Description	GEA/LAK-44 Corridor Study					

Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (v), veh/h	10	20	10	10	20	90	10	740	30	140	670	10

Signal Information												
Cycle, s	59.9	Reference Phase	2	Green	40.4	9.5	0.0	0.0	0.0	0.0	0.0	0.0
Offset, s	0	Reference Point	End	Yellow	3.0	3.0	0.0	0.0	0.0	0.0	0.0	0.0
Uncoordinated	Yes	Simult. Gap E/W	On	Red	2.0	2.0	0.0	0.0	0.0	0.0	0.0	0.0
Force Mode	Fixed	Simult. Gap N/S	On									

Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase		4		8		2		6
Case Number		8.0		8.0		6.0		6.0
Phase Duration, s		14.5		14.5		45.4		45.4
Change Period, (Y+R _c), s		5.0		5.0		5.0		5.0
Max Allow Headway (MAH), s		3.8		3.8		3.8		3.8
Queue Clearance Time (g _s), s		3.3		6.4		19.4		31.6
Green Extension Time (g _e), s		0.5		0.5		8.8		8.8
Phase Call Probability		0.95		0.95		1.00		1.00
Max Out Probability		0.00		0.00		0.00		0.01


Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	7	4	14	3	8	18	5	2	12	1	6	16
Adjusted Flow Rate (v), veh/h	44			133			11 856			156 756		
Adjusted Saturation Flow Rate (s), veh/h/ln	1653			1628			692 1813			640 1851		
Queue Service Time (g _s), s	0.0			0.0			0.5 17.4			11.9 13.4		
Cycle Queue Clearance Time (g _c), s	1.3			4.4			14.3 17.4			29.6 13.4		
Green Ratio (g/C)	0.16			0.16			0.67 0.67			0.67 0.67		
Capacity (c), veh/h	336			322			429 1225			364 1250		
Volume-to-Capacity Ratio (X)	0.132			0.414			0.026 0.699			0.428 0.604		
Back of Queue (Q), ft/ln (95 th percentile)	22.2			70			2.9 118.4			63.6 90.7		
Back of Queue (Q), veh/ln (95 th percentile)	0.9			2.8			0.1 4.6			2.5 3.5		
Queue Storage Ratio (RQ) (95 th percentile)	0.00			0.00			0.00 0.00			0.00 0.00		
Uniform Delay (d ₁), s/veh	21.8			23.1			9.3 6.0			15.2 5.3		
Incremental Delay (d ₂), s/veh	0.2			0.9			0.0 0.7			0.8 0.5		
Initial Queue Delay (d ₃), s/veh	0.0			0.0			0.0 0.0			0.0 0.0		
Control Delay (d), s/veh	22.0			24.0			9.4 6.7			16.0 5.8		
Level of Service (LOS)	C			C			A A			B A		
Approach Delay, s/veh / LOS	22.0		C	24.0		C	6.7		A	7.5		A
Intersection Delay, s/veh / LOS	8.6						A					

Multimodal Results	EB	WB	NB	SB
Pedestrian LOS Score / LOS				
Bicycle LOS Score / LOS				

HCS7 Roundabouts Report

General Information

Site Information

Analyst	Naser Tabanja		Intersection	SR-44 / Hosford Road
Agency or Co.	GPD GROUP		E/W Street Name	Hosford Road
Date Performed	3/15/2022		N/S Street Name	SR-44
Analysis Year	2047		Analysis Time Period (hrs)	0.25
Time Analyzed	AM Peak		Peak Hour Factor	0.89
Project Description	SR-44 Corridor Study		Jurisdiction	ODOT - D12

Volume Adjustments and Site Characteristics

Approach	EB				WB				NB				SB			
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Movement																
Number of Lanes (N)	0	0	1	0	0	0	1	0	0	0	1	0	0	0	1	0
Lane Assignment	LTR				LTR				LTR				LTR			
Volume (V), veh/h	0	10	10	10	0	20	30	190	0	10	450	10	0	60	550	10
Percent Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
Flow Rate (v _{PCE}), pc/h	0	12	12	12	0	23	35	220	0	12	521	12	0	69	637	12
Right-Turn Bypass	None				None				None				None			
Conflicting Lanes	1				1				1				1			
Pedestrians Crossing, p/h	0				0				0				0			

Critical and Follow-Up Headway Adjustment

Approach	EB			WB			NB			SB		
	Left	Right	Bypass	Left	Right	Bypass	Left	Right	Bypass	Left	Right	Bypass
Critical Headway (s)		4.9763			4.9763			4.9763			4.9763	
Follow-Up Headway (s)		2.6087			2.6087			2.6087			2.6087	

Flow Computations, Capacity and v/c Ratios

Approach	EB			WB			NB			SB		
	Left	Right	Bypass	Left	Right	Bypass	Left	Right	Bypass	Left	Right	Bypass
Entry Flow (v _e), pc/h		36			278			545			718	
Entry Volume, veh/h		35			270			529			697	
Circulating Flow (v _c), pc/h	729			545			93			70		
Exiting Flow (v _{ex}), pc/h	93			59			753			672		
Capacity (C _{PCE}), pc/h		656			792			1255			1285	
Capacity (c), veh/h		637			768			1219			1247	
v/c Ratio (x)		0.05			0.35			0.43			0.56	


Delay and Level of Service

Approach	EB			WB			NB			SB		
	Left	Right	Bypass	Left	Right	Bypass	Left	Right	Bypass	Left	Right	Bypass
Lane Control Delay (d), s/veh		6.3			9.0			7.4			9.3	
Lane LOS		A			A			A			A	
95% Queue, veh		0.2			1.6			2.2			3.6	
Approach Delay, s/veh	6.3			9.0			7.4			9.3		
Approach LOS	A			A			A			A		
Intersection Delay, s/veh LOS	8.5						A					

HCS7 Roundabouts Report

General Information

Site Information

Analyst	Naser Tabanja		Intersection	SR-44 / Hosford Road
Agency or Co.	GPD GROUP		E/W Street Name	Hosford Road
Date Performed	3/15/2022		N/S Street Name	SR-44
Analysis Year	2022		Analysis Time Period (hrs)	0.25
Time Analyzed	PM Peak		Peak Hour Factor	0.90
Project Description	SR-44 Corridor Study		Jurisdiction	ODOT - D12

Volume Adjustments and Site Characteristics

Approach	EB				WB				NB				SB			
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Movement																
Number of Lanes (N)	0	0	1	0	0	0	1	0	0	0	1	0	0	0	1	0
Lane Assignment	LTR				LTR				LTR				LTR			
Volume (V), veh/h	0	10	20	10	0	10	20	90	0	10	740	30	0	140	670	10
Percent Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
Flow Rate (v _{PCE}), pc/h	0	11	23	11	0	11	23	103	0	11	847	34	0	160	767	11
Right-Turn Bypass	None				None				None				None			
Conflicting Lanes	1				1				1				1			
Pedestrians Crossing, p/h	0				0				0				0			

Critical and Follow-Up Headway Adjustment

Approach	EB			WB			NB			SB		
	Left	Right	Bypass	Left	Right	Bypass	Left	Right	Bypass	Left	Right	Bypass
Critical Headway (s)		4.9763			4.9763			4.9763			4.9763	
Follow-Up Headway (s)		2.6087			2.6087			2.6087			2.6087	

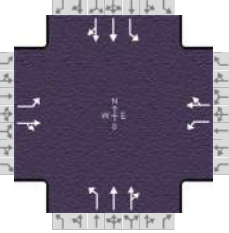
Flow Computations, Capacity and v/c Ratios

Approach	EB			WB			NB			SB		
	Left	Right	Bypass	Left	Right	Bypass	Left	Right	Bypass	Left	Right	Bypass
Entry Flow (v _e), pc/h		45			137			892			938	
Entry Volume, veh/h		44			133			866			911	
Circulating Flow (v _c), pc/h	938			869			194			45		
Exiting Flow (v _{ex}), pc/h	217			45			961			789		
Capacity (C _{PCE}), pc/h		530			569			1132			1318	
Capacity (c), veh/h		515			552			1099			1280	
v/c Ratio (x)		0.08			0.24			0.79			0.71	

Delay and Level of Service

Approach	EB			WB			NB			SB		
	Left	Right	Bypass	Left	Right	Bypass	Left	Right	Bypass	Left	Right	Bypass
Lane Control Delay (d), s/veh		8.1			9.8			18.1			13.0	
Lane LOS		A			A			C			B	
95% Queue, veh		0.3			0.9			8.6			6.5	
Approach Delay, s/veh	8.1			9.8			18.1			13.0		
Approach LOS	A			A			C			B		
Intersection Delay, s/veh LOS	14.9						B					

HCS7 Signalized Intersection Results Summary

General Information				Intersection Information		
Agency	GPD Group			Duration, h	0.250	
Analyst	Naser J Tabanja	Analysis Date	3/15/2022	Area Type	Other	
Jurisdiction	ODOT - D12	Time Period	AM Peak	PHF	0.89	
Urban Street	SR-44	Analysis Year	2047	Analysis Period	1 > 7:00	
Intersection	SR-44 / Girdled Road	File Name	2- SR-44_Girdled Rd_DY AM_Build.xus			
Project Description	SR-44 Corridor Study					

Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (v), veh/h	110	80	20	60	190	240	40	630	30	70	520	120

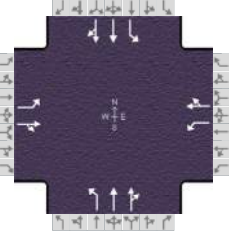
Signal Information														
Cycle, s	88.7	Reference Phase	2											
Offset, s	0	Reference Point	End											
Uncoordinated	Yes	Simult. Gap E/W	On	Green	5.4	1.5	25.0	5.7	1.0	27.2				
Force Mode	Fixed	Simult. Gap N/S	On	Yellow	3.0	0.0	5.0	3.0	0.0	3.6				
				Red	2.7	0.0	1.6	2.0	0.0	2.1				

Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	7	4	3	8	5	2	1	6
Case Number	1.1	4.0	1.1	4.0	1.1	4.0	1.1	4.0
Phase Duration, s	11.7	33.9	10.7	32.9	11.1	31.6	12.6	33.1
Change Period, ($Y+R_c$), s	5.0	5.7	5.0	5.7	5.7	6.6	5.7	6.6
Max Allow Headway (MAH), s	3.7	3.8	3.7	3.8	3.7	3.6	3.7	3.6
Queue Clearance Time (g_s), s	6.2	6.1	4.2	26.4	3.5	18.4	4.6	17.6
Green Extension Time (g_e), s	0.2	1.9	0.1	0.8	0.0	4.5	0.1	4.5
Phase Call Probability	0.95	1.00	0.81	1.00	0.67	1.00	0.86	1.00
Max Out Probability	0.01	0.00	0.00	1.00	0.00	0.06	0.00	0.05

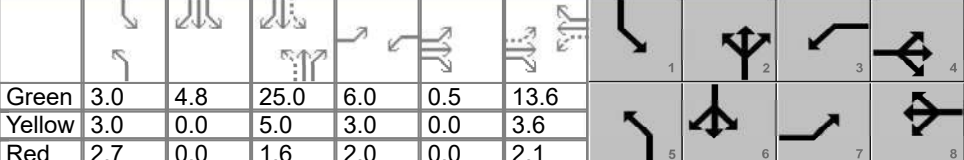
Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	7	4	14	3	8	18	5	2	12	1	6	16
Adjusted Flow Rate (v), veh/h	124	112		67	483		45	374	368	79	371	348
Adjusted Saturation Flow Rate (s), veh/h/ln	1739	1762		1781	1700		1739	1826	1796	1767	1856	1735
Queue Service Time (g_s), s	4.2	4.1		2.2	24.4		1.5	16.4	16.4	2.6	15.5	15.6
Cycle Queue Clearance Time (g_c), s	4.2	4.1		2.2	24.4		1.5	16.4	16.4	2.6	15.5	15.6
Green Ratio (g/C)	0.38	0.32		0.37	0.31		0.34	0.28	0.28	0.36	0.30	0.30
Capacity (c), veh/h	240	560		514	521		258	514	506	286	554	518
Volume-to-Capacity Ratio (X)	0.515	0.201		0.131	0.927		0.175	0.726	0.727	0.275	0.669	0.672
Back of Queue (Q), ft/ln (95 th percentile)	77.8	75.6		38.8	451.3		28.3	292.3	277.7	48.1	275.9	257
Back of Queue (Q), veh/ln (95 th percentile)	3.0	2.9		1.5	17.8		1.1	11.2	11.1	1.9	10.8	10.3
Queue Storage Ratio (RQ) (95 th percentile)	0.00	0.00		0.00	0.00		0.28	0.00	0.00	0.00	0.00	0.00
Uniform Delay (d_1), s/veh	22.1	22.0		18.4	29.8		21.3	28.8	28.8	20.8	27.3	27.3
Incremental Delay (d_2), s/veh	1.7	0.2		0.1	20.3		0.3	2.0	2.0	0.5	1.4	1.5
Initial Queue Delay (d_3), s/veh	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	23.8	22.2		18.5	50.1		21.6	30.8	30.8	21.3	28.7	28.8
Level of Service (LOS)	C	C		B	D		C	C	C	C	C	C
Approach Delay, s/veh / LOS	23.1	C		46.3	D		30.2	C		28.0	C	
Intersection Delay, s/veh / LOS	32.5						C					

Multimodal Results	EB	WB	NB	SB
Pedestrian LOS Score / LOS				
Bicycle LOS Score / LOS				

HCS7 Signalized Intersection Results Summary

General Information				Intersection Information		
Agency	GPD Group			Duration, h	0.250	
Analyst	Naser J Tabanja	Analysis Date	3/15/2022	Area Type	Other	
Jurisdiction	ODOT -D12	Time Period	PM Peak	PHF	0.89	
Urban Street	SR-44	Analysis Year	2047	Analysis Period	1 > 7:00	
Intersection	SR-44 / Girdled Road	File Name	2- SR-44_Girdled Rd_DY PM_Build.xus			
Project Description	SR-44 Corridor Study					

Demand Information	EB			WB			NB			SB		
	L	T	R	L	T	R	L	T	R	L	T	R
Approach Movement												
Demand (v), veh/h	110	150	30	80	120	100	20	720	70	170	710	80

Signal Information																		
Cycle, s	75.9	Reference Phase	2	Green	3.0	4.8	25.0	6.0	0.5	13.6	Yellow	3.0	0.0	5.0	3.0	0.0	3.6	
Offset, s	0	Reference Point	End	Red	2.7	0.0	1.6	2.0	0.0	2.1	Uncoordinated	Yes	Simult. Gap E/W	On	Force Mode	Fixed	Simult. Gap N/S	On

Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	7	4	3	8	5	2	1	6
Case Number	1.1	4.0	1.1	4.0	1.1	4.0	1.1	4.0
Phase Duration, s	11.5	19.8	11.0	19.3	8.7	31.6	13.6	36.4
Change Period, ($Y+R_c$), s	5.0	5.7	5.0	5.7	5.7	6.6	5.7	6.6
Max Allow Headway (MAH), s	3.7	3.7	3.7	3.7	3.7	3.6	3.7	3.6
Queue Clearance Time (g_s), s	6.3	10.0	5.0	12.4	2.6	18.7	7.1	16.9
Green Extension Time (g_e), s	0.2	1.2	0.1	1.2	0.0	5.8	0.3	5.9
Phase Call Probability	0.93	1.00	0.85	1.00	0.38	1.00	0.98	1.00
Max Out Probability	0.01	0.00	0.00	0.00	0.00	0.13	0.03	0.11

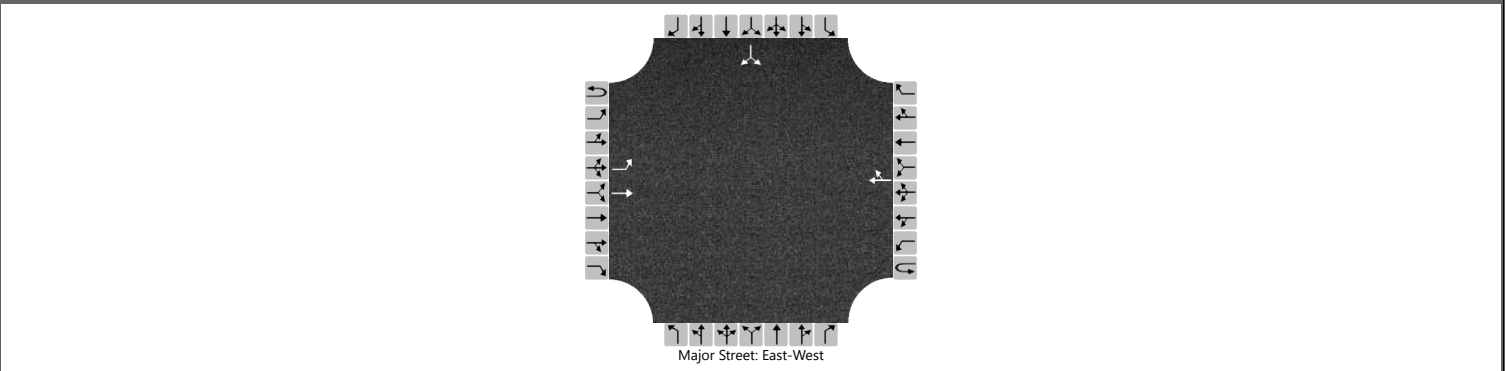
Movement Group Results	EB			WB			NB			SB		
	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	7	4	14	3	8	18	5	2	12	1	6	16
Adjusted Flow Rate (v), veh/h	124	202		90	247		22	451	437	191	452	436
Adjusted Saturation Flow Rate (s), veh/h/ln	1739	1773		1781	1729		1739	1826	1769	1767	1856	1789
Queue Service Time (g_s), s	4.3	8.0		3.0	10.4		0.6	16.7	16.7	5.1	14.8	14.9
Cycle Queue Clearance Time (g_c), s	4.3	8.0		3.0	10.4		0.6	16.7	16.7	5.1	14.8	14.9
Green Ratio (g/C)	0.26	0.19		0.26	0.18		0.37	0.33	0.33	0.45	0.39	0.39
Capacity (c), veh/h	290	330		300	310		268	601	582	345	729	703
Volume-to-Capacity Ratio (X)	0.426	0.613		0.300	0.798		0.084	0.750	0.750	0.553	0.620	0.620
Back of Queue (Q), ft/ln (95 th percentile)	77.8	153.3		54.4	198		10.8	283.1	265.7	85.8	246.1	233.7
Back of Queue (Q), veh/ln (95 th percentile)	3.0	5.9		2.1	7.8		0.4	10.9	10.6	3.4	9.6	9.3
Queue Storage Ratio (RQ) (95 th percentile)	0.00	0.00		0.00	0.00		0.11	0.00	0.00	0.34	0.00	0.00
Uniform Delay (d_1), s/veh	22.9	28.4		22.7	29.9		16.3	22.7	22.7	16.0	18.5	18.5
Incremental Delay (d_2), s/veh	1.0	1.8		0.6	4.7		0.1	1.9	2.0	1.4	0.9	0.9
Initial Queue Delay (d_3), s/veh	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	23.9	30.2		23.2	34.6		16.4	24.6	24.7	17.4	19.4	19.4
Level of Service (LOS)	C	C		C	C		B	C	C	B	B	B
Approach Delay, s/veh / LOS	27.8	C		31.6	C		24.4	C		19.0	B	
Intersection Delay, s/veh / LOS	23.6						C					

Multimodal Results	EB	WB	NB	SB
Pedestrian LOS Score / LOS				
Bicycle LOS Score / LOS				

HCS7 Two-Way Stop-Control Report

General Information		Site Information	
Analyst	NJT	Intersection	Girdled Road / Crile Road
Agency/Co.	GPD Group	Jurisdiction	ODOT District 12
Date Performed	03/11/2022	East/West Street	Girdled Road
Analysis Year	2047	North/South Street	Crile Road
Time Analyzed	AM Peak 'Build'	Peak Hour Factor	0.94
Intersection Orientation	East-West	Analysis Time Period (hrs)	0.25
Project Description	GEA/LAK-44 Corridor Study		

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Movement	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Priority																
Number of Lanes	0	1	1	0	0	0	1	0		0	0	0		0	1	0
Configuration		L	T					TR							LR	
Volume (veh/h)		40	140				450	70						30		40
Percent Heavy Vehicles (%)		1												2		2
Proportion Time Blocked																
Percent Grade (%)														0		
Right Turn Channelized																
Median Type Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		4.1												7.1		6.2
Critical Headway (sec)		4.11												6.42		6.22
Base Follow-Up Headway (sec)		2.2												3.5		3.3
Follow-Up Headway (sec)		2.21												3.52		3.32

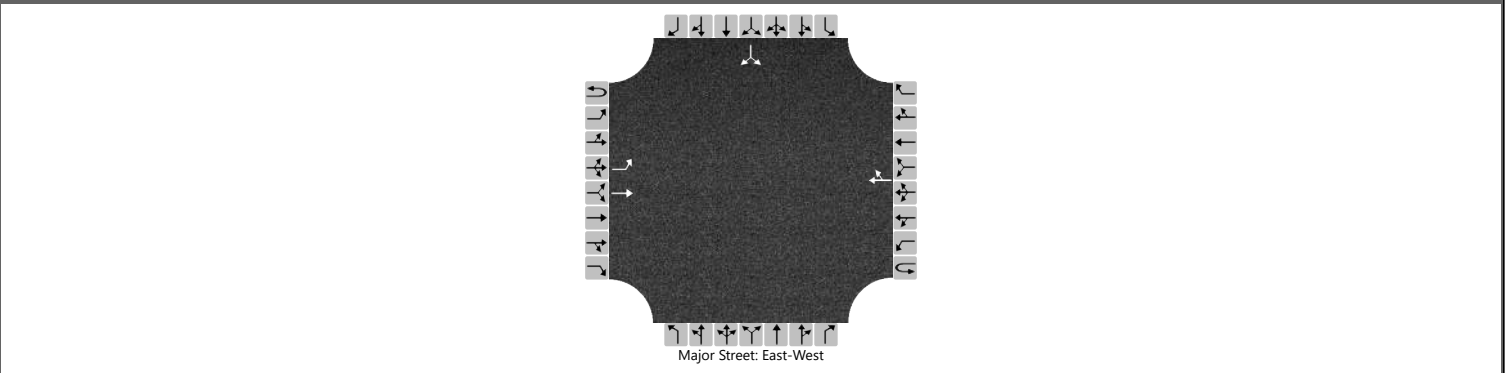
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		43														74	
Capacity, c (veh/h)		1022														454	
v/c Ratio		0.04														0.16	
95% Queue Length, Q ₉₅ (veh)		0.1														0.6	
Control Delay (s/veh)		8.7														14.5	
Level of Service (LOS)		A														B	
Approach Delay (s/veh)		1.9												14.5			
Approach LOS														B			

HCS7 Two-Way Stop-Control Report

General Information		Site Information	
Analyst	NJT	Intersection	Girdled Road / Crile Road
Agency/Co.	GPD Group	Jurisdiction	ODOT District 12
Date Performed	03/11/2022	East/West Street	Girdled Road
Analysis Year	2047	North/South Street	Crile Road
Time Analyzed	PM Peak 'Build'	Peak Hour Factor	0.92
Intersection Orientation	East-West	Analysis Time Period (hrs)	0.25
Project Description	GEA/LAK-44 Corridor Study		

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Movement	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Priority																
Number of Lanes	0	1	1	0	0	0	1	0	0	0	0	0	0	1	0	
Configuration		L	T					TR							LR	
Volume (veh/h)		90	300				210	110						110		90
Percent Heavy Vehicles (%)		3												3		3
Proportion Time Blocked																
Percent Grade (%)														0		
Right Turn Channelized																
Median Type Storage		Undivided														

Critical and Follow-up Headways

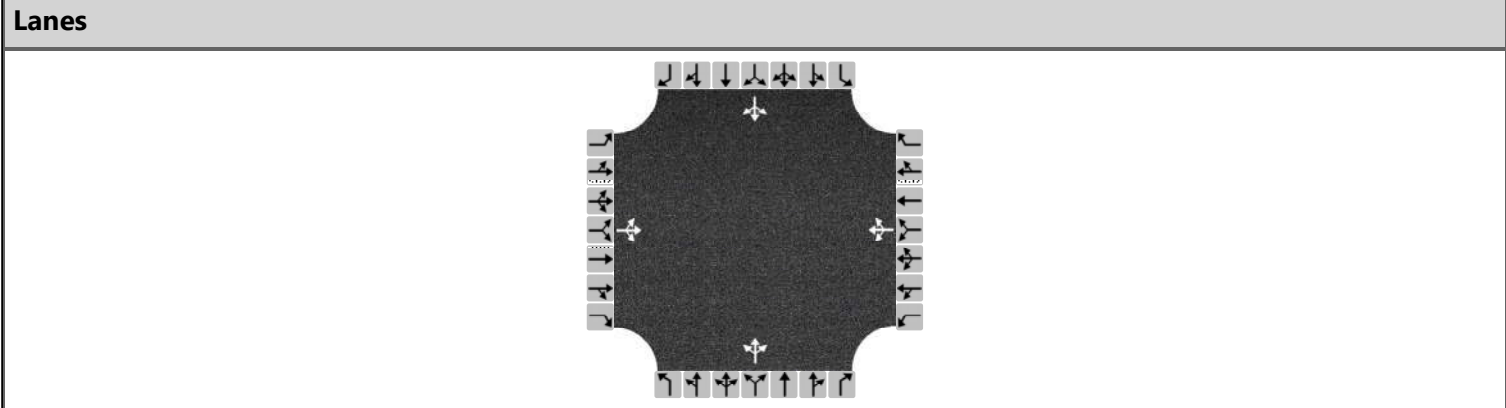
Base Critical Headway (sec)		4.1												7.1		6.2
Critical Headway (sec)		4.13												6.43		6.23
Base Follow-Up Headway (sec)		2.2												3.5		3.3
Follow-Up Headway (sec)		2.23												3.53		3.33

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		98														217	
Capacity, c (veh/h)		1206														431	
v/c Ratio		0.08														0.50	
95% Queue Length, Q ₉₅ (veh)		0.3														2.8	
Control Delay (s/veh)		8.2														21.6	
Level of Service (LOS)		A														C	
Approach Delay (s/veh)		1.9												21.6			
Approach LOS														C			

HCS7 All-Way Stop Control Report

General Information		Site Information	
Analyst	Naser Tabanja	Intersection	Girdled Road /Auburn Road
Agency/Co.	GPD Group	Jurisdiction	ODOT District 12
Date Performed	03/11/2022	East/West Street	Girdled Road
Analysis Year	2047	North/South Street	Auburn Road
Analysis Time Period (hrs)	0.25	Peak Hour Factor	0.92
Time Analyzed	AM Peak 'Build'		
Project Description	GEA/LAK-44 Corridor Study		



Vehicle Volume and Adjustments

Approach	Eastbound			Westbound			Northbound			Southbound		
	L	T	R	L	T	R	L	T	R	L	T	R
Movement												
Volume	40	60	20	180	50	120	10	140	120	30	90	10
% Thrus in Shared Lane												
Lane	L1	L2	L3	L1	L2	L3	L1	L2	L3	L1	L2	L3
Configuration	LTR			LTR			LTR			LTR		
Flow Rate, v (veh/h)	130			380			293			141		
Percent Heavy Vehicles	3			3			4			2		

Departure Headway and Service Time

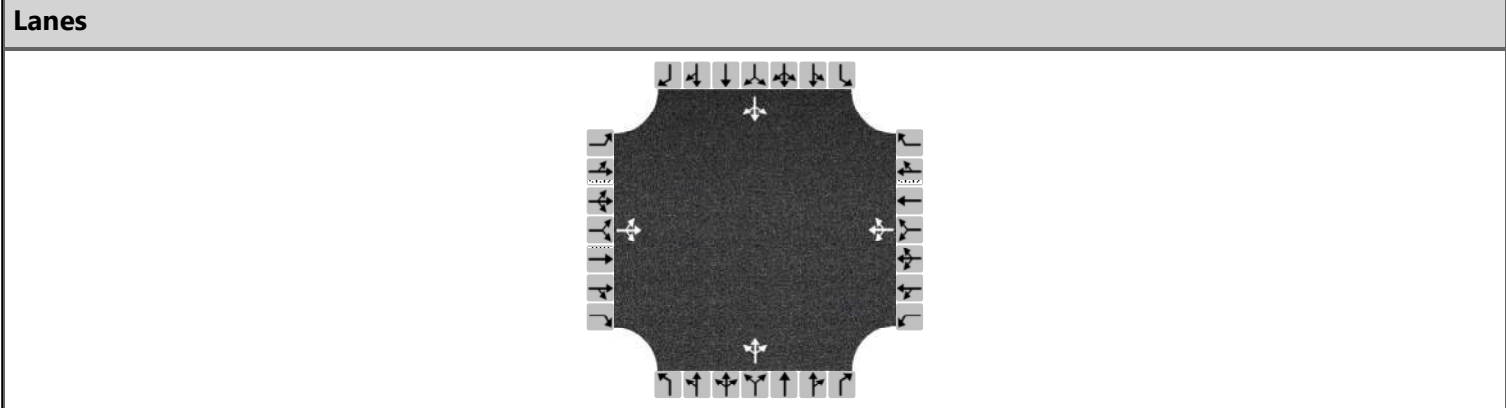
Initial Departure Headway, hd (s)	3.20			3.20			3.20			3.20		
Initial Degree of Utilization, x	0.116			0.338			0.261			0.126		
Final Departure Headway, hd (s)	5.83			5.33			5.41			5.91		
Final Degree of Utilization, x	0.211			0.563			0.441			0.232		
Move-Up Time, m (s)	2.0			2.0			2.0			2.0		
Service Time, ts (s)	3.83			3.33			3.41			3.91		

Capacity, Delay and Level of Service

Flow Rate, v (veh/h)	130			380			293			141		
Capacity	618			676			665			610		
95% Queue Length, Q ₉₅ (veh)	0.8			3.5			2.3			0.9		
Control Delay (s/veh)	10.4			15.0			12.6			10.7		
Level of Service, LOS	B			B			B			B		
Approach Delay (s/veh)	10.4			15.0			12.6			10.7		
Approach LOS	B			B			B			B		
Intersection Delay, s/veh LOS	13.0						B					

HCS7 All-Way Stop Control Report

General Information		Site Information	
Analyst	Naser Tabanja	Intersection	Girdled Road /Auburn Road
Agency/Co.	GPD Group	Jurisdiction	ODOT District 12
Date Performed	03/11/2022	East/West Street	Girdled Road
Analysis Year	2047	North/South Street	Auburn Road
Analysis Time Period (hrs)	0.25	Peak Hour Factor	0.81
Time Analyzed	PM Peak 'Build'		
Project Description	GEA/LAK-44 Corridor Study		



Vehicle Volume and Adjustments

Approach	Eastbound			Westbound			Northbound			Southbound		
	L	T	R	L	T	R	L	T	R	L	T	R
Movement												
Volume	20	110	30	120	80	20	10	140	120	60	120	30
% Thrus in Shared Lane												
Lane	L1	L2	L3	L1	L2	L3	L1	L2	L3	L1	L2	L3
Configuration	LTR			LTR			LTR			LTR		
Flow Rate, v (veh/h)	198			272			333			259		
Percent Heavy Vehicles	3			3			4			2		

Departure Headway and Service Time

Initial Departure Headway, hd (s)	3.20			3.20			3.20			3.20		
Initial Degree of Utilization, x	0.176			0.241			0.296			0.230		
Final Departure Headway, hd (s)	6.28			6.24			5.76			6.09		
Final Degree of Utilization, x	0.345			0.471			0.533			0.438		
Move-Up Time, m (s)	2.0			2.0			2.0			2.0		
Service Time, ts (s)	4.28			4.24			3.76			4.09		

Capacity, Delay and Level of Service

Flow Rate, v (veh/h)	198			272			333			259		
Capacity	573			577			625			591		
95% Queue Length, Q ₉₅ (veh)	1.5			2.5			3.2			2.2		
Control Delay (s/veh)	12.6			14.7			15.1			13.8		
Level of Service, LOS	B			B			C			B		
Approach Delay (s/veh)	12.6			14.7			15.1			13.8		
Approach LOS	B			B			C			B		
Intersection Delay, s/veh LOS	14.2						B					

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**APPENDIX H
TRANSMODELER INTERSECTION CAPACITY ANALYSIS**

DESIGN YEAR 2047 'NO-BUILD' CONDITIONS

Project: SR 44 Corridor - 'No-Build'
 Scenario: AM Peak
 Run(s): Batch (10 runs)
 Simulated: Various
 Time: 08:00:00 - 09:00:00
 Interval: Summary
 Selection: --

Intersection Level of Service by Lane Group - Overview

GIRDLED ROAD & AUBURN ROAD -- UNSIGNALIZED

NODE: 17671

Run	Number of Vehicles	Total Control Delay (hr)	Avg Control Delay (sec/veh)	Level of Service
NB LTR on Auburn Road: Superlink ID 24384				
1	268.0	14.81	198.9	F
2	268.0	19.57	262.9	F
3	261.0	23.71	327.0	F
4	257.0	14.47	202.8	F
5	251.0	27.05	388.0	F
6	260.0	23.80	329.6	F
7	261.0	26.34	363.4	F
8	262.0	23.38	321.2	F
9	248.0	36.83	534.6	F
10	254.0	29.08	412.1	F
Average:	259.0	23.90	334.1	F

NEB LTR on Girdled Road: Superlink ID 24382

1	129.0	1.32	36.8	E
2	132.0	1.21	33.0	D
3	130.0	1.09	30.2	D
4	129.0	1.20	33.6	D
5	129.0	1.08	30.2	D
6	131.0	1.16	31.9	D
7	129.0	1.01	28.1	D
8	129.0	1.05	29.2	D
9	130.0	1.20	33.3	D
10	129.0	1.24	34.5	D
Average:	129.7	1.16	32.1	D

SB LTR on Auburn Road: Superlink ID 24383

1	143.0	0.94	23.7	C
2	139.0	0.84	21.9	C
3	140.0	0.99	25.5	D
4	143.0	1.06	26.6	D
5	140.0	1.14	29.4	D
6	143.0	1.12	28.2	D
7	143.0	1.03	25.9	D
8	142.0	0.96	24.4	C
9	142.0	1.09	27.7	D
10	144.0	0.87	21.8	C
Average:	141.9	1.00	25.5	D

GIRDLED ROAD & AUBURN ROAD -- UNSIGNALIZED

NODE: 17671

Run	Number of Vehicles	Total Control Delay (hr)	Avg Control Delay (sec/veh)	Level of Service
SWB LTR on Girdled Road: Superlink ID 24371				
1	271.0	4.43	58.8	F
2	277.0	5.50	71.5	F
3	271.0	5.24	69.6	F
4	261.0	4.99	68.8	F
5	274.0	5.52	72.5	F
6	277.0	4.71	61.3	F
7	278.0	4.76	61.6	F
8	283.0	4.52	57.5	F
9	284.0	4.71	59.7	F
10	280.0	4.50	57.9	F
Average:	275.6	4.89	63.9	F

GIRDLED ROAD & CRILE ROAD -- UNSIGNALIZED

NODE: 6

Run	Number of Vehicles	Total Control Delay (hr)	Avg Control Delay (sec/veh)	Level of Service
NEB LT on Girdled Road: Superlink ID 24386				
1	190.0	0.35	6.5	A
2	189.0	0.24	4.6	A
3	184.0	0.48	9.4	A
4	168.0	1.09	23.4	C
5	186.0	0.19	3.7	A
6	184.0	0.46	8.9	A
7	182.0	0.37	7.3	A
8	195.0	0.10	1.8	A
9	185.0	0.20	3.9	A
10	190.0	0.27	5.1	A
Average:	185.3	0.38	7.5	A

SB LR on Crile Road: Superlink ID 24385

1	73.0	4.14	204.1	F
2	65.0	6.86	380.2	F
3	73.0	2.70	133.1	F
4	72.0	2.05	102.6	F
5	66.0	6.12	333.8	F
6	77.0	2.57	120.3	F
7	74.0	3.60	175.2	F
8	74.0	3.96	192.9	F
9	69.0	5.08	265.0	F
10	74.0	2.65	128.8	F
Average:	71.7	3.97	203.6	F

SWB TR on Girdled Road: Superlink ID 24367

GIRDLED ROAD & CRILE ROAD -- UNSIGNALIZED**NODE: 6**

Run	Number of Vehicles	Total Control Delay (hr)	Avg Control Delay (sec/veh)	Level of Service
1	250.0	71.59	1,030.9	F
2	267.0	77.86	1,049.8	F
3	255.0	73.50	1,037.6	F
4	250.0	78.23	1,126.5	F
5	241.0	80.19	1,197.9	F
6	278.0	70.06	907.2	F
7	280.0	85.11	1,094.3	F
8	276.0	83.54	1,089.7	F
9	283.0	79.50	1,011.3	F
10	269.0	82.33	1,101.8	F
Average:	264.9	78.19	1,064.7	F

STATE ROUTE 44 & GIRDLED ROAD -- SIGNALIZED**NODE: 17673**

Run	Number of Vehicles	Total Control Delay (hr)	Avg Control Delay (sec/veh)	Level of Service
NB L on State Route 44: Superlink ID 24388				
1	43.0	2.17	181.3	F
2	42.0	3.47	297.5	F
3	39.0	2.51	232.1	F
4	31.0	3.24	376.4	F
5	42.0	2.64	226.1	F
6	37.0	3.00	292.3	F
7	41.0	3.35	293.7	F
8	43.0	3.02	252.8	F
9	41.0	3.46	304.1	F
10	39.0	3.06	282.9	F
Average:	39.8	2.99	273.9	F

NB TR on State Route 44: Superlink ID 24388

1	833.0	29.36	126.9	F
2	820.0	49.23	216.1	F
3	812.0	36.18	160.4	F
4	632.0	52.50	299.0	F
5	848.0	35.67	151.4	F
6	756.0	50.29	239.5	F
7	827.0	50.03	217.8	F
8	852.0	47.67	201.4	F
9	809.0	48.46	215.6	F
10	811.0	49.08	217.8	F
Average:	800.0	44.85	204.6	F

NEB LT on Girdled Road: Superlink ID 24371

1	194.0	3.61	66.9	E
2	194.0	3.58	66.5	E

STATE ROUTE 44 & GIRDLED ROAD -- SIGNALIZED

NODE: 17673

Run	Number of Vehicles	Total Control Delay (hr)	Avg Control Delay (sec/veh)	Level of Service
3	189.0	3.58	68.1	E
4	190.0	3.55	67.3	E
5	189.0	3.83	73.0	E
6	192.0	3.76	70.6	E
7	188.0	3.80	72.7	E
8	193.0	3.67	68.4	E
9	184.0	3.90	76.4	E
10	185.0	3.86	75.0	E
Average:	189.8	3.71	70.5	E

NEB R on Girdled Road: Superlink ID 24371

1	20.0	0.31	56.5	E
2	20.0	0.32	57.3	E
3	19.0	0.33	61.6	E
4	20.0	0.28	50.8	D
5	20.0	0.32	57.6	E
6	19.0	0.28	52.5	D
7	17.0	0.25	53.3	D
8	21.0	0.27	47.1	D
9	22.0	0.35	57.5	E
10	21.0	0.30	51.4	D
Average:	19.9	0.30	54.6	D

SB L on State Route 44: Superlink ID 24374

1	77.0	2.81	131.3	F
2	76.0	4.03	190.8	F
3	75.0	3.95	189.7	F
4	73.0	4.26	210.3	F
5	73.0	3.85	190.0	F
6	79.0	3.16	143.9	F
7	72.0	2.70	134.9	F
8	78.0	3.07	141.7	F
9	78.0	2.78	128.3	F
10	77.0	3.23	151.0	F
Average:	75.8	3.38	161.2	F

SB TR on State Route 44: Superlink ID 24374

1	695.0	9.21	47.7	D
2	717.0	19.53	98.0	F
3	710.0	19.19	97.3	F
4	683.0	17.41	91.8	F
5	701.0	19.64	100.8	F
6	702.0	10.28	52.7	D

STATE ROUTE 44 & GIRDLED ROAD -- SIGNALIZED

NODE: 17673

Run	Number of Vehicles	Total Control Delay (hr)	Avg Control Delay (sec/veh)	Level of Service
7	697.0	7.98	41.2	D
8	705.0	9.47	48.4	D
9	698.0	9.12	47.0	D
10	706.0	11.99	61.1	E
Average:	701.4	13.38	68.6	E

SWB LT on Girdled Road: Superlink ID 24386

1	130.0	2.35	65.0	E
2	136.0	2.27	60.0	E
3	136.0	2.29	60.6	E
4	130.0	2.63	72.8	E
5	128.0	2.52	71.0	E
6	145.0	2.26	56.0	E
7	145.0	2.28	56.7	E
8	144.0	2.42	60.6	E
9	145.0	2.20	54.7	D
10	144.0	2.47	61.8	E
Average:	138.3	2.37	61.9	E

SWB R on Girdled Road: Superlink ID 24386

1	128.0	1.24	34.8	C
2	133.0	1.13	30.6	C
3	130.0	1.20	33.2	C
4	125.0	1.17	33.8	C
5	118.0	1.05	31.9	C
6	137.0	1.20	31.5	C
7	137.0	1.18	31.1	C
8	137.0	0.92	24.1	C
9	138.0	1.03	26.9	C
10	133.0	1.10	29.7	C
Average:	131.6	1.12	30.8	C

Project: SR 44 Corridor - 'No-Build'
 Scenario: AM Peak
 Run(s): Batch (10 runs)
 Simulated: Various
 Time: 08:00:00 - 09:00:00
 Interval: Summary
 Selection: --

Intersection Level of Service by Lane Group - Total Control Delay

GIRDLED ROAD & AUBURN ROAD

NODE: 17671

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NB LTR	Auburn Road	24384	23.9	6.7	14.5	36.8	10
NEB LTR	Girdled Road	24382	1.2	0.1	1.0	1.3	10
SB LTR	Auburn Road	24383	1.0	0.1	0.8	1.1	10
SWB LTR	Girdled Road	24371	4.9	0.4	4.4	5.5	10

GIRDLED ROAD & CRILE ROAD

NODE: 6

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NEB LT	Girdled Road	24386	0.4	0.3	0.1	1.1	10
SB LR	Crile Road	24385	4.0	1.6	2.1	6.9	10
SWB TR	Girdled Road	24367	78.2	5.1	70.1	85.1	10

STATE ROUTE 44 & GIRDLED ROAD

NODE: 17673

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NB L	State Route 44	24388	3.0	0.4	2.2	3.5	10
NB TR	State Route 44	24388	44.8	8.0	29.4	52.5	10
NEB LT	Girdled Road	24371	3.7	0.1	3.6	3.9	10
NEB R	Girdled Road	24371	0.3	0.0	0.3	0.4	10
SB L	State Route 44	24374	3.4	0.6	2.7	4.3	10
SB TR	State Route 44	24374	13.4	4.9	8.0	19.6	10
SWB LT	Girdled Road	24386	2.4	0.1	2.2	2.6	10
SWB R	Girdled Road	24386	1.1	0.1	0.9	1.2	10

Project: SR 44 Corridor - 'No-Build'
 Scenario: AM Peak
 Run(s): Batch (10 runs)
 Simulated: Various
 Time: 08:00:00 - 09:00:00
 Interval: Summary
 Selection: --

Intersection Level of Service by Lane Group - Avg Control Delay

GIRDLED ROAD & AUBURN ROAD

NODE: 17671

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NB LTR	Auburn Road	24384	334.1	100.5	198.9	534.6	10
NEB LTR	Girdled Road	24382	32.1	2.7	28.1	36.8	10
SB LTR	Auburn Road	24383	25.5	2.6	21.8	29.4	10
SWB LTR	Girdled Road	24371	63.9	6.0	57.5	72.5	10

GIRDLED ROAD & CRILE ROAD

NODE: 6

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NEB LT	Girdled Road	24386	7.5	6.1	1.8	23.4	10
SB LR	Crile Road	24385	203.6	94.6	102.6	380.2	10
SWB TR	Girdled Road	24367	1,064.7	77.6	907.2	1,197.9	10

STATE ROUTE 44 & GIRDLED ROAD

NODE: 17673

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NB L	State Route 44	24388	273.9	53.6	181.3	376.4	10
NB TR	State Route 44	24388	204.6	48.9	126.9	299.0	10
NEB LT	Girdled Road	24371	70.5	3.6	66.5	76.4	10
NEB R	Girdled Road	24371	54.6	4.3	47.1	61.6	10
SB L	State Route 44	24374	161.2	30.5	128.3	210.3	10
SB TR	State Route 44	24374	68.6	25.0	41.2	100.8	10
SWB LT	Girdled Road	24386	61.9	6.1	54.7	72.8	10
SWB R	Girdled Road	24386	30.8	3.2	24.1	34.8	10

Project: SR 44 Corridor - 'No-Build'
 Scenario: AM Peak
 Run(s): Batch (10 runs)
 Simulated: Various
 Time: 08:00:00 - 09:00:00
 Interval: Summary
 Selection: --

Intersection Level of Service by Approach - Overview

GIRDLED ROAD & AUBURN ROAD -- UNSIGNALIZED

NODE: 17671

Run	Number of Vehicles	Total Control Delay (hr)	Avg Control Delay (sec/veh)	Level of Service
NB on Auburn Road: Superlink ID 24384				
1	268.0	14.81	198.9	F
2	268.0	19.57	262.9	F
3	261.0	23.71	327.0	F
4	257.0	14.47	202.8	F
5	251.0	27.05	388.0	F
6	260.0	23.80	329.6	F
7	261.0	26.34	363.4	F
8	262.0	23.38	321.2	F
9	248.0	36.83	534.6	F
10	254.0	29.08	412.1	F
Average:	259.0	23.90	334.1	F

NEB on Girdled Road: Superlink ID 24382

1	129.0	1.32	36.8	E
2	132.0	1.21	33.0	D
3	130.0	1.09	30.2	D
4	129.0	1.20	33.6	D
5	129.0	1.08	30.2	D
6	131.0	1.16	31.9	D
7	129.0	1.01	28.1	D
8	129.0	1.05	29.2	D
9	130.0	1.20	33.3	D
10	129.0	1.24	34.5	D
Average:	129.7	1.16	32.1	D

SB on Auburn Road: Superlink ID 24383

1	143.0	0.94	23.7	C
2	139.0	0.84	21.9	C
3	140.0	0.99	25.5	D
4	143.0	1.06	26.6	D
5	140.0	1.14	29.4	D
6	143.0	1.12	28.2	D
7	143.0	1.03	25.9	D
8	142.0	0.96	24.4	C
9	142.0	1.09	27.7	D

GIRDLED ROAD & AUBURN ROAD -- UNSIGNALIZED

NODE: 17671

Run	Number of Vehicles	Total Control Delay (hr)	Avg Control Delay (sec/veh)	Level of Service
10	144.0	0.87	21.8	C
Average:	141.9	1.00	25.5	D

SWB on Girdled Road: Superlink ID 24371

1	271.0	4.43	58.8	F
2	277.0	5.50	71.5	F
3	271.0	5.24	69.6	F
4	261.0	4.99	68.8	F
5	274.0	5.52	72.5	F
6	277.0	4.71	61.3	F
7	278.0	4.76	61.6	F
8	283.0	4.52	57.5	F
9	284.0	4.71	59.7	F
10	280.0	4.50	57.9	F
Average:	275.6	4.89	63.9	F

GIRDLED ROAD & CRILE ROAD -- UNSIGNALIZED

NODE: 6

Run	Number of Vehicles	Total Control Delay (hr)	Avg Control Delay (sec/veh)	Level of Service
NEB on Girdled Road: Superlink ID 24386				
1	190.0	0.35	6.5	A
2	189.0	0.24	4.6	A
3	184.0	0.48	9.4	A
4	168.0	1.09	23.4	C
5	186.0	0.19	3.7	A
6	184.0	0.46	8.9	A
7	182.0	0.37	7.3	A
8	195.0	0.10	1.8	A
9	185.0	0.20	3.9	A
10	190.0	0.27	5.1	A
Average:	185.3	0.38	7.5	A

SB on Crile Road: Superlink ID 24385

1	73.0	4.14	204.1	F
2	65.0	6.86	380.2	F
3	73.0	2.70	133.1	F
4	72.0	2.05	102.6	F
5	66.0	6.12	333.8	F
6	77.0	2.57	120.3	F
7	74.0	3.60	175.2	F
8	74.0	3.96	192.9	F
9	69.0	5.08	265.0	F

GIRDLED ROAD & CRILE ROAD -- UNSIGNALIZED

NODE: 6

Run	Number of Vehicles	Total Control Delay (hr)	Avg Control Delay (sec/veh)	Level of Service
10	74.0	2.65	128.8	F
Average:	71.7	3.97	203.6	F

SWB on Girdled Road: Superlink ID 24367

1	250.0	71.59	1,030.9	F
2	267.0	77.86	1,049.8	F
3	255.0	73.50	1,037.6	F
4	250.0	78.23	1,126.5	F
5	241.0	80.19	1,197.9	F
6	278.0	70.06	907.2	F
7	280.0	85.11	1,094.3	F
8	276.0	83.54	1,089.7	F
9	283.0	79.50	1,011.3	F
10	269.0	82.33	1,101.8	F
Average:	264.9	78.19	1,064.7	F

STATE ROUTE 44 & GIRDLED ROAD -- SIGNALIZED

NODE: 17673

Run	Number of Vehicles	Total Control Delay (hr)	Avg Control Delay (sec/veh)	Level of Service
NB on State Route 44: Superlink ID 24388				
1	876.0	31.53	129.6	F
2	862.0	52.70	220.1	F
3	851.0	38.69	163.7	F
4	663.0	55.74	302.7	F
5	890.0	38.30	154.9	F
6	793.0	53.29	241.9	F
7	868.0	53.37	221.4	F
8	895.0	50.69	203.9	F
9	850.0	51.92	219.9	F
10	850.0	52.14	220.8	F
Average:	839.8	47.84	207.9	F

NEB on Girdled Road: Superlink ID 24371

1	214.0	3.92	66.0	E
2	214.0	3.90	65.6	E
3	208.0	3.90	67.5	E
4	210.0	3.84	65.7	E
5	209.0	4.15	71.6	E
6	211.0	4.04	68.9	E
7	205.0	4.05	71.1	E
8	214.0	3.94	66.3	E
9	206.0	4.25	74.4	E

STATE ROUTE 44 & GIRDLED ROAD -- SIGNALIZED

NODE: 17673

Run	Number of Vehicles	Total Control Delay (hr)	Avg Control Delay (sec/veh)	Level of Service
10	206.0	4.16	72.6	E
Average:	209.7	4.02	69.0	E

SB on State Route 44: Superlink ID 24374

1	772.0	12.01	56.0	E
2	793.0	23.55	106.9	F
3	785.0	23.14	106.1	F
4	756.0	21.67	103.2	F
5	774.0	23.49	109.3	F
6	781.0	13.44	62.0	E
7	769.0	10.68	50.0	D
8	783.0	12.55	57.7	E
9	776.0	11.90	55.2	E
10	783.0	15.22	70.0	E
Average:	777.2	16.77	77.6	E

SWB on Girdled Road: Superlink ID 24386

1	258.0	3.58	50.0	D
2	269.0	3.40	45.5	D
3	266.0	3.49	47.2	D
4	255.0	3.80	53.7	D
5	246.0	3.57	52.2	D
6	282.0	3.45	44.1	D
7	282.0	3.47	44.3	D
8	281.0	3.34	42.8	D
9	283.0	3.23	41.1	D
10	277.0	3.57	46.4	D
Average:	269.9	3.49	46.7	D

Project: SR 44 Corridor - 'No-Build'
 Scenario: AM Peak
 Run(s): Batch (10 runs)
 Simulated: Various
 Time: 08:00:00 - 09:00:00
 Interval: Summary
 Selection: --

Intersection Level of Service by Approach - Total Control Delay

GIRDLED ROAD & AUBURN ROAD

NODE: 17671

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
N	Auburn Road	24384	23.9	6.7	14.5	36.8	10
NE	Girdled Road	24382	1.2	0.1	1.0	1.3	10
S	Auburn Road	24383	1.0	0.1	0.8	1.1	10
SW	Girdled Road	24371	4.9	0.4	4.4	5.5	10

GIRDLED ROAD & CRILE ROAD

NODE: 6

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NE	Girdled Road	24386	0.4	0.3	0.1	1.1	10
S	Crile Road	24385	4.0	1.6	2.1	6.9	10
SW	Girdled Road	24367	78.2	5.1	70.1	85.1	10

STATE ROUTE 44 & GIRDLED ROAD

NODE: 17673

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
N	State Route 44	24388	47.8	8.4	31.5	55.7	10
NE	Girdled Road	24371	4.0	0.1	3.8	4.3	10
S	State Route 44	24374	16.8	5.5	10.7	23.6	10
SW	Girdled Road	24386	3.5	0.2	3.2	3.8	10

Project: SR 44 Corridor - 'No-Build'
 Scenario: AM Peak
 Run(s): Batch (10 runs)
 Simulated: Various
 Time: 08:00:00 - 09:00:00
 Interval: Summary
 Selection: --

Intersection Level of Service by Approach - Avg Control Delay

GIRDLED ROAD & AUBURN ROAD

NODE: 17671

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
N	Auburn Road	24384	334.1	100.5	198.9	534.6	10
NE	Girdled Road	24382	32.1	2.7	28.1	36.8	10
S	Auburn Road	24383	25.5	2.6	21.8	29.4	10
SW	Girdled Road	24371	63.9	6.0	57.5	72.5	10

GIRDLED ROAD & CRILE ROAD

NODE: 6

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NE	Girdled Road	24386	7.5	6.1	1.8	23.4	10
S	Crile Road	24385	203.6	94.6	102.6	380.2	10
SW	Girdled Road	24367	1,064.7	77.6	907.2	1,197.9	10

STATE ROUTE 44 & GIRDLED ROAD

NODE: 17673

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
N	State Route 44	24388	207.9	49.1	129.6	302.7	10
NE	Girdled Road	24371	69.0	3.2	65.6	74.4	10
S	State Route 44	24374	77.6	25.3	50.0	109.3	10
SW	Girdled Road	24386	46.7	4.1	41.1	53.7	10

Project: SR 44 Corridor - 'No-Build'
 Scenario: AM Peak
 Run(s): Batch (10 runs)
 Simulated: Various
 Time: 08:00:00 - 09:00:00
 Interval: Summary
 Selection: --

Intersection Level of Service - Overview

GIRDLED ROAD & AUBURN ROAD -- UNSIGNALIZED NODE: 17671

Run	Number of Vehicles	Total Control Delay (hr)	Avg Control Delay (sec/veh)	Level of Service
1	811.0	21.50	95.4	F
2	816.0	27.12	119.7	F
3	802.0	31.03	139.3	F
4	790.0	21.72	99.0	F
5	794.0	34.80	157.8	F
6	811.0	30.80	136.7	F
7	811.0	33.14	147.1	F
8	816.0	29.91	131.9	F
9	804.0	43.83	196.3	F
10	807.0	35.69	159.2	F
Average:	806.2	30.95	138.2	F

GIRDLED ROAD & CRILE ROAD -- UNSIGNALIZED NODE: 6

Run	Number of Vehicles	Total Control Delay (hr)	Avg Control Delay (sec/veh)	Level of Service
1	513.0	76.08	533.9	F
2	521.0	84.97	587.1	F
3	512.0	76.68	539.1	F
4	490.0	81.37	597.8	F
5	493.0	86.50	631.7	F
6	539.0	73.09	488.2	F
7	536.0	89.08	598.3	F
8	545.0	87.61	578.7	F
9	537.0	84.78	568.4	F
10	533.0	85.24	575.8	F
Average:	521.9	82.54	569.9	F

STATE ROUTE 44 & GIRDLED ROAD -- SIGNALIZED NODE: 17673

Run	Number of Vehicles	Total Control Delay (hr)	Avg Control Delay (sec/veh)	Level of Service
1	2,120.0	51.05	86.7	F
2	2,138.0	83.56	140.7	F
3	2,110.0	69.22	118.1	F
4	1,884.0	85.05	162.5	F
5	2,119.0	69.52	118.1	F
6	2,067.0	74.23	129.3	F
7	2,124.0	71.57	121.3	F
8	2,173.0	70.52	116.8	F
9	2,115.0	71.31	121.4	F

Intersection Level of Service

10	2,116.0	75.09	127.7	F
Average:	2,096.6	72.11	124.3	F

Project: SR 44 Corridor - 'No-Build'
Scenario: AM Peak
Run(s): Batch (10 runs)
Simulated: Various
Time: 08:00:00 - 09:00:00
Interval: Summary
Selection: --

Intersection Level of Service - Total Control Delay

Node ID	Intersection	Control Type	Average	Std Dev	Minimum	Maximum	# Samples
17671	Girdled Road & Auburn Road	Stop	31.0	6.7	21.5	43.8	10
6	Girdled Road & Crile Road	Stop	82.5	5.5	73.1	89.1	10
17673	State Route 44 & Girdled Road	Actuated	72.1	9.3	51.1	85.1	10

Project: SR 44 Corridor - 'No-Build'
Scenario: AM Peak
Run(s): Batch (10 runs)
Simulated: Various
Time: 08:00:00 - 09:00:00
Interval: Summary
Selection: --

Intersection Level of Service - Avg Control Delay

Node ID	Intersection	Control Type	Average	Std Dev	Minimum	Maximum	# Samples
17671	Girdled Road & Auburn Road	Stop	138.2	29.9	95.4	196.3	10
6	Girdled Road & Crile Road	Stop	569.9	40.5	488.2	631.7	10
17673	State Route 44 & Girdled Road	Actuated	124.3	19.2	86.7	162.5	10

Project: SR 44 Corridor - 'No-Build'
 Scenario: PM Peak
 Run(s): Batch (10 runs)
 Simulated: Various
 Time: 17:00:00 - 18:00:00
 Interval: Summary
 Selection: --

Intersection Level of Service by Lane Group - Overview

GIRDLED ROAD & AUBURN ROAD -- UNSIGNALIZED

NODE: 17671

Run	Number of Vehicles	Total Control Delay (hr)	Avg Control Delay (sec/veh)	Level of Service
NB LTR on Auburn Road: Superlink ID 24384				
1	171.0	49.11	1,034.0	F
2	180.0	43.06	861.3	F
3	181.0	45.26	900.3	F
4	175.0	48.52	998.1	F
5	173.0	48.49	1,009.0	F
6	185.0	42.64	829.8	F
7	174.0	46.34	958.7	F
8	173.0	48.17	1,002.5	F
9	165.0	46.35	1,011.2	F
10	179.0	45.83	921.8	F
Average:	175.6	46.38	952.7	F

NEB LTR on Girdled Road: Superlink ID 24382

1	153.0	8.22	193.5	F
2	167.0	6.78	146.1	F
3	165.0	8.18	178.5	F
4	165.0	9.70	211.7	F
5	167.0	9.96	214.7	F
6	162.0	7.76	172.5	F
7	164.0	8.93	196.0	F
8	160.0	7.07	159.1	F
9	142.0	17.95	455.2	F
10	167.0	9.57	206.3	F
Average:	161.2	9.41	213.4	F

SB LTR on Auburn Road: Superlink ID 24383

1	181.0	26.45	526.1	F
2	180.0	19.16	383.3	F
3	184.0	26.03	509.3	F
4	191.0	22.64	426.7	F
5	186.0	30.10	582.6	F
6	191.0	24.89	469.2	F
7	188.0	22.34	427.9	F
8	188.0	27.82	532.7	F
9	175.0	29.26	602.0	F
10	197.0	22.12	404.3	F
Average:	186.1	25.08	486.4	F

GIRDLED ROAD & AUBURN ROAD -- UNSIGNALIZED

NODE: 17671

Run	Number of Vehicles	Total Control Delay (hr)	Avg Control Delay (sec/veh)	Level of Service
SWB LTR on Girdled Road: Superlink ID 24371				
1	196.0	2.38	43.8	E
2	184.0	2.34	45.8	E
3	180.0	2.18	43.6	E
4	174.0	2.93	60.7	F
5	180.0	1.89	37.8	E
6	179.0	1.87	37.6	E
7	181.0	2.04	40.6	E
8	182.0	2.09	41.3	E
9	179.0	2.06	41.5	E
10	174.0	2.36	48.8	E
Average:	180.9	2.21	44.2	E

GIRDLED ROAD & CRILE ROAD -- UNSIGNALIZED

NODE: 6

Run	Number of Vehicles	Total Control Delay (hr)	Avg Control Delay (sec/veh)	Level of Service
NEB LT on Girdled Road: Superlink ID 24386				
1	343.0	0.26	2.7	A
2	330.0	0.25	2.8	A
3	340.0	0.28	3.0	A
4	332.0	0.26	2.9	A
5	341.0	0.35	3.7	A
6	353.0	0.24	2.4	A
7	344.0	0.26	2.7	A
8	345.0	0.28	2.9	A
9	314.0	0.27	3.1	A
10	334.0	0.29	3.1	A
Average:	337.6	0.27	2.9	A

SB LR on Crile Road: Superlink ID 24385

1	84.0	36.03	1,544.3	F
2	83.0	34.49	1,495.9	F
3	83.0	34.77	1,508.1	F
4	78.0	27.89	1,287.1	F
5	77.0	32.37	1,513.6	F
6	71.0	32.98	1,672.2	F
7	80.0	35.95	1,617.8	F
8	75.0	35.08	1,683.6	F
9	69.0	33.38	1,741.7	F
10	80.0	34.34	1,545.2	F
Average:	78.0	33.73	1,561.0	F

SWB TR on Girdled Road: Superlink ID 24367

GIRDLED ROAD & CRILE ROAD -- UNSIGNALIZED

NODE: 6

Run	Number of Vehicles	Total Control Delay (hr)	Avg Control Delay (sec/veh)	Level of Service
1	351.0	0.03	0.4	A
2	329.0	17.22	188.4	F
3	308.0	0.03	0.4	A
4	282.0	0.03	0.4	A
5	319.0	0.04	0.4	A
6	277.0	0.03	0.4	A
7	316.0	0.03	0.3	A
8	320.0	0.03	0.4	A
9	318.0	16.80	190.2	F
10	301.0	0.73	8.7	A
Average:	312.1	3.50	39.0	E

STATE ROUTE 44 & GIRDLED ROAD -- SIGNALIZED

NODE: 17673

Run	Number of Vehicles	Total Control Delay (hr)	Avg Control Delay (sec/veh)	Level of Service
NB L on State Route 44: Superlink ID 24388				
1	22.0	0.42	68.4	E
2	20.0	0.44	79.1	E
3	21.0	0.35	60.0	E
4	23.0	0.41	63.5	E
5	21.0	0.48	81.5	F
6	23.0	0.47	73.7	E
7	21.0	0.42	71.9	E
8	21.0	0.33	56.5	E
9	22.0	0.35	57.8	E
10	21.0	0.39	67.7	E
Average:	21.5	0.41	68.0	E

NB TR on State Route 44: Superlink ID 24388

1	703.0	7.62	39.0	D
2	705.0	7.60	38.8	D
3	712.0	7.17	36.3	D
4	720.0	7.65	38.3	D
5	708.0	7.68	39.1	D
6	732.0	7.53	37.0	D
7	709.0	7.62	38.7	D
8	714.0	7.35	37.1	D
9	735.0	8.14	39.9	D
10	718.0	7.62	38.2	D
Average:	715.6	7.60	38.2	D

NEB LT on Girdled Road: Superlink ID 24371

1	207.0	4.17	72.5	E
2	224.0	4.15	66.7	E

STATE ROUTE 44 & GIRDLED ROAD -- SIGNALIZED

NODE: 17673

Run	Number of Vehicles	Total Control Delay (hr)	Avg Control Delay (sec/veh)	Level of Service
3	219.0	3.77	62.0	E
4	220.0	4.09	66.9	E
5	223.0	4.34	70.0	E
6	217.0	3.90	64.7	E
7	225.0	4.19	67.0	E
8	224.0	4.26	68.4	E
9	191.0	4.02	75.8	E
10	225.0	4.04	64.7	E
Average:	217.5	4.09	67.9	E

NEB R on Girdled Road: Superlink ID 24371

1	25.0	0.37	54.0	D
2	24.0	0.34	51.6	D
3	28.0	0.48	62.3	E
4	26.0	0.44	60.6	E
5	25.0	0.44	64.1	E
6	28.0	0.38	49.0	D
7	27.0	0.41	54.4	D
8	23.0	0.44	69.4	E
9	24.0	0.34	50.5	D
10	26.0	0.27	37.5	D
Average:	25.6	0.39	55.3	E

SB L on State Route 44: Superlink ID 24374

1	151.0	14.27	340.2	F
2	128.0	13.82	388.7	F
3	142.0	13.62	345.4	F
4	132.0	14.13	385.3	F
5	140.0	13.68	351.8	F
6	145.0	13.66	339.1	F
7	139.0	14.29	370.0	F
8	138.0	13.71	357.7	F
9	126.0	15.08	431.0	F
10	128.0	14.01	394.0	F
Average:	136.9	14.03	370.3	F

SB TR on State Route 44: Superlink ID 24374

1	681.0	50.14	265.0	F
2	598.0	53.93	324.6	F
3	656.0	51.40	282.1	F
4	626.0	55.62	319.9	F
5	626.0	48.31	277.8	F
6	691.0	53.50	278.7	F

STATE ROUTE 44 & GIRDLED ROAD -- SIGNALIZED

NODE: 17673

Run	Number of Vehicles	Total Control Delay (hr)	Avg Control Delay (sec/veh)	Level of Service
7	632.0	53.07	302.3	F
8	643.0	51.58	288.8	F
9	588.0	55.27	338.4	F
10	611.0	55.05	324.4	F
Average:	635.2	52.79	300.2	F

SWB LT on Girdled Road: Superlink ID 24386

1	181.0	2.46	49.0	D
2	170.0	2.64	55.9	E
3	157.0	2.52	57.7	E
4	145.0	2.58	64.0	E
5	163.0	2.52	55.8	E
6	142.0	2.55	64.7	E
7	162.0	2.56	56.9	E
8	161.0	2.49	55.6	E
9	160.0	2.55	57.3	E
10	152.0	2.39	56.6	E
Average:	159.3	2.53	57.4	E

SWB R on Girdled Road: Superlink ID 24386

1	90.0	0.65	26.0	C
2	85.0	0.68	29.0	C
3	81.0	0.70	31.2	C
4	74.0	0.80	38.8	D
5	80.0	0.78	35.0	C
6	70.0	0.52	26.7	C
7	82.0	0.72	31.6	C
8	82.0	0.73	32.2	C
9	80.0	0.69	30.8	C
10	78.0	0.76	35.1	D
Average:	80.2	0.70	31.6	C

Project: SR 44 Corridor - 'No-Build'
 Scenario: PM Peak
 Run(s): Batch (10 runs)
 Simulated: Various
 Time: 17:00:00 - 18:00:00
 Interval: Summary
 Selection: --

Intersection Level of Service by Lane Group - Total Control Delay

GIRDLED ROAD & AUBURN ROAD

NODE: 17671

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NB LTR	Auburn Road	24384	46.4	2.3	42.6	49.1	10
NEB LTR	Girdled Road	24382	9.4	3.2	6.8	18.0	10
SB LTR	Auburn Road	24383	25.1	3.5	19.2	30.1	10
SWB LTR	Girdled Road	24371	2.2	0.3	1.9	2.9	10

GIRDLED ROAD & CRILE ROAD

NODE: 6

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NEB LT	Girdled Road	24386	0.3	0.0	0.2	0.4	10
SB LR	Crile Road	24385	33.7	2.4	27.9	36.0	10
SWB TR	Girdled Road	24367	3.5	7.1	0.0	17.2	10

STATE ROUTE 44 & GIRDLED ROAD

NODE: 17673

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NB L	State Route 44	24388	0.4	0.1	0.3	0.5	10
NB TR	State Route 44	24388	7.6	0.2	7.2	8.1	10
NEB LT	Girdled Road	24371	4.1	0.2	3.8	4.3	10
NEB R	Girdled Road	24371	0.4	0.1	0.3	0.5	10
SB L	State Route 44	24374	14.0	0.4	13.6	15.1	10
SB TR	State Route 44	24374	52.8	2.4	48.3	55.6	10
SWB LT	Girdled Road	24386	2.5	0.1	2.4	2.6	10
SWB R	Girdled Road	24386	0.7	0.1	0.5	0.8	10

Project: SR 44 Corridor - 'No-Build'
 Scenario: PM Peak
 Run(s): Batch (10 runs)
 Simulated: Various
 Time: 17:00:00 - 18:00:00
 Interval: Summary
 Selection: --

Intersection Level of Service by Lane Group - Avg Control Delay

GIRDLED ROAD & AUBURN ROAD

NODE: 17671

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NB LTR	Auburn Road	24384	952.7	70.7	829.8	1,034.0	10
NEB LTR	Girdled Road	24382	213.4	87.9	146.1	455.2	10
SB LTR	Auburn Road	24383	486.4	75.7	383.3	602.0	10
SWB LTR	Girdled Road	24371	44.2	6.7	37.6	60.7	10

GIRDLED ROAD & CRILE ROAD

NODE: 6

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NEB LT	Girdled Road	24386	2.9	0.3	2.4	3.7	10
SB LR	Crile Road	24385	1,561.0	128.3	1,287.1	1,741.7	10
SWB TR	Girdled Road	24367	39.0	79.3	0.3	190.2	10

STATE ROUTE 44 & GIRDLED ROAD

NODE: 17673

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NB L	State Route 44	24388	68.0	8.7	56.5	81.5	10
NB TR	State Route 44	24388	38.2	1.1	36.3	39.9	10
NEB LT	Girdled Road	24371	67.9	4.0	62.0	75.8	10
NEB R	Girdled Road	24371	55.3	9.1	37.5	69.4	10
SB L	State Route 44	24374	370.3	29.5	339.1	431.0	10
SB TR	State Route 44	24374	300.2	25.2	265.0	338.4	10
SWB LT	Girdled Road	24386	57.4	4.4	49.0	64.7	10
SWB R	Girdled Road	24386	31.6	3.9	26.0	38.8	10

Project: SR 44 Corridor - 'No-Build'
 Scenario: PM Peak
 Run(s): Batch (10 runs)
 Simulated: Various
 Time: 17:00:00 - 18:00:00
 Interval: Summary
 Selection: --

Intersection Level of Service by Approach - Overview

GIRDLED ROAD & AUBURN ROAD -- UNSIGNALIZED

NODE: 17671

Run	Number of Vehicles	Total Control Delay (hr)	Avg Control Delay (sec/veh)	Level of Service
NB on Auburn Road: Superlink ID 24384				
1	171.0	49.11	1,034.0	F
2	180.0	43.06	861.3	F
3	181.0	45.26	900.3	F
4	175.0	48.52	998.1	F
5	173.0	48.49	1,009.0	F
6	185.0	42.64	829.8	F
7	174.0	46.34	958.7	F
8	173.0	48.17	1,002.5	F
9	165.0	46.35	1,011.2	F
10	179.0	45.83	921.8	F
Average:	175.6	46.38	952.7	F

NEB on Girdled Road: Superlink ID 24382

1	153.0	8.22	193.5	F
2	167.0	6.78	146.1	F
3	165.0	8.18	178.5	F
4	165.0	9.70	211.7	F
5	167.0	9.96	214.7	F
6	162.0	7.76	172.5	F
7	164.0	8.93	196.0	F
8	160.0	7.07	159.1	F
9	142.0	17.95	455.2	F
10	167.0	9.57	206.3	F
Average:	161.2	9.41	213.4	F

SB on Auburn Road: Superlink ID 24383

1	181.0	26.45	526.1	F
2	180.0	19.16	383.3	F
3	184.0	26.03	509.3	F
4	191.0	22.64	426.7	F
5	186.0	30.10	582.6	F
6	191.0	24.89	469.2	F
7	188.0	22.34	427.9	F
8	188.0	27.82	532.7	F
9	175.0	29.26	602.0	F

GIRDLED ROAD & AUBURN ROAD -- UNSIGNALIZED

NODE: 17671

Run	Number of Vehicles	Total Control Delay (hr)	Avg Control Delay (sec/veh)	Level of Service
10	197.0	22.12	404.3	F
Average:	186.1	25.08	486.4	F

SWB on Girdled Road: Superlink ID 24371

1	196.0	2.38	43.8	E
2	184.0	2.34	45.8	E
3	180.0	2.18	43.6	E
4	174.0	2.93	60.7	F
5	180.0	1.89	37.8	E
6	179.0	1.87	37.6	E
7	181.0	2.04	40.6	E
8	182.0	2.09	41.3	E
9	179.0	2.06	41.5	E
10	174.0	2.36	48.8	E
Average:	180.9	2.21	44.2	E

GIRDLED ROAD & CRILE ROAD -- UNSIGNALIZED

NODE: 6

Run	Number of Vehicles	Total Control Delay (hr)	Avg Control Delay (sec/veh)	Level of Service
NEB on Girdled Road: Superlink ID 24386				
1	343.0	0.26	2.7	A
2	330.0	0.25	2.8	A
3	340.0	0.28	3.0	A
4	332.0	0.26	2.9	A
5	341.0	0.35	3.7	A
6	353.0	0.24	2.4	A
7	344.0	0.26	2.7	A
8	345.0	0.28	2.9	A
9	314.0	0.27	3.1	A
10	334.0	0.29	3.1	A
Average:	337.6	0.27	2.9	A

SB on Crile Road: Superlink ID 24385

1	84.0	36.03	1,544.3	F
2	83.0	34.49	1,495.9	F
3	83.0	34.77	1,508.1	F
4	78.0	27.89	1,287.1	F
5	77.0	32.37	1,513.6	F
6	71.0	32.98	1,672.2	F
7	80.0	35.95	1,617.8	F
8	75.0	35.08	1,683.6	F
9	69.0	33.38	1,741.7	F

GIRDLED ROAD & CRILE ROAD -- UNSIGNALIZED

NODE: 6

Run	Number of Vehicles	Total Control Delay (hr)	Avg Control Delay (sec/veh)	Level of Service
10	80.0	34.34	1,545.2	F
Average:	78.0	33.73	1,561.0	F

SWB on Girdled Road: Superlink ID 24367

1	351.0	0.03	0.4	A
2	329.0	17.22	188.4	F
3	308.0	0.03	0.4	A
4	282.0	0.03	0.4	A
5	319.0	0.04	0.4	A
6	277.0	0.03	0.4	A
7	316.0	0.03	0.3	A
8	320.0	0.03	0.4	A
9	318.0	16.80	190.2	F
10	301.0	0.73	8.7	A
Average:	312.1	3.50	39.0	E

STATE ROUTE 44 & GIRDLED ROAD -- SIGNALIZED

NODE: 17673

Run	Number of Vehicles	Total Control Delay (hr)	Avg Control Delay (sec/veh)	Level of Service
NB on State Route 44: Superlink ID 24388				
1	725.0	8.04	39.9	D
2	725.0	8.03	39.9	D
3	733.0	7.52	36.9	D
4	743.0	8.06	39.0	D
5	729.0	8.16	40.3	D
6	755.0	8.00	38.2	D
7	730.0	8.03	39.6	D
8	735.0	7.68	37.6	D
9	757.0	8.50	40.4	D
10	739.0	8.02	39.1	D
Average:	737.1	8.00	39.1	D

NEB on Girdled Road: Superlink ID 24371

1	232.0	4.54	70.5	E
2	248.0	4.49	65.2	E
3	247.0	4.26	62.0	E
4	246.0	4.53	66.2	E
5	248.0	4.78	69.4	E
6	245.0	4.28	62.9	E
7	252.0	4.60	65.7	E
8	247.0	4.70	68.5	E
9	215.0	4.36	72.9	E

STATE ROUTE 44 & GIRDLED ROAD -- SIGNALIZED

NODE: 17673

Run	Number of Vehicles	Total Control Delay (hr)	Avg Control Delay (sec/veh)	Level of Service
10	251.0	4.31	61.8	E
Average:	243.1	4.49	66.5	E

SB on State Route 44: Superlink ID 24374

1	832.0	64.41	278.7	F
2	726.0	67.75	335.9	F
3	798.0	65.02	293.3	F
4	758.0	69.75	331.3	F
5	766.0	61.99	291.4	F
6	836.0	67.16	289.2	F
7	771.0	67.36	314.5	F
8	781.0	65.29	301.0	F
9	714.0	70.36	354.7	F
10	739.0	69.06	336.4	F
Average:	772.1	66.82	312.6	F

SWB on Girdled Road: Superlink ID 24386

1	271.0	3.12	41.4	D
2	255.0	3.32	46.9	D
3	238.0	3.22	48.7	D
4	219.0	3.38	55.5	E
5	243.0	3.30	48.9	D
6	212.0	3.07	52.2	D
7	244.0	3.28	48.4	D
8	243.0	3.22	47.7	D
9	240.0	3.23	48.5	D
10	230.0	3.15	49.3	D
Average:	239.5	3.23	48.8	D

Project: SR 44 Corridor - 'No-Build'
 Scenario: PM Peak
 Run(s): Batch (10 runs)
 Simulated: Various
 Time: 17:00:00 - 18:00:00
 Interval: Summary
 Selection: --

Intersection Level of Service by Approach - Total Control Delay

GIRDLED ROAD & AUBURN ROAD

NODE: 17671

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
N	Auburn Road	24384	46.4	2.3	42.6	49.1	10
NE	Girdled Road	24382	9.4	3.2	6.8	18.0	10
S	Auburn Road	24383	25.1	3.5	19.2	30.1	10
SW	Girdled Road	24371	2.2	0.3	1.9	2.9	10

GIRDLED ROAD & CRILE ROAD

NODE: 6

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NE	Girdled Road	24386	0.3	0.0	0.2	0.4	10
S	Crile Road	24385	33.7	2.4	27.9	36.0	10
SW	Girdled Road	24367	3.5	7.1	0.0	17.2	10

STATE ROUTE 44 & GIRDLED ROAD

NODE: 17673

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
N	State Route 44	24388	8.0	0.3	7.5	8.5	10
NE	Girdled Road	24371	4.5	0.2	4.3	4.8	10
S	State Route 44	24374	66.8	2.6	62.0	70.4	10
SW	Girdled Road	24386	3.2	0.1	3.1	3.4	10

Project: SR 44 Corridor - 'No-Build'
 Scenario: PM Peak
 Run(s): Batch (10 runs)
 Simulated: Various
 Time: 17:00:00 - 18:00:00
 Interval: Summary
 Selection: --

Intersection Level of Service by Approach - Avg Control Delay

GIRDLED ROAD & AUBURN ROAD

NODE: 17671

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
N	Auburn Road	24384	952.7	70.7	829.8	1,034.0	10
NE	Girdled Road	24382	213.4	87.9	146.1	455.2	10
S	Auburn Road	24383	486.4	75.7	383.3	602.0	10
SW	Girdled Road	24371	44.2	6.7	37.6	60.7	10

GIRDLED ROAD & CRILE ROAD

NODE: 6

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NE	Girdled Road	24386	2.9	0.3	2.4	3.7	10
S	Crile Road	24385	1,561.0	128.3	1,287.1	1,741.7	10
SW	Girdled Road	24367	39.0	79.3	0.3	190.2	10

STATE ROUTE 44 & GIRDLED ROAD

NODE: 17673

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
N	State Route 44	24388	39.1	1.2	36.9	40.4	10
NE	Girdled Road	24371	66.5	3.8	61.8	72.9	10
S	State Route 44	24374	312.6	25.6	278.7	354.7	10
SW	Girdled Road	24386	48.8	3.6	41.4	55.5	10

Project: SR 44 Corridor - 'No-Build'
 Scenario: PM Peak
 Run(s): Batch (10 runs)
 Simulated: Various
 Time: 17:00:00 - 18:00:00
 Interval: Summary
 Selection: --

Intersection Level of Service - Overview

GIRDLED ROAD & AUBURN ROAD -- UNSIGNALIZED NODE: 17671

Run	Number of Vehicles	Total Control Delay (hr)	Avg Control Delay (sec/veh)	Level of Service
1	701.0	86.17	442.5	F
2	711.0	71.34	361.2	F
3	710.0	81.65	414.0	F
4	705.0	83.79	427.9	F
5	706.0	90.44	461.1	F
6	717.0	77.17	387.5	F
7	707.0	79.66	405.6	F
8	703.0	85.15	436.1	F
9	661.0	95.63	520.8	F
10	717.0	79.89	401.1	F
Average:	703.8	83.09	425.8	F

GIRDLED ROAD & CRILE ROAD -- UNSIGNALIZED NODE: 6

Run	Number of Vehicles	Total Control Delay (hr)	Avg Control Delay (sec/veh)	Level of Service
1	778.0	36.33	168.1	F
2	742.0	51.96	252.1	F
3	731.0	35.08	172.8	F
4	692.0	28.18	146.6	F
5	737.0	32.77	160.1	F
6	701.0	33.25	170.7	F
7	740.0	36.24	176.3	F
8	740.0	35.39	172.1	F
9	701.0	50.45	259.1	F
10	715.0	35.35	178.0	F
Average:	727.7	37.50	185.6	F

STATE ROUTE 44 & GIRDLED ROAD -- SIGNALIZED NODE: 17673

Run	Number of Vehicles	Total Control Delay (hr)	Avg Control Delay (sec/veh)	Level of Service
1	2,060.0	80.10	140.0	F
2	1,954.0	83.60	154.0	F
3	2,016.0	80.02	142.9	F
4	1,966.0	85.71	156.9	F
5	1,986.0	78.24	141.8	F
6	2,048.0	82.51	145.0	F
7	1,997.0	83.27	150.1	F
8	2,006.0	80.90	145.2	F
9	1,926.0	86.44	161.6	F

Intersection Level of Service

10	1,959.0	84.54	155.4	F
Average:	1,991.8	82.53	149.3	F

Project: SR 44 Corridor - 'No-Build'
Scenario: PM Peak
Run(s): Batch (10 runs)
Simulated: Various
Time: 17:00:00 - 18:00:00
Interval: Summary
Selection: --

Intersection Level of Service - Total Control Delay

Node ID	Intersection	Control Type	Average	Std Dev	Minimum	Maximum	# Samples
17671	Girdled Road & Auburn Road	Stop	83.1	6.9	71.3	95.6	10
6	Girdled Road & Crile Road	Stop	37.5	7.6	28.2	52.0	10
17673	State Route 44 & Girdled Road	Actuated	82.5	2.7	78.2	86.4	10

Project: SR 44 Corridor - 'No-Build'
Scenario: PM Peak
Run(s): Batch (10 runs)
Simulated: Various
Time: 17:00:00 - 18:00:00
Interval: Summary
Selection: --

Intersection Level of Service - Avg Control Delay

Node ID	Intersection	Control Type	Average	Std Dev	Minimum	Maximum	# Samples
17671	Girdled Road & Auburn Road	Stop	425.8	44.0	361.2	520.8	10
6	Girdled Road & Crile Road	Stop	185.6	38.0	146.6	259.1	10
17673	State Route 44 & Girdled Road	Actuated	149.3	7.4	140.0	161.6	10

DESIGN YEAR 2047 'BUILD' CONDITIONS

DRAFT

'BUILD OPTION A'

Project: Option A - Capacity Improvements
 Scenario: AM Peak
 Run(s): Batch (10 runs)
 Simulated: Various
 Time: 08:00:00 - 09:00:00
 Interval: Summary
 Selection: --

Intersection Level of Service by Lane Group - Overview

GIRDLED ROAD & AUBURN ROAD -- UNSIGNALIZED

NODE: 17671

Run	Number of Vehicles	Total Control Delay (hr)	Avg Control Delay (sec/veh)	Level of Service
NB LTR on Auburn Road: Superlink ID 24384				
1	290.0	3.69	45.7	E
2	293.0	3.77	46.3	E
3	296.0	3.78	45.9	E
4	289.0	3.72	46.4	E
5	292.0	11.95	147.4	F
6	290.0	3.61	44.8	E
7	288.0	4.20	52.5	F
8	289.0	2.74	34.2	D
9	290.0	3.26	40.4	E
10	296.0	4.15	50.5	F
Average:	291.3	4.49	55.4	F

NEB LTR on Girdled Road: Superlink ID 24382

1	130.0	0.95	26.3	D
2	131.0	0.93	25.6	D
3	131.0	0.92	25.3	D
4	132.0	0.92	25.0	D
5	129.0	0.88	24.6	C
6	129.0	0.90	25.1	D
7	129.0	0.85	23.7	C
8	131.0	0.93	25.5	D
9	131.0	0.93	25.6	D
10	131.0	0.92	25.2	D
Average:	130.4	0.91	25.2	D

SB LTR on Auburn Road: Superlink ID 24383

1	143.0	0.71	17.8	C
2	144.0	0.77	19.1	C
3	139.0	0.66	17.2	C
4	142.0	0.77	19.5	C
5	141.0	0.76	19.4	C
6	142.0	0.81	20.6	C
7	141.0	0.72	18.3	C
8	140.0	0.78	20.1	C
9	141.0	0.70	17.9	C
10	143.0	0.75	19.0	C
Average:	141.6	0.74	18.9	C

GIRDLED ROAD & AUBURN ROAD -- UNSIGNALIZED

NODE: 17671

Run	Number of Vehicles	Total Control Delay (hr)	Avg Control Delay (sec/veh)	Level of Service
SWB LTR on Girdled Road: Superlink ID 24387				
1	262.0	5.88	80.8	F
2	270.0	6.10	81.3	F
3	271.0	5.74	76.2	F
4	259.0	6.23	86.5	F
5	264.0	6.40	87.3	F
6	274.0	6.13	80.5	F
7	265.0	6.13	83.2	F
8	268.0	5.95	80.0	F
9	258.0	6.04	84.3	F
10	272.0	6.19	82.0	F
Average:	266.3	6.08	82.2	F

GIRDLED ROAD & CRILE ROAD -- UNSIGNALIZED

NODE: 10

Run	Number of Vehicles	Total Control Delay (hr)	Avg Control Delay (sec/veh)	Level of Service
NEB L on Girdled Road: Superlink ID 24390				
1	42.0	0.11	9.4	A
2	43.0	0.11	9.0	A
3	42.0	0.11	9.4	A
4	42.0	0.08	7.0	A
5	41.0	0.10	9.1	A
6	41.0	0.10	8.9	A
7	44.0	0.11	9.2	A
8	40.0	0.11	9.6	A
9	43.0	0.09	7.7	A
10	43.0	0.10	8.4	A
Average:	42.1	0.10	8.8	A

NEB T on Girdled Road: Superlink ID 24390

1	149.0	0.00	0.0	A
2	154.0	0.00	0.0	A
3	148.0	0.00	0.0	A
4	150.0	0.00	0.0	A
5	154.0	0.00	0.0	A
6	150.0	0.00	0.0	A
7	149.0	0.00	0.0	A
8	150.0	0.00	0.0	A
9	152.0	0.00	0.0	A
10	154.0	0.00	0.0	A
Average:	151.0	0.00	0.0	A

SB LR on Crile Road: Superlink ID 24389

GIRDLED ROAD & CRILE ROAD -- UNSIGNALIZED

NODE: 10

Run	Number of Vehicles	Total Control Delay (hr)	Avg Control Delay (sec/veh)	Level of Service
1	74.0	2.20	107.2	F
2	75.0	2.11	101.5	F
3	74.0	1.47	71.4	F
4	73.0	1.20	59.2	F
5	74.0	2.41	117.1	F
6	78.0	1.11	51.1	F
7	76.0	1.93	91.3	F
8	78.0	2.47	114.0	F
9	78.0	1.14	52.4	F
10	76.0	1.24	58.7	F
Average:	75.6	1.73	82.4	F

SWB T on Girdled Road: Superlink ID 24367

1	23.0	7.32	1,146.0	F
2	24.0	7.60	1,140.1	F
3	29.0	7.92	983.2	F
4	23.0	0.00	0.1	A
5	21.0	5.33	913.7	F
6	26.0	8.81	1,220.0	F
7	26.0	0.00	0.1	A
8	24.0	0.00	0.2	A
9	23.0	7.85	1,228.4	F
10	28.0	8.94	1,149.9	F
Average:	24.7	5.38	778.2	F

SWB TR on Girdled Road: Superlink ID 24367

1	212.0	68.37	1,161.1	F
2	209.0	67.27	1,158.7	F
3	247.0	68.32	995.8	F
4	197.0	0.02	0.4	A
5	186.0	45.22	875.3	F
6	220.0	75.56	1,236.5	F
7	217.0	0.02	0.4	A
8	205.0	0.02	0.4	A
9	192.0	63.79	1,196.0	F
10	234.0	75.56	1,162.4	F
Average:	211.9	46.42	778.7	F

STATE ROUTE 44 & GIRDLED ROAD -- SIGNALIZED

NODE: 17673

Run	Number of Vehicles	Total Control Delay (hr)	Avg Control Delay (sec/veh)	Level of Service
NB L on State Route 44: Superlink ID 24388				
1	39.0	1.36	125.3	F
2	42.0	1.01	86.2	F

STATE ROUTE 44 & GIRDLED ROAD -- SIGNALIZED

NODE: 17673

Run	Number of Vehicles	Total Control Delay (hr)	Avg Control Delay (sec/veh)	Level of Service
3	38.0	3.11	294.8	F
4	43.0	2.76	230.9	F
5	46.0	1.36	106.1	F
6	43.0	1.79	149.9	F
7	40.0	1.39	125.4	F
8	44.0	0.79	65.0	E
9	39.0	3.32	306.1	F
10	42.0	1.81	155.4	F
Average:	41.6	1.87	164.5	F

NB T on State Route 44: Superlink ID 24388

1	351.0	2.57	26.3	C
2	351.0	2.64	27.1	C
3	293.0	2.15	26.4	C
4	342.0	2.65	27.9	C
5	358.0	2.59	26.1	C
6	333.0	2.63	28.4	C
7	336.0	2.51	26.8	C
8	359.0	2.85	28.6	C
9	330.0	2.57	28.0	C
10	333.0	2.63	28.5	C
Average:	338.6	2.58	27.4	C

NB TR on State Route 44: Superlink ID 24388

1	361.0	2.67	26.6	C
2	368.0	2.75	26.9	C
3	426.0	3.58	30.2	C
4	381.0	2.78	26.2	C
5	368.0	3.35	32.8	C
6	386.0	2.82	26.3	C
7	371.0	2.77	26.8	C
8	367.0	2.71	26.6	C
9	400.0	3.16	28.4	C
10	375.0	2.69	25.8	C
Average:	380.3	2.93	27.7	C

NEB L on Girdled Road: Superlink ID 24387

1	118.0	1.12	34.0	C
2	121.0	1.10	32.7	C
3	123.0	1.29	37.8	D
4	117.0	1.03	31.7	C
5	120.0	1.20	36.1	D
6	121.0	1.14	34.0	C

STATE ROUTE 44 & GIRDLED ROAD -- SIGNALIZED

NODE: 17673

Run	Number of Vehicles	Total Control Delay (hr)	Avg Control Delay (sec/veh)	Level of Service
7	121.0	1.16	34.4	C
8	118.0	1.00	30.6	C
9	119.0	1.16	35.0	D
10	121.0	1.13	33.8	C
Average:	119.9	1.13	34.0	C

NEB TR on Girdled Road: Superlink ID 24387

1	109.0	0.73	24.1	C
2	110.0	0.75	24.7	C
3	108.0	0.83	27.6	C
4	104.0	0.75	26.1	C
5	105.0	0.62	21.1	C
6	105.0	0.64	22.0	C
7	104.0	0.65	22.5	C
8	107.0	0.73	24.7	C
9	104.0	0.69	23.9	C
10	112.0	0.74	23.7	C
Average:	106.8	0.71	24.0	C

SB L on State Route 44: Superlink ID 24374

1	76.0	0.50	23.5	C
2	77.0	0.44	20.6	C
3	75.0	0.58	27.8	C
4	76.0	0.43	20.4	C
5	76.0	0.48	22.5	C
6	74.0	0.55	26.5	C
7	78.0	0.54	24.9	C
8	74.0	0.48	23.3	C
9	76.0	0.54	25.4	C
10	77.0	0.61	28.4	C
Average:	75.9	0.52	24.3	C

SB T on State Route 44: Superlink ID 24374

1	440.0	3.83	31.4	C
2	439.0	3.52	28.9	C
3	423.0	3.44	29.3	C
4	453.0	4.19	33.3	C
5	459.0	3.99	31.3	C
6	467.0	4.00	30.8	C
7	424.0	3.50	29.7	C
8	420.0	3.37	28.9	C
9	476.0	4.41	33.3	C
10	431.0	3.57	29.8	C

STATE ROUTE 44 & GIRDLED ROAD -- SIGNALIZED

NODE: 17673

Run	Number of Vehicles	Total Control Delay (hr)	Avg Control Delay (sec/veh)	Level of Service
Average:	443.2	3.78	30.7	C

SB TR on State Route 44: Superlink ID 24374

1	246.0	2.97	43.4	D
2	258.0	2.46	34.3	C
3	272.0	2.56	33.9	C
4	244.0	2.70	39.9	D
5	244.0	2.59	38.2	D
6	231.0	2.92	45.5	D
7	260.0	2.53	35.1	D
8	278.0	2.38	30.9	C
9	230.0	2.94	46.1	D
10	252.0	2.63	37.5	D
Average:	251.5	2.67	38.5	D

SWB L on Girdled Road: Superlink ID 24390

1	29.0	0.24	30.3	C
2	29.0	0.15	18.6	B
3	35.0	0.25	26.2	C
4	28.0	0.22	27.7	C
5	26.0	0.14	19.1	B
6	32.0	0.18	19.9	B
7	33.0	0.19	20.6	C
8	29.0	0.18	22.4	C
9	27.0	0.19	24.7	C
10	34.0	0.22	23.7	C
Average:	30.2	0.20	23.3	C

SWB TR on Girdled Road: Superlink ID 24390

1	218.0	3.99	65.9	E
2	214.0	4.06	68.2	E
3	243.0	3.63	53.7	D
4	202.0	3.94	70.2	E
5	193.0	4.05	75.6	E
6	225.0	3.93	62.8	E
7	220.0	3.86	63.1	E
8	214.0	3.79	63.8	E
9	200.0	3.85	69.2	E
10	236.0	4.12	62.8	E
Average:	216.5	3.92	65.5	E

Intersection Level of Service by Lane Group

Project: Option A - Capacity Improvements
 Scenario: AM Peak
 Run(s): Batch (10 runs)
 Simulated: Various
 Time: 08:00:00 - 09:00:00
 Interval: Summary
 Selection: --

Intersection Level of Service by Lane Group - Total Control Delay

GIRDLED ROAD & AUBURN ROAD

NODE: 17671

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NB LTR	Auburn Road	24384	4.5	2.7	2.7	12.0	10
NEB LTR	Girdled Road	24382	0.9	0.0	0.9	1.0	10
SB LTR	Auburn Road	24383	0.7	0.0	0.7	0.8	10
SWB LTR	Girdled Road	24387	6.1	0.2	5.7	6.4	10

GIRDLED ROAD & CRILE ROAD

NODE: 10

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NEB L	Girdled Road	24390	0.1	0.0	0.1	0.1	10
NEB T	Girdled Road	24390	0.0	0.0	0.0	0.0	10
SB LR	Crile Road	24389	1.7	0.6	1.1	2.5	10
SWB T	Girdled Road	24367	5.4	3.8	0.0	8.9	10
SWB TR	Girdled Road	24367	46.4	33.1	0.0	75.6	10

STATE ROUTE 44 & GIRDLED ROAD

NODE: 17673

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NB L	State Route 44	24388	1.9	0.9	0.8	3.3	10
NB T	State Route 44	24388	2.6	0.2	2.2	2.9	10
NB TR	State Route 44	24388	2.9	0.3	2.7	3.6	10
NEB L	Girdled Road	24387	1.1	0.1	1.0	1.3	10
NEB TR	Girdled Road	24387	0.7	0.1	0.6	0.8	10
SB L	State Route 44	24374	0.5	0.1	0.4	0.6	10
SB T	State Route 44	24374	3.8	0.4	3.4	4.4	10
SB TR	State Route 44	24374	2.7	0.2	2.4	3.0	10
SWB L	Girdled Road	24390	0.2	0.0	0.1	0.3	10
SWB TR	Girdled Road	24390	3.9	0.1	3.6	4.1	10

Project: Option A - Capacity Improvements
 Scenario: AM Peak
 Run(s): Batch (10 runs)
 Simulated: Various
 Time: 08:00:00 - 09:00:00
 Interval: Summary
 Selection: --

Intersection Level of Service by Lane Group - Avg Control Delay

GIRDLED ROAD & AUBURN ROAD

NODE: 17671

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NB LTR	Auburn Road	24384	55.4	32.7	34.2	147.4	10
NEB LTR	Girdled Road	24382	25.2	0.7	23.7	26.3	10
SB LTR	Auburn Road	24383	18.9	1.1	17.2	20.6	10
SWB LTR	Girdled Road	24387	82.2	3.3	76.2	87.3	10

GIRDLED ROAD & CRILE ROAD

NODE: 10

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NEB L	Girdled Road	24390	8.8	0.8	7.0	9.6	10
NEB T	Girdled Road	24390	0.0	0.0	0.0	0.0	10
SB LR	Crile Road	24389	82.4	26.6	51.1	117.1	10
SWB T	Girdled Road	24367	778.2	545.6	0.1	1,228.4	10
SWB TR	Girdled Road	24367	778.7	547.2	0.4	1,236.5	10

STATE ROUTE 44 & GIRDLED ROAD

NODE: 17673

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NB L	State Route 44	24388	164.5	84.5	65.0	306.1	10
NB T	State Route 44	24388	27.4	1.0	26.1	28.6	10
NB TR	State Route 44	24388	27.7	2.2	25.8	32.8	10
NEB L	Girdled Road	24387	34.0	2.1	30.6	37.8	10
NEB TR	Girdled Road	24387	24.0	1.9	21.1	27.6	10
SB L	State Route 44	24374	24.3	2.8	20.4	28.4	10
SB T	State Route 44	24374	30.7	1.7	28.9	33.3	10
SB TR	State Route 44	24374	38.5	5.2	30.9	46.1	10
SWB L	Girdled Road	24390	23.3	3.9	18.6	30.3	10
SWB TR	Girdled Road	24390	65.5	5.8	53.7	75.6	10

Project: Option A - Capacity Improvements
 Scenario: AM Peak
 Run(s): Batch (10 runs)
 Simulated: Various
 Time: 08:00:00 - 09:00:00
 Interval: Summary
 Selection: --

Intersection Level of Service by Approach - Overview

GIRDLED ROAD & AUBURN ROAD -- UNSIGNALIZED

NODE: 17671

Run	Number of Vehicles	Total Control Delay (hr)	Avg Control Delay (sec/veh)	Level of Service
NB on Auburn Road: Superlink ID 24384				
1	290.0	3.69	45.7	E
2	293.0	3.77	46.3	E
3	296.0	3.78	45.9	E
4	289.0	3.72	46.4	E
5	292.0	11.95	147.4	F
6	290.0	3.61	44.8	E
7	288.0	4.20	52.5	F
8	289.0	2.74	34.2	D
9	290.0	3.26	40.4	E
10	296.0	4.15	50.5	F
Average:	291.3	4.49	55.4	F
NEB on Girdled Road: Superlink ID 24382				
1	130.0	0.95	26.3	D
2	131.0	0.93	25.6	D
3	131.0	0.92	25.3	D
4	132.0	0.92	25.0	D
5	129.0	0.88	24.6	C
6	129.0	0.90	25.1	D
7	129.0	0.85	23.7	C
8	131.0	0.93	25.5	D
9	131.0	0.93	25.6	D
10	131.0	0.92	25.2	D
Average:	130.4	0.91	25.2	D
SB on Auburn Road: Superlink ID 24383				
1	143.0	0.71	17.8	C
2	144.0	0.77	19.1	C
3	139.0	0.66	17.2	C
4	142.0	0.77	19.5	C
5	141.0	0.76	19.4	C
6	142.0	0.81	20.6	C
7	141.0	0.72	18.3	C
8	140.0	0.78	20.1	C
9	141.0	0.70	17.9	C

GIRDLED ROAD & AUBURN ROAD -- UNSIGNALIZED

NODE: 17671

Run	Number of Vehicles	Total Control Delay (hr)	Avg Control Delay (sec/veh)	Level of Service
10	143.0	0.75	19.0	C
Average:	141.6	0.74	18.9	C

SWB on Girdled Road: Superlink ID 24387

1	262.0	5.88	80.8	F
2	270.0	6.10	81.3	F
3	271.0	5.74	76.2	F
4	259.0	6.23	86.5	F
5	264.0	6.40	87.3	F
6	274.0	6.13	80.5	F
7	265.0	6.13	83.2	F
8	268.0	5.95	80.0	F
9	258.0	6.04	84.3	F
10	272.0	6.19	82.0	F
Average:	266.3	6.08	82.2	F

GIRDLED ROAD & CRILE ROAD -- UNSIGNALIZED

NODE: 10

Run	Number of Vehicles	Total Control Delay (hr)	Avg Control Delay (sec/veh)	Level of Service
NEB on Girdled Road: Superlink ID 24390				
1	191.0	0.11	2.1	A
2	197.0	0.11	2.0	A
3	190.0	0.11	2.1	A
4	192.0	0.08	1.5	A
5	195.0	0.10	1.9	A
6	191.0	0.10	1.9	A
7	193.0	0.11	2.1	A
8	190.0	0.11	2.0	A
9	195.0	0.09	1.7	A
10	197.0	0.10	1.8	A
Average:	193.1	0.10	1.9	A

SB on Crile Road: Superlink ID 24389

1	74.0	2.20	107.2	F
2	75.0	2.11	101.5	F
3	74.0	1.47	71.4	F
4	73.0	1.20	59.2	F
5	74.0	2.41	117.1	F
6	78.0	1.11	51.1	F
7	76.0	1.93	91.3	F
8	78.0	2.47	114.0	F
9	78.0	1.14	52.4	F

GIRDLED ROAD & CRILE ROAD -- UNSIGNALIZED

NODE: 10

Run	Number of Vehicles	Total Control Delay (hr)	Avg Control Delay (sec/veh)	Level of Service
10	76.0	1.24	58.7	F
Average:	75.6	1.73	82.4	F

SWB on Girdled Road: Superlink ID 24367

1	235.0	75.70	1,159.6	F
2	233.0	74.87	1,156.8	F
3	276.0	76.24	994.5	F
4	220.0	0.02	0.4	A
5	207.0	50.55	879.2	F
6	246.0	84.38	1,234.8	F
7	243.0	0.02	0.4	A
8	229.0	0.02	0.4	A
9	215.0	71.63	1,199.5	F
10	262.0	84.50	1,161.1	F
Average:	236.6	51.79	778.7	F

STATE ROUTE 44 & GIRDLED ROAD -- SIGNALIZED

NODE: 17673

Run	Number of Vehicles	Total Control Delay (hr)	Avg Control Delay (sec/veh)	Level of Service
NB on State Route 44: Superlink ID 24388				
1	751.0	6.59	31.6	C
2	761.0	6.40	30.3	C
3	757.0	8.84	42.0	D
4	766.0	8.18	38.5	D
5	772.0	7.30	34.0	C
6	762.0	7.24	34.2	C
7	747.0	6.66	32.1	C
8	770.0	6.36	29.7	C
9	769.0	9.04	42.3	D
10	750.0	7.14	34.3	C
Average:	760.5	7.38	34.9	C

NEB on Girdled Road: Superlink ID 24387

1	227.0	1.85	29.3	C
2	231.0	1.85	28.9	C
3	231.0	2.12	33.0	C
4	221.0	1.79	29.1	C
5	225.0	1.82	29.1	C
6	226.0	1.78	28.4	C
7	225.0	1.81	28.9	C
8	225.0	1.74	27.8	C
9	223.0	1.85	29.9	C

STATE ROUTE 44 & GIRDLED ROAD -- SIGNALIZED

NODE: 17673

Run	Number of Vehicles	Total Control Delay (hr)	Avg Control Delay (sec/veh)	Level of Service
10	233.0	1.87	28.9	C
Average:	226.7	1.85	29.3	C

SB on State Route 44: Superlink ID 24374

1	762.0	7.30	34.5	C
2	774.0	6.42	29.9	C
3	770.0	6.58	30.8	C
4	773.0	7.33	34.1	C
5	779.0	7.05	32.6	C
6	772.0	7.46	34.8	C
7	762.0	6.57	31.1	C
8	772.0	6.23	29.1	C
9	782.0	7.89	36.3	D
10	760.0	6.80	32.2	C
Average:	770.6	6.96	32.5	C

SWB on Girdled Road: Superlink ID 24390

1	247.0	4.24	61.7	E
2	243.0	4.21	62.3	E
3	278.0	3.88	50.2	D
4	230.0	4.16	65.0	E
5	219.0	4.19	68.9	E
6	257.0	4.10	57.5	E
7	253.0	4.05	57.6	E
8	243.0	3.97	58.8	E
9	227.0	4.03	64.0	E
10	270.0	4.34	57.9	E
Average:	246.7	4.12	60.4	E

Project: Option A - Capacity Improvements
 Scenario: AM Peak
 Run(s): Batch (10 runs)
 Simulated: Various
 Time: 08:00:00 - 09:00:00
 Interval: Summary
 Selection: --

Intersection Level of Service by Approach - Total Control Delay

GIRDLED ROAD & AUBURN ROAD

NODE: 17671

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
N	Auburn Road	24384	4.5	2.7	2.7	12.0	10
NE	Girdled Road	24382	0.9	0.0	0.9	1.0	10
S	Auburn Road	24383	0.7	0.0	0.7	0.8	10
SW	Girdled Road	24387	6.1	0.2	5.7	6.4	10

GIRDLED ROAD & CRILE ROAD

NODE: 10

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NE	Girdled Road	24390	0.1	0.0	0.1	0.1	10
S	Crile Road	24389	1.7	0.6	1.1	2.5	10
SW	Girdled Road	24367	51.8	36.9	0.0	84.5	10

STATE ROUTE 44 & GIRDLED ROAD

NODE: 17673

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
N	State Route 44	24388	7.4	1.0	6.4	9.0	10
NE	Girdled Road	24387	1.8	0.1	1.7	2.1	10
S	State Route 44	24374	7.0	0.5	6.2	7.9	10
SW	Girdled Road	24390	4.1	0.1	3.9	4.3	10

Project: Option A - Capacity Improvements
 Scenario: AM Peak
 Run(s): Batch (10 runs)
 Simulated: Various
 Time: 08:00:00 - 09:00:00
 Interval: Summary
 Selection: --

Intersection Level of Service by Approach - Avg Control Delay

GIRDLED ROAD & AUBURN ROAD

NODE: 17671

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
N	Auburn Road	24384	55.4	32.7	34.2	147.4	10
NE	Girdled Road	24382	25.2	0.7	23.7	26.3	10
S	Auburn Road	24383	18.9	1.1	17.2	20.6	10
SW	Girdled Road	24387	82.2	3.3	76.2	87.3	10

GIRDLED ROAD & CRILE ROAD

NODE: 10

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NE	Girdled Road	24390	1.9	0.2	1.5	2.1	10
S	Crile Road	24389	82.4	26.6	51.1	117.1	10
SW	Girdled Road	24367	778.7	547.0	0.4	1,234.8	10

STATE ROUTE 44 & GIRDLED ROAD

NODE: 17673

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
N	State Route 44	24388	34.9	4.6	29.7	42.3	10
NE	Girdled Road	24387	29.3	1.4	27.8	33.0	10
S	State Route 44	24374	32.5	2.3	29.1	36.3	10
SW	Girdled Road	24390	60.4	5.2	50.2	68.9	10

Project: Option A - Capacity Improvements
 Scenario: AM Peak
 Run(s): Batch (10 runs)
 Simulated: Various
 Time: 08:00:00 - 09:00:00
 Interval: Summary
 Selection: --

Intersection Level of Service - Overview

GIRDLED ROAD & AUBURN ROAD -- UNSIGNALIZED NODE: 17671

Run	Number of Vehicles	Total Control Delay (hr)	Avg Control Delay (sec/veh)	Level of Service
1	825.0	11.22	49.0	E
2	838.0	11.56	49.7	E
3	837.0	11.10	47.7	E
4	822.0	11.64	51.0	F
5	826.0	20.00	87.2	F
6	835.0	11.45	49.4	E
7	823.0	11.89	52.0	F
8	828.0	10.40	45.2	E
9	820.0	10.93	48.0	E
10	842.0	12.02	51.4	F
Average:	829.6	12.22	53.1	F

GIRDLED ROAD & CRILE ROAD -- UNSIGNALIZED NODE: 10

Run	Number of Vehicles	Total Control Delay (hr)	Avg Control Delay (sec/veh)	Level of Service
1	500.0	78.01	561.7	F
2	505.0	77.09	549.6	F
3	540.0	77.82	518.8	F
4	485.0	1.30	9.7	A
5	476.0	53.06	401.3	F
6	515.0	85.58	598.3	F
7	512.0	2.06	14.5	B
8	497.0	2.60	18.8	C
9	488.0	72.86	537.5	F
10	535.0	85.84	577.6	F
Average:	505.3	53.62	378.8	F

STATE ROUTE 44 & GIRDLED ROAD -- SIGNALIZED NODE: 17673

Run	Number of Vehicles	Total Control Delay (hr)	Avg Control Delay (sec/veh)	Level of Service
1	1,987.0	19.97	36.2	D
2	2,009.0	18.88	33.8	C
3	2,036.0	21.42	37.9	D
4	1,990.0	21.45	38.8	D
5	1,995.0	20.36	36.7	D
6	2,017.0	20.59	36.7	D
7	1,987.0	19.09	34.6	C
8	2,010.0	18.30	32.8	C
9	2,001.0	22.81	41.0	D

Intersection Level of Service

10	2,013.0	20.15	36.0	D
Average:	2,004.5	20.30	36.5	D

Project: Option A - Capacity Improvements
Scenario: AM Peak
Run(s): Batch (10 runs)
Simulated: Various
Time: 08:00:00 - 09:00:00
Interval: Summary
Selection: --

Intersection Level of Service - Total Control Delay

Node ID	Intersection	Control Type	Average	Std Dev	Minimum	Maximum	# Samples
17671	Girdled Road & Auburn Road	Stop	12.2	2.8	10.4	20.0	10
10	Girdled Road & Crile Road	Stop	53.6	36.8	1.3	85.8	10
17673	State Route 44 & Girdled Road	Actuated	20.3	1.4	18.3	22.8	10

Project: Option A - Capacity Improvements
Scenario: AM Peak
Run(s): Batch (10 runs)
Simulated: Various
Time: 08:00:00 - 09:00:00
Interval: Summary
Selection: --

Intersection Level of Service - Avg Control Delay

Node ID	Intersection	Control Type	Average	Std Dev	Minimum	Maximum	# Samples
17671	Girdled Road & Auburn Road	Stop	53.1	12.2	45.2	87.2	10
10	Girdled Road & Crile Road	Stop	378.8	256.9	9.7	598.3	10
17673	State Route 44 & Girdled Road	Actuated	36.5	2.4	32.8	41.0	10

Project: Option A - Capacity Improvements
 Scenario: PM Peak
 Run(s): Batch (10 runs)
 Simulated: Various
 Time: 17:00:00 - 18:00:00
 Interval: Summary
 Selection: --

Intersection Level of Service by Lane Group - Overview

GIRDLED ROAD & AUBURN ROAD -- UNSIGNALIZED

NODE: 17671

Run	Number of Vehicles	Total Control Delay (hr)	Avg Control Delay (sec/veh)	Level of Service
NB LTR on Auburn Road: Superlink ID 24384				
1	224.0	36.29	583.2	F
2	233.0	42.68	659.4	F
3	216.0	41.07	684.4	F
4	225.0	36.23	579.8	F
5	226.0	39.44	628.2	F
6	223.0	38.35	619.0	F
7	217.0	38.78	643.4	F
8	237.0	32.43	492.6	F
9	229.0	38.07	598.5	F
10	215.0	39.99	669.6	F
Average:	224.5	38.33	615.8	F

NEB LTR on Girdled Road: Superlink ID 24382

1	172.0	2.19	45.8	E
2	174.0	1.92	39.7	E
3	173.0	2.67	55.5	F
4	176.0	2.06	42.2	E
5	175.0	2.42	49.7	E
6	174.0	2.61	53.9	F
7	174.0	2.34	48.4	E
8	176.0	1.74	35.6	E
9	174.0	2.11	43.6	E
10	174.0	2.26	46.9	E
Average:	174.2	2.23	46.1	E

SB LTR on Auburn Road: Superlink ID 24383

1	199.0	19.10	345.5	F
2	210.0	23.05	395.2	F
3	194.0	22.82	423.5	F
4	203.0	20.06	355.7	F
5	199.0	16.57	299.8	F
6	190.0	21.49	407.2	F
7	195.0	21.12	389.8	F
8	212.0	9.78	166.1	F
9	202.0	20.83	371.2	F
10	194.0	19.22	356.7	F
Average:	199.8	19.40	351.1	F

GIRDLED ROAD & AUBURN ROAD -- UNSIGNALIZED

NODE: 17671

Run	Number of Vehicles	Total Control Delay (hr)	Avg Control Delay (sec/veh)	Level of Service
SWB LTR on Girdled Road: Superlink ID 24387				
1	191.0	6.25	117.8	F
2	199.0	6.38	115.4	F
3	188.0	6.54	125.2	F
4	200.0	6.24	112.2	F
5	189.0	6.42	122.3	F
6	198.0	6.34	115.3	F
7	189.0	6.17	117.5	F
8	205.0	6.10	107.0	F
9	197.0	6.22	113.6	F
10	187.0	6.40	123.2	F
Average:	194.3	6.31	117.0	F

GIRDLED ROAD & CRILE ROAD -- UNSIGNALIZED

NODE: 10

Run	Number of Vehicles	Total Control Delay (hr)	Avg Control Delay (sec/veh)	Level of Service
NEB L on Girdled Road: Superlink ID 24390				
1	94.0	0.28	10.7	B
2	94.0	0.24	9.0	A
3	91.0	0.21	8.5	A
4	97.0	0.27	9.9	A
5	98.0	0.24	8.8	A
6	94.0	0.28	10.8	B
7	93.0	0.27	10.6	B
8	95.0	0.23	8.8	A
9	92.0	0.21	8.3	A
10	93.0	0.22	8.5	A
Average:	94.1	0.25	9.4	A

NEB T on Girdled Road: Superlink ID 24390

1	310.0	0.00	0.0	A
2	313.0	0.00	0.0	A
3	305.0	0.00	0.0	A
4	313.0	0.00	0.0	A
5	310.0	0.00	0.0	A
6	308.0	0.00	0.0	A
7	304.0	0.00	0.0	A
8	314.0	0.00	0.0	A
9	310.0	0.00	0.0	A
10	309.0	0.00	0.0	A
Average:	309.6	0.00	0.0	A

SB LR on Crile Road: Superlink ID 24389

GIRDLED ROAD & CRILE ROAD -- UNSIGNALIZED

NODE: 10

Run	Number of Vehicles	Total Control Delay (hr)	Avg Control Delay (sec/veh)	Level of Service
1	94.0	31.21	1,195.4	F
2	123.0	30.22	884.5	F
3	125.0	29.14	839.3	F
4	114.0	34.93	1,103.1	F
5	93.0	36.25	1,403.2	F
6	105.0	38.61	1,323.6	F
7	121.0	23.85	709.7	F
8	138.0	23.36	609.4	F
9	113.0	33.52	1,067.8	F
10	105.0	24.58	842.7	F
Average:	113.1	30.57	997.9	F

SWB T on Girdled Road: Superlink ID 24367

1	44.0	3.75	307.2	F
2	43.0	4.07	340.5	F
3	42.0	2.95	252.4	F
4	48.0	0.00	0.1	A
5	45.0	6.75	539.9	F
6	46.0	0.00	0.2	A
7	42.0	0.00	0.1	A
8	47.0	3.23	247.3	F
9	45.0	0.00	0.2	A
10	41.0	0.04	3.4	A
Average:	44.3	2.08	169.1	F

SWB TR on Girdled Road: Superlink ID 24367

1	207.0	18.38	319.6	F
2	208.0	19.50	337.4	F
3	193.0	13.07	243.8	F
4	228.0	0.02	0.2	A
5	213.0	33.34	563.5	F
6	217.0	0.02	0.3	A
7	201.0	0.05	1.0	A
8	223.0	16.40	264.8	F
9	209.0	0.02	0.3	A
10	190.0	0.28	5.3	A
Average:	208.9	10.11	173.6	F

STATE ROUTE 44 & GIRDLED ROAD -- SIGNALIZED

NODE: 17673

Run	Number of Vehicles	Total Control Delay (hr)	Avg Control Delay (sec/veh)	Level of Service
NB L on State Route 44: Superlink ID 24388				
1	22.0	0.50	81.7	F
2	22.0	0.53	87.4	F

STATE ROUTE 44 & GIRDLED ROAD -- SIGNALIZED

NODE: 17673

Run	Number of Vehicles	Total Control Delay (hr)	Avg Control Delay (sec/veh)	Level of Service
3	21.0	0.58	99.6	F
4	19.0	0.42	79.2	E
5	21.0	0.51	86.7	F
6	22.0	0.82	133.6	F
7	19.0	3.28	621.3	F
8	23.0	1.96	306.4	F
9	20.0	0.38	67.9	E
10	22.0	0.67	109.4	F
Average:	21.1	0.97	167.3	F

NB T on State Route 44: Superlink ID 24388

1	416.0	3.86	33.4	C
2	424.0	3.77	32.0	C
3	423.0	3.72	31.6	C
4	421.0	3.94	33.7	C
5	406.0	3.71	32.9	C
6	421.0	3.84	32.8	C
7	343.0	3.90	41.0	D
8	411.0	3.68	32.2	C
9	429.0	3.91	32.8	C
10	406.0	3.58	31.7	C
Average:	410.0	3.79	33.4	C

NB TR on State Route 44: Superlink ID 24388

1	441.0	3.96	32.3	C
2	441.0	3.80	31.0	C
3	446.0	3.86	31.2	C
4	454.0	4.05	32.1	C
5	459.0	4.26	33.4	C
6	436.0	4.08	33.7	C
7	519.0	7.00	48.6	D
8	448.0	3.94	31.7	C
9	433.0	3.84	31.9	C
10	448.0	3.82	30.7	C
Average:	452.5	4.26	33.7	C

NEB L on Girdled Road: Superlink ID 24387

1	106.0	0.89	30.3	C
2	107.0	0.85	28.6	C
3	100.0	1.00	35.9	D
4	104.0	0.80	27.7	C
5	101.0	0.91	32.6	C
6	105.0	0.93	31.8	C

STATE ROUTE 44 & GIRDLED ROAD -- SIGNALIZED

NODE: 17673

Run	Number of Vehicles	Total Control Delay (hr)	Avg Control Delay (sec/veh)	Level of Service
7	102.0	0.98	34.5	C
8	109.0	0.90	29.6	C
9	107.0	0.88	29.8	C
10	104.0	0.82	28.4	C
Average:	104.5	0.90	30.9	C

NEB TR on Girdled Road: Superlink ID 24387

1	170.0	1.30	27.6	C
2	180.0	1.67	33.3	C
3	165.0	1.52	33.2	C
4	171.0	1.45	30.4	C
5	174.0	1.24	25.7	C
6	170.0	1.43	30.3	C
7	163.0	1.30	28.7	C
8	180.0	1.39	27.7	C
9	172.0	1.38	28.8	C
10	171.0	1.31	27.5	C
Average:	171.6	1.40	29.3	C

SB L on State Route 44: Superlink ID 24374

1	187.0	2.42	46.5	D
2	182.0	1.65	32.7	C
3	183.0	1.90	37.4	D
4	187.0	1.70	32.6	C
5	185.0	1.90	37.0	D
6	184.0	1.88	36.7	D
7	184.0	2.19	42.8	D
8	183.0	1.82	35.8	D
9	184.0	1.90	37.2	D
10	185.0	1.83	35.5	D
Average:	184.4	1.92	37.4	D

SB T on State Route 44: Superlink ID 24374

1	542.0	4.17	27.7	C
2	554.0	4.10	26.6	C
3	536.0	4.14	27.8	C
4	539.0	3.92	26.2	C
5	569.0	4.24	26.8	C
6	566.0	4.42	28.1	C
7	544.0	4.91	32.5	C
8	539.0	5.29	35.3	D
9	555.0	3.94	25.5	C
10	589.0	5.46	33.4	C

STATE ROUTE 44 & GIRDLED ROAD -- SIGNALIZED

NODE: 17673

Run	Number of Vehicles	Total Control Delay (hr)	Avg Control Delay (sec/veh)	Level of Service
Average:	553.3	4.46	29.0	C

SB TR on State Route 44: Superlink ID 24374

1	313.0	2.51	28.9	C
2	295.0	2.72	33.1	C
3	325.0	2.67	29.6	C
4	333.0	2.82	30.4	C
5	292.0	2.63	32.5	C
6	289.0	2.70	33.7	C
7	311.0	3.08	35.7	D
8	317.0	3.22	36.6	D
9	300.0	2.67	32.1	C
10	265.0	2.97	40.3	D
Average:	304.0	2.80	33.3	C

SWB L on Girdled Road: Superlink ID 24390

1	55.0	0.41	26.6	C
2	55.0	0.49	31.9	C
3	54.0	0.39	25.9	C
4	62.0	0.48	28.1	C
5	56.0	0.39	25.0	C
6	61.0	0.50	29.4	C
7	57.0	0.38	24.0	C
8	65.0	0.57	31.7	C
9	58.0	0.40	25.1	C
10	55.0	0.30	19.6	B
Average:	57.8	0.43	26.7	C

SWB TR on Girdled Road: Superlink ID 24390

1	150.0	3.80	91.1	F
2	166.0	3.92	85.0	F
3	152.0	3.90	92.3	F
4	169.0	3.81	81.2	F
5	154.0	3.86	90.2	F
6	163.0	3.96	87.6	F
7	154.0	3.80	88.9	F
8	175.0	3.68	75.7	E
9	162.0	3.78	84.0	F
10	143.0	4.02	101.2	F
Average:	158.8	3.85	87.7	F

Intersection Level of Service by Lane Group

Project: Option A - Capacity Improvements
 Scenario: PM Peak
 Run(s): Batch (10 runs)
 Simulated: Various
 Time: 17:00:00 - 18:00:00
 Interval: Summary
 Selection: --

Intersection Level of Service by Lane Group - Total Control Delay

GIRDLED ROAD & AUBURN ROAD

NODE: 17671

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NB LTR	Auburn Road	24384	38.3	2.9	32.4	42.7	10
NEB LTR	Girdled Road	24382	2.2	0.3	1.7	2.7	10
SB LTR	Auburn Road	24383	19.4	3.9	9.8	23.1	10
SWB LTR	Girdled Road	24387	6.3	0.1	6.1	6.5	10

GIRDLED ROAD & CRILE ROAD

NODE: 10

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NEB L	Girdled Road	24390	0.2	0.0	0.2	0.3	10
NEB T	Girdled Road	24390	0.0	0.0	0.0	0.0	10
SB LR	Crile Road	24389	30.6	5.4	23.4	38.6	10
SWB T	Girdled Road	24367	2.1	2.4	0.0	6.8	10
SWB TR	Girdled Road	24367	10.1	11.8	0.0	33.3	10

STATE ROUTE 44 & GIRDLED ROAD

NODE: 17673

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NB L	State Route 44	24388	1.0	0.9	0.4	3.3	10
NB T	State Route 44	24388	3.8	0.1	3.6	3.9	10
NB TR	State Route 44	24388	4.3	1.0	3.8	7.0	10
NEB L	Girdled Road	24387	0.9	0.1	0.8	1.0	10
NEB TR	Girdled Road	24387	1.4	0.1	1.2	1.7	10
SB L	State Route 44	24374	1.9	0.2	1.7	2.4	10
SB T	State Route 44	24374	4.5	0.6	3.9	5.5	10
SB TR	State Route 44	24374	2.8	0.2	2.5	3.2	10
SWB L	Girdled Road	24390	0.4	0.1	0.3	0.6	10
SWB TR	Girdled Road	24390	3.9	0.1	3.7	4.0	10

Project: Option A - Capacity Improvements
 Scenario: PM Peak
 Run(s): Batch (10 runs)
 Simulated: Various
 Time: 17:00:00 - 18:00:00
 Interval: Summary
 Selection: --

Intersection Level of Service by Lane Group - Avg Control Delay

GIRDLED ROAD & AUBURN ROAD

NODE: 17671

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NB LTR	Auburn Road	24384	615.8	56.0	492.6	684.4	10
NEB LTR	Girdled Road	24382	46.1	6.2	35.6	55.5	10
SB LTR	Auburn Road	24383	351.1	73.9	166.1	423.5	10
SWB LTR	Girdled Road	24387	117.0	5.5	107.0	125.2	10

GIRDLED ROAD & CRILE ROAD

NODE: 10

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NEB L	Girdled Road	24390	9.4	1.0	8.3	10.8	10
NEB T	Girdled Road	24390	0.0	0.0	0.0	0.0	10
SB LR	Crile Road	24389	997.9	262.8	609.4	1,403.2	10
SWB T	Girdled Road	24367	169.1	194.5	0.1	539.9	10
SWB TR	Girdled Road	24367	173.6	200.5	0.2	563.5	10

STATE ROUTE 44 & GIRDLED ROAD

NODE: 17673

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NB L	State Route 44	24388	167.3	174.0	67.9	621.3	10
NB T	State Route 44	24388	33.4	2.8	31.6	41.0	10
NB TR	State Route 44	24388	33.7	5.3	30.7	48.6	10
NEB L	Girdled Road	24387	30.9	2.7	27.7	35.9	10
NEB TR	Girdled Road	24387	29.3	2.5	25.7	33.3	10
SB L	State Route 44	24374	37.4	4.3	32.6	46.5	10
SB T	State Route 44	24374	29.0	3.4	25.5	35.3	10
SB TR	State Route 44	24374	33.3	3.5	28.9	40.3	10
SWB L	Girdled Road	24390	26.7	3.7	19.6	31.9	10
SWB TR	Girdled Road	24390	87.7	6.9	75.7	101.2	10

Project: Option A - Capacity Improvements
 Scenario: PM Peak
 Run(s): Batch (10 runs)
 Simulated: Various
 Time: 17:00:00 - 18:00:00
 Interval: Summary
 Selection: --

Intersection Level of Service by Approach - Overview

GIRDLED ROAD & AUBURN ROAD -- UNSIGNALIZED

NODE: 17671

Run	Number of Vehicles	Total Control Delay (hr)	Avg Control Delay (sec/veh)	Level of Service
NB on Auburn Road: Superlink ID 24384				
1	224.0	36.29	583.2	F
2	233.0	42.68	659.4	F
3	216.0	41.07	684.4	F
4	225.0	36.23	579.8	F
5	226.0	39.44	628.2	F
6	223.0	38.35	619.0	F
7	217.0	38.78	643.4	F
8	237.0	32.43	492.6	F
9	229.0	38.07	598.5	F
10	215.0	39.99	669.6	F
Average:	224.5	38.33	615.8	F

NEB on Girdled Road: Superlink ID 24382

1	172.0	2.19	45.8	E
2	174.0	1.92	39.7	E
3	173.0	2.67	55.5	F
4	176.0	2.06	42.2	E
5	175.0	2.42	49.7	E
6	174.0	2.61	53.9	F
7	174.0	2.34	48.4	E
8	176.0	1.74	35.6	E
9	174.0	2.11	43.6	E
10	174.0	2.26	46.9	E
Average:	174.2	2.23	46.1	E

SB on Auburn Road: Superlink ID 24383

1	199.0	19.10	345.5	F
2	210.0	23.05	395.2	F
3	194.0	22.82	423.5	F
4	203.0	20.06	355.7	F
5	199.0	16.57	299.8	F
6	190.0	21.49	407.2	F
7	195.0	21.12	389.8	F
8	212.0	9.78	166.1	F
9	202.0	20.83	371.2	F

GIRDLED ROAD & AUBURN ROAD -- UNSIGNALIZED

NODE: 17671

Run	Number of Vehicles	Total Control Delay (hr)	Avg Control Delay (sec/veh)	Level of Service
10	194.0	19.22	356.7	F
Average:	199.8	19.40	351.1	F

SWB on Girdled Road: Superlink ID 24387

1	191.0	6.25	117.8	F
2	199.0	6.38	115.4	F
3	188.0	6.54	125.2	F
4	200.0	6.24	112.2	F
5	189.0	6.42	122.3	F
6	198.0	6.34	115.3	F
7	189.0	6.17	117.5	F
8	205.0	6.10	107.0	F
9	197.0	6.22	113.6	F
10	187.0	6.40	123.2	F
Average:	194.3	6.31	117.0	F

GIRDLED ROAD & CRILE ROAD -- UNSIGNALIZED

NODE: 10

Run	Number of Vehicles	Total Control Delay (hr)	Avg Control Delay (sec/veh)	Level of Service
NEB on Girdled Road: Superlink ID 24390				
1	404.0	0.28	2.5	A
2	407.0	0.24	2.1	A
3	396.0	0.21	1.9	A
4	410.0	0.27	2.4	A
5	408.0	0.24	2.1	A
6	402.0	0.28	2.5	A
7	397.0	0.27	2.5	A
8	409.0	0.23	2.0	A
9	402.0	0.21	1.9	A
10	402.0	0.22	2.0	A
Average:	403.7	0.25	2.2	A

SB on Crile Road: Superlink ID 24389

1	94.0	31.21	1,195.4	F
2	123.0	30.22	884.5	F
3	125.0	29.14	839.3	F
4	114.0	34.93	1,103.1	F
5	93.0	36.25	1,403.2	F
6	105.0	38.61	1,323.6	F
7	121.0	23.85	709.7	F
8	138.0	23.36	609.4	F
9	113.0	33.52	1,067.8	F

GIRDLED ROAD & CRILE ROAD -- UNSIGNALIZED

NODE: 10

Run	Number of Vehicles	Total Control Delay (hr)	Avg Control Delay (sec/veh)	Level of Service
10	105.0	24.58	842.7	F
Average:	113.1	30.57	997.9	F

SWB on Girdled Road: Superlink ID 24367

1	251.0	22.13	317.4	F
2	251.0	23.56	338.0	F
3	235.0	16.02	245.4	F
4	276.0	0.02	0.2	A
5	258.0	40.09	559.4	F
6	263.0	0.02	0.3	A
7	243.0	0.06	0.8	A
8	270.0	19.63	261.8	F
9	254.0	0.02	0.3	A
10	231.0	0.32	5.0	A
Average:	253.2	12.19	172.9	F

STATE ROUTE 44 & GIRDLED ROAD -- SIGNALIZED

NODE: 17673

Run	Number of Vehicles	Total Control Delay (hr)	Avg Control Delay (sec/veh)	Level of Service
NB on State Route 44: Superlink ID 24388				
1	879.0	8.31	34.0	C
2	887.0	8.10	32.9	C
3	890.0	8.16	33.0	C
4	894.0	8.41	33.9	C
5	886.0	8.48	34.4	C
6	879.0	8.73	35.8	D
7	881.0	14.18	58.0	E
8	882.0	9.57	39.1	D
9	882.0	8.13	33.2	C
10	876.0	8.06	33.1	C
Average:	883.6	9.01	36.7	D

NEB on Girdled Road: Superlink ID 24387

1	276.0	2.19	28.6	C
2	287.0	2.52	31.6	C
3	265.0	2.52	34.2	C
4	275.0	2.25	29.4	C
5	275.0	2.15	28.2	C
6	275.0	2.36	30.9	C
7	265.0	2.28	30.9	C
8	289.0	2.28	28.4	C
9	279.0	2.26	29.2	C

STATE ROUTE 44 & GIRDLED ROAD -- SIGNALIZED

NODE: 17673

Run	Number of Vehicles	Total Control Delay (hr)	Avg Control Delay (sec/veh)	Level of Service
10	275.0	2.13	27.9	C
Average:	276.1	2.29	29.9	C

SB on State Route 44: Superlink ID 24374

1	1,042.0	9.09	31.4	C
2	1,031.0	8.47	29.6	C
3	1,044.0	8.71	30.0	C
4	1,059.0	8.43	28.7	C
5	1,046.0	8.78	30.2	C
6	1,039.0	9.00	31.2	C
7	1,039.0	10.18	35.3	D
8	1,039.0	10.33	35.8	D
9	1,039.0	8.51	29.5	C
10	1,039.0	10.25	35.5	D
Average:	1,041.7	9.18	31.7	C

SWB on Girdled Road: Superlink ID 24390

1	205.0	4.20	73.8	E
2	221.0	4.41	71.8	E
3	206.0	4.28	74.9	E
4	231.0	4.30	67.0	E
5	210.0	4.25	72.9	E
6	224.0	4.46	71.7	E
7	211.0	4.18	71.3	E
8	240.0	4.25	63.8	E
9	220.0	4.19	68.5	E
10	198.0	4.32	78.6	E
Average:	216.6	4.28	71.4	E

Project: Option A - Capacity Improvements
 Scenario: PM Peak
 Run(s): Batch (10 runs)
 Simulated: Various
 Time: 17:00:00 - 18:00:00
 Interval: Summary
 Selection: --

Intersection Level of Service by Approach - Total Control Delay

GIRDLED ROAD & AUBURN ROAD

NODE: 17671

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
N	Auburn Road	24384	38.3	2.9	32.4	42.7	10
NE	Girdled Road	24382	2.2	0.3	1.7	2.7	10
S	Auburn Road	24383	19.4	3.9	9.8	23.1	10
SW	Girdled Road	24387	6.3	0.1	6.1	6.5	10

GIRDLED ROAD & CRILE ROAD

NODE: 10

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NE	Girdled Road	24390	0.2	0.0	0.2	0.3	10
S	Crile Road	24389	30.6	5.4	23.4	38.6	10
SW	Girdled Road	24367	12.2	14.2	0.0	40.1	10

STATE ROUTE 44 & GIRDLED ROAD

NODE: 17673

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
N	State Route 44	24388	9.0	1.9	8.1	14.2	10
NE	Girdled Road	24387	2.3	0.1	2.1	2.5	10
S	State Route 44	24374	9.2	0.8	8.4	10.3	10
SW	Girdled Road	24390	4.3	0.1	4.2	4.5	10

Project: Option A - Capacity Improvements
 Scenario: PM Peak
 Run(s): Batch (10 runs)
 Simulated: Various
 Time: 17:00:00 - 18:00:00
 Interval: Summary
 Selection: --

Intersection Level of Service by Approach - Avg Control Delay

GIRDLED ROAD & AUBURN ROAD

NODE: 17671

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
N	Auburn Road	24384	615.8	56.0	492.6	684.4	10
NE	Girdled Road	24382	46.1	6.2	35.6	55.5	10
S	Auburn Road	24383	351.1	73.9	166.1	423.5	10
SW	Girdled Road	24387	117.0	5.5	107.0	125.2	10

GIRDLED ROAD & CRILE ROAD

NODE: 10

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NE	Girdled Road	24390	2.2	0.3	1.9	2.5	10
S	Crile Road	24389	997.9	262.8	609.4	1,403.2	10
SW	Girdled Road	24367	172.9	199.4	0.2	559.4	10

STATE ROUTE 44 & GIRDLED ROAD

NODE: 17673

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
N	State Route 44	24388	36.7	7.7	32.9	58.0	10
NE	Girdled Road	24387	29.9	2.0	27.9	34.2	10
S	State Route 44	24374	31.7	2.7	28.7	35.8	10
SW	Girdled Road	24390	71.4	4.2	63.8	78.6	10

Project: Option A - Capacity Improvements
 Scenario: PM Peak
 Run(s): Batch (10 runs)
 Simulated: Various
 Time: 17:00:00 - 18:00:00
 Interval: Summary
 Selection: --

Intersection Level of Service - Overview

GIRDLED ROAD & AUBURN ROAD -- UNSIGNALIZED NODE: 17671

Run	Number of Vehicles	Total Control Delay (hr)	Avg Control Delay (sec/veh)	Level of Service
1	786.0	63.82	292.3	F
2	816.0	74.03	326.6	F
3	771.0	73.09	341.3	F
4	804.0	64.59	289.2	F
5	789.0	64.85	295.9	F
6	785.0	68.78	315.4	F
7	775.0	68.41	317.8	F
8	830.0	50.05	217.1	F
9	802.0	67.22	301.8	F
10	770.0	67.87	317.3	F
Average:	792.8	66.27	301.5	F

GIRDLED ROAD & CRILE ROAD -- UNSIGNALIZED NODE: 10

Run	Number of Vehicles	Total Control Delay (hr)	Avg Control Delay (sec/veh)	Level of Service
1	749.0	53.62	257.7	F
2	781.0	54.02	249.0	F
3	756.0	45.37	216.1	F
4	800.0	35.22	158.5	F
5	759.0	76.57	363.2	F
6	770.0	38.91	181.9	F
7	761.0	24.19	114.4	F
8	817.0	43.23	190.5	F
9	769.0	33.75	158.0	F
10	738.0	25.12	122.5	F
Average:	770.0	43.00	201.2	F

STATE ROUTE 44 & GIRDLED ROAD -- SIGNALIZED NODE: 17673

Run	Number of Vehicles	Total Control Delay (hr)	Avg Control Delay (sec/veh)	Level of Service
1	2,402.0	23.80	35.7	D
2	2,426.0	23.49	34.9	C
3	2,405.0	23.67	35.4	D
4	2,459.0	23.38	34.2	C
5	2,417.0	23.66	35.2	D
6	2,417.0	24.55	36.6	D
7	2,396.0	30.82	46.3	D
8	2,450.0	26.44	38.8	D
9	2,420.0	23.09	34.4	C

Intersection Level of Service

10	2,388.0	24.76	37.3	D
Average:	2,418.0	24.77	36.9	D

Project: Option A - Capacity Improvements
Scenario: PM Peak
Run(s): Batch (10 runs)
Simulated: Various
Time: 17:00:00 - 18:00:00
Interval: Summary
Selection: --

Intersection Level of Service - Total Control Delay

Node ID	Intersection	Control Type	Average	Std Dev	Minimum	Maximum	# Samples
17671	Girdled Road & Auburn Road	Stop	66.3	6.6	50.1	74.0	10
10	Girdled Road & Crile Road	Stop	43.0	15.6	24.2	76.6	10
17673	State Route 44 & Girdled Road	Actuated	24.8	2.3	23.1	30.8	10

Project: Option A - Capacity Improvements
Scenario: PM Peak
Run(s): Batch (10 runs)
Simulated: Various
Time: 17:00:00 - 18:00:00
Interval: Summary
Selection: --

Intersection Level of Service - Avg Control Delay

Node ID	Intersection	Control Type	Average	Std Dev	Minimum	Maximum	# Samples
17671	Girdled Road & Auburn Road	Stop	301.5	33.9	217.1	341.3	10
10	Girdled Road & Crile Road	Stop	201.2	74.4	114.4	363.2	10
17673	State Route 44 & Girdled Road	Actuated	36.9	3.6	34.2	46.3	10

DRAFT

'BUILD OPTION B'

Project: Option B - Option A + Auburn Separation
 Scenario: AM Peak
 Run(s): Batch (10 runs)
 Simulated: Various
 Time: 08:00:00 - 09:00:00
 Interval: Summary
 Selection: --

Intersection Level of Service by Lane Group - Overview

GIRDLED ROAD & AUBURN ROAD (EAST) -- UNSIGNALIZED

NODE: 17671

Run	Number of Vehicles	Total Control Delay (hr)	Avg Control Delay (sec/veh)	Level of Service
NEB LT on Girdled Road: Superlink ID 24382				
1	391.0	0.34	3.1	A
2	395.0	0.32	2.9	A
3	389.0	0.38	3.5	A
4	387.0	0.29	2.7	A
5	392.0	0.32	2.9	A
6	390.0	0.33	3.0	A
7	392.0	0.30	2.7	A
8	392.0	0.31	2.8	A
9	392.0	0.29	2.7	A
10	393.0	0.33	3.0	A
Average:	391.3	0.32	2.9	A

SEB LR on Auburn Road (East): Superlink ID 24383

1	141.0	0.41	10.4	B
2	142.0	0.41	10.5	B
3	140.0	0.35	9.0	A
4	137.0	0.38	9.9	A
5	140.0	0.36	9.1	A
6	140.0	0.38	9.8	A
7	143.0	0.46	11.6	B
8	145.0	0.40	9.8	A
9	140.0	0.33	8.4	A
10	140.0	0.37	9.6	A
Average:	140.8	0.39	9.8	A

SWB TR on Girdled Road: Superlink ID 24387

1	351.0	0.01	0.1	A
2	338.0	0.01	0.1	A
3	336.0	0.02	0.2	A
4	341.0	0.01	0.1	A
5	344.0	0.01	0.1	A
6	348.0	0.01	0.1	A
7	344.0	0.01	0.1	A
8	357.0	0.01	0.1	A
9	339.0	0.01	0.1	A
10	350.0	0.01	0.1	A
Average:	344.8	0.01	0.1	A

GIRDLED ROAD & AUBURN ROAD (EAST) -- UNSIGNALIZED

NODE: 17671

Run	Number of Vehicles	Total Control Delay (hr)	Avg Control Delay (sec/veh)	Level of Service
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GIRDLED ROAD & AUBURN ROAD (WEST) -- UNSIGNALIZED

NODE: 7

Run	Number of Vehicles	Total Control Delay (hr)	Avg Control Delay (sec/veh)	Level of Service
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NEB TR on Girdled Road: Superlink ID 24392

1	132.0	0.01	0.3	A
2	131.0	0.01	0.2	A
3	128.0	0.01	0.3	A
4	130.0	0.01	0.2	A
5	131.0	0.01	0.3	A
6	132.0	0.01	0.3	A
7	131.0	0.01	0.1	A
8	130.0	0.01	0.2	A
9	131.0	0.01	0.2	A
10	131.0	0.01	0.3	A
Average:	130.7	0.01	0.2	A

NWB LR on Auburn Road (West): Superlink ID 24391

1	293.0	0.85	10.5	B
2	296.0	0.82	9.9	A
3	295.0	0.87	10.6	B
4	292.0	0.82	10.1	B
5	292.0	0.77	9.5	A
6	292.0	0.92	11.3	B
7	296.0	0.87	10.6	B
8	294.0	0.84	10.2	B
9	293.0	0.84	10.3	B
10	294.0	0.86	10.5	B
Average:	293.7	0.85	10.4	B

SWB LT on Girdled Road: Superlink ID 24382

1	341.0	0.15	1.6	A
2	327.0	0.15	1.6	A
3	327.0	0.14	1.6	A
4	331.0	0.12	1.3	A
5	333.0	0.15	1.6	A
6	337.0	0.16	1.7	A
7	338.0	0.12	1.3	A
8	343.0	0.12	1.3	A
9	333.0	0.14	1.5	A
10	335.0	0.14	1.5	A
Average:	334.5	0.14	1.5	A

GIRDLED ROAD & CRILE ROAD -- UNSIGNALIZED

NODE: 10

Run	Number of Vehicles	Total Control Delay (hr)	Avg Control Delay (sec/veh)	Level of Service
NEB L on Girdled Road: Superlink ID 24390				
1	44.0	0.20	16.2	C
2	40.0	0.16	14.4	B
3	43.0	0.18	14.9	B
4	44.0	0.17	14.0	B
5	44.0	0.16	12.7	B
6	42.0	0.17	14.3	B
7	43.0	0.20	16.8	C
8	45.0	0.18	14.7	B
9	44.0	0.18	14.5	B
10	43.0	0.17	14.1	B
Average:	43.2	0.18	14.7	B

NEB T on Girdled Road: Superlink ID 24390

1	150.0	0.00	0.0	A
2	152.0	0.00	0.0	A
3	152.0	0.00	0.0	A
4	150.0	0.00	0.0	A
5	151.0	0.00	0.0	A
6	148.0	0.00	0.0	A
7	154.0	0.00	0.0	A
8	150.0	0.00	0.0	A
9	153.0	0.00	0.0	A
10	155.0	0.00	0.0	A
Average:	151.5	0.00	0.0	A

SB LR on Crile Road: Superlink ID 24389

1	74.0	0.69	33.8	D
2	78.0	1.13	52.1	F
3	76.0	1.19	56.3	F
4	75.0	0.70	33.4	D
5	78.0	1.01	46.4	E
6	76.0	0.89	42.2	E
7	75.0	0.89	42.9	E
8	76.0	1.05	49.8	E
9	75.0	1.23	59.1	F
10	76.0	1.31	62.1	F
Average:	75.9	1.01	47.8	E

SWB T on Girdled Road: Superlink ID 24367

1	51.0	4.64	327.3	F
2	46.0	6.10	477.3	F
3	48.0	7.16	537.2	F

GIRDLED ROAD & CRILE ROAD -- UNSIGNALIZED

NODE: 10

Run	Number of Vehicles	Total Control Delay (hr)	Avg Control Delay (sec/veh)	Level of Service
4	48.0	5.92	444.1	F
5	50.0	4.47	321.5	F
6	48.0	6.45	483.9	F
7	48.0	5.72	428.6	F
8	52.0	5.17	358.0	F
9	49.0	5.65	415.2	F
10	50.0	5.06	364.3	F
Average:	49.0	5.63	415.7	F

SWB TR on Girdled Road: Superlink ID 24367

1	433.0	40.67	338.2	F
2	392.0	53.81	494.1	F
3	393.0	58.86	539.2	F
4	401.0	50.08	449.6	F
5	418.0	38.96	335.6	F
6	410.0	55.27	485.3	F
7	412.0	50.48	441.1	F
8	443.0	45.58	370.4	F
9	408.0	49.28	434.8	F
10	422.0	43.91	374.6	F
Average:	413.2	48.69	426.3	F

STATE ROUTE 44 & GIRDLED ROAD -- SIGNALIZED

NODE: 17673

Run	Number of Vehicles	Total Control Delay (hr)	Avg Control Delay (sec/veh)	Level of Service
NB L on State Route 44: Superlink ID 24388				
1	42.0	0.33	28.1	C
2	43.0	0.36	30.2	C
3	42.0	0.39	33.5	C
4	42.0	0.39	33.2	C
5	42.0	0.39	33.4	C
6	44.0	0.47	38.2	D
7	43.0	0.29	24.1	C
8	42.0	0.35	30.2	C
9	41.0	0.36	31.7	C
10	43.0	0.34	28.2	C
Average:	42.4	0.37	31.1	C

NB T on State Route 44: Superlink ID 24388

1	354.0	2.80	28.5	C
2	356.0	2.68	27.1	C
3	353.0	2.78	28.4	C
4	356.0	2.78	28.1	C
5	342.0	2.77	29.1	C

STATE ROUTE 44 & GIRDLED ROAD -- SIGNALIZED

NODE: 17673

Run	Number of Vehicles	Total Control Delay (hr)	Avg Control Delay (sec/veh)	Level of Service
6	342.0	2.74	28.8	C
7	354.0	2.75	28.0	C
8	347.0	2.77	28.7	C
9	365.0	2.90	28.6	C
10	356.0	2.99	30.2	C
Average:	352.5	2.80	28.6	C

NB TR on State Route 44: Superlink ID 24388

1	358.0	2.68	26.9	C
2	377.0	2.82	26.9	C
3	365.0	2.84	28.0	C
4	374.0	2.94	28.3	C
5	371.0	2.82	27.4	C
6	378.0	2.85	27.2	C
7	358.0	2.78	27.9	C
8	363.0	2.90	28.7	C
9	358.0	2.93	29.5	C
10	371.0	2.79	27.1	C
Average:	367.3	2.84	27.8	C

NEB L on Girdled Road: Superlink ID 24387

1	123.0	1.21	35.4	D
2	120.0	1.26	37.8	D
3	119.0	1.40	42.4	D
4	119.0	1.27	38.5	D
5	121.0	1.28	38.2	D
6	121.0	1.56	46.3	D
7	123.0	1.53	44.9	D
8	123.0	1.41	41.2	D
9	122.0	1.39	40.9	D
10	119.0	1.46	44.2	D
Average:	121.0	1.38	41.0	D

NEB TR on Girdled Road: Superlink ID 24387

1	111.0	0.85	27.5	C
2	109.0	0.74	24.5	C
3	107.0	0.79	26.5	C
4	105.0	0.79	27.2	C
5	110.0	0.93	30.4	C
6	103.0	0.90	31.3	C
7	111.0	0.98	31.7	C
8	110.0	0.90	29.3	C
9	108.0	0.77	25.5	C

STATE ROUTE 44 & GIRDLED ROAD -- SIGNALIZED

NODE: 17673

Run	Number of Vehicles	Total Control Delay (hr)	Avg Control Delay (sec/veh)	Level of Service
10	111.0	0.83	26.9	C
Average:	108.5	0.85	28.1	C

SB L on State Route 44: Superlink ID 24374

1	74.0	0.47	22.8	C
2	74.0	0.47	22.8	C
3	76.0	0.52	24.5	C
4	75.0	0.55	26.4	C
5	77.0	0.49	22.7	C
6	76.0	0.55	26.2	C
7	76.0	0.54	25.8	C
8	76.0	0.51	24.3	C
9	74.0	0.60	29.3	C
10	76.0	0.49	23.0	C
Average:	75.4	0.52	24.8	C

SB T on State Route 44: Superlink ID 24374

1	359.0	2.54	25.4	C
2	366.0	2.48	24.4	C
3	379.0	2.44	23.1	C
4	370.0	2.76	26.8	C
5	356.0	2.67	27.0	C
6	372.0	2.64	25.6	C
7	347.0	2.61	27.1	C
8	351.0	2.55	26.2	C
9	353.0	2.56	26.1	C
10	373.0	2.85	27.5	C
Average:	362.6	2.61	25.9	C

SB TR on State Route 44: Superlink ID 24374

1	331.0	2.20	23.9	C
2	341.0	2.21	23.3	C
3	317.0	2.16	24.5	C
4	341.0	2.22	23.5	C
5	333.0	2.13	23.0	C
6	329.0	2.11	23.0	C
7	343.0	2.00	21.0	C
8	335.0	2.15	23.1	C
9	344.0	2.17	22.7	C
10	332.0	2.32	25.2	C
Average:	334.6	2.17	23.3	C

SWB L on Girdled Road: Superlink ID 24390

STATE ROUTE 44 & GIRDLED ROAD -- SIGNALIZED**NODE: 17673**

Run	Number of Vehicles	Total Control Delay (hr)	Avg Control Delay (sec/veh)	Level of Service
1	56.0	0.35	22.3	C
2	51.0	0.35	25.0	C
3	54.0	0.34	22.8	C
4	53.0	0.29	19.7	B
5	56.0	0.38	24.6	C
6	54.0	0.26	17.2	B
7	54.0	0.34	22.6	C
8	58.0	0.41	25.7	C
9	53.0	0.30	20.4	C
10	57.0	0.43	27.2	C
Average:	54.6	0.35	22.8	C

SWB TR on Girdled Road: Superlink ID 24390

1	406.0	3.46	30.7	C
2	371.0	3.29	31.9	C
3	371.0	3.53	34.2	C
4	376.0	3.51	33.6	C
5	395.0	3.55	32.4	C
6	385.0	3.40	31.8	C
7	389.0	3.49	32.3	C
8	416.0	3.54	30.6	C
9	383.0	3.42	32.2	C
10	396.0	3.34	30.3	C
Average:	388.8	3.45	32.0	C

Project: Option B - Option A + Auburn Separation
 Scenario: AM Peak
 Run(s): Batch (10 runs)
 Simulated: Various
 Time: 08:00:00 - 09:00:00
 Interval: Summary
 Selection: --

Intersection Level of Service by Lane Group - Total Control Delay

GIRDLED ROAD & AUBURN ROAD (EAST)

NODE: 17671

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NEB LT	Girdled Road	24382	0.3	0.0	0.3	0.4	10
SEB LR	Auburn Road (East)	24383	0.4	0.0	0.3	0.5	10
SWB TR	Girdled Road	24387	0.0	0.0	0.0	0.0	10

GIRDLED ROAD & AUBURN ROAD (WEST)

NODE: 7

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NEB TR	Girdled Road	24392	0.0	0.0	0.0	0.0	10
NWB LR	Auburn Road (West)	24391	0.8	0.0	0.8	0.9	10
SWB LT	Girdled Road	24382	0.1	0.0	0.1	0.2	10

GIRDLED ROAD & CRILE ROAD

NODE: 10

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NEB L	Girdled Road	24390	0.2	0.0	0.2	0.2	10
NEB T	Girdled Road	24390	0.0	0.0	0.0	0.0	10
SB LR	Crile Road	24389	1.0	0.2	0.7	1.3	10
SWB T	Girdled Road	24367	5.6	0.8	4.5	7.2	10
SWB TR	Girdled Road	24367	48.7	6.4	39.0	58.9	10

STATE ROUTE 44 & GIRDLED ROAD

NODE: 17673

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NB L	State Route 44	24388	0.4	0.0	0.3	0.5	10
NB T	State Route 44	24388	2.8	0.1	2.7	3.0	10
NB TR	State Route 44	24388	2.8	0.1	2.7	2.9	10
NEB L	Girdled Road	24387	1.4	0.1	1.2	1.6	10
NEB TR	Girdled Road	24387	0.8	0.1	0.7	1.0	10
SB L	State Route 44	24374	0.5	0.0	0.5	0.6	10
SB T	State Route 44	24374	2.6	0.1	2.4	2.9	10
SB TR	State Route 44	24374	2.2	0.1	2.0	2.3	10
SWB L	Girdled Road	24390	0.3	0.1	0.3	0.4	10
SWB TR	Girdled Road	24390	3.5	0.1	3.3	3.6	10

Intersection Level of Service by Lane Group

Project: Option B - Option A + Auburn Separation
 Scenario: AM Peak
 Run(s): Batch (10 runs)
 Simulated: Various
 Time: 08:00:00 - 09:00:00
 Interval: Summary
 Selection: --

Intersection Level of Service by Lane Group - Avg Control Delay

GIRDLED ROAD & AUBURN ROAD (EAST)

NODE: 17671

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NEB LT	Girdled Road	24382	2.9	0.2	2.7	3.5	10
SEB LR	Auburn Road (East)	24383	9.8	0.9	8.4	11.6	10
SWB TR	Girdled Road	24387	0.1	0.0	0.1	0.2	10

GIRDLED ROAD & AUBURN ROAD (WEST)

NODE: 7

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NEB TR	Girdled Road	24392	0.2	0.1	0.1	0.3	10
NWB LR	Auburn Road (West)	24391	10.4	0.5	9.5	11.3	10
SWB LT	Girdled Road	24382	1.5	0.1	1.3	1.7	10

GIRDLED ROAD & CRILE ROAD

NODE: 10

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NEB L	Girdled Road	24390	14.7	1.1	12.7	16.8	10
NEB T	Girdled Road	24390	0.0	0.0	0.0	0.0	10
SB LR	Crile Road	24389	47.8	9.9	33.4	62.1	10
SWB T	Girdled Road	24367	415.7	72.1	321.5	537.2	10
SWB TR	Girdled Road	24367	426.3	69.5	335.6	539.2	10

STATE ROUTE 44 & GIRDLED ROAD

NODE: 17673

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NB L	State Route 44	24388	31.1	3.9	24.1	38.2	10
NB T	State Route 44	24388	28.6	0.8	27.1	30.2	10
NB TR	State Route 44	24388	27.8	0.9	26.9	29.5	10
NEB L	Girdled Road	24387	41.0	3.5	35.4	46.3	10
NEB TR	Girdled Road	24387	28.1	2.5	24.5	31.7	10
SB L	State Route 44	24374	24.8	2.2	22.7	29.3	10
SB T	State Route 44	24374	25.9	1.4	23.1	27.5	10
SB TR	State Route 44	24374	23.3	1.1	21.0	25.2	10
SWB L	Girdled Road	24390	22.8	3.0	17.2	27.2	10
SWB TR	Girdled Road	24390	32.0	1.3	30.3	34.2	10

Project: Option B - Option A + Auburn Separation
 Scenario: AM Peak
 Run(s): Batch (10 runs)
 Simulated: Various
 Time: 08:00:00 - 09:00:00
 Interval: Summary
 Selection: --

Intersection Level of Service by Approach - Overview

GIRDLED ROAD & AUBURN ROAD (EAST) -- UNSIGNALIZED

NODE: 17671

Run	Number of Vehicles	Total Control Delay (hr)	Avg Control Delay (sec/veh)	Level of Service
NEB on Girdled Road: Superlink ID 24382				
1	391.0	0.34	3.1	A
2	395.0	0.32	2.9	A
3	389.0	0.38	3.5	A
4	387.0	0.29	2.7	A
5	392.0	0.32	2.9	A
6	390.0	0.33	3.0	A
7	392.0	0.30	2.7	A
8	392.0	0.31	2.8	A
9	392.0	0.29	2.7	A
10	393.0	0.33	3.0	A
Average:	391.3	0.32	2.9	A
SEB on Auburn Road (East): Superlink ID 24383				
1	141.0	0.41	10.4	B
2	142.0	0.41	10.5	B
3	140.0	0.35	9.0	A
4	137.0	0.38	9.9	A
5	140.0	0.36	9.1	A
6	140.0	0.38	9.8	A
7	143.0	0.46	11.6	B
8	145.0	0.40	9.8	A
9	140.0	0.33	8.4	A
10	140.0	0.37	9.6	A
Average:	140.8	0.39	9.8	A
SWB on Girdled Road: Superlink ID 24387				
1	351.0	0.01	0.1	A
2	338.0	0.01	0.1	A
3	336.0	0.02	0.2	A
4	341.0	0.01	0.1	A
5	344.0	0.01	0.1	A
6	348.0	0.01	0.1	A
7	344.0	0.01	0.1	A
8	357.0	0.01	0.1	A
9	339.0	0.01	0.1	A

GIRDLED ROAD & AUBURN ROAD (EAST) -- UNSIGNALIZED

NODE: 17671

Run	Number of Vehicles	Total Control Delay (hr)	Avg Control Delay (sec/veh)	Level of Service
10	350.0	0.01	0.1	A
Average:	344.8	0.01	0.1	A

GIRDLED ROAD & AUBURN ROAD (WEST) -- UNSIGNALIZED

NODE: 7

Run	Number of Vehicles	Total Control Delay (hr)	Avg Control Delay (sec/veh)	Level of Service
NEB on Girdled Road: Superlink ID 24392				
1	132.0	0.01	0.3	A
2	131.0	0.01	0.2	A
3	128.0	0.01	0.3	A
4	130.0	0.01	0.2	A
5	131.0	0.01	0.3	A
6	132.0	0.01	0.3	A
7	131.0	0.01	0.1	A
8	130.0	0.01	0.2	A
9	131.0	0.01	0.2	A
10	131.0	0.01	0.3	A
Average:	130.7	0.01	0.2	A

NWB on Auburn Road (West): Superlink ID 24391

1	293.0	0.85	10.5	B
2	296.0	0.82	9.9	A
3	295.0	0.87	10.6	B
4	292.0	0.82	10.1	B
5	292.0	0.77	9.5	A
6	292.0	0.92	11.3	B
7	296.0	0.87	10.6	B
8	294.0	0.84	10.2	B
9	293.0	0.84	10.3	B
10	294.0	0.86	10.5	B
Average:	293.7	0.85	10.4	B

SWB on Girdled Road: Superlink ID 24382

1	341.0	0.15	1.6	A
2	327.0	0.15	1.6	A
3	327.0	0.14	1.6	A
4	331.0	0.12	1.3	A
5	333.0	0.15	1.6	A
6	337.0	0.16	1.7	A
7	338.0	0.12	1.3	A
8	343.0	0.12	1.3	A
9	333.0	0.14	1.5	A

GIRDLED ROAD & AUBURN ROAD (WEST) -- UNSIGNALIZED**NODE: 7**

Run	Number of Vehicles	Total Control Delay (hr)	Avg Control Delay (sec/veh)	Level of Service
10	335.0	0.14	1.5	A
Average:	334.5	0.14	1.5	A

GIRDLED ROAD & CRILE ROAD -- UNSIGNALIZED**NODE: 10**

Run	Number of Vehicles	Total Control Delay (hr)	Avg Control Delay (sec/veh)	Level of Service
NEB on Girdled Road: Superlink ID 24390				
1	194.0	0.20	3.7	A
2	192.0	0.16	3.0	A
3	195.0	0.18	3.3	A
4	194.0	0.17	3.2	A
5	195.0	0.16	2.9	A
6	190.0	0.17	3.2	A
7	197.0	0.20	3.7	A
8	195.0	0.18	3.4	A
9	197.0	0.18	3.2	A
10	198.0	0.17	3.1	A
Average:	194.7	0.18	3.3	A

SB on Crile Road: Superlink ID 24389

1	74.0	0.69	33.8	D
2	78.0	1.13	52.1	F
3	76.0	1.19	56.3	F
4	75.0	0.70	33.4	D
5	78.0	1.01	46.4	E
6	76.0	0.89	42.2	E
7	75.0	0.89	42.9	E
8	76.0	1.05	49.8	E
9	75.0	1.23	59.1	F
10	76.0	1.31	62.1	F
Average:	75.9	1.01	47.8	E

SWB on Girdled Road: Superlink ID 24367

1	484.0	45.31	337.0	F
2	438.0	59.90	492.4	F
3	441.0	66.02	539.0	F
4	449.0	56.01	449.0	F
5	468.0	43.43	334.1	F
6	458.0	61.72	485.2	F
7	460.0	56.19	439.8	F
8	495.0	50.75	369.1	F
9	457.0	54.93	432.7	F

GIRDLED ROAD & CRILE ROAD -- UNSIGNALIZED

NODE: 10

Run	Number of Vehicles	Total Control Delay (hr)	Avg Control Delay (sec/veh)	Level of Service
10	472.0	48.97	373.5	F
Average:	462.2	54.32	425.2	F

STATE ROUTE 44 & GIRDLED ROAD -- SIGNALIZED

NODE: 17673

Run	Number of Vehicles	Total Control Delay (hr)	Avg Control Delay (sec/veh)	Level of Service
NB on State Route 44: Superlink ID 24388				
1	754.0	5.81	27.7	C
2	776.0	5.86	27.2	C
3	760.0	6.02	28.5	C
4	772.0	6.10	28.5	C
5	755.0	5.98	28.5	C
6	764.0	6.06	28.5	C
7	755.0	5.82	27.7	C
8	752.0	6.02	28.8	C
9	764.0	6.19	29.2	C
10	770.0	6.12	28.6	C
Average:	762.2	6.00	28.3	C

NEB on Girdled Road: Superlink ID 24387

1	234.0	2.06	31.6	C
2	229.0	2.00	31.5	C
3	226.0	2.19	34.9	C
4	224.0	2.06	33.2	C
5	231.0	2.21	34.5	C
6	224.0	2.45	39.4	D
7	234.0	2.51	38.7	D
8	233.0	2.30	35.6	D
9	230.0	2.15	33.7	C
10	230.0	2.29	35.8	D
Average:	229.5	2.22	34.9	C

SB on State Route 44: Superlink ID 24374

1	764.0	5.20	24.5	C
2	781.0	5.15	23.8	C
3	772.0	5.11	23.8	C
4	786.0	5.53	25.3	C
5	766.0	5.29	24.9	C
6	777.0	5.30	24.5	C
7	766.0	5.16	24.2	C
8	762.0	5.22	24.6	C
9	771.0	5.33	24.9	C

STATE ROUTE 44 & GIRDLED ROAD -- SIGNALIZED

NODE: 17673

Run	Number of Vehicles	Total Control Delay (hr)	Avg Control Delay (sec/veh)	Level of Service
10	781.0	5.66	26.1	C
Average:	772.6	5.30	24.7	C

SWB on Girdled Road: Superlink ID 24390

1	462.0	3.81	29.7	C
2	422.0	3.64	31.1	C
3	425.0	3.87	32.8	C
4	429.0	3.80	31.9	C
5	451.0	3.94	31.4	C
6	439.0	3.66	30.0	C
7	443.0	3.83	31.1	C
8	474.0	3.95	30.0	C
9	436.0	3.72	30.7	C
10	453.0	3.77	30.0	C
Average:	443.4	3.80	30.9	C

Project: Option B - Option A + Auburn Separation
 Scenario: AM Peak
 Run(s): Batch (10 runs)
 Simulated: Various
 Time: 08:00:00 - 09:00:00
 Interval: Summary
 Selection: --

Intersection Level of Service by Approach - Total Control Delay

GIRDLED ROAD & AUBURN ROAD (EAST)

NODE: 17671

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NE	Girdled Road	24382	0.3	0.0	0.3	0.4	10
SE	Auburn Road (East)	24383	0.4	0.0	0.3	0.5	10
SW	Girdled Road	24387	0.0	0.0	0.0	0.0	10

GIRDLED ROAD & AUBURN ROAD (WEST)

NODE: 7

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NE	Girdled Road	24392	0.0	0.0	0.0	0.0	10
NW	Auburn Road (West)	24391	0.8	0.0	0.8	0.9	10
SW	Girdled Road	24382	0.1	0.0	0.1	0.2	10

GIRDLED ROAD & CRILE ROAD

NODE: 10

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NE	Girdled Road	24390	0.2	0.0	0.2	0.2	10
S	Crile Road	24389	1.0	0.2	0.7	1.3	10
SW	Girdled Road	24367	54.3	7.2	43.4	66.0	10

STATE ROUTE 44 & GIRDLED ROAD

NODE: 17673

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
N	State Route 44	24388	6.0	0.1	5.8	6.2	10
NE	Girdled Road	24387	2.2	0.2	2.0	2.5	10
S	State Route 44	24374	5.3	0.2	5.1	5.7	10
SW	Girdled Road	24390	3.8	0.1	3.6	4.0	10

Project: Option B - Option A + Auburn Separation
 Scenario: AM Peak
 Run(s): Batch (10 runs)
 Simulated: Various
 Time: 08:00:00 - 09:00:00
 Interval: Summary
 Selection: --

Intersection Level of Service by Approach - Avg Control Delay

GIRDLED ROAD & AUBURN ROAD (EAST)

NODE: 17671

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NE	Girdled Road	24382	2.9	0.2	2.7	3.5	10
SE	Auburn Road (East)	24383	9.8	0.9	8.4	11.6	10
SW	Girdled Road	24387	0.1	0.0	0.1	0.2	10

GIRDLED ROAD & AUBURN ROAD (WEST)

NODE: 7

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NE	Girdled Road	24392	0.2	0.1	0.1	0.3	10
NW	Auburn Road (West)	24391	10.4	0.5	9.5	11.3	10
SW	Girdled Road	24382	1.5	0.1	1.3	1.7	10

GIRDLED ROAD & CRILE ROAD

NODE: 10

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NE	Girdled Road	24390	3.3	0.3	2.9	3.7	10
S	Crile Road	24389	47.8	9.9	33.4	62.1	10
SW	Girdled Road	24367	425.2	69.8	334.1	539.0	10

STATE ROUTE 44 & GIRDLED ROAD

NODE: 17673

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
N	State Route 44	24388	28.3	0.6	27.2	29.2	10
NE	Girdled Road	24387	34.9	2.6	31.5	39.4	10
S	State Route 44	24374	24.7	0.7	23.8	26.1	10
SW	Girdled Road	24390	30.9	1.0	29.7	32.8	10

Project: Option B - Option A + Auburn Separation
 Scenario: AM Peak
 Run(s): Batch (10 runs)
 Simulated: Various
 Time: 08:00:00 - 09:00:00
 Interval: Summary
 Selection: --

Intersection Level of Service - Overview

GIRDLED ROAD & AUBURN ROAD (EAST) -- UNSIGNALIZED

NODE: 17671

Run	Number of Vehicles	Total Control Delay (hr)	Avg Control Delay (sec/veh)	Level of Service
1	883.0	0.75	3.1	A
2	875.0	0.74	3.1	A
3	865.0	0.74	3.1	A
4	865.0	0.68	2.8	A
5	876.0	0.68	2.8	A
6	878.0	0.72	3.0	A
7	879.0	0.77	3.1	A
8	894.0	0.71	2.9	A
9	871.0	0.63	2.6	A
10	883.0	0.72	2.9	A
Average:	876.9	0.71	2.9	A

GIRDLED ROAD & AUBURN ROAD (WEST) -- UNSIGNALIZED

NODE: 7

Run	Number of Vehicles	Total Control Delay (hr)	Avg Control Delay (sec/veh)	Level of Service
1	766.0	1.01	4.8	A
2	754.0	0.97	4.6	A
3	750.0	1.02	4.9	A
4	753.0	0.95	4.5	A
5	756.0	0.93	4.4	A
6	761.0	1.08	5.1	A
7	765.0	1.00	4.7	A
8	767.0	0.96	4.5	A
9	757.0	0.99	4.7	A
10	760.0	1.00	4.8	A
Average:	758.9	0.99	4.7	A

GIRDLED ROAD & CRILE ROAD -- UNSIGNALIZED

NODE: 10

Run	Number of Vehicles	Total Control Delay (hr)	Avg Control Delay (sec/veh)	Level of Service
1	752.0	46.20	221.2	F
2	708.0	61.19	311.1	F
3	712.0	67.39	340.7	F
4	718.0	56.87	285.2	F
5	741.0	44.59	216.6	F
6	724.0	62.78	312.2	F
7	732.0	57.29	281.7	F
8	766.0	51.98	244.3	F
9	729.0	56.34	278.2	F

Intersection Level of Service

10	746.0	50.45	243.5	F
Average:	732.8	55.51	273.5	F

STATE ROUTE 44 & GIRDLED ROAD -- SIGNALIZED

NODE: 17673

Run	Number of Vehicles	Total Control Delay (hr)	Avg Control Delay (sec/veh)	Level of Service
1	2,214.0	16.88	27.4	C
2	2,208.0	16.66	27.2	C
3	2,183.0	17.19	28.4	C
4	2,211.0	17.49	28.5	C
5	2,203.0	17.42	28.5	C
6	2,204.0	17.46	28.5	C
7	2,198.0	17.32	28.4	C
8	2,221.0	17.49	28.3	C
9	2,201.0	17.40	28.5	C
10	2,234.0	17.83	28.7	C
Average:	2,207.7	17.31	28.2	C

Project: Option B - Option A + Auburn Separation
 Scenario: AM Peak
 Run(s): Batch (10 runs)
 Simulated: Various
 Time: 08:00:00 - 09:00:00
 Interval: Summary
 Selection: --

Intersection Level of Service - Total Control Delay

Node ID	Intersection	Control Type	Average	Std Dev	Minimum	Maximum	# Samples
17671	Girdled Road & Auburn Road (East)	Stop	0.7	0.0	0.6	0.8	10
7	Girdled Road & Auburn Road (West)	Stop	1.0	0.0	0.9	1.1	10
10	Girdled Road & Crile Road	Stop	55.5	7.3	44.6	67.4	10
17673	State Route 44 & Girdled Road	Actuated	17.3	0.3	16.7	17.8	10

Project: Option B - Option A + Auburn Separation
 Scenario: AM Peak
 Run(s): Batch (10 runs)
 Simulated: Various
 Time: 08:00:00 - 09:00:00
 Interval: Summary
 Selection: --

Intersection Level of Service - Avg Control Delay

Node ID	Intersection	Control Type	Average	Std Dev	Minimum	Maximum	# Samples
17671	Girdled Road & Auburn Road (East)	Stop	2.9	0.2	2.6	3.1	10
7	Girdled Road & Auburn Road (West)	Stop	4.7	0.2	4.4	5.1	10
10	Girdled Road & Crile Road	Stop	273.5	41.3	216.6	340.7	10
17673	State Route 44 & Girdled Road	Actuated	28.2	0.5	27.2	28.7	10

Project: Option B - Option A + Auburn Separation
 Scenario: PM Peak
 Run(s): Batch (10 runs)
 Simulated: Various
 Time: 17:00:00 - 18:00:00
 Interval: Summary
 Selection: --

Intersection Level of Service by Lane Group - Overview

GIRDLED ROAD & AUBURN ROAD (EAST) -- UNSIGNALIZED

NODE: 17671

Run	Number of Vehicles	Total Control Delay (hr)	Avg Control Delay (sec/veh)	Level of Service
NEB LT on Girdled Road: Superlink ID 24382				
1	420.0	0.21	1.8	A
2	426.0	0.19	1.6	A
3	428.0	0.21	1.8	A
4	422.0	0.19	1.7	A
5	425.0	0.19	1.6	A
6	422.0	0.24	2.0	A
7	424.0	0.20	1.7	A
8	421.0	0.23	2.0	A
9	422.0	0.20	1.7	A
10	423.0	0.24	2.0	A
Average:	423.3	0.21	1.8	A

SEB LR on Auburn Road (East): Superlink ID 24383

1	230.0	0.88	13.7	B
2	228.0	0.78	12.3	B
3	228.0	0.77	12.2	B
4	225.0	0.69	11.0	B
5	228.0	0.70	11.1	B
6	226.0	0.83	13.3	B
7	231.0	0.87	13.5	B
8	232.0	0.77	12.0	B
9	228.0	0.67	10.7	B
10	230.0	0.82	12.9	B
Average:	228.6	0.78	12.3	B

SWB TR on Girdled Road: Superlink ID 24387

1	239.0	0.01	0.2	A
2	242.0	0.01	0.2	A
3	244.0	0.01	0.2	A
4	237.0	0.01	0.2	A
5	239.0	0.01	0.2	A
6	241.0	0.01	0.2	A
7	238.0	0.02	0.2	A
8	238.0	0.01	0.1	A
9	239.0	0.01	0.2	A
10	231.0	0.01	0.1	A
Average:	238.8	0.01	0.2	A

GIRDLED ROAD & AUBURN ROAD (EAST) -- UNSIGNALIZED

NODE: 17671

Run	Number of Vehicles	Total Control Delay (hr)	Avg Control Delay (sec/veh)	Level of Service
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GIRDLED ROAD & AUBURN ROAD (WEST) -- UNSIGNALIZED

NODE: 7

Run	Number of Vehicles	Total Control Delay (hr)	Avg Control Delay (sec/veh)	Level of Service
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NEB TR on Girdled Road: Superlink ID 24392

1	175.0	0.01	0.2	A
2	174.0	0.01	0.2	A
3	178.0	0.01	0.1	A
4	174.0	0.01	0.1	A
5	177.0	0.01	0.2	A
6	173.0	0.01	0.1	A
7	173.0	0.01	0.2	A
8	173.0	0.02	0.3	A
9	173.0	0.01	0.1	A
10	175.0	0.01	0.2	A
Average:	174.5	0.01	0.2	A

NWB LR on Auburn Road (West): Superlink ID 24391

1	294.0	0.92	11.2	B
2	294.0	0.92	11.2	B
3	295.0	0.94	11.4	B
4	293.0	0.92	11.3	B
5	293.0	0.92	11.3	B
6	292.0	0.93	11.5	B
7	295.0	0.96	11.7	B
8	291.0	0.93	11.6	B
9	292.0	0.88	10.9	B
10	291.0	0.93	11.5	B
Average:	293.0	0.93	11.4	B

SWB LT on Girdled Road: Superlink ID 24382

1	379.0	0.23	2.2	A
2	383.0	0.20	1.8	A
3	382.0	0.20	1.9	A
4	377.0	0.19	1.8	A
5	380.0	0.24	2.2	A
6	378.0	0.19	1.8	A
7	382.0	0.20	1.9	A
8	377.0	0.17	1.6	A
9	380.0	0.19	1.8	A
10	374.0	0.22	2.2	A
Average:	379.2	0.20	1.9	A

GIRDLED ROAD & CRILE ROAD -- UNSIGNALIZED**NODE: 10**

Run	Number of Vehicles	Total Control Delay (hr)	Avg Control Delay (sec/veh)	Level of Service
NEB L on Girdled Road: Superlink ID 24390				
1	97.0	0.26	9.7	A
2	97.0	0.21	7.9	A
3	97.0	0.21	7.9	A
4	96.0	0.20	7.6	A
5	95.0	0.23	8.8	A
6	98.0	0.23	8.6	A
7	98.0	0.21	7.9	A
8	96.0	0.24	9.0	A
9	94.0	0.22	8.3	A
10	99.0	0.23	8.5	A
Average:	96.7	0.22	8.4	A
NEB T on Girdled Road: Superlink ID 24390				
1	325.0	0.00	0.0	A
2	327.0	0.00	0.0	A
3	330.0	0.00	0.0	A
4	325.0	0.00	0.0	A
5	326.0	0.00	0.0	A
6	325.0	0.00	0.0	A
7	325.0	0.00	0.0	A
8	325.0	0.00	0.0	A
9	328.0	0.00	0.0	A
10	326.0	0.00	0.0	A
Average:	326.2	0.00	0.0	A
SB LR on Crile Road: Superlink ID 24389				
1	214.0	5.49	92.4	F
2	217.0	3.38	56.1	F
3	215.0	3.06	51.2	F
4	216.0	3.20	53.4	F
5	221.0	3.53	57.5	F
6	213.0	3.08	52.0	F
7	218.0	2.38	39.3	E
8	216.0	2.47	41.2	E
9	214.0	3.52	59.2	F
10	216.0	3.02	50.4	F
Average:	216.0	3.31	55.3	F
SWB T on Girdled Road: Superlink ID 24367				
1	61.0	0.02	1.2	A
2	60.0	0.03	1.9	A
3	61.0	0.02	0.9	A

GIRDLED ROAD & CRILE ROAD -- UNSIGNALIZED

NODE: 10

Run	Number of Vehicles	Total Control Delay (hr)	Avg Control Delay (sec/veh)	Level of Service
4	60.0	0.01	0.7	A
5	61.0	0.02	1.4	A
6	61.0	0.01	0.8	A
7	63.0	0.02	1.0	A
8	61.0	0.01	0.8	A
9	61.0	0.01	0.8	A
10	60.0	0.02	1.2	A
Average:	60.9	0.02	1.1	A

SWB TR on Girdled Road: Superlink ID 24367

1	287.0	0.22	2.7	A
2	290.0	0.16	2.0	A
3	290.0	0.09	1.1	A
4	286.0	0.10	1.2	A
5	285.0	0.12	1.6	A
6	288.0	0.11	1.4	A
7	286.0	0.10	1.3	A
8	289.0	0.14	1.7	A
9	286.0	0.06	0.7	A
10	284.0	0.11	1.4	A
Average:	287.1	0.12	1.5	A

STATE ROUTE 44 & GIRDLED ROAD -- SIGNALIZED

NODE: 17673

Run	Number of Vehicles	Total Control Delay (hr)	Avg Control Delay (sec/veh)	Level of Service
NB L on State Route 44: Superlink ID 24388				
1	22.0	0.17	27.2	C
2	24.0	0.20	29.6	C
3	24.0	0.22	32.8	C
4	22.0	0.16	26.4	C
5	23.0	0.19	30.1	C
6	22.0	0.20	32.5	C
7	24.0	0.20	29.9	C
8	22.0	0.19	31.3	C
9	23.0	0.19	30.3	C
10	22.0	0.21	34.8	C
Average:	22.8	0.19	30.5	C

NB T on State Route 44: Superlink ID 24388

1	435.0	3.14	26.0	C
2	410.0	3.08	27.0	C
3	403.0	2.95	26.3	C
4	431.0	3.19	26.6	C
5	412.0	3.13	27.3	C

STATE ROUTE 44 & GIRDLED ROAD -- SIGNALIZED

NODE: 17673

Run	Number of Vehicles	Total Control Delay (hr)	Avg Control Delay (sec/veh)	Level of Service
6	407.0	3.21	28.4	C
7	416.0	3.17	27.5	C
8	410.0	3.14	27.5	C
9	423.0	3.23	27.5	C
10	422.0	3.18	27.2	C
Average:	416.9	3.14	27.1	C

NB TR on State Route 44: Superlink ID 24388

1	429.0	3.26	27.3	C
2	445.0	3.25	26.3	C
3	448.0	3.07	24.7	C
4	430.0	3.25	27.3	C
5	457.0	3.28	25.8	C
6	445.0	3.22	26.0	C
7	440.0	3.07	25.2	C
8	432.0	3.25	27.1	C
9	435.0	3.39	28.0	C
10	444.0	3.32	26.9	C
Average:	440.5	3.24	26.5	C

NEB L on Girdled Road: Superlink ID 24387

1	119.0	1.10	33.2	C
2	120.0	0.95	28.6	C
3	120.0	1.04	31.1	C
4	117.0	1.00	30.9	C
5	120.0	0.90	27.0	C
6	117.0	0.91	28.0	C
7	118.0	0.93	28.5	C
8	121.0	0.94	28.0	C
9	120.0	1.00	29.9	C
10	120.0	0.98	29.4	C
Average:	119.2	0.98	29.5	C

NEB TR on Girdled Road: Superlink ID 24387

1	196.0	2.05	37.6	D
2	199.0	1.93	34.9	C
3	200.0	1.89	34.1	C
4	196.0	1.93	35.4	D
5	193.0	1.83	34.1	C
6	198.0	2.03	37.0	D
7	202.0	1.89	33.7	C
8	197.0	1.90	34.8	C
9	195.0	1.91	35.3	D

STATE ROUTE 44 & GIRDLED ROAD -- SIGNALIZED

NODE: 17673

Run	Number of Vehicles	Total Control Delay (hr)	Avg Control Delay (sec/veh)	Level of Service
10	195.0	1.88	34.7	C
Average:	197.1	1.92	35.2	D

SB L on State Route 44: Superlink ID 24374

1	183.0	1.38	27.2	C
2	183.0	1.59	31.2	C
3	186.0	1.47	28.5	C
4	182.0	1.45	28.8	C
5	187.0	1.45	28.0	C
6	185.0	1.50	29.2	C
7	184.0	1.43	28.1	C
8	186.0	1.50	29.1	C
9	185.0	1.82	35.4	D
10	187.0	1.45	28.0	C
Average:	184.8	1.50	29.4	C

SB T on State Route 44: Superlink ID 24374

1	474.0	2.51	19.0	B
2	473.0	2.51	19.1	B
3	472.0	2.44	18.6	B
4	492.0	2.32	17.0	B
5	489.0	2.45	18.0	B
6	479.0	2.58	19.4	B
7	478.0	2.42	18.3	B
8	463.0	2.49	19.4	B
9	470.0	2.72	20.9	C
10	483.0	2.48	18.5	B
Average:	477.3	2.49	18.8	B

SB TR on State Route 44: Superlink ID 24374

1	388.0	1.65	15.3	B
2	382.0	1.93	18.2	B
3	383.0	1.89	17.8	B
4	361.0	1.80	18.0	B
5	379.0	1.95	18.6	B
6	372.0	1.92	18.6	B
7	376.0	1.79	17.1	B
8	382.0	2.01	18.9	B
9	391.0	2.11	19.4	B
10	381.0	1.82	17.2	B
Average:	379.5	1.89	17.9	B

SWB L on Girdled Road: Superlink ID 24390

STATE ROUTE 44 & GIRDLED ROAD -- SIGNALIZED

NODE: 17673

Run	Number of Vehicles	Total Control Delay (hr)	Avg Control Delay (sec/veh)	Level of Service
1	87.0	0.56	23.1	C
2	86.0	0.55	23.0	C
3	86.0	0.63	26.4	C
4	87.0	0.52	21.7	C
5	86.0	0.49	20.4	C
6	87.0	0.51	20.9	C
7	89.0	0.63	25.5	C
8	87.0	0.56	23.2	C
9	87.0	0.61	25.0	C
10	87.0	0.60	24.9	C
Average:	86.9	0.57	23.4	C

SWB TR on Girdled Road: Superlink ID 24390

1	242.0	1.94	28.8	C
2	243.0	2.00	29.7	C
3	245.0	2.02	29.7	C
4	237.0	2.04	31.0	C
5	236.0	1.91	29.1	C
6	244.0	1.97	29.1	C
7	239.0	1.94	29.2	C
8	241.0	1.95	29.2	C
9	236.0	1.86	28.4	C
10	230.0	1.86	29.2	C
Average:	239.3	1.95	29.3	C

Project: Option B - Option A + Auburn Separation
 Scenario: PM Peak
 Run(s): Batch (10 runs)
 Simulated: Various
 Time: 17:00:00 - 18:00:00
 Interval: Summary
 Selection: --

Intersection Level of Service by Lane Group - Total Control Delay

GIRDLED ROAD & AUBURN ROAD (EAST)

NODE: 17671

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NEB LT	Girdled Road	24382	0.2	0.0	0.2	0.2	10
SEB LR	Auburn Road (East)	24383	0.8	0.1	0.7	0.9	10
SWB TR	Girdled Road	24387	0.0	0.0	0.0	0.0	10

GIRDLED ROAD & AUBURN ROAD (WEST)

NODE: 7

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NEB TR	Girdled Road	24392	0.0	0.0	0.0	0.0	10
NWB LR	Auburn Road (West)	24391	0.9	0.0	0.9	1.0	10
SWB LT	Girdled Road	24382	0.2	0.0	0.2	0.2	10

GIRDLED ROAD & CRILE ROAD

NODE: 10

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NEB L	Girdled Road	24390	0.2	0.0	0.2	0.3	10
NEB T	Girdled Road	24390	0.0	0.0	0.0	0.0	10
SB LR	Crile Road	24389	3.3	0.9	2.4	5.5	10
SWB T	Girdled Road	24367	0.0	0.0	0.0	0.0	10
SWB TR	Girdled Road	24367	0.1	0.0	0.1	0.2	10

STATE ROUTE 44 & GIRDLED ROAD

NODE: 17673

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NB L	State Route 44	24388	0.2	0.0	0.2	0.2	10
NB T	State Route 44	24388	3.1	0.1	3.0	3.2	10
NB TR	State Route 44	24388	3.2	0.1	3.1	3.4	10
NEB L	Girdled Road	24387	1.0	0.1	0.9	1.1	10
NEB TR	Girdled Road	24387	1.9	0.1	1.8	2.1	10
SB L	State Route 44	24374	1.5	0.1	1.4	1.8	10
SB T	State Route 44	24374	2.5	0.1	2.3	2.7	10
SB TR	State Route 44	24374	1.9	0.1	1.7	2.1	10
SWB L	Girdled Road	24390	0.6	0.1	0.5	0.6	10
SWB TR	Girdled Road	24390	1.9	0.1	1.9	2.0	10

Intersection Level of Service by Lane Group

Project: Option B - Option A + Auburn Separation
 Scenario: PM Peak
 Run(s): Batch (10 runs)
 Simulated: Various
 Time: 17:00:00 - 18:00:00
 Interval: Summary
 Selection: --

Intersection Level of Service by Lane Group - Avg Control Delay

GIRDLED ROAD & AUBURN ROAD (EAST)

NODE: 17671

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NEB LT	Girdled Road	24382	1.8	0.2	1.6	2.0	10
SEB LR	Auburn Road (East)	24383	12.3	1.1	10.7	13.7	10
SWB TR	Girdled Road	24387	0.2	0.0	0.1	0.2	10

GIRDLED ROAD & AUBURN ROAD (WEST)

NODE: 7

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NEB TR	Girdled Road	24392	0.2	0.1	0.1	0.3	10
NWB LR	Auburn Road (West)	24391	11.4	0.2	10.9	11.7	10
SWB LT	Girdled Road	24382	1.9	0.2	1.6	2.2	10

GIRDLED ROAD & CRILE ROAD

NODE: 10

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NEB L	Girdled Road	24390	8.4	0.6	7.6	9.7	10
NEB T	Girdled Road	24390	0.0	0.0	0.0	0.0	10
SB LR	Crile Road	24389	55.3	14.6	39.3	92.4	10
SWB T	Girdled Road	24367	1.1	0.4	0.7	1.9	10
SWB TR	Girdled Road	24367	1.5	0.5	0.7	2.7	10

STATE ROUTE 44 & GIRDLED ROAD

NODE: 17673

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NB L	State Route 44	24388	30.5	2.5	26.4	34.8	10
NB T	State Route 44	24388	27.1	0.7	26.0	28.4	10
NB TR	State Route 44	24388	26.5	1.0	24.7	28.0	10
NEB L	Girdled Road	24387	29.5	1.9	27.0	33.2	10
NEB TR	Girdled Road	24387	35.2	1.3	33.7	37.6	10
SB L	State Route 44	24374	29.4	2.4	27.2	35.4	10
SB T	State Route 44	24374	18.8	1.0	17.0	20.9	10
SB TR	State Route 44	24374	17.9	1.2	15.3	19.4	10
SWB L	Girdled Road	24390	23.4	2.0	20.4	26.4	10
SWB TR	Girdled Road	24390	29.3	0.7	28.4	31.0	10

Project: Option B - Option A + Auburn Separation
 Scenario: PM Peak
 Run(s): Batch (10 runs)
 Simulated: Various
 Time: 17:00:00 - 18:00:00
 Interval: Summary
 Selection: --

Intersection Level of Service by Approach - Overview

GIRDLED ROAD & AUBURN ROAD (EAST) -- UNSIGNALIZED

NODE: 17671

Run	Number of Vehicles	Total Control Delay (hr)	Avg Control Delay (sec/veh)	Level of Service
NEB on Girdled Road: Superlink ID 24382				
1	420.0	0.21	1.8	A
2	426.0	0.19	1.6	A
3	428.0	0.21	1.8	A
4	422.0	0.19	1.7	A
5	425.0	0.19	1.6	A
6	422.0	0.24	2.0	A
7	424.0	0.20	1.7	A
8	421.0	0.23	2.0	A
9	422.0	0.20	1.7	A
10	423.0	0.24	2.0	A
Average:	423.3	0.21	1.8	A
SEB on Auburn Road (East): Superlink ID 24383				
1	230.0	0.88	13.7	B
2	228.0	0.78	12.3	B
3	228.0	0.77	12.2	B
4	225.0	0.69	11.0	B
5	228.0	0.70	11.1	B
6	226.0	0.83	13.3	B
7	231.0	0.87	13.5	B
8	232.0	0.77	12.0	B
9	228.0	0.67	10.7	B
10	230.0	0.82	12.9	B
Average:	228.6	0.78	12.3	B
SWB on Girdled Road: Superlink ID 24387				
1	239.0	0.01	0.2	A
2	242.0	0.01	0.2	A
3	244.0	0.01	0.2	A
4	237.0	0.01	0.2	A
5	239.0	0.01	0.2	A
6	241.0	0.01	0.2	A
7	238.0	0.02	0.2	A
8	238.0	0.01	0.1	A
9	239.0	0.01	0.2	A

GIRDLED ROAD & AUBURN ROAD (EAST) -- UNSIGNALIZED

NODE: 17671

Run	Number of Vehicles	Total Control Delay (hr)	Avg Control Delay (sec/veh)	Level of Service
10	231.0	0.01	0.1	A
Average:	238.8	0.01	0.2	A

GIRDLED ROAD & AUBURN ROAD (WEST) -- UNSIGNALIZED

NODE: 7

Run	Number of Vehicles	Total Control Delay (hr)	Avg Control Delay (sec/veh)	Level of Service
NEB on Girdled Road: Superlink ID 24392				
1	175.0	0.01	0.2	A
2	174.0	0.01	0.2	A
3	178.0	0.01	0.1	A
4	174.0	0.01	0.1	A
5	177.0	0.01	0.2	A
6	173.0	0.01	0.1	A
7	173.0	0.01	0.2	A
8	173.0	0.02	0.3	A
9	173.0	0.01	0.1	A
10	175.0	0.01	0.2	A
Average:	174.5	0.01	0.2	A

NWB on Auburn Road (West): Superlink ID 24391

1	294.0	0.92	11.2	B
2	294.0	0.92	11.2	B
3	295.0	0.94	11.4	B
4	293.0	0.92	11.3	B
5	293.0	0.92	11.3	B
6	292.0	0.93	11.5	B
7	295.0	0.96	11.7	B
8	291.0	0.93	11.6	B
9	292.0	0.88	10.9	B
10	291.0	0.93	11.5	B
Average:	293.0	0.93	11.4	B

SWB on Girdled Road: Superlink ID 24382

1	379.0	0.23	2.2	A
2	383.0	0.20	1.8	A
3	382.0	0.20	1.9	A
4	377.0	0.19	1.8	A
5	380.0	0.24	2.2	A
6	378.0	0.19	1.8	A
7	382.0	0.20	1.9	A
8	377.0	0.17	1.6	A
9	380.0	0.19	1.8	A

GIRDLED ROAD & AUBURN ROAD (WEST) -- UNSIGNALIZED

NODE: 7

Run	Number of Vehicles	Total Control Delay (hr)	Avg Control Delay (sec/veh)	Level of Service
10	374.0	0.22	2.2	A
Average:	379.2	0.20	1.9	A

GIRDLED ROAD & CRILE ROAD -- UNSIGNALIZED

NODE: 10

Run	Number of Vehicles	Total Control Delay (hr)	Avg Control Delay (sec/veh)	Level of Service
NEB on Girdled Road: Superlink ID 24390				
1	422.0	0.26	2.2	A
2	424.0	0.21	1.8	A
3	427.0	0.21	1.8	A
4	421.0	0.20	1.7	A
5	421.0	0.23	2.0	A
6	423.0	0.23	2.0	A
7	423.0	0.21	1.8	A
8	421.0	0.24	2.0	A
9	422.0	0.22	1.9	A
10	425.0	0.23	2.0	A
Average:	422.9	0.22	1.9	A

SB on Crile Road: Superlink ID 24389

1	214.0	5.49	92.4	F
2	217.0	3.38	56.1	F
3	215.0	3.06	51.2	F
4	216.0	3.20	53.4	F
5	221.0	3.53	57.5	F
6	213.0	3.08	52.0	F
7	218.0	2.38	39.3	E
8	216.0	2.47	41.2	E
9	214.0	3.52	59.2	F
10	216.0	3.02	50.4	F
Average:	216.0	3.31	55.3	F

SWB on Girdled Road: Superlink ID 24367

1	348.0	0.24	2.5	A
2	350.0	0.19	2.0	A
3	351.0	0.10	1.1	A
4	346.0	0.11	1.1	A
5	346.0	0.15	1.5	A
6	349.0	0.13	1.3	A
7	349.0	0.12	1.2	A
8	350.0	0.15	1.6	A
9	347.0	0.07	0.7	A

GIRDLED ROAD & CRILE ROAD -- UNSIGNALIZED

NODE: 10

Run	Number of Vehicles	Total Control Delay (hr)	Avg Control Delay (sec/veh)	Level of Service
10	344.0	0.13	1.3	A
Average:	348.0	0.14	1.4	A

STATE ROUTE 44 & GIRDLED ROAD -- SIGNALIZED

NODE: 17673

Run	Number of Vehicles	Total Control Delay (hr)	Avg Control Delay (sec/veh)	Level of Service
NB on State Route 44: Superlink ID 24388				
1	886.0	6.56	26.7	C
2	879.0	6.52	26.7	C
3	875.0	6.23	25.6	C
4	883.0	6.60	26.9	C
5	892.0	6.60	26.6	C
6	874.0	6.62	27.3	C
7	880.0	6.45	26.4	C
8	864.0	6.58	27.4	C
9	881.0	6.81	27.8	C
10	888.0	6.72	27.2	C
Average:	880.2	6.57	26.9	C

NEB on Girdled Road: Superlink ID 24387

1	315.0	3.14	35.9	D
2	319.0	2.88	32.5	C
3	320.0	2.93	32.9	C
4	313.0	2.93	33.7	C
5	313.0	2.73	31.4	C
6	315.0	2.94	33.6	C
7	320.0	2.82	31.8	C
8	318.0	2.85	32.2	C
9	315.0	2.91	33.3	C
10	315.0	2.86	32.7	C
Average:	316.3	2.90	33.0	C

SB on State Route 44: Superlink ID 24374

1	1,045.0	5.53	19.1	B
2	1,038.0	6.03	20.9	C
3	1,041.0	5.81	20.1	C
4	1,035.0	5.58	19.4	B
5	1,055.0	5.85	20.0	B
6	1,036.0	6.00	20.9	C
7	1,038.0	5.65	19.6	B
8	1,031.0	6.00	21.0	C
9	1,046.0	6.65	22.9	C

STATE ROUTE 44 & GIRDLED ROAD -- SIGNALIZED

NODE: 17673

Run	Number of Vehicles	Total Control Delay (hr)	Avg Control Delay (sec/veh)	Level of Service
10	1,051.0	5.75	19.7	B
Average:	1,041.6	5.89	20.4	C

SWB on Girdled Road: Superlink ID 24390

1	329.0	2.50	27.3	C
2	329.0	2.55	27.9	C
3	331.0	2.65	28.8	C
4	324.0	2.57	28.5	C
5	322.0	2.39	26.8	C
6	331.0	2.48	27.0	C
7	328.0	2.57	28.2	C
8	328.0	2.51	27.6	C
9	323.0	2.47	27.5	C
10	317.0	2.47	28.0	C
Average:	326.2	2.52	27.8	C

Project: Option B - Option A + Auburn Separation
 Scenario: PM Peak
 Run(s): Batch (10 runs)
 Simulated: Various
 Time: 17:00:00 - 18:00:00
 Interval: Summary
 Selection: --

Intersection Level of Service by Approach - Total Control Delay

GIRDLED ROAD & AUBURN ROAD (EAST)

NODE: 17671

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NE	Girdled Road	24382	0.2	0.0	0.2	0.2	10
SE	Auburn Road (East)	24383	0.8	0.1	0.7	0.9	10
SW	Girdled Road	24387	0.0	0.0	0.0	0.0	10

GIRDLED ROAD & AUBURN ROAD (WEST)

NODE: 7

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NE	Girdled Road	24392	0.0	0.0	0.0	0.0	10
NW	Auburn Road (West)	24391	0.9	0.0	0.9	1.0	10
SW	Girdled Road	24382	0.2	0.0	0.2	0.2	10

GIRDLED ROAD & CRILE ROAD

NODE: 10

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NE	Girdled Road	24390	0.2	0.0	0.2	0.3	10
S	Crile Road	24389	3.3	0.9	2.4	5.5	10
SW	Girdled Road	24367	0.1	0.0	0.1	0.2	10

STATE ROUTE 44 & GIRDLED ROAD

NODE: 17673

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
N	State Route 44	24388	6.6	0.2	6.2	6.8	10
NE	Girdled Road	24387	2.9	0.1	2.7	3.1	10
S	State Route 44	24374	5.9	0.3	5.5	6.7	10
SW	Girdled Road	24390	2.5	0.1	2.4	2.7	10

Project: Option B - Option A + Auburn Separation
 Scenario: PM Peak
 Run(s): Batch (10 runs)
 Simulated: Various
 Time: 17:00:00 - 18:00:00
 Interval: Summary
 Selection: --

Intersection Level of Service by Approach - Avg Control Delay

GIRDLED ROAD & AUBURN ROAD (EAST)

NODE: 17671

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NE	Girdled Road	24382	1.8	0.2	1.6	2.0	10
SE	Auburn Road (East)	24383	12.3	1.1	10.7	13.7	10
SW	Girdled Road	24387	0.2	0.0	0.1	0.2	10

GIRDLED ROAD & AUBURN ROAD (WEST)

NODE: 7

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NE	Girdled Road	24392	0.2	0.1	0.1	0.3	10
NW	Auburn Road (West)	24391	11.4	0.2	10.9	11.7	10
SW	Girdled Road	24382	1.9	0.2	1.6	2.2	10

GIRDLED ROAD & CRILE ROAD

NODE: 10

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NE	Girdled Road	24390	1.9	0.1	1.7	2.2	10
S	Crile Road	24389	55.3	14.6	39.3	92.4	10
SW	Girdled Road	24367	1.4	0.5	0.7	2.5	10

STATE ROUTE 44 & GIRDLED ROAD

NODE: 17673

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
N	State Route 44	24388	26.9	0.6	25.6	27.8	10
NE	Girdled Road	24387	33.0	1.3	31.4	35.9	10
S	State Route 44	24374	20.4	1.1	19.1	22.9	10
SW	Girdled Road	24390	27.8	0.6	26.8	28.8	10

Project: Option B - Option A + Auburn Separation
 Scenario: PM Peak
 Run(s): Batch (10 runs)
 Simulated: Various
 Time: 17:00:00 - 18:00:00
 Interval: Summary
 Selection: --

Intersection Level of Service - Overview

GIRDLED ROAD & AUBURN ROAD (EAST) -- UNSIGNALIZED

NODE: 17671

Run	Number of Vehicles	Total Control Delay (hr)	Avg Control Delay (sec/veh)	Level of Service
1	889.0	1.10	4.4	A
2	896.0	0.98	4.0	A
3	900.0	1.00	4.0	A
4	884.0	0.89	3.6	A
5	892.0	0.90	3.6	A
6	889.0	1.08	4.4	A
7	893.0	1.08	4.4	A
8	891.0	1.01	4.1	A
9	889.0	0.89	3.6	A
10	884.0	1.07	4.4	A
Average:	890.7	1.00	4.1	A

GIRDLED ROAD & AUBURN ROAD (WEST) -- UNSIGNALIZED

NODE: 7

Run	Number of Vehicles	Total Control Delay (hr)	Avg Control Delay (sec/veh)	Level of Service
1	848.0	1.16	4.9	A
2	851.0	1.12	4.7	A
3	855.0	1.14	4.8	A
4	844.0	1.12	4.8	A
5	850.0	1.16	4.9	A
6	843.0	1.12	4.8	A
7	850.0	1.17	5.0	A
8	841.0	1.12	4.8	A
9	845.0	1.08	4.6	A
10	840.0	1.16	5.0	A
Average:	846.7	1.14	4.8	A

GIRDLED ROAD & CRILE ROAD -- UNSIGNALIZED

NODE: 10

Run	Number of Vehicles	Total Control Delay (hr)	Avg Control Delay (sec/veh)	Level of Service
1	984.0	5.99	21.9	C
2	991.0	3.78	13.7	B
3	993.0	3.37	12.2	B
4	983.0	3.52	12.9	B
5	988.0	3.91	14.2	B
6	985.0	3.44	12.6	B
7	990.0	2.71	9.9	A
8	987.0	2.86	10.4	B
9	983.0	3.81	13.9	B

Intersection Level of Service

10	985.0	3.38	12.4	B
Average:	986.9	3.68	13.4	B

STATE ROUTE 44 & GIRDLED ROAD -- SIGNALIZED

NODE: 17673

Run	Number of Vehicles	Total Control Delay (hr)	Avg Control Delay (sec/veh)	Level of Service
1	2,575.0	17.74	24.8	C
2	2,565.0	17.99	25.2	C
3	2,567.0	17.62	24.7	C
4	2,555.0	17.68	24.9	C
5	2,582.0	17.57	24.5	C
6	2,556.0	18.05	25.4	C
7	2,566.0	17.49	24.5	C
8	2,541.0	17.94	25.4	C
9	2,565.0	18.84	26.4	C
10	2,571.0	17.80	24.9	C
Average:	2,564.3	17.87	25.1	C

Project: Option B - Option A + Auburn Separation
 Scenario: PM Peak
 Run(s): Batch (10 runs)
 Simulated: Various
 Time: 17:00:00 - 18:00:00
 Interval: Summary
 Selection: --

Intersection Level of Service - Total Control Delay

Node ID	Intersection	Control Type	Average	Std Dev	Minimum	Maximum	# Samples
17671	Girdled Road & Auburn Road (East)	Stop	1.0	0.1	0.9	1.1	10
7	Girdled Road & Auburn Road (West)	Stop	1.1	0.0	1.1	1.2	10
10	Girdled Road & Crile Road	Stop	3.7	0.9	2.7	6.0	10
17673	State Route 44 & Girdled Road	Actuated	17.9	0.4	17.5	18.8	10

Project: Option B - Option A + Auburn Separation
 Scenario: PM Peak
 Run(s): Batch (10 runs)
 Simulated: Various
 Time: 17:00:00 - 18:00:00
 Interval: Summary
 Selection: --

Intersection Level of Service - Avg Control Delay

Node ID	Intersection	Control Type	Average	Std Dev	Minimum	Maximum	# Samples
17671	Girdled Road & Auburn Road (East)	Stop	4.1	0.4	3.6	4.4	10
7	Girdled Road & Auburn Road (West)	Stop	4.8	0.1	4.6	5.0	10
10	Girdled Road & Crile Road	Stop	13.4	3.3	9.9	21.9	10
17673	State Route 44 & Girdled Road	Actuated	25.1	0.6	24.5	26.4	10

DRAFT

'BUILD OPTION C'

Project: Option C - Option A + Crile Relocation
 Scenario: AM Peak
 Run(s): Batch (10 runs)
 Simulated: Various
 Time: 08:00:00 - 09:00:00
 Interval: Summary
 Selection: --

Intersection Level of Service by Lane Group - Overview

GIRDLED ROAD & AUBURN ROAD -- UNSIGNALIZED

NODE: 17671

Run	Number of Vehicles	Total Control Delay (hr)	Avg Control Delay (sec/veh)	Level of Service
NB LTR on Auburn Road: Superlink ID 24384				
1	289.0	3.69	45.9	E
2	287.0	5.34	67.0	F
3	298.0	3.25	39.3	E
4	292.0	2.83	35.0	D
5	293.0	3.45	42.4	E
6	293.0	3.47	42.7	E
7	288.0	4.57	57.1	F
8	293.0	5.59	68.7	F
9	289.0	3.94	49.1	E
10	295.0	4.16	50.7	F
Average:	291.7	4.03	49.8	E

NEB LTR on Girdled Road: Superlink ID 24382

1	130.0	0.81	22.4	C
2	131.0	0.99	27.3	D
3	131.0	0.96	26.4	D
4	132.0	0.86	23.5	C
5	131.0	0.85	23.3	C
6	131.0	0.80	21.9	C
7	131.0	0.98	26.8	D
8	132.0	0.96	26.2	D
9	131.0	0.92	25.3	D
10	130.0	0.92	25.3	D
Average:	131.0	0.91	24.8	C

SB LTR on Auburn Road: Superlink ID 24383

1	139.0	0.81	21.0	C
2	141.0	0.78	19.9	C
3	142.0	0.74	18.7	C
4	141.0	0.78	20.0	C
5	139.0	0.73	18.9	C
6	141.0	0.68	17.3	C
7	142.0	0.77	19.4	C
8	141.0	0.74	18.9	C
9	142.0	0.79	20.0	C
10	139.0	0.76	19.7	C
Average:	140.7	0.76	19.4	C

GIRDLED ROAD & AUBURN ROAD -- UNSIGNALIZED

NODE: 17671

Run	Number of Vehicles	Total Control Delay (hr)	Avg Control Delay (sec/veh)	Level of Service
SWB LTR on Girdled Road: Superlink ID 24387				
1	277.0	5.85	76.0	F
2	262.0	5.85	80.4	F
3	259.0	6.12	85.1	F
4	285.0	5.93	74.9	F
5	274.0	6.10	80.1	F
6	268.0	6.12	82.2	F
7	269.0	6.31	84.5	F
8	259.0	5.95	82.8	F
9	261.0	6.05	83.5	F
10	259.0	6.25	86.8	F
Average:	267.3	6.05	81.6	F

GIRDLED ROAD & CRILE ROAD -- UNSIGNALIZED

NODE: 7

Run	Number of Vehicles	Total Control Delay (hr)	Avg Control Delay (sec/veh)	Level of Service
NEB L on Girdled Road: Superlink ID 24390				
1	43.0	0.10	8.0	A
2	42.0	0.10	8.4	A
3	43.0	0.08	7.0	A
4	43.0	0.10	8.6	A
5	41.0	0.10	8.8	A
6	41.0	0.09	7.6	A
7	43.0	0.09	7.5	A
8	43.0	0.09	7.6	A
9	46.0	0.12	9.1	A
10	40.0	0.08	7.6	A
Average:	42.5	0.10	8.0	A

NEB T on Girdled Road: Superlink ID 24390

1	150.0	0.00	0.0	A
2	150.0	0.00	0.0	A
3	154.0	0.00	0.1	A
4	151.0	0.00	0.0	A
5	150.0	0.00	0.1	A
6	149.0	0.00	0.0	A
7	152.0	0.00	0.0	A
8	151.0	0.00	0.1	A
9	154.0	0.00	0.1	A
10	153.0	0.00	0.0	A
Average:	151.4	0.00	0.0	A

SEB LR on Crile Road: Superlink ID 24389

GIRDLED ROAD & CRILE ROAD -- UNSIGNALIZED

NODE: 7

Run	Number of Vehicles	Total Control Delay (hr)	Avg Control Delay (sec/veh)	Level of Service
1	77.0	0.97	45.2	E
2	77.0	1.50	69.9	F
3	77.0	1.16	54.4	F
4	74.0	1.00	48.6	E
5	74.0	0.71	34.5	D
6	76.0	0.88	41.5	E
7	76.0	1.00	47.2	E
8	77.0	1.17	54.9	F
9	75.0	1.00	47.8	E
10	78.0	1.73	79.9	F
Average:	76.1	1.11	52.4	F

SWB TR on Girdled Road: Superlink ID 24367

1	253.0	0.00	0.0	A
2	230.0	0.00	0.0	A
3	209.0	0.00	0.0	A
4	281.0	0.00	0.0	A
5	260.0	0.00	0.0	A
6	236.0	0.00	0.0	A
7	249.0	0.00	0.0	A
8	210.0	0.00	0.0	A
9	214.0	0.00	0.0	A
10	203.0	0.00	0.0	A
Average:	234.5	0.00	0.0	A

STATE ROUTE 44 & GIRDLED ROAD -- SIGNALIZED

NODE: 17673

Run	Number of Vehicles	Total Control Delay (hr)	Avg Control Delay (sec/veh)	Level of Service
NB L on State Route 44: Superlink ID 24388				
1	41.0	1.59	140.0	F
2	41.0	1.72	151.4	F
3	40.0	1.26	113.8	F
4	43.0	1.90	158.8	F
5	42.0	1.03	88.0	F
6	46.0	2.50	195.6	F
7	40.0	2.34	210.2	F
8	40.0	0.92	83.1	F
9	44.0	1.22	99.8	F
10	42.0	3.01	258.4	F
Average:	41.9	1.75	149.9	F

NB T on State Route 44: Superlink ID 24388

1	358.0	2.63	26.5	C
2	343.0	2.73	28.7	C

STATE ROUTE 44 & GIRDLED ROAD -- SIGNALIZED

NODE: 17673

Run	Number of Vehicles	Total Control Delay (hr)	Avg Control Delay (sec/veh)	Level of Service
3	344.0	2.58	27.0	C
4	342.0	2.69	28.3	C
5	344.0	2.82	29.6	C
6	335.0	2.53	27.1	C
7	350.0	2.70	27.8	C
8	349.0	2.91	30.1	C
9	352.0	2.78	28.4	C
10	349.0	2.56	26.5	C
Average:	346.6	2.69	28.0	C

NB TR on State Route 44: Superlink ID 24388

1	362.0	2.77	27.5	C
2	379.0	2.79	26.5	C
3	368.0	2.66	26.0	C
4	385.0	2.83	26.5	C
5	383.0	2.79	26.2	C
6	378.0	2.78	26.5	C
7	369.0	2.60	25.4	C
8	374.0	2.81	27.1	C
9	380.0	2.99	28.4	C
10	373.0	2.71	26.1	C
Average:	375.1	2.77	26.6	C

NEB L on Girdled Road: Superlink ID 24387

1	119.0	1.07	32.2	C
2	117.0	1.02	31.3	C
3	121.0	1.01	30.0	C
4	121.0	1.04	30.9	C
5	121.0	1.23	36.5	D
6	120.0	1.13	33.8	C
7	123.0	1.32	38.6	D
8	119.0	0.97	29.3	C
9	117.0	0.86	26.4	C
10	120.0	1.10	33.0	C
Average:	119.8	1.08	32.2	C

NEB TR on Girdled Road: Superlink ID 24387

1	104.0	0.83	28.6	C
2	108.0	0.73	24.2	C
3	112.0	0.87	27.9	C
4	110.0	0.76	24.9	C
5	106.0	0.69	23.4	C
6	107.0	0.66	22.3	C

STATE ROUTE 44 & GIRDLED ROAD -- SIGNALIZED

NODE: 17673

Run	Number of Vehicles	Total Control Delay (hr)	Avg Control Delay (sec/veh)	Level of Service
7	107.0	0.55	18.3	B
8	112.0	0.78	25.1	C
9	109.0	0.77	25.5	C
10	110.0	0.74	24.1	C
Average:	108.5	0.74	24.4	C

SB L on State Route 44: Superlink ID 24374

1	75.0	0.56	26.9	C
2	74.0	0.48	23.2	C
3	74.0	0.46	22.5	C
4	76.0	0.49	23.0	C
5	73.0	0.47	23.2	C
6	75.0	0.42	20.2	C
7	74.0	0.48	23.5	C
8	75.0	0.50	24.2	C
9	76.0	0.43	20.3	C
10	76.0	0.49	23.0	C
Average:	74.8	0.48	23.0	C

SB T on State Route 44: Superlink ID 24374

1	455.0	3.91	30.9	C
2	449.0	3.77	30.2	C
3	432.0	3.67	30.6	C
4	414.0	3.34	29.0	C
5	454.0	3.85	30.5	C
6	422.0	3.73	31.8	C
7	443.0	3.73	30.3	C
8	423.0	3.38	28.7	C
9	447.0	3.75	30.2	C
10	444.0	3.86	31.3	C
Average:	438.3	3.70	30.4	C

SB TR on State Route 44: Superlink ID 24374

1	243.0	2.70	39.9	D
2	238.0	2.70	40.8	D
3	258.0	2.66	37.1	D
4	280.0	2.45	31.4	C
5	249.0	2.98	43.0	D
6	271.0	2.87	38.1	D
7	257.0	2.77	38.8	D
8	278.0	2.74	35.5	D
9	256.0	2.83	39.8	D
10	258.0	2.86	39.9	D

STATE ROUTE 44 & GIRDLED ROAD -- SIGNALIZED

NODE: 17673

Run	Number of Vehicles	Total Control Delay (hr)	Avg Control Delay (sec/veh)	Level of Service
Average:	258.8	2.76	38.4	D

SWB L on Girdled Road: Superlink ID 24390

1	33.0	0.97	106.2	F
2	29.0	0.88	109.7	F
3	28.0	0.98	126.1	F
4	34.0	0.81	85.5	F
5	32.0	0.88	98.5	F
6	31.0	1.01	117.6	F
7	32.0	0.86	96.3	F
8	28.0	0.82	105.5	F
9	27.0	0.83	111.0	F
10	26.0	0.80	110.4	F
Average:	30.0	0.88	106.7	F

SWB TR on Girdled Road: Superlink ID 24390

1	239.0	12.97	195.4	F
2	215.0	12.32	206.3	F
3	200.0	12.47	224.5	F
4	248.0	12.73	184.8	F
5	231.0	12.99	202.5	F
6	214.0	13.15	221.3	F
7	225.0	12.93	206.8	F
8	197.0	12.15	222.1	F
9	199.0	12.91	233.6	F
10	195.0	12.38	228.5	F
Average:	216.3	12.70	212.6	F

Project: Option C - Option A + Crile Relocation
 Scenario: AM Peak
 Run(s): Batch (10 runs)
 Simulated: Various
 Time: 08:00:00 - 09:00:00
 Interval: Summary
 Selection: --

Intersection Level of Service by Lane Group - Total Control Delay

GIRDLED ROAD & AUBURN ROAD

NODE: 17671

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NB LTR	Auburn Road	24384	4.0	0.9	2.8	5.6	10
NEB LTR	Girdled Road	24382	0.9	0.1	0.8	1.0	10
SB LTR	Auburn Road	24383	0.8	0.0	0.7	0.8	10
SWB LTR	Girdled Road	24387	6.1	0.2	5.9	6.3	10

GIRDLED ROAD & CRILE ROAD

NODE: 7

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NEB L	Girdled Road	24390	0.1	0.0	0.1	0.1	10
NEB T	Girdled Road	24390	0.0	0.0	0.0	0.0	10
SEB LR	Crile Road	24389	1.1	0.3	0.7	1.7	10
SWB TR	Girdled Road	24367	0.0	0.0	0.0	0.0	10

STATE ROUTE 44 & GIRDLED ROAD

NODE: 17673

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NB L	State Route 44	24388	1.7	0.7	0.9	3.0	10
NB T	State Route 44	24388	2.7	0.1	2.5	2.9	10
NB TR	State Route 44	24388	2.8	0.1	2.6	3.0	10
NEB L	Girdled Road	24387	1.1	0.1	0.9	1.3	10
NEB TR	Girdled Road	24387	0.7	0.1	0.6	0.9	10
SB L	State Route 44	24374	0.5	0.0	0.4	0.6	10
SB T	State Route 44	24374	3.7	0.2	3.3	3.9	10
SB TR	State Route 44	24374	2.8	0.1	2.5	3.0	10
SWB L	Girdled Road	24390	0.9	0.1	0.8	1.0	10
SWB TR	Girdled Road	24390	12.7	0.3	12.2	13.2	10

Project: Option C - Option A + Crile Relocation
 Scenario: AM Peak
 Run(s): Batch (10 runs)
 Simulated: Various
 Time: 08:00:00 - 09:00:00
 Interval: Summary
 Selection: --

Intersection Level of Service by Lane Group - Avg Control Delay

GIRDLED ROAD & AUBURN ROAD

NODE: 17671

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NB LTR	Auburn Road	24384	49.8	11.3	35.0	68.7	10
NEB LTR	Girdled Road	24382	24.8	1.9	21.9	27.3	10
SB LTR	Auburn Road	24383	19.4	1.0	17.3	21.0	10
SWB LTR	Girdled Road	24387	81.6	3.8	74.9	86.8	10

GIRDLED ROAD & CRILE ROAD

NODE: 7

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NEB L	Girdled Road	24390	8.0	0.7	7.0	9.1	10
NEB T	Girdled Road	24390	0.0	0.1	0.0	0.1	10
SEB LR	Crile Road	24389	52.4	13.4	34.5	79.9	10
SWB TR	Girdled Road	24367	0.0	0.0	0.0	0.0	10

STATE ROUTE 44 & GIRDLED ROAD

NODE: 17673

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NB L	State Route 44	24388	149.9	57.5	83.1	258.4	10
NB T	State Route 44	24388	28.0	1.2	26.5	30.1	10
NB TR	State Route 44	24388	26.6	0.9	25.4	28.4	10
NEB L	Girdled Road	24387	32.2	3.5	26.4	38.6	10
NEB TR	Girdled Road	24387	24.4	2.9	18.3	28.6	10
SB L	State Route 44	24374	23.0	1.9	20.2	26.9	10
SB T	State Route 44	24374	30.4	0.9	28.7	31.8	10
SB TR	State Route 44	24374	38.4	3.2	31.4	43.0	10
SWB L	Girdled Road	24390	106.7	11.4	85.5	126.1	10
SWB TR	Girdled Road	24390	212.6	15.8	184.8	233.6	10

Project: Option C - Option A + Crile Relocation
 Scenario: AM Peak
 Run(s): Batch (10 runs)
 Simulated: Various
 Time: 08:00:00 - 09:00:00
 Interval: Summary
 Selection: --

Intersection Level of Service by Approach - Overview

GIRDLED ROAD & AUBURN ROAD -- UNSIGNALIZED

NODE: 17671

Run	Number of Vehicles	Total Control Delay (hr)	Avg Control Delay (sec/veh)	Level of Service
NB on Auburn Road: Superlink ID 24384				
1	289.0	3.69	45.9	E
2	287.0	5.34	67.0	F
3	298.0	3.25	39.3	E
4	292.0	2.83	35.0	D
5	293.0	3.45	42.4	E
6	293.0	3.47	42.7	E
7	288.0	4.57	57.1	F
8	293.0	5.59	68.7	F
9	289.0	3.94	49.1	E
10	295.0	4.16	50.7	F
Average:	291.7	4.03	49.8	E
NEB on Girdled Road: Superlink ID 24382				
1	130.0	0.81	22.4	C
2	131.0	0.99	27.3	D
3	131.0	0.96	26.4	D
4	132.0	0.86	23.5	C
5	131.0	0.85	23.3	C
6	131.0	0.80	21.9	C
7	131.0	0.98	26.8	D
8	132.0	0.96	26.2	D
9	131.0	0.92	25.3	D
10	130.0	0.92	25.3	D
Average:	131.0	0.91	24.8	C
SB on Auburn Road: Superlink ID 24383				
1	139.0	0.81	21.0	C
2	141.0	0.78	19.9	C
3	142.0	0.74	18.7	C
4	141.0	0.78	20.0	C
5	139.0	0.73	18.9	C
6	141.0	0.68	17.3	C
7	142.0	0.77	19.4	C
8	141.0	0.74	18.9	C
9	142.0	0.79	20.0	C

GIRDLED ROAD & AUBURN ROAD -- UNSIGNALIZED

NODE: 17671

Run	Number of Vehicles	Total Control Delay (hr)	Avg Control Delay (sec/veh)	Level of Service
10	139.0	0.76	19.7	C
Average:	140.7	0.76	19.4	C

SWB on Girdled Road: Superlink ID 24387

1	277.0	5.85	76.0	F
2	262.0	5.85	80.4	F
3	259.0	6.12	85.1	F
4	285.0	5.93	74.9	F
5	274.0	6.10	80.1	F
6	268.0	6.12	82.2	F
7	269.0	6.31	84.5	F
8	259.0	5.95	82.8	F
9	261.0	6.05	83.5	F
10	259.0	6.25	86.8	F
Average:	267.3	6.05	81.6	F

GIRDLED ROAD & CRILE ROAD -- UNSIGNALIZED

NODE: 7

Run	Number of Vehicles	Total Control Delay (hr)	Avg Control Delay (sec/veh)	Level of Service
NEB on Girdled Road: Superlink ID 24390				
1	193.0	0.10	1.8	A
2	192.0	0.10	1.9	A
3	197.0	0.09	1.6	A
4	194.0	0.10	1.9	A
5	191.0	0.10	2.0	A
6	190.0	0.09	1.7	A
7	195.0	0.09	1.7	A
8	194.0	0.10	1.8	A
9	200.0	0.12	2.2	A
10	193.0	0.09	1.6	A
Average:	193.9	0.10	1.8	A

SEB on Crile Road: Superlink ID 24389

1	77.0	0.97	45.2	E
2	77.0	1.50	69.9	F
3	77.0	1.16	54.4	F
4	74.0	1.00	48.6	E
5	74.0	0.71	34.5	D
6	76.0	0.88	41.5	E
7	76.0	1.00	47.2	E
8	77.0	1.17	54.9	F
9	75.0	1.00	47.8	E

GIRDLED ROAD & CRILE ROAD -- UNSIGNALIZED

NODE: 7

Run	Number of Vehicles	Total Control Delay (hr)	Avg Control Delay (sec/veh)	Level of Service
10	78.0	1.73	79.9	F
Average:	76.1	1.11	52.4	F

SWB on Girdled Road: Superlink ID 24367

1	253.0	0.00	0.0	A
2	230.0	0.00	0.0	A
3	209.0	0.00	0.0	A
4	281.0	0.00	0.0	A
5	260.0	0.00	0.0	A
6	236.0	0.00	0.0	A
7	249.0	0.00	0.0	A
8	210.0	0.00	0.0	A
9	214.0	0.00	0.0	A
10	203.0	0.00	0.0	A
Average:	234.5	0.00	0.0	A

STATE ROUTE 44 & GIRDLED ROAD -- SIGNALIZED

NODE: 17673

Run	Number of Vehicles	Total Control Delay (hr)	Avg Control Delay (sec/veh)	Level of Service
NB on State Route 44: Superlink ID 24388				
1	761.0	6.99	33.1	C
2	763.0	7.25	34.2	C
3	752.0	6.51	31.2	C
4	770.0	7.42	34.7	C
5	769.0	6.64	31.1	C
6	759.0	7.81	37.0	D
7	759.0	7.64	36.2	D
8	763.0	6.65	31.4	C
9	776.0	6.99	32.4	C
10	764.0	8.29	39.0	D
Average:	763.6	7.22	34.0	C

NEB on Girdled Road: Superlink ID 24387

1	223.0	1.89	30.5	C
2	225.0	1.74	27.9	C
3	233.0	1.88	29.0	C
4	231.0	1.80	28.0	C
5	227.0	1.92	30.4	C
6	227.0	1.79	28.4	C
7	230.0	1.86	29.2	C
8	231.0	1.75	27.3	C
9	226.0	1.63	26.0	C

STATE ROUTE 44 & GIRDLED ROAD -- SIGNALIZED

NODE: 17673

Run	Number of Vehicles	Total Control Delay (hr)	Avg Control Delay (sec/veh)	Level of Service
10	230.0	1.84	28.8	C
Average:	228.3	1.81	28.6	C

SB on State Route 44: Superlink ID 24374

1	773.0	7.16	33.4	C
2	761.0	6.95	32.9	C
3	764.0	6.80	32.0	C
4	770.0	6.27	29.3	C
5	776.0	7.30	33.9	C
6	768.0	7.02	32.9	C
7	774.0	6.99	32.5	C
8	776.0	6.62	30.7	C
9	779.0	7.01	32.4	C
10	778.0	7.20	33.3	C
Average:	771.9	6.93	32.3	C

SWB on Girdled Road: Superlink ID 24390

1	272.0	13.95	184.6	F
2	244.0	13.20	194.8	F
3	228.0	13.45	212.4	F
4	282.0	13.54	172.8	F
5	263.0	13.87	189.8	F
6	245.0	14.16	208.1	F
7	257.0	13.78	193.1	F
8	225.0	12.97	207.6	F
9	226.0	13.74	218.9	F
10	221.0	13.17	214.6	F
Average:	246.3	13.58	199.7	F

Project: Option C - Option A + Crile Relocation
 Scenario: AM Peak
 Run(s): Batch (10 runs)
 Simulated: Various
 Time: 08:00:00 - 09:00:00
 Interval: Summary
 Selection: --

Intersection Level of Service by Approach - Total Control Delay

GIRDLED ROAD & AUBURN ROAD

NODE: 17671

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
N	Auburn Road	24384	4.0	0.9	2.8	5.6	10
NE	Girdled Road	24382	0.9	0.1	0.8	1.0	10
S	Auburn Road	24383	0.8	0.0	0.7	0.8	10
SW	Girdled Road	24387	6.1	0.2	5.9	6.3	10

GIRDLED ROAD & CRILE ROAD

NODE: 7

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NE	Girdled Road	24390	0.1	0.0	0.1	0.1	10
SE	Crile Road	24389	1.1	0.3	0.7	1.7	10
SW	Girdled Road	24367	0.0	0.0	0.0	0.0	10

STATE ROUTE 44 & GIRDLED ROAD

NODE: 17673

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
N	State Route 44	24388	7.2	0.6	6.5	8.3	10
NE	Girdled Road	24387	1.8	0.1	1.6	1.9	10
S	State Route 44	24374	6.9	0.3	6.3	7.3	10
SW	Girdled Road	24390	13.6	0.4	13.0	14.2	10

Project: Option C - Option A + Crile Relocation
 Scenario: AM Peak
 Run(s): Batch (10 runs)
 Simulated: Various
 Time: 08:00:00 - 09:00:00
 Interval: Summary
 Selection: --

Intersection Level of Service by Approach - Avg Control Delay

GIRDLED ROAD & AUBURN ROAD

NODE: 17671

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
N	Auburn Road	24384	49.8	11.3	35.0	68.7	10
NE	Girdled Road	24382	24.8	1.9	21.9	27.3	10
S	Auburn Road	24383	19.4	1.0	17.3	21.0	10
SW	Girdled Road	24387	81.6	3.8	74.9	86.8	10

GIRDLED ROAD & CRILE ROAD

NODE: 7

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NE	Girdled Road	24390	1.8	0.2	1.6	2.2	10
SE	Crile Road	24389	52.4	13.4	34.5	79.9	10
SW	Girdled Road	24367	0.0	0.0	0.0	0.0	10

STATE ROUTE 44 & GIRDLED ROAD

NODE: 17673

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
N	State Route 44	24388	34.0	2.7	31.1	39.0	10
NE	Girdled Road	24387	28.6	1.4	26.0	30.5	10
S	State Route 44	24374	32.3	1.4	29.3	33.9	10
SW	Girdled Road	24390	199.7	14.9	172.8	218.9	10

Project: Option C - Option A + Crile Relocation
 Scenario: AM Peak
 Run(s): Batch (10 runs)
 Simulated: Various
 Time: 08:00:00 - 09:00:00
 Interval: Summary
 Selection: --

Intersection Level of Service - Overview

GIRDLED ROAD & AUBURN ROAD -- UNSIGNALIZED

NODE: 17671

Run	Number of Vehicles	Total Control Delay (hr)	Avg Control Delay (sec/veh)	Level of Service
1	835.0	11.16	48.1	E
2	821.0	12.96	56.8	F
3	830.0	11.07	48.0	E
4	850.0	10.41	44.1	E
5	837.0	11.12	47.8	E
6	833.0	11.07	47.8	E
7	830.0	12.62	54.7	F
8	825.0	13.25	57.8	F
9	823.0	11.70	51.2	F
10	823.0	12.08	52.8	F
Average:	830.7	11.74	50.9	F

GIRDLED ROAD & CRILE ROAD -- UNSIGNALIZED

NODE: 7

Run	Number of Vehicles	Total Control Delay (hr)	Avg Control Delay (sec/veh)	Level of Service
1	523.0	1.06	7.3	A
2	499.0	1.59	11.5	B
3	483.0	1.25	9.3	A
4	549.0	1.10	7.2	A
5	525.0	0.81	5.6	A
6	502.0	0.96	6.9	A
7	520.0	1.09	7.5	A
8	481.0	1.27	9.5	A
9	489.0	1.12	8.2	A
10	474.0	1.82	13.8	B
Average:	504.5	1.21	8.7	A

STATE ROUTE 44 & GIRDLED ROAD -- SIGNALIZED

NODE: 17673

Run	Number of Vehicles	Total Control Delay (hr)	Avg Control Delay (sec/veh)	Level of Service
1	2,029.0	30.00	53.2	D
2	1,993.0	29.14	52.6	D
3	1,977.0	28.63	52.1	D
4	2,053.0	29.02	50.9	D
5	2,035.0	29.72	52.6	D
6	1,999.0	30.78	55.4	E
7	2,020.0	30.27	54.0	D
8	1,995.0	27.99	50.5	D
9	2,007.0	29.37	52.7	D

Intersection Level of Service

10	1,993.0	30.50	55.1	E
Average:	2,010.1	29.54	52.9	D

Project: Option C - Option A + Crile Relocation
Scenario: AM Peak
Run(s): Batch (10 runs)
Simulated: Various
Time: 08:00:00 - 09:00:00
Interval: Summary
Selection: --

Intersection Level of Service - Total Control Delay

Node ID	Intersection	Control Type	Average	Std Dev	Minimum	Maximum	# Samples
17671	Girdled Road & Auburn Road	Stop	11.7	0.9	10.4	13.3	10
7	Girdled Road & Crile Road	Stop	1.2	0.3	0.8	1.8	10
17673	State Route 44 & Girdled Road	Actuated	29.5	0.9	28.0	30.8	10

Project: Option C - Option A + Crile Relocation
Scenario: AM Peak
Run(s): Batch (10 runs)
Simulated: Various
Time: 08:00:00 - 09:00:00
Interval: Summary
Selection: --

Intersection Level of Service - Avg Control Delay

Node ID	Intersection	Control Type	Average	Std Dev	Minimum	Maximum	# Samples
17671	Girdled Road & Auburn Road	Stop	50.9	4.5	44.1	57.8	10
7	Girdled Road & Crile Road	Stop	8.7	2.4	5.6	13.8	10
17673	State Route 44 & Girdled Road	Actuated	52.9	1.6	50.5	55.4	10

Project: Option C - Option A + Crile Relocation
 Scenario: PM Peak
 Run(s): Batch (10 runs)
 Simulated: Various
 Time: 17:00:00 - 18:00:00
 Interval: Summary
 Selection: --

Intersection Level of Service by Lane Group - Overview

GIRDLED ROAD & AUBURN ROAD -- UNSIGNALIZED

NODE: 17671

Run	Number of Vehicles	Total Control Delay (hr)	Avg Control Delay (sec/veh)	Level of Service
NB LTR on Auburn Road: Superlink ID 24384				
1	227.0	36.71	582.2	F
2	219.0	43.71	718.6	F
3	223.0	39.97	645.3	F
4	227.0	36.69	581.9	F
5	219.0	33.35	548.2	F
6	213.0	39.26	663.6	F
7	223.0	40.27	650.1	F
8	222.0	36.55	592.8	F
9	232.0	35.13	545.2	F
10	226.0	34.32	546.6	F
Average:	223.1	37.60	607.5	F

NEB LTR on Girdled Road: Superlink ID 24382

1	175.0	2.32	47.8	E
2	174.0	2.09	43.3	E
3	175.0	2.31	47.5	E
4	171.0	2.19	46.0	E
5	176.0	2.72	55.6	F
6	172.0	3.22	67.3	F
7	177.0	2.43	49.4	E
8	173.0	2.10	43.7	E
9	173.0	2.10	43.7	E
10	174.0	2.44	50.4	F
Average:	174.0	2.39	49.5	E

SB LTR on Auburn Road: Superlink ID 24383

1	204.0	16.61	293.1	F
2	204.0	17.52	309.1	F
3	196.0	21.98	403.7	F
4	207.0	19.38	337.0	F
5	199.0	19.24	348.0	F
6	194.0	20.47	379.8	F
7	199.0	22.53	407.6	F
8	203.0	19.25	341.4	F
9	200.0	14.44	260.0	F
10	192.0	21.18	397.2	F
Average:	199.8	19.26	347.7	F

GIRDLED ROAD & AUBURN ROAD -- UNSIGNALIZED

NODE: 17671

Run	Number of Vehicles	Total Control Delay (hr)	Avg Control Delay (sec/veh)	Level of Service
SWB LTR on Girdled Road: Superlink ID 24387				
1	197.0	6.39	116.8	F
2	195.0	6.33	116.9	F
3	193.0	6.30	117.6	F
4	201.0	6.28	112.4	F
5	195.0	6.44	118.9	F
6	183.0	6.18	121.5	F
7	189.0	6.16	117.4	F
8	192.0	6.35	119.1	F
9	189.0	6.15	117.1	F
10	190.0	6.05	114.7	F
Average:	192.4	6.26	117.2	F

GIRDLED ROAD & CRILE ROAD -- UNSIGNALIZED

NODE: 7

Run	Number of Vehicles	Total Control Delay (hr)	Avg Control Delay (sec/veh)	Level of Service
NEB L on Girdled Road: Superlink ID 24390				
1	94.0	0.24	9.2	A
2	91.0	0.22	8.6	A
3	94.0	0.21	8.0	A
4	92.0	0.20	7.8	A
5	92.0	0.26	10.2	B
6	92.0	0.21	8.3	A
7	94.0	0.22	8.3	A
8	90.0	0.25	9.9	A
9	92.0	0.19	7.3	A
10	93.0	0.19	7.2	A
Average:	92.4	0.22	8.5	A

NEB T on Girdled Road: Superlink ID 24390

1	311.0	0.01	0.1	A
2	311.0	0.01	0.1	A
3	308.0	0.01	0.1	A
4	309.0	0.01	0.1	A
5	310.0	0.01	0.1	A
6	308.0	0.01	0.1	A
7	308.0	0.01	0.1	A
8	310.0	0.01	0.1	A
9	308.0	0.01	0.1	A
10	308.0	0.01	0.1	A
Average:	309.1	0.01	0.1	A

SEB LR on Crile Road: Superlink ID 24389

GIRDLED ROAD & CRILE ROAD -- UNSIGNALIZED

NODE: 7

Run	Number of Vehicles	Total Control Delay (hr)	Avg Control Delay (sec/veh)	Level of Service
1	113.0	25.89	824.7	F
2	111.0	26.29	852.6	F
3	115.0	27.90	873.4	F
4	114.0	22.42	708.0	F
5	108.0	23.63	787.5	F
6	115.0	19.31	604.6	F
7	100.0	32.43	1,167.4	F
8	120.0	30.48	914.4	F
9	121.0	24.97	743.0	F
10	112.0	22.14	711.7	F
Average:	112.9	25.55	818.7	F

SWB TR on Girdled Road: Superlink ID 24367

1	267.0	0.00	0.0	A
2	252.0	0.00	0.0	A
3	256.0	0.00	0.0	A
4	273.0	0.00	0.0	A
5	256.0	0.00	0.0	A
6	217.0	0.00	0.0	A
7	244.0	0.00	0.0	A
8	256.0	0.00	0.0	A
9	235.0	0.00	0.0	A
10	236.0	0.00	0.0	A
Average:	249.2	0.00	0.0	A

STATE ROUTE 44 & GIRDLED ROAD -- SIGNALIZED

NODE: 17673

Run	Number of Vehicles	Total Control Delay (hr)	Avg Control Delay (sec/veh)	Level of Service
NB L on State Route 44: Superlink ID 24388				
1	21.0	0.43	73.6	E
2	21.0	0.65	111.9	F
3	22.0	0.47	77.3	E
4	23.0	0.42	66.3	E
5	22.0	0.41	66.5	E
6	21.0	0.74	127.7	F
7	20.0	0.64	114.8	F
8	24.0	0.88	132.6	F
9	22.0	1.57	256.6	F
10	24.0	0.72	108.3	F
Average:	22.0	0.69	113.6	F

NB T on State Route 44: Superlink ID 24388

1	410.0	3.80	33.3	C
2	428.0	4.03	33.9	C

STATE ROUTE 44 & GIRDLED ROAD -- SIGNALIZED

NODE: 17673

Run	Number of Vehicles	Total Control Delay (hr)	Avg Control Delay (sec/veh)	Level of Service
3	415.0	3.95	34.2	C
4	420.0	3.84	32.9	C
5	405.0	3.88	34.5	C
6	422.0	3.89	33.2	C
7	424.0	3.97	33.7	C
8	422.0	3.89	33.1	C
9	398.0	3.75	33.9	C
10	412.0	3.94	34.4	C
Average:	415.6	3.89	33.7	C

NB TR on State Route 44: Superlink ID 24388

1	440.0	3.96	32.4	C
2	434.0	3.92	32.5	C
3	433.0	3.77	31.4	C
4	438.0	4.12	33.9	C
5	454.0	4.04	32.1	C
6	436.0	3.62	29.9	C
7	433.0	4.05	33.7	C
8	436.0	3.93	32.4	C
9	463.0	3.99	31.0	C
10	447.0	3.93	31.7	C
Average:	441.4	3.93	32.1	C

NEB L on Girdled Road: Superlink ID 24387

1	108.0	0.71	23.6	C
2	105.0	0.92	31.7	C
3	103.0	0.76	26.5	C
4	104.0	0.87	29.9	C
5	106.0	0.77	26.0	C
6	99.0	0.74	27.0	C
7	106.0	0.97	32.8	C
8	106.0	1.12	38.0	D
9	108.0	0.88	29.3	C
10	100.0	0.78	28.1	C
Average:	104.5	0.85	29.3	C

NEB TR on Girdled Road: Superlink ID 24387

1	174.0	1.58	32.7	C
2	169.0	1.27	27.1	C
3	169.0	1.29	27.4	C
4	171.0	1.32	27.8	C
5	169.0	1.59	33.8	C
6	170.0	1.44	30.5	C

STATE ROUTE 44 & GIRDLED ROAD -- SIGNALIZED

NODE: 17673

Run	Number of Vehicles	Total Control Delay (hr)	Avg Control Delay (sec/veh)	Level of Service
7	173.0	1.25	26.0	C
8	172.0	1.28	26.8	C
9	171.0	1.29	27.1	C
10	172.0	1.32	27.5	C
Average:	171.0	1.36	28.7	C

SB L on State Route 44: Superlink ID 24374

1	184.0	2.01	39.3	D
2	183.0	1.68	33.1	C
3	187.0	2.03	39.1	D
4	184.0	1.90	37.2	D
5	185.0	1.91	37.2	D
6	184.0	2.22	43.4	D
7	184.0	2.02	39.6	D
8	184.0	1.81	35.4	D
9	182.0	1.88	37.1	D
10	185.0	2.02	39.3	D
Average:	184.2	1.95	38.1	D

SB T on State Route 44: Superlink ID 24374

1	543.0	4.01	26.6	C
2	556.0	4.49	29.1	C
3	524.0	3.87	26.6	C
4	539.0	5.00	33.4	C
5	552.0	4.92	32.1	C
6	590.0	6.71	40.9	D
7	539.0	3.95	26.4	C
8	552.0	4.55	29.7	C
9	566.0	4.57	29.1	C
10	523.0	4.03	27.7	C
Average:	548.4	4.61	30.2	C

SB TR on State Route 44: Superlink ID 24374

1	303.0	2.85	33.9	C
2	322.0	2.92	32.6	C
3	324.0	2.57	28.6	C
4	320.0	2.95	33.2	C
5	307.0	2.68	31.5	C
6	273.0	3.47	45.8	D
7	318.0	2.85	32.2	C
8	299.0	3.06	36.8	D
9	293.0	2.95	36.2	D
10	340.0	3.03	32.0	C

STATE ROUTE 44 & GIRDLED ROAD -- SIGNALIZED

NODE: 17673

Run	Number of Vehicles	Total Control Delay (hr)	Avg Control Delay (sec/veh)	Level of Service
Average:	309.9	2.93	34.3	C

SWB L on Girdled Road: Superlink ID 24390

1	60.0	1.71	102.8	F
2	56.0	1.71	110.1	F
3	57.0	1.79	113.2	F
4	60.0	1.71	102.6	F
5	56.0	1.82	116.9	F
6	51.0	1.66	116.8	F
7	56.0	1.93	124.0	F
8	58.0	1.98	122.9	F
9	55.0	1.73	113.2	F
10	55.0	1.85	121.3	F
Average:	56.4	1.79	114.4	F

SWB TR on Girdled Road: Superlink ID 24390

1	160.0	11.49	258.6	F
2	156.0	12.07	278.5	F
3	158.0	12.18	277.5	F
4	168.0	12.07	258.6	F
5	156.0	12.01	277.1	F
6	133.0	11.29	305.7	F
7	151.0	11.94	284.7	F
8	158.0	12.25	279.1	F
9	149.0	11.16	269.6	F
10	143.0	11.05	278.1	F
Average:	153.2	11.75	276.8	F

Project: Option C - Option A + Crile Relocation
 Scenario: PM Peak
 Run(s): Batch (10 runs)
 Simulated: Various
 Time: 17:00:00 - 18:00:00
 Interval: Summary
 Selection: --

Intersection Level of Service by Lane Group - Total Control Delay

GIRDLED ROAD & AUBURN ROAD

NODE: 17671

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NB LTR	Auburn Road	24384	37.6	3.2	33.4	43.7	10
NEB LTR	Girdled Road	24382	2.4	0.4	2.1	3.2	10
SB LTR	Auburn Road	24383	19.3	2.5	14.4	22.5	10
SWB LTR	Girdled Road	24387	6.3	0.1	6.1	6.4	10

GIRDLED ROAD & CRILE ROAD

NODE: 7

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NEB L	Girdled Road	24390	0.2	0.0	0.2	0.3	10
NEB T	Girdled Road	24390	0.0	0.0	0.0	0.0	10
SEB LR	Crile Road	24389	25.5	4.0	19.3	32.4	10
SWB TR	Girdled Road	24367	0.0	0.0	0.0	0.0	10

STATE ROUTE 44 & GIRDLED ROAD

NODE: 17673

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NB L	State Route 44	24388	0.7	0.3	0.4	1.6	10
NB T	State Route 44	24388	3.9	0.1	3.8	4.0	10
NB TR	State Route 44	24388	3.9	0.1	3.6	4.1	10
NEB L	Girdled Road	24387	0.9	0.1	0.7	1.1	10
NEB TR	Girdled Road	24387	1.4	0.1	1.3	1.6	10
SB L	State Route 44	24374	1.9	0.1	1.7	2.2	10
SB T	State Route 44	24374	4.6	0.8	3.9	6.7	10
SB TR	State Route 44	24374	2.9	0.2	2.6	3.5	10
SWB L	Girdled Road	24390	1.8	0.1	1.7	2.0	10
SWB TR	Girdled Road	24390	11.8	0.5	11.1	12.3	10

Project: Option C - Option A + Crile Relocation
 Scenario: PM Peak
 Run(s): Batch (10 runs)
 Simulated: Various
 Time: 17:00:00 - 18:00:00
 Interval: Summary
 Selection: --

Intersection Level of Service by Lane Group - Avg Control Delay

GIRDLED ROAD & AUBURN ROAD

NODE: 17671

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NB LTR	Auburn Road	24384	607.5	59.0	545.2	718.6	10
NEB LTR	Girdled Road	24382	49.5	7.3	43.3	67.3	10
SB LTR	Auburn Road	24383	347.7	50.0	260.0	407.6	10
SWB LTR	Girdled Road	24387	117.2	2.5	112.4	121.5	10

GIRDLED ROAD & CRILE ROAD

NODE: 7

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NEB L	Girdled Road	24390	8.5	1.0	7.2	10.2	10
NEB T	Girdled Road	24390	0.1	0.0	0.1	0.1	10
SEB LR	Crile Road	24389	818.7	153.2	604.6	1,167.4	10
SWB TR	Girdled Road	24367	0.0	0.0	0.0	0.0	10

STATE ROUTE 44 & GIRDLED ROAD

NODE: 17673

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NB L	State Route 44	24388	113.6	56.2	66.3	256.6	10
NB T	State Route 44	24388	33.7	0.6	32.9	34.5	10
NB TR	State Route 44	24388	32.1	1.2	29.9	33.9	10
NEB L	Girdled Road	24387	29.3	4.1	23.6	38.0	10
NEB TR	Girdled Road	24387	28.7	2.7	26.0	33.8	10
SB L	State Route 44	24374	38.1	2.8	33.1	43.4	10
SB T	State Route 44	24374	30.2	4.4	26.4	40.9	10
SB TR	State Route 44	24374	34.3	4.7	28.6	45.8	10
SWB L	Girdled Road	24390	114.4	7.6	102.6	124.0	10
SWB TR	Girdled Road	24390	276.8	13.4	258.6	305.7	10

Project: Option C - Option A + Crile Relocation
 Scenario: PM Peak
 Run(s): Batch (10 runs)
 Simulated: Various
 Time: 17:00:00 - 18:00:00
 Interval: Summary
 Selection: --

Intersection Level of Service by Approach - Overview

GIRDLED ROAD & AUBURN ROAD -- UNSIGNALIZED

NODE: 17671

Run	Number of Vehicles	Total Control Delay (hr)	Avg Control Delay (sec/veh)	Level of Service
NB on Auburn Road: Superlink ID 24384				
1	227.0	36.71	582.2	F
2	219.0	43.71	718.6	F
3	223.0	39.97	645.3	F
4	227.0	36.69	581.9	F
5	219.0	33.35	548.2	F
6	213.0	39.26	663.6	F
7	223.0	40.27	650.1	F
8	222.0	36.55	592.8	F
9	232.0	35.13	545.2	F
10	226.0	34.32	546.6	F
Average:	223.1	37.60	607.5	F

NEB on Girdled Road: Superlink ID 24382

1	175.0	2.32	47.8	E
2	174.0	2.09	43.3	E
3	175.0	2.31	47.5	E
4	171.0	2.19	46.0	E
5	176.0	2.72	55.6	F
6	172.0	3.22	67.3	F
7	177.0	2.43	49.4	E
8	173.0	2.10	43.7	E
9	173.0	2.10	43.7	E
10	174.0	2.44	50.4	F
Average:	174.0	2.39	49.5	E

SB on Auburn Road: Superlink ID 24383

1	204.0	16.61	293.1	F
2	204.0	17.52	309.1	F
3	196.0	21.98	403.7	F
4	207.0	19.38	337.0	F
5	199.0	19.24	348.0	F
6	194.0	20.47	379.8	F
7	199.0	22.53	407.6	F
8	203.0	19.25	341.4	F
9	200.0	14.44	260.0	F

GIRDLED ROAD & AUBURN ROAD -- UNSIGNALIZED

NODE: 17671

Run	Number of Vehicles	Total Control Delay (hr)	Avg Control Delay (sec/veh)	Level of Service
10	192.0	21.18	397.2	F
Average:	199.8	19.26	347.7	F

SWB on Girdled Road: Superlink ID 24387

1	197.0	6.39	116.8	F
2	195.0	6.33	116.9	F
3	193.0	6.30	117.6	F
4	201.0	6.28	112.4	F
5	195.0	6.44	118.9	F
6	183.0	6.18	121.5	F
7	189.0	6.16	117.4	F
8	192.0	6.35	119.1	F
9	189.0	6.15	117.1	F
10	190.0	6.05	114.7	F
Average:	192.4	6.26	117.2	F

GIRDLED ROAD & CRILE ROAD -- UNSIGNALIZED

NODE: 7

Run	Number of Vehicles	Total Control Delay (hr)	Avg Control Delay (sec/veh)	Level of Service
NEB on Girdled Road: Superlink ID 24390				
1	405.0	0.25	2.2	A
2	402.0	0.23	2.0	A
3	402.0	0.22	1.9	A
4	401.0	0.20	1.8	A
5	402.0	0.27	2.4	A
6	400.0	0.22	2.0	A
7	402.0	0.22	2.0	A
8	400.0	0.25	2.3	A
9	400.0	0.20	1.8	A
10	401.0	0.19	1.7	A
Average:	401.5	0.23	2.0	A

SEB on Crile Road: Superlink ID 24389

1	113.0	25.89	824.7	F
2	111.0	26.29	852.6	F
3	115.0	27.90	873.4	F
4	114.0	22.42	708.0	F
5	108.0	23.63	787.5	F
6	115.0	19.31	604.6	F
7	100.0	32.43	1,167.4	F
8	120.0	30.48	914.4	F
9	121.0	24.97	743.0	F

GIRDLED ROAD & CRILE ROAD -- UNSIGNALIZED

NODE: 7

Run	Number of Vehicles	Total Control Delay (hr)	Avg Control Delay (sec/veh)	Level of Service
10	112.0	22.14	711.7	F
Average:	112.9	25.55	818.7	F

SWB on Girdled Road: Superlink ID 24367

1	267.0	0.00	0.0	A
2	252.0	0.00	0.0	A
3	256.0	0.00	0.0	A
4	273.0	0.00	0.0	A
5	256.0	0.00	0.0	A
6	217.0	0.00	0.0	A
7	244.0	0.00	0.0	A
8	256.0	0.00	0.0	A
9	235.0	0.00	0.0	A
10	236.0	0.00	0.0	A
Average:	249.2	0.00	0.0	A

STATE ROUTE 44 & GIRDLED ROAD -- SIGNALIZED

NODE: 17673

Run	Number of Vehicles	Total Control Delay (hr)	Avg Control Delay (sec/veh)	Level of Service
NB on State Route 44: Superlink ID 24388				
1	871.0	8.18	33.8	C
2	883.0	8.60	35.1	D
3	870.0	8.19	33.9	C
4	881.0	8.38	34.3	C
5	881.0	8.33	34.0	C
6	879.0	8.25	33.8	C
7	877.0	8.65	35.5	D
8	882.0	8.70	35.5	D
9	883.0	9.30	37.9	D
10	883.0	8.59	35.0	D
Average:	879.0	8.52	34.9	C

NEB on Girdled Road: Superlink ID 24387

1	282.0	2.29	29.2	C
2	274.0	2.20	28.9	C
3	272.0	2.05	27.1	C
4	275.0	2.19	28.6	C
5	275.0	2.35	30.8	C
6	269.0	2.18	29.2	C
7	279.0	2.22	28.6	C
8	278.0	2.40	31.1	C
9	279.0	2.17	27.9	C

STATE ROUTE 44 & GIRDLED ROAD -- SIGNALIZED

NODE: 17673

Run	Number of Vehicles	Total Control Delay (hr)	Avg Control Delay (sec/veh)	Level of Service
10	272.0	2.10	27.7	C
Average:	275.5	2.22	28.9	C

SB on State Route 44: Superlink ID 24374

1	1,030.0	8.87	31.0	C
2	1,061.0	9.09	30.9	C
3	1,035.0	8.48	29.5	C
4	1,043.0	9.85	34.0	C
5	1,044.0	9.51	32.8	C
6	1,047.0	12.39	42.6	D
7	1,041.0	8.82	30.5	C
8	1,035.0	9.42	32.8	C
9	1,041.0	9.39	32.5	C
10	1,048.0	9.08	31.2	C
Average:	1,042.5	9.49	32.8	C

SWB on Girdled Road: Superlink ID 24390

1	220.0	13.21	216.1	F
2	212.0	13.78	234.0	F
3	215.0	13.97	233.9	F
4	228.0	13.78	217.5	F
5	212.0	13.82	234.8	F
6	184.0	12.95	253.3	F
7	207.0	13.87	241.3	F
8	216.0	14.23	237.1	F
9	204.0	12.89	227.4	F
10	198.0	12.90	234.5	F
Average:	209.6	13.54	233.0	F

Project: Option C - Option A + Crile Relocation
 Scenario: PM Peak
 Run(s): Batch (10 runs)
 Simulated: Various
 Time: 17:00:00 - 18:00:00
 Interval: Summary
 Selection: --

Intersection Level of Service by Approach - Total Control Delay

GIRDLED ROAD & AUBURN ROAD

NODE: 17671

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
N	Auburn Road	24384	37.6	3.2	33.4	43.7	10
NE	Girdled Road	24382	2.4	0.4	2.1	3.2	10
S	Auburn Road	24383	19.3	2.5	14.4	22.5	10
SW	Girdled Road	24387	6.3	0.1	6.1	6.4	10

GIRDLED ROAD & CRILE ROAD

NODE: 7

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NE	Girdled Road	24390	0.2	0.0	0.2	0.3	10
SE	Crile Road	24389	25.5	4.0	19.3	32.4	10
SW	Girdled Road	24367	0.0	0.0	0.0	0.0	10

STATE ROUTE 44 & GIRDLED ROAD

NODE: 17673

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
N	State Route 44	24388	8.5	0.3	8.2	9.3	10
NE	Girdled Road	24387	2.2	0.1	2.1	2.4	10
S	State Route 44	24374	9.5	1.1	8.5	12.4	10
SW	Girdled Road	24390	13.5	0.5	12.9	14.2	10

Project: Option C - Option A + Crile Relocation
 Scenario: PM Peak
 Run(s): Batch (10 runs)
 Simulated: Various
 Time: 17:00:00 - 18:00:00
 Interval: Summary
 Selection: --

Intersection Level of Service by Approach - Avg Control Delay

GIRDLED ROAD & AUBURN ROAD

NODE: 17671

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
N	Auburn Road	24384	607.5	59.0	545.2	718.6	10
NE	Girdled Road	24382	49.5	7.3	43.3	67.3	10
S	Auburn Road	24383	347.7	50.0	260.0	407.6	10
SW	Girdled Road	24387	117.2	2.5	112.4	121.5	10

GIRDLED ROAD & CRILE ROAD

NODE: 7

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NE	Girdled Road	24390	2.0	0.2	1.7	2.4	10
SE	Crile Road	24389	818.7	153.2	604.6	1,167.4	10
SW	Girdled Road	24367	0.0	0.0	0.0	0.0	10

STATE ROUTE 44 & GIRDLED ROAD

NODE: 17673

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
N	State Route 44	24388	34.9	1.3	33.8	37.9	10
NE	Girdled Road	24387	28.9	1.3	27.1	31.1	10
S	State Route 44	24374	32.8	3.7	29.5	42.6	10
SW	Girdled Road	24390	233.0	10.9	216.1	253.3	10

Project: Option C - Option A + Crile Relocation
 Scenario: PM Peak
 Run(s): Batch (10 runs)
 Simulated: Various
 Time: 17:00:00 - 18:00:00
 Interval: Summary
 Selection: --

Intersection Level of Service - Overview

GIRDLED ROAD & AUBURN ROAD -- UNSIGNALIZED NODE: 17671

Run	Number of Vehicles	Total Control Delay (hr)	Avg Control Delay (sec/veh)	Level of Service
1	803.0	62.03	278.1	F
2	792.0	69.66	316.6	F
3	787.0	70.56	322.8	F
4	806.0	64.53	288.2	F
5	789.0	61.74	281.7	F
6	762.0	69.12	326.6	F
7	788.0	71.39	326.2	F
8	790.0	64.26	292.8	F
9	794.0	57.82	262.2	F
10	782.0	63.99	294.6	F
Average:	789.3	65.51	299.0	F

GIRDLED ROAD & CRILE ROAD -- UNSIGNALIZED NODE: 7

Run	Number of Vehicles	Total Control Delay (hr)	Avg Control Delay (sec/veh)	Level of Service
1	785.0	26.14	119.9	F
2	765.0	26.51	124.8	F
3	773.0	28.12	130.9	F
4	788.0	22.62	103.4	F
5	766.0	23.89	112.3	F
6	732.0	19.53	96.1	F
7	746.0	32.65	157.6	F
8	776.0	30.73	142.6	F
9	756.0	25.17	119.9	F
10	749.0	22.33	107.3	F
Average:	763.6	25.77	121.5	F

STATE ROUTE 44 & GIRDLED ROAD -- SIGNALIZED NODE: 17673

Run	Number of Vehicles	Total Control Delay (hr)	Avg Control Delay (sec/veh)	Level of Service
1	2,403.0	32.55	48.8	D
2	2,430.0	33.67	49.9	D
3	2,392.0	32.68	49.2	D
4	2,427.0	34.20	50.7	D
5	2,412.0	34.02	50.8	D
6	2,379.0	35.78	54.1	D
7	2,404.0	33.56	50.3	D
8	2,411.0	34.75	51.9	D
9	2,407.0	33.75	50.5	D

Intersection Level of Service

10	2,401.0	32.66	49.0	D
Average:	2,406.6	33.76	50.5	D

Project: Option C - Option A + Crile Relocation
Scenario: PM Peak
Run(s): Batch (10 runs)
Simulated: Various
Time: 17:00:00 - 18:00:00
Interval: Summary
Selection: --

Intersection Level of Service - Total Control Delay

Node ID	Intersection	Control Type	Average	Std Dev	Minimum	Maximum	# Samples
17671	Girdled Road & Auburn Road	Stop	65.5	4.5	57.8	71.4	10
7	Girdled Road & Crile Road	Stop	25.8	4.0	19.5	32.7	10
17673	State Route 44 & Girdled Road	Actuated	33.8	1.0	32.6	35.8	10

Project: Option C - Option A + Crile Relocation
Scenario: PM Peak
Run(s): Batch (10 runs)
Simulated: Various
Time: 17:00:00 - 18:00:00
Interval: Summary
Selection: --

Intersection Level of Service - Avg Control Delay

Node ID	Intersection	Control Type	Average	Std Dev	Minimum	Maximum	# Samples
17671	Girdled Road & Auburn Road	Stop	299.0	22.7	262.2	326.6	10
7	Girdled Road & Crile Road	Stop	121.5	18.6	96.1	157.6	10
17673	State Route 44 & Girdled Road	Actuated	50.5	1.6	48.8	54.1	10

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'BUILD OPTION D'

Project: Option D - Options A + B + C
 Scenario: AM Peak
 Run(s): Batch (10 runs)
 Simulated: Various
 Time: 08:00:00 - 09:00:00
 Interval: Summary
 Selection: --

Intersection Level of Service by Lane Group - Overview

GIRDLED ROAD & AUBURN ROAD (EAST) -- UNSIGNALIZED

NODE: 17671

Run	Number of Vehicles	Total Control Delay (hr)	Avg Control Delay (sec/veh)	Level of Service
NEB LT on Girdled Road: Superlink ID 24382				
1	389.0	0.32	3.0	A
2	395.0	0.32	2.9	A
3	389.0	0.29	2.7	A
4	391.0	0.39	3.6	A
5	391.0	0.31	2.8	A
6	391.0	0.30	2.8	A
7	392.0	0.36	3.3	A
8	390.0	0.35	3.2	A
9	389.0	0.38	3.6	A
10	394.0	0.32	2.9	A
Average:	391.1	0.33	3.1	A

SEB LR on Auburn Road (East): Superlink ID 24383

1	138.0	0.39	10.2	B
2	140.0	0.39	9.9	A
3	143.0	0.44	11.0	B
4	141.0	0.39	9.9	A
5	140.0	0.40	10.4	B
6	139.0	0.40	10.3	B
7	139.0	0.36	9.4	A
8	140.0	0.36	9.2	A
9	140.0	0.49	12.7	B
10	141.0	0.41	10.5	B
Average:	140.1	0.40	10.4	B

SWB TR on Girdled Road: Superlink ID 24387

1	364.0	0.01	0.1	A
2	370.0	0.01	0.1	A
3	368.0	0.01	0.1	A
4	369.0	0.01	0.1	A
5	358.0	0.01	0.1	A
6	367.0	0.01	0.1	A
7	370.0	0.01	0.1	A
8	363.0	0.01	0.1	A
9	368.0	0.01	0.1	A
10	373.0	0.01	0.1	A
Average:	367.0	0.01	0.1	A

GIRDLED ROAD & AUBURN ROAD (EAST) -- UNSIGNALIZED

NODE: 17671

Run	Number of Vehicles	Total Control Delay (hr)	Avg Control Delay (sec/veh)	Level of Service
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GIRDLED ROAD & AUBURN ROAD (WEST) -- UNSIGNALIZED

NODE: 7

Run	Number of Vehicles	Total Control Delay (hr)	Avg Control Delay (sec/veh)	Level of Service
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NEB TR on Girdled Road: Superlink ID 24392

1	128.0	0.01	0.3	A
2	131.0	0.01	0.2	A
3	129.0	0.01	0.3	A
4	131.0	0.01	0.2	A
5	130.0	0.01	0.2	A
6	130.0	0.01	0.2	A
7	129.0	0.01	0.2	A
8	131.0	0.01	0.3	A
9	131.0	0.01	0.2	A
10	133.0	0.01	0.2	A
Average:	130.3	0.01	0.2	A

NWB LR on Auburn Road (West): Superlink ID 24391

1	293.0	0.82	10.1	B
2	295.0	0.85	10.4	B
3	293.0	0.80	9.9	A
4	292.0	0.86	10.7	B
5	292.0	0.84	10.4	B
6	293.0	0.85	10.4	B
7	294.0	0.85	10.4	B
8	295.0	0.87	10.6	B
9	295.0	0.85	10.4	B
10	293.0	0.86	10.6	B
Average:	293.5	0.85	10.4	B

SWB LT on Girdled Road: Superlink ID 24382

1	347.0	0.14	1.4	A
2	349.0	0.13	1.4	A
3	351.0	0.14	1.4	A
4	349.0	0.16	1.6	A
5	348.0	0.12	1.3	A
6	350.0	0.12	1.3	A
7	351.0	0.13	1.4	A
8	345.0	0.12	1.2	A
9	349.0	0.13	1.4	A
10	353.0	0.12	1.2	A
Average:	349.2	0.13	1.4	A

GIRDLED ROAD & CRILE ROAD -- UNSIGNALIZED

NODE: 10

Run	Number of Vehicles	Total Control Delay (hr)	Avg Control Delay (sec/veh)	Level of Service
EB L on Girdled Road: Superlink ID 24394				
1	44.0	0.14	11.6	B
2	40.0	0.11	9.5	A
3	42.0	0.11	9.7	A
4	42.0	0.13	11.0	B
5	45.0	0.15	11.7	B
6	43.0	0.15	13.0	B
7	43.0	0.15	12.3	B
8	42.0	0.13	11.2	B
9	46.0	0.13	10.4	B
10	44.0	0.13	10.7	B
Average:	43.1	0.13	11.1	B
EB T on Girdled Road: Superlink ID 24394				
1	151.0	0.00	0.1	A
2	153.0	0.00	0.1	A
3	152.0	0.00	0.0	A
4	153.0	0.00	0.0	A
5	148.0	0.00	0.1	A
6	152.0	0.00	0.0	A
7	152.0	0.00	0.0	A
8	151.0	0.00	0.0	A
9	152.0	0.00	0.0	A
10	153.0	0.00	0.1	A
Average:	151.7	0.00	0.0	A
SEB LR on Crile Road: Superlink ID 24389				
1	75.0	0.70	33.8	D
2	76.0	0.71	33.5	D
3	75.0	0.51	24.5	C
4	78.0	0.92	42.4	E
5	76.0	1.00	47.2	E
6	76.0	0.62	29.2	D
7	74.0	0.73	35.6	E
8	74.0	0.59	28.6	D
9	76.0	0.42	19.8	C
10	78.0	0.41	18.8	C
Average:	75.8	0.66	31.3	D
SWB TR on Girdled Road: Superlink ID 24367				
1	529.0	0.00	0.0	A
2	541.0	0.00	0.0	A
3	540.0	0.00	0.0	A

GIRDLED ROAD & CRILE ROAD -- UNSIGNALIZED

NODE: 10

Run	Number of Vehicles	Total Control Delay (hr)	Avg Control Delay (sec/veh)	Level of Service
4	531.0	0.00	0.0	A
5	500.0	0.00	0.0	A
6	534.0	0.00	0.0	A
7	544.0	0.00	0.0	A
8	530.0	0.00	0.0	A
9	542.0	0.00	0.0	A
10	540.0	0.00	0.0	A
Average:	533.1	0.00	0.0	A

STATE ROUTE 44 & GIRDLED ROAD -- SIGNALIZED

NODE: 17673

Run	Number of Vehicles	Total Control Delay (hr)	Avg Control Delay (sec/veh)	Level of Service
NB L on State Route 44: Superlink ID 24388				
1	42.0	0.40	34.3	C
2	42.0	0.42	35.8	D
3	43.0	0.36	30.3	C
4	44.0	0.43	35.5	D
5	40.0	0.43	38.4	D
6	43.0	0.42	35.4	D
7	45.0	0.36	29.1	C
8	43.0	0.40	33.2	C
9	42.0	0.32	27.6	C
10	42.0	0.37	31.8	C
Average:	42.6	0.39	33.1	C

NB T on State Route 44: Superlink ID 24388

1	351.0	2.98	30.6	C
2	355.0	2.76	28.0	C
3	358.0	2.81	28.3	C
4	350.0	2.85	29.3	C
5	353.0	2.80	28.5	C
6	337.0	2.85	30.5	C
7	360.0	2.68	26.8	C
8	362.0	2.92	29.0	C
9	351.0	3.04	31.2	C
10	350.0	2.84	29.3	C
Average:	352.7	2.85	29.2	C

NB TR on State Route 44: Superlink ID 24388

1	375.0	2.94	28.3	C
2	352.0	2.77	28.3	C
3	347.0	2.92	30.3	C
4	365.0	2.88	28.4	C
5	368.0	2.89	28.3	C

STATE ROUTE 44 & GIRDLED ROAD -- SIGNALIZED

NODE: 17673

Run	Number of Vehicles	Total Control Delay (hr)	Avg Control Delay (sec/veh)	Level of Service
6	392.0	3.09	28.4	C
7	359.0	2.97	29.8	C
8	355.0	2.82	28.6	C
9	377.0	2.98	28.4	C
10	367.0	2.89	28.4	C
Average:	365.7	2.92	28.7	C

NEB L on Girdled Road: Superlink ID 24387

1	118.0	1.48	45.2	D
2	122.0	1.42	41.9	D
3	119.0	1.43	43.2	D
4	116.0	1.40	43.3	D
5	118.0	1.37	41.8	D
6	115.0	1.45	45.4	D
7	119.0	1.46	44.3	D
8	120.0	1.37	41.2	D
9	122.0	1.46	43.1	D
10	120.0	1.42	42.7	D
Average:	118.9	1.43	43.2	D

NEB TR on Girdled Road: Superlink ID 24387

1	107.0	0.67	22.7	C
2	110.0	0.89	29.2	C
3	109.0	0.86	28.4	C
4	109.0	0.79	25.9	C
5	109.0	0.84	27.7	C
6	108.0	0.81	27.1	C
7	109.0	0.75	24.7	C
8	110.0	0.82	26.7	C
9	108.0	0.73	24.5	C
10	108.0	0.89	29.6	C
Average:	108.7	0.81	26.7	C

SB L on State Route 44: Superlink ID 24374

1	76.0	0.57	26.9	C
2	76.0	0.50	23.7	C
3	76.0	0.51	24.2	C
4	78.0	0.48	22.4	C
5	75.0	0.59	28.3	C
6	76.0	0.50	23.6	C
7	74.0	0.44	21.2	C
8	76.0	0.52	24.8	C
9	77.0	0.48	22.6	C

STATE ROUTE 44 & GIRDLED ROAD -- SIGNALIZED

NODE: 17673

Run	Number of Vehicles	Total Control Delay (hr)	Avg Control Delay (sec/veh)	Level of Service
10	77.0	0.53	24.9	C
Average:	76.1	0.51	24.3	C

SB T on State Route 44: Superlink ID 24374

1	366.0	2.56	25.2	C
2	367.0	2.47	24.2	C
3	364.0	2.70	26.7	C
4	356.0	2.74	27.8	C
5	364.0	2.72	26.9	C
6	364.0	2.56	25.3	C
7	359.0	2.48	24.8	C
8	356.0	2.49	25.2	C
9	373.0	2.88	27.8	C
10	375.0	2.76	26.5	C
Average:	364.4	2.64	26.0	C

SB TR on State Route 44: Superlink ID 24374

1	340.0	2.30	24.3	C
2	322.0	2.21	24.7	C
3	322.0	2.29	25.6	C
4	337.0	2.20	23.5	C
5	335.0	2.28	24.5	C
6	338.0	2.28	24.3	C
7	327.0	2.11	23.3	C
8	336.0	2.02	21.6	C
9	333.0	2.34	25.3	C
10	330.0	2.38	26.0	C
Average:	332.0	2.24	24.3	C

SWB L on Girdled Road: Superlink ID 24394

1	60.0	1.00	60.3	E
2	63.0	1.06	60.5	E
3	63.0	0.93	53.2	D
4	62.0	0.94	54.6	D
5	58.0	0.96	59.4	E
6	62.0	1.01	58.8	E
7	62.0	1.08	62.6	E
8	62.0	1.01	58.6	E
9	63.0	0.86	49.1	D
10	61.0	0.84	49.9	D
Average:	61.6	0.97	56.7	E

SWB TR on Girdled Road: Superlink ID 24394

STATE ROUTE 44 & GIRDLED ROAD -- SIGNALIZED

NODE: 17673

Run	Number of Vehicles	Total Control Delay (hr)	Avg Control Delay (sec/veh)	Level of Service
1	432.0	11.49	95.8	F
2	451.0	11.40	91.0	F
3	448.0	10.95	88.0	F
4	442.0	11.62	94.6	F
5	421.0	11.32	96.8	F
6	438.0	11.67	95.9	F
7	445.0	11.24	90.9	F
8	435.0	11.49	95.1	F
9	439.0	10.58	86.8	F
10	444.0	10.63	86.2	F
Average:	439.5	11.24	92.1	F

Project: Option D - Options A + B + C
 Scenario: AM Peak
 Run(s): Batch (10 runs)
 Simulated: Various
 Time: 08:00:00 - 09:00:00
 Interval: Summary
 Selection: --

Intersection Level of Service by Lane Group - Total Control Delay

GIRDLED ROAD & AUBURN ROAD (EAST)

NODE: 17671

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NEB LT	Girdled Road	24382	0.3	0.0	0.3	0.4	10
SEB LR	Auburn Road (East)	24383	0.4	0.0	0.4	0.5	10
SWB TR	Girdled Road	24387	0.0	0.0	0.0	0.0	10

GIRDLED ROAD & AUBURN ROAD (WEST)

NODE: 7

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NEB TR	Girdled Road	24392	0.0	0.0	0.0	0.0	10
NWB LR	Auburn Road (West)	24391	0.8	0.0	0.8	0.9	10
SWB LT	Girdled Road	24382	0.1	0.0	0.1	0.2	10

GIRDLED ROAD & CRILE ROAD

NODE: 10

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Girdled Road	24394	0.1	0.0	0.1	0.2	10
EB T	Girdled Road	24394	0.0	0.0	0.0	0.0	10
SEB LR	Crile Road	24389	0.7	0.2	0.4	1.0	10
SWB TR	Girdled Road	24367	0.0	0.0	0.0	0.0	10

STATE ROUTE 44 & GIRDLED ROAD

NODE: 17673

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NB L	State Route 44	24388	0.4	0.0	0.3	0.4	10
NB T	State Route 44	24388	2.9	0.1	2.7	3.0	10
NB TR	State Route 44	24388	2.9	0.1	2.8	3.1	10
NEB L	Girdled Road	24387	1.4	0.0	1.4	1.5	10
NEB TR	Girdled Road	24387	0.8	0.1	0.7	0.9	10
SB L	State Route 44	24374	0.5	0.0	0.4	0.6	10
SB T	State Route 44	24374	2.6	0.1	2.5	2.9	10
SB TR	State Route 44	24374	2.2	0.1	2.0	2.4	10
SWB L	Girdled Road	24394	1.0	0.1	0.8	1.1	10
SWB TR	Girdled Road	24394	11.2	0.4	10.6	11.7	10

Project: Option D - Options A + B + C
 Scenario: AM Peak
 Run(s): Batch (10 runs)
 Simulated: Various
 Time: 08:00:00 - 09:00:00
 Interval: Summary
 Selection: --

Intersection Level of Service by Lane Group - Avg Control Delay

GIRDLED ROAD & AUBURN ROAD (EAST)

NODE: 17671

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NEB LT	Girdled Road	24382	3.1	0.3	2.7	3.6	10
SEB LR	Auburn Road (East)	24383	10.4	1.0	9.2	12.7	10
SWB TR	Girdled Road	24387	0.1	0.0	0.1	0.1	10

GIRDLED ROAD & AUBURN ROAD (WEST)

NODE: 7

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NEB TR	Girdled Road	24392	0.2	0.0	0.2	0.3	10
NWB LR	Auburn Road (West)	24391	10.4	0.2	9.9	10.7	10
SWB LT	Girdled Road	24382	1.4	0.1	1.2	1.6	10

GIRDLED ROAD & CRILE ROAD

NODE: 10

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Girdled Road	24394	11.1	1.1	9.5	13.0	10
EB T	Girdled Road	24394	0.0	0.1	0.0	0.1	10
SEB LR	Crile Road	24389	31.3	9.1	18.8	47.2	10
SWB TR	Girdled Road	24367	0.0	0.0	0.0	0.0	10

STATE ROUTE 44 & GIRDLED ROAD

NODE: 17673

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NB L	State Route 44	24388	33.1	3.4	27.6	38.4	10
NB T	State Route 44	24388	29.2	1.3	26.8	31.2	10
NB TR	State Route 44	24388	28.7	0.7	28.3	30.3	10
NEB L	Girdled Road	24387	43.2	1.4	41.2	45.4	10
NEB TR	Girdled Road	24387	26.7	2.2	22.7	29.6	10
SB L	State Route 44	24374	24.3	2.1	21.2	28.3	10
SB T	State Route 44	24374	26.0	1.3	24.2	27.8	10
SB TR	State Route 44	24374	24.3	1.3	21.6	26.0	10
SWB L	Girdled Road	24394	56.7	4.7	49.1	62.6	10
SWB TR	Girdled Road	24394	92.1	4.1	86.2	96.8	10

Project: Option D - Options A + B + C
 Scenario: AM Peak
 Run(s): Batch (10 runs)
 Simulated: Various
 Time: 08:00:00 - 09:00:00
 Interval: Summary
 Selection: --

Intersection Level of Service by Approach - Overview

GIRDLED ROAD & AUBURN ROAD (EAST) -- UNSIGNALIZED

NODE: 17671

Run	Number of Vehicles	Total Control Delay (hr)	Avg Control Delay (sec/veh)	Level of Service
NEB on Girdled Road: Superlink ID 24382				
1	389.0	0.32	3.0	A
2	395.0	0.32	2.9	A
3	389.0	0.29	2.7	A
4	391.0	0.39	3.6	A
5	391.0	0.31	2.8	A
6	391.0	0.30	2.8	A
7	392.0	0.36	3.3	A
8	390.0	0.35	3.2	A
9	389.0	0.38	3.6	A
10	394.0	0.32	2.9	A
Average:	391.1	0.33	3.1	A
SEB on Auburn Road (East): Superlink ID 24383				
1	138.0	0.39	10.2	B
2	140.0	0.39	9.9	A
3	143.0	0.44	11.0	B
4	141.0	0.39	9.9	A
5	140.0	0.40	10.4	B
6	139.0	0.40	10.3	B
7	139.0	0.36	9.4	A
8	140.0	0.36	9.2	A
9	140.0	0.49	12.7	B
10	141.0	0.41	10.5	B
Average:	140.1	0.40	10.4	B
SWB on Girdled Road: Superlink ID 24387				
1	364.0	0.01	0.1	A
2	370.0	0.01	0.1	A
3	368.0	0.01	0.1	A
4	369.0	0.01	0.1	A
5	358.0	0.01	0.1	A
6	367.0	0.01	0.1	A
7	370.0	0.01	0.1	A
8	363.0	0.01	0.1	A
9	368.0	0.01	0.1	A

GIRDLED ROAD & AUBURN ROAD (EAST) -- UNSIGNALIZED

NODE: 17671

Run	Number of Vehicles	Total Control Delay (hr)	Avg Control Delay (sec/veh)	Level of Service
10	373.0	0.01	0.1	A
Average:	367.0	0.01	0.1	A

GIRDLED ROAD & AUBURN ROAD (WEST) -- UNSIGNALIZED

NODE: 7

Run	Number of Vehicles	Total Control Delay (hr)	Avg Control Delay (sec/veh)	Level of Service
NEB on Girdled Road: Superlink ID 24392				
1	128.0	0.01	0.3	A
2	131.0	0.01	0.2	A
3	129.0	0.01	0.3	A
4	131.0	0.01	0.2	A
5	130.0	0.01	0.2	A
6	130.0	0.01	0.2	A
7	129.0	0.01	0.2	A
8	131.0	0.01	0.3	A
9	131.0	0.01	0.2	A
10	133.0	0.01	0.2	A
Average:	130.3	0.01	0.2	A

NWB on Auburn Road (West): Superlink ID 24391

1	293.0	0.82	10.1	B
2	295.0	0.85	10.4	B
3	293.0	0.80	9.9	A
4	292.0	0.86	10.7	B
5	292.0	0.84	10.4	B
6	293.0	0.85	10.4	B
7	294.0	0.85	10.4	B
8	295.0	0.87	10.6	B
9	295.0	0.85	10.4	B
10	293.0	0.86	10.6	B
Average:	293.5	0.85	10.4	B

SWB on Girdled Road: Superlink ID 24382

1	347.0	0.14	1.4	A
2	349.0	0.13	1.4	A
3	351.0	0.14	1.4	A
4	349.0	0.16	1.6	A
5	348.0	0.12	1.3	A
6	350.0	0.12	1.3	A
7	351.0	0.13	1.4	A
8	345.0	0.12	1.2	A
9	349.0	0.13	1.4	A

GIRDLED ROAD & AUBURN ROAD (WEST) -- UNSIGNALIZED

NODE: 7

Run	Number of Vehicles	Total Control Delay (hr)	Avg Control Delay (sec/veh)	Level of Service
10	353.0	0.12	1.2	A
Average:	349.2	0.13	1.4	A

GIRDLED ROAD & CRILE ROAD -- UNSIGNALIZED

NODE: 10

Run	Number of Vehicles	Total Control Delay (hr)	Avg Control Delay (sec/veh)	Level of Service
EB on Girdled Road: Superlink ID 24394				
1	195.0	0.14	2.7	A
2	193.0	0.11	2.0	A
3	194.0	0.12	2.1	A
4	195.0	0.13	2.4	A
5	193.0	0.15	2.8	A
6	195.0	0.16	2.9	A
7	195.0	0.15	2.7	A
8	193.0	0.13	2.5	A
9	198.0	0.13	2.4	A
10	197.0	0.13	2.4	A
Average:	194.8	0.14	2.5	A

SEB on Crile Road: Superlink ID 24389

1	75.0	0.70	33.8	D
2	76.0	0.71	33.5	D
3	75.0	0.51	24.5	C
4	78.0	0.92	42.4	E
5	76.0	1.00	47.2	E
6	76.0	0.62	29.2	D
7	74.0	0.73	35.6	E
8	74.0	0.59	28.6	D
9	76.0	0.42	19.8	C
10	78.0	0.41	18.8	C
Average:	75.8	0.66	31.3	D

SWB on Girdled Road: Superlink ID 24367

1	529.0	0.00	0.0	A
2	541.0	0.00	0.0	A
3	540.0	0.00	0.0	A
4	531.0	0.00	0.0	A
5	500.0	0.00	0.0	A
6	534.0	0.00	0.0	A
7	544.0	0.00	0.0	A
8	530.0	0.00	0.0	A
9	542.0	0.00	0.0	A

GIRDLED ROAD & CRILE ROAD -- UNSIGNALIZED

NODE: 10

Run	Number of Vehicles	Total Control Delay (hr)	Avg Control Delay (sec/veh)	Level of Service
10	540.0	0.00	0.0	A
Average:	533.1	0.00	0.0	A

STATE ROUTE 44 & GIRDLED ROAD -- SIGNALIZED

NODE: 17673

Run	Number of Vehicles	Total Control Delay (hr)	Avg Control Delay (sec/veh)	Level of Service
NB on State Route 44: Superlink ID 24388				
1	768.0	6.33	29.7	C
2	749.0	5.95	28.6	C
3	748.0	6.10	29.3	C
4	759.0	6.16	29.2	C
5	761.0	6.12	28.9	C
6	772.0	6.37	29.7	C
7	764.0	6.02	28.3	C
8	760.0	6.13	29.1	C
9	770.0	6.34	29.7	C
10	759.0	6.11	29.0	C
Average:	761.0	6.16	29.2	C

NEB on Girdled Road: Superlink ID 24387

1	225.0	2.16	34.5	C
2	232.0	2.31	35.9	D
3	228.0	2.29	36.1	D
4	225.0	2.18	34.9	C
5	227.0	2.21	35.1	D
6	223.0	2.26	36.5	D
7	228.0	2.21	34.9	C
8	230.0	2.19	34.3	C
9	230.0	2.19	34.3	C
10	228.0	2.31	36.5	D
Average:	227.6	2.23	35.3	D

SB on State Route 44: Superlink ID 24374

1	782.0	5.42	25.0	C
2	765.0	5.18	24.4	C
3	762.0	5.50	26.0	C
4	771.0	5.43	25.3	C
5	774.0	5.59	26.0	C
6	778.0	5.34	24.7	C
7	760.0	5.03	23.8	C
8	768.0	5.03	23.6	C
9	783.0	5.71	26.2	C

STATE ROUTE 44 & GIRDLED ROAD -- SIGNALIZED

NODE: 17673

Run	Number of Vehicles	Total Control Delay (hr)	Avg Control Delay (sec/veh)	Level of Service
10	782.0	5.67	26.1	C
Average:	772.5	5.39	25.1	C

SWB on Girdled Road: Superlink ID 24394

1	492.0	12.50	91.4	F
2	514.0	12.46	87.3	F
3	511.0	11.88	83.7	F
4	504.0	12.56	89.7	F
5	479.0	12.28	92.3	F
6	500.0	12.69	91.3	F
7	507.0	12.31	87.4	F
8	497.0	12.50	90.5	F
9	502.0	11.44	82.0	F
10	505.0	11.48	81.8	F
Average:	501.1	12.21	87.7	F

Project: Option D - Options A + B + C
 Scenario: AM Peak
 Run(s): Batch (10 runs)
 Simulated: Various
 Time: 08:00:00 - 09:00:00
 Interval: Summary
 Selection: --

Intersection Level of Service by Approach - Total Control Delay

GIRDLED ROAD & AUBURN ROAD (EAST)

NODE: 17671

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NE	Girdled Road	24382	0.3	0.0	0.3	0.4	10
SE	Auburn Road (East)	24383	0.4	0.0	0.4	0.5	10
SW	Girdled Road	24387	0.0	0.0	0.0	0.0	10

GIRDLED ROAD & AUBURN ROAD (WEST)

NODE: 7

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NE	Girdled Road	24392	0.0	0.0	0.0	0.0	10
NW	Auburn Road (West)	24391	0.8	0.0	0.8	0.9	10
SW	Girdled Road	24382	0.1	0.0	0.1	0.2	10

GIRDLED ROAD & CRILE ROAD

NODE: 10

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Girdled Road	24394	0.1	0.0	0.1	0.2	10
SE	Crile Road	24389	0.7	0.2	0.4	1.0	10
SW	Girdled Road	24367	0.0	0.0	0.0	0.0	10

STATE ROUTE 44 & GIRDLED ROAD

NODE: 17673

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
N	State Route 44	24388	6.2	0.1	6.0	6.4	10
NE	Girdled Road	24387	2.2	0.1	2.2	2.3	10
S	State Route 44	24374	5.4	0.2	5.0	5.7	10
SW	Girdled Road	24394	12.2	0.5	11.4	12.7	10

Project: Option D - Options A + B + C
 Scenario: AM Peak
 Run(s): Batch (10 runs)
 Simulated: Various
 Time: 08:00:00 - 09:00:00
 Interval: Summary
 Selection: --

Intersection Level of Service by Approach - Avg Control Delay

GIRDLED ROAD & AUBURN ROAD (EAST)

NODE: 17671

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NE	Girdled Road	24382	3.1	0.3	2.7	3.6	10
SE	Auburn Road (East)	24383	10.4	1.0	9.2	12.7	10
SW	Girdled Road	24387	0.1	0.0	0.1	0.1	10

GIRDLED ROAD & AUBURN ROAD (WEST)

NODE: 7

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NE	Girdled Road	24392	0.2	0.0	0.2	0.3	10
NW	Auburn Road (West)	24391	10.4	0.2	9.9	10.7	10
SW	Girdled Road	24382	1.4	0.1	1.2	1.6	10

GIRDLED ROAD & CRILE ROAD

NODE: 10

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Girdled Road	24394	2.5	0.3	2.0	2.9	10
SE	Crile Road	24389	31.3	9.1	18.8	47.2	10
SW	Girdled Road	24367	0.0	0.0	0.0	0.0	10

STATE ROUTE 44 & GIRDLED ROAD

NODE: 17673

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
N	State Route 44	24388	29.2	0.5	28.3	29.7	10
NE	Girdled Road	24387	35.3	0.9	34.3	36.5	10
S	State Route 44	24374	25.1	1.0	23.6	26.2	10
SW	Girdled Road	24394	87.7	4.0	81.8	92.3	10

Project: Option D - Options A + B + C
 Scenario: AM Peak
 Run(s): Batch (10 runs)
 Simulated: Various
 Time: 08:00:00 - 09:00:00
 Interval: Summary
 Selection: --

Intersection Level of Service - Overview

GIRDLED ROAD & AUBURN ROAD (EAST) -- UNSIGNALIZED

NODE: 17671

Run	Number of Vehicles	Total Control Delay (hr)	Avg Control Delay (sec/veh)	Level of Service
1	891.0	0.72	2.9	A
2	905.0	0.72	2.8	A
3	900.0	0.74	3.0	A
4	901.0	0.79	3.2	A
5	889.0	0.72	2.9	A
6	897.0	0.71	2.8	A
7	901.0	0.73	2.9	A
8	893.0	0.72	2.9	A
9	897.0	0.89	3.6	A
10	908.0	0.74	2.9	A
Average:	898.2	0.75	3.0	A

GIRDLED ROAD & AUBURN ROAD (WEST) -- UNSIGNALIZED

NODE: 7

Run	Number of Vehicles	Total Control Delay (hr)	Avg Control Delay (sec/veh)	Level of Service
1	768.0	0.97	4.5	A
2	775.0	0.99	4.6	A
3	773.0	0.95	4.4	A
4	772.0	1.03	4.8	A
5	770.0	0.97	4.5	A
6	773.0	0.97	4.5	A
7	774.0	0.99	4.6	A
8	771.0	1.00	4.6	A
9	775.0	0.99	4.6	A
10	779.0	0.98	4.5	A
Average:	773.0	0.98	4.6	A

GIRDLED ROAD & CRILE ROAD -- UNSIGNALIZED

NODE: 10

Run	Number of Vehicles	Total Control Delay (hr)	Avg Control Delay (sec/veh)	Level of Service
1	799.0	0.85	3.8	A
2	810.0	0.82	3.6	A
3	809.0	0.63	2.8	A
4	804.0	1.05	4.7	A
5	769.0	1.14	5.4	A
6	805.0	0.77	3.5	A
7	813.0	0.88	3.9	A
8	797.0	0.72	3.3	A
9	816.0	0.55	2.4	A

Intersection Level of Service

10	815.0	0.54	2.4	A
Average:	803.7	0.80	3.6	A

STATE ROUTE 44 & GIRDLED ROAD -- SIGNALIZED

NODE: 17673

Run	Number of Vehicles	Total Control Delay (hr)	Avg Control Delay (sec/veh)	Level of Service
1	2,267.0	26.40	41.9	D
2	2,260.0	25.91	41.3	D
3	2,249.0	25.77	41.2	D
4	2,259.0	26.33	42.0	D
5	2,241.0	26.19	42.1	D
6	2,273.0	26.65	42.2	D
7	2,259.0	25.57	40.7	D
8	2,255.0	25.85	41.3	D
9	2,285.0	25.69	40.5	D
10	2,274.0	25.57	40.5	D
Average:	2,262.2	25.99	41.4	D

Project: Option D - Options A + B + C
 Scenario: AM Peak
 Run(s): Batch (10 runs)
 Simulated: Various
 Time: 08:00:00 - 09:00:00
 Interval: Summary
 Selection: --

Intersection Level of Service - Total Control Delay

Node ID	Intersection	Control Type	Average	Std Dev	Minimum	Maximum	# Samples
17671	Girdled Road & Auburn Road (East)	Stop	0.7	0.1	0.7	0.9	10
7	Girdled Road & Auburn Road (West)	Stop	1.0	0.0	1.0	1.0	10
10	Girdled Road & Crile Road	Stop	0.8	0.2	0.5	1.1	10
17673	State Route 44 & Girdled Road	Actuated	26.0	0.4	25.6	26.7	10

Project: Option D - Options A + B + C
Scenario: AM Peak
Run(s): Batch (10 runs)
Simulated: Various
Time: 08:00:00 - 09:00:00
Interval: Summary
Selection: --

Intersection Level of Service - Avg Control Delay

Node ID	Intersection	Control Type	Average	Std Dev	Minimum	Maximum	# Samples
17671	Girdled Road & Auburn Road (East)	Stop	3.0	0.2	2.8	3.6	10
7	Girdled Road & Auburn Road (West)	Stop	4.6	0.1	4.4	4.8	10
10	Girdled Road & Crile Road	Stop	3.6	1.0	2.4	5.4	10
17673	State Route 44 & Girdled Road	Actuated	41.4	0.7	40.5	42.2	10

Project: Option D - Options A + B + C
 Scenario: PM Peak
 Run(s): Batch (10 runs)
 Simulated: Various
 Time: 17:00:00 - 18:00:00
 Interval: Summary
 Selection: --

Intersection Level of Service by Lane Group - Overview

GIRDLED ROAD & AUBURN ROAD (EAST) -- UNSIGNALIZED

NODE: 17671

Run	Number of Vehicles	Total Control Delay (hr)	Avg Control Delay (sec/veh)	Level of Service
NEB LT on Girdled Road: Superlink ID 24382				
1	423.0	0.24	2.0	A
2	425.0	0.22	1.9	A
3	423.0	0.18	1.5	A
4	426.0	0.22	1.9	A
5	422.0	0.23	2.0	A
6	424.0	0.27	2.3	A
7	421.0	0.21	1.8	A
8	428.0	0.22	1.9	A
9	423.0	0.16	1.4	A
10	425.0	0.20	1.7	A
Average:	424.0	0.22	1.8	A

SEB LR on Auburn Road (East): Superlink ID 24383

1	228.0	0.79	12.5	B
2	226.0	0.76	12.2	B
3	228.0	0.82	12.9	B
4	226.0	0.73	11.7	B
5	225.0	0.69	11.1	B
6	227.0	0.84	13.3	B
7	227.0	0.69	11.0	B
8	225.0	0.80	12.9	B
9	225.0	0.73	11.7	B
10	229.0	0.92	14.5	B
Average:	226.6	0.78	12.4	B

SWB TR on Girdled Road: Superlink ID 24387

1	237.0	0.01	0.2	A
2	238.0	0.01	0.2	A
3	237.0	0.01	0.2	A
4	241.0	0.01	0.2	A
5	236.0	0.01	0.1	A
6	239.0	0.01	0.2	A
7	236.0	0.01	0.2	A
8	240.0	0.01	0.2	A
9	233.0	0.01	0.2	A
10	238.0	0.01	0.2	A
Average:	237.5	0.01	0.2	A

GIRDLED ROAD & AUBURN ROAD (EAST) -- UNSIGNALIZED

NODE: 17671

Run	Number of Vehicles	Total Control Delay (hr)	Avg Control Delay (sec/veh)	Level of Service
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GIRDLED ROAD & AUBURN ROAD (WEST) -- UNSIGNALIZED

NODE: 7

Run	Number of Vehicles	Total Control Delay (hr)	Avg Control Delay (sec/veh)	Level of Service
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NEB TR on Girdled Road: Superlink ID 24392

1	171.0	0.01	0.1	A
2	172.0	0.01	0.2	A
3	174.0	0.01	0.1	A
4	175.0	0.01	0.2	A
5	174.0	0.01	0.2	A
6	174.0	0.01	0.2	A
7	172.0	0.01	0.2	A
8	176.0	0.01	0.1	A
9	172.0	0.01	0.2	A
10	172.0	0.01	0.2	A
Average:	173.2	0.01	0.2	A

NWB LR on Auburn Road (West): Superlink ID 24391

1	294.0	0.95	11.7	B
2	293.0	0.90	11.1	B
3	295.0	1.04	12.6	B
4	294.0	0.89	10.9	B
5	291.0	0.90	11.1	B
6	294.0	0.89	10.9	B
7	292.0	0.93	11.5	B
8	295.0	0.92	11.3	B
9	296.0	0.87	10.6	B
10	294.0	0.87	10.6	B
Average:	293.8	0.92	11.2	B

SWB LT on Girdled Road: Superlink ID 24382

1	379.0	0.16	1.5	A
2	380.0	0.18	1.7	A
3	378.0	0.23	2.2	A
4	383.0	0.20	1.8	A
5	376.0	0.18	1.8	A
6	380.0	0.17	1.6	A
7	379.0	0.21	2.0	A
8	381.0	0.19	1.8	A
9	374.0	0.22	2.1	A
10	382.0	0.19	1.7	A
Average:	379.2	0.19	1.8	A

GIRDLED ROAD & CRILE ROAD -- UNSIGNALIZED

NODE: 10

Run	Number of Vehicles	Total Control Delay (hr)	Avg Control Delay (sec/veh)	Level of Service
EB L on Girdled Road: Superlink ID 24394				
1	97.0	0.12	4.5	A
2	96.0	0.14	5.2	A
3	98.0	0.11	4.0	A
4	96.0	0.12	4.3	A
5	96.0	0.14	5.2	A
6	97.0	0.12	4.3	A
7	97.0	0.11	4.0	A
8	97.0	0.13	5.0	A
9	95.0	0.13	4.9	A
10	98.0	0.11	4.2	A
Average:	96.7	0.12	4.6	A
EB T on Girdled Road: Superlink ID 24394				
1	323.0	0.00	0.1	A
2	327.0	0.00	0.0	A
3	325.0	0.00	0.1	A
4	325.0	0.00	0.1	A
5	322.0	0.01	0.1	A
6	324.0	0.00	0.0	A
7	327.0	0.01	0.1	A
8	324.0	0.01	0.1	A
9	327.0	0.01	0.1	A
10	323.0	0.00	0.0	A
Average:	324.7	0.00	0.1	A
SEB LR on Crile Road: Superlink ID 24389				
1	214.0	0.66	11.1	B
2	216.0	0.68	11.4	B
3	216.0	0.69	11.6	B
4	215.0	0.83	14.0	B
5	218.0	0.76	12.6	B
6	218.0	0.71	11.8	B
7	219.0	0.80	13.1	B
8	216.0	0.72	12.0	B
9	217.0	0.80	13.2	B
10	218.0	0.75	12.5	B
Average:	216.7	0.74	12.3	B
SWB TR on Girdled Road: Superlink ID 24367				
1	347.0	0.00	0.0	A
2	349.0	0.00	0.0	A
3	346.0	0.00	0.0	A

GIRDLED ROAD & CRILE ROAD -- UNSIGNALIZED

NODE: 10

Run	Number of Vehicles	Total Control Delay (hr)	Avg Control Delay (sec/veh)	Level of Service
4	347.0	0.00	0.0	A
5	346.0	0.00	0.0	A
6	348.0	0.00	0.0	A
7	349.0	0.00	0.0	A
8	348.0	0.00	0.0	A
9	349.0	0.00	0.0	A
10	348.0	0.00	0.0	A
Average:	347.7	0.00	0.0	A

STATE ROUTE 44 & GIRDLED ROAD -- SIGNALIZED

NODE: 17673

Run	Number of Vehicles	Total Control Delay (hr)	Avg Control Delay (sec/veh)	Level of Service
NB L on State Route 44: Superlink ID 24388				
1	19.0	0.15	29.2	C
2	21.0	0.16	28.2	C
3	22.0	0.19	31.9	C
4	21.0	0.14	23.7	C
5	22.0	0.20	32.5	C
6	23.0	0.26	40.0	D
7	22.0	0.22	36.3	D
8	22.0	0.21	34.9	C
9	22.0	0.19	30.3	C
10	23.0	0.22	34.9	C
Average:	21.7	0.19	32.2	C

NB T on State Route 44: Superlink ID 24388

1	425.0	2.99	25.3	C
2	405.0	2.97	26.4	C
3	425.0	3.37	28.6	C
4	404.0	2.97	26.5	C
5	418.0	3.04	26.2	C
6	421.0	3.09	26.4	C
7	420.0	3.25	27.8	C
8	414.0	3.20	27.8	C
9	410.0	2.97	26.1	C
10	422.0	3.29	28.0	C
Average:	416.4	3.11	26.9	C

NB TR on State Route 44: Superlink ID 24388

1	439.0	3.11	25.5	C
2	449.0	3.06	24.5	C
3	444.0	3.45	28.0	C
4	456.0	3.25	25.6	C
5	433.0	3.13	26.0	C

STATE ROUTE 44 & GIRDLED ROAD -- SIGNALIZED

NODE: 17673

Run	Number of Vehicles	Total Control Delay (hr)	Avg Control Delay (sec/veh)	Level of Service
6	439.0	3.12	25.5	C
7	445.0	3.33	27.0	C
8	456.0	3.26	25.7	C
9	446.0	3.25	26.2	C
10	439.0	3.12	25.6	C
Average:	444.6	3.21	26.0	C

NEB L on Girdled Road: Superlink ID 24387

1	120.0	0.85	25.6	C
2	118.0	1.00	30.5	C
3	119.0	0.93	28.2	C
4	120.0	1.00	29.9	C
5	122.0	0.95	28.0	C
6	121.0	0.94	28.0	C
7	118.0	0.85	25.8	C
8	119.0	0.79	24.0	C
9	117.0	0.94	28.8	C
10	123.0	0.87	25.4	C
Average:	119.7	0.91	27.4	C

NEB TR on Girdled Road: Superlink ID 24387

1	194.0	2.07	38.5	D
2	197.0	1.82	33.3	C
3	194.0	1.91	35.4	D
4	193.0	1.82	34.0	C
5	193.0	1.94	36.2	D
6	194.0	2.29	42.4	D
7	191.0	1.82	34.3	C
8	189.0	1.90	36.2	D
9	194.0	1.81	33.6	C
10	190.0	1.91	36.2	D
Average:	192.9	1.93	36.0	D

SB L on State Route 44: Superlink ID 24374

1	180.0	1.35	27.1	C
2	186.0	1.41	27.3	C
3	186.0	1.44	27.9	C
4	182.0	1.45	28.6	C
5	184.0	1.54	30.1	C
6	186.0	1.60	31.0	C
7	187.0	1.31	25.2	C
8	186.0	1.42	27.5	C
9	184.0	1.30	25.5	C

STATE ROUTE 44 & GIRDLED ROAD -- SIGNALIZED

NODE: 17673

Run	Number of Vehicles	Total Control Delay (hr)	Avg Control Delay (sec/veh)	Level of Service
10	185.0	1.57	30.5	C
Average:	184.6	1.44	28.1	C

SB T on State Route 44: Superlink ID 24374

1	505.0	2.46	17.5	B
2	490.0	2.45	18.0	B
3	491.0	2.61	19.2	B
4	483.0	2.55	19.0	B
5	481.0	2.29	17.1	B
6	497.0	2.46	17.8	B
7	494.0	2.47	18.0	B
8	485.0	2.60	19.3	B
9	474.0	2.18	16.6	B
10	477.0	2.40	18.1	B
Average:	487.7	2.45	18.1	B

SB TR on State Route 44: Superlink ID 24374

1	363.0	1.92	19.0	B
2	371.0	1.86	18.1	B
3	381.0	2.02	19.1	B
4	377.0	1.86	17.7	B
5	372.0	1.79	17.3	B
6	366.0	1.87	18.4	B
7	369.0	1.82	17.8	B
8	385.0	1.92	18.0	B
9	383.0	1.78	16.7	B
10	381.0	1.76	16.6	B
Average:	374.8	1.86	17.9	B

SWB L on Girdled Road: Superlink ID 24394

1	87.0	0.64	26.4	C
2	87.0	0.65	26.8	C
3	86.0	0.69	28.7	C
4	87.0	0.59	24.2	C
5	88.0	0.68	27.8	C
6	86.0	0.66	27.5	C
7	86.0	0.66	27.8	C
8	85.0	0.54	23.1	C
9	85.0	0.59	24.9	C
10	86.0	0.63	26.5	C
Average:	86.3	0.63	26.4	C

SWB TR on Girdled Road: Superlink ID 24394

STATE ROUTE 44 & GIRDLED ROAD -- SIGNALIZED

NODE: 17673

Run	Number of Vehicles	Total Control Delay (hr)	Avg Control Delay (sec/veh)	Level of Service
1	236.0	2.07	31.5	C
2	239.0	2.21	33.2	C
3	236.0	2.19	33.4	C
4	240.0	2.18	32.7	C
5	236.0	2.29	35.0	C
6	239.0	2.27	34.2	C
7	236.0	2.25	34.2	C
8	236.0	1.96	29.9	C
9	233.0	2.14	33.1	C
10	235.0	2.24	34.3	C
Average:	236.6	2.18	33.2	C

Project: Option D - Options A + B + C
 Scenario: PM Peak
 Run(s): Batch (10 runs)
 Simulated: Various
 Time: 17:00:00 - 18:00:00
 Interval: Summary
 Selection: --

Intersection Level of Service by Lane Group - Total Control Delay

GIRDLED ROAD & AUBURN ROAD (EAST)

NODE: 17671

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NEB LT	Girdled Road	24382	0.2	0.0	0.2	0.3	10
SEB LR	Auburn Road (East)	24383	0.8	0.1	0.7	0.9	10
SWB TR	Girdled Road	24387	0.0	0.0	0.0	0.0	10

GIRDLED ROAD & AUBURN ROAD (WEST)

NODE: 7

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NEB TR	Girdled Road	24392	0.0	0.0	0.0	0.0	10
NWB LR	Auburn Road (West)	24391	0.9	0.1	0.9	1.0	10
SWB LT	Girdled Road	24382	0.2	0.0	0.2	0.2	10

GIRDLED ROAD & CRILE ROAD

NODE: 10

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Girdled Road	24394	0.1	0.0	0.1	0.1	10
EB T	Girdled Road	24394	0.0	0.0	0.0	0.0	10
SEB LR	Crile Road	24389	0.7	0.1	0.7	0.8	10
SWB TR	Girdled Road	24367	0.0	0.0	0.0	0.0	10

STATE ROUTE 44 & GIRDLED ROAD

NODE: 17673

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NB L	State Route 44	24388	0.2	0.0	0.1	0.3	10
NB T	State Route 44	24388	3.1	0.2	3.0	3.4	10
NB TR	State Route 44	24388	3.2	0.1	3.1	3.5	10
NEB L	Girdled Road	24387	0.9	0.1	0.8	1.0	10
NEB TR	Girdled Road	24387	1.9	0.1	1.8	2.3	10
SB L	State Route 44	24374	1.4	0.1	1.3	1.6	10
SB T	State Route 44	24374	2.4	0.1	2.2	2.6	10
SB TR	State Route 44	24374	1.9	0.1	1.8	2.0	10
SWB L	Girdled Road	24394	0.6	0.0	0.5	0.7	10
SWB TR	Girdled Road	24394	2.2	0.1	2.0	2.3	10

Project: Option D - Options A + B + C
 Scenario: PM Peak
 Run(s): Batch (10 runs)
 Simulated: Various
 Time: 17:00:00 - 18:00:00
 Interval: Summary
 Selection: --

Intersection Level of Service by Lane Group - Avg Control Delay

GIRDLED ROAD & AUBURN ROAD (EAST)

NODE: 17671

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NEB LT	Girdled Road	24382	1.8	0.3	1.4	2.3	10
SEB LR	Auburn Road (East)	24383	12.4	1.1	11.0	14.5	10
SWB TR	Girdled Road	24387	0.2	0.0	0.1	0.2	10

GIRDLED ROAD & AUBURN ROAD (WEST)

NODE: 7

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NEB TR	Girdled Road	24392	0.2	0.0	0.1	0.2	10
NWB LR	Auburn Road (West)	24391	11.2	0.6	10.6	12.6	10
SWB LT	Girdled Road	24382	1.8	0.2	1.5	2.2	10

GIRDLED ROAD & CRILE ROAD

NODE: 10

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Girdled Road	24394	4.6	0.5	4.0	5.2	10
EB T	Girdled Road	24394	0.1	0.0	0.0	0.1	10
SEB LR	Crile Road	24389	12.3	0.9	11.1	14.0	10
SWB TR	Girdled Road	24367	0.0	0.0	0.0	0.0	10

STATE ROUTE 44 & GIRDLED ROAD

NODE: 17673

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NB L	State Route 44	24388	32.2	4.6	23.7	40.0	10
NB T	State Route 44	24388	26.9	1.1	25.3	28.6	10
NB TR	State Route 44	24388	26.0	1.0	24.5	28.0	10
NEB L	Girdled Road	24387	27.4	2.1	24.0	30.5	10
NEB TR	Girdled Road	24387	36.0	2.7	33.3	42.4	10
SB L	State Route 44	24374	28.1	2.0	25.2	31.0	10
SB T	State Route 44	24374	18.1	0.9	16.6	19.3	10
SB TR	State Route 44	24374	17.9	0.8	16.6	19.1	10
SWB L	Girdled Road	24394	26.4	1.8	23.1	28.7	10
SWB TR	Girdled Road	24394	33.2	1.5	29.9	35.0	10

Project: Option D - Options A + B + C
 Scenario: PM Peak
 Run(s): Batch (10 runs)
 Simulated: Various
 Time: 17:00:00 - 18:00:00
 Interval: Summary
 Selection: --

Intersection Level of Service by Approach - Overview

GIRDLED ROAD & AUBURN ROAD (EAST) -- UNSIGNALIZED

NODE: 17671

Run	Number of Vehicles	Total Control Delay (hr)	Avg Control Delay (sec/veh)	Level of Service
NEB on Girdled Road: Superlink ID 24382				
1	423.0	0.24	2.0	A
2	425.0	0.22	1.9	A
3	423.0	0.18	1.5	A
4	426.0	0.22	1.9	A
5	422.0	0.23	2.0	A
6	424.0	0.27	2.3	A
7	421.0	0.21	1.8	A
8	428.0	0.22	1.9	A
9	423.0	0.16	1.4	A
10	425.0	0.20	1.7	A
Average:	424.0	0.22	1.8	A
SEB on Auburn Road (East): Superlink ID 24383				
1	228.0	0.79	12.5	B
2	226.0	0.76	12.2	B
3	228.0	0.82	12.9	B
4	226.0	0.73	11.7	B
5	225.0	0.69	11.1	B
6	227.0	0.84	13.3	B
7	227.0	0.69	11.0	B
8	225.0	0.80	12.9	B
9	225.0	0.73	11.7	B
10	229.0	0.92	14.5	B
Average:	226.6	0.78	12.4	B
SWB on Girdled Road: Superlink ID 24387				
1	237.0	0.01	0.2	A
2	238.0	0.01	0.2	A
3	237.0	0.01	0.2	A
4	241.0	0.01	0.2	A
5	236.0	0.01	0.1	A
6	239.0	0.01	0.2	A
7	236.0	0.01	0.2	A
8	240.0	0.01	0.2	A
9	233.0	0.01	0.2	A

GIRDLED ROAD & AUBURN ROAD (EAST) -- UNSIGNALIZED

NODE: 17671

Run	Number of Vehicles	Total Control Delay (hr)	Avg Control Delay (sec/veh)	Level of Service
10	238.0	0.01	0.2	A
Average:	237.5	0.01	0.2	A

GIRDLED ROAD & AUBURN ROAD (WEST) -- UNSIGNALIZED

NODE: 7

Run	Number of Vehicles	Total Control Delay (hr)	Avg Control Delay (sec/veh)	Level of Service
NEB on Girdled Road: Superlink ID 24392				
1	171.0	0.01	0.1	A
2	172.0	0.01	0.2	A
3	174.0	0.01	0.1	A
4	175.0	0.01	0.2	A
5	174.0	0.01	0.2	A
6	174.0	0.01	0.2	A
7	172.0	0.01	0.2	A
8	176.0	0.01	0.1	A
9	172.0	0.01	0.2	A
10	172.0	0.01	0.2	A
Average:	173.2	0.01	0.2	A

NWB on Auburn Road (West): Superlink ID 24391

1	294.0	0.95	11.7	B
2	293.0	0.90	11.1	B
3	295.0	1.04	12.6	B
4	294.0	0.89	10.9	B
5	291.0	0.90	11.1	B
6	294.0	0.89	10.9	B
7	292.0	0.93	11.5	B
8	295.0	0.92	11.3	B
9	296.0	0.87	10.6	B
10	294.0	0.87	10.6	B
Average:	293.8	0.92	11.2	B

SWB on Girdled Road: Superlink ID 24382

1	379.0	0.16	1.5	A
2	380.0	0.18	1.7	A
3	378.0	0.23	2.2	A
4	383.0	0.20	1.8	A
5	376.0	0.18	1.8	A
6	380.0	0.17	1.6	A
7	379.0	0.21	2.0	A
8	381.0	0.19	1.8	A
9	374.0	0.22	2.1	A

GIRDLED ROAD & AUBURN ROAD (WEST) -- UNSIGNALIZED

NODE: 7

Run	Number of Vehicles	Total Control Delay (hr)	Avg Control Delay (sec/veh)	Level of Service
10	382.0	0.19	1.7	A
Average:	379.2	0.19	1.8	A

GIRDLED ROAD & CRILE ROAD -- UNSIGNALIZED

NODE: 10

Run	Number of Vehicles	Total Control Delay (hr)	Avg Control Delay (sec/veh)	Level of Service
EB on Girdled Road: Superlink ID 24394				
1	420.0	0.13	1.1	A
2	423.0	0.14	1.2	A
3	423.0	0.11	1.0	A
4	421.0	0.12	1.0	A
5	418.0	0.15	1.2	A
6	421.0	0.12	1.0	A
7	424.0	0.11	1.0	A
8	421.0	0.14	1.2	A
9	422.0	0.14	1.2	A
10	421.0	0.12	1.0	A
Average:	421.4	0.13	1.1	A

SEB on Crile Road: Superlink ID 24389

1	214.0	0.66	11.1	B
2	216.0	0.68	11.4	B
3	216.0	0.69	11.6	B
4	215.0	0.83	14.0	B
5	218.0	0.76	12.6	B
6	218.0	0.71	11.8	B
7	219.0	0.80	13.1	B
8	216.0	0.72	12.0	B
9	217.0	0.80	13.2	B
10	218.0	0.75	12.5	B
Average:	216.7	0.74	12.3	B

SWB on Girdled Road: Superlink ID 24367

1	347.0	0.00	0.0	A
2	349.0	0.00	0.0	A
3	346.0	0.00	0.0	A
4	347.0	0.00	0.0	A
5	346.0	0.00	0.0	A
6	348.0	0.00	0.0	A
7	349.0	0.00	0.0	A
8	348.0	0.00	0.0	A
9	349.0	0.00	0.0	A

GIRDLED ROAD & CRILE ROAD -- UNSIGNALIZED

NODE: 10

Run	Number of Vehicles	Total Control Delay (hr)	Avg Control Delay (sec/veh)	Level of Service
10	348.0	0.00	0.0	A
Average:	347.7	0.00	0.0	A

STATE ROUTE 44 & GIRDLED ROAD -- SIGNALIZED

NODE: 17673

Run	Number of Vehicles	Total Control Delay (hr)	Avg Control Delay (sec/veh)	Level of Service
NB on State Route 44: Superlink ID 24388				
1	883.0	6.25	25.5	C
2	875.0	6.19	25.5	C
3	891.0	7.02	28.4	C
4	881.0	6.36	26.0	C
5	873.0	6.36	26.2	C
6	883.0	6.46	26.4	C
7	887.0	6.80	27.6	C
8	892.0	6.67	26.9	C
9	878.0	6.41	26.3	C
10	884.0	6.63	27.0	C
Average:	882.7	6.52	26.6	C

NEB on Girdled Road: Superlink ID 24387

1	314.0	2.92	33.5	C
2	315.0	2.83	32.3	C
3	313.0	2.84	32.7	C
4	313.0	2.82	32.4	C
5	315.0	2.89	33.0	C
6	315.0	3.23	36.9	D
7	309.0	2.66	31.0	C
8	308.0	2.70	31.5	C
9	311.0	2.75	31.8	C
10	313.0	2.78	32.0	C
Average:	312.6	2.84	32.7	C

SB on State Route 44: Superlink ID 24374

1	1,048.0	5.73	19.7	B
2	1,047.0	5.72	19.7	B
3	1,058.0	6.07	20.7	C
4	1,042.0	5.86	20.2	C
5	1,037.0	5.61	19.5	B
6	1,049.0	5.93	20.4	C
7	1,050.0	5.60	19.2	B
8	1,056.0	5.94	20.3	C
9	1,041.0	5.26	18.2	B

STATE ROUTE 44 & GIRDLED ROAD -- SIGNALIZED

NODE: 17673

Run	Number of Vehicles	Total Control Delay (hr)	Avg Control Delay (sec/veh)	Level of Service
10	1,043.0	5.72	19.7	B
Average:	1,047.1	5.74	19.8	B

SWB on Girdled Road: Superlink ID 24394

1	323.0	2.71	30.2	C
2	326.0	2.85	31.5	C
3	322.0	2.87	32.1	C
4	327.0	2.76	30.4	C
5	324.0	2.97	33.0	C
6	325.0	2.93	32.4	C
7	322.0	2.91	32.5	C
8	321.0	2.51	28.1	C
9	318.0	2.73	30.9	C
10	321.0	2.87	32.2	C
Average:	322.9	2.81	31.3	C

Project: Option D - Options A + B + C
 Scenario: PM Peak
 Run(s): Batch (10 runs)
 Simulated: Various
 Time: 17:00:00 - 18:00:00
 Interval: Summary
 Selection: --

Intersection Level of Service by Approach - Total Control Delay

GIRDLED ROAD & AUBURN ROAD (EAST)

NODE: 17671

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NE	Girdled Road	24382	0.2	0.0	0.2	0.3	10
SE	Auburn Road (East)	24383	0.8	0.1	0.7	0.9	10
SW	Girdled Road	24387	0.0	0.0	0.0	0.0	10

GIRDLED ROAD & AUBURN ROAD (WEST)

NODE: 7

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NE	Girdled Road	24392	0.0	0.0	0.0	0.0	10
NW	Auburn Road (West)	24391	0.9	0.1	0.9	1.0	10
SW	Girdled Road	24382	0.2	0.0	0.2	0.2	10

GIRDLED ROAD & CRILE ROAD

NODE: 10

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Girdled Road	24394	0.1	0.0	0.1	0.2	10
SE	Crile Road	24389	0.7	0.1	0.7	0.8	10
SW	Girdled Road	24367	0.0	0.0	0.0	0.0	10

STATE ROUTE 44 & GIRDLED ROAD

NODE: 17673

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
N	State Route 44	24388	6.5	0.3	6.2	7.0	10
NE	Girdled Road	24387	2.8	0.2	2.7	3.2	10
S	State Route 44	24374	5.7	0.2	5.3	6.1	10
SW	Girdled Road	24394	2.8	0.1	2.5	3.0	10

Project: Option D - Options A + B + C
 Scenario: PM Peak
 Run(s): Batch (10 runs)
 Simulated: Various
 Time: 17:00:00 - 18:00:00
 Interval: Summary
 Selection: --

Intersection Level of Service by Approach - Avg Control Delay

GIRDLED ROAD & AUBURN ROAD (EAST)

NODE: 17671

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NE	Girdled Road	24382	1.8	0.3	1.4	2.3	10
SE	Auburn Road (East)	24383	12.4	1.1	11.0	14.5	10
SW	Girdled Road	24387	0.2	0.0	0.1	0.2	10

GIRDLED ROAD & AUBURN ROAD (WEST)

NODE: 7

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NE	Girdled Road	24392	0.2	0.0	0.1	0.2	10
NW	Auburn Road (West)	24391	11.2	0.6	10.6	12.6	10
SW	Girdled Road	24382	1.8	0.2	1.5	2.2	10

GIRDLED ROAD & CRILE ROAD

NODE: 10

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Girdled Road	24394	1.1	0.1	1.0	1.2	10
SE	Crile Road	24389	12.3	0.9	11.1	14.0	10
SW	Girdled Road	24367	0.0	0.0	0.0	0.0	10

STATE ROUTE 44 & GIRDLED ROAD

NODE: 17673

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
N	State Route 44	24388	26.6	0.9	25.5	28.4	10
NE	Girdled Road	24387	32.7	1.6	31.0	36.9	10
S	State Route 44	24374	19.8	0.7	18.2	20.7	10
SW	Girdled Road	24394	31.3	1.5	28.1	33.0	10

Project: Option D - Options A + B + C
 Scenario: PM Peak
 Run(s): Batch (10 runs)
 Simulated: Various
 Time: 17:00:00 - 18:00:00
 Interval: Summary
 Selection: --

Intersection Level of Service - Overview

GIRDLED ROAD & AUBURN ROAD (EAST) -- UNSIGNALIZED

NODE: 17671

Run	Number of Vehicles	Total Control Delay (hr)	Avg Control Delay (sec/veh)	Level of Service
1	888.0	1.03	4.2	A
2	889.0	1.00	4.0	A
3	888.0	1.00	4.1	A
4	893.0	0.96	3.9	A
5	883.0	0.94	3.8	A
6	890.0	1.12	4.5	A
7	884.0	0.92	3.7	A
8	893.0	1.04	4.2	A
9	881.0	0.90	3.7	A
10	892.0	1.13	4.6	A
Average:	888.1	1.00	4.1	A

GIRDLED ROAD & AUBURN ROAD (WEST) -- UNSIGNALIZED

NODE: 7

Run	Number of Vehicles	Total Control Delay (hr)	Avg Control Delay (sec/veh)	Level of Service
1	844.0	1.12	4.8	A
2	845.0	1.09	4.7	A
3	847.0	1.27	5.4	A
4	852.0	1.09	4.6	A
5	841.0	1.09	4.7	A
6	848.0	1.06	4.5	A
7	843.0	1.15	4.9	A
8	852.0	1.12	4.7	A
9	842.0	1.10	4.7	A
10	848.0	1.06	4.5	A
Average:	846.2	1.12	4.8	A

GIRDLED ROAD & CRILE ROAD -- UNSIGNALIZED

NODE: 10

Run	Number of Vehicles	Total Control Delay (hr)	Avg Control Delay (sec/veh)	Level of Service
1	981.0	0.79	2.9	A
2	988.0	0.82	3.0	A
3	985.0	0.81	2.9	A
4	983.0	0.96	3.5	A
5	982.0	0.91	3.3	A
6	987.0	0.83	3.0	A
7	992.0	0.91	3.3	A
8	985.0	0.86	3.1	A
9	988.0	0.93	3.4	A

Intersection Level of Service

10	987.0	0.87	3.2	A
Average:	985.8	0.87	3.2	A

STATE ROUTE 44 & GIRDLED ROAD -- SIGNALIZED

NODE: 17673

Run	Number of Vehicles	Total Control Delay (hr)	Avg Control Delay (sec/veh)	Level of Service
1	2,568.0	17.62	24.7	C
2	2,563.0	17.60	24.7	C
3	2,584.0	18.80	26.2	C
4	2,563.0	17.80	25.0	C
5	2,549.0	17.84	25.2	C
6	2,572.0	18.55	26.0	C
7	2,568.0	17.98	25.2	C
8	2,577.0	17.82	24.9	C
9	2,548.0	17.15	24.2	C
10	2,561.0	18.01	25.3	C
Average:	2,565.3	17.92	25.1	C

Project: Option D - Options A + B + C
 Scenario: PM Peak
 Run(s): Batch (10 runs)
 Simulated: Various
 Time: 17:00:00 - 18:00:00
 Interval: Summary
 Selection: --

Intersection Level of Service - Total Control Delay

Node ID	Intersection	Control Type	Average	Std Dev	Minimum	Maximum	# Samples
17671	Girdled Road & Auburn Road (East)	Stop	1.0	0.1	0.9	1.1	10
7	Girdled Road & Auburn Road (West)	Stop	1.1	0.1	1.1	1.3	10
10	Girdled Road & Crile Road	Stop	0.9	0.1	0.8	1.0	10
17673	State Route 44 & Girdled Road	Actuated	17.9	0.5	17.2	18.8	10

Project: Option D - Options A + B + C
 Scenario: PM Peak
 Run(s): Batch (10 runs)
 Simulated: Various
 Time: 17:00:00 - 18:00:00
 Interval: Summary
 Selection: --

Intersection Level of Service - Avg Control Delay

Node ID	Intersection	Control Type	Average	Std Dev	Minimum	Maximum	# Samples
17671	Girdled Road & Auburn Road (East)	Stop	4.1	0.3	3.7	4.6	10
7	Girdled Road & Auburn Road (West)	Stop	4.8	0.3	4.5	5.4	10
10	Girdled Road & Crile Road	Stop	3.2	0.2	2.9	3.5	10
17673	State Route 44 & Girdled Road	Actuated	25.1	0.6	24.2	26.2	10