October 2020

TheLloyd4U October Media Coverage

Summary

Total Mentions: 26

Total Reach: 558.5K

Total Publicity Value: $18.3K

Top Articles

Top Articles

DATE	HEADLINES	OUTLET	REACH
10/14/2020	INDOT, local officials say major upgrades coming to Lloyd Expressway	Evansville Courier & Press Online	86,001
10/15/2020	INDOT invests $100 million for Lloyd Expressway improvements	WFIE-TV Online	55,622
10/14/2020	$100 million in Lloyd Expressway improvements getting underway	WFIE-TV Online	55,622
10/14/2020	$100M project announced to redesign the Lloyd Expressway	WTVW-TV Online	50,003
10/15/2020	Major Improvements Coming to the Lloyd Expressway	99.5 WKDQ	
10/15/2020	Planning to Begin on Lloyd Improvements	WJCT-TV - Online	47,365
10/14/2020	INDOT: $100 million in Lloyd projects coming; Greater efficiency, safety aim of	Evansville Courier & Press	34,543
10/14/2020	14 News at 6	WFIE-TV	32,465
10/14/2020	Eyewitness News at 5pm	WEHT-TV	25,432
10/14/2020	14 News at 5	WFIE-TV	25,275
10/14/2020	14 News at 4:00PM	WFIE-TV	20,103
10/14/2020	14 News at 10	WFIE-TV	18,499
10/14/2020	Eyewitness News at 9pm	WTVW-TV	14,949
10/14/2020	Eyewitness News First at 4pm	WEHT-TV	10,903
10/14/2020	Eyewitness News at 10pm	WEHT-TV	9,798
10/14/2020	Eyewitness News Daybreak	WEHT-TV	8,839
10/14/2020	14 News at Sunrise	WFIE-TV	8,086
10/14/2020	14 News at Sunrise	WFIE-TV	8,086

Top Outlets

OUTLET	NUMBER OF CLIPS	REACH	PUBLICITY VALUE
WFIE-TV	9	127,760	$9,163.60
WEHT-TV	5	58,553	$4,099.03
WTVW-TV	5	42,486	$3,110.34
WFIE-TV Online	2	111,244	$25.59
Evansville Courier & Press Online	1	86,001	$39.56
WTVW-TV Online	1	50,003	$11.50
WJCT-TV - Online	1	47,365	$10.89
106.1 Kiss FM - Online	1	500	$0.12
Evansville Courier & Press	1	34,543	$1,811.57

April 2021

April TheLloyd4U Media Coverage

Summary

Total Mentions: 31

Total Reach: 615.4K

Total Publicity Value: $13.9K

Top Articles

Top Articles

DATE	HEADLINES	OUTLET	REACH
4/21/2021	How to learn more about intersection improvements planned for Lloyd Expressway	Evansville Courier & Press Online	86,001
4/21/2021	INDOT road construction picking up with several projects planned this spring	WFIE-TV Online	55,622
4/5/2021	Public meetings set for Lloyd Expressway improvement plans	WFIE-TV Online	55,622
4/21/2021	Public meeting held on Lloyd4U project	WTVW-TV Online	50,003
4/5/2021	TheLloyd4U virtual, public meetings to introduce project and improvements	WEHT-TV (TriState)	50,003
4/23/202	INDOT: Traffic flow upgrades coming to Lloyd	Evansville Courier & Press (Print)	34,543
4/21/2021	14 News at 6	WFIE-TV	26,135
4/21/2021	14 News at 5	WFIE-TV	20,175
4/21/2021	14 News at 10	WFIE-TV	17,369
4/21/2021	14 News at 10	WFIE-TV	17,369
4/21/2021	14 News at Sunrise	WFIE-TV	10,811
4/21/2021	14 News at Sunrise	WFIE-TV	10,811
4/21/2021	14 News at Sunrise	WFIE-TV	9,931
4/21/2021	14 News at Sunrise	WFIE-TV	9,312
4/21/2021	14 News at 11:00AM	WFIE-TV	9,031
4/21/2021	TheLloyd4U Project Gives Public First Look at Design Concepts	WEVV (44 News)	3,270

Top Outlets

OUTLET	NUMBER OF CLIPS	REACH	PUBLICITY VALUE
WFIE-TV	12	147,242	$10,418.25
WEVV-TV	7	22,910	$2,184.62
WFIE-TV Online	4	222,488	$51.17
WEVV2-TV	4	2,253	$127.65
WTVW-TV Online	2	100,006	$23.00
Evansville Courier & Press Online	1	86,001	$39.56
Evansville Courier & Press	1	34,543	$1,047.43

June 2021

TheLloyd4U June Media Coverage

Summary

Total Mentions: 19

Total Reach: 221.4K

Total Publicity Value: $6.8K

Top Articles

Top Articles

DATES	HEADLINES	OUTLET	REACH
6/21/2021	'The Lloyd4U' project looking for your feedback	WFIE-TV Online	55,622
6/21/2021	TheLloyd4U Project asks for feedback on permanent road closures	WEHT	50,003
6/20/2021	Lloyd 4U Project Team Presenting Questionnaire Allowing Public Input	44 News	26,293
6/21/2021	14 News at 6	WFIE-TV	19,598
6/21/2021	14 News at 6	WFIE-TV	19,598
6/21/2021	14 News at 10	WFIE-TV	13,594
6/21/2021	44News at 10	WEVV-TV	7,546
6/21/2021	14 News at 11:00AM	WFIE-TV	6,963
6/21/2021	14 news at noon	WFIE-TV	5,084
6/22/2021	44News at 6	WEVV-TV	4,459
6/22/2021	44News at Noon	WEVV-TV	4,408
6/22/2021	44News at 5	WEVV-TV	3,397
6/21/2021	44News This Morning at 6	WEVV-TV	1,521
6/23/2021	Indiana Department of Transportation Seeking Public Input on Lloyd Expressway Safety	106.1 Kiss FM - Online	500

Top Outlets

OUTLET	NUMBER OF CLIPS	REACH	PUBLICITY VALUE
WFIE-TV	5	64,837	$4,745.58
WEVV-TV	5	21,331	$1,840.75
WEVV2-TV	4	2,289	$139.35
WSON Radio	1	500	$0.12
44 News	1	26,293	$6.05
WTVW-TV Online	1	50,003	$11.50
106.1 Kiss FM - Online	1	500	$0.12
WFIE-TV Online	1	55,622	$12.79

July 2021

TheLloyd4U July Media Coverage

Summary

Total Mentions: 1

Total Reach: 500

Top Articles

Top Articles

DATE	HEADLINES	OUTLET	REACH
7/19/2021	Reminder: Lloyd4U Questionnaire Available Through July 30	WSON Radio	500

Top Outlets

OUTLET	NUMBER OF CLIPS	REACH	PUBLICITY VALUE
WSON Radio	1	500	$0.12

August 2021

TheLloyd4U August Media Coverage

Summary

Total Mentions: 7
Total Reach: 84.1K
Publicity Value: $5K

Top Articles

Top Articles

DATES	HEADLINES	OUTLET	REACH
8/25/2021	Design process underway for potential closures along the Lloyd Expressway	WEHT Online	34,543
8/16/2021	Eyewitness News at 9pm	WTVW-TV	15,609
8/2/2021	Eyewitness News at 5pm	WEHT-TV	15,022
8/9/2021	Eyewitness News Daybreak Extra	WTVW-TV	7,522
8/9/2021	Eyewitness News Daybreak Extra	WTVW-TV	5,787
8/16/2021	Eyewitness News Daybreak	WTVW-TV	2,821
8/16/2021	Eyewitness News Daybreak	WTVW-TV	2,821

Top Outlets

OUTLET	NUMBER OF CLIPS	REACH	PUBLICITY VALUE
WTVW-TV	5	34,560	$2,971.02
WEHT-TV	1	15,022	$1,129.88
WEHT Online	1	15,022	$1,129.88

March 2022

TheLloyd4U March Media Coverage

Summary

Total Mentions: 21
Total Reach: 474.7K
Total Publicity Value: $6.3K

Top Articles

Top Articles

DATES	HEADLINES	OUTLET	REACH
3/30/2022	Here's how several intersections could change Evansville traffic	Courier & Press	86,000
3/8/2022	Lloyd4U project hosting upcoming virtual, in-person meetings	WFIE-TV Online	55,622
3/29/2022	TheLloyd4U meeting set for Tuesday	WFIE-TV Online	55,622
3/30/2022	Public meeting held Tuesday for TheLloyd4U project	WFIE-TV Online	55,622
3/29/2022	INDOT giving public their say in Lloyd plans	WTVW-TV Online	50,003
3/28/2022	14 News at 6	WFIE-TV	28,542
3/9/2022	Two Public Meetings Planned for The Lloyd4U Project this Month	44 News	26,293
3/30/2022	Community Shares Concerns On Lloyd4U Project Designs	44 News	26,293
3/29/2022	Community Shares Thoughts On Lloyd4U Project	44 News	26,293
3/28/2022	44News at 10	WEVV-TV	8,472
3/8/2022	14 news at noon	WFIE-TV	8,286
3/29/2022	44News at 10	WEVV-TV	8,086
3/29/2022	14 News at 11:00AM	WFIE-TV	7,439
3/29/2022	14 News Sunrise at 4:30	WFIE-TV	5,008
3/26/2022	44News at 10	WEVV-TV	4,354
3/8/2022	44News at 6	WEVV-TV	3,928
3/29/2022	44News at 5	WEVV-TV	3,436

Top Outlets

OUTLET	NUMBER OF CLIPS	REACH	PUBLICITY VALUE
WEVV-TV	9	33,696	$3,474.68
WFIE-TV	4	49,275	$2,351.42
WFIE-TV Online	3	166,866	$38.38
44 News	3	78,879	$18.14
WTVW-TV Online	1	50,003	$11.50
Courier & Press	1	86,000	$40.00

April 2022

TheLloyd4U April Media Coverage

Summary

Total Mentions: 3
Total Reach: 47.7K
Total Publicity Value: $6.4K

THE LLOYD4U
Making the Lloyd Work for You

Top Articles

Top Articles

DATES	HEADLINES	OUTLET	REACH
4/3/2022	Construction coming for Lloyd Expressway; Work to include more than 12 projects at a cost of	(Print) Evansville Courier &	34,543
4/3/2022	Construction coming for Lloyd Expressway; Work to include more than 12 projects at a cost of	(Print) Gleaner, The	5,656
4/6/2022	Brad Byrd inDEPTH: The Lloyd is getting a new look	WEHT-TV	7,458

Top Outlets

OUTLET	NUMBER OF CLIPS	REACH	PUBLICITY VALUE
The Gleaner	1	5,656	$948.00
Evansville Courier & Press	1	34,543	$4,711.56
WEHT-TV	1	7,458	$677.00

September 2022

September Media Coverage

Summary

Total Mentions: 5

Total Reach: 37.6K

Total Publicity Value: $1.3K

Top Articles

Top Articles

DATE	HEADLINES	OUTLET	REACH
9/16/22	Public feedback is still being gathered on the future Lloyd4U project	44 News	26,293
9/15/22	44News at 10	WEVV-TV	5,893
9/15/22	44News at 6	WEVV-TV	4,040
9/16/22	44News This Morning at 5	WEVV-TV	1,239
9/16/22	TV clip from WEVV My Fox 44 at 2022-09-16 05:05:19.000	WEVV2-TV	98

Top Outlets

OUTLET	NUMBER OF CLIPS	REACH	PUBLICITY VALUE
WEVV-TV	3	11,172	$1,259.79
WEVV2-TV	1	98	$7.22
44 News	1	26,293	$6.05

March 2023

The Lloyd4U March Media Report

Summary

Total Mentions: 10
Total Reach: 275.3K
Total Publicity Value: $15.3K

Coverage Summary

Top Articles

DATES	HEADLINES	OUTLET	REACH
3/8/2023	Changes to one intersection dominate public comment at Lloyd Expressway	Evansville Courier & Press Online	86,001
3/10/2023	Concerns over traffic; One intersection dominates public comment at Lloyd	Gleaner, The	2,141
3/10/2023	Concerns over traffic; One intersection dominates public comment at Lloyd	Evansville Courier & Press	0
3/8/2023	Changes to one intersection dominate public comment at Lloyd Expressway	Evansville Courier & Press	0
3/8/2023	Eyewitness News at Noon	WTVW-TV	85,569
3/8/2023	Eyewitness News at Noon	WTVW-TV	39,271
3/7/2023	Eyewitness News at 9pm	WTVW-TV	34,318
3/8/2023	Eyewitness News Daybreak	WEHT-TV	14,276
3/8/2023	Eyewitness News Daybreak Extra	WTVW-TV	13,224
3/28/2023	Eyewitness News Daybreak	WTVW-TV	569

Top Outlets

OUTLET	NUMBER OF CLIPS	REACH	PUBLICITY VALUE
Evansville Courier & Press	2	0	$6,131.74
WTVW-TV	1	569	$136.68
Evansville Courier & Press Online	1	86,001	$39.56
The Gleaner	1	2,141	$600.75
WTVW-TV	5	172,951	$7,008.86
WFIE-TV	1	10,126	$482.69
WEHT-TV	1	14,276	$710.43

April 2023

The Lloyd4U April Media Coverage

Summary

Total Mentions: 2
Total Reach: 4.6K
Total Publicity Value: $1.05

Coverage Summary

Top Articles

DATE	HEADLINES	OUTLET	REACH
4/6/2023	Mayor Winnecke's "State Of The City" Address Made At The Rotary Club	City-County Observer	4,056
4/5/2023	Mayor Winnecke delivers final State of the City Address on Tuesday	44 News	500

Top Outlets

OUTLET	NUMBER OF CLIPS	REACH	PUBLICITY VALUE
City-County Observer	1	4,056	$0.93
44 News	1	500	$0.12

Public Comments for all phases of TheLloyd4U project submitted via INDOT4U

Date Received	Case	Response Due	Name	INDOT Service	Response Date	Theme	Comment	Response
11/6/2020	CS0238459		Brian Will	Project Information Assistance	11/11/2020	Land loss	Good morning, my niece has a home on the corner of Ingle and Lloyd expressway. 3221 Forest avenue. She is wondering how the home is going to be effected. How do we find out?	Your inquiry to the INDOT Customer Services Department pertaining to the Lloyd Expressway Project (The Lloyd4U) is copied below. I am a member of the project team responsible for providing responses to inquiries from the public. The Lloyd4U project is just now kicking off. We are conducting survey activities and traffic analyses at this time. It is too early in the process to know how access to your niece's home will be impacted at this time. We will be scheduling public information meetings in the spring of next year so we can introduce the project, design considerations, and the project schedule to the public. Until that time, I would encourage her to go to our project website at www.TheLloyd4U.com and follow us on Facebook and Twitter. We will share information about upcoming meetings as it comes available.
4/21/2021	CS0261389		Ted Miller	Public Involvement Engagement	4/22/2021	Public involvement	This customer is VERY angry and says he is SURE no one will call back because INDOT doesn't do anything they way they should they are just talkers that try to hide everything. The customer signed up for the virtual meeting, and is very upset that he did not get any notification of the start of the meeting and he completely missed it. He wants someone to call him back. The customer also says he will be gathering as many people as possible to fight back at INDOT on this project. Thank you!	The projedct team is sorry that you missed TheLloyd4U virtual public meeting earlier this week. When registering for the meeting, there was an option to download a calendar reminder. No meeting registration was needed for people who chose to call into the meeting. Meeting reminders were also distributed on Monday of this week as a project update and to the media, and reminders have been posted on our social media channels throughout the week.The good news is that a recording of the full meeting will be posted on the project website. That's expected to happen tomorrow after we complete our public meetings this week. All meeting materials will be posted including the presentation, the recording of the virtual meeting, display boards and a project handout. That handout includes the INDOT4U contact channels that you can always use to share your feedback. We do have an additional in-person meeting this afternoon. We'll be at the Crescent Room at Milestones, 621 S. Cullen Avenue, from 4:30 to 7pm. There will be a presentation at 5pm and a second presentation at 6pm, if needed. Project team members will also be available for one-on-on discussions. You can also sign up for email or text updates for the project so you always receive the latest project news. Links are on the website, www.thelloyd4u.com. We're sorry for any confusion and let us know if you need additional information.
4/22/2021	CS0261699	4/30/2021	Jerry Glass	Project Information Assistance	4/30/2021	Overall design	The customer is not agreeing with the plan and he doesn't thing INDOT does enough studies before planning a project. The customer is suggesting that you study the traffic and road systems in California because they have been very successful. Thank you.	Thanks for sharing your feedback regarding TheLloyd4U. Your comments have been shared with the Project Team for review and consideration.
4/23/2021	CS023619525	5/3/2021	Raven Fickas	Project Information Assistance	5/3/2021	Overall design	I've come across the "Lloyd4U" project. I understand that perhaps this project idea has been born with the genuine intent of making improvements to the Lloyd that would make it "work for" those of us who use it. However, the Lloyd works and has worked just fine for many years. There are many other roads and areas in our city/state that could use improvements and might be a better allocation of resources. One hundred million dollars seems like too much money to fix what isn't truly broken; while so many other roads and areas in our city become more and more run down daily. I don't send this email to be hateful. I only send it in hopes that whoever is responsible might consider using these resources elsewhere.	Thanks for sharing your feedback regarding TheLloyd4U. Your comments have been shared with the Project Team for review and consideration.
4/26/2021	CS0262164		Not given		4/26/2021	Left turns	An article titled "Evaluation of displaced left-turn intersections" was provided by the commentor.	The article was passed to the project team.
4/26/2021	CS0262164		Elizabeth Arnold		4/26/2021	Left turns	An article titled "Evaluation of displaced left-turn intersections" was provided by the commentor.	The article was passed to the project team.

Date Received	Case	Response Due	Name	INDOT Service	Response Date	Theme	Comment	Response
5/14/2021	CS0265480	5/24/2021	Ronald Unfried	Project Information Assistance	5/17/2021	Multi-street concerns	Hello. I attended the virtual conference last month with regard to the Lloyd4U planning. I left some comments and David Goffinet returned an email with his answers. Let me address my concerns. I live on the eastside of Evansville and often enter the Lloyd near I-69, It appears to me the committee is hell bent on spending a lot of $$ for what appears to be the present census of traffic and quite honestly they are a decade behind. Let's consider the traffic in a couple of years when I-69 is complete with a new bridge over the Ohio River and complete to Indianapolis. As mentioned, I enter the Lloyd near I-69 and traffic currently can be backed up due to the traffic lights at Brentwood Drive and Fielding Road in 2021. Mr Goffinet said no plans are in place for these 2 intersections looking forward. I guarantee you traffic in 2029 and beyond is going to be a cluster f... when we start getting additional traffic exiting into Evansville from the North and South.	Thanks for sharing your feedback regarding TheLloyd4U. Your comments have been shared with the Project Team for review and consideration.
6/30/2021	CS0274561	7/8/2021	Al Debes	Project Information Assistance	6/30/2021	Left turns and side stre	Leave side streets open to exit only, these are good for when it is backed up 2 to 3 blocks, make left turn lanes longer at St. Joe Ave Your questions do not let you give feed back.	The project team wanted to let you know they received your feedback through the INDOT Customer Service Office. They want to thank you for providing your thoughts on the side street access and St. Joe Avenue.
7/6/2021	CS0275477	7/14/2021	Edward Wells	Project Information Assistance	7/6/2021	New lanes	Hello. I am providing feedback on the LLOYD4U Improvement Projects. The St. Joseph Improvement Project needs reviewed. Plan documents state: "Southbound to eastbound is the main turning movement." I agree this improvement project should be done. In addition to this, I believe Eastbound to northbound turning movement is significant too. I think there should be two eastbound left turn lanes to improve the level of service at this intersection. Only one eastbound left turn lane reduces the level of service at this intersection. So much eastbound traffic wants to turn left and head north that the one lane of left turn movement is lengthy.	Thanks for sharing your feedback regarding TheLloyd4U. Your comments have been shared with the Project Team for review and consideration.
8/26/2021	CS0285200	9/3/2021	Jeff Minor	Project Information Assistance	8/26/2021	Overall design	Who decides what roads will be permanently closed in the Lloyd 4U project? I have lived at 2613 W. Indiana St. for about 10 years and I have not seen any accidents that would require permanent closure of this intersection. I use this intersection all the time and never have a problem getting onto the Lloyd and if I'm coming from the east do not have problem getting off of the Lloyd either. There have been more accidents at Lloyd and Rosenburger, Lloyd and Red Bank so just trying to see why the Lloyd and Lemcke is being considered to be permanently closed	Thanks for sharing your feedback regarding TheLloyd4U. Your comments have been shared with the Project Team for review and consideration.
8/27/2021	285000		Linda Lacrosse		8/30/2021	Left turns	I heard they are going to do work at E Lloyd Expy and Vann Ave that will prohibit being able to make a left or right turn off the Lloyd Expy onto Vann Ave. I oppose that decision as the ability to turn there is very important.	Preliminary designs for the intersections are still being developed by the Project Team. At this time, it's anticipated that left turns from the Lloyd Expressway to Vann Avenue will be prohibited because of safety and other concerns. However, right turns from eastbound Lloyd to Vann will be allowed. Public meetings will be held to share preliminary designs. That will likely happen late this year or early next year. You can sign up for project updates (by text or email) on the website (www.TheLloyd4U.com) to make sure you're aware of the latest news. Your feedback has been shared with the Project Team. Thanks for your interest in the project.
9/28/2021	CS0290571	10/6/2021	Rebecca Thacke	Project Information Assistance	10/4/2021	Intersection	It would be nuts to do what has been proposed at this intersection!! Maybe it needs to be raised so you could still has access to the Lloyd Expy/SR 66 from Vann Ave.! There will be to much traffic on Lincoln Ave.!!! Please rethink basically closing this intersection!! Surly there is a better plan!!	Thank you for reaching out to INDOT with your comments regarding the Vann Avenue intersection improvement considerations. We are continuing to review improvement options at this location and Stockwell Road immediately to the east. The two intersections are proximate enough that improvements at one can impact the other. The left turn movements from Vann Avenue onto the Lloyd are still likely to be prohibited. The local road network south and east/west will accommodate those desiring to make turning movements that will no longer be allowed at the existing intersection.

Date Received	Case	Response Due	Name	INDOT Service	Response Date	Theme	Comment	Response
12/8/2021	CS0300867	12/16/2021	Lukas Storey	Project Information Assistance	12/15/2021	Additional components	I wanted to know if there was any viewable timeline information for the Crosspointe boulevard project? I'm inquiring about the dual displaced left turns being installed on Lloyd Expressway (SR 66) in Evansville, IN. I wanted to know if there was any timeline information on when this project may start.	The project team received your inquiry through INDOPT's Customer Service Portal. Construction on the improvements on Lloyd Expressway on the east side, including the improvements at Cross Pointe Boulevard are slated to go to construction in the spring of 2024. There are improvements planned at multiple intersections on the east side so it will be up to the selected contractor to plan construction phasing and sequencing. We will not have details on that front until early 2024. Let me know if you have additional questions.
3/28/2022	CS0318765	N/A	R Link		4/12/2022	Overall design	What is the timeline for when you're going to mess up the Vann Ave intersection? For those of use who live to the south of the Lloyd and close to Vann Ave, that's been the most efficient intersection to use for going West on the Lloyd. Anything west of there (Boeke, Weinbach) requires travel along Division St until nearly the 41/Lloyd cloverleaf and adds several minutes to a commute. Then, WHAT is that craziness you have planned for Stockwell Rd? Will we even be able to get onto the westbound Lloyd there? And, when will that intersection be impacted? After all these changes, is the name of the road going to be changed to Lloyd Interstate? or Lloyd Highway? *smirk* and, those dual displaced left turns ? ... ha! The idiots that are already causing accidents on that stretch of road are just going to go bonkers when they can't figure out what to do at the intersections. what a joke. It's always the same ... when planners put into new streets, they are short-sighted and don't put in a road that can handle high traffic throughout it's life ... (And, sorry, 'not available to go to the 3/29 meeting.)	Thanks for sharing your feedback regarding TheLloyd4U. Your comments have been shared with the Project Team for review and consideration. Construction on Phase 1 (that includes Vann Avenue) is expected to begin in Spring 2024. There will be access to the westbound Lloyd Expressway from Stockwell Road. If you're not already, consider following the project on social media and adding your email address or phone number at TheLloyd4U.com. The Project Team shares periodic updates and will share information on public meetings this fall to subscribers.
3/28/2022	CS0318804	4/5/2022	Ted Miller	Project Information Assistance	3/28/2022	Overall design	The customer is calling regarding the Lloyd for You project and the plans with it for Corbierre Ave, Evansville. The customer is concerned with the routes that will be left for travel to the St Vincent Hospital. The customer says that INDOT is not considering how the project is going to affect the rest of Evansville and he would like to discuss this with someone. Thank you.	
3/29/2022			Edward Wells		4/12/2022	Multi-street concerns	Presently, when I want to make a right turn I have a traffic light to help me enter the highway. According to the maps of the new intersection modifications, when I make a right turn, I go a short distance from the intersection and then have a Stop bar so that I can make a right turn and enter the highway. Properly, after making a right turn at the new intersections, the short distance is called an acceleration lane to reach highway speeds so that I can then merge into the highway. After making a right turn from the intersection, there should be a merge lane to enter the highway. // **Cross Point Blvd** The map says I-69 EB Exit ramp but I think it should say I-69 WB Exit ramp. Presently, WB Exit ramp is one lane that merges non-stop onto the highway. Proposed, two lanes with traffic signal so everybody has to always stop. Maybe the proposed I-69 WB Exit ramp could keep one lane for non-stop merging WB traffic, and the other WB Exit lane only would incorporate the traffic signal for the WB traffic that wants to turn left onto Cross Point Blvd because only that traffic has to cross both WB Lloyd Expressway lanes for the displaced turn. NB and SB Cross Point right turning traffic movements should be merge lanes onto the highway. // **Burkhardt Rd** NB and SB Burkhardt Rd right turning traffic movements should be merge lanes onto the highway. // **Stockwell Rd** SB Stockwell Rd right turning traffic movements should be merge lanes onto the highway. // **Barker Avenue/Igleheart Avenue** really good // **Corbierre Avenue** really good // **Red Bank Rd** NB and SB Red Bank Rd right turning traffic movements should be merge lanes onto the highway // **Boehne Camp Rd** NB and SB Boehne Camp Rd right turning traffic movements should be merge lanes onto highway // NB Vann Ave right turn needs an acceleration lane to merge with highway traffic	Thanks for sharing your feedback regarding TheLloyd4U and for attending the public meeting. Your comments have been shared with the Project Team for review and consideration. When using a boulevard left turn, drivers proceed through the main intersection and make a U-turn, followed by a right turn. The far outside lane after making that U-turn allows drivers the space to safely accelerate and then slow to complete the right turn. Learn more about boulevard left turns and other innovative intersections under consideration at TheLloyd4U.com.

Date Received	Case	Response Due	Name	INDOT Service	Response Date	Theme	Comment	Response
3/29/2022			John Kuhn		4/12/2022	Left turns	I urge you to reconsider left turn closures on northbound Vann Ave. It is a heavy commuter corridor and no viable alternative exists. The intersection's safety can be improved by warning signals over Boeke overpass, closing southbound access (and connecting access rd to Boeke Rd), AND closing left turns FROM the Lloyd. This would decrease light cycle times greatly, mitigate safety + rear end accidents and minimize inconvenience. BUT you have to do them ALL.	Thanks for sharing your feedback regarding TheLloyd4U and for attending the public meeting. Your comments about Vann Avenue and Boeke have been shared with the Project Team for review and consideration. If you're not already, consider following the project on social media and signing up for text and/or email alerts from the project at TheLloyd4U.com.
3/29/2022			Dale Fatland		4/12/2022	Name change	I was glad to see all these projects for the future (2-20 years) but my main point TODAY and suggestion is change the name of the Lloyd to the Lloyd Highway - not expressway - because it is NOT an expressway.	Thanks for sharing your feedback regarding TheLloyd4U and for attending the public meeting. Your comments have been shared with the Project Team for review and consideration.
3/29/2022			Carolyn James		4/12/2022	Left turns	It was nice to see larger pictures and talk with engineers/designers. Concerns: Barker Ave Eastbound ramp doesn't look improved. Already a triangle and cars in each others' view. Barker N/S Combo: left turns for S Barker hindered when traffic backed up to go east on Penn Ave.	Thanks for sharing your feedback regarding TheLloyd4U and for attending the public meeting. Your comments about Barker Avenue have been shared with the Project Team for review and consideration.
3/29/2022			Steve Shappard		4/12/2022	Stoplights	Hate it- adding more stoplights. Poorly designed. Spend more money to fund a design that eliminates all traffic lights from I-69 to west side. If the state can provide funding for Keystone Ave to Carmel and eliminate all the stoplights w/ overpasses and roundabouts they can certainly do more in Eville. build/consolidated in between Stockwell and Vann to service both and eliminate stoplights.	Thanks for sharing your feedback regarding TheLloyd4U and for attending the public meeting. Your comments have been shared with the Project Team for review and consideration. While there are some intersections that will use additional stoplights, alternative intersections like the displaced left turn reduce conflict points and move more traffic than a traditional intersection. Visit TheLloyd4U.com for informational videos about intersection designs.
3/29/2022			Randy Eades		4/12/2022	Left turns	I think it is very poorly planned, it looks good on paper but the neighborhoods and Green River Road, Boeke, Weinbach cannot handle the amount of increased westbound traffic that will be generated by closing Vann to left turns on Lloyd. I work there and know how much traffic goes through there. Westbound on Lloyd to Vann handles the ball fields and soccer fields so where does all that traffic go?	To your question about the ball fields – drivers accessing Vann Avenue via the westbound Lloyd Expressway will need to identify an alternative route along the grid south of the Lloyd.
3/29/2022			Stacy Stevens		4/12/2022	Left turns	The turn lanes from Vann Ave to west Lloyd should be left there. The neighborhood cannot take on all the traffic that will be sent on to the side streets. Boeke Rd is not sufficient to funnel all the traffic from Vann onto the Lloyd Expressway. PLEASE take this into consideration before you finalize this plan.	Thanks for sharing your feedback regarding TheLloyd4U and for attending the public meeting. Your comments about Vann and Boeke have been shared with the Project Team for review and consideration.
3/29/2022			Mychelle Christian		4/12/2022	Additional components	Will include any components of the complete street elements in your plans?	Thanks for sharing your feedback regarding TheLloyd4U and for attending the public meeting. Your comments have been shared with the Project Team for review and consideration. The Lloyd improvements are focused solely on the mainline expressway with minor upgrades where we intersect with the Lloyd. Accommodations for crossing the Lloyd that are in place today will be maintained including a reconstruction of the pedestrian crossing near Mead Johnson.The Lloyd improvements are focused solely on the mainline expressway with minor upgrades where we intersect with the Lloyd. Accommodations for crossing the Lloyd that are in place today will be maintained including a reconstruction of the pedestrian crossing near Mead Johnson.

Date Received	Case	Response Due	Name	INDOT Service	Response Date	Theme	Comment	Response
3/29/2022			Lorie Van Hook		4/12/2022	Additional components	Do the improvements planned include improved mobility/safety + accessibility to adjacent neighborhoods + important places along the corridor? Information regarding the improvements featuring connections for active transportation is important to local community members.	Thanks for sharing your feedback regarding TheLloyd4U and for attending the public meeting. Your comments have been shared with the Project Team for review and consideration. The Lloyd improvements are focused solely on the mainline expressway with minor upgrades where we intersect with the Lloyd. Accommodations for crossing the Lloyd that are in place today will be maintained including a reconstruction of the pedestrian crossing near Mead Johnson.The Lloyd improvements are focused solely on the mainline expressway with minor upgrades where we intersect with the Lloyd. Accommodations for crossing the Lloyd that are in place today will be maintained including a reconstruction of the pedestrian crossing near Mead Johnson.
3/29/2022			None given			Appreciation	Very informative, thank you!	
3/29/2022			None given			Noise	Worried about drainage on south side of Lloyd by Tekoppel Ave. We already have a problem with flooding. Sound barriers, is it going to get louder being taller?	We will not be introducing additional water to the south side, it will be captured with mainline drainage measures. A noise study is being completed as part of the environmental document. There has not been a determination on this matter yet.
3/30/2022	CS0319283	4/1/2022	Janet Dunn	Construction Work Zone Manager	4/1/2022	Left turns	Vann Avenue South of SR 62/the Lloyd Expressway is capable of handling the southbound traffic. Boeke Road is not, so eliminating left turns from the westbound lane of SR 62/the Lloyd would CAUSE a major problem on Boeke Road. Eastbound traffic on SR 62/the Lloyd's only route northward between Boeke Road and Green River Road is Stockwell Road, so eliminating left turns for eastbound traffic to go North onto Stockwell Road would increase traffic on Green River Road, which is ALREADY a problem	Thanks for sharing your feedback regarding TheLloyd4U. Your comments have been shared with the Project Team for review and consideration.
3/30/2022	CS0319280	4/7/2022	Michael Gottma	Project Information Assistance	4/12/2022	Left turns	This evening, I attended the in-person meeting about the upcoming Lloyd Expressway project. One of the individuals I spoke with was Dave Goffinet. It is my understanding that detailed designs are not complete west of Rosenberger Ave. In my conversation with Dave, I brought up the fact the state of Indiana has implemented 'J' turns in other parts of the state. Based on my limited knowledge of J turns, it seems to me J turns could be implemented for everything west of Boehne Camp Rd (Middle Mt Vernon, Feltstead, Schutte and McDowell). There is plenty of available real estate and enough 'line of sight' to make the J turn work. Thank you for taking the time to put together the meeting tonight. If there is someone on the design team I can contact directly, I would be very interested in having that conversation.	Thanks for your comments and for attending the public meeting. You are correct – detailed designs are still underway west of Rosenberger Avenue. Look for a public meeting this fall to share those design concepts and more information about the project. If you're not already, please consider signing up for text and email updates at TheLloyd4U.com – we'll send notifications on public meetings and other periodic project updates there and on social media. We've passed along your suggestions and feedback about J-turns to the Project Team. If you should still want to speak with a member of the team, let me know.
3/30/2022	CS0319284	4/7/2022	Nell Clay	Project Information Assistance	N/A	Stoplights	I attended the Lloyd4U meeting in Evansville last night and wanted to express my concern about the project. I think the goal is to remove stoplights—from what I can tell, they've been added. Also the proposed changes at Vann Ave will make an already busy intersection much worse. Please reconfigure this idea while still in the planning stages. If it goes forward as is, it will be a nightmare for our city.	
3/31/2022			Eddie Knapp		4/12/2022	Interchanges	I put a chat question on about why we can't get interchanges / overpasses like they have up north? I think lots of people would like to hear your answers during this meeting. Thanks	Thank you for your feedback we have shared it with the project team.
3/31/2022			Eddie Knapp		4/12/2022	Interchanges	I was asked to put my question here. I saw the videos of Fort Wayne and Fishers with the legitimate interchanges / overpasses. We deserve those too. I heard her say this isn't going to happen. My response is to that is to save my money. This is a joke. All you are going to do is back up traffic for 3 years and throw away a bunch of money. Sorry. I suspect if you asked local residents they would agree with me.	Thanks for sharing your feedback regarding TheLloyd4U and for attending the virtual public meeting. Your comments have been shared with the Project Team for review and consideration. Adding interchange overpasses is costly – an average of between $30 and $50 million an intersection. Additionally, adding overpasses/interchanges requires a significant amount of space that would be a detriment to businesses along the Lloyd Expressway. The designs planned along the Lloyd will increase safety and mobility for drivers while maintaining accessibility to businesses and homes.

Date Received	Case	Response Due	Name	INDOT Service	Response Date	Theme	Comment	Response
3/31/2022			Ronald Unfried		4/12/2022	Left turns	Why can't we close the left hand turn at Fielding Rd as well as Brentwood Dr? It would help traffic flow coming off of I-69	The left turn movements at Fielding and Brentwood are low volume movements which are receiving minimal signal phasing time. Preliminary studies do not indicate they are creating a time delay issue or safety concern.
3/31/2022			Ronald Unfried		4/12/2022	Left turns	Couldn't we just close Stockwell and let the traffic headed towards the North exit onto Greenriver Rd and then they can funel through the lanes exiting Greenriver Rd?	The volumes of Stockwell Road along with the current geometry and volumes utilizing Green River Road preclude us from implementing a similar improvement at Stockwell Road.
3/31/2022			Ronald Unfried		4/12/2022	Stoplights	Do you have any ideas how many cars are held up at St Joe Ave and Wabash Ave at peek times? It is hundreds and your signal modifications will do very little to expedite traffic flow. You are allocating $100k and quite honestly, I see little improvement for money spent. This (and our utilities) is why people are discussing relocating and business is having 2nd thoughts for expanding and bring their employees to souther Indiana	Thank you for your feedback we have shared it with the project team.
3/31/2022			Eddie Knapp		4/12/2022	New lanes	The extra 2 lanes on the west side are great - but why not take them to Boehne Camp - it is always backed up to there.	Thank you for your feedback we have shared it with the project team.
3/31/2022			Eddie Knapp		4/12/2022	N/A	I would be happy to talk to you about this offline.	Thank you for your feedback we have shared it with the project team.
3/31/2022			Eddie Knapp		4/12/2022	Stoplights	The wasted gas from all the cars stopped at the stoplights would pay for the full interchange in 5	Thank you for your feedback we have shared it with the project team.
3/31/2022			Thomas Vennard		4/12/2022	Land loss	Our specific questions relate to the far Westside. If our property adjacent to the lloyd is affected when will we be notified if we are losing yard?	Thanks for sharing your feedback regarding TheLloyd4U and for attending the public meeting. By the end of 2022 we should know how much additional right of way, if any, will be needed for planned improvements.
3/31/2022			David Folz		3/31/2022	Project phases	what is expected beginning of phase 2	Live answer
3/31/2022			David Folz		3/31/2022	Project phases	when?	Live answer
3/31/2022			Edward Wells		3/31/2022	Appreciation	Thanks to all for being here tonight and hosting this meeting. It was a great presentation.	Live answer
3/31/2022			Edward Wells		3/31/2022	Appreciation	You are Welcome.	Thanks for joining us, Edward. Appreciate it.
3/31/2022			Donald Nichols		4/12/2022	New lanes	Lloyd needs to be three lanes to/from USI- very heavy fast moving traffic during school. Being repaved. Consider widening	Thanks for sharing your feedback regarding TheLloyd4U and for attending the public meeting. Your comments about the area around USI has been shared with the Project Team for review and consideration.
3/31/2022			David Folz		3/31/2022	Appreciation	thank you for info	Absolutely!
3/31/2022			B C		3/31/2022	Intersection	Can you tell me when input on the far west side can be given? Specifically the McDowell Rd intersection. Will that be in the fall?	Live answer
3/31/2022			Thomas Vennard		4/12/2022	Noise, stoplights	Are any sound barriers planned for residential portions? Only my two cents, but we do not want any traffic lights on the far west side intersections. Perhaps just small designated turning lane with stop signs. It is wonderful that it gets dark our here and seems rural. We are concerned about it turning city. Traffic is not heavy after 9 or 10pm. I do like the plans for the East side, hopefully residents will learn to go on green lights so the timing of lights works out. Thank you.	A noise study is being completed as part of the environmental document. There has not been a determination on this matter yet.
4/6/2022	CS0320629	4/14/2022	Michael DeCarli	Project Information Assistance	4/8/2022	Stoplights	My name is Michael DeCarli. I am from Evansville but am currently Active Duty Navy in Italy. I just read through the plans for the Lloyd Expressway in Evansville and quite frankly it's a huge letdown. I'm tired of Evansville being the last city in the state to receive worthwhile upgrades from INDOT! Take the lights off the Lloyd Expressway and make this thoroughfare limited access all the way through. I really am struggling to understand what is so difficult about this. Cities across America of similar size to Evansville have cross-town limited access freeways. If Indiana wants to allow the Evansville area the opportunity to achieve proper growth, this plan will be re-evaluated immediately and these stoplights will be removed instead of modified. Newburgh will continue to grow which means these intersection "upgrades" will become congested. Make the Lloyd Expressway an expressway immediately. Thank you for your time.	Mr. DeCarli – Thanks for your interest in TheLloyd4U and thanks for your service. We appreciate you reaching out. We realize the frustration for drivers on the Lloyd Expressway and also the constraints the team has to work within. The Lloyd is a main connector and heavily developed. Maintaining access to those many businesses and homes is a priority. That can't be done with removing traffic lights and limited access. Planned improvements must be reasonable and feasible. INDOT is planning a significant investment in the Lloyd from one end of the county to the other. This $100+ investment should make a real difference in how the Lloyd functions for drivers – increasing traffic flow and safety. Your comments are being shared with the Project Team, and we hope you'll continue to follow our progress.

Date Received	Case	Response Due	Name	INDOT Service	Response Date	Theme	Comment	Response
4/6/2022	CS0320613	4/14/2022	Steve Bennett	Project Information Assistance	4/11/2022	Stoplights	I just read the newspaper article about the planned improvements. Please consider the same change to the Wabash Ave intersection that you plan to make at Vann Ave., right turns only and no stoplights. With 9th Ave only a block to the east it would be easier for motorists to deal with than the one at Vann Ave.	Thanks for sharing your feedback regarding TheLloyd4U. Your comments about the Wabash and Vann intersections have been shared with the Project Team for review and consideration. If you're not already, consider following us on social media and adding your email address or phone number at TheLloyd4U.com – you'll get the latest project news and updates from us there and on Facebook at Twitter.
4/11/2022	CSC0321373	4/20/2022	Kevin Robertson	Project Information Assistance	4/11/2022	Overall design	Good afternoon, I have read the proposed project and to say that this proposal is some the worst engineering mismanagement would be a kindness. The Lloyd is primed and ready to receive the same treatment as State Rd 31, Keystone Parkway, and State Rd 37 in Hamilton County. It is clear that not only do engineers from different locations not communicate. You do not read even your own published information. I have posted your own link here for a refresher: https://www.in.gov/indot/traffic-operations/roundabouts/. Your office should go back to school and retake all of your civil engineering classes. The LLoyd4U proposal in it's current itteration is an embarrassment and ridiculous waste of tax payer and federal funds. I am happy to engage in productive discourse regarding my comments. To quote: "I pause for a reply." With regards, Kevin C. Robertson	Thanks for taking the time to reach out, and we're sorry for your frustration. We will share your comments with the Project Team for additional discussion and review.
4/14/2022			John Scheer			Stoplights	Ideally, I would prefer the Lloyd to be a full fledged expressway. But, since that does not seem possible, any improvement in traffic flow over what we have now would be great. I do not like the idea of adding a traffic light to the I-69-Lloyd interchange, but realize it may be necessary.	Thanks for sharing your feedback regarding TheLloyd4U and for attending the public meeting. Your comments have been passed along to the Project Team. While there are some intersections that will use additional stoplights, alternative intersections like the displaced left turn reduce conflict points and move more traffic than a traditional intersection. Visit TheLloyd4U.com for informational videos about intersection designs.
2/27/2023	373394		Amanda Rainey			Acquisition	I am unable to find information regarding Project #: 1900308 / if it is under way, postponed, or if it will affect my home, 3217 Corbierre Ave Evansville IN 47712. I received a letter back in December 2022 stating my property may be considered for acquisition. Within the past 2 weeks survey type stakes have showed up in my front yard with no discernable markings on who placed them there. I have received no notification on what this is about. Please advise. Thank you.	A project team member explained to her the purpose of the stakes, gave her a status update on the project and emailed her a link to the part of the project website that discusses Corbierre.
3/3/2023	CS0374502	3/13/2023	Dave Wanninge	Project Information Assistance	3/3/2023	Land loss	Dave Wanninger called in with specific questions about the Lloyd Express project, or Llyod for you, in Vanderburgh county. The caller wants to make sure there will be no plan in changes being made to an existing business there in that area.	Thanks for sharing your feedback regarding TheLloyd4U. Your comments have been shared with the Project Team for review and consideration.

Date Received	Case	Response Due	Name	INDOT Service	Response Date	Theme	Comment	Response
3/15/2023	CS0376583	3/23/2023	Christine Hale	Project Information Assistance		Left turns	Thank you for hosting the public hearing in Evansville earlier in March 2023. As is Federally required, I am apprehensive and skeptical of the weight of any community member's comments on the project plan. Having said that, I will not sit in silence while dollars are spent resulting in confusion and increased traffic hazards for the community. I appreciate all community service positions as we try to serve our communities in one field or another. As a Healthcare Provider, It would be no secret that in my field, my concern weighs heavily on safety as I am sure we have that in common. Displaced left turns in any place on the Lloyd will be a problem of confusion, frustration, and increased accidents. It does not improve traffic flow as there are still signalized stops. For the safety of the community, we would all be grateful if the project team would strongly consider an alteration of plans. As well as for upcoming W Lloyd Projects. Vann Ave- No concern for project plans. Appears as said right in-right out as long as turning traffic can merge onto HWY obviously. Continues flow of traffic. Stockwell rd. - BLVD L turn/Displaced L turn or Hybrid turn is not going to markedly improve traffic flow. This seems like a wasteful way to spend dollars overall. There's no better way to say that. Stockwell is not a big problem. If you want to do something, make it an overpass. The Lloyd was originally blueprinted to be an overpass.Burkhard rd - Displaced L turns are not going to markedly improve traffic flow. CrossPoint Blvd - Displaced L turns are not going to markedly improve traffic flow. Please do not signalize 1-69 ramps. Please do not add more signaling with Displaced L turns on the Lloyd. It is already known as "stoplight" city when it was originally supposed to have been an overpass. This side of the Lloyd flows smoothly overall as is. Money can be better spent on the W. Lloyd. I believe the same official comments came in this night as well.	Thanks for sharing your feedback regarding TheLloyd4U. Your comments have been shared with the Project Team for review and consideration.

Lead DES. # 1900308

LEGAL NOTICE OF PUBLIC HEARING
Proposed Improvements on SR 62/Lloyd Expressway from Posey/Vanderburgh County Line to Rosenberger Avenue and from Rosenberger Avenue to Wabash Avenue in Evansville and Vanderburgh County

The Indiana Department of Transportation (INDOT) will host a public hearing on Tuesday, September 26, 2023 at City View at Sterling Square, 210 N Fulton Avenue, Evansville, IN 47710. The hearing will begin at 5:30 pm, with a presentation at 6:00 pm. The purpose of the public hearing is to offer all interested persons an opportunity to comment on current preliminary design plans to improve SR 62 (locally known as the Lloyd Expressway) from the Posey/Vanderburgh County Line to Rosenberger Avenue and from Rosenberger Avenue to Wabash Avenue in Evansville and Vanderburgh County.

Des. No. 2001917 is planned to improve SR 62 from the Posey/Vanderburgh County Line to Rosenberger Avenue. The primary purpose for improvements along this section of SR 62 is to address, as a coordinated network, the safety performance of the SR 62/McDowell Road, SR 62/Middle Mount Vernon Road, SR 62/Felstead Road, SR 62/Schutte Road, SR 62/Boehne Camp Road, and SR 62/Red Bank Road intersections by reducing the number of crashes. Additionally, the purpose is to improve rideability and reduce the amount of maintenance required to maintain the improved rideability by extending the time between patching repairs to 20 years. The need for the project stems from existing high traffic volumes experienced by this section of SR 62 which have resulted in congestion at intersections and safety concerns including an above normal number of crashes.

The following Des. Nos. are included in this project: 2001917, 2100041, 1900262, 1900258, 1900260. Des. No. 2001917 involves removal and replacement of pavement along SR 62 within the project area. The proposed improvements include entrance and exit ramp reconfiguration, ditch grading, culvert replacement, culvert lining, underdrain replacement and construction, median drainage and inlet replacement and construction, storm sewer and inlet replacement, raised median construction, additional turn lanes, guardrail replacement and construction, and new and replacement signage and pavement markings.

Des. No. 2100041 will involve intersection improvements including lane reconfiguration, installation and lengthening of turn lanes, and modifications to existing signage at SR 62 and McDowell Road.

Des. No. 1900262 will involve intersection reconfigurations and improvements including lengthening and modification of existing turn lanes and replacing/adding signage and pavement markings at SR 62 and Schutte Road.

Des. No. 1900258 will involve intersection improvements including the addition of turn lanes and lengthening of turn lanes, improved pavement markings and signage, and replacement of the existing traffic signal equipment at SR 62 and Boehne Camp Road.

Des. No. 1900260 will involve intersection improvements including lane reconfiguration, lengthening of turn lanes, replacement of the existing traffic signals and installation of new traffic signals in turn lanes at SR 62 and Red Bank Road.

Approximately 0.662 acre of permanent right-of-way (ROW) and 0.143 acre of temporary ROW will be required for the Des. No. 2001917 project. Impacts associated with this project include 2.1 acres of tree clearing, 419 linear feet of stream impacts, and approximately 0.01 acre of permanent wetland impacts.

A separate project, Des. No. 1900308, is planned to improve SR 62 from Rosenberger Avenue to Wabash Avenue. The primary purpose for improvements along this section of SR 62 is to reduce the total number of crashes and improve the traffic capacity to a desired Level of Service (LOS) C at the SR 62/Rosenberger Avenue, SR 62/St. Joseph Avenue, and SR 62/Wabash Avenue intersections. Additionally, the purpose is to improve the condition of the bridges between Rosenberger Avenue and Wabash Avenue to a condition rating of at least 7 (good) or better. The need for the project stems from existing high traffic volumes experienced by this section of SR 62 which have resulted in significant queueing, delays, and congestion issues causing safety concerns, such as above normal number of crashes, and from the deteriorated condition of the existing bridges along this section of SR 62.

The following Des. Nos. are included in this project: 1900308, 1900264, 1900263, 2000187, 1602258, 1500041, and 1600060. As proposed, Des. No. 1900308 involves road reconstruction along SR 62 within the project area. The proposed improvements include an added travel lane, entrance and exit ramp reconfiguration, relocations, and closures, as well as closure of select local cross streets to improve traffic flow. Drainage improvements along with streetlight, signage, and pavement marking replacement will also be included as part of this project.

Des. No. 1900264 will involve intersection improvements including lane reconfiguration, lengthening of turn lanes, and modifications to existing traffic signals at SR 62 and Rosenberger Avenue.

Des. No. 1900263 will involve intersection improvements including lengthening the existing dual left turn lanes and adding new dual right turn lanes at SR 62 and St. Joseph Avenue.

Des. No. 2000187 will involve intersection improvements including improved pavement markings and signage, as well as new signal equipment and pedestrian facilities at SR 62 and Wabash Avenue.

Des. Nos. 1602258, 1500041, and 1600060 will involve the replacement of the SR 62 bridges over Carpentier Creek, CSX/Evansville Western RR, and Tekoppel Avenue, respectively.

Approximately 0.51 acre of permanent ROW and 0.62 acre of temporary ROW will be required for the Des. No. 1900308 project. Impacts associated with this project include 3.1 acres of tree clearing, 1,043 linear feet of stream impacts, and approximately 0.08 acre of permanent wetland impacts. Due to noise impacts associated with this project, a sound barrier will likely be placed along the southside of eastbound SR 62 and the Barker Avenue exit ramp from Tekoppel Avenue to Barker Avenue.

Construction is anticipated to begin in Spring 2024. The vehicular Maintenance of Traffic (MOT) plan for the projects involves lane restrictions/closures and official detours. Pedestrian MOT for the projects will involve sidewalk closures with detours at select locations. Access to all properties will be maintained during construction. INDOT will coordinate with emergency services, local school corporation officials and project stakeholders to ensure potential disruptions and impacts are minimized as much as possible.

Federal and state funds are proposed to be used for construction of these projects. INDOT and the Federal Highway Administration have agreed that these projects pose minimal impact to the natural environment. Two Categorical Exclusion (CE) environmental documents have been prepared for these projects. The environmental documentation and preliminary design information is available to view prior at the following locations:

1. Evansville Vanderburgh Public Library (EVPL) Red Bank: 120 S Red Bank Road, Evansville, IN 47712
2. Lochmueller Group Office: 6200 Vogel Road, Evansville, IN 47715
3. INDOT Vincennes District Office: 3650 South US Hwy 41, Vincennes, IN 47591, 855-INDOT4U (463-6848)
4. Project Website: https://thelloyd4u.com
5. Project documents can be mailed upon request. Contact Nicole Minton, Lochmueller Group at (812) 759-4179 or Nicole.Minton@lochgroup.com; Matthew Bullock, INDOT at (812) 830-9683 or mbullock1@indot.in.gov; or INDOT at 855-INDOT4U

Public statements for the record will be taken as part of the public hearing procedure. All verbal statements recorded during the public hearing and all written comments submitted prior to, during and for a period of two (2) weeks following the hearing date, will be evaluated, considered and addressed in subsequent environmental documentation. Written comments may be submitted prior to the public hearing and within the comment period to Nicole Minton, Lochmueller Group, Inc., 6200 Vogel Road, Evansville, IN 47715 or by email at Nicole.Minton@lochgroup.com. **INDOT respectfully requests comments be submitted by Wednesday, October 11, 2023.**

With advance notice, INDOT will provide accommodations for persons with disabilities with regards to participation and access to project information as part of the hearings process including arranging auxiliary aids, interpretation services for the hearing impaired, services for the sight impaired and other services as needed. In addition, INDOT will provide accommodations for persons of Limited English Proficiency (LEP) requiring auxiliary aids including language interpretation services and document conversion. Should accommodation be required, please contact Nicole Minton, Lochmueller Group, Inc., 6200 Vogel Road, Evansville, IN 47715 or by email at Nicole.Minton@lochgroup.com.

This notice is published in compliance with Code of Federal Regulations, Title 23, Section 771 (CFR 771.111(h)(1) states: “Each State must have procedures approved by the FHWA to carry out a public involvement/public hearing program.” 23 CFR 450.212(a)(7) states: “Public involvement procedures shall provide for periodic review of the effectiveness of the public involvement process to ensure that the process provides full and open access to all and revision of the process as necessary.” approved by the Federal Highway Administration, U.S. Department of Transportation on July 7, 2021.

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Affidavit of Publication

PROOF OF PUBLICATION OF LEGAL ADVERTISEMENT

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STATE OF WISCONSIN
BROWN COUNTY

LOCHMUELLER GROUP
6200 VOGEL ROAD

EVANSVILLE IN 47715

RE: LOCHMUELLER GROUP
AD: 0005816407-01
Publication Cost: 224.42

# of Affidavits 1

This is not an invoice

I,being sworn, am an employee of the **Evansville Courier Company**, publisher of **The Evansville Courier**, a daily newspaper published in the city of Evansville, in said county and state and that the legal advertisement, of which the attached is a true copy, was printed in its issues of:

EC-Evansville Courier & Press

The issues dated: 09/11/2023
The issues dated: 09/18/2023

Signed

9.18.23
Date

SEP 25 2023

Notary Public

Notary is Resident of Brown County, State of Wisconsin

My Commission expires: 9.19.25

VICKY FELTY
Notary Public
State of Wisconsin

Form Prescribed by State Board of Accounts

General Form No. 99P (Rev. 2002)

_____

To: **Evansville Courier & Press**

(Governmental Unit)

_____ County, Indiana_____

Evansville, IN

PUBLISHER'S CLAIM

302 lines, 1 columns wide equals 302 equivalent lines at $0.37 per line @ 2 days,	$224.42
Website Publication	$0
Charge for proof(s) of publication	$0.00
TOTAL AMOUNT OF CLAIM	$224.42

Acct #:1321525
Ad #: 0005816407

DATA FOR COMPUTING COST
Width of single column 9.5 ems
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Size of type 7 point

Pursuant to the provisions and penalties of IC 5-11-10-1, I here by certify that the foregoing account is just and correct, that the amount claimed is legally due, after allowing all just credits, and that no part of the same has been pai

Claim No. _____ Warrant No. _____
IN FAVOR OF
Evansville Courier & Press
Evansville, IN
Vanderburgh County, IN
PO Box 268, Evansville IN 47702

$ _____
On Account of Appropriation For

_____

FED. ID
#06-1032273

Allowed _____ , 20_____

In the sum of $_____

_____

I certify that the within claim is true and correct; that the services there-in itemized and for which charge is made were ordered by me and were necessary to the public business.

_____

_____

I have examined the within claim and hereby certify as follows:

That it is in proper form.

This it is duly authenticated as required by law.

That it is based upon statutory authority.

That it is apparently (correct)
(incorrect)

_____

LEGAL NOTICE OF PUBLIC HEARING
Lead DES. # 1900308
Proposed Improvements on SR 62/Lloyd Expressway from Posey/Vanderburgh County Line to Rosenberger Avenue and from Rosenberger Avenue to Wabash Avenue in Evansville and Vanderburgh County

The Indiana Department of Transportation (INDOT) will host a public hearing on Tuesday, September 26, 2023 at City View at Sterling Square, 210 N Fulton Avenue, Evansville, IN 47710. The hearing will begin at 5:30 pm, with a presentation at 6:00 pm. The purpose of the public hearing is to offer all interested persons an opportunity to comment on current preliminary design plans to improve SR 62 (locally known as the Lloyd Expressway) from the Posey/Vanderburgh County Line to Rosenberger Avenue and from Rosenberger Avenue to Wabash Avenue in Evansville and Vanderburgh County.

Des. No. 2001917 is planned to improve SR 62 from the Posey/Vanderburgh County Line to Rosenberger Avenue. The primary purpose for improvements along this section of SR 62 is to address, as a coordinated network, the safety performance of the SR 62/McDowell Road, SR 62/Middle Mount Vernon Road, SR 62/Felstead Road, SR 62/Schutte Road, SR 62/Boehne Camp Road, and SR 62/Red Bank Road intersections by reducing the number of crashes. Additionally, the purpose is to improve rideability and reduce the amount of maintenance required to maintain the improved rideability by extending the time between patching repairs to 20 years. The need for the project stems from existing high traffic volumes experienced by this section of SR 62 which have resulted in congestion at intersections and safety concerns including an above normal number of crashes.

The following Des. Nos. are included in this project: 2001917, 2100041, 1900262, 1900258, 1900260. Des. No. 2001917 involves removal and replacement of pavement along SR 62 within the project area. The proposed improvements include entrance and exit ramp reconfiguration, ditch grading, culvert replacement, culvert lining, underdrain replacement and construction, median drainage and inlet replacement and construction, storm sewer and inlet replacement, raised median construction, additional turn lanes, guardrail replacement and construction, and new and replacement signage and pavement markings.

Des. No. 2100041 will involve intersection improvements including lane reconfiguration, installation and lengthening of turn lanes, and modifications to existing signage at SR 62 and McDowell Road.

Des. No. 1900262 will involve intersection reconfigurations and improvements including lengthening

and modification of existing turn lanes and replacing/adding signage and pavement markings at SR 62 and Schutte Road.

Des. No. 1900258 will involve intersection improvements including the addition of turn lanes and lengthening of turn lanes, improved pavement markings and signage, and replacement of the existing traffic signal equipment at SR 62 and Boehne Camp Road.

Des. No. 1900260 will involve intersection improvements including lane reconfiguration, lengthening of turn lanes, replacement of the existing traffic signals and installation of new traffic signals in turn lanes at SR 62 and Red Bank Road.

Approximately 0.662 acre of permanent right-of-way (ROW) and 0.143 acre of temporary ROW will be required for the Des. No. 2001917 project. Impacts associated with this project include 2.1 acres of tree clearing, 419 linear feet of stream impacts, and approximately 0.01 acre of permanent wetland impacts.

A separate project, Des. No. 1900308, is planned to improve SR 62 from Rosenberger Avenue to Wabash Avenue. The primary purpose for improvements along this section of SR 62 is to reduce the total number of crashes and improve the traffic capacity to a desired Level of Service (LOS) C at the SR 62/Rosenberger Avenue, SR 62/St. Joseph Avenue, and SR 62/Wabash Avenue intersections. Additionally, the purpose is to improve the condition of the bridges between Rosenberger Avenue and Wabash Avenue to a condition rating of at least 7 (good) or better. The need for the project stems from existing high traffic volumes experienced by this section of SR 62 which have resulted in significant queueing, delays, and congestion issues causing safety concerns, such as above normal number of crashes, and from the deteriorated condition of the existing bridges along this section of SR 62.

The following Des. Nos. are included in this project: 1900308, 1900264, 1900263, 2000187, 1602258, 1500041, and 1600060. As proposed, Des. No. 1900308 involves road reconstruction along SR 62 within the project area. The proposed improvements include an added travel lane, entrance and exit ramp reconfiguration, relocations, and closures, as well as closure of select local cross streets to improve traffic flow. Drainage improvements along with streetlight, signage, and pavement marking replacement will also be included as part of this project.

Des. No. 1900264 will involve intersection improvements including lane reconfiguration, lengthening of turn lanes, and modifications to existing traffic signals at SR 62 and Rosenberger Avenue.

Des. No. 1900263 will involve intersection improvements including

lengthening the existing dual left turn lanes and adding new dual right turn lanes at SR 62 and St. Joseph Avenue.

Des. No. 2000187 will involve intersection improvements including improved pavement markings and signage, as well as new signal equipment and pedestrian facilities at SR 62 and Wabash Avenue.

Des. Nos. 1602258, 1500041, and 1600060 will involve the replacement of the SR 62 bridges over Carpentier Creek, CSX/Evansville Western RR, and Tekoppel Avenue, respectively.

Approximately 0.51 acre of permanent ROW and 0.62 acre of temporary ROW will be required for the Des. No. 1900308 project. Impacts associated with this project include 3.1 acres of tree clearing, 1,043 linear feet of stream impacts, and approximately 0.08 acre of permanent wetland impacts. Due to noise impacts associated with this project, a sound barrier will likely be placed along the southside of eastbound SR 62 and the Barker Avenue exit ramp from Tekoppel Avenue to Barker Avenue.

Construction is anticipated to begin in Spring 2024. The vehicular Maintenance of Traffic (MOT) plan for the projects involves lane restrictions/closures and official detours. Pedestrian MOT for the projects will involve sidewalk closures with detours at select locations. Access to all properties will be maintained during construction. INDOT will coordinate with emergency services, local school corporation officials and project stakeholders to ensure potential disruptions and impacts are minimized as much as possible.

Federal and state funds are proposed to be used for construction of these projects. INDOT and the Federal Highway Administration have agreed that these projects pose minimal impact to the natural environment. Two Categorical Exclusion (CE) environmental documents have been prepared for these projects. The environmental documentation and preliminary design information is available to view prior at the following locations:

1.Evansville Vanderburgh Public Library (EVPL) Red Bank: 120 S Red Bank Road, Evansville, IN 47712
2.Lochmueller Group Office: 6200 Vogel Road, Evansville, IN 47715
3.INDOT Vincennes District Office: 3650 South US Hwy 41, Vincennes, IN 47591, 855-INDOT4U (463-6848)
4.Project Website: https://thelloyd4u.com
5.Project documents can be mailed upon request. Contact Nicole Minton, Lochmueller Group at (812) 759-4179 or Nicole.Minton@lochgroup.com; Matthew Bullock, INDOT at (812) 830-9683 or mbullock1@indot.in.gov; or INDOT at 855-INDOT4U

Public statements for the record will be taken as part of the public

hearing procedure. All verbal statements recorded during the public hearing and all written comments submitted prior to, during and for a period of two (2) weeks following the hearing date, will be evaluated, considered and addressed in subsequent environmental documentation. Written comments may be submitted prior to the public hearing and within the comment period to Nicole Minton, Lochmueller Group, Inc., 6200 Vogel Road, Evansville, IN 47715 or by email at Nicole.Minton@lochgroup.com. **INDOT respectfully requests comments be submitted by Wednesday, October 11, 2023.**

With advance notice, INDOT will provide accommodations for persons with disabilities with regards to participation and access to project information as part of the hearings process including arranging auxiliary aids, interpretation services for the hearing impaired, services for the sight impaired and other services as needed. In addition, INDOT will provide accommodations for persons of Limited English Proficiency (LEP) requiring auxiliary aids including language interpretation services and document conversion. Should accommodation be required, please contact Nicole Minton, Lochmueller Group, Inc., 6200 Vogel Road, Evansville, IN 47715 or by email at Nicole.Minton@lochgroup.com.

This notice is published in compliance with Code of Federal Regulations, Title 23, Section 771 (CFR 771.111(h)(1) states: "Each State must have procedures approved by the FHWA to carry out a public involvement/public hearing program." 23 CFR 450.212(a)(7) states: "Public involvement procedures shall provide for periodic review of the effectiveness of the public involvement process to ensure that the process provides full and open access to all and revision of the process as necessary." approved by the Federal Highway Administration, U.S. Department of Transportation on July 7, 2021.
(Courier & Press, September 11, 18, 2023) hspaxlp

POINT OF CONTACT	BUSINESS/ ORGANIZATION	CITY	State	ZIP	Submission Type
ABRAHAM BROWN	EVANSVILLE LATINO CENTER		IN		email
ADRIAN BROOKS	MEMORIAL BAPTIST CHURCH		IN		email
ALEX BURTON	CITY OF EVANSVILLE		IN		email
ALFONSO VIDAL	HOLA EVANSVILLE				email
ALICE WEATHERS	COMMUNITY ACTION PROGRAM OF EVANSVILLE		IN		email
ANGELA KOEHLER LINDSEY	CITY OF EVANSVILLE		IN		email
ANNETTE USSERY	CITY OF EVANSVILLE		IN		email
BEN SHOULDERS	VANDERBURGH COUNTY		IN		email
BETTY CRAWLEY	GRACE BAPTIST CHURCH		IN		email
BRANT FLORES	LATINO CHAMBER ALLIANCE		IN		email
BRETT DONIGER	EVANSVILLE GRACE CHURCH OF THE NAZARENE		IN		email
BRIAN SOUTHERN	COMMERICAL PROPERTY OWNER		IN		email
CHAD ECKELS	ST. PAUL'S LUTHERAN CHURCH		IN		email
CHERYL MUSGRAVE	VANDERBURGH COUNTY		IN		email
CHERYL THOMAS	COMMUNITY ACTION PROGRAM OF EVANSVILLE		IN		email
CHRIS FLEMING	POTTERS WHEEL MINISTRIES		IN		email
CHRISTY GILLENWATER	SOUTHWEST INDIANA CHAMBER		IN		email
DAVE TERUEL	WESTWOOD CHURCH		IN		email
DAVID HUFF	EMBRACE CHURCH		IN		email
DAVID SMITH	EVANSVILLE VANDERBURGH SCHOOL CORPORATION		IN		email
DAVID WHITMORE	CATALYST CHURCH		IN		email
DEWEY MILLER	CENTRAL UNITED METHODIST CHURCH		IN		email
DIANA CLEMENTS	EVANSVILLE-VANDERBURGH COUNTY HUMAN RELATIONS COMMISSION		IN		email
EARL CARTER	ARENA OF FAITH CHURCH		IN		email
ERIKA TAYLOR	YMCA		IN		email

POINT OF CONTACT	BUSINESS/ ORGANIZATION	CITY	State	ZIP	Submission Type
EXECUTIVE DIRECTOR	EVANSVILLE DEPARTMENT OF PARKS & RECREATION	EVANSVILLE	IN	47713	email
GAYLE RICE	EVANSVILLE HOUSING AUTHORITY		IN		email
GENO MERRIWEATHER	LINE STREET CHURCH OF CHRIST		IN		email
HOLLY SMITH	UNIVERSITY OF EVANSVILLE		IN		email
HUGH CLAYTON	MARATHON GAS		IN		email
JASON WOEBKENBERG	EVANSVILLE VANDERBURGH SCHOOL CORPORATION		IN		email
JEFF KINKADE	CITY CHURCH OF EVANSVILLE		IN		email
JERRY WRIGHT	WEST SIDE CHRISTIAN CHURCH & FAMILY LIFE CENTER		IN		email
JIM BRINKMEYER	CITY OF EVANSVILLE		IN		email
JOHN FARLESS	UNIVERSITY OF SOUTHERN INDIANA		IN		email
JONATHAN SIEBEKING	METROPOLITAN EVANSVILLE TRANSIT SYSTEM		IN		email
JONATHAN WEAVER	CITY OF EVANSVILLE		IN		email
JOSH CALHOUN	HOPE OF EVANSVILLE		IN		email
JULIE SPRATT	ROTARY CLUB OF EVANSVILLE		IN		email
JUSTIN ELPERS	VANDERBURGH COUNTY		IN		email
KAITLIN MOORE	CITY OF EVANSVILLE		IN		email
KATIE BROWN	UNITARIAN UNIVERSALIST CHURCH OF EVANSVILLE		IN		email
KENT JOHNSON			IN		email
KENZIE CAMPBELL	AZZIP PIZZA		IN		email
KRISTEN WATSON	OLIVET COMMUNITY CHURCH		IN		email
LAURA CALLENDER	ST. LUCAS UNITED CHURCH OF CHRIST		IN		email
LUKE SMITH	GRACEPOINT CHURCH		IN		email
MARY HURLEY	ST. PAUL'S UNITED CHURCH OF CHRIST		IN		email
MICHELLE PRIOR	CATHOLIC DIOCESE OF EVANSVILLE SCHOOLS		IN		email

POINT OF CONTACT	BUSINESS/ ORGANIZATION	CITY	State	ZIP	Submission Type
MIKE GERNER	HOPE CITY CHURCH		IN		email
MIKE PYLE	EAGLE'S VIEW CHURCH		IN		email
MISSY MOSBY	CITY OF EVANSVILLE		IN		email
NOAH STUBBS	CITY OF EVANSVILLE		IN		email
PATRICK DAVIS	LOGANS ROADHOUSE		IN		email
RASHAWNDA BONDS	COMMUNITY ACTION PROGRAM OF EVANSVILLE		IN		email
RAY AUSTIN	FOREST HILLS WESLEYAN CHURCH		IN		email
RAY BROWN	THE GATHERING CHURCH		IN		email
REV. JOHN VANDERZEE	FIRST PRESBYTERIAN CHURCH		IN		email
RHONDA WEISSMANN	CATHOLIC DIOCESE OF EVANSVILLE SCHOOLS		IN		email
RICK MOORE	EVANSVILLE HOUSING AUTHORITY		IN		email
ROBERTA MEYER	GRACE AND PEACE LUTHERAN CHURCH		IN		email
ROBIN ROBERTSON	METROPOLITAN EVANSVILLE TRANSIT SYSTEM		IN		email
RON BEANE	CITY OF EVANSVILLE		IN		email
ROSS CHAPMAN	FOR EVANSVILLE		IN		email
RYAN JACKSON	NEW HOPE MISSIONARY BAPTIST CHURCH		IN		email
SAM ROBINSON	LANDMARK BAPTIST CHURCH		IN		email
SECRETARY	EVANSVILLE BIBLE CHURCH		IN		email
SEYED SHOKOUHZADEH	EXECUTIVE DIRECTOR	EVANSVILLE	IN	47708	email
STATE REP. RYAN HATFIELD	INDIANA GENERAL ASSEMBLY		IN		email
STATE REP. WENDY MCNAMARA	INDIANA GENERAL ASSEMBLY		IN		email
STEVE CLARK, EXECUTIVE PASTOR	RHYTHM CHURCH		IN		email
STEVE SEN. JAMES TOMES	INDIANA GENERAL ASSEMBLY		IN		email
STEVEN CLASPELL	FIRST BAPTIST CHURCH		IN		email
STEW ARMSTRONG	ENCOUNTER CHURCH		IN		email
TODD GILE	EVANSVILLE TRINITY UMC		IN		email
TROY SMITH	VINEYARD EVANSVILLE				email

POINT OF CONTACT	BUSINESS/ ORGANIZATION	CITY	State	ZIP	Submission Type
	EVANSVILLE BLACK CHAMBER OF COMMERCE		IN		email
	EVANSVILLE EPA		IN		email
ROBIN JOHNSTON DEEM	WESSELMAN WOODS	EVANSVILLE	IN	47711	USPS
5125 EVANSVILLE LLC		LEXINGTON	KY	40502	USPS
ABRAHAM A ZENTHOFER		EVANSVILLE	IN	47712	USPS
ADAM P BLACK		EVANSVILLE	IN	47712-9649	USPS
ADDISON B CRAWFORD		EVANSVILLE	IN	47712	USPS
ADMINISTRATOR	UNIVERSITY OF EVANSVILLE	EVANSVILLE	IN	47722	USPS
ADN REALTY EVANSVILLE LLC		EAST HILLS	NY	11576	USPS
ADRIENNE K LINCOLN, NICKOLAS J LINCOLN, & ADRIENNE K LINCOLN		EVANSVILLE	IN	47712	USPS
ALAN R CORRESSELL & DENISE CORRESSELL		EVANSVILLE	IN	47712	USPS
ALDI INC (KANSAS)		HOUSTON	TX	77056	USPS
ALEX TRINKLE & LAUREN TRINKLE		EVANSVILLE	IN	47712	USPS
ALTON R ROEDEL		EVANSVILLE	IN	47720	USPS
AMANDA L RAINEY		EVANSVILLE	IN	47712	USPS
AMY C LYNN		EVANSVILLE	IN	47712	USPS
AMY DRESSEL	EVANSVILLE VANDERBURGH SCHOOL CORPORATION	EVANSVILLE	IN	47713	USPS
ANDREI SHARYGIN		NEWBURGH	IN	47630	USPS
ANDREW ALEXANDER	AT&T STORE	EVANSVILLE	IN	47712	USPS
ANDREW C COOK & HEATHER D COOK		EVANSVILLE	IN	47712	USPS
ANDREW J DAVIDSON		EVANSVILLE	IN	47712	USPS
ANDREW JONES	HHGREGG APPLIANCE FACTORY	EVANSVILLE	IN	47712	USPS
ANDREW ROBERT MAYES		EVANSVILLE	IN	47712	USPS
ANDY COOK	KOCH AIR	EVANSVILLE	IN	47712	USPS
ANGELIQUE L KIRMSE		EVANSVILLE	IN	47712	USPS
ANNA MARIE YATES		EVANSVILLE	IN	47720	USPS
ARTHUR BRUNETTI & JANET H BRUNETTI		EVANSVILLE	IN	47719	USPS
ASHLEY ROBB	DEACONESS PAIN CENTER	EVANSVILLE	IN	47712	USPS
AUSTIN CROWE	WEST TERRACE CHURCH	EVANSVILLE	IN	47712	USPS
AUTO ZONE INC (DEPT 8700)		MEMPHIS	TN	38101-9842	USPS
B & M ESTATES LLC		HUNTINGBURG	IN	47542	USPS
B & S PROPERTY MANAGEMENT LLC		EVANSVILLE	IN	47712	USPS
B & S PROPERTY MANAGEMENT LLC		EVANSVILLE	IN	47711	USPS
B & S PROPERTY MANAGEMENT LLC		EVANSVILLE	IN	47712	USPS

POINT OF CONTACT	BUSINESS/ ORGANIZATION	CITY	State	ZIP	Submission Type
B & S PROPERTY MANAGEMENT LLC		EVANSVILLE	IN	47720	USPS
BARBARA O BOLIN		EVANSVILLE	IN	47712-3654	USPS
BARRY L WEISSMAN & AMY B WEISSMAN		EVANSVILLE	IN	47712-3155	USPS
BART A WEINZAPFEL & DIANA R WEINZAPFEL		EVANSVILLE	IN	47712-9649	USPS
BEN TROCKMAN	CITY OF EVANSVILLE	EVANSVILLE	IN	47715	USPS
BETTY H COTTOM		EVANSVILLE	IN	47712	USPS
BETTY L DUNIVAN		EVANSVILLE	IN	47712	USPS
BILLY BOLIN	EVANSVILLE POLICE DEPARTMENT	EVANSVILLE	IN	47708	USPS
BJA CAPITAL LLC		MESA	AZ	85207	USPS
BLANE E CLOUM		EVANSVILLE	IN	47712	USPS
BOBBY J OLDHAM JR.		EVANSVILLE	IN	47712	USPS
BRADFORD L BLAINE		EVANSVILLE	IN	47712	USPS
BRADLEY D HURSHMAN		EVANSVILLE	IN	47712	USPS
BRADLEY J VAN BIBBER & LAURIE M VAN BIBBER		EVANSVILLE	IN	47712-9649	USPS
BRAELYN MICHELLE CARGAL		EVANSVILLE	IN	47712	USPS
BRANDEE BRINKER	FIRST BANK	EVANSVILLE	IN	47712	USPS
BRANDI M HUFFMAN & RICHARD A HUFFMAN		EVANSVILLE	IN	47712	USPS
BRANDON MCQUINN	PANERA	EVANSVILLE	IN	47712	USPS
BRANDON WOLF		EVANSVILLE	IN	47712	USPS
BRIAN K CARLTON & WENDY M CARLTON		EVANSVILLE	IN	47712-9689	USPS
BRIAN K SOUTHERN	STATE FARM	EVANSVILLE	IN	47712	USPS
BRIAN L WILLETT & KELLY MCCORMICK WILLETT		EVANSVILLE	IN	47712	USPS
BRIAN MALONE	INDIANA DEPARTMENT OF TRANSPORTATION	VINCENNES	IN	47591	USPS
BRIAN NEFF	TACO BELL	EVANSVILLE	IN	47712	USPS
BRIAN PHAN	LOVELY NAILS	EVANSVILLE	IN	47712	USPS
BRIAN RICH	RABEN TIRE AND AUTO	EVANSVILLE	IN	47712	USPS
BRIAN SIEBERS	O'CHARLEYS	EVANSVILLE	IN	47712	USPS
BRUCE A BOWERS BRENDA S BOWERS		EVANSVILLE	IN	47712	USPS
BRUNO DRAVENIEKS	PURPLE CUP COFFEE COMPANY	EVANSVILLE	IN	47712	USPS
BRYAN ZELLER	ZELLER'S MASTER TIRE	EVANSVILLE	IN	47712	USPS
BRYANT LEE YOUNG & JANE EDMUNDSON		EVANSVILLE	IN	47712	USPS
BRYLEE HAGAN		EVANSVILLE	IN	47712	USPS
BUSLER ENTERPRISES INC		EVANSVILLE	IN	47720-5471	USPS
BYRON G PEERMAN & CYNTHIA C PEERMAN		EVANSVILLE	IN	47712	USPS
BYRON G PEERMAN & CYNTHIA C PEERMAN		EVANSVILLE	IN	47712	USPS
C & S INC		TELL CITY	IN	47586	USPS
CALLOWAY LLC		EVANSVILLE	IN	47712	USPS

POINT OF CONTACT	BUSINESS/ ORGANIZATION	CITY	State	ZIP	Submission Type
CARL F RODENBERG III		EVANSVILLE	IN	47712	USPS
CARLEEN R EPPLER		EVANSVILLE	IN	47712	USPS
CAROLE LUCILLE HACKNEY & DANIEL M HACKNEY		EVANSVILLE	IN	47712-5068	USPS
CATHERINE M BOHANNON & ANTHONY R MARKS		EVANSVILLE	IN	47712	USPS
CFT NV DEVELOPMENT LLC		ROSEMEAD	CA	91770	USPS
CHANDA L HATT & DAINEL H HATT & GARY KITZINGER		EVANSVILLE	IN	47712	USPS
CHARLES D HOFMANN & MARTHA J HOFMANN		EVANSVILLE	IN	47712	USPS
CHARLES SEIFERT	DIRECTOR OF BUILDINGS, GROUNDS, AND TRANSPORTATION	MT. VERNON	IN	47620	USPS
CHERIE L JOHNSTON		EVANSVILLE	IN	47712	USPS
CHEROKEE PROPERTIES OF VINCENNES #1 LLC		KANSAS CITY	MO	64114	USPS
CHERYLIN BOGAN	ORTHOPEDIC ASSOCIATES WEST EVANSVILE	EVANSVILLE	IN	47712	USPS
CHICK-FIL-A INC		ATLANTA	GA	30349-2998	USPS
CHIEF CONNELLY	EVANSVILLE FIRE DEPARTMENT	EVANSVILLE	IN	47713	USPS
CHIEF RICK WILLIAMSON	MARRS TOWNSHIP VOLUNTEER FIRE DEPARTMENT	MT. VERNON	IN	47620	USPS
CHRIS HAMLET	MCDONALD'S CORPORATION	EVANSVILLE	IN	47712	USPS
CHRISTIAN C COSTELLO		EVANSVILLE	IN	47712-6401	USPS
CHRISTIE GLAESER	FREDDY'S	EVANSVILLE	IN	47712	USPS
RACHEL VAN VOORHIS, DIVISION OF FISH AND WILDLIFE	INDIANA DEPARTMENT OF NATURAL RESOURCES	INDIANAPOLIS	IN	46204	USPS
CHRISTINA MARLENA STONE & DAVID E HOLLY		EVANSVILLE	IN	47712	USPS
CHRISTOPHER DEWITT	H&R BLOCK	EVANSVILLE	IN	47712	USPS
CHRISTOPHER L GARRETT & SUSAN L GARRETT		EVANSVILLE	IN	47712	USPS
CINDY A WENTZEL		EVANSVILLE	IN	47712	USPS
CLARENCE G WEBER & ROSEMARY M WEBER		EVANSVILLE	IN	47712	USPS
CLAY ALLISON & DENISE ALLISON		EVANSVILLE	IN	47720	USPS
CLAYTON WEPFER & HEATHER CLARK		EVANSVILLE	IN	47712	USPS
CLIFF WEAVER	EVANSVILLE/VANDERBURGH COUNTY EMERGENCY MANAGEMENT AGENCY	EVANSVILLE	IN	47720	USPS

POINT OF CONTACT	BUSINESS/ ORGANIZATION	CITY	State	ZIP	Submission Type
CLINTON J MATHEWS		EVANSVILLE	IN	47712-5068	USPS
CMG W EVANSVILLE LLC		INDIANAPOLIS	IN	46220	USPS
COLLETTE CROW	CULVER'S	EVANSVILLE	IN	47712	USPS
COMMERCIAL NET LEASE REALTY LP		ORLANDO	FL	32801	USPS
CONNOR MOTHERSHED & SHELBY MOTHERSHED		EVANSVILLE	IN	47712	USPS
COREY CHAPMAN	DEACONESS CLINIC WEST	EVANSVILLE	IN	47712	USPS
CORINNE MARTIN	HARMONY EYE CARE	EVANSVILLE	IN	47712	USPS
CORNERSTONE CAPITAL IV LLC		EVANSVILLE	IN	47701	USPS
CRIS BRUNSEN - GENERAL MANAGER PATRICK MARKHAM - STORE MANAGER	MARK'S MATTRESS OUTLET	EVANSVILLE	IN	47712	USPS
CSI COMPLEX LLC		EVANSVILLE	IN	47712	USPS
CSI COMPLEX LLC		EVANSVILLE	IN	47706	USPS
CURRENT OCCUPANT		EVANSVILLE	IN	47712	USPS
CURRENT OCCUPANT		EVANSVILLE	IN	47712	USPS
CURRENT OCCUPANT		EVANSVILLE	IN	47712	USPS
CURRENT OCCUPANT		EVANSVILLE	IN	47712	USPS
CURRENT OCCUPANT		EVANSVILLE	IN	47712	USPS
CURRENT OCCUPANT		EVANSVILLE	IN	47712-5560	USPS
CURRENT OCCUPANT		EVANSVILLE	IN	47712	USPS
CURRENT OCCUPANT		EVANSVILLE	IN	47712	USPS
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POINT OF CONTACT	BUSINESS/ ORGANIZATION	CITY	State	ZIP	Submission Type
CURRENT OCCUPANT		EVANSVILLE	IN	47711	USPS
CURRENT OCCUPANT		EVANSVILLE	IN	47712	USPS
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CURRENT OCCUPANT		EVANSVILLE	IN	47712-3107	USPS
CURRENT OCCUPANT		EVANSVILLE	IN	47712	USPS
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CURRENT OCCUPANT		EVANSVILLE	IN	47712-4945	USPS
CURRENT OCCUPANT		EVANSVILLE	IN	47712-4947	USPS
CURRENT OCCUPANT		EVANSVILLE	IN	47712-5706	USPS
CURRENT OCCUPANT		EVANSVILLE	IN	47712	USPS
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CURRENT OCCUPANT		EVANSVILLE	IN	47712-4878	USPS
CURRENT OCCUPANT		EVANSVILLE	IN	47712	USPS
CURRENT OCCUPANT		EVANSVILLE	IN	47712	USPS

POINT OF CONTACT	BUSINESS/ ORGANIZATION	CITY	State	ZIP	Submission Type
CURRENT OCCUPANT		EVANSVILLE	IN	47712	USPS
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CURRENT OCCUPANT		EVANSVILLE	IN	47712-3019	USPS
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CURRENT OCCUPANT		EVANSVILLE	IN	47712-9134	USPS
CURRENT OCCUPANT		EVANSVILLE	IN	47712	USPS
CURT BRUNSON		EVANSVILLE	IN	47712	USPS
CURTIS A ROEDEL & HEATHER E ROEDEL		EVANSVILLE	IN	47712	USPS
CWK INVESTMENTS-EAGLE PLAZA LLC		EVANSVILLE	IN	47725	USPS
CYNTHIA G ZINN		EVANSVILLE	IN	47712	USPS
DALLAS CRAIG & SUE ANN CRAIG		EVANSVILLE	IN	47712	USPS
DALTON KING		EVANSVILLE	IN	47712	USPS
DAN CARTER		EVANSVILLE	IN	47712	USPS
DAN GRUNOW	GD RITZY'S	EVANSVILLE	IN	47712	USPS
DANA GUBLER	HERITAGE FEDERAL CREDIT UNION	EVANSVILLE	IN	47712	USPS

POINT OF CONTACT	BUSINESS/ ORGANIZATION	CITY	State	ZIP	Submission Type
DANIEL LEDBETTER & REBECCA M LEDBETTER		EVANSVILLE	IN	47712-9687	USPS
DANIEL M MILLS & LEE ANN MILLS		EVANSVILLE	IN	47712-9693	USPS
DANIEL P HERTEL		EVANSVILLE	IN	47712	USPS
DANIEL W CASPER & GAIL L CASPER		EVANSVILLE	IN	47712-9643	USPS
DANNY CAROLL	MEAD JOHNSON	EVANSVILLE	IN	47712	USPS
DANNY CARTER & ASHTON CARTER		EVANSVILLE	IN	47720	USPS
DARREN R GRIMWOOD & CARLA A GRIMWOOD		EVANSVILLE	IN	47712	USPS
DARYL HAGAN	CATHOLIC DIOCESE OF EVANSVILLE	EVANSVILLE	IN	47724-0169	USPS
DAVE AHLSTEDT	KOHL'S	EVANSVILLE	IN	47712	USPS
DAVID BALLEW	FLOODPLAIN ADMINISTRATOR	EVANSVILLE	IN	47708	USPS
DAVID E ELSNER & KERYL H ELSNER		NEWBURGH	IN	47630	USPS
DAVID HALLER & SHIRLEY HALLER		EVANSVILLE	IN	47712	USPS
DAVID L ASHWORTH & VICTORIA E ASHWORTH		EVANSVILLE	IN	47712	USPS
DAVID M MILLER & YVONNE MILLER		EVANSVILLE	IN	47712	USPS
DAVID P HENRY & KATHY L REVOCABLE FAMILY TRUST		EVANSVILLE	IN	47712	USPS
DAVID PROPERTIES LLC		EVANSVILLE	IN	47712	USPS
DAVID REYNOLDS	FIRST PODIATRY	EVANSVILLE	IN	47712	USPS
DAVID THOMPSON & DENISE THOMPSON		EVANSVILLE	IN	47712	USPS
DAVIS & WINSTEAD PROPERTIES LLC		EVANSVILLE	IN	47712	USPS
DAVIS & WINSTEAD PROPERTIES LLC		MADISONVILLE	KY	42431	USPS
DEACONESS HOSPITAL INC		EVANSVILLE	IN	47747	USPS
DEBBIE DEAN	CHICK FIL A 4323	EVANSVILLE	IN	47712	USPS
DEBBIE KAYE WELLS		EVANSVILLE	IN	47712	USPS
DEEJAY PROPERTIES LLC		EVANSVILLE	IN	47712	USPS
DELTA PROPERTIES LLC		NEWBURGH	IN	47630	USPS
DENNIS WANNEMUEHLER & ANGELA WANNEMUEHLER		EVANSVILLE	IN	47712	USPS
DEREK J REYHER & AMANDA R REYHER		EVANSVILLE	IN	47712	USPS
DEREK J REYHER & AMANDA R REYHER (J		EVANSVILLE	IN	47712-9637	USPS
DEREK LAPPE	AZZIP PIZZA	EVANSVILLE	IN	47712	USPS
DESTINY OF FAITH COMMUNITY CHURCH INC		EVANSVILLE	IN	47712	USPS
DESTINY OF FAITH COMMUNITY CHURCH INC		EVANSVILLE	IN	47712	USPS

POINT OF CONTACT	BUSINESS/ ORGANIZATION	CITY	State	ZIP	Submission Type
DIAMOND VALLEY FEDERAL CREDIT UNION		EVANSVILLE	IN	47711	USPS
DIANA CARROLL		EVANSVILLE	IN	47712	USPS
DLS INVESTMENTS LLC		EVANSVILLE	IN	47712	USPS
DO IT RIGHT INVESTMENTS LLP		EVANSVILLE	IN	47712-4517	USPS
DONALD KEITH CALDWELL JR & NANCY CALDWELL		EVANSVILLE	IN	47712	USPS
DONALD W HENDERSON		HOPKINSVILLE	KY	42240	USPS
DONNA M HAUSMANN & JOHN W HAUSMANN		EVANSVILLE	IN	47712-3035	USPS
DONUT BANK INC		EVANSVILLE	IN	47711-3901	USPS
EAGLE VILLAGE GROUP LLC		GILBERT	AZ	85298	USPS
EAGLES VIEW INC		EVANSVILLE	IN	47712	USPS
EAGLE'S VIEW INC		EVANSVILLE	IN	47712	USPS
EAGLE'S VIEW INC		EVANSVILLE	IN	47712	USPS
EBONY GLOVER		EVANSVILLE	IN	47712	USPS
EDWARD A KITZINGER SR		EVANSVILLE	IN	47712	USPS
ELI HESS		EVANSVILLE	IN	47712	USPS
EMMA GENE THOMPSON (LIFE ESTATE) & ORVILLE EASTWOOD JR.		EVANSVILLE	IN	47712	USPS
ERIC A FRIEND		EVANSVILLE	IN	47712	USPS
ERIC A FRIEND		EVANSVILLE	IN	47712	USPS
ERIC A WILDEMAN		EVANSVILLE	IN	47712	USPS
ERIC BOREUP	COOK PORTABLE WAREHOUSES	EVANSVILLE	IN	47712	USPS
ERIC DOWDY		EVANSVILLE	IN	47712	USPS
ERIC JACQUOT & DEBRA JACQUOT		EVANSVILLE	IN	47712	USPS
ERIC M HAMILTON & MICHELLE HAMILTON		EVANSVILLE	IN	47712	USPS
ERIN A CULVER		EVANSVILLE	IN	47712-3655	USPS
ESTEBAN ALCANTARA		EVANSVILLE	IN	47712	USPS
ESTHER L REINICKE		EVANSVILLE	IN	47712	USPS
EUGENE J WEBER		EVANSVILLE	IN	47712	USPS
EVANSVILLE FEDERAL SAVINGS & LOAN ASSOC		EVANSVILLE	IN	47708	USPS
EVANSVILLE GOODWILL INDUSTRIES INC		EVANSVILLE	IN	47715	USPS
EVANSVILLE HISTORIC HOMES INC		EVANSVILLE	IN	47710	USPS
EVANSVILLE TEACHERS FEDERAL CREDIT UNION		EVANSVILLE	IN	47716	USPS
EVANSVILLE VANDERBURGH COUNTY PUBLIC LIBRARY		EVANSVILLE	IN	47708	USPS
EVANSVILLE VANDERBURGH SCHOOL CORPORATION	EVSC, BUS TRANSPORTATION	EVANSVILLE	IN	47713	USPS
EVANSVILLE WEST HOTEL VENTURES LLC		SPRINGFIELD	IL	62712-6875	USPS
EVVPROPERTIES LLC		EVANSVILLE	IN	47719	USPS
F & F HOLDINGS CO LLC		EVANSVILLE	IN	47712	USPS

POINT OF CONTACT	BUSINESS/ ORGANIZATION	CITY	State	ZIP	Submission Type
F & F HOLDINGS CO LLC		EVANSVILLE	IN	47712	USPS
F & F HOLDINGS CO LLC		EVANSVILLE	IN	47712	USPS
F & F HOLDINGS CO LLC		EVANSVILLE	IN	47712	USPS
FAIRCHILD HOLDINGS LLC		NEWBURGH	IN	47630	USPS
FALISHA M. PIERCE	HACIENDA	EVANSVILLE	IN	47712	USPS
FERNANDO TUDELA	CROSS-EYED CRICKET	EVANSVILLE	IN	47712	USPS
FERNANDO TUDELA	CROSS-EYED CRICKET	EVANSVILLE	IN	47712	USPS
FIFTH THIRD BANK		EVANSVILLE	IN	47712	USPS
FIRE CHIEF	PERRY TOWNSHIP VOLUNTEER FIRE DEPARTMENT	EVANSVILLE	IN	47712	USPS
FIRST NATIONAL BANK OF CARMI		CARMI	IL	62821-1841	USPS
FLINT CREEK PROPERTIES LLC		EVANSVILLE	IN	47715	USPS
FOXXX EQUIPMENT COMPANY LLC		EVANSVILLE	IN	47712	USPS
FRUC-TUOUS LLC		SCOTTSDALE	AZ	85255	USPS
GARY EDWIN STEPHENS & ANNA M STEPHENS		EVANSVILLE	IN	47711	USPS
GDDAVIS PROPERTIES LLC		WADESVILLE	IN	47638	USPS
GDDAVIS PROPERTIES LLC		EVANSVILLE	IN	47712	USPS
GENE WARREN JR 2021 FAMILY TRUST		EVANSVILLE	IN	47712	USPS
GENNY COX LLC		MOUNT VERNON	IN	47620	USPS
GEORGE KOCH & SONS INC		EVANSVILLE	IN	47712	USPS
GEORGE OTTERSON MELISSA FORE	HOLIDAY INN	EVANSVILLE	IN	47712	USPS
GERALD R RINEY & PAULA L RINEY		EVANSVILLE	IN	47720	USPS
GIANT INDIANA LLC		TAMPA	FL	33602	USPS
GILBERT H HARTIG JR & CLARA G HARTIG		EVANSVILLE	IN	47712-3027	USPS
GRABLE REALTY LLC		EVANSVILLE	IN	47712	USPS
GREG BRYANT	EVANSVILLE STREET MAINTENANCE DEPARTMENT	EVANSVILLE	IN	47713	USPS
GRIMM PROPERTY HOLDINGS LLC		EVANSVILLE	IN	47714	USPS
GUAGENTI FAMILY LIMITED PARTNERSHIP		EVANSVILLE	IN	47715	USPS
HEALTH ADMINISTRATOR	VANDERBURGH COUNTY HEALTH DEPARTMENT	EVANSVILLE	IN	47713	USPS
HEATHER N BURTON		EVANSVILLE	IN	47712	USPS
HEATHER WALTERS, ROSS MALMGREN	EAGLE VILLAGE APARTMENTS	EVANSVILLE	IN	47712	USPS
HEM PROPERTIES LLC		NEWBURGH	IN	47629	USPS
HERITAGE INVESTMENTS LLC		EVANSVILLE	IN	47716	USPS
HILLSIDE MANOR APARTMENTS LLC		EVANSVILLE	IN	47712	USPS

POINT OF CONTACT	BUSINESS/ ORGANIZATION	CITY	State	ZIP	Submission Type
HIRA INC		NEWBURGH	IN	47630	USPS
HIRU LLC % PATHIL AMIN		NEWBURGH	IN	47630	USPS
HK EAGLES LLC		EVANSVILLE	IN	47715	USPS
HOLDEN W METZGER		EVANSVILLE	IN	47712	USPS
HOOD PROPERTIES II LLC		EVANSVILLE	IN	47720	USPS
HTA EVANSVILLE WESTSIDE LLC		SCOTTSDALE	AZ	85254	USPS
HUSKY HOMES LLC		EVANSVILLE	IN	47712	USPS
IMI SOUTHWEST INC		LOUISVILLE	KY	40213	USPS
INTERPROP FUND V L P % ARCAP SERVICING INC		EVANSVILLE	IN	47712	USPS
INTERPROP FUND VII LP % ARCAP SERVICING INC		EVANSVILLE	IN	47712	USPS
INTERPROP FUND VII LP % ARCAP SERVICING INC		EVANSVILLE	IN	47712	USPS
JACKSON BARNES		EVANSVILLE	IN	47712	USPS
JACOB P STAUBER		EVANSVILLE	IN	47712	USPS
JACOB P STAUBER		EVANSVILLE	IN	47712	USPS
JAIME L BLACKFORD & DOUGLAS E BLACKFORD		EVANSVILLE	IN	47712	USPS
JAMES A CHEANEY & JUDITH A HERRMANN CHEANEY		EVANSVILLE	IN	47712	USPS
JAMES A EVANS		EVANSVILLE	IN	47712	USPS
JAMES A NEIDIG		EVANSVILLE	IN	47711	USPS
JAMES C STERLING & SARA J STERLING		EVANSVILLE	IN	47712	USPS
JAMES E MORROW & JACQUELYN F MORROW		EVANSVILLE	IN	47712-5067	USPS
JAMES ELDERBROOK		EVANSVILLE	IN	47712	USPS
JAMES RABEN	VANDERBURGH COUNTY	EVANSVILLE	IN	47708	USPS
JAMES RALPH WILHITE		EVANSVILLE	IN	47712	USPS
JAMES T.WOOD	EVANSVILLE CONVENTION AND VISITORS BUREAU	EVANSVILLE	IN	47713	USPS
JAMIE H WEBER & MACKENZIE L WEBER		EVANSVILLE	IN	47715	USPS
JANET C SMITH		EVANSVILLE	IN	47712	USPS
JANET SANDLEVEN	MISSION VIEJO APARTMENTS	EVANSVILLE	IN	47712	USPS
JANICE PECKENPAUGH		EVANSVILLE	IN	47712	USPS
JASON A WEBER & AMY M WEBER		EVANSVILLE	IN	47712	USPS
JEFFERY KINGERY - OWNER	MIAMOR SALON	EVANSVILLE	IN	47712	USPS
JEFFERY KINGERY - OWNER	TREASURE HUNT	EVANSVILLE	IN	47712	USPS
JEFFERY T MOORE		EVANSVILLE	IN	47712	USPS
JEFFREY A DONINGER		EVANSVILLE	IN	47712	USPS
JENJER A BEAL		EVANSVILLE	IN	47712-5011	USPS
JENNA DORE		EVANSVILLE	IN	47712	USPS
JENNIE L HEAD REVOCABLE TRUST AGREEMENT		EVANSVILLE	IN	47712	USPS

POINT OF CONTACT	BUSINESS/ ORGANIZATION	CITY	State	ZIP	Submission Type
JENNIFER R KOCH		EVANSVILLE	IN	47712-5068	USPS
JENNY MITCHELL - CPM	SCHNUCKS GROCERY	EVANSVILLE	IN	47712	USPS
JEREMIAH C TALBERT & KELSEY J SOLLMAN		EVANSVILLE	IN	47712	USPS
JEREMY HAWKINS	BOB'S GYM - WEST	EVANSVILLE	IN	47712	USPS
JERRY W NORD		EVANSVILLE	IN	47712	USPS
JESSICA CHAPMAN	PALM BEACH TAN	EVANSVILLE	IN	47712	USPS
JESSICA CREMEENS	PAPA JOHN'S PIZZA	EVANSVILLE	IN	47712	USPS
JETAY ENTERPRISE LLC		EVANSVILLE	IN	47712	USPS
JILL ANNE HAHN	VANDERBURGH COUNTY	EVANSVILLE	IN	47708	USPS
JIMMIE D OXLEY & SHIRLEY M OXLEY		EVANSVILLE	IN	47712	USPS
JK PARTNERS LLC		EVANSVILLE	IN	47712	USPS
JOE KIEFER	VANDERBURGH COUNTY	EVANSVILLE	IN	47708	USPS
JOE RAMIREZ		EVANSVILLE	IN	47710	USPS
JOHN CHARLES BIRCHER		EVANSVILLE	IN	47712	USPS
JOHN D MUSGRAVE		EVANSVILLE	IN	47712	USPS
JOHN FUCHS & JENNIFER FUCHS		EVANSVILLE	IN	47712	USPS
JOHN KIRK BUNNER & SHAUN RENAE BUNNER		EVANSVILLE	IN	47712	USPS
JOHN MONSTRASTELLE	VANDERBURGH COUNTY	EVANSVILLE	IN	47708	USPS
JOHN S HUNT & JAMIE L HUNT		EVANSVILLE	IN	47712-9692	USPS
JOHN STOLL	VANDERBURGH COUNTY MS4 COORDINATOR	EVANSVILLE	IN	47708	USPS
JOHN WANDLING	CONTROL SPECIALISTS INC	EVANSVILLE	IN	47712	USPS
JOHNNY L WEST & DEBRA L WEST		EVANSVILLE	IN	47720	USPS
JONATHAN MUNNIER & ANDREA MUNNIER		EVANSVILLE	IN	47712-9687	USPS
JONATHAN SIEBEKING	METROPOLITAN EVANSVILLE TRANSIT SYSTEMS	EVANSVILLE	IN	47713-1999	USPS
JONATHAN STAGG		EVANSVILLE	IN	47712	USPS
JOSEPH A MUTSCHLER		PALM BEACH GARDENS	FL	33410	USPS
JOSEPH CLYDE RANDOLPH & ELIZABETH COURTNEY RANDOLPH		EVANSVILLE	IN	47712-5066	USPS
JOSEPH MATTHEW JONES & KATHERINE SUSANNE JONES		EVANSVILLE	IN	47712	USPS
JOSEPH MILNER		EVANSVILLE	IN	47711	USPS
JOSEPH STUCKEY		EVANSVILLE	IN	47712	USPS
JOSH GILBERG	KOCH AND SONS	EVANSVILLE	IN	47712	USPS
JOSHUA K MESSIC		EVANSVILLE	IN	47712-6401	USPS
JOY JOHNSON	HACIENDA	EVANSVILLE	IN	47712	USPS

POINT OF CONTACT	BUSINESS/ ORGANIZATION	CITY	State	ZIP	Submission Type
JOYCE A BAKER		EVANSVILLE	IN	47712-9162	USPS
JULIA M KLEIN & RYAN M KLEIN		EVANSVILLE	IN	47712	USPS
TYLER LEWANDOWSKI	INDIANA DEPARTMENT OF TRANSPORTATION	INDIANAPOLIS	IN	46204	USPS
KARAN BARNHILL	CITY OF EVANSVILLE STORM WATER COORDINATOR	EVANSVILLE	IN	47708	USPS
KAREN OWENS		EVANSVILLE	IN	47712-6801	USPS
KAROLINE G CHRAPONSKI & MICHAEL J CHRAPONSKI		EVANSVILLE	IN	47712	USPS
KATHERINE M SHERRILL & CHRISTINE L SHERRILL		EVANSVILLE	IN	47712-5724	USPS
KATHRYN E BRACKETT		EVANSVILLE	IN	47712-5067	USPS
KATHY GROSHEART	ARBY'S	EVANSVILLE	IN	47712	USPS
KATHY RANEY	COPPER CREEK APARTMENTS	EVANSVILLE	IN	47712	USPS
KATHY SHREVE	STUDIO OF HAIR	EVANSVILLE	IN	47712	USPS
KATIE SYERS	FIFTH THIRD BANK	EVANSVILLE	IN	47712	USPS
KEB REAL ESTATE HOLDINGS LLC		EVANSVILLE	IN	47706	USPS
KEITH A SYMANSKI & ROXANNA L SYMANSKI		MOUNT VERNON	IN	47620	USPS
KEITH M SANDERSON & STEPHANIE M SANDERSON		EVANSVILLE	IN	47712	USPS
KEITH M SANDERSON & STEPHANIE M SANDERSON		EVANSVILLE	IN	47712	USPS
KELLY RUNAU	VERSONA ACCESSORIES	EVANSVILLE	IN	47715	USPS
KELLY THOMAS	DAVITA KIDNEY CARE	EVANSVILLE	IN	47712	USPS
KELSEY R BOWMAN & BRETT T BOWMAN		EVANSVILLE	IN	47712	USPS
KENDRICK LOCKETT		EVANSVILLE	IN	47712	USPS
KENNETH JOCHEM & KELLY JOCHEM		MOUNT VERNON	IN	47620	USPS
KENNETH SPEAR	VANDERBURGH COUNTY HEALTH DEPARTMENT	EVANSVILLE	IN	47713	USPS
KEVIN M SHELLEY & KAREN S SHELLEY		EVANSVILLE	IN	47712	USPS
KIRK A NICHOLS		EVANSVILLE	IN	47712	USPS
KIRSTEN DIETZ	DIAMOND VALLEY FEDERAL CREDIT UNION	EVANSVILLE	IN	47712	USPS
KISSEL PROPERTIES LLC		EVANSVILLE	IN	47712	USPS
KOCH, GEORGE SONS LLC		EVANSVILLE	IN	47712	USPS
KOHLS INDIANA		MILWAUKEE	WI	53201	USPS
KRISTIAN L ELLISON		EVANSVILLE	IN	47712	USPS
KRISTY KAY LUIGS		EVANSVILLE	IN	47712-5067	USPS

POINT OF CONTACT	BUSINESS/ ORGANIZATION	CITY	State	ZIP	Submission Type
KURT A FLOWERS		EVANSVILLE	IN	47712-5728	USPS
KYLE JOHNSON	AUTO NOW	EVANSVILLE	IN	47712	USPS
KYLE S HARTMANN & CECELIA B LOPEZ		EVANSVILLE	IN	47712	USPS
KYLEE BROWN & CHARLES RAMSEY		OWENSBORO	KY	42303	USPS
LANCE E RUBEL & CARLEEN M RUBEL		EVANSVILLE	IN	47712	USPS
LAUREN KAISER	TRISTATE ORTHOPEDICS	EVANSVILLE	IN	47712	USPS
GENERAL MANAGER	OFFICE DEPOT	EVANSVILLE	IN	47712	USPS
LESLIE BUCKMAN	EVANSVILLE CITY/VANDERBURGH COUNTY JOINT DEPARTMENT OF CENTRAL DISPATCH	EVANSVILLE	IN	47720	USPS
LILLIAN HEIRS HUBER AKA NORMAN F HUBER & ETALS		EVANSVILLE	IN	47712	USPS
LINDA FREEMAN	SURVEYOR'S OFFICE	EVANSVILLE	IN	47708	USPS
LINDSEY H KEMPF & LISA A KEMPF		EVANSVILLE	IN	47712	USPS
LINUS H KORESSEL & BEVERLY RUTH KORESSEL		EVANSVILLE	IN	47712	USPS
LLOYD LAND CO LLC		EVANSVILLE	IN	47714	USPS
LOIS I JONES		EVANSVILLE	IN	47712	USPS
LOWE'S HOME CENTERS INC (679)		MOORESVILLE	NC	28117-8520	USPS
LUCIA PEREZ	WALMART	EVANSVILLE	IN	47712	USPS
LUCILA R TUDELA		EVANSVILLE	IN	47712	USPS
MANCHESTER VENTURES LLC		QUEEN CREEK	AZ	85142	USPS
MARK A FUNKE		EVANSVILLE	IN	47712	USPS
MARK D TODD & DIANNA S DURGESS		EVANSVILLE	IN	47712	USPS
MARK E HALLER & DEBRA J HALLER		EVANSVILLE	IN	47712	USPS
MARK EDWARD BAUER & MELISSA MARIE BAUER		EVANSVILLE	IN	47712	USPS
MARK LAXTON PAUL HOSKINS	DENNY'S	EVANSVILLE	IN	47712	USPS
MARK RUDISILL		EVANSVILLE	IN	47712	USPS
MARY A EICKHOFF		EVANSVILLE	IN	47712-5067	USPS
MARY DAVIS		EVANSVILLE	IN	47712	USPS
MARY FRANCES HUBER		EVANSVILLE	IN	47712	USPS
MASTER FUNDING I LLC		EVANSVILLE	IN	47710	USPS
MAX A KINCAIDE & HELEN F KINCAIDE		EVANSVILLE	IN	47712	USPS
MAYOR LLOYD WINNECKE	EVANSVILLE MAYOR'S OFFICE	EVANSVILLE	IN	47708	USPS
MB EVANSVILLE OWNER LLC		FOREST HILLS	NY	11375	USPS
MCDONALDS CORPORATION		BOWLING GREEN	KY	42102	USPS

POINT OF CONTACT	BUSINESS/ ORGANIZATION	CITY	State	ZIP	Submission Type
MCW-RD EVANSVILLE WEST CENTER LLC		SAINT LOUIS	MO	63105	USPS
MCW-RD EVANSVILLE WEST CENTER LLC		EVANSVILLE	IN	47712	USPS
MEAD JOHNSON & CO		EVANSVILLE	IN	47712	USPS
MEAD JOHNSON & CO		EVANSVILLE	IN	47712	USPS
MELISSA L SABEL		EVANSVILLE	IN	47712	USPS
MELMAR SWP LLC		EVANSVILLE	IN	47715	USPS
MELYNDA SUE MORROW		EVANSVILLE	IN	47712	USPS
MICAH EDWARD ROBERTSON & NATALIE ELISABETH		EVANSVILLE	IN	47712	USPS
MICHAEL D LEWIS JR.		EVANSVILLE	IN	47712	USPS
MICHAEL D WEBER & JENNIFER WEBER		EVANSVILLE	IN	47712	USPS
MICHAEL E DEBLANC JR & ELIZABETH A DEBLANC		EVANSVILLE	IN	47712-3123	USPS
MICHAEL GOEBEL, COUNTY COUNCIL, AT LARGE	VANDERBURGH COUNTY	EVANSVILLE	IN	47708	USPS
MICHAEL L SIBBITT		EVANSVILLE	IN	47712	USPS
MICHAEL P HUTHER		EVANSVILLE	IN	47712-5049	USPS
MICKEY L BAUMMEYER & DOROTHY M BAUMMEYER		EVANSVILLE	IN	47712-9689	USPS
MIKE LABITZKE	CITY OF EVANSVILLE	EVANSVILLE	IN	47708	USPS
MORGAN HARGIS	FIRST BANK	EVANSVILLE	IN	47715	USPS
N.F.G. LLC		STILWELL	KS	66085	USPS
NANCY L STOCKMAN		EVANSVILLE	IN	47712-9689	USPS
NATALIE E JONES & BARRY L JONES		EVANSVILLE	IN	47712-5066	USPS
NATALIE LEE & CODY LEE		EVANSVILLE	IN	47712-9692	USPS
NATHAN BURTON RAY & SHARON KAY		EVANSVILLE	IN	47712-3120	USPS
NATHAN SWANSON	SHINE ON CARWASH	EVANSVILLE	IN	47712	USPS
NEIL A JOHANN		EVANSVILLE	IN	47712	USPS
NELLIS HOLDINGS LLC		EVANSVILLE	IN	47712	USPS
NICH PARIMAN	LOWE'S	EVANSVILLE	IN	47712	USPS
NICHOLAS J FEAGLEY & MARY E FEAGLEY		EVANSVILLE	IN	47712	USPS
NOAH J NELLIS		EVANSVILLE	IN	47712	USPS
NOAH RICHARD ROSS		EVANSVILLE	IN	47712	USPS
NOE PROPERTIES LLC		BOONVILLE	IN	47601	USPS
OLD NATIONAL BANK		EVANSVILLE	IN	47705-0718	USPS
OLIVIA GASS	GREAT CLIPS	EVANSVILLE	IN	47712	USPS

POINT OF CONTACT	BUSINESS/ ORGANIZATION	CITY	State	ZIP	Submission Type
OUTER LOOP INVESTMENT PROPERTIES LP		LOUISVILLE	KY	40241-1118	USPS
PANTHER HOLDINGS LLC		EVANSVILLE	IN	47719	USPS
PASTOR KYLE WISHERT JR.	UNIVERSITY HEIGHTS BAPTIST CHURCH	EVANSVILLE	IN	47712	USPS
PASTOR MIKE PYLE	EAGLE'S VIEW CHURCH	EVANSVILLE	IN	47712	USPS
PASTOR SCOTT CASSEL	TURNING POINT UNITED METHODIST CHURCH	EVANSVILLE	IN	47712	USPS
PATRICE VILLINES		EVANSVILLE	IN	47712-5067	USPS
PATRICIA A ANTEY		EVANSVILLE	IN	47712	USPS
PATRICIA J RIGER		EVANSVILLE	IN	47712	USPS
PAULA M WEIR		EVANSVILLE	IN	47712	USPS
PEARL R CUMMINGS (LIFE ESTATE) & CAROLYN S KIBBY & ETAL		EVANSVILLE	IN	47712	USPS
PEGGY SCHNEIDER		EVANSVILLE	IN	47712-3653	USPS
PEOPLES TRUST AND SAVINGS BANK		BOONVILLE	IN	47601	USPS
PETER BRIAN KIESSLING		EVANSVILLE	IN	47712-9142	USPS
PETER ELLERT		EVANSVILLE	IN	47712-3033	USPS
PETER M JOHNSON		EVANSVILLE	IN	47712	USPS
PHILIP L GROSS		EVANSVILLE	IN	47712	USPS
PHYBELL DEVELOPMENT CORPORATION % THOMSON PROP TAX		MARCELLUS	NY	13108	USPS
PRINCIPAL JAMES WOLF	UNIVERSITY OF SOUTHERN INDIANA (USI)	EVANSVILLE	IN	47712	USPS
QUEST INVESTMENT PROPERTIES, LLC		EVANSVILLE	IN	47735	USPS
R. THOMAS WALDROP JR & LAVERNE M WALDROP		MAYFIELD	KY	42066	USPS
RACHEL L THOMAS		EVANSVILLE	IN	47712	USPS
RAND WARREN LLC		EVANSVILLE	IN	47712	USPS
RANDALL L VOORHEES JR. & MICHELLE L VOORHEES		EVANSVILLE	IN	47712	USPS
RANDALL LEE ROSS & DARLENE		EVANSVILLE	IN	47712	USPS
RANDY EADES	VIKKI BRASEL STATE FARM INSURANCE	EVANSVILLE	IN	47714	USPS
RANDY MCCORMICK & CONNIE MCCORMICK		EVANSVILLE	IN	47712	USPS
RANDY RACINE DON BOZICH	DISCOUNT TIRE	EVANSVILLE	IN	47712	USPS
REALTY INCOME CORPORATION		EVANSVILLE	IN	47712	USPS
REALTY INCOME PROPERTIES 26 LLC		SAN DIEGO	CA	92130	USPS
RED BANK DEVELOPMENT LLC		EVANSVILLE	IN	47711	USPS

POINT OF CONTACT	BUSINESS/ ORGANIZATION	CITY	State	ZIP	Submission Type
REP. LARRY BUCSHON, 8TH DISTRICT VIA ANSLEY BOYLAN	U.S. GOVERNMENT	EVANSVILLE	IN	47708	USPS
RETISHA G NUNN		EVANSVILLE	IN	47712	USPS
REX E WILLIAMS & RETHA N WILLIAMS		EVANSVILLE	IN	47712	USPS
RICHARD E SCHMIDT & PATRICIA C SCHMIDT		EVANSVILLE	IN	47712-5068	USPS
RICHARD J MICK & CAITLIN M MICK		EVANSVILLE	IN	47712	USPS
RICHARD M BLAND & SHERRY L BLAND		EVANSVILLE	IN	47712-9637	USPS
RICK J KISSEL & JODY A KISSEL		EVANSVILLE	IN	47712	USPS
RITA J STOCK		EVANSVILLE	IN	47712	USPS
RNT PROPERTIES OF EVANSVILLE LLC		EVANSVILLE	IN	47710	USPS
ROBERT A SCHELLER & MARY T SCHELLER		EVANSVILLE	IN	47712	USPS
ROBERT E ALLEN & ALLISON B ALLEN		EVANSVILLE	IN	47712-3037	USPS
ROBERT E ALLEN & ALLISON B ALLEN		EVANSVILLE	IN	47712	USPS
ROBERT F KORING		EVANSVILLE	IN	47712	USPS
ROBERT M. BOZEMAN & JUDITH R. BOZEMAN		EVANSVILLE	IN	47712	USPS
ROBERT S MCCARTY		EVANSVILLE	IN	47712	USPS
ROBIN D MCDONALD & DANA L MCDONALD		EVANSVILLE	IN	47712	USPS
ROBIN SELBY	CVS PHARMACY	EVANSVILLE	IN	47712	USPS
ROGER L SMITH & TINA M SMITH		EVANSVILLE	IN	47712	USPS
RONALD L BAKER		EVANSVILLE	IN	47712	USPS
RONALD L BROWN & KAREN A BROWN		EVANSVILLE	IN	47712-9643	USPS
RONALD WAYNE GOAD		EVANSVILLE	IN	47712	USPS
RYAN FALLS	INDIANA DEPARTMENT OF TRANSPORTATION	VINCENNES	IN	47591	USPS
RYAN HUCK	SPANKEY'S UNA PIZZA	EVANSVILLE	IN	47712	USPS
RYAN MATT	FULL MOON GRILL AND BAR	EVANSVILLE	IN	47712	USPS
SAINT JAMES WEST UNITED METHODIST CHURCH INC		EVANSVILLE	IN	47712	USPS
SALAMEH & KHOUKAZ REAL ESTATE LLC		EVANSVILLE	IN	47711	USPS
SALAMEH & KHOUKAZ REAL ESTATE LLC		BOWLING GREEN	KY	42103	USPS
SAM ANDERSON	INDIANA DEPARTMENT OF TRANSPORTATION	INDIANAPOLIS	IN	46204	USPS
SAMANTHA SPERLING		EVANSVILLE	IN	47712	USPS
SAMAYOA FAMILY 2019 LIVING TRUST		DANA POINT	CA	92624	USPS
SAMUEL C MILLS & PATTIE LU MILLS		EVANSVILLE	IN	47712	USPS

POINT OF CONTACT	BUSINESS/ ORGANIZATION	CITY	State	ZIP	Submission Type
SARAH COOPER & GARY L COOPER		EVANSVILLE	IN	47712	USPS
SARAH COOPER & GARY L COOPER		EVANSVILLE	IN	47712	USPS
SARAH HAYNES DOTTY HUFF	FAIRFIELD INN	EVANSVILLE	IN	47712	USPS
SCOT HETTENBACK - OWNER	NOBLE ROMAN'S CRAFT PIZZA & PUB	EVANSVILLE	IN	47712	USPS
SCOT WICHSER	VANDERBURGH COUNTY	EVANSVILLE	IN	47720	USPS
SCOTT A VINCENT		EVANSVILLE	IN	47719	USPS
SCOTT A WEBER		EVANSVILLE	IN	47712	USPS
SCOTT FISHER	RB/MEAD JOHNSON	EVANSVILLE	IN	47712	USPS
SCOTT M WUNDERLICH	OLD NATIONAL BANK	EVANSVILLE	IN	47712	USPS
SCOTT VINCENT		EVANSVILLE	IN	47712	USPS
SCOTT W REED & LYNETTE M REED		EVANSVILLE	IN	47712	USPS
SEAN COMPALL	EMPIRE TATTOO		IN		USPS
SEBASTIAN FRANCISCO DIEGO		EVANSVILLE	IN	47712	USPS
SEN. MIKE BRAUN	U.S. GOVERNMENT	WASHINGTON DC		20510	USPS
SERVUS INC		JASPER	IN	47546	USPS
SHALEA SCHRIVER	SHERWIN-WILLIAMS	EVANSVILLE	IN	47712	USPS
SHARON R GRIGSBY & HERSCHEL E GRIGSBY		EVANSVILLE	IN	47712	USPS
SHELBY HEAD	FIRST FEDERAL BANK	EVANSVILLE	IN	47712	USPS
SHELLEY KRUEGER	SALLY BEAUTY SUPPLY	EVANSVILLE	IN	47712	USPS
SHERIFF DAVE WEDDING	VANDERBURGH COUNTY SHERIFF'S DEPARTMENT	EVANSVILLE	IN	47711	USPS
SHERIFF TOM LATHAM	POSEY COUNTY SHERIFF'S OFFICE	EVANSVILLE	IN	47620	USPS
SKYLER RAYMOND SAVAGE		EVANSVILLE	IN	47712	USPS
SOFIA COOK	CENTER FOR CONGREGATIONS	EVANSVILLE	IN	47715	USPS
SOLARBRON POINTE INC		BLOOMINGTON	IN	47401	USPS
SST INVESTMENTS LLC		EVANSVILLE	IN	47712	USPS
ST JAMES METHODIST CHURCH		EVANSVILLE	IN	47712	USPS
ST MARYS BUILDING CORPORATION		INDIANAPOLIS	IN	46260-1316	USPS
ST. PAULS UNITED CHURCH OF CHRIST		EVANSVILLE	IN	47712	USPS
STACEY ALLEN	APPLEBEES	EVANSVILLE	IN	47712	USPS
STACEY S TUDELA		EVANSVILLE	IN	47712	USPS
STACEY S TUDELA		EVANSVILLE	IN	47712	USPS
STACY R HEUER & JOHN F HEUER		O'FALLON	MO	63368	USPS
STANLEY E HAHN & DEBORAH A HAHN		EVANSVILLE	IN	47712	USPS
STATE OF INDIANA		EVANSVILLE	IN	47712	USPS
STATE OF INDIANA		EVANSVILLE	IN	47712	USPS

POINT OF CONTACT	BUSINESS/ ORGANIZATION	CITY	State	ZIP	Submission Type
STEPHANIE BITTNER & ZACHARY R BITTNER		EVANSVILLE	IN	47712-9123	USPS
STEPHANIE S THIEL		EVANSVILLE	IN	47712	USPS
STEPHANIE STEWART	WEST TERRACE ELEMENTARY SCHOOL	EVANSVILLE	IN	47712	USPS
STEPHANIE TERRY	VANDERBURGH COUNTY	EVANSVILLE	IN	47708	USPS
STEPHEN FISCHER & C KENNETH FISCHER		EVANSVILLE	IN	47714	USPS
STEPHEN NIEMEIER & STEPHANIE NIEMEIER		EVANSVILLE	IN	47712	USPS
STEPHEN NIEMEIER & STEPHANIE NIEMEIER		EVANSVILLE	IN	47720	USPS
STEVE E GRISMORE & DONNA G T/E		EVANSVILLE	IN	47712	USPS
STEVEN M LYON & STACEY L LYON		EVANSVILLE	IN	47712	USPS
STEVEN M LYON & STACEY L LYON		EVANSVILLE	IN	47712	USPS
STEVEN R JARVIS		EVANSVILLE	IN	47712	USPS
STEVEN R SCHNELL & STEVANNA M SCHNELL		EVANSVILLE	IN	47712-3019	USPS
SUSAN G PALUMBO & LYNN BAUMGART		EVANSVILLE	IN	47711	USPS
SUSAN HALL		EVANSVILLE	IN	47720	USPS
SUSIE WEST	UNITED FIDELITY BANK	EVANSVILLE	IN	47712	USPS
SUZANNA E MORRIS		EVANSVILLE	IN	47712	USPS
SYF PROPERTIES LLC		INGLEFIELD	IN	47618	USPS
T & C PROPERTIES LLC		EVANSVILLE	IN	47712	USPS
TAMMY G HAMMOND		EVANSVILLE	IN	47712-3130	USPS
TAMMY MORRIS	PROFILE	EVANSVILLE	IN	47712	USPS
TAYLOR MOHR	STARBUCKS	EVANSVILLE	IN	47712	USPS
TAYLOR QUAKENBUSH	BUFFALO WILD WINGS	EVANSVILLE	IN	47712	USPS
TCP RED BANK LLC		INDIANAPOLIS	IN	46260	USPS
TERRIE MONKS		EVANSVILLE	IN	47712	USPS
THE TURNING POINTE CO		EVANSVILLE	IN	47712	USPS
THE TURNING POINTE CO		EVANSVILLE	IN	47712	USPS
THERESA J CONNER		EVANSVILLE	IN	47712-3021	USPS
THOMAS R BUCKLER		EVANSVILLE	IN	47712	USPS
THOMAS R HAYES & C ELAINE HAYES		EVANSVILLE	IN	47720	USPS
THOMAS R VENNARD JR & STEPHANIE T VENNARD		EVANSVILLE	IN	47712-9134	USPS
THREE I ENGINEERING INC		EVANSVILLE	IN	47715	USPS
TIMOTHY M MURPHY		EVANSVILLE	IN	47712	USPS
TIMOTHY P HOLL & KATHY HOLL		EVANSVILLE	IN	47712-3033	USPS
TIMOTHY R APPELL & JENNIFER L APPELL		EVANSVILLE	IN	47712	USPS

POINT OF CONTACT	BUSINESS/ ORGANIZATION	CITY	State	ZIP	Submission Type
TIMOTHY T DICK & MARTHA L DICK		EVANSVILLE	IN	47712	USPS
TINA M LITTLE		EVANSVILLE	IN	47712	USPS
TODD R HAYES		EVANSVILLE	IN	47712	USPS
TODD RAY REIMINGER & CATHY FAYE REIMINGER		EVANSVILLE	IN	47712	USPS
TODD ROBERTSON	CITY OF EVANSVILLE	EVANSVILLE	IN	47708	USPS
TOF, LLC		LEXINGTON	KY	40555	USPS
TOM SHETLER, JR.	VANDERBURGH COUNTY	EVANSVILLE	IN	47708	USPS
TORNATTA INVESTMENTS LLC		EVANSVILLE	IN	47715	USPS
TRACY JEFFERYS		EVANSVILLE	IN	47712-6801	USPS
	TRACY ZELLER JEWELRY	EVANSVILLE	IN	47712	USPS
TYLER EFFINGER & PEYTON MAYER		EVANSVILLE	IN	47712	USPS
UNIVERSITY HEIGHTS BAPTIST CHURCH		EVANSVILLE	IN	47712-9636	USPS
UNIVERSITY HEIGHTS BAPTIST CHURCH TRUSTEES		EVANSVILLE	IN	47712	USPS
UNIVERSITY OF SOUTHERN INDIANA		EVANSVILLE	IN	47712	USPS
UNIVERSITY OF SOUTHERN INDIANA		EVANSVILLE	IN	47712-3534	USPS
UNIVERSITY OF SOUTHERN INDIANA		EVANSVILLE	IN	47712	USPS
UNIVERSITY OF SOUTHERN INDIANA		EVANSVILLE	IN	47712	USPS
UNIVERSITY SHOPPING CENTER INC		EVANSVILLE	IN	47708-1706	USPS
HILLCREST YOUTH SERVICES		EVANSVILLE	IN	47712	USPS
VEERA 2 LLC		MOUNT VERNON	IN	47620	USPS
VICTORIA L HOLMES		EVANSVILLE	IN	47712-5720	USPS
VINCENT G MOODY SR		EVANSVILLE	IN	47712	USPS
VLH PROPERTIES LLC		EVANSVILLE	IN	47712-5560	USPS
WAL-MART, REAL ESTATE % RE PROPERTY TAX DEPT		BENTONVILLE	AR	72716-0555	USPS
WARREN BANK PROPERTY, LLC		EVANSVILLE	IN	47724	USPS
WARRICK FEDERAL CREDIT UNION		NEWBURGH	IN	47629-0189	USPS
WATTS CAPITAL LLC (1/2 INTEREST) & PIERRE PROPERTIES LLC		EVANSVILLE	IN	47720	USPS
WAYLAND G BLICKEN		EVANSVILLE	IN	47712	USPS
WC MIDWEST HOLDINGS LLC		EVANSVILLE	IN	47719	USPS
WENDELL L BURKHART & DIANA K BURKHART		EVANSVILLE	IN	47712	USPS

POINT OF CONTACT	BUSINESS/ ORGANIZATION	CITY	State	ZIP	Submission Type
WEST EVANSVILLE DEVELOPERS LLC		EVANSVILLE	IN	47710	USPS
WILLIAM COMPTON		EVANSVILLE	IN	47725	USPS
WILLIAM COX & MARIANE COX		EVANSVILLE	IN	47712	USPS
WILLIAM EUGENE BECKHAM & KATHRYN CANDISTEIN BECKHAM		EVANSVILLE	IN	47712	USPS
WILLIAM GINN - SALES MANAGER	EVANSVILLE MAZDA	EVANSVILLE	IN	47715	USPS
WILLIAM H MARTIN & KAREN S MARTIN		EVANSVILLE	IN	47712	USPS
WILLIAM R BAUMGARTNER		EVANSVILLE	IN	47712	USPS
WILLIAM THOMAS MARTIN II & ANITA SHAYNE MARTIN		EVANSVILLE	IN	47712	USPS
WRIGHT ACRES LLC		EVANSVILLE	IN	47712	USPS
WRIGHT ACRES LLC		EVANSVILLE	IN	47712	USPS
WS PARTNERS LLC		EVANSVILLE	IN	47712	USPS
WS PARTNERS LLC		EVANSVILLE	IN	47713	USPS
ZAC HERONEMUS	CITY OF EVANSVILLE	EVANSVILLE	IN	47714	USPS
ZELLER PROPERTIES LLC		EVANSVILLE	IN	47710	USPS
	ROCKY FALLS RV PARK AND CAMPGROUND	EVANSVILLE	IN	47712	USPS
	WEST TERRACE GENERAL BAPTIST CHURCH	EVANSVILLE	IN	47712	USPS
	VANDERBURGH COUNTY COUNCIL	EVANSVILLE	IN	47708	USPS
	VANDERBURGH COUNTY COMMISSIONERS	EVANSVILLE	IN	47708	USPS
	EVANSVILLE CITY COUNCIL	EVANSVILLE	IN	47708	USPS
	THORNTONS CONVENIENCE STORE	EVANSVILLE	IN	47712	USPS
	SALON WOW	EVANSVILLE	IN	47712	USPS
	IRVING MATERIALS INCORPORATED	EVANSVILLE	IN	47712	USPS
	EYE MART	EVANSVILLE	IN	47712	USPS
LOTUS SPA AND SALON		EVANSVILLE	IN	47712	USPS

News Date	News Headline	Outlet Name	News Link	Mediu
9/13/2023	INDOT seeking public input on Lloyd Expressway improvements	14 News	https://www.14news.com/2023/09/13/indot-seeking-public-input-lloyd-expressway-improvements/	Online
9/13/2023	INDOT seeking public input on Lloyd Expressway improvements	12 News	https://www.kwch.com/video/2023/09/13/indot-seeking-public-input-lloyd-expressway-improvements/	Online
9/13/2023	INDOT seeking public input on Lloyd Expressway improvements	WLOX	https://www.wlox.com/video/2023/09/13/indot-seeking-public-input-lloyd-expressway-improvements/	Online
9/13/2023	INDOT seeking public input on Lloyd Expressway improvements	14 News	https://www.14news.com/video/2023/09/13/indot-seeking-public-input-lloyd-expressway-improvements/	Online
9/13/2023	44News at 4	WEVV-TV	Archived Video (tveyes.com)	Broadcast
9/13/2023	44News at 6	WEVV-TV	Archived Video (tveyes.com)	Broadcast
9/13/2023	INDOT seeking public input on Lloyd Expressway improvements	WFIE-TV Online	INDOT seeking public input on Lloyd Expressway improvements (14news.com)	Online
9/13/2023	44News at 10	WEVV-TV	Archived Video (tveyes.com)	Broadcast
9/13/2023	TV clip from WEVV My Fox 44 at 2023-09-14 08:25:32.00(	WEVV2-TV	Archived Video (tveyes.com)	Broadcast
9/14/2023	Residents Can Share Feedback On Upcoming Road Projects	104.1 WIKY	https://wiky.com/2023/09/14/774930/	Online
9/14/2023	Residents Can Share Feedback On Upcoming Road Projects	hot96.com	https://hot96.com/2023/09/14/residents-can-share-feedback-on-upcoming-road-projects/	Online
9/14/2023	Residents Can Share Feedback On Upcoming Road Projects	WABX-FM Online	https://wabx.net/2023/09/14/residents-can-share-feedback-on-upcoming-road-projects/	Online
9/15/2023	Changes are coming to the Lloyd Expressway. Here's how to learn more	Courier Press	https://www.courierpress.com/story/news/local/2023/09/15/changes-are-coming-to-the-lloyd-expressway-heres-how-to-learn-more/70845139007/	Online
9/21/2023	Eyewitness News at 10pm	WEHT-TV	https://archive.tveyes.com/18120/3429276-42731/4d2c482a-48d8-442c-8e92-ef895a2688bd/WEHT_09-21-2023_22.06.04.mp	Broadcast
9/22/2023	14 News Sunrise Early Edition	WFIE-TV	https://archive.tveyes.com/18120/3429276-42731/64d3c14f-36a6-4554-b6dd-54a1a68cd858/WFIE_09-22-2023_05.33.59.mp	Broadcast
9/22/2023	Eyewitness News Daybreak	WEHT-TV	https://archive.tveyes.com/18120/3429276-42731/376fe9e2-b51d-4b74-a8ad-d2969d1e683b/WEHT_09-22-2023_05.08.28.mp	Broadcast
9/22/2023	14 News at Sunrise	WFIE-TV	https://archive.tveyes.com/18120/3429276-42731/8e48efd3-b9a0-42e0-8eab-e9f37c3436fa/WFIE_09-22-2023_06.35.54.mp	Broadcast
9/22/2023	Eyewitness News Daybreak	WTVW-TV	https://archive.tveyes.com/18120/3429276-42731/a8630b7b-394a-4081-bba1-0c0832422c60/WTVW_09-22-2023_07.10.27.mp	Broadcast
9/25/2023	TV clip from WEVV My Fox 44 at 2023-09-25 07:05:11.00(	WEVV2-TV	https://archive.tveyes.com/18120/3429276-42731/4a6d47c3-9661-4ba3-8555-06db92b61b31/WEVVDT2_09-25-2023_07.06.58.mp	Broadcast
9/25/2023	As Lloyd Expressway improvement project draws closer, the public gets a chance to sound off on the plans	WEVV	https://www.wevv.com/news/as-lloyd-expressway-improvement-project-draws-closer-the-public-gets-a-chance-to-sound-off/article_70ceed8e-5be9-11ee-982f-b7839bb6e3f1.html	Online
9/25/2023	"Lloyd4U" project moving forward following public hearing	WEVV	https://www.wevv.com/news/lloyd4u-project-moving-forward-following-public-hearing/article_b2289ae2-5ce2-11ee-b8ff-bb7254a0859e.htm	Online
9/26/2023	Lloyd4U holds public hearing in Evansville	WEHT	https://www.tristatehomepage.com/news/lloyd4u-holds-public-hearing-in-evansville/	Online
9/26/2023	INDOT seeks input on Lloyd Expressway Westside Improvements	WEHT	https://www.tristatehomepage.com/news/top-stories/indot-seeks-input-on-lloyd-expressway-westside-improvements/	Online
9/26/2023	INDOT seeking public input on Lloyd Expressway improvements	WLOX	https://www.wlox.com/video/2023/09/26/indot-seeking-public-input-lloyd-expressway-improvements-2/?outputType=amp	Online
9/26/2023	Eyewitness News at 9pm	WTVW-TV	https://archive.tveyes.com/18120/3429276-42731/e3f5b9e6-d7f2-4e29-9081-5a9255f92519/WTVW_09-26-2023_21.29.24.mp	Broadcast
9/26/2023	Eyewitness News at 10pm	WEHT-TV	https://archive.tveyes.com/18120/3429276-42731/446f02d2-0846-40df-8d02-ceacbe2747fe/WEHT_09-26-2023_22.01.35.mp	Broadcast
9/27/2023	INDOT seeking public input on Lloyd Expressway improvements	KWCH	https://www.kwch.com/video/2023/09/26/indot-seeking-public-input-lloyd-expressway-improvements/	Online
9/27/2023	INDOT seeking public input on Lloyd Expressway improvements	14 News	https://www.14news.com/video/2023/09/26/indot-seeking-public-input-lloyd-expressway-improvements-2/	Online
9/27/2023	There's still time to comment on proposed changes to the west side of the Lloyd Expressway	Courier Press	https://www.courierpress.com/story/news/local/2023/09/27/heres-a-look-at-indot-plans-for-the-west-side-of-evansvilles-lloyd-expressway/70962544007/	Online
9/27/2023	Eyewitness News Daybreak	WEHT-TV	https://archive.tveyes.com/18120/3429276-42731/ff9c5ab8-7d4c-4d28-9805-4beab4f230b9/WEHT_09-27-2023_05.04.29.mp	Broadcast
9/27/2023	Eyewitness News Daybreak	WEHT-TV	https://archive.tveyes.com/18120/3429276-42731/7a8488a7-b94b-4547-a1e2-fc441c2a00e1/WEHT_09-27-2023_06.02.43.mp	Broadcast
9/27/2023	44News This Morning at 6	WEVV-TV	https://archive.tveyes.com/18120/3429276-42731/a3418f5b-7586-40f6-802b-ecddc3221278/WEVV_09-27-2023_06.00.14.mp	Broadcast
9/27/2023	TV clip from WEVV My Fox 44 at 2023-09-27 06:00:12.00(	WEVV2-TV	https://archive.tveyes.com/18120/3429276-42731/7a3d444c-c8b5-42be-b024-7a58379312dc/WEVVDT2_09-27-2023_06.04.53.mp	Broadcast
9/27/2023	14 news at noon	WFIE-TV	https://archive.tveyes.com/18120/3429276-42731/a646a14c-7b3c-4114-abbc-c3b5611a2172/WFIE_09-27-2023_12.03.37.mp	Broadcast

Business meeting invitation email

Good afternoon,

The Lloyd4U Project Team would like to extend an invitation to learn more and ask any questions about the TheLloyd4U project. Please join us **virtually** at 9:30/10:30 CDT, on Thursday, September 21.

You may accept or decline this meeting using Outlook menu options. Please sign into the meeting 5 minutes before the start to adjust any audio/video settings using this link:
https://us06web.zoom.us/j/85033377471?pwd=WMXNE1bEFQKP1yLaQ2OPnKFqZXvoY1.1
Meeting ID: 850 3337 7471
Passcode: 575769

You may also call into the meeting toll-free at +13126266799,,85033377471# using the meeting ID 850 3337 7471.

We ask that if you do have questions, utilize the chat feature on Zoom, all questions will be recorded and answered at a later date. A meeting summary will be sent to all attendees following the conclusion of the meeting to highlight what was discussed.

We look forward to seeing you on September 21!

Business/organization	Point of Contact	Address
Applebees	Stacey Allen - GM	[redacted]
Arby's	Kathy Grosheart - Manager	[redacted]
Arena of Faith Church	Earl Carter, pastor	[redacted]
AT&T Store	Andrew Alexander - Manager	[redacted]
Auto Now	Kyle Johnson	[redacted]
Azzip pizza	Derek Lappe - GM	[redacted]
Azzip pizza	Kenzie Campbell - Office manager	
Bob's Gym - West	Jeremy Hawkins - Manager	[redacted]
Buffalo Trace Council	John Harding - Scout Executive	[redacted]
Buffalo Wild Wings	Taylor Quakenbush	[redacted]
Catalyst Church	David Whitmore, pastor	[redacted]
Catholic Diocese of Evansville	Daryl Hagan - Superintendent	[redacted]
Central United Methodist Church	Dewey Miller, pastor	[redacted]
Chick-fil-a	Debbie Dean - Owner Hunter Wallace - Manager	[redacted]
City Church of Evansville	Jeff Kinkade, lead pastor	[redacted]
Commerical Property Owner	Brian Southern	--
Community Action Program of Evansville	Cheryl Thomas, minority health coordinator	
Community Action Program of Evansville	RaShawnda Bonds, public health coordinator	
Community Action Program of Evansville	Alice Weathers, chief executive officer	
Control Specialists INC	John Wandling	[redacted]
Cook Portable Warehouses	Eric Boreup	[redacted]
Copper Creek Apartments	Kathy Raney - Resident Manager	[redacted]
Cross-Eyed Cricket	Fernando Tudela	[redacted]
Cross-Eyed Cricket	Fernando Tudela	[redacted]
Culver's	Collette Crow - Owner	[redacted]
CVS Pharmacy	Robin Selby - Manager	[redacted]
Davita Kidney Care	Kelly Thomas - Facility Administrator	[redacted]

Business/organization	Point of Contact	Address
Deaconess Clinic West	Corey Chapman	[redacted]
Deaconess Gateway Hospital		[redacted]
Deaconess Pain Center	Ashley Robb - Manager	[redacted]
Denny's	Mark Laxton - District Manager Paul Hoskins - General Manager	[redacted]
Diamond Valley Federal Credit Union	Kirsten Dietz - Branch Manager	[redacted]
Discount Tire	Randy Racine - Manager Don Bozich - Owner	[redacted]
Eagle Village Apartments	Heather Walters, Ross Malmgren	[redacted]
Eagle's View Church	Mike Pyle, pastor	[redacted]
Empire Tattoo	Sean Compall	[redacted]
Encounter Church	Stew Armstrong, lead pastor	[redacted]
Evansville Bible Church	Secretary	[redacted]
Evansville Black Chamber of Commerce		
Evansville Convention and Visitors Bureau	James T.Wood, president and CEO	[redacted]
Evansville Grace Church of the Nazarene	Brett Doniger, senior pastor	[redacted]
Evansville Latino Center	Abraham Brown, president	
Evansville Metropolitan Planning Organization	Seyed Shokouhzadeh, Executive Director	[redacted]
Evansville Red Cross	Brandan Garrison - Office/Facility Manager Courtney Vanjelgerhuis - Chief Operating Officer	[redacted]
Evansville State Hospital	Hospital Administrator	[redacted]
Evansville State Hospital	Jeff Wedding - Director of Operations	[redacted]
Evansville Trinity UMC	Todd Gile, pastor	[redacted]
Eye Mart	Evan	[redacted]
Fairfield Inn	Sarah Haynes - General Manager Dotty Huff - Sales Director	[redacted]
Fifth Third Bank	Katie Syers	[redacted]
First Bank	Brandee Brinker - Branch Manager	[redacted]

Business/organization	Point of Contact	Address
First Baptist Church	Steven Claspell, senior pastor	[redacted]
First Federal Bank	Shelby Head - Retail Banker Associate	[redacted]
First Podiatry	David Reynolds - Practice Owner	[redacted]
First Presbyterian Church	Rev. John Vanderzee	[redacted]
For Evansville	Ross Chapman, president and executive director	
Forest Hills Wesleyan Church	Ray Austin, pastor	[redacted]
Freddy's	Christie Glaeser	[redacted]
Full Moon Grill and Bar	Ryan Matt	[redacted]
GD Ritzy's	Dan Grunow - Manager	[redacted]
Grace and Peace Lutheran Church	Roberta Meyer, Pastor	[redacted]
Grace Baptist Church	Betty Crawley, office manager	[redacted]
GracePoint Church	Luke Smith, pastor	[redacted]
Great Clips	Olivia Gass - Manager	[redacted]
H&R Block	Christopher Dewitt - District Manager	[redacted]
Hacienda	Falisha M. Pierce - GM	[redacted]
Hacienda	Joy Johnson - Manager	[redacted]
Harmony Eye Care	Corinne Martin - Patient Care Coordinator	[redacted]
Heritage Federal Credit Union	Dana Gubler	[redacted]
hhgregg Appliance Factory	Andrew Jones - Sales Manager	[redacted]
HOLA Evansville	Alfonso Vidal, board of directors	
Holiday Inn	George Otterson - GM	[redacted]
Holiday Inn	Melissa Fore - Asst. GM	[redacted]
Hope City Church	Mike Gerner, administrative director	[redacted]
Hope of Evansville	Josh Calhoun, executive director	
Koch Air	Andy Cook	[redacted]
Koch and Sons	Josh Gilberg	[redacted]
Kohl's	Dave Ahlstedt - General Manager	[redacted]

Business/organization	Point of Contact	Address
Landmark Baptist Church	Sam Robinson, pastor	[redacted]
Latino Chamber Alliance	Brant Flores, president	
Line Street Church of Christ	Geno Merriweather, minister	[redacted]
Logans Roadhouse	Patrick Davis	[redacted]
Lovely Nails	Brian Phan - Owner	[redacted]
Lowe's	Nich Pariman - Assist. Store Manager	[redacted]
Marathon Gas	Hugh Clayton - Owner	
Mark's Mattress Outlet	Cris brunsen - General Manager Patrick Markham - Store Manager	[redacted]
McDonalds	Chris Hamlet	[redacted]
Mead Johnson	Danny Caroll - EHS Manager	[redacted]
Memorial Baptist Church	Adrian Brooks, senior pastor	[redacted]
MiAmor Salon	Jeffery Kingery - Owner	[redacted]
Mission Viejo Apartments	Janet Sandleven - Property Manager	[redacted]
New Hope Missionary Baptist Church	Ryan Jackson, senior pastor	[redacted]
Noble Roman's Craft Pizza & Pub	Scot Hettenback - Owner	[redacted]
O'Charleys	Brian Siebers	[redacted]
Office Depot	Laurie - General Manager	[redacted]
Old National Bank	Scott M Wunderlich	[redacted]
Olivet Community Church	Kristen Watson, Administrative Pastor	[redacted]
Orthopedic Associates West Evansvile	Cherylin Bogan	[redacted]
Palm Beach Tan	Jessica Chapman	[redacted]
Panera	Brandon Mcquinn	[redacted]
Papa John's Pizza	Jessica Cremeens - Manager	[redacted]
Potters Wheel Ministries	Chris Fleming, executive director	[redacted]
Profile	Tammy Morris - Manager	[redacted]
Purple Cup Coffee Company	Bruno Dravenieks - President	[redacted]
Raben Tire and Auto	Brian Rich	[redacted]

Business/organization	Point of Contact	Address
RB/Mead Johnson	Scott Fisher - ESC Site Director	[redacted]
Rhythm Church	Steve Clark, Executive Pastor	[redacted]
Rotary Club of Evansville	Julie Spratt, Executive Assistant	
Sally Beauty Supply	Shelley Krueger - Manager	[redacted]
Salon Wow		[redacted]
Schnucks Grocery	Jenny Mitchell - CPM	[redacted]
Sherwin-Williams	Shalea Schriver - Manager	[redacted]
Shine On Carwash	Nathan Swanson - Manager	[redacted]
Southwest Indiana Chamber	Christy Gillenwater, president and CEO	
Southwestern Behavioral Healthcare, Inc.	James Groves - Addiction Services Director Corey Minnette - Facility Director	[redacted]
Spankey's Una Pizza	Ryan Huck - Owner	[redacted]
St. Lucas United Church of Christ	Laura Callender, pastor	[redacted]
St. Paul's Lutheran Church	Chad Eckels, associate pastor	[redacted]
St. Paul's United Church of Christ	Mary Hurley, pastor	[redacted]
Starbucks	Taylor Mohr - Manager	[redacted]
State Farm	Brian K Southern	[redacted]
Studio of Hair	Kathy Shreve - Manager	[redacted]
Taco Bell	Brian Neff - Area Coach	[redacted]
The Gathering Church	Ray Brown, lead pastor	[redacted]
Thorntons Convenience Store		[redacted]
Torian Insurance	Andy Dillow	[redacted]
Tracy Zeller Jewelry	Tracy Zeller - Owner	[redacted]
Treasure Hunt	Jeffery Kingery - Owner	[redacted]
Tristate orthopedics	Lauren Kaiser	[redacted]
Unitarian Universalist Church of Evansville	Katie Brown, Adminstrative Office Assistant	[redacted]
United Fidelity Bank	Susie West - General Manager	[redacted]

Business/organization	Point of Contact	Address
Vikki Brasel State Farm Insurance	Randy Eades - Financial Servies Rep.	[redacted]
Walmart	Lucia Perez	[redacted]
Wesselman Woods	Robin Johnston Deem - Director	[redacted]
West Side Christian Church & Family Life Center	Jerry Wright, pastor	[redacted]
West Terrace Church	Austin Crowe (Pastor)	[redacted]
Westwood Church	Dave Teruel, senior pastor	[redacted]
Within Sight	Julie Bellamy - LCSW Caron Leader -LCSW	[redacted]
YMCA	Erika Taylor, CEO	[redacted]
Zeller's master Tire	Bryan Zeller - Owner	[redacted]

MEETING SUMMARY

Date of Meeting:	September 21, 2023	**Re:**	Lloyd4U Business Stakeholder Meeting Summary
Location:	Virtual Meeting - Zoom Meeting ID: 850 3337 7471 Passcode: 575769	**Issue Date:**	October 4, 2023
Submitted By:	Nicole Minton		

In Attendance:

- Seyed Shokouhzadeh – Director, Evansville MPO
- Pam Drach – Deputy Director, Evansville MPO
- Jennifer Schulz - Deaconess Health System
- D. Phipps – Unidentified
- Matt Bullock – Lloyd4U Project Manager, INDOT Vincennes District
- Jared Peterson – Capital Project Management Director, INDOT
- Chris Gentry – Technical Services Director, INDOT Vincennes District
- Gary Brian – Communications Director, INDOT Vincennes District
- Emily Sprinkle, Project Manager, INDOT Vincennes District
- Nicole Minton – Lochmueller Group
- David Goffinet – Lochmueller Group
- Jeff Whitaker – Lochmueller Group
- Angela Blank – C2
- Collin Merkel – C2
- Emma Collins – C2

ITEMS DISCUSSED:

I. Welcome:

Nicole Minton welcomed everyone to the meeting and asked that participants type their name, organization and email in the chat. Nicole pointed out that a link to the project website was available in the chat, as well as images of Red Bank Road, Schutte/Felstead/Middle Mt. Vernon, Corbierre Avenue and Barker Avenue.

Nicole thanked the group for joining the meeting and allowing the team to share the presentation planned for the upcoming Public Hearing. The desire was to arrange an opportunity for the group to see the planned improvements and submit comments in an environment where individual attention is easier to achieve than at the public hearing.

II. Presentation:

Nicole played the 17-minute presentation that shared schedule updates, where we are within the environmental process, planned improvements and ways to comment.

III. Questions & Comments:

Following the presentation, the participants were asked to share comments or questions.

None were provided.

The above constitutes our understanding of the meeting. If you believe there are omissions, additions, or corrections, please send your written comments within seven working days to Lochmueller Group.

Public Official meeting invitation email

Good afternoon,

The Lloyd4U Project Team would like to extend an invitation to learn more and ask any questions about the TheLloyd4U project. Please join us **virtually** at 12:30/1:30 CDT, on Thursday, September 21.

You may accept or decline this meeting using Outlook menu options. Please sign into the meeting 5 minutes before the start to adjust any audio/video settings using this link:
https://us06web.zoom.us/j/82066727133?pwd=29UTSBnUAcnyjULXuzUehleF3QcmzR.1
Meeting ID: 820 6672 7133
Passcode: 376457

You may also call into the meeting toll-free at +13126266799,,82066727133# US (Chicago)
using the meeting ID 820 6672 7133.

We ask that if you do have questions, utilize the chat feature on Zoom, all questions will be recorded and answered at a later date. A meeting summary will be sent to all attendees following the conclusion of the meeting to highlight what was discussed.

We look forward to seeing you on September 21!

Business/organization	Point of Contact	Address
Catholic Diocese of Evansville Schools	Michelle Prior, assistant superintendent	
Catholic Diocese of Evansville Schools	Rhonda Weissmann, administrative superintendent	
City of Evansville	Alex Burton, Council Member, Ward 4	
City of Evansville	Angela Koehler Lindsey, Council Member, Ward 5	
City of Evansville	Annette Ussery, administrative assistant	
City of Evansville	Mike Labitzke, City Engineer	Civic Center Complex, Rm. 321, 1 NW Martin Luther King Boulevard, Evansville, IN 47708
City of Evansville	Ben Trockman, City Councilor Ward 1	[redacted]
City of Evansville	Jim Brinkmeyer, Council Member, Ward 6	
City of Evansville	Jonathan Weaver, Council Member, at large	
City of Evansville	Karen Barnhill, Stormwater coordinator-MS4	Civic Center Complex, Rm. 321, 1 NW Martin Luther King Boulevard, Evansville, IN 47708
City of Evansville	Kaitlin Moore, Council Member, at large	
City of Evansville	Lloyd Winnecke, Mayor	Civic Center Complex, Rm. 302, 1 NW Martin Luther King Boulevard, Evansville, IN 47708
City of Evansville	Missy Mosby, Council Member, Ward 2	
City of Evansville	Noah Stubbs, director of communications	
City of Evansville	Ron Beane, Council Member, at-large	
City of Evansville	Todd Robertson, Transportation Executive Director	Civic Center Complex, Rm. 321, 1 NW Martin Luther King Boulevard, Evansville, IN 47708
City of Evansville	Zac Heronemus, City Councilor, Ward 3	[redacted]
Evansville EPA		
Evansville Fire Department Administration	Mike Connelly, Fire Chief via administrative assistant	[redacted]
Evansville Housing Authority	Gayle Rice, receptionist	
Evansville Housing Authority	Rick Moore, Executive Director	
Evansville Parks and Recreation Department	Parks Director	Civic Center Complex, Rm. 325, 1 NW Martin Luther King Boulevard, Evansville, IN 47708
Evansville Police Department	Billy Bolin, Police Chief	15 NW Martin Luther King Boulevard, Evansville, IN 47708
Evansville Vanderburgh School Corporation	Amy Dressel, Superintendent	951 Walnut Street, Evansville, IN 47713
Evansville Vanderburgh School Corporation	David Smith, superintendent	

Business/organization	Point of Contact	Address
Evansville Vanderburgh School Corporation		951 Walnut Street, Evansville, IN 47713
Evansville Vanderburgh School Corporation	Jason Woebkenberg, chief communications officer	
Evansville-Vanderburgh County Human Relations Commission	Diana Clements, executive director	
Federal Highway Administration	Kari Carmany-George, Federal Office Building	575 N. Pennsylvania Street, Rm. 254, Indianapolis, IN 46204
Harper Elementary School	Jake VanWinkle, Principal	21 South Alvord Boulevard, Evansville, IN 47714
Harrison High School	Leslie Wilhelmus, assistant principal	211 Fielding Road, Evansville, IN 47715
IDEM	Website Submittal	Website submittal
IDEM	Website Submittal	Website submittal
IGWS	Website Submittal	https://igws.indiana.edu/eAssessment
Indiana Department of Natural Resources	Christie Stanifer, Division of Fish and Wildlife	402 W. Washington Street, Rm. W273, Indianapolis, IN 46204
Indiana Department of Transportation	Brian Malone, Vincennes District Office	3650 S US Highway 41, Vincennes, IN 47591
Indiana Department of Transportation	Julian Courtade, Office of Aviation	100 N. Senate Avenue, Rm. 955, Indianapolis, IN 46204
Indiana Department of Transportation	Ryan Falls, Vincennes District Office	3650 S US Highway 41, Vincennes, IN 47591
Indiana Department of Transportation	Sam Anderson, Utilities and Rail Office	100 N Senate, ICGN 758- UT/RR, Indianapolis, IN 46204
Indiana General Assembly	State Rep. Matt Hostettler	
Indiana General Assembly	State Rep. Ryan Hatfield	
Indiana General Assembly	State Rep. Tim O'Brien	
Indiana General Assembly	State Rep. Wendy McNamara	
Indiana General Assembly	State Sen. Vaneta Becker	
Indiana General Assembly	Steve Sen. James Tomes	
Metropolitan Evansville Transit System	Jonathan Siebeking, director	
Metropolitan Evansville Transit System	Robin Robertson, officer manager	
National Guard Armory	Derek Hayward - Chief	3300 E Division St Evansville, IN 47715
National Park Service	Regional Environmental Officer, Midwest Regional Office	601 Riverfront Drive, Omaha, Nebraska 68102
U.S. Government	Sen. Mike Braun	404 Russell Senate Office Building, Washingto
U.S. Government	Rep. Larry Bucshon, 8th District via Ansley Boylan	20 NW Third Street, Suite 1230 Evansville, IN 447708
University of Evansville	Administrator	1800 Lincoln Avenue, Evansville, IN 47722
University of Evansville	Holly Smith, Senior Director of Marketing and Communications	
University of Southern Indiana	John Farless, Director of University Communications	
US Department of Housing & Urban Development	Field Environmental Officer, Chicago Regional Office	77 W. Jackson Boulevard, Rm. 2401, Chicago, IL 60604

Business/organization	Point of Contact	Address
Vanderburgh County	Ben Shoulders, County Commissioner, district 1	
Vanderburgh County	Cheryl Musgrave, County Commissioner, president, district 3	
Vanderburgh County	Dave Ballew - Building Commissioner, Local Floodplain Administrator	Civic Center Complex, Rm. 310, 1 NW Martin Luther King Boulevard, Evansville, IN 47708
Vanderburgh County	Justin Elpers, County Commissioner, vice president, district 2	
Vanderburgh County	Scot Wichser - Highway Superintendent	5105 N. Saint Joseph Avenue, Evansville, IN 47720
Vanderburgh County	James Raben, County Council District 1	Civic Center Complex, Rm. 303, 1 NW Martin Luther King Boulevard, Evansville, IN 47708
Vanderburgh County	Tom Shetler, Jr. - County Council District 2	Civic Center Complex, Rm. 303, 1 NW Martin Luther King Boulevard, Evansville, IN 47708
Vanderburgh County	Stephanie Terry, County Council District 3	Civic Center Complex, Rm. 303, 1 NW Martin Luther King Boulevard, Evansville, IN 47708
Vanderburgh County	John Monstrastelle - County Council District 4	Civic Center Complex, Rm. 303, 1 NW Martin Luther King Boulevard, Evansville, IN 47708
Vanderburgh County	Michael Goebel, County Council, at large	Civic Center Complex, Rm. 303, 1 NW Martin Luther King Boulevard, Evansville, IN 47708
Vanderburgh County	Joe Kiefer, County Council, at large, vice president	Civic Center Complex, Rm. 303, 1 NW Martin Luther King Boulevard, Evansville, IN 47708
Vanderburgh County	Jill Anne Hahn, County Council, at large, president	Civic Center Complex, Rm. 303, 1 NW Martin Luther King Boulevard, Evansville, IN 47708
Vanderburgh County	Linda Freeman - County Surveyor	Civic Center Complex, Rm. 325, 1 NW Martin Luther King Boulevard, Evansville, IN 47708
Vanderburgh County Health Department	Health Administrator	420 Mulberry Street, Evansville, IN 47713
Vanderburgh County Health Department	Kenneth Spear, health officer	420 Mulberry Street, Evansville, IN 47713

Business/organization	Point of Contact	Address
EVSC	Dr. David Smith	Superintendent
		EVSC - Director of Transportation
CSX	Adam Hess	Industrial Development Manager
EMS (Fire, Police, Sheriff, State Police, Ambulance)	Billy Bolin	Chief - Police Department
	Phillip Smith	Chief Deputy - Police Department
	Noah Robinson	Sheriff
		Chief Deputy - Sheriff's Office
	Mike Connelly	Chief - Fire Department
	Paul Anslinger	Assistant Chief - Fire Department
	Cathleen Tamez	Executive Secretary - Fire Department
	Cliff Weaver	Director -Emergency Management Agency
Metropolitan Evansville Transportation System	Jonathan Siebeking	Manager - METS
John Stoll	County Engineer	County Engineer
Scot Wichser	County Highway	County Highway Superintendent
Mike Labitzke	City Engineer	City Engineer
Ron London	Director	APC
Blaine Oliver	Senior Planner	APC
Seyed Shokouhzadeh	Director	EMPO
Pamela Drach	Assistant Director	EMPO
Lane Young	Director	Evansville Water and Sewer Utility
Shawn Wright	Director of Planning	Evansville Water and Sewer Utility

MEETING SUMMARY

Date of Meeting:	September 21, 2023	**Re:**	Lloyd4U Local Officials Briefing #3 – Meeting Summary
Location:	Virtual Meeting - Zoom Meeting ID: 820 6672 7133 Passcode: 376457	**Issue Date:**	October 4, 2023
Submitted By:	Nicole Minton		

In Attendance:

- Seyed Shokouhzadeh – Director, Evansville MPO
- Pam Drach – Deputy Director, Evansville MPO
- Amanda Joest – Mayor's Office
- Cheryl Musgrave – County Commissioner
- Stephanie Terry – County Council
- Paul Anslinger – Evansville Fire Department
- Jason Woebkenberg - EVSC
- Patrick Carpenter – Federal Highway Administration
- Matt Bullock – Lloyd4U Project Manager, INDOT Vincennes District
- Brian Malone – Senior Project Manager, INDOT Vincennes District
- Gary Brian – Communications Director, INDOT Vincennes District
- Emily Sprinkle, Project Manager, INDOT Vincennes District
- Nicole Minton – Lochmueller Group
- David Goffinet – Lochmueller Group
- Jeff Whitaker – Lochmueller Group
- Angela Blank – C2
- Collin Merkel – C2
- Emma Collins – C2

ITEMS DISCUSSED:

I. Welcome:

Nicole Minton welcomed everyone to the meeting and asked that participants type their name, organization and email in the chat. Nicole pointed out that a link to the project website was available in the chat, as well as images of Red Bank Road, Schutte/Felstead/Middle Mt. Vernon, Corbierre Avenue and Barker Avenue.

Nicole thanked the group for joining the meeting and allowing the team to share the presentation planned for the upcoming Public Hearing. The desire was to arrange an opportunity for the group to see the planned improvements and have their questions answered in an environment where individual attention is easier to achieve than at the public hearing.

II. Presentation:

Nicole played the 17-minute presentation that shared schedule updates, where we are within the environmental process, planned improvements and ways to comment.

III. Questions & Comments:

Following the presentation, the participants were asked to share comments or questions.

Only one comment was received. Cheryl Musgrave pointed out that the former Old National Bank building could be seen in the background of one of the slides and suggested it be corrected since the building was demolished.

The above constitutes our understanding of the meeting. If you believe there are omissions, additions, or corrections, please send your written comments within seven working days to Lochmueller Group.

THE LLOYD4U
Making the Lloyd Work for You

September 26, 2023 | Westside Improvements Public Hearing

City View at Sterling Square – Sign-In Sheet

Name	Address	Cell Phone *Include for text alerts*	Email	Text Alert Opt-In (check)	Email Alert Opt-In (check)
Rick Ripey	[redacted]			☐	☐
Kent Hollowden				☐	☒
Darren Grimwood				☐	☒
Dotty Baumeyer				☐	☒
Rachel Thomas				☒	☒
Mike Woehler PERRY TWP FIRE DEPT				☐	☐
Christine Hale				☒	☐
Kate Sherrill				☐	☐
Karlene Howard				☐	☒
Keith Topper				☐	☐

PLEASE NOTE: In accordance with the Indiana Access to Public Records Act (In. Code 5-14-1.5), these sign-in sheets are public records that INDOT will be required to produce upon request.

THE LLOYD4U
Making the Lloyd Work for You

September 26, 2023 | Westside Improvements Public Hearing

City View at Sterling Square – Sign-In Sheet

Name	Address	Cell Phone *Include for text alerts*	Email	Text Alert Opt-In (check)	Email Alert Opt-In (check)
Ryan Leeds	[redacted]			☑	☐
Scott Harding				☐	☐
Patrick Craig				☐	☐
Tommy Haufe				☐	☑
Debbie Dean				☐	☐
Dan Grunow				☒	☐
Mickey Baumeyer				☑	☐
John R Spagetti				☐	☐
Patricia Riger				☑	☐
[illegible]				☐	☐

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September 26, 2023 | Westside Improvements Public Hearing

City View at Sterling Square – Sign-In Sheet

Name	Address	Cell Phone *Include for text alerts*	Email	Text Alert Opt-in (check)	Email Alert Opt-in (check)
CHARLES WOLFINGER	[redacted]	[redacted]	[redacted]	☐	☑
Debra Lutz	[redacted]	[redacted]	[redacted]	☒	☐
Josh Gilberg	[redacted]	[redacted]	[redacted]	☐	☐
Fernanda Tudela	[redacted]	[redacted]	[redacted]	☐	☐
Stacey Tudela	[redacted]	[redacted]	[redacted]	☐ icon	☑
Michele Olsen	[redacted]	[redacted]	[redacted]	☐	☐
Blake Bentley	[redacted]	[redacted]	[redacted]	☑ cell	☐
James Voelker	[redacted]	[redacted]	[redacted]	☐	☑
Mark Head	[redacted]	[redacted]	[redacted]	☐	☑
Ken Smith	[redacted]	[redacted]	[redacted]	☑	☐

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City View at Sterling Square – Sign-In Sheet

Name	Address	Cell Phone *Include for text alerts*	Email	Text Alert Opt-In (check)	Email Alert Opt-In (check)
Rick Kissel	[redacted]			☑	☑
Sharon Bratley				☑	☐
ALLEN STATE				☑	☐
Jeffrey Miller				☐	☒
Jim Fechtmeister				☑	☐
Terry Campbell				☑	☐
Joe Lutz				☑	☐
CHRIS OLSON				☑	☑
Barbara Dye				☐	☐
Lenis Kounel				☐	☐

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September 26, 2023 | Westside Improvements Public Hearing

City View at Sterling Square – Sign-In Sheet

Name	Address	Cell Phone *Include for text alerts*	Email	Text Alert Opt-In (check)	Email Alert Opt-In (check)
[illegible]	[redacted]			☐	☐
Joan Byrne				☐	☒
Dere K Reyher				☒	☒
David Ballew				☐	☒
Stan + Debbie Hahn				☒	☒
DAN NIX				☐	☒
Cynthia Zinn				☒	☐
ADAM + AYES				☐	☐
Tina Little/Mike H				☒	☐
JAMES WHITE				☐	☐

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THE LLOYD4U
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September 26, 2023 | Westside Improvements Public Hearing

City View at Sterling Square – Elected Officials Sign-In Sheet

Name	Address	Cell Phone *Include for text alerts*	Email	Text Alert Opt-In (check)	Email Alert Opt-In (check)
Michael LaBissiere		[redacted]		☐	☑
				☐	☐
				☐	☐
				☐	☐
				☐	☐
				☐	☐
				☐	☐
				☐	☐
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				☐	☐

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September 26, 2023 | Westside Improvements Public Hearing

City View at Sterling Square – Sign-In Sheet

Name	Address	Cell Phone *Include for text alerts*	Email	Text Alert Opt-In (check)	Email Alert Opt-In (check)
Rusty Yeager	[redacted]			☐	☒
Tom Stephenson				☒	☒
KATHY YEARWOOD				☒	☐
Rob Underwood				☑	☐
				☐	☐
				☐	☐
				☐	☐
				☐	☐
				☐	☐
				☐	☐

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September 26, 2023 | Westside Improvements Public Hearing

City View at Sterling Square – Sign-In Sheet

Name	Address	Cell Phone *Include for text alerts*	Email	Text Alert Opt-In (check)	Email Alert Opt-In (check)
Linda Ruff	[redacted]			☐	☐
Sherry Pyle				☐	☐
Karen Selby				☐	☒
Stephanie Underwood				☑	☐
David Sugg				☐	☑
Jon Zuzicki				☐	☐
				☐	☐
				☐	☐
				☐	☐
				☐	☐

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September 26, 2023 | Westside Improvements Public Hearing

City View at Sterling Square – Sign-In Sheet

Name	Address	Cell Phone *Include for text alerts*	Email	Text Alert Opt-In (check)	Email Alert Opt-In (check)
Scott Read	[redacted]			☐	☑
				☐	☐
Peter Johnson				☐	☒
John Scheer				☐	☒
Ron Monarch				☐	☐
Tony Ricketts				☐	☒
Bryan Webb				☐	☐
Ian Woolsey				☐	☐
Sarah Loesch				☐	☐
				☐	☐

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September 26, 2023 | Westside Improvements Public Hearing

City View at Sterling Square – Sign-In Sheet

Name	Address	Cell Phone *Include for text alerts*	Email	Text Alert Opt-In (check)	Email Alert Opt-In (check)
Eli Frahlich	[redacted]			☐	☒
Eugene Weber				☐	☐
Bob Oldham				☑	☐
Jodi Monarch				☐	☐
Brance & Sharon Cloom		[redacted]		☑	☐
KrisEvans				☑	☐
Steven Selby				☐	☑
Tom Antes				☐	☑
Tom Vennard				☑	☑
				☐	☐

PLEASE NOTE: In accordance with the Indiana Access to Public Records Act (In. Code 5-14-1.5), these sign-in sheets are public records that INDOT will be required to produce upon request.

Presentation slides for the September 26, 2023 Public Hearing

THE LLOYD4U

Public Hearing
West Side Improvements

Lead Des No. 1900308

Includes Des. Nos. 2001917, 2100041, 1900262, 1900258, 1900260

September 2023

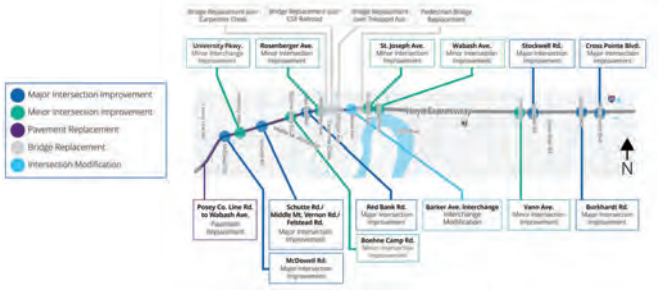
AGENDA

1) **Project Overview**
2) **Innovative Intersections**
3) **Recommended Improvements**
4) **Next Steps**
5) **Follow Our Progress**

PROJECT OVERVIEW

- Includes more than a dozen improvement projects
- INDOT plans to invest more than $150 million
- Projects extend across Vanderburgh County, from Posey County Line Road to Cross Pointe Boulevard
- Projects include intersection improvements, bridge replacements, pavement replacement and more

IMPROVEMENT LOCATIONS



PROJECT PURPOSE

Making the Lloyd Work For You

- Enhance safety
- Improve mobility
- Maintain accessibility

THE LLOYD4U
Making the Lloyd Work for You

THE BIG PICTURE

- The team is sharing preliminary designs.
- More detailed maps are available.
- Public input is an important part of the process.
- We're talking to businesses and other stakeholders.
- Additional outreach will be conducted next year to educate drivers on using innovative intersections.

WHAT HAS BEEN HAPPENING

- Traffic analysis
- Preliminary maintenance of traffic plans
- Preliminary road design
- Survey work
- Construction expected to begin in spring 2024

RIGHT-OF-WAY

- No relocations with the project
- Only strips or corner cuts of permanent right-of-way
- Temporary right-of-way for sidewalks, driveways, grading and sloping

WHAT ARE INNOVATIVE INTERSECTIONS?

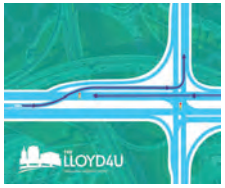
- Innovative intersections are new to the area
- A proven success in other areas
- Organize traffic to improve flow and safety
- Change the way left turns are made
- Reduce conflict points, enhance safety

Displaced Left Turn

Boulevard Left Turn

DISPLACED LEFT TURN

- Vehicles turning left move to a dedicated lane on the other side of the road, with a signal, before the main intersection
- Left-turning traffic moves with through traffic on the Lloyd Expressway
- Reduced conflict points, enhanced safety and traffic flow at main intersection
- Also known as a continuous flow intersection



WEST SIDE IMPROVEMENTS

PROJECT IMPROVEMENTS

- Pavement replacement
- New guardrails, curbs and sidewalks
- New drainage pipes, structures and grading
- Added street lighting, new signs and pavement markings
- Signal replacements

LLOYD FACILITY TYPES

- Posey Co. Line to Boehne Camp: Rural 4-lane divided roadway
- Boehne Camp to Rosenberger: Urban 4-lane divided highway
- Rosenberger to Barker: Adding two lanes to create a 6-lane urban roadway
- Barker to Wabash: 6-lane urban roadway, new separate storm sewer

WABASH AVENUE

Minor Intersection Improvement

- Lengthen eastbound left turn
- Westbound warning signs for traffic backups
- Updated signal timing and coordination with St. Joseph Avenue
- Close access to Pennsylvania Street

Considerations

- High number of westbound rear-end crashes
- Westbound sight distance/Pigeon Creek Bridge

ST. JOSEPH AVENUE

Minor Intersection Improvement

- Improve signal timing and coordination with Wabash Avenue
- Reconfigure St. Joseph southbound approach to extend left turn lanes and add right turn lane
- Lengthen Lloyd left turn lane

Considerations

- Significant amount of truck traffic
- Southbound to eastbound is the main turning movement
- Maintain dual lane through movement

BARKER AVENUE/IGLEHEART AVENUE

Intersection Modification

- Close South Barker westbound exit loop ramp
- Add South Barker traffic to North Barker exit ramp
- Realign westbound entrance ramp
- Upgrade eastbound Barker exit ramp

Considerations

- Reconfigure ramps to improve safety

CORBIERRE AVENUE

Intersection Modification

- Relocate westbound Tekoppel Avenue exit
- Reconstruct Corbierre from Tekoppel to east of Addison

Considerations

- Increase ramp spacing
- Improve space for changing lanes

ROSENBERGER AVENUE

Minor Intersection Improvement

- Extend turn lanes, pavement upgrades
- Restrict right turns on red with signal modifications

Considerations

- High number of westbound rear-end crashes
- Improve westbound sight distance by flattening roadway

RED BANK ROAD

Major Intersection Improvement

- Dual displaced left turns

Considerations

- Heavy commercial corridor
- Maintain same lane configurations for northbound/southbound Red Bank Road
- Highest volume of left turn movements

BOEHNE CAMP ROAD

Minor Intersection Improvement

- Add turning movements
- Add northbound left turn lane
- Add southbound left and right turns

Considerations

- Heavy commercial corridor

MIDDLE MT. VERNON & FELSTEAD ROADS

Reduced Conflict Intersection

- Right in/right out only on north/southbound Middle Mt. Vernon and Felstead roads
- Utilize median U-turns for other movements

Considerations

- Complement changes at Schutte Road

SCHUTTE ROAD

Restricted Crossing U-Turn

- Signalized left turns for Lloyd traffic
- Right in/right out only on north/southbound Schutte Road

Considerations

- Residential development to the north and apartments and access to USI to the south

MCDOWELL ROAD

Reduced Conflict Intersection

- Right in/right out only on north/southbound McDowell Road

Considerations

- Intersection on curve
- Sight distance is limited
- Safety improvement needed

BRIDGE REPLACEMENTS

Bridge replacements

- Tekoppel Road
- CSX Railroad
- Carpentier Creek
- Pedestrian Bridge near St. Joseph Avenue

MAINTENANCE OF TRAFFIC

- Four Phases
  - **Phase 1 -** EB outside shoulder strengthened
  - **Phase 2 -** move traffic to EB side, construct WB side
  - **Phase 3 -** move traffic to WB side, construct EB side
  - **Phase 4 -** return traffic to normal lanes and work on median
- At least one lane of traffic open in each direction; in some places two will remain open

MAINTENANCE OF TRAFFIC

- Construction updates will be shared with the public via:
  - Text alerts
  - Email alerts
  - Social media
  - TheLloyd4U.com
- Cameras will be installed along project to monitor congestion and adjust signal timing

ZIPPER MERGE

- A zipper merge occurs when drivers take turns merging when a lane is ending.
- Vehicles fill **both** lanes then take turns as the lane reduces.
- You are **not cutting** the line.
- Zipper merges shorten traffic backups and reduce traffic backing up and blocking intersections.

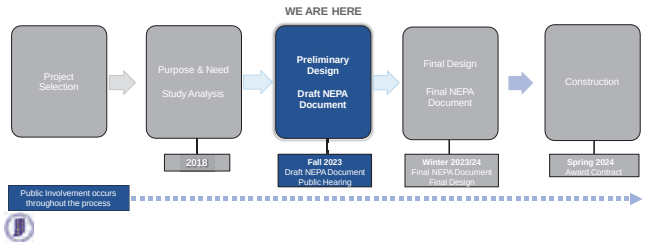
NATIONAL ENVIRONMENTAL POLICY ACT (1969)

Federal Process

- Requires that federal agencies consider the effects of their actions on surrounding natural, cultural and social environments
- Requires public be provided the opportunity to be involved and comment
- Requires impacts be described in an environmental document

PROJECT DEVELOPMENT PROCESS

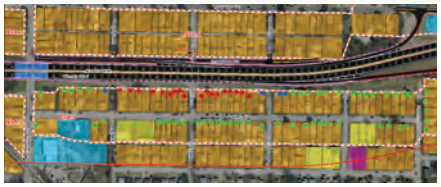
Environmental Documents – Categorical Exclusion Level 4 (CE-4)



IMPACTS

Type	Impact
Relocations	0
Perm. Right-of-Way/Temp. Right-of-Way	1.17 acres / .76 acres
Traffic Pattern	Lemcke Ave., 12th Ave., Pennsylvania St., Ingle Ave., Corbierre Ave.
Water/Wetlands	.09 wetland acres
Terrestrial Habitat Disruption	47.9 acres
Cultural Resources (Section 106)	No Adverse Effect
Threatened and Endangered Species	Tree Clearing Not Likely to Adversely Affect
Environmental Justice	No Disproportionately Adverse Impacts
Noise	Noise Abatement Likely at Forest Avenue

NOISE STUDY

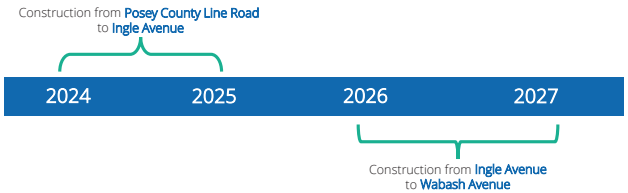


- Noise Analysis identified portion of Forest Avenue would benefit from a noise barrier
- Residents were surveyed and indicated their desire to move forward with plans for a noise barrier

ROAD CLOSURES

- Various drives and alley between Wabash and St. Joseph
- N. 12th Avenue
- N. Lemcke Avenue
- Pennsylvania Street
- Corbierre Access reconfigured
- North and South Ingle closed at the Lloyd
- Southwestern access between Red Bank and Rosenberger

TIMELINE



PUBLIC COMMENT PERIOD

Comments accepted through October 11, 2023

- Email: Nicole.Minton@lochgroup.com
- Mail: Nicole Minton, Lochmueller Group, 6200 Vogel Road, Evansville, IN 47715

FOLLOW OUR PROGRESS

TheLloyd4U.com

TheLloyd4U

@TheLloyd4U

QUESTIONS AND COMMENTS

INDOT4U.com

855-INDOT4U (463-6848)

INDOT@indot.in.gov

THE LLOYD4U

Thank you!

Public Hearing Welcome Letter

INDIANA DEPARTMENT OF TRANSPORTATION

Tuesday, September 26, 2023

Welcome to the Indiana Department of Transportation (INDOT) public hearing regarding SR 66/Lloyd Expressway Intersections Improvements from Posey/Vanderburgh County Line to Rosenberger Avenue and from Rosenberger Avenue to Wabash Avenue in Evansville and Vanderburgh County.

The purpose of the public hearing is to offer all interested persons an opportunity to comment on current preliminary design plans and the environmental document for this project.

There are several ways your comments may be presented this evening and following tonight's public hearing. You may submit comments in the following manner:

1. **Complete** a comment form and return it to the comment box or an INDOT or project team representative attending the public hearing. Comment forms are available at the sign-in table and are also included in your information packet.

2. **Participate** as a speaker during the comment session following tonight's presentation.

3. **E-mail** comments to Nicole.Minton@lochgroup.com.

4. **Mail** comments to Nicole Minton, Lochmueller Group, 6200 Vogel Road, Evansville, IN 47715.

5. **Visit** https://thelloyd4u.com to learn more about this project.

6. **Submit** comments (or have comments postmarked) by **October 11, 2023.** Comments will be reviewed and considered as part of INDOT's decision-making process.

7. **Questions?** Contact INDOT Customer Service at 1-855-INDOT-4-U (1-855-463-6848).

The purpose of the public hearing is to offer all interested persons an opportunity to comment on current preliminary design plans to improve SR 62 (locally known as the Lloyd Expressway) from the Posey/Vanderburgh County Line to Rosenberger Avenue and from Rosenberger Avenue to Wabash Avenue in Evansville and Vanderburgh County.

Des #	Work Type	Location	Description
1500041	Bridge Replacement	SR 62 Over CSX RR, 4.19 mile W of US 41.	Replacement of the SR 62 bridge over CSX/Evansville Western RR
1600060	Bridge Replacement	SR 62 Over Tekoppel Avenue, 4.09 miles W US-41	Replacement of the SR 62 bridge over Tekoppel Avenue
1602258	Bridge Replacement	SR 62 Over Carpentier Creek, 4.43 miles W US-41	Replacement of the SR 62 bridge over Carpentier Creek
1702066	Bridge Replacement	SR 62 Pedestrian Walk at SR-62 EB/WB	Replacement of the SR 62 bridge over Pedestrian Walk at SR-62 EB/WB
1900258	Intersection Improvement	SR 62 At 5.58 mi W of US-41 (Boehne Camp Rd)	Intersection improvements including the addition of turn lanes and lengthening of turn lanes, improved pavement markings and signage, and replacement of the existing traffic signal equipment at SR 62 and Boehne Camp Road
1900260	Intersection Improvement	SR 62 At 5.08 mi W of US-41 (Red Bank Road)	Intersection improvements including lane reconfiguration, lengthening of turn lanes, replacement of the existing traffic signals and installation of new traffic signals in turn lanes at SR 62 and Red Bank Road
1900262	Intersection Improvement	SR 62 At 6.62 mi W of US-41 (Schutte Rd)	Involve intersection reconfigurations and improvements including lengthening and modification of existing turn lanes and replacing/adding signage and pavement markings at SR 62 and Schutte Road
1900264	Intersection Improvement	SR 62 At 4.58 mi W of US-41 (Rosenberger Ave)	Intersection improvements including lane reconfiguration, lengthening of turn lanes, and modifications to existing traffic signals at SR 62 and Rosenberger Avenue.
1900308	Pavement Replacement	SR 62 From Rosenberger Rd (4.59	Improvements along SR 62 from Rosenberger Avenue to Wabash Avenue to reduce the total number of crashes and improve the traffic capacity to a desired Level of Service (LOS) C at the

		mi W of S Jct US-41) to 3.92 mi W of S Jct US-41 (Ingle Ave)	SR 62/Rosenberger Avenue, SR 62/St. Joseph Avenue, and SR 62/Wabash Avenue intersections. Additionally, the purpose is to improve the condition of the bridges between Rosenberger Avenue and Wabash Avenue to a condition rating of at least 7 (good) or better. The need for the project stems from existing high traffic volumes experienced by this section of SR 62 which have resulted in significant queueing, delays, and congestion issues causing safety concerns, such as above normal number of crashes, and from the deteriorated condition of the existing bridges along this section of SR 62. As proposed, Des. No. 1900308 involves road reconstruction along SR 62 within the project area. The proposed improvements include an added travel lane, entrance and exit ramp reconfiguration, relocations, and closures, as well as closure of select local cross streets to improve traffic flow. Drainage improvements along with streetlight, signage, and pavement marking replacement will also be included as part of this project. Approximately 0.51 acre of permanent ROW and 0.62 acre of temporary ROW will be required. Impacts associated with this project include 3.1 acres of tree clearing, 1,043 linear feet of stream impacts, and approximately 0.08 acre of permanent wetland impacts. Due to noise impacts associated with this project, a sound barrier will likely be placed along the southside of eastbound SR 62 and the Barker Avenue exit ramp from Tekoppel Avenue to Barker Avenue.
2001917	Pavement Replacement	SR 62 From 8.56 mi W US 41 to 4.59 mi W of US 41 (East of Posey/Vanderburgh Count Line to Rosenberger Rd	Des. No. 2001917 involves removal and replacement of pavement along SR 62 within the project area. The proposed improvements include entrance and exit ramp reconfiguration, ditch grading, culvert replacement, culvert lining, underdrain replacement and construction, median drainage and inlet replacement and construction, storm sewer and inlet replacement, raised median construction, additional turn lanes, guardrail replacement and construction, and new and replacement signage and pavement markings.
2100041	Intersection Improvement	SR 62 At McDowell Road, 7.75 mi W of US41	Intersection improvements including lane reconfiguration, installation and lengthening of turn lanes, and modifications to existing signage at SR 62 and McDowell Road
1900263	Intersection Improvement	SR 62 At 3.09 mi W of US-41 (St. Joseph Ave.)	Intersection improvements including lengthening the existing dual left turn lanes and adding new dual right turn lanes at SR 62 and St. Joseph Avenue
2000187	Intersection Improvement	SR 62 2.72 mi W of US 41 (Wabash Ave)	Intersection improvements including improved pavement markings and signage, as well as new signal equipment and pedestrian facilities at SR 62 and Wabash Avenue
2301254	Pavement Replacement	SR 62 SR 62 from 3.92 mi W of S Jct US 41 (Ingle Ave) to 2.72 mi W of Jct US 41 (Wabash Ave)	Des. No. 2301254 involves removal and replacement of pavement along SR 62 within the project area. The proposed improvements include entrance and exit ramp reconfiguration, ditch grading, culvert replacement, culvert lining, underdrain replacement and construction, median drainage and inlet replacement and construction, storm sewer and inlet replacement, raised median construction, additional turn lanes, guardrail replacement and construction, and new and replacement signage and pavement markings.

Construction is anticipated to begin in Spring 2024. The vehicular Maintenance of Traffic (MOT) plan for the projects involves lane restrictions/closures and official detours. Pedestrian MOT for the projects will involve sidewalk closures with detours at select locations. Access to all properties will be maintained during construction. INDOT will coordinate with emergency services, local school corporation officials and project stakeholders to ensure potential disruptions and impacts are minimized as much as possible.

Public Hearing Agenda
5:30 p.m. – Doors open and project team is available for questions
6:00 p.m. – Formal presentation, followed immediately by the public comment session
At the conclusion of the presentation and the comment session, team members will be available for questions in the display area.

All substantive comments received prior to, during and following the public hearing will be evaluated and responded to in writing within subsequent project documentation. The documentation will address concerns presented during the public hearing process and describe project decisions reached following careful consideration of the views and concerns of the public. Comment must be submitted by October 11, 2023.
Federal and state funds are proposed to be used for construction of these projects. INDOT and the Federal Highway Administration have agreed that these projects pose minimal impact to the natural environment. Two Categorical Exclusion (CE) environmental documents have been prepared for these projects. The environmental documentation and preliminary design information is available to view at the following locations:

1. Evansville Vanderburgh Public Library (EVPL) Red Bank: 120 S Red Bank Road, Evansville, IN 47712
2. Lochmueller Group, 6200 Vogel Road, Evansville, IN 47715
3. INDOT Vincennes District Office: 3650 South U.S. Highway 41, Vincennes, IN 47591, 855-INDOT4U (463-6848)
4. Project Website: https://thelloyd4u.com

Project documents can be mailed upon request. Contact Nicole Minton, Lochmueller Group at (812) 759-4179 or Nicole.Minton@lochgroup.com; Matthew Bullock, INDOT at (812) 830-9683 or mbullock1@indot.in.gov; or INDOT at 855-INDOT4U.

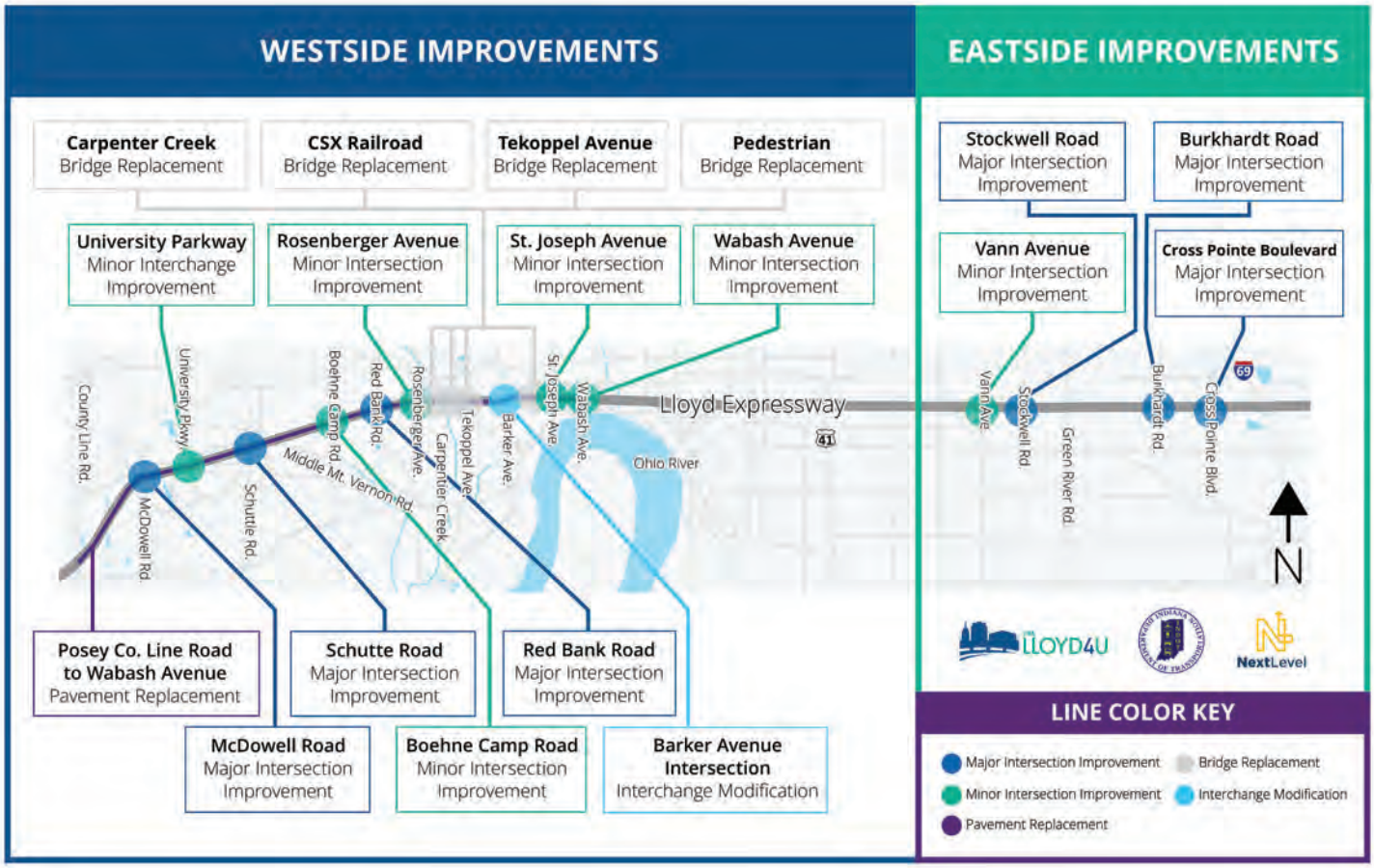
Thank you for attending tonight's public hearing.

Public Hearing Handout

THE LLOYD4U

TheLloyd4U includes more than a dozen improvement projects along the Lloyd Expressway, from Posey County Line Road to Cross Pointe Boulevard. The Indiana Department of Transportation plans to invest more than $150 million in improvements to make the Lloyd Expressway more efficient and safer for motorists to navigate.

The work will include **intersection improvements, bridge replacements, pavement replacement** and more.



IMPROVEMENTS: INNOVATIVE INTERSECTIONS

Planned improvements are focused on making the Lloyd work for you. Innovative intersections will be used to improve safety and mobility while maintaining accessibility to businesses and homes along the Lloyd Expressway.

The idea is simple: organize traffic to improve flow and safety.

This is done by changing the way left turns are made.

- **Fewer conflict points**
- **Increased efficiency**
- **Maintained accessibility**
- **Improved safety**
- **Improved traffic flow**

Find more information on planned improvements for each intersection, maps and alternative intersection videos at **TheLloyd4U.com**.

WESTSIDE IMPROVEMENTS

CONSTRUCTION ANTICIPATED TO BEGIN SPRING 2024

MAJOR INTERSECTION IMPROVMENTS

MCDOWELL RD.

Reduced Conflict Intersection

SCHUTTE RD.

Restricted Crossing U-Turn

RED BANK RD.

Dual Displaced Left Turns

BARKER AVE. INTERCHANGE

Interchange Modification

MINOR INTERSECTION IMPROVEMENTS

University Parkway
Pavement Replacement

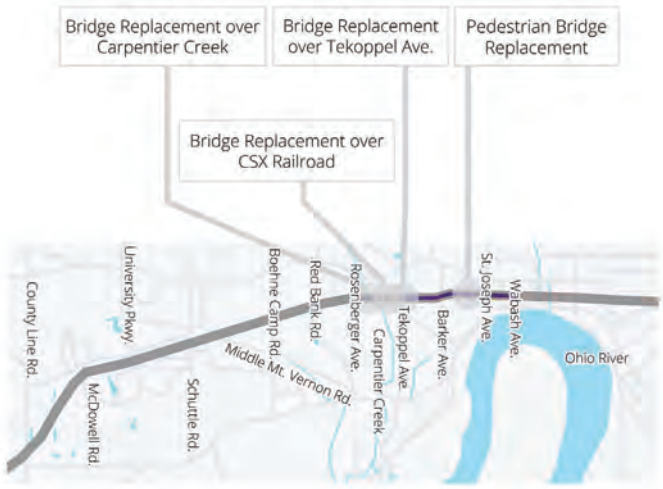
Rosenberger Ave.
SignalModifications and Extended Turn Lanes

Boehne Camp Rd.
Added Turning Movements

St. Joseph Ave.
Lane realignment and signal modification

Wabash Ave.
Improve Signal Timing and Close Access to Pennsylvania Street

BRIDGE REPLACEMENTS



FOLLOW OUR PROGRESS

TheLloyd4U.com

TheLloyd4U

Text "INDOT Lloyd" to 468311 for text updates

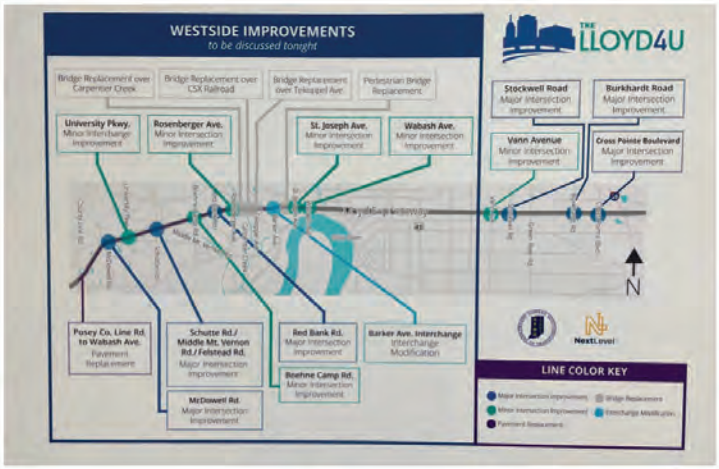
Sign up for e-mail updates

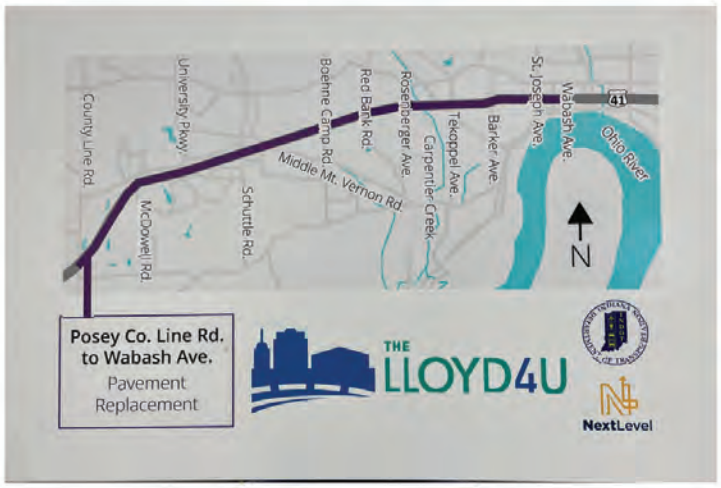
SHARE YOUR FEEDBACK

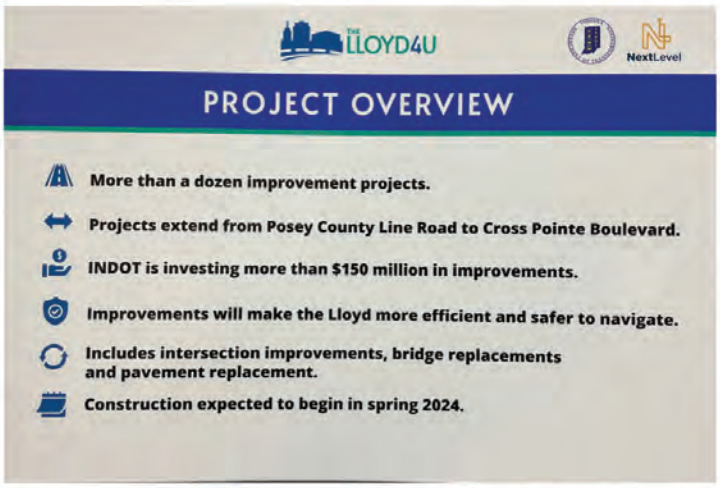
Nicole.Minton@lochgroup.com

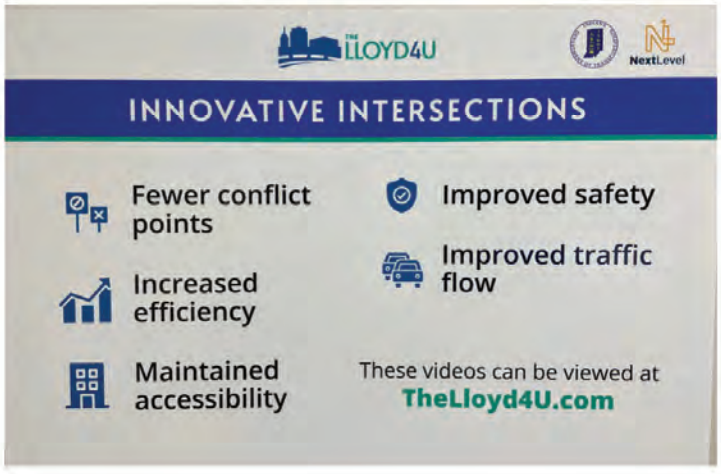
Nicole Minton
Lochmueller Group
6200 Vogel Road, Evansville IN 47715

Display boards used for the September 26, 2023 Public Hearing









WABASH AVENUE

MINOR INTERSECTION IMPROVEMENT

- Lengthen eastbound left turn
- Westbound warning signs for traffic backups
- Updated signal timing and coordination with St. Joseph Avenue
- Close access to Pennsylvania Street

Considerations

- High number of westbound rear-end crashes
- Westbound sight distance/Pigeon Creek Bridge

ST. JOSEPH AVENUE: MINOR INTERSECTION IMPROVEMENT

- **Reconfigure SB approach**
- **Realign dual SB left turn lanes**
- **Add second SB right turn lane**
- **Improve signal timing coordination with Wabash Avenue**

Considerations:

- Commercial and industrial corridor
- Significant amount of truck traffic
- SB to EB is the main turning movement
- Maintains dual lane through movement

BARKER AVENUE/IGLEHEART AVENUE

INTERSECTION MODIFICATION

- Close South Barker westbound exit loop ramp
- Add South Barker traffic to North Barker exit ramp
- Realign westbound entrance ramp
- Upgrade eastbound Barker exit ramp

Considerations

- Reconfigure ramps to improve safety

CORBIERRE AVENUE

INTERSECTION MODIFICATION

- Relocate westbound Tekoppel Avenue exit
- Reconstruct Corbierre from Tekoppel to east of Addison

Considerations

- Increase ramp spacing
- Improve space for changing lanes

ROSENBERGER AVENUE: MINOR INTERSECTION IMPROVEMENT

- **Restrict right turns on red with signal modifications**
- **Extend turn lanes**
- **Improve WB sight distance**
- **Reconstruct pavement**

Considerations:

- High number of WB rear-end crashes
- Improves WB sight distance

RED BANK ROAD

MAJOR INTERSECTION IMPROVEMENT

- Dual displaced left turns

Considerations

- Heavy commercial corridor
- Maintain same lane configurations for northbound/southbound Red Bank Road
- Highest volume of left turn movements

BOEHNE CAMP ROAD

MINOR INTERSECTION IMPROVEMENT

- Add turning movements
- Add northbound left turn lane
- Add southbound left and right turns

Considerations

- Heavy commercial corridor

MIDDLE MT. VERNON & FELSTEAD ROADS

REDUCED CONFLICT INTERSECTION

- Right in/right out only on north/southbound Middle Mt. Vernon and Felstead roads
- Utilize median U-turns for other movements

Considerations

- Complement changes at Schutte Road

SCHUTTE ROAD

RESTRICTED CROSSING U-TURN

- Signalized left turns for Lloyd traffic
- Right in/right out only on north/southbound Schutte Road

Considerations

- Residential development to the north and apartments and access to USI to the south

UNIVERSITY PARKWAY INTERCHANGE

PAVEMENT REPLACEMENT:

Considerations

- USI drives traffic volumes
- Pavement replacement needed

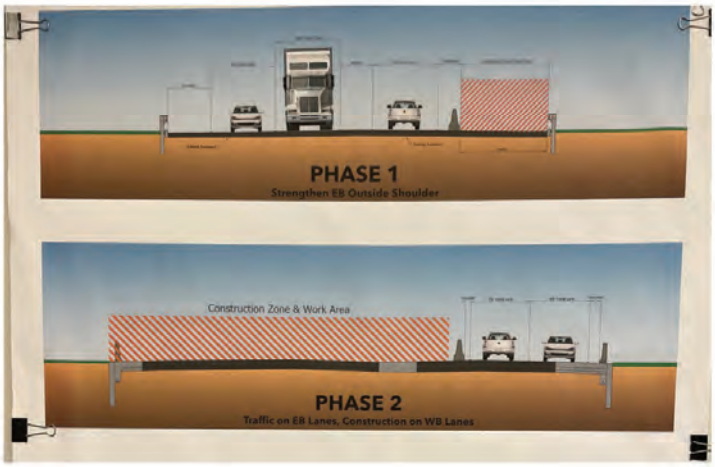
MCDOWELL ROAD

REDUCED CONFLICT INTERSECTION

- Right in/right out only on north/southbound McDowell Road

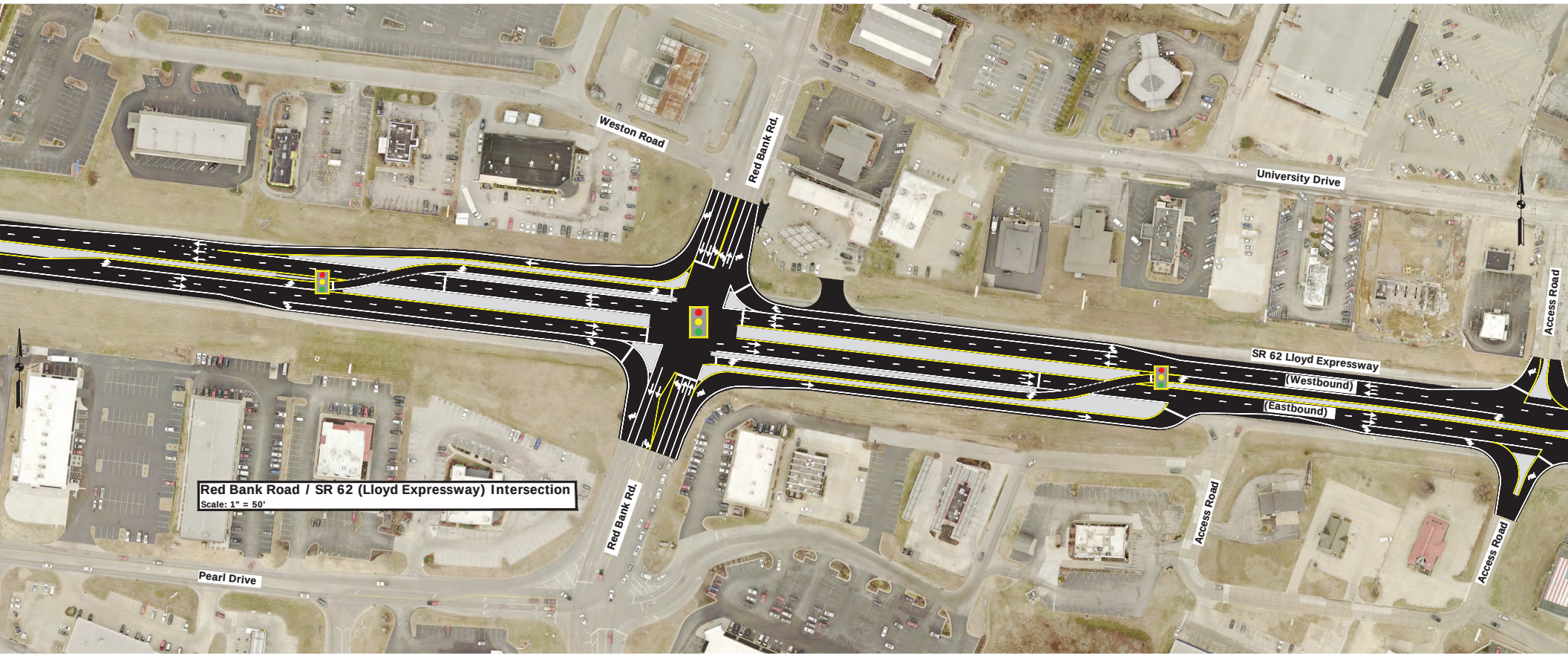
Considerations

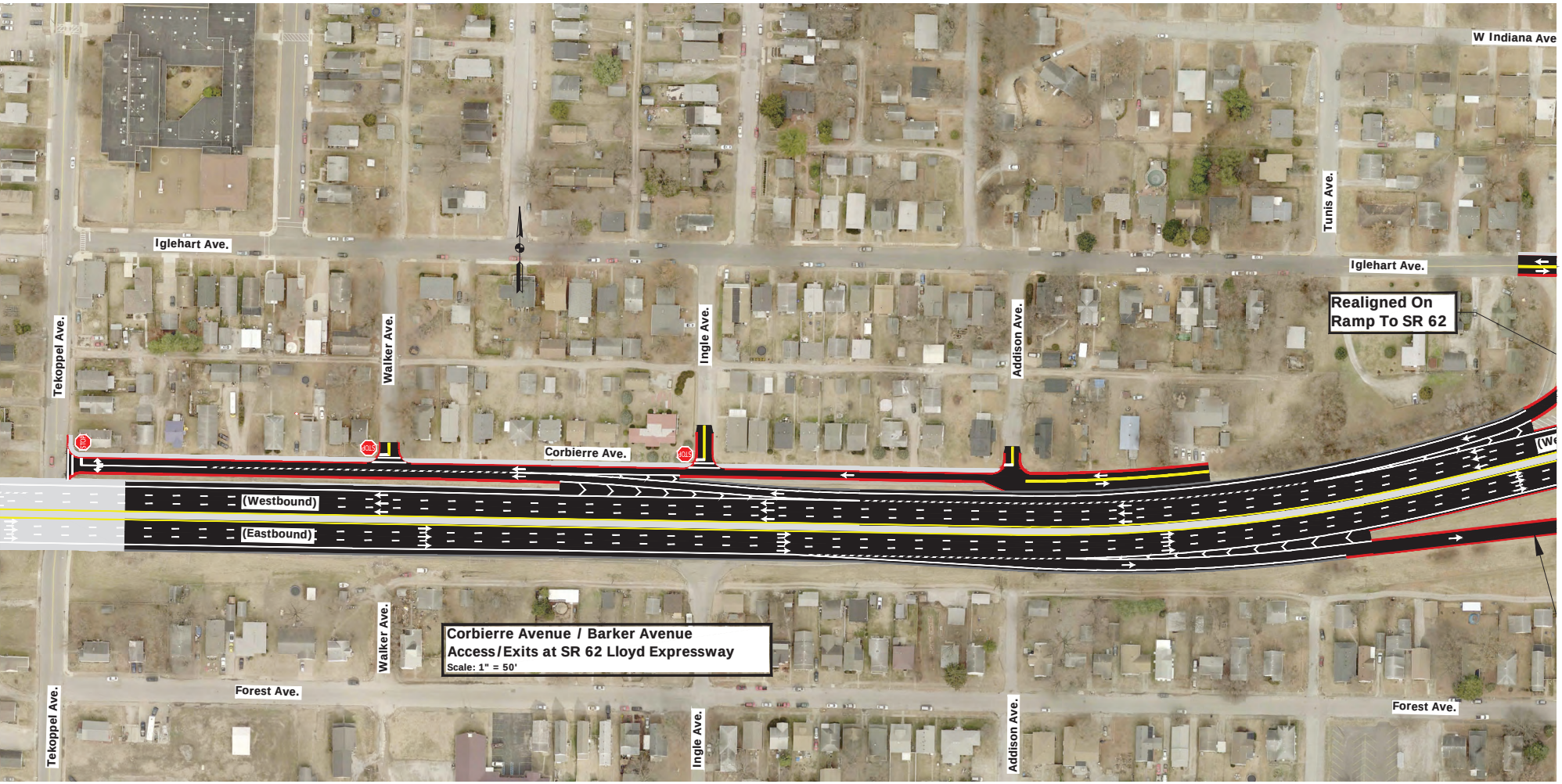
- Intersection on curve
- Sight distance is limited
- Safety improvement needed

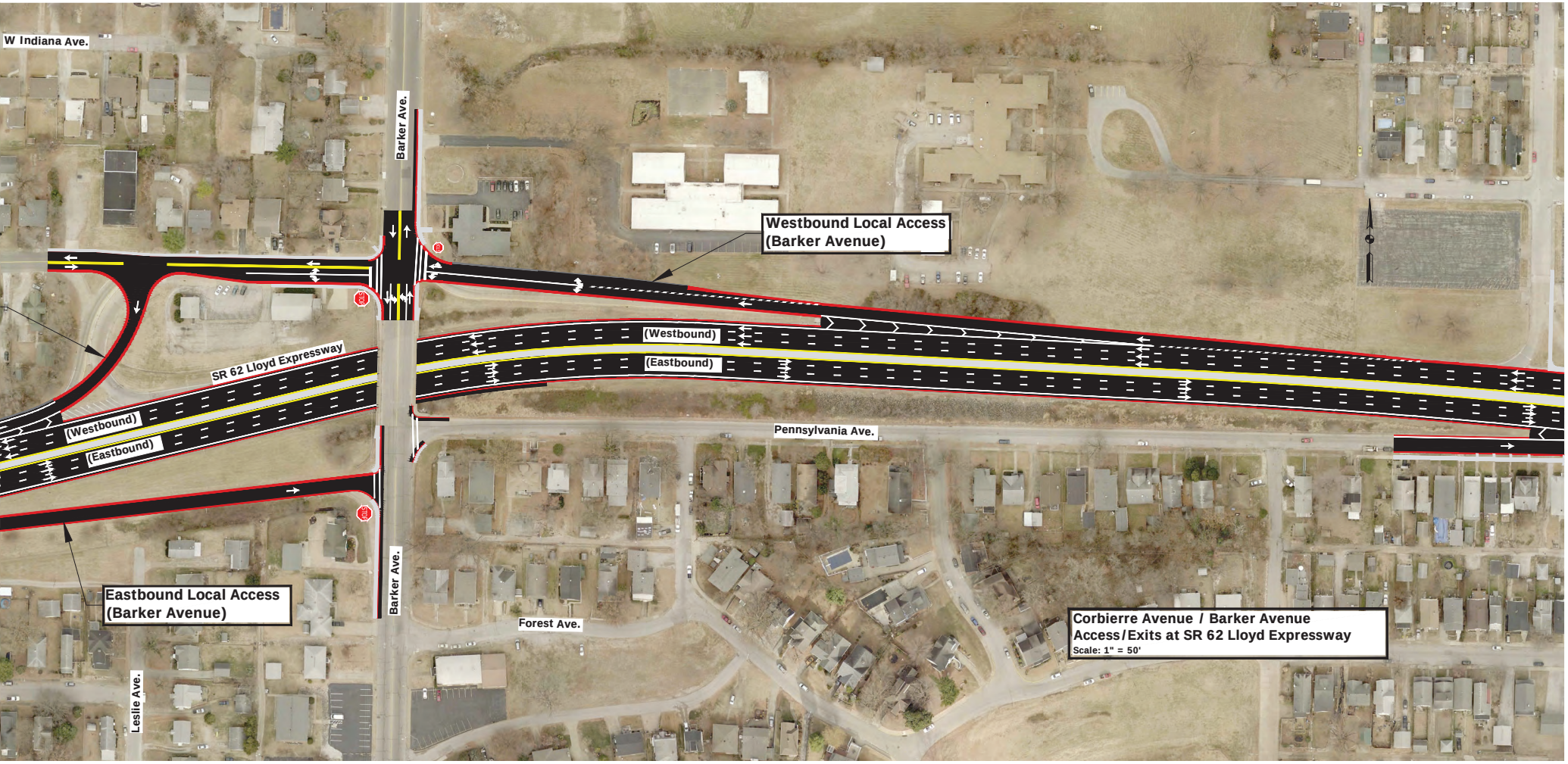


Tabletop display boards for the September 26, 2023 Public Hearing


Middle Mt. Vernon Road
Felstead Road
Middle Mt. Vernon Road
Schutte Road / Felstead / Middle Mt. Vernon
Intersections at SR 62 Lloyd Expressway
Scale: 1" = 50'


Weston Road
Red Bank Rd.
University Drive
Access Road
SR 62 Lloyd Expressway
(Westbound)
(Eastbound)
Red Bank Road / SR 62 (Lloyd Expressway) Intersection
Scale: 1" = 50'
Red Bank Rd.
Access Road
Access Road
Pearl Drive


W Indiana Ave
Iglehart Ave.
Iglehart Ave.
Tunis Ave.
Realigned On
Ramp To SR 62
Tekoppel Ave.
Walker Ave.
Ingle Ave.
Addison Ave.
Corbierre Ave.
(Westbound)
(Eastbound)
Corbierre Avenue / Barker Avenue
Access/Exits at SR 62 Lloyd Expressway
Scale: 1" = 50'
Walker Ave.
Forest Ave.
Tekoppel Ave.
Ingle Ave.
Addison Ave.
Forest Ave.


W Indiana Ave.
Barker Ave.
Westbound Local Access
(Barker Avenue)
(Westbound)
(Eastbound)
SR 62 Lloyd Expressway
(Westbound)
(Eastbound)
Pennsylvania Ave.
Eastbound Local Access
(Barker Avenue)
Barker Ave.
Forest Ave.
Leslie Ave.
Corbierre Avenue / Barker Avenue
Access/Exits at SR 62 Lloyd Expressway
Scale: 1" = 50'

THE LLOYD4U

TheLloyd4U Westside Improvements Public Hearing

Public Speaker Sign-Up

Tuesday, September 26, 2023 – City View at Sterling Square – Evansville, IN

Name
James Wilhite
Kent Hollander
Eugene Weber
Rachel Thomas

THE LLOYD4U

COMMENT FORM

Please check all that apply:

- ☐ I own a business along the Lloyd Expressway
- ☐ I work along the Lloyd Expressway
- ☐ I live along the Lloyd Expressway
- ☐ I travel the Lloyd Expressway frequently
- ☐ I don't live or work along the Lloyd Expressway, but I have interest in the project

How many times do you typically travel on the Lloyd Expressway?

- ☐ Daily
- ☐ Multiple times a day
- ☐ 3-5 times per week
- ☐ 3-5 times per month
- ☐ Monthly
- ☐ A few times a year

Would you like to receive project updates?

- ☐ By email. Email address: _____
- ☐ By text. Phone number: _____

LET US KNOW WHAT YOU THINK

_____

_____

_____

_____

_____

_____

_____

Name: _____ **Address:** _____

E-mail: _____ **Phone number:** _____

Comments can be mailed to Nicole Minton, Lochmueller Group, 6200 Vogel Road, Evansville, IN 47715 or emailed to Nicole.Minton@lochgroup.com. Submit comments or have them postmarked by Oct. 11, 2023.

INDIANA DEPARTMENT OF TRANSPORTATION INDOT

NextLevel

Comment cells that are greyed do not pertain to the limits of Des. No. 2001917.

Note: Grayed out boxes are comments pertaining to Des. No. 2001917.

	Name	Theme	Comment	Summary Points	Response	Date	Contact Info	Type
1	Rep. Wendy McNamara	Safety Schutte Felstead MMV	Thank you for the invitation. I will be hosting a food truck for first responders at the time of the zoom call. I will try to call in and pay attention. I had a concern that I had forwarded to Rusty Fowler. It has to do with the proposed right turn only off of Felstead (going East) and the right turn only off of Schutte (going east). There is a legitimate fear that folks wanting to go WEST on 62 will go through a residential subdivision to get to Schutte. Most people will choose to go through the subdivision so that they don't have to go further down the road from Felstead to the U- turn to go back west. At Schutte, they will still have that U-turn but it will require them not go as far to the east to backtrack to go west. This subdivision already has a speeding problem with USI students using it as a cut through. I am not sure the amount of traffic coming north on Felstad will be, but I know that it is a well-used north/south road. I am sure many of those wanting to go West will go the through the subdivision. Additionally, Deaconess is building a pediatric clinic on the corner of Felstad and 62. I can only imagine the traffic that will bring. I do not have a solution, but I want it on someone's radar to come up with one. Neighbors have suggested speed bumps in the neighborhood. There was a traffic "study" line (not sure who) put in the subdivision for less than a week prior to USI and EVSC beginning. It was in one location closer to the apartments. Traffic substantially increases once both are in session. Sorry so long. Takes a bit to describe. If I have any other concerns or questions, I will send them you way.	A. Traffic will divert through neighborhood to use Schutte Road rather than Felstead Road. B. New clinic on Felstead and 62.	A. Schutte, Felstead and Middle Mt. Vernon will all use the same median U-turn located east of Middle Mt. Vernon Road. Felstead traffic is closer to the median U-turn than Schutte Road and would have no benefit to go west through the neighborhood to access Schutte only to go east and pass Felstead on their way to the median U-turn. B. Noted	09/14	[redacted]	email

2	Jon David	Access to Information	Good morning. I will be out of town on the 26th but was wondering if there is going to be any web casting of the meeting that I might be able to watch. Thank you, Jon David	A. Access to information	A. The following information was provided to Jon David on September 19, 2023. The recorded presentation will be available on the project website at thelloyd4u.com beginning the day after the hearing.	9/19	[redacted]	email
3	David Woosley	St. Joseph Avenue	Good morning, Nicole! I hope you and the family are doing well and adjusting easily to life back in Evansville! I am the Environmental and Sustainability Program Manager at Mead Johnson and we just received the legal notice for the upcoming west side public hearing, and I saw that you were the contact! Would you be able to share some drawings/plans for the upgrades to St. Joe and Wabash? We would like to review so that we can produce a game plan for any affects the construction may have on site logistics. Thank you!	A. Information on St. Joseph Avenue and Wabash	A. The following information was provided to David Woosley on September 19, 2023. We are updating the signal at the St. Joseph Avenue intersection to coordinate with Wabash Avenue timing. The bulk of the changes are happening on the north side of the intersection. To accommodate southbound cars on St. Joe, we will extend the left turn lanes and add an additional right turn lane. We will keep two lanes for through movement. Also in this area, we will be reconstructing the pedestrian bridge, and constructing a new sewer system to take this section off the current combined sewer system. At Wabash, we will be increasing the length of the eastbound left turn lane. For drivers headed west on the Pigeon Creek bridge, we are installing warning signs for traffic backups. We are updating the traffic signal to improve signal timing in with St. Joseph Avenue. Pennsylvania Street that runs behind Koch Air and parallel with the Lloyd will be closed.	09/19	[redacted]	email
4	Steven Scheller	Bus Transportation and Parent Drop off	Nicole Thank you so much for taking my call regarding the INDOT Lloyd Expressway project. I have included several other key Administrators in this email that would need to be informed of any changes that would affect bus transportation and parent drop off. If you could include all of us in future correspondence regarding this project, it would be greatly appreciated. Also thank you for sharing the lloydforyou.com website for more information regarding the project. Will there be a scheduled conference call meeting regarding progress when the project starts this spring? Thank you	A. Will there be a coordination meeting prior to construction?	The project includes an education campaign to keep the public informed as construction approaches. Coordination with stakeholders, like the EVSC, will be a priority.	9/21	[redacted]	Phone/ email

5	Lauren Norvell	Access to info	I was unable to attend the public officials session. Is there something I can preview before Tuesday's session? Thanks!	A. Access to information	A. The following information was provided to Lauren Norvell on September 26, 2023. Thank you for reaching out. If you are unable to attend the hearing this evening, the presentation will be available on the project website tomorrow at www.thelloyd4u.com The website also has descriptions and maps of the intersection improvements as well as videos that help explain the new turning movements.	9/25	[redacted]	email
6	Grant Davis	Business Parking on Igleheart	Good afternoon. I was hoping to make the public meeting this evening but will not be able to make it. I own the property at 96 N Barker Ave (Barker Brewhouse) as well as 3001 Igleheart and wanted to share my input. We need street parking along Igleheart Ave. The current condition has some street parking, but with the new configuration of closing the clover leaf from the lloyd it should be better set up to add more street parking. Currently we have parking on the street from the east drive of our parking lot to the front corner of the NE corner of the building. I feel that there is no reason they shouldn't add additional street parking between the entrance and exit of our parking lot. There is no reason to have the right hand turn lane stretch all the way to the west end of our parking lot. By closing off the clover leave it will be eliminating the majority of the east bound traffic on igleheart approaching Barker. There is 27' from the edge of the sidewalk to the centerline of the road so there is more than enough width for parking and a drive lane. Currently with all the clover leaf traffic, the "right turn lane" is only what I have sketched on the attached document due to the current street parking. Our goal is to keep as many of our customers close to the building so our overflow parking does not push out into the surrounding neighborhood. This is why we purchased the property at 3001 Igleheart as well. We have all the parking required by code, but have been fortunate enough to be very successful in our first 6 months and attract large crowds. We also use the existing street parking to accommodate some of our larger food trucks. Taking this away would be detrimental to our business. This project will have major impacts on our business during construction but we feel the final condition will be an overall improvement to the traffic and safety along igleheart. We do however feel very strongly that there needs to be street parking on the south side of igleheart. We have spoken to all the adjacent neighbors and they are in agreement on the street parking. These houses have extremely small driveways that can only accommodate 1 or 2 cars.	A. Add or maintain street parking on Igleheart in front of Barker Brewhouse	Igleheart will be reconstructed basically as it exists today. Changes to the existing roadway would have to come from the city, since this is a city street.	9/26	[redacted]	email

			Please take our request into consideration and revise the plan for the unnecessarily long right turn lane. Please reach out with any comments or questions.					
7	Rachel Thomas	Sound Barrier on Corbierre	Why does this project not include sound barriers for those residing on Corbierre Avenue? The noise pollution is already substantial and the addition of extra lanes to the Lloyd Expressway, as well as Corbierre Avenue, will be exponential. The other side of the Llyod, those who live on Forest Avenue, are getting a sound barrier and have more room away from the highway as it stands including more grass area and an alley. I thank you for your time and consideration. As a resident of Corbierre Avenue this is something I feel needs that needs addressed before undertaking this project Spring 2024. I hope you find this comment well and address it at this presentation. Best, Rachel Thomas	A. Why does Forest Ave. get a sound barrier and Corbierre does not?	A. The noise analysis included the residences north of the Lloyd Expressway between Tekoppel Avenue and Barker Avenue and concluded that many of the properties along Corbierre Avenue would experience noise impacts as defined by FHWA and INDOT noise policy. Subsequently, noise abatement barriers were given consideration for this area. However, unlike the south side of the Lloyd Expressway, placement of a continuous barrier with no breaches along the portion of the highway would not be feasible since the westbound traffic exit ramp to Tekoppel Avenue via Corbierre Avenue would require a large gap in the barrier. Two shorter length barriers east and west of the exit ramp gap were modeled to a height of 18 feet to evaluate noise reduction effectiveness for the Corbierre Avenue residents. The length and position of the barriers was limited by the need to maintain clear zone design standards. While these barriers were predicted to provide 5 to 7 dBA noise reduction for a few residences along Corbierre Avenue, the magnitude of the benefits do not meet the INDOT policy criteria for feasible and reasonableness. Based on this analysis, a feasible and effective barrier is not possible for this location. Construction of an effective noise barrier between the Lloyd Expressway and Corbierre Avenue residences would require eliminating the westbound exit ramp to Corbierre Avenue that provides access to Tekoppel Avenue. Closing the westbound exit ramp to Corbierre Avenue would result in	9/26	[redacted]	email

					drivers utilizing the westbound exit ramp to Barker Avenue then continue along Igleheart Avenue to access Tekoppel Avenue. Igleheart Avenue is a 28 ft wide residential street with street parking on both sides of the road that prohibits continuous two-way traffic. Additionally, Tekoppel Elementary School is located at the corner of Tekoppel Avenue and Igleheart Avenue. Closing the Corbierre Avenue exit would create additional traffic delays and congestion at the Barker Avenue intersection; create additional safety hazards along Iglehart Avene; and create additional traffic in a school zone. For these reasons closing the Corbierre Avenue exit ramp is not considered a prudent option.			
8	Eugene Weber	Capacity during detours	How will the West Terrace School traffic be handled during construction? Can the side roads be used for detoured traffic handle the workload?	A. What is the detour for Schutte Road and the traffic associated with West Terrace school? B. How do you measure impact to the surrounding road network?	A. The north leg of Schutte Road will be closed for 14 days for reconstruction during Phase 2 of the maintenance of traffic plan. The official detour will consist of using Middle Mt Vernon Road and SR 62. This closure will occur during the summer when school is not in session. B. The official detour route was coordinated with the County Engineer. Other routes can be used as well.	9/26	[redacted]	Comment form
9		Light Pollution	There was talk about noise pollution, but not about light pollution. I think this is a topic that should be researched. Having more lights doesn't always mean better to the surrounding areas. Please consider lighting that is energy efficient as well.	A. Was light pollution studied? B. Use energy efficient lighting	A. Most of the project is located within urban areas that currently have existing lighting. The lighting at intersections outside the urban areas without existing lighting are required for safety and the lights will be standard height roadway lights that utilize LED bulbs to limit the energy usage and they will have minimal light pollution to the surrounding areas outside the transportation facility. B. The streetlights were designed with LED lights to be energy efficient.	9/26	[redacted]	Comment form
10	Mary Thomas	Noise Barrier at Corbierre	I find it almost laughable that a sound barrier will be put across from where I live. Those houses have their back yard and garages toward the Lloyd. (I was told a study was done did they study Tekopple exit side too? That where my front porch is. The noise pollution is about unbearable already. I have never in all my travels seen a highway butted up to people's front doors for blocks – but the plan is to block noise from the garages across the highway? There should be a barrier on Corbierre going to Tekopple any less is a gross flaw. If not one placed there then what.	A. Why does Forest Avenue get a sound barrier and Corbierre does not?	A. The noise analysis included the residences north of the Lloyd Expressway between Tekoppel Avenue and Barker Avenue and concluded that many of the properties along Corbierre Avenue would experience noise impacts as defined by FHWA and INDOT noise policy. Subsequently, noise abatement barriers were given consideration for this area. However, unlike the south side of the Lloyd Expressway, placement of a continuous barrier with no breaches along the portion of the highway would not be feasible since the westbound traffic exit ramp to Tekoppel Avenue via Corbierre Avenue would require a large gap in the barrier. Two shorter length barriers east and west of the exit ramp gap were modeled to a height of 18 feet to evaluate noise reduction effectiveness for the Corbierre Avenue residents. The length and	9/26	[redacted]	Comment Form

					position of the barriers was limited by the need to maintain clear zone design standards. While these barriers were predicted to provide 5 to 7 dBA noise reduction for a few residences along Corbierre Avenue, the magnitude of the benefits do not meet the INDOT policy criteria for feasible and reasonableness. Based on this analysis, a feasible and effective barrier is not possible for this location. Construction of an effective noise barrier between the Lloyd Expressway and Corbierre Avenue residences would require eliminating the westbound exit ramp to Corbierre Avenue that provides access to Tekoppel Avenue. Closing the westbound exit ramp to Corbierre Avenue would result in drivers utilizing the westbound exit ramp to Barker Avenue then continue along Igleheart Avenue to access Tekoppel Avenue. Igleheart Avenue is a 28 ft wide residential street with street parking on both sides of the road that prohibits continuous two-way traffic. Additionally, Tekoppel Elementary School is located at the corner of Tekoppel Avenue and Igleheart Avenue. Closing the Corbierre Avenue exit would create additional traffic delays and congestion at the Barker Avenue intersection; create additional safety hazards along Iglehart Avene; and create additional traffic in a school zone. For these reasons closing the Corbierre Avenue exit ramp is not considered a prudent option.			
11	Tina Little Mike Hurley	Speed on Tekoppel exit	We think rumble strips need to be added to Corbierre Ave from the Ingle to Tekoppel to decrease speed coming off the Lloyd. Currently the speed limit along Corbierre is 30 moh. People drive past my house at speeds in excess of 50 mph.	A. Add rumble strips to Corbierre.	A. Rumble strips make a loud noise when vehicles run over them and therefore are not recommended in a residential area. A merge lane will be constructed between the Igleheart entrance ramp and the Tekoppel Exit Ramps for drivers to slow down before exiting onto Corbierre.	9/26	[redacted]	Comment form
12	Ian Woolsey	Coordination of changes on maps	Coordinate with Google/Apple maps throughout the project to keep GPS maps accurate. Thank you. Great ideas, great project, great presentation!	A. Coordinate changes with Google/Apple B. Approves of project	A. The project team is looking at best practices for keeping popular applications updated of closures and detours during construction. Signing up for text alerts or emails will also help drivers manage changes during construction. B. Noted	9/26	[redacted]	Comment form
13	Ryan Leeds	Access at Ingle	It would be best to leave the entrance to eastbound Lloyd at Ingle. If not those who use that entrance regularly would either have to enter east bound Lloyd from Pennsylvania or go to the Rosenberger intersection.	A. Keep access to EB Lloyd at Ingle open.	One of the goals of the project was to improve safety. A good way to improve safety is to eliminate access where possible. The existing Rt-In/Rt-Out at this location has a small traffic count with other access available. Another reason to close this access was because of the revisions to the westbound exit ramp at Barker Ave. The exit ramp was	9/26	[redacted]	Comment form

					designed to meet current design standards and thereby requiring the ramp length to be increased. The intersection and the proposed ramp are now too close together which will cause confusion with drivers turning at Ingle or onto the ramp. Closing off the intersection also allows for a Sound Barrier to be installed along the south side of the Lloyd from Tekoppel bridge to Barker Ave. A sound barrier would not be feasible if the intersection were to remain open. Alternative routes are available to the residents in the area depending on where they come from. For Rt-In traffic the use of Barker Ave/Rosenberger Ave/Red Bank/Claremont. For Rt-Out traffic use Pennsylvania/Ray Becker. While these options may be a little inconvenient, the closing of Ingle Ave will reduce conflict points and improve safety.			
14	Derek Reyher	Local network traffic Stoplights Schutte	What considerations are there for the extra traffic on the side roads? Like Middle Mt. Vernon west of the Parkway and Hogue Road? Because there will be more traffic on those roads. Why add more stoplights to an expressway that already has too many? Why is the U-turn to get off the east bound lane of the Lloyd all the way down by Boehne Camp if I want to go across Schutte?	A. How do you measure impact to the surrounding road network? B. Why are you adding stoplights? C. Why is the Schutte / Felstead / MMV U-turn by Boehne Camp?	A. Traffic modeling gives the project team data that shows how roads perform now and in the future once improvements are complete. B. Additional traffic signals required at the Displaced Left Turn intersections are basically the left turn signals at the intersection relocated to a different location ahead of the intersection. These additional signals work in conjunction with the intersection signal and function as one signal. C. The area of Schutte/Felstead/Middle Mt Vernon intersections were designed as a system of intersections because of their proximity to each other. The U-Turn for eastbound traffic had to be placed east of Middle Mt Vernon for turning movements from Schutte, Felstead and Middle Mt Vernon because there is limited distance between intersections. This is also why an additional or closer U-Turn couldn't be added nearer to Schutte.	9/26	[redacted]	Comment form
15	Peter Johnson	Road closures Schutte University Parkway	I would like to know timing of road closures. If road closures between Schutte and University Parkway are during the school year and traffic is diverted north, there is a school in the area and traffic is likely 4x-5x greater than during the summer.	A. Road closures B. Concerned if traffic is diverted north when school is in session	The north leg of Schutte Road will be closed for 14 days for reconstruction. The official detour will consist of using Middle Mt Vernon Road and SR 62. The westbound exit ramp at University Pkwy will be closed for 30 days for reconstruction. The official detour will consist of Schutte/Peerless/Hogue.	9/26	[redacted]	Comment form

					These closures will occur during the summer when school is not in session.			
16	Dotty Baumeyer	Noise Middle Mt. Vernon	Noise is very loud along our stretch of Middle Mt. Vernon north of the Lloyd from USI to County Line Road. Please consider a sound barrier so we can enjoy some outdoor time. It's way too loud to sit outside except on Sundays.	A. Noise analysis at Middle Mt. Vernon between Univ. Pkwy and PCLR	In accordance with 23 CFR 772 and the current Indiana Department of Transportation Traffic Noise Analysis Procedure, only Type I projects that result in added capacity of significant changes to the roadway require highway noise analysis and consideration of noise barriers. The upgrade scope of work proposed for the Lloyd Expressway from the Posey County line to Rosenberger qualifies this as a Type III project. While highway noise along this portion of the Lloyd Expressway is undesirable, INDOT policy does not address preexisting noise impacts for Type III projects.	9/26	[redacted]	Comment form
17	James Wilhite	Pedestrian Bridge LOS Grades Previous Blasting near Barker	I had about three comments that I wanted to make that I thought might need to aired. The first one was I wasn't sure that the pedestrian walk project was still on, but I see now, looking at your posters and literature, that it is still going, so I guess my only comment about that at this time is: Is that work on that pedestrian bridge going to be concurrent with the building of the rest of the road? I just had comments about that. Also, it says here, and also in a letter that I received, improvements along State Road 62 from Rosenberger to Wabash Avenue to reduce the total number of crashes and improve the traffic capacity to a desired level of service letter C. Am I, and everyone present, to assume that letter C means that there is maybe a better grade level B and level A that's not currently being striven for? Is there an E and F also? Going on the A through F grade school grading system, the C struck me as sort of a mid-range kind of thing. Because many of us here can remember 20 some-odd years ago when the Corradino Engineering Group came through, and they spent millions of taxpayer dollars, and all kinds of engineering, drawings, surveys, et cetera, and all of that ended up going into the trashcan. Third thing I wanted to address was, if you plan to extend the westbound access road from the Lloyd up to Barker Avenue, which is now a single lane, and is now a right-turn only, but many people use it to make the illegal left turn, and you're plan is to make it in to a two-lane with a stop sign, if you do plan to extend that road up to Barker and have the actual access onto it extended farther east, towards Lynch Avenue, when that existing exit was built in 1955, the engineers had to use some dynamite to blast through the bedrock that was there by the orphanage, and that caused the windows of the orphanage to break that time. So on behalf of myself and the other residents of Pennsylvania Street, we're just expressing our concern for that, and we would certainly band together if we	A. Is the pedestrian bridge replacement concurrent with road work? B. What does LOS C mean? C. Be aware that any blasting required near Barker Avenue could impact the clay sewer pipes in the area.	A. Yes B. Intersection performance or traffic operations are quantified by six Levels of Service (LOS), which range from LOS A ("Free Flow") to LOS F ("Fully Saturated"). LOS C is normally used for design purposes and represents a roadway with volumes ranging from 70% to 80% of its capacity. LOS D is generally considered acceptable for peak period conditions in urban and suburban areas and would be an appropriate benchmark of acceptable traffic for the study area road system. C. If rock is encountered in the area of Barker Avenue, it will be removed by mechanical methods. Blasting is not allowed as a part of this project.			Oral comment at hearing

			experience any damage to our properties and/or our hundred-plus-year-old clay sewer pipes that run under all of our homes. So that was basically the only comments I wanted to make and thank you so much.					
18	Kent Hollander	DLT at Red Bank	I'm concerned about the intersection at the Red Bank Road and Lloyd with the displaced turning lane because I've sat at that intersection with two left-turn lanes that exist now and had to sit through four or five light changes to get through that intersection to get to Walmart Super Center, and now you're changing it to the displaced single lane left turn, and that traffic is going to be backed out of that single lane onto the double lane that's heading west, and it's going to obstruct the traffic, is my concern.· That the traffic is not going to be able to get off the road into that single lane because of all the traffic that's going in because you have the Walmart, we have Home Depot, you have the cinema complex, and all the restaurants along Pearl Drive there that people are trying to access.· There's a lot of traffic that's trying to get through, and people run that red light now all the time because they get tired of waiting in the two lanes, and you're converging it into one diverted left lane, and I'm afraid that the traffic is going to be backed out on the highway, impeding the flow.· And that's the only comment I have. Okay.· Thank you.	A. Can traffic be accommodated by a single displaced left turn lane when there are currently two left turn lanes to go from WB Lloyd to SB Red Bank?	A. Yes. The displaced left turn intersection configuration allows for more green time to be allocated to the mainline left turn movements. This allows for a reduction in turn lanes while maintaining adequate LOS for the movement.	9/26		Oral comment at hearing
19	Eugene Weber	MOT	At the library, they had a lot of the information on the detours while the construction was going on, and some of these detours are pretty elaborate, and nothing -- you haven't said anything about any of the detours. Would this -- as the time comes, will this information come out or -- like I say, looking at those plans at the library, it looks like it's elaborate on those detours, and I don't know if the side roads are going to be able to handle all of it.	A. Is information on the detours going to be shared? B. Can the surrounding network of roads handle the detours?	A. The Maintenance of Traffic Plan is available on the project website. Construction updates, including detours, will be shared through e-mail, text, on the project website, on social media and through the news media. B. The Maintenance of Traffic Plan was developed through traffic analysis and measured impacts to traffic during construction. Furthermore, SR 62 will not be closed during construction, therefore no official detour route is needed. Side streets will be closed for short durations during construction ranging from 5-30 days. The side streets will function with expected congestion and delays during peak times of the day.	9/26		Oral comment at hearing
20	Rachel Thomas	Noise on Corbierre	I personally am a resident at Corbierre Avenue.· I don't know why we weren't necessarily consulted as well as the people who live on Forest Avenue about a sound blockage.· The noise pollution is already pretty awful.· I just don't know why we were not consulted with that when the front of our houses are basically right next to the Lloyd Expressway.· You're expanding on that, and expanding Corbierre as well. It's just going to lead to more noise pollution.· I think a sound barrier would be something worth, too, considering.· I don't know why the residents weren't consulted.· People who live on Forest, they have a little bit more grass area -- they have more grass area, their garages are right there.· We live right on top of it. That's my main comment.· Thank you.	A. Why were residents on Corbierre not consulted with about a noise barrier?	A. A meeting was held for Corbierre Avenue residents on August 10, 2022 to discuss potential impacts to property owners and review the proposed improvements. That meeting included discussions about repaving, added sidewalks that could impact parking, and access changes. A noise barrier for the Corbierre Avenue residents wasn't discussed because noise analysis wasn't complete. The noise analysis included the residences north of the Lloyd Expressway between Tekoppel Avenue and Barker Avenue and concluded that many of the properties along Corbierre Avenue would experience noise impacts as	9/26		Oral comment at hearing

					defined by FHWA and INDOT noise policy. Subsequently, noise abatement barriers were given consideration for this area. However, unlike the south side of the Lloyd Expressway, placement of a continuous barrier with no breaches along the portion of the highway would not be feasible since the westbound traffic exit ramp to Tekoppel Avenue via Corbierre Avenue would require a large gap in the barrier. Two shorter length barriers east and west of the exit ramp gap were modeled to a height of 18 feet to evaluate noise reduction effectiveness for the Corbierre Avenue residents. The length and position of the barriers was limited by the need to maintain clear zone design standards. While these barriers were predicted to provide 5 to 7 dBA noise reduction for a few residences along Corbierre Avenue, the magnitude of the benefits do not meet the INDOT policy criteria for feasible and reasonableness. Based on this analysis, a feasible and effective barrier is not possible for this location. Construction of an effective noise barrier between the Lloyd Expressway and Corbierre Avenue residences would require eliminating the westbound exit ramp to Corbierre Avenue that provides access to Tekoppel Avenue. Closing the westbound exit ramp to Corbierre Avenue would result in drivers utilizing the westbound exit ramp to Barker Avenue then continue along Igleheart Avenue to access Tekoppel Avenue. Igleheart Avenue is a 28 ft wide residential street with street parking on both sides of the road that prohibits continuous two-way traffic. Additionally, Tekoppel Elementary School is located at the corner of Tekoppel Avenue and Igleheart Avenue. Closing the Corbierre Avenue exit would create additional traffic delays and congestion at the Barker Avenue intersection; create additional safety hazards along Iglehart Avene; and create additional traffic in a school zone. For these reasons closing the Corbierre Avenue exit ramp is not considered a prudent option. Had the noise analysis determined that a sound barrier was feasible and reasonable, a second meeting with residents would have been scheduled to measure interest in a barrier.			
21	Linda Ruff	Speed Limit	My curiosity is, what's the speed limit going to be?· Right now, it's 50.· It's rare that you find anybody that goes that slow.· If you do, you risk your life, and I have literally seen race drivers weaving in and out of traffic.· How's that doing to affect the speed limit?	A. What will the speed limit be?	A. There will be no changes to the posted speed limits.	9/26		Oral comment at hearing

22	Edward Wells	St. Joseph Avenue turn lane	When traveling WB on the Lloyd Expressway, approaching St. Joseph Avenue, I catch a red light sometimes and have to wait a very long time. So many EB cars want to make a left turn onto NB St. Joseph Avenue. I believe that EB to NB traffic is also a main turning movement and needs some improvement. Would dual left turn lanes for EB to NB traffic decrease my wait time?	A. Lloyd/St. Joseph intersection has a long wait time.	All the signals are being replaced to have better signal timing to clear more traffic with shorter wait times. The EB Lloyd to NB St. Joe turn lane is also being extended.	9/27	[redacted]	email
23	Jacqui Sigg	Right of Way	Our office is in receipt of the attached notice regarding the upcoming SR 62 Project in proximity to the property referenced above (our tenant). Realty Income is the owner of the above-referenced property. We understand that the improvements needed may impact our property. At this time are there plans available which show the proposed impacts to our property? Will any right of way be required from the site, and if so what is the timing for the acquisition? Please let us know whether the planned improvements in proximity to our parcel will remain solely within the existing right of way, or if the work will extend onto our property. Any additional information you may have with respect to the project will be appreciated.	A. Impact to property B. Right of way timing	Temporary R/W will be required for minimal grading on the property for the intersection reconstruction at the NE corner of the property. Information about the R/W was sent to Ms. Sigg on 10/3/2023.	9/27	[redacted]	email
24	Kelly Pace	Barker and Igleheart	The Courier's article regarding the proposed W. Lloyd Expressway changes references another public meeting next Tuesday, October 3; however, it does not give the time or location. Do you have that information? The INDOT website is a bit overwhelming. I live on Rupper Ave, which intersects with Igleheart (3 streets down from Barker, 3 streets up from Tekoppel Ave.). I'd like to see the maps of the proposed changes in person. (Via phone) Cars from Barker Brewhouse park along the street at Barker and Igleheart and make it difficult to see traffic approaching on Barker to determine if it is safe to turn. They ignore no parking signs.	A. Additional Meeting B. Access to Maps C. Reduced visibility at current NB Barker exit.	A. That information is inaccurate. The 26th is the date of the hearing. B. Provided website and phoned via request. C. The project will not change the existing parking along Barker Ave or Igleheart Ave. For illegal parking concerns please contact the Evansville Police Department.	9/27	[redacted]	email phone
25	Ryan	Business Impact	How can expect my business to be affected? I have 100 seat pizza shop at 4404 w Lloyd Expressway.	A. Business Impact	A. The Rosenberger intersection improvements will significantly extend the turn lanes for people turning off the Lloyd to head south on Rosenberger. The changes will make the intersection more efficient. There are access changes to a local drive between Red Bank and Rosenberger near Donut Bank. Changes to the drive nearest the business in front of Schnucks will continue to be right in/right out.	9/27	[redacted]	email
26	Scott Krejci	DLT	This type of intersection has been in use in other parts of the U.S. for close to 20 years. One city that's had success with it for at least 15 years or longer, is Madison, WI. It saves lives, as long as people pay attention to their driving habits.	A. Innovative intersections work well	A. Noted	9/27	[redacted]	email

27	Vic Chamness	Information	I'm a west-sider but couldn't attend the hearing due to work. Is there an online version of the plans so we can review and be informed? Thanks for your work and efforts to keep the public informed!	A. Information request	A. The following information was provided to Vic Chamness on September 27, 2023. The presentation is on the project website at thelloyd4u.com/project-documents/ You can find descriptions of the intersection improvements at thelloyd4u.com/westside-improvements/	9/27	[redacted]	email
28	Thomas Stephenson	Access at Ingle	I have concerns about the Lloyd Expressway project. I live off of Tekoppel Ave and use the Lloyd on ramp located at Ingle and the Lloyd multiple times a day. I would like to keep that access point because if it is eliminated it will cause a hardship on me and all my neighbors.	A. Keep access to the Lloyd open at Ingle.	One of the goals of the project was to improve safety. A good way to improve safety is to eliminate access where possible. The existing Rt-In/Rt-Out at this location has a small traffic count with other access available. Another reason to close this access was because of the revisions to westbound exit ramp at Barker Ave. The exit ramp was designed to meet current design standards and thereby requiring the ramp length to be increased. The intersection and the proposed ramp are now too close together which will cause confusion with drivers turning at Ingle or onto the ramp. Closing off the intersection also allows for a Sound Barrier to be installed along the south side of the Lloyd from Tekoppel bridge to Barker Ave. A sound barrier would not be feasible if the intersection were to remain open. Alternative routes are available to the residents in the area depending on where they come from. For Rt-In traffic the use of Barker Ave/Rosenberger Ave/Red Bank/Claremont. For Rt-Out traffic use Pennsylvania/Ray Becker. While these options may be a little inconvenient, the closing of Ingle Ave will reduce conflict points and improve safety.	10/02	[redacted]	LochGroup website
29	Barb Brown	Access at Ingle Bottleneck at St. Joseph Ave. Project awareness	I am sending you this to voice my concerns on the changes to West Lloyd Expressway. Me and my husband went to a meeting quite a while back at City View. The impression we got was that decisions were already made without any input beforehand. The meeting started off with a woman standing up and telling us that "the Lloyd Expressway will never be an Expressway so you need to get over it". Nice way to start… We have property on Ingle Ave that has access to the Lloyd. We were told that Ingle Ave will be closed off. If you have done any research on this area, trains are a big part of the traffic flow and our life, and they stop a lot for long periods of time. The tracks run between our property and the Lloyd. They definitely have a bearing on whether you are going to be on time or not. They	A. Decisions made without public input B. Access concerns for neighborhoods and emergency vehicles in the event of trains C. Traffic merging on the Lloyd at EB at St. Joseph Avenue. D. Was there coordination with Reitz High School E. Does anyone on the project team live here? F. How is this going to help this side of town? G. Notification to the public	A. Public Involvement has been a priority from the beginning of the project. Early in the project, a survey was shared with the public to gather opinions on access changes on the Lloyd. More than 1,500 responses were collected. Stakeholder meetings were held throughout the study with public officials, business owners, neighborhood groups and more. Comment forms were collected at the Public Information Meetings and shared with the project team. Add: One of the goals of the project was to improve safety. A good way to improve safety is to eliminate access where possible. The existing Rt-In/Rt-Out at this location has a	10/02	[redacted]	email

			WILL NOT move or adjust their schedule for anything or anyone. If you block all these small access roads off to these small neighborhoods it could have a profound bearing on when we might receive emergency care (fire or ambulance). When I brought that up to one of the officials at the meeting, he said "how do you know which way the ambulance will be coming from?". The smart remarks were too much. If they were getting tired of the questions, they shouldn't be there. Our understanding is that all of the traffic will be merging eastbound at St. Joseph Ave. That is going to be such a bottleneck. Especially if Reitz High School has any function going on. Just curious, was this discussed with Reitz High School? I guess I would like to know if anyone involved in this project actually lives or commutes in this area. My husband has health issues, so if we need an ambulance and there is a train, we just need to wait, or they need to find an out of the way detour, right? I do not see how any of this is going to help us on this side of town. I'm sure this will have no bearing on the project. The powers that be have made their decisions without any input from those who it will have the most bearing on. By the way, on Facebook I had voiced my concerns after that meeting and had a huge response from those who live in the area and they get it…they know the problems it's going to create. But with that being said, we have brought it up to many of our friends who live on this side and they are not even aware of it. With the drop off of newspaper subscriptions, news like this doesn't reach many until too late. You would have to catch the local news at the right time to be aware of it. I don't know the answer to this, but it does present a problem of getting the word out. Maybe a flyer to all addresses in the immediate area? I don't know… Thank you for your time.		small traffic count with other access available. Another reason to close this access was because of the revisions to westbound exit ramp at Barker Ave. The exit ramp was designed to meet current design standards and thereby requiring the ramp length to be increased. The intersection and the proposed ramp are now too close together which will cause confusion with drivers turning at Ingle or onto the ramp. Closing off the intersection also allows for a Sound Barrier to be installed along the south side of the Lloyd from Tekoppel bridge to Barker Ave. A sound barrier would not be feasible if the intersection were to remain open. B. With Ingle south of the Lloyd being proposed to be closed off, Emergency vehicles coming from the east, north and south will access the area as they currently do. Emergency vehicles coming from the west would use Barker Ave Ramp and go south to access the area bounded by SR 62, the railroad track, and Ray Becker Pkwy. Emergency vehicles going to areas south of the railroad track would utilize the same routes as existing today when a train is crossing/blocking the track. C. Alternate routes are available to the residents in the area depending on where they come from. For Rt-In traffic the use of Barker Ave/Rosenberger Ave/Red Bank/Claremont. For Rt-Out traffic use Pennsylvania/Ray Becker. While these options may be a little inconvenient, the closing of Ingle Ave will reduce conflict points and improve safety. D. The Evansville Vanderburgh School Corporation was included in public officials stakeholder meetings where input was collected at project launch and key milestones. The EVSC was also included in a smaller group that contributed to development of the traffic maintenance plan that will be implemented during construction. E. Lochmueller Group, an Evansville firm, was hired by the Indiana Department of Transportation to perform this phase of study and design on the Lloyd Expressway. Almost all of the team, including the INDOT Project Manager and Lochmueller Group Project			

					Manager, are Evansville residents and use the Lloyd Expressway. F. Closing Ingle Ave to the south will increase safety by reducing conflict points and crashes. Other low volume local streets and drives in the area will be closed for the same reason. G. Notice of the public hearing was sent to all property owners within the study area. A legal notice was placed in the local paper twice. A press release was shared with local news outlets and ran on radio, television, and print. The notice was sent to the project e-mail distribution list, and via text to project subscribers. Meeting notices and reminders were posted on social media channels, and the legal notice and press release were available on the project website.			
30	James Will	McDowell Road	James Will stopped by Lochmueller Group to see plans for the McDowell Road intersection and share his safety concerns. He said he is aware of many accidents that take place at the intersection. He was relieved to see the right in/right out changes and the boulevard left turns. He wondered if an acceleration lane could be made for vehicles making a right turn at McDowell to go east on the Lloyd. He said the poor line of sight caused by the Lloyd's curve makes it difficult to time your turn. Speeding vehicles on the westbound Lloyd often encounter slow moving vehicles entering from McDowell. He said the large retirement community, Solarbron, uses the intersection and cautious drivers are often met by impatient drivers causing danger. In his opinion, an acceleration lane would give those drivers a chance to get up to speed and more clearly see traffic on a straight section for merging. He would ideally like to see the lane extend all the way to University Parkway for eastbound travelers.	A. Pleased to see right in/right out at McDowell Road B. Would like an acceleration lane for merging on EB Lloyd	A. Noted B. The traffic model ran acceptably without the addition of acceleration lanes so an additional lane wasn't recommended.	10/02	[redacted]	In office visit
31	Mary Jane Thomas		We live on Corbierre Ave 47712 and were told there is not a sound barrier planned for this side of the Lloyd project but across the highway where there is a strip of land and an alley, and some have garages or sheds they plan a sound barrier. This is planned to take some of my front yard the Tekopple exit in front of houses on the street and the noise level now is almost intolerable and no barrier. My living room is going to be on a six-lane highway. (also Tekopple exit) I believe whatever thresholds for sound pollution Corbierre goes beyond that. I have never in all my travels have seen a six-lane highway butted up to a row of houses in residential area and across there a alley and no one's front door. I believe you should buy all the houses that will be on Tekopple exit. Memorial Parkway by the river (I-69) has a barrier the houses are hundreds of yards from the street and probably not even a fourth of traffic. All sound will	A. Why does Forest Avenue get a sound barrier and Corbierre does not?	A. The noise analysis included the residences north of the Lloyd Expressway between Tekoppel Avenue and Barker Avenue and concluded that many of the properties along Corbierre Avenue would experience noise impacts as defined by FHWA and INDOT noise policy. Subsequently, noise abatement barriers were given consideration for this area. However, unlike the south side of the Lloyd Expressway, placement of a continuous barrier with no breaches along the portion of the highway would not be feasible since the westbound traffic exit ramp to Tekoppel Avenue via Corbierre Avenue would require a large gap in the barrier. Two shorter length barriers east and west of the exit ramp gap were modeled to a height of 18 feet to	10/03	[redacted]	INDOT Customer Service Line

			bounce even more to Corbierre side if Forrest Ave side for garages and alley gets a sound barrier. There are quite a few of us now aware of this fact, what are you going to do for us?		evaluate noise reduction effectiveness for the Corbierre Avenue residents. The length and position of the barriers was limited by the need to maintain clear zone design standards. While these barriers were predicted to provide 5 to 7 dBA noise reduction for a few residences along Corbierre Avenue, the magnitude of the benefits do not meet the INDOT policy criteria for feasible and reasonableness. Based on this analysis, a feasible and effective barrier is not possible for this location. Construction of an effective noise barrier between the Lloyd Expressway and Corbierre Avenue residences would require eliminating the westbound exit ramp to Corbierre Avenue that provides access to Tekoppel Avenue. Closing the westbound exit ramp to Corbierre Avenue would result in drivers utilizing the westbound exit ramp to Barker Avenue then continue along Igleheart Avenue to access Tekoppel Avenue. Igleheart Avenue is a 28 ft wide residential street with street parking on both sides of the road that prohibits continuous two-way traffic. Additionally, Tekoppel Elementary School is located at the corner of Tekoppel Avenue and Igleheart Avenue. Closing the Corbierre Avenue exit would create additional traffic delays and congestion at the Barker Avenue intersection; create additional safety hazards along Iglehart Avene; and create additional traffic in a school zone. For these reasons closing the Corbierre Avenue exit ramp is not considered a prudent option.			
32	Rachel Thomas	Corbierre Sound Barrier	To whom this may concern, As of now the individuals overseeing and planning the LLOYD4U project are considering a sound barrier/blockade for the residents living on Forest Avenue. However, these same people are not extending the same courtesy to the people who live with houses on Corbierre Avenue. Those of us living on Corbierre Ave. and those living on streets close by could greatly benefit from some form of noise reduction as well. The noise pollution from the Lloyd expressway is abysmal. Speaking to Nichole Minton, one of the leading people on the Lloyd4You project, claimed that they are supplying the side closest to Forest Avenue based on a sound survey. I work in a lab so as a self-proclaimed woman of science, I personally love statistics and data, but the people working on this project do not live in this neighborhood. I have lived and owned my home on Corbierre Avenue for two years now and there are peak traffic times I cannot be outside or in my living room because I cannot hear, especially if I am on the phone or have guests. When I am walking my dog up or down	A. Why does Forest Avenue get a sound barrier and Corbierre does not? B. Will noise bounce off the noise barrier and create greater impacts to Corbierre residents? C. Will another noise analysis be done after construction and installation of the noise barrier?	A. The noise analysis included the residences north of the Lloyd Expressway between Tekoppel Avenue and Barker Avenue and concluded that many of the properties along Corbierre Avenue would experience noise impacts as defined by FHWA and INDOT noise policy. Subsequently, noise abatement barriers were given consideration for this area. However, unlike the south side of the Lloyd Expressway, placement of a continuous barrier with no breaches along the portion of the highway would not be feasible since the westbound traffic exit ramp to Tekoppel Avenue via Corbierre Avenue would require a large gap in the barrier. Two shorter length barriers east and west of the exit ramp gap were modeled to a height of 18 feet to evaluate noise reduction effectiveness for the Corbierre Avenue residents. The length and position of the barriers was limited by the need to maintain clear zone design standards.	10/10	[redacted]	e-mail

			Igleheart, or even West Franklin, or Virginia, I can still hear the traffic from the Lloyd Expressway. I am already so close to the highway and I cannot imagine how much worse it will be when my home is closer to it when it is expanded. Getting back to the topic of Forest Avenue, I am in no way a physicist, but I have a hard time believing that only adding a wall to one side will cause noise from the highway to bounce back at us who live on Corbierre and around the neighborhood. Put your phone into a bowl or put it close to a wall and you will notice the initial noise will bounce off of a surface. Imagine all of that traffic noise bouncing back off of one wall. The people overseeing this project do not understand the residents' (who reside on Corbierre Avenue) quality of life as it stands and how much worse it could get. Will a sound survey be conducted after construction of the Lloyd Expressway and sound barrier over by Forest? If there is a sound survey conducted and yields unfavorable results, will something be done then? Will the individuals devising and executing this project consider the addition of some form of noise reduction for the residents of Corbierre Avenue? Clarity on this matter would be appreciated. With the addition of an extra lane on both sides of the Lloyd, as well as an extra lane on Corbierre, I firmly believe this project could negatively affect residents' day-to-day life outside of merely travelling. I know it will impact mine due to the further propagation of noise pollution alone. This project will affect residents' means of commute, property value, exposure to traffic, and exposure to noise pollution. It is a means of changing our quality of life, and it is clear that accommodations are being made for residents on Forest Avenue but not for the residents of Corbierre. This does not make sense to me. Being that this project is through the state of Indiana there is not much to contend with because whether the residents like it or not, it is happening. However, I strongly urge those finalizing the project this winter to reconsider and add some form of sound cancellation for the residents of Corbierre Ave. since the noise pollution is already so definitive. I thank whoever reads this for their time and consideration.		While these barriers were predicted to provide 5 to 7 dBA noise reduction for a few residences along Corbierre Avenue, the magnitude of the benefits do not meet the INDOT policy criteria for feasible and reasonableness. Based on this analysis, a feasible and effective barrier is not possible for this location. Construction of an effective noise barrier between the Lloyd Expressway and Corbierre Avenue residences would require eliminating the westbound exit ramp to Corbierre Avenue that provides access to Tekoppel Avenue. Closing the westbound exit ramp to Corbierre Avenue would result in drivers utilizing the westbound exit ramp to Barker Avenue then continue along Igleheart Avenue to access Tekoppel Avenue. Igleheart Avenue is a 28 ft wide residential street with street parking on both sides of the road that prohibits continuous two-way traffic. Additionally, Tekoppel Elementary School is located at the corner of Tekoppel Avenue and Igleheart Avenue. Closing the Corbierre Avenue exit would create additional traffic delays and congestion at the Barker Avenue intersection; create additional safety hazards along Iglehart Avene; and create additional traffic in a school zone. For these reasons closing the Corbierre Avenue exit ramp is not considered a prudent option. B. For most instances, INDOT Noise Policy requires that noise barriers be constructed with noise absorptive materials with a noise reduction coefficient (NRC) of at least 0.70 on the roadway side of the barrier. These materials are designed to significantly reduce the sound energy that would otherwise be reflected off the hard barrier surface and back across the highway to potential receptors (residences) on the opposite side of the highway. Additionally, the sound energy is further attenuated (reduced) because of the extra distance the sound would follow from the vehicles to the noise barrier and back across the highway. In the case of the Lloyd Expressway, reflected noise off the barrier from the vehicles on the highway would travel between 180 and 250 feet from the highway lanes to the residences along Corbierre. Even in the absence of an absorptive barrier, this added distance would only result in an imperceptible increase in sound energy above the level expected directly from the highway. C. A noise analysis would not be conducted following construction of the highway and			

					installation of the barrier unless another Type I project warrants additional analysis. In the event that INDOT has reason to believe that the barrier installed is not performing as anticipated, a follow-up investigation would be taken into consideration.			
33	Jerry Hammer	Corbierre Noise	I am beyond concerned about how this affects houses on Corbierre Ave and the 'can not believe" sound barrier wall would be put on the side where there is a strip of land, an alley then garages , and storage barns to houses on Forrest Ave back yard. Houses on Corbierre will have their living rooms in the middle of the six-lane highway with an exit to boot. The noise pollution now is almost unbearable. But across from us, it is somehow worse for garages and an alley. I am sure it hits whatever threshold is required e never in my travels seen a six-lane plus highway next to residents' front door (only in Evansville?) There is a barrier wall on Memorial Parkway the houses are hundreds of yards from road with I bet not a fourth of the traffic. Really Tekopple exit should go all the way to either off Barker right or left or all the way to Rosenberg. Who benefits from having a highway in their front room? There should have been offered to buy all homes on that side on Corbierre for what is being done. And across the highway in alleys and backyards, one will see not the alley or a garage but a sound barrier wall. It is wrong, Our houses should have been purchased not just a portion of our frontage so people can actually see our faces as they zoom past.	A. Why does Forest Avenue get a sound barrier and Corbierre does not? B. Why don't you close the Tekoppel exit and make drivers use Barker or Rosenberger? C. Why don't you buy our homes?	A. The noise analysis included the residences north of the Lloyd Expressway between Tekoppel Avenue and Barker Avenue and concluded that many of the properties along Corbierre Avenue would experience noise impacts as defined by FHWA and INDOT noise policy. Subsequently, noise abatement barriers were given consideration for this area. However, unlike the south side of the Lloyd Expressway, placement of a continuous barrier with no breaches along the portion of the highway would not be feasible since the westbound traffic exit ramp to Tekoppel Avenue via Corbierre Avenue would require a large gap in the barrier. Two shorter length barriers east and west of the exit ramp gap were modeled to a height of 18 feet to evaluate noise reduction effectiveness for the Corbierre Avenue residents. The length and position of the barriers was limited by the need to maintain clear zone design standards. While these barriers were predicted to provide 5 to 7 dBA noise reduction for a few residences along Corbierre Avenue, the magnitude of the benefits do not meet the INDOT policy criteria for feasible and reasonableness. Based on this analysis, a feasible and effective barrier is not possible for this location. Construction of an effective noise barrier between the Lloyd Expressway and Corbierre Avenue residences would require eliminating the westbound exit ramp to Corbierre Avenue that provides access to Tekoppel Avenue. Closing the westbound exit ramp to Corbierre Avenue would result in drivers utilizing the westbound exit ramp to Barker Avenue then continue along Igleheart Avenue to access Tekoppel Avenue. Igleheart Avenue is a 28 ft wide residential street with street parking on both sides of the road that prohibits continuous two-way traffic. Additionally, Tekoppel Elementary School is located at the corner of Tekoppel Avenue and Igleheart Avenue. Closing the Corbierre Avenue exit would create additional traffic delays and congestion at the Barker Avenue intersection; create additional safety hazards along Iglehart Avene; and create additional traffic in a school zone. For these reasons	10/11	[redacted]	email

					closing the Corbierre Avenue exit ramp is not considered a prudent option. B. See above response to Part A. C. Real estate acquisition occurs when right-of-way is required for a project and isn't reasonable as a mitigation effort in this case.			
34	John Scheer	Supports project DLT at Red Bank Corbierre Noise Barrier	In response to the request for comments for the West Side Lloyd 4U project INDOT public hearing of September 26, 2023, I generally support the project and hope it will rapidly be done. I do think that you will need to make sure that the proposed turn from the westbound Lloyd to southbound Red Bank Road and Pearl Drive have enough turn lane space to not cause backups on the main westbound Lloyd. I also think the people on the north side of the Lloyd just west of Barker deserve a noise barrier. Other than those points, I am happy with the proposed project.	A. Supports project B. Is the turn lane long enough to accommodate traffic headed WB on Lloyd to SB Red Bank? C. Corbierre should get a noise wall too.	A. Noted B. Yes. The displaced left turn intersection configuration allows for more green time to be allocated to the mainline left turn movements. This allows for a reduction in turn lanes while maintaining adequate LOS for the movement. C. The noise analysis included the residences north of the Lloyd Expressway between Tekoppel Avenue and Barker Avenue and concluded that many of the properties along Corbierre Avenue would experience noise impacts as defined by FHWA and INDOT noise policy. Subsequently, noise abatement barriers were given consideration for this area. However, unlike the south side of the Lloyd Expressway, placement of a continuous barrier with no breaches along the portion of the highway would not be feasible since the westbound traffic exit ramp to Tekoppel Avenue via Corbierre Avenue would require a large gap in the barrier. Two shorter length barriers east and west of the exit ramp gap were modeled to a height of 18 feet to evaluate noise reduction effectiveness for the Corbierre Avenue residents. The length and position of the barriers was limited by the need to maintain clear zone design standards. While these barriers were predicted to provide 5 to 7 dBA noise reduction for a few residences along Corbierre Avenue, the magnitude of the benefits do not meet the INDOT policy criteria for feasible and reasonableness. Based on this analysis, a feasible and effective barrier is not possible for this location. Construction of an effective noise barrier between the Lloyd Expressway and Corbierre Avenue residences would require eliminating the westbound exit ramp to Corbierre Avenue that provides access to Tekoppel Avenue. Closing the westbound exit ramp to Corbierre Avenue would result in drivers utilizing the westbound exit ramp to Barker Avenue then continue along Igleheart Avenue to access Tekoppel Avenue. Igleheart Avenue is a 28 ft wide residential street with street parking on both sides of the road that prohibits continuous two-way traffic. Additionally, Tekoppel Elementary School is	10/11	[redacted]	letter

					located at the corner of Tekoppel Avenue and Igleheart Avenue. Closing the Corbierre Avenue exit would create additional traffic delays and congestion at the Barker Avenue intersection; create additional safety hazards along Iglehart Avene; and create additional traffic in a school zone. For these reasons closing the Corbierre Avenue exit ramp is not considered a prudent option.			
35	Kate Bigge	Interchanges	We need to make progress as a modern city and have a true cross-city travel option without stop lights. What happened to the plan to remove lights and add ramps, like was done at Fulton and 41? Adding more stop lights is not the solution. This city's road infrastructure makes us a laughing stock, and had created a reputation that this is a metro area to be avoided. Let's not put money into more stop lights.	A. Remove lights and add interchanges.	The focus for this project is to improve safety, improve rideability, and reduce delays, while maintaining accessibility. Interchanges or overpasses were removed from consideration due to costs and impacts. Development along the Lloyd Expressway means the large construction footprint of an interchange would create numerous impacts to surrounding homes and businesses. The cost of constructing an interchange is more than 5 times the cost of a Displaced Left Turn (DLT). That doesn't include the cost of acquiring the homes or businesses needed to build the interchange. While most people see the benefit of an interchange, the project team must consider costs of construction and impacts to surrounding property owners. One of the primary goals of the Lloyd4U project is to improve efficiency. A DLT moves significantly more traffic in the same amount of time as a traditional intersection and uses the existing footprint with minimal additional right-of-way. Instead of a left-turn signal at the main intersection, theLloyd4U moves left turning traffic to the other side of the road before the main intersection. Through traffic in both directions on the Lloyd and drivers making left turns off the Lloyd are made simultaneously, increasing the number of vehicles that move through the intersection in one cycle. Additional traffic signal heads are an extension of the main signal and function with it. TheLloyd4U reduces travel times at intersections along the Lloyd, especially during peak morning and evening commutes. The Schutte Road intersection will become right-in/right-out, meaning eastbound and westbound traffic will flow continuously on the Lloyd except for a short left turn cycle to allow EB/WB vehicles to access Schutte. Additionally, all signals will be replaced with new technology to provide better timing and coordination between intersections to improve eastbound/westbound flow and efficiency.	10/12	[redacted]	Online Comment Form

36	Jon Golding	Stoplights	fewer stoplights	A. Remove stoplights	The focus for this project is to improve safety, improve rideability, and reduce delays, while maintaining accessibility. Interchanges or overpasses were removed from consideration due to costs and impacts. Development along the Lloyd Expressway means the large construction footprint of an interchange would create numerous impacts to surrounding homes and businesses. The cost of constructing an interchange is more than 5 times the cost of a Displaced Left Turn (DLT). That doesn't include the cost of acquiring the homes or businesses needed to build the interchange. While most people see the benefit of an interchange, the project team must consider costs of construction and impacts to surrounding property owners. One of the primary goals of the Lloyd4U project is to improve efficiency. A DLT moves significantly more traffic in the same amount of time as a traditional intersection and uses the existing footprint with minimal additional right-of-way. Instead of a left-turn signal at the main intersection, theLloyd4U moves left turning traffic to the other side of the road before the main intersection. Through traffic in both directions on the Lloyd and drivers making left turns off the Lloyd are made simultaneously, increasing the number of vehicles that move through the intersection in one cycle. Additional traffic signal heads are an extension of the main signal and function with it. TheLloyd4U reduces travel times at intersections along the Lloyd, especially during peak morning and evening commutes. The Schutte Road intersection will become right-in/right-out, meaning eastbound and westbound traffic will flow continuously on the Lloyd except for a short left turn cycle to allow EB/WB vehicles to access Schutte. Additionally, all signals will be replaced with new technology to provide better timing and coordination between intersections to improve eastbound/westbound flow and efficiency.	10/12	[redacted]	Online Comment Form
37	Jonelle Riets	Interchanges	We need more overpasses, not more stoplights. Already have waaaaaaay too many stoplights as it is.	A. Remove lights and add interchanges.	The focus for this project is to improve safety, improve rideability, and reduce delays, while maintaining accessibility. Interchanges or overpasses were removed from consideration due to costs and impacts. Development along the Lloyd Expressway means the large construction footprint of an interchange would create numerous impacts to surrounding homes and businesses. The cost of constructing an interchange is more than 5	10/12	[redacted]	Online Comment Form

					times the cost of a Displaced Left Turn (DLT). That doesn't include the cost of acquiring the homes or businesses needed to build the interchange. While most people see the benefit of an interchange, the project team must consider costs of construction and impacts to surrounding property owners. One of the primary goals of the Lloyd4U project is to improve efficiency. A DLT moves significantly more traffic in the same amount of time as a traditional intersection and uses the existing footprint with minimal additional right-of-way. Instead of a left-turn signal at the main intersection, theLloyd4U moves left turning traffic to the other side of the road before the main intersection. Through traffic in both directions on the Lloyd and drivers making left turns off the Lloyd are made simultaneously, increasing the number of vehicles that move through the intersection in one cycle. Additional traffic signal heads are an extension of the main signal and function with it. TheLloyd4U reduces travel times at intersections along the Lloyd, especially during peak morning and evening commutes. The Schutte Road intersection will become right-in/right-out, meaning eastbound and westbound traffic will flow continuously on the Lloyd except for a short left turn cycle to allow EB/WB vehicles to access Schutte. Additionally, all signals will be replaced with new technology to provide better timing and coordination between intersections to improve eastbound/westbound flow and efficiency.			
38	Dan Elg	Interchanges	Overpasses, overpasses, overpasses. All money spent on updating the Lloyd should go to increasing the number of overpasses and reducing the number of stoplight intersections. The fact that there is no real freeway going east-west through Evansville (and not even any real side street that goes east-west all the way through) is absolutely ludicrous. It's a city of 120000. If we can't get to full freeway status, we should at least work towards it by adding overpasses over time.	A. Remove lights and add interchanges.	The focus for this project is to improve safety, improve rideability, and reduce delays, while maintaining accessibility. Interchanges or overpasses were removed from consideration due to costs and impacts. Development along the Lloyd Expressway means the large construction footprint of an interchange would create numerous impacts to surrounding homes and businesses. The cost of constructing an interchange is more than 5 times the cost of a Displaced Left Turn (DLT). That doesn't include the cost of acquiring the homes or businesses needed to build the interchange. While most people see the benefit of an interchange, the project team must consider costs of construction and impacts to surrounding property owners. One of the primary goals of the Lloyd4U project is to improve efficiency. A DLT moves significantly more traffic in the same amount	10/12	[redacted]	Online Comment Form

					of time as a traditional intersection and uses the existing footprint with minimal additional right-of-way. Instead of a left-turn signal at the main intersection, theLloyd4U moves left turning traffic to the other side of the road before the main intersection. Through traffic in both directions on the Lloyd and drivers making left turns off the Lloyd are made simultaneously, increasing the number of vehicles that move through the intersection in one cycle. Additional traffic signal heads are an extension of the main signal and function with it. TheLloyd4U reduces travel times at intersections along the Lloyd, especially during peak morning and evening commutes. The Schutte Road intersection will become right-in/right-out, meaning eastbound and westbound traffic will flow continuously on the Lloyd except for a short left turn cycle to allow EB/WB vehicles to access Schutte. Additionally, all signals will be replaced with new technology to provide better timing and coordination between intersections to improve eastbound/westbound flow and efficiency.			
39	Melissa Mindrup	Stoplights	We do not need more stoplights on the Lloyd! There are better ways the money could be spent.	A. Remove stoplights	One of the primary goals of the Lloyd4U project is to improve efficiency. A DLT moves significantly more traffic in the same amount of time as a traditional intersection and uses the existing footprint with minimal additional right-of-way. Instead of a left-turn signal at the main intersection, theLloyd4U moves left turning traffic to the other side of the road before the main intersection. Through traffic in both directions on the Lloyd and drivers making left turns off the Lloyd are made simultaneously, increasing the number of vehicles that move through the intersection in one cycle. Additional traffic signal heads are an extension of the main signal and function with it. TheLloyd4U reduces travel times at intersections along the Lloyd, especially during peak morning and evening commutes. The Schutte Road intersection will become right-in/right-out, meaning eastbound and westbound traffic will flow continuously on the Lloyd except for a short left turn cycle to allow EB/WB vehicles to access Schutte. Additionally, all signals will be replaced with new technology to provide better timing and coordination between intersections to improve eastbound/westbound flow and efficiency.	10/12	[redacted]	Online Comment Form
40	Mike Brown	Stoplights Interchanges	Please, no more stoplights. Overpasses would drastically improve drive time and safety	A. Remove lights and add interchanges.	The focus for this project is to improve safety, improve rideability, and reduce delays, while	10/12	[redacted]	Online Comm

					maintaining accessibility. Interchanges or overpasses were removed from consideration due to costs and impacts. Development along the Lloyd Expressway means the large construction footprint of an interchange would create numerous impacts to surrounding homes and businesses. The cost of constructing an interchange is more than 5 times the cost of a Displaced Left Turn (DLT). That doesn't include the cost of acquiring the homes or businesses needed to build the interchange. While most people see the benefit of an interchange, the project team must consider costs of construction and impacts to surrounding property owners. One of the primary goals of the Lloyd4U project is to improve efficiency. A DLT moves significantly more traffic in the same amount of time as a traditional intersection and uses the existing footprint with minimal additional right-of-way. Instead of a left-turn signal at the main intersection, theLloyd4U moves left turning traffic to the other side of the road before the main intersection. Through traffic in both directions on the Lloyd and drivers making left turns off the Lloyd are made simultaneously, increasing the number of vehicles that move through the intersection in one cycle. Additional traffic signal heads are an extension of the main signal and function with it. TheLloyd4U reduces travel times at intersections along the Lloyd, especially during peak morning and evening commutes. The Schutte Road intersection will become right-in/right-out, meaning eastbound and westbound traffic will flow continuously on the Lloyd except for a short left turn cycle to allow EB/WB vehicles to access Schutte. Additionally, all signals will be replaced with new technology to provide better timing and coordination between intersections to improve eastbound/westbound flow and efficiency.		[redacted]	ent Form
41	Ryan Hilderbrand	Stoplights Interchanges Efficiency	I didn't know the public comment phase was even open, much less that it is now closed. In the off-chance that I am able to still submit a comment: The people of this city would rather us spend $150 million on three new overpasses than on a handful of new stoplights. It is already very difficult to get from USI to the east side in a reasonable amount of time; this plan will make it absolutely impossible.	A. Remove lights and add interchanges B. The improvements will make the Lloyd less efficient.	The focus for this project is to improve safety, improve rideability, and reduce delays, while maintaining accessibility. Interchanges or overpasses were removed from consideration due to costs and impacts. Development along the Lloyd Expressway means the large construction footprint of an interchange would create numerous impacts to surrounding homes and businesses. The cost of constructing an interchange is more than 5 times the cost of a Displaced Left Turn (DLT). That doesn't include the cost of acquiring the	10/12	[redacted]	Online Comment Form

					homes or businesses needed to build the interchange. While most people see the benefit of an interchange, the project team must consider costs of construction and impacts to surrounding property owners. One of the primary goals of the Lloyd4U project is to improve efficiency. A DLT moves significantly more traffic in the same amount of time as a traditional intersection and uses the existing footprint with minimal additional right-of-way. Instead of a left-turn signal at the main intersection, theLloyd4U moves left turning traffic to the other side of the road before the main intersection. Through traffic in both directions on the Lloyd and drivers making left turns off the Lloyd are made simultaneously, increasing the number of vehicles that move through the intersection in one cycle. Additional traffic signal heads are an extension of the main signal and function with it. TheLloyd4U reduces travel times at intersections along the Lloyd, especially during peak morning and evening commutes. The Schutte Road intersection will become right-in/right-out, meaning eastbound and westbound traffic will flow continuously on the Lloyd except for a short left turn cycle to allow EB/WB vehicles to access Schutte. Additionally, all signals will be replaced with new technology to provide better timing and coordination between intersections to improve eastbound/westbound flow and efficiency.			

Peter Putzier

From: Wendy McNamara [redacted]
Sent: Thursday, September 14, 2023 10:39 AM
To: Nicole Minton
Subject: Re: Join Us: Lloyd4U Public Officials Meeting (Online) to Discuss Westside Improvements to Lloyd Expressway
Attachments: image233662.png

Follow Up Flag: Follow up
Flag Status: Flagged

EXTERNAL

Thank you for the invitation.. I will be hosting a food truck for first responders at the time of the zoom call. I will try to call in and pay attention.
I had a concern that I had forwarded to Rusty Fowler. It has to do with the proposed right turn only off of Felstad (going East) and the right turn only off of Schutte (going east). There is a legitimate fear that folks wanting to go WEST on 62 will go through a residential subdivision to get to Schutte. Most peop;le will choose to go through the subdivision so that they don't have to go further down the road from Felstad to the U- turn to go back west. At Schutte, they will still have that u-turn but it will require them not go as far to the east to backtrack to go west. This subdivision already has a speeding problem with USI students using it as a cut through. I am not sure the amount of traffic coming north on Felstad will be, but I know that it is a well used north/south road. I am sure many of those wanting to go West will go the through the subdivision. Additionally, Deaconess is building a pediatric clinic on the corner of Felstad and 62. I can only imagine the traffic that will bring.
I do not have a solution, but I want it on someone's radar to come up with one. Neighbors have suggested speed bumps in the neighborhood.

There was a traffic "study" line (not sure who) put in the subdivision for less than a week prior to USI and EVSC beginning. It was in one location closer to the apartments. Traffic substantially increases once both are in session.

Sorry so long. Takes a bit to describe. If I have any other concerns or questions, I will send them you way.
Wendy

On Thu, Sep 14, 2023 at 9:59 AM Nicole Minton <Nicole.Minton@lochgroup.com> wrote:

> Good morning,
>
> The Lloyd4U Project Team would like to extend an invitation to learn more about the planned improvements to the Lloyd Expressway. Please join us **virtually** at 12:30 CDT, on Thursday, September 21st.
>
> We would like to have the opportunity to give focused attention to your questions on the project in advance of the public hearing scheduled for Tuesday, September 26th at 5:30 p.m. at City View at Sterling Square.

From: Nicole Minton
To: Jon David
Subject: RE: Public Hearing on the 26th
Date: Tuesday, September 19, 2023 10:20:38 AM
Attachments: image001.png
image894580.png
image730684.png
image379472.png
image570408.png
image401049.png
image439690.png
image333487.png
image285622.png

Good morning,

Thank you for reaching out. The recorded presentation will be available on the project website at https://thelloyd4u.com/ the day after the hearing.

We have invited businesses along the Lloyd to an online stakeholder meeting taking place tomorrow. You are more than welcome to join us.

Please use the link or call-in information below.

Please sign into the meeting 5 minutes before the start to adjust any audio/video settings using this link: https://us06web.zoom.us/j/85033377471?pwd=WMXNE1bEFQKP1yLaQ2OPnKFqZXvoY1.1
Meeting ID: 850 3337 7471
Passcode: 575769

If you are unable to attend tomorrow's meeting, look for the presentation and meeting materials on the project website on the 27th.

Thanks for your interest in the project!

Nicole

Nicole Minton
Public Outreach Manager
Lochmueller Group
6200 Vogel Road, Evansville, IN 47715
Email: Nicole.Minton@lochgroup.com
Direct: 812.759.4179
Mobile: 812.228.9744

Web: http://lochgroup.com

From: Jon David <jon@davidenterprisesinc.com>
Sent: Monday, September 18, 2023 11:13 AM
To: Nicole Minton <Nicole.Minton@lochgroup.com>
Subject: Public Hearing on the 26th

EXTERNAL

Good morning.

I will be out of town on the 26th but was wondering if there is going to be any web casting of the meeting that I might be able to watch.

Thank you,
Jon David

Peter Putzier

From: Nicole Minton
Sent: Tuesday, September 19, 2023 10:29 AM
To: Woosley, David
Subject: RE: [EXTERNAL] RE: Improvement Plans for St.Joe and Wabash

Someone from your organization should have received an invitation to Thursday's online Business Stakeholder Meeting. Here are the details if someone wants to join. We aren't answering questions during that one, so I'm not sure how helpful that will be. Another option, the recorded presentation from the hearing will be on the project website the following day on the 27th at https://thelloyd4u.com/

Here are the meeting details:

September 21, 9:30 am -10:30 am
Please use the link or call-in information below for our Business Stakeholder Meeting.

Please sign into the meeting 5 minutes before the start to adjust any audio/video settings using this link:
https://us06web.zoom.us/j/85033377471?pwd=WMXNE1bEFQKP1yLaQ2OPnKFqZXvoY1.1
Meeting ID: 850 3337 7471
Passcode: 575769

LOCHMUELLER GROUP

Web: http://lochgroup.com

Nicole Minton
Public Outreach Manager
Lochmueller Group
6200 Vogel Road, Evansville, IN 47715
Email: Nicole.Minton@lochgroup.com
Direct: 812.759.4179
Mobile: 812.228.9744

From: Woosley, David [redacted]
Sent: Tuesday, September 19, 2023 9:53 AM
To: Nicole Minton <Nicole.Minton@lochgroup.com>
Subject: RE: [EXTERNAL] RE: Improvement Plans for St.Joe and Wabash

EXTERNAL

Thank you very much for the info! It is much appreciated!

I am going to share this with our Site Director, Scott Fisher. I am sure he will have questions.

Thanks, again!

From: Nicole Minton <Nicole.Minton@lochgroup.com>
Sent: Tuesday, September 19, 2023 9:47 AM

To: Woosley, David [redacted]
Subject: [EXTERNAL] RE: Improvement Plans for St.Joe and Wabash

Good morning! What a hoot to see your name pop up in my email.

We are updating the signal at the St. Joseph Avenue intersection to coordinate with Wabash Avenue timing.
The bulk of the changes are happening on the north side of the intersection. To accommodate southbound cars on St. Joe, we will extend the left turn lanes and add an additional right turn lane. We will keep two lanes for through movement. Also in this area, we will be reconstructing the pedestrian bridge, and constructing a new sewer system to take this section off of the current combined sewer system.

At Wabash, we will be increasing the length of the eastbound left turn lane. For drivers headed west on the Pigeon Creek bridge, we are installing warning signs for traffic backups. We are updating the traffic signal to improve signal timing in with St. Joseph Avenue. Pennsylvania Street that runs behind Koch Air and parallel with the Lloyd will be closed.

As a whole, work on the westside projects will include replacing all of the existing pavement. The project includes new guardrails, curbs, and sidewalks. Drainage pipes and structures will be replaced as well as grading of ditches and yards. Replacement lighting will be included along the Lloyd from Red Bank Rd to Wabash Avenue. The project will include new signs and pavement markings.

We have more detailed plans that give a better idea of right-of-way changes. If you have specific questions, we can set up a meeting to share plans and talk about the project.
Just let me know!

Best,

Web: http://lochgroup.com

Nicole Minton
Public Outreach Manager

Lochmueller Group
6200 Vogel Road, Evansville, IN 47715

Email: Nicole.Minton@lochgroup.com

Direct: 812.759.4179
Mobile: 812.228.9744

From: Woosley, David [redacted]
Sent: Tuesday, September 19, 2023 7:22 AM
To: Nicole Minton <Nicole.Minton@lochgroup.com>
Subject: Improvement Plans for St.Joe and Wabash

EXTERNAL

Good morning, Nicole!

I hope you and the family are doing well and adjusting easily to life back in Evansville!

I am the Environmental and Sustainability Program Manager at Mead Johnson and we just received the legal notice for the upcoming west side public hearing, and I saw that you were the contact!

Would you be able to share some drawings/plans for the upgrades to St. Joe and Wabash? We would like to review so that we can produce a game plan for any affects the construction may have on site logistics.

Thank you!

Peter Putzier

From: Scheller, Steven [redacted]
Sent: Thursday, September 21, 2023 2:23 PM
To: Nicole Minton
Cc: Williams, Ryan; Richard Cameron; Jennifer Kroll
Subject: INDOT project on the Lloyd Expressway

EXTERNAL

Nicole
Thank you so much for taking my call regarding the INDOT Lloyd Expressway project. I have included several other key Administrators in this email that would need to be informed of any changes that would affect bus transportation and parent drop off. If you could include all of us in future correspondence regarding this project it would be greatly appreciated. Also thank you for sharing the lloydforyou.com website for more information regarding the project. Will there be a scheduled conference call meeting regarding progress when the project starts this spring?
Thank you

--
Steven Scheller
Chief Facilities Officer
Evansville Vanderburgh School Corp.
951 Walnut Street
Evansville Indiana 47713 (812) 435-8426

Peter Putzier

From: Norvell, Lauren J [redacted]
Sent: Monday, September 25, 2023 8:44 AM
To: Nicole Minton
Subject: RE: Join Us: Lloyd4U Public Officials Meeting (Online) to Discuss Westside Improvements to Lloyd Expressway

EXTERNAL

I was unable to attend the public officials session. Is there something I can preview before Tuesday's session? Thanks!

Kind regards,

Lauren J Norvell
Climate Action Director
Office of Mayor Lloyd Winnecke
City of Evansville
1 NW Martin Luther King Jr. Blvd.
Evansville, IN 47708
[redacted]
(812) 436-7019
Schedule with me: https://calendly.com/ljnorvell

From: Nicole Minton <Nicole.Minton@lochgroup.com>
Sent: Thursday, September 21, 2023 12:04 PM
Cc: David Goffinet <DGoffinet@lochgroup.com>; Jeff Whitaker <JWhitaker@lochgroup.com>; Bullock, Matthew K <MBullock1@indot.IN.gov>; Peterson, Jared D <JarPeterson@indot.IN.gov>; Sprinkle, Emily R <ESprinkle@indot.IN.gov>; Brian, Gary R <GBrian@indot.IN.gov>; Timothy.Kent@parsons.com; cassy.wade@parsons.com; Angela Blank <ablank@c2strategic.com>; Collin Merkel <cmerkel@c2strategic.com>; Jacob Wenthe <jwenthe@c2strategic.com>
Subject: RE: Join Us: Lloyd4U Public Officials Meeting (Online) to Discuss Westside Improvements to Lloyd Expressway

Good afternoon,

This is your reminder that our Public Officials Meeting is at 12:30 today.

[redacted]

From: Grant Davis [redacted]
Sent: Tuesday, September 26, 2023 4:41 PM
To: Nicole Minton
Subject: Barker Project- Igleheart Ave
Attachments: Barker Ave Project.pdf

EXTERNAL

Good afternoon. I was hoping to make the public meeting this evening but will not be able to make it. I own the property at 96 N Barker Ave (Barker Brewhouse) as well as 3001 Igleheart and wanted to share my input.

We need street parking along Igleheart Ave. The current condition has some street parking, but with the new configuration of closing the clover leaf from the lloyd it should be better set up to add more street parking. Currently we have parking on the street from the east drive of our parking lot to the front corner of the NE corner of the building. I feel that there is no reason they shouldn't add additional street parking between the entrance and exit of our parking lot.

There is no reason to have the right hand turn lane stretch all the way to the west end of our parking lot. By closing off the clover leave it will be eliminating the majority of the east bound traffic on igleheart approaching Barker. There is 27' from the edge of the sidewalk to the centerline of the road so there is more than enough width for parking and a drive lane. Currently with all the clover leaf traffic, the "right turn lane" is only what I have sketched on the attached document due to the current street parking.

Our goal is to keep as many of our customers close to the building so our overflow parking does not push out into the surrounding neighborhood. This is why we purchased the property at 3001 Igleheart as well. We have all the parking required by code, but have been fortunate enough to be very successful in our first 6 months and attract large crowds. We also use the existing street parking to accommodate some of our larger food trucks. Taking this away would be detrimental to our business.

This project will have major impacts on our business during construction but we feel the final condition will be an overall improvement to the traffic and safety along igleheart. We do however feel very strongly that there needs to be street parking on the south side of igleheart.

We have spoken to all the adjacent neighbors and they are in agreement on the street parking. These houses have extremely small driveways that can only accommodate 1 or 2 cars.

Please take our request into consideration and revise the plan for the unnecessarily long right turn lane. Please reach out with any comments or questions.

Regards,

Grant Davis
GDDavis Properties LLC
Barker Brewhouse
812-499-6774

[redacted]

From: Rachel Thomas [redacted]
Sent: Tuesday, September 26, 2023 5:55 PM
To: Nicole Minton
Subject: INDOT Westside Corbierre Ave. Comment 9-26-23

EXTERNAL

Why does this project not include sound barriers for those residing on Corbierre Avenue? The noise pollution is already substantial and the addition of extra lanes to the Lloyd Expressway, as well as Corbierre Avenue, will be exponential. The other side of the Llyod, those who live on Forest Avenue, are getting a sound barrier and have more room away from the highway as it stands including more grass area and an alley.

I thank you for your time and consideration. As a resident of Corbierre Avenue this is something I feel needs that needs addressed before undertaking this project Spring 2024. I hope you find this comment well and address it at this presentation.

Best,
Rachel Thomas

Des. Nos. 1900308, 2001917, 2100041, 1900262, 1900258, 1900260 Public Hearing Sept. 26, 2023

THE LLOYD4U

COMMENT FORM

Please check all that apply:

- ☐ I own a business along the Lloyd Expressway
- ☐ I work along the Lloyd Expressway
- ☑ I live along the Lloyd Expressway
- ☐ I travel the Lloyd Expressway frequently
- ☐ I don't live or work along the Lloyd Expressway, but I have interest in the project

How many times do you typically travel on the Lloyd Expressway?

- ☑ Daily
- ☐ Multiple times a day
- ☐ 3-5 times per week
- ☐ 3-5 times per month
- ☐ Monthly
- ☐ A few times a year

Would you like to receive project updates?

- ☑ By email. Email address: [redacted]
- ☐ By text. Phone number: _____

LET US KNOW WHAT YOU THINK

How will West Terrace School traffic be handled during construction? Can the side roads be used for Detoured traffic handle the workload?

Name: Eugene Weber **Address:** [redacted]

E-mail: [redacted] **Phone number:** [redacted]

Comments can be mailed to Nicole Minton, Lochmueller Group, 6200 Vogel Road, Evansville, IN 47715 or emailed to Nicole.Minton@lochgroup.com. Submit comments or have them postmarked by Oct. 11, 2023.

INDIANA DEPARTMENT OF TRANSPORTATION INDOT

NextLevel

Des. Nos. 1900308, 2001917, 2100041, 1900262, 1900258, 1900260 Public Hearing Sept. 26, 2023

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Would you like to receive project updates?

- ☐ By email. Email address: _____
- ☒ By text. Phone number: [redacted]

LET US KNOW WHAT YOU THINK

There was talk about noise pollution, but not about light pollution. I think this is a topic that should be researched. Having more lights doesn't always mean better to the surrounding areas. Please consider lighting that is energy efficient as well.

Name: _____ **Address:** _____

E-mail: _____ **Phone number:** _____

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Would you like to receive project updates?

- ☐ By email. Email address: _____
- ☑ By text. Phone number: [redacted] _____

LET US KNOW WHAT YOU THINK

I find it almost laughable that a sound barrier will be put across from where I live. Those homes have their back yards & garages toward the Lloyd - (I was told a study was done did they study Teakopple exit side too? That where my front porch is. The noise pollution is about unbearable already. I have never in all my travels seen a highway butted up to peoples front doors for blocks - but the plan is to block noise from the garages across the highway? There should be a barrier on Corbin the going to Teakopple anyless is a gross flaw. If not ONE PLACED THERE THEN What?

Name: _____ **Address:** [redacted]

E-mail: _____ **Phone number:** [redacted]

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- ☐ By text. Phone number: _____

LET US KNOW WHAT YOU THINK

We think rumble strips need to be added to Corbierre Ave from Ingle to Tekoppel to decrease the speed coming off the Llyod.

Currently the speed limit along Corbierre is 30 mph. People drive past my house at speeds in excess of 50 mph.

Name: Tina Little / Mike Hurley **Address:** [redacted]

E-mail: [redacted] **Phone number:** [redacted]

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- ☑ By text. Phone number: [redacted]

LET US KNOW WHAT YOU THINK

Coordinate with google/apple maps throughout the project to keep GPS maps accurate. Thank you.

Great Ideas, Great Project, Great presentation!

Name: Ian Woolsey **Address:** [redacted]

E-mail: [redacted] **Phone number** [redacted]

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LET US KNOW WHAT YOU THINK

It would be best to leave the entrance to eastbound Lloyd at Ingle. If not those who use that entrance regularly would either have to enter east bound Lloyd from Pennsylvania or go to the Rosenburgher intersection.

Name: Ryan Leeds **Address:** [redacted]

E-mail: [redacted] **Phone number** [redacted]

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LET US KNOW WHAT YOU THINK

What Considerations are there for the extra Traffic on the side Roads. Like middle Mt. Vernon Road West of the Parkway and Hogue Rd? Because there will be more Traffic on those Roads

Why add more stop lights to an Expressway that already has to many?

Why is the U Turn to get off the east bound lane of the Lloyd all the way down by Boehne Camp if it want to go across schutte?

Name: Derek Rayher **Address:** _____

E-mail: [redacted] **Phone number:** [redacted]

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- ☐ By text. Phone number: _____

LET US KNOW WHAT YOU THINK

I would like to know timing of road closures.

If road closures between Schuette and University Parkway are during the school year and traffic is diverted north, there is a school in the area and traffic is likely 4x-5x greater than during the summer.

Name: Peter Johnson **Address:** [redacted]

E-mail [redacted] **Phone number:** [redacted]

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LET US KNOW WHAT YOU THINK

Noise is very loud along our stretch of Middle Mt Vernon north of the Lloyd from US1 to County Line Rd. Please consider sound barriers so we can enjoy some outdoor time. Its way too loud to sit outside except on Sundays.

Name: Dotty Baumeyer **Address:** [redacted]

E-mail: [redacted] **Phone number:** [redacted]

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INDIANA DEPARTMENT OF TRANSPORTATION INDOT

NextLevel

envisioning what this is going to look like and how it's going to operate. I also want to stress that if you haven't signed up for text alerts or e-mails, as we move into the construction season, those are going to be really important to notify you of when changes are happening, and so you'll know when to expect changes in your area, and it may take a collective effort in us leaving at a different time, coming home at a different time. We don't have as many options on the west side for avoiding the Lloyd, but thinking through those things and being aware of the changes that are coming are going to be a real priority for us to make sure we stay in communication with you on that. So we're going to do our public hearing portion now. Angela has my list of the folks that have signed up to give a public comment. Just a reminder that we will be listening to the comments, but we will not be responding to comments this evening. Given that we have one person that signed up to speak, I'm not going to put a time limit on it, but again, once we get done with the public comment portion, we will head back to the display area to take your questions. Mr. Wilhite. James Wilhite, if you'll come stand on the X, say your name, and spell it for

the court reporter.

MR. WILHITE: All right. Thank you, Nicole. My name is James Wilhite.

MS. MINTON: Come on up to the microphone. We got an X right there for you to stand on.

MR. WILHITE: You can find the spelling here. Okay. I'm a little bit handicapped, but I'll do what I can.

MS. MINTON: Take your time.

MR. WILHITE: This microphone here?

MS. MINTON: Yes, please.

MR. WILHITE: Okay. So I'm just speaking to you and not all these good people?

MS. MINTON: If you'd like to look that way, I'm sure the microphone will pick you up. They're pretty --

MR. WILHITE: All right. Very good. I had about three comments that I wanted to make that I thought might need to aired. The first one was I wasn't sure that the pedestrian walk project was still on, but I see now, looking at your posters and literature, that it is still going, so I guess my only comment about that at this time is: Is that work on that pedestrian bridge going to be concurrent with the building of the rest of the

road? I just had comments about that. Also, it says here, and also in a letter that I received, improvements along State Road 62 from Rosenberger to Wabash Avenue to reduce the total number of crashes and improve the traffic capacity to a desired level of service letter C. Am I, and everyone present, to assume that letter C means that there is maybe a better grade level B and level A that's not currently being striven for? Is there an E and F also? Going on the A through F grade school grading system, the C struck me as sort of a mid-range kind of thing. Because many of us here can remember 20 some-odd years ago when the Corradino Engineering Group came through, and they spent millions of taxpayer dollars, and all kinds of engineering, drawings, surveys, et cetera, and all of that ended up going into the trashcan. Third thing I wanted to address was, if you plan to extend the westbound access road from the Lloyd up to Barker Avenue, which is now a single lane, and is now a right-turn only, but many people use it to make the illegal left turn, and you're plan is to make it into a two-lane with a stop sign, if you do plan to extend that road up to Barker and have the actual access onto it extended farther east, towards Lynche

Avenue, when that existing exit was built in 1955, the engineers had to use some dynamite to blast through the bedrock that was there by the orphanage, and that caused the windows of the orphanage to break that time. So on behalf of myself and the other residents of Pennsylvania Street, we're just expressing our concern for that, and we would certainly band together if we experience any damage to our properties and/or our hundred-plus-year-old clay sewer pipes that run under all of our homes. So that was basically the only comments I wanted to make, and thank you so much.

MS. MINTON: Thank you, Mr. Wilhite. Well said. All right. Anyone else that needed to make a public comment? Otherwise, we'll go back to the display area and handle any questions that you might have or do any explaining.

MR. HOLLANDER: Can I make a comment even though I didn't sign up?

MS. MINTON: Sure. Yeah. Come add your name.

MR. HOLLANDER: You want me to sign the paper?

MS. MINTON: You can leave your comment first and say your name and spell it, and then put your name on --

MR. HOLLANDER: My name is Kent Hollander. It's

K-E-N-T, H-O-L-L-A-N-D-E-R. I'm concerned about the intersection at the Red Bank Road and Lloyd with the displaced turning lane because I've sat at that intersection with two left-turn lanes that exist now and had to sit through four or five light changes to get through that intersection to get to Walmart Super Center, and now you're changing it to the displaced single lane left turn, and that traffic is going to be backed out of that single lane onto the double lane that's heading west, and it's going to obstruct the traffic, is my concern. That the traffic is not going to be able to get off the road into that single lane because of all the traffic that's going in because you have the Walmart, we have Home Depot, you have the cinema complex, and all the restaurants along Pearl Drive there that people are trying to access. There's a lot of traffic that's trying to get through, and people run that red light now all the time because they get tired of waiting in the two lanes, and you're converging it into one diverted left lane, and I'm afraid that the traffic is going to be backed out on the highway, impeding the flow. And that's the only comment I have. Okay. Thank you.

MS. MINTON: Thank you for that. Thanks for

sharing your comment. Yeah, come sign your name on the sheet. We'll be happy to take your comment. Please say your name and spell it.

MR. WEBER: Eugene Weber, E-U-G-E-N-E, W-E-B-E-R. At the library, they had a lot of the information on the detours while the construction was going on, and some of these detours are pretty elaborate, and nothing -- you haven't said anything about any of the detours. Would this -- as the time comes, will this information come out or -- like I say, looking at those plans at the library, it looks like it's elaborate on those detours, and I don't know if the side roads are going to be able to handle all of it.

MS. MINTON: Thank you for that. Say your name and spell it, please.

MS. THOMAS: Rachel Thomas, R-A-C-H-E-L, T-H-O-M-A-S. I personally am a resident at Corbierre Avenue. I don't know why we weren't necessarily consulted as well as the people who live on Forest Avenue about a sound blockage. The noise pollution is already pretty awful. I just don't know why we were not consulted with that when the front of our houses are basically right next to the Lloyd Expressway. You're expanding on that, and

expanding Corbierre as well. It's just going to lead to more noise pollution. I think a sound barrier would be something worth, too, considering. I don't know why the residents weren't consulted. People who live on Forest, they have a little bit more grass area -- they have more grass area, their garages are right there. We live right on top of it. That's my main comment. Thank you.

MS. MINTON: Thank you. Well said. Last call. Would you like to speak?

MS. RUFF: Yes.

MS. MINTON: Come on up.

MS. RUFF: I'm Linda Ruff, and I live there on Wrights (phonetic) Hill.

MS. MINTON: Can you spell your name for us, Linda?

MS. RUFF: L-I-N-D-A, R-U-F-F. My curiosity is, what's the speed limit going to be? Right now, it's 50. It's rare that you find anybody that goes that slow. If you do, you risk your life, and I have literally seen race drivers weaving in and out of traffic. How's that doing to affect the speed limit?

MS. MINTON: Thank you for that. Okay. Those project teams members that I pointed out

earlier, wave your hand for me. Wave your hand, project team members. We're sending them back your way. Thank you-all for coming this evening. We'll be here to answer your questions. We appreciate it. If you have questions, please find one of us to get the answer.

(HEARING CONCLUDED AT 6:41 P.M. CT)

Kentuckiana Reporters
P.O. Box 3983
Louisville, KY 40201

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CERTIFICATE OF REPORTER

I do hereby certify that the hearing in the foregoing transcript was taken on the date, and at the time and place set out on the Title page here of by me and that the said matter was recorded digitally by me and then reduced to type written form under my direction, and constitutes a true record of the transcript as taken, all to the best of my skill and ability. I certify that I am not a relative or employee of either counsel, and that I am in no way interested financially, directly or indirectly, in this action.

DANIELLE NICOLE CALVERT,
COURT REPORTER/NOTARY
MY COMMISSION EXPIRES ON: 03/20/2027
SUBMITTED ON: 10/11/2023

Kentuckiana Reporters
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502.584.0119 Fax
schedule@kentuckianareporters.com
www.kentuckianareporters.com

[redacted]

From: Edward Wells [redacted]
Sent: Wednesday, September 27, 2023 8:55 PM
To: Nicole Minton
Cc: [redacted]
Subject: Lloyd4U comments
Attachments: Comment Form.pdf

EXTERNAL

Hello.

I have included my comments on the attached Comment Form.

The Comment Form information is also listed below.

All that applies:
I live along the Lloyd Expressway, I travel the Lloyd Expressway frequently, I typically travel the Lloyd Expressway Multiple times a day.

I would like to receive project updates. By email. Email address: [redacted]

What I think:
St. Joseph Avenue
When traveling WB on the Lloyd Expressway, approaching St. Joseph Avenue, I catch a red light sometimes and have to wait a very long time.
So many EB cars want to make a left turn onto NB St. Joseph Avenue.
I believe that EB to NB traffic is also a main turning movement and needs some improvement.
Would dual left turn lanes for EB to NB traffic decrease my wait time?

Edward Wells
[redacted]

Thank you for accepting comments on the Lloyd Expressway improvements.

Have a great day.

Sincerely,
Edward Wells

Peter Putzier

From: Jacqui Sigg [redacted]
Sent: Wednesday, September 27, 2023 12:36 PM
To: Bullock, Matthew K; Nicole Minton
Subject: INDOT SR 62/Lloyd Expwy Project - Starbucks, 4700 W Lloyd Expy., Evansville, IN (RI#1892)
Attachments: SKM_C750i23091909331.pdf

EXTERNAL

Dear Sir/Ma'am,

Our office is in receipt of the attached notice regarding the upcoming SR 62 Project in proximity to the property referenced above (our tenant). Realty Income is the owner of the above-referenced property.

We understand that the improvements needed may impact our property. At this time are there plans available which show the proposed impacts to our property? Will any right of way be required from the site, and if so what is the timing for the acquisition?

Please let us know whether the planned improvements in proximity to our parcel will remain solely within the existing right of way, or if the work will extend onto our property.

Any additional information you may have with respect to the project will be appreciated.

Thank you,

Jacqui Sigg
Senior Associate, Right of Way, Condemnations, & Real Estate
East Region: AL, CT, DE, FL, GA, IN, KY, ME, MD, MA, MI, MS, NH, NJ, NY, NC, OH, PA, RI, SC, TN, VT, VA, WV
Realty Income Corporation (NYSE "O")
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www.realtyincome.com
(O) 858-284- 5235 (F) 858-724-3406

REALTY INCOME
The Monthly Dividend Company®

Please Think Before You Print

[redacted]

From: [redacted]
Sent: Wednesday, September 27, 2023 11:12 AM
To: Nicole Minton
Subject: W. Lloyd Expressway proposed changes

EXTERNAL

Nicole,
The Courier's article regarding the proposed W. Lloyd Expressway changes references another public meeting next Tuesday, October 3; however, it does not give the time or location. Do you have that information? The INDOT website is a bit overwhelming.

I live on Rupper Ave, which intersects with Igleheart (3 streets down from Barker, 3 streets up from Tekoppel Ave.). I'd like to see the maps of the proposed changes in person.

Thank you!

Regards,

KELLY M. PACE

ZSWS ZIEMER STAYMAN WEITZEL SHOULDERS LLP
ATTORNEYS AT LAW

Assistant to Stephan E. Weitzel & Jeffrey W. Henning
20 NW FIRST STREET 9TH FLOOR | PO BOX 916
EVANSVILLE INDIANA 47706 0916

PHONE **(812) 424-7575 ext 220** | FAX **(812) 421-5089** | ZSWS.com

Peter Putzier

From: [redacted]
Sent: Wednesday, September 27, 2023 5:33 PM
To: Nicole Minton
Subject: Lloyd.

EXTERNAL

How can expect my business to be affected? I have 100 seat pizza shop at 4404 w Lloyd Expressway.

Ryan

Sent from my iPhone

[redacted]

From: Scott Krejci [redacted]
Sent: Wednesday, September 27, 2023 7:08 AM
To: Nicole Minton
Subject: Intersections

EXTERNAL

Nicole,

This type of intersection has been in use in other parts of the U.S. for close to 20 years. One city that's had success with it for at least 15 years or longer, is Madison, WI. It saves lives, as long as people pay attention to their driving habits.....

Scott Krejci
[redacted]

Sent from Yahoo Mail on Android

[redacted]

From: Vic Chamness [redacted]
Sent: Wednesday, September 27, 2023 8:52 AM
To: Nicole Minton
Subject: West Lloyd traffic construction plans

EXTERNAL

Hi Nicole,

I'm a west-sider but couldn't attend the hearing due to work.

Is there an online version of the plans so we can review and be informed?

Thanks for your work and efforts to keep the public informed!

Thanks,
Vic Chamness
[redacted]

[redacted]

From: Harmony Gratzer
Sent: Monday, October 2, 2023 7:22 AM
To: Nicole Minton; Jeff Whitaker; David Goffinet
Subject: Fw: New submission on HubSpot Form "Website Contact Us Form"

Follow Up Flag: Follow up
Flag Status: Flagged

This came in through our website.

Harmony Gratzer, CPSM
Director of Marketing
Lochmueller Group
Direct: 812.759.4169
Mobile: 812.568.2665

From: HubSpot Forms <noreply@hubspot.com>
Sent: Saturday, September 30, 2023 7:41 AM
To: Harmony Gratzer <hgratzer@lochgroup.com>
Subject: New submission on HubSpot Form "Website Contact Us Form"

EXTERNAL

New submission on HubSpot Form "Website Contact Us Form"

Page submitted on: Lochmueller Group : Contact

Email:
[redacted]

First Name:
Thomas

Last Name:

Stephenson

Message:

I have concerns about the Lloyd Expressway project. I live off of Tekoppel Ave and use the Lloyd on ramp located at Ingle and the Lloyd multiple times a day. I would like to keep that access point because if it is eliminated it will cause a hardship on me and all my neighbors.

View in HubSpot

- **CONTACT**
- Thomas Stephenson

[redacted]

From: [redacted]
Sent: Monday, October 2, 2023 2:41 PM
To: Nicole Minton
Subject: INDOT West Lloyd Expressway changes

Follow Up Flag: Follow up
Flag Status: Flagged

EXTERNAL

I am sending you this to voice my concerns on the changes to West Lloyd Expressway. Me and my husband went to a meeting quite a while back at City View. The impression we got was that decisions were already made without any input beforehand.
The meeting started off with a woman standing up and telling us that "the Lloyd Expressway will never be an Expressway so you need to get over it". Nice way to start…
We have property on Ingle Ave that has access to the Lloyd. We were told that Ingle Ave will be closed off. If you have done any research on this area, trains are a big part of the traffic flow and our life, and they stop a lot for long periods of time. The tracks run between our property and the Lloyd. They definitely have a bearing on whether you are going to be on time or not. They WILL NOT move or adjust their schedule for anything or anyone. If you block all these small access roads off to these small neighborhoods it could have a profound bearing on when we might receive emergency care (fire or ambulance).
When I brought that up to one of the officials at the meeting, he said "how do you know which way the ambulance will be coming from?". The smart remarks were too much. If they were getting tired of the questions, they shouldn't be there.
Our understanding is that all of the traffic will be merging eastbound at St. Joseph Ave. That is going to be such a bottleneck. Especially if Reitz High School has any function going on. Just curious, was this discussed with Reitz High School?
I guess I would like to know if anyone involved in this project actually lives or commutes in this area. My husband has health issues, so if we need an ambulance and there is a train, we just need to wait, or they need to find an out of the way detour, right?
I do not see how any of this is going to help us on this side of town.
I'm sure this will have no bearing on the project. The powers that be have made their decisions without any input from those who it will have the most bearing on.
By the way, on Facebook I had voiced my concerns after that meeting and had a huge response from those who live in the area and they get it…they know the problems it's going to create. But with that being said, we have brought it up to many of our friends who live on this side and they are not even aware of it. With the drop off of newspaper subscriptions, news like this doesn't reach many until too late. You would have to catch the local news at the right time to be aware of it. I don't know the answer to this, but it does present a problem of getting the word out. Maybe a flyer to all addresses in the immediate area? I don't know…

Thank you for your time.

Barb Brown

[redacted]

From: Nicole Minton
Sent: Tuesday, October 3, 2023 12:41 PM
To: Nicole Minton
Subject: James Will 1002

James Will stopped by Lochmueller Group to see plans for the McDowell Road intersection and share his safety concerns. He said he is aware of many accidents that take place at the intersection. He was relieved to see the right in/right out changes and the boulevard left turns. He wondered if an acceleration lane could be made for vehicles making a right turn at McDowell to go west on the Lloyd. He said the poor line of sight caused by the Lloyd's curve makes it difficult to time your turn. Speeding vehicles on the westbound Lloyd often encounter slow moving vehicles entering from McDowell. He said the large retirement community, Solarbron, uses the intersection and cautious drivers are often met by impatient drivers causing danger. In his opinion, an acceleration lane would give those drivers a chance to get up to speed and more clearly see traffic on a straight section for merging. He would ideally like to see the lane extend all the way to University Parkway for eastbound travelers.

[redacted]

Nicole Minton
Public Outreach Manager
Lochmueller Group
Direct: 812.759.4179
Mobile: 812.228.9744

Peter Putzier

From: McCarter, Misty D [redacted]
Sent: Tuesday, October 3, 2023 11:56 AM
To: Nicole Minton
Subject: RE: Case 411775

EXTERNAL

Mary Jane Thomas [redacted]
Let me know when contact has been made and I can close her out.
Thanks! Be safe

From: Nicole Minton <Nicole.Minton@lochgroup.com>
Sent: Tuesday, October 3, 2023 11:29 AM
To: David Goffinet <dgoffinet@lochgroup.com>; McCarter, Misty D [redacted]
Subject: RE: Case 411775

**** This is an EXTERNAL email. Exercise caution. DO NOT open attachments or click links from unknown senders or unexpected email. ****

Misty,

Do you have contact information? We are currently in the comment period following the hearing and I will need to add this to our project comment and response matrix.

Thanks,
Nicole

LOCHMUELLER GROUP

Web: http://lochgroup.com

Nicole Minton
Public Outreach Manager
Lochmueller Group
6200 Vogel Road, Evansville, IN 47715
Email: Nicole.Minton@lochgroup.com
Direct: 812.759.4179
Mobile: 812.228.9744

From: David Goffinet <DGoffinet@lochgroup.com>
Sent: Tuesday, October 3, 2023 10:23 AM
To: McCarter, Misty D <[redacted]
Cc: Nicole Minton <Nicole.Minton@lochgroup.com>
Subject: Re: Case 411775

We sure will.

Sent from my iPhone

David Goffinet
Regional Leader - Southern Indiana
Lochmueller Group
Direct: 812.759.4120
Mobile: 812.893.0642

On Oct 2, 2023, at 8:52 AM, McCarter, Misty D [redacted] wrote:

EXTERNAL

Could you have someone help with this case?

We live on Corbierre Ave 47712 and were told there is not a sound barrier planned for this side of the Lloyd project but across the highway where there is a strip of land and an alley, and some have garages or sheds they plan a sound barrier. This is planned to take some of my front yard the Tekopple exit in front of houses on the street and the noise level now is almost intolerable and no barrier. My living room is going to be on a six-lane highway. (also Tekopple exit) I believe whatever thresholds for sound pollution Corbierre goes beyond that. I have never in all my travels have seen a six-lane highway butted up to a row of houses in residential area and across there a alley and no one's front door. I believe you should buy all the houses that will be on Tekopple exit. Memorial Parkway by the river (I-69) has a barrier the houses are hundreds of yards from the street and probably not even a fourth of traffic. All sound will bounce even more to Corbierre side if Forrest Ave side for garages and alley gets a sound barrier. There are quite a few of us now aware of this fact, what are you going to do for us?

Thank you!
Misty

From: Rachel Thomas
To: Nicole Minton
Subject: 10-10-23 LLOYD4U Corbierre Ave. Concerns
Date: Tuesday, October 10, 2023 3:47:38 PM

EXTERNAL

To whom this may concern,

As of now the individuals overseeing and planning the LLOYD4U project are considering a sound barrier/blockade for the residents living on Forest Avenue. However, these same people are not extending the same courtesy to the people who live with houses on Corbierre Avenue. Those of us living on Corbierre Ave. and those living on streets close by could greatly benefit from some form of noise reduction as well.

The noise pollution from the Lloyd expressway is abysmal. Speaking to Nichole Minton, one of the leading people on the Lloyd4You project, claimed that they are supplying the side closest to Forest Avenue based on a sound survey. I work in a lab so as a self-proclaimed woman of science, I personally love statistics and data, but the people working on this project do not live in this neighborhood. I have lived and owned my home on Corbierre Avenue for two years now and there are peak traffic times I cannot be outside or in my living room because I cannot hear, especially if I am on the phone or have guests. When I am walking my dog up or down Igleheart, or even West Franklin, or Virginia, I can still hear the traffic from the Lloyd Expressway. I am already so close to the highway and I cannot imagine how much worse it will be when my home is closer to it when it is expanded. Getting back to the topic of Forest Avenue, I am in no way a physicist, but I have a hard time believing that only adding a wall to one side will cause noise from the highway to bounce back at us who live on Corbierre and around the neighborhood. Put your phone into a bowl or put it close to a wall and you will notice the initial noise will bounce off of a surface. Imagine all of that traffic noise bouncing back off of one wall. The people overseeing this project do not understand the residents' (who reside on Corbierre Avenue) quality of life as it stands and how much worse it could get. Will a sound survey be conducted after construction of the Lloyd Expressway and sound barrier over by Forest? If there is a sound survey conducted and yields unfavorable results, will something be done then? Will the individuals devising and executing this project consider the addition of some form of noise reduction for the residents of Corbierre Avenue? Clarity on this matter would be appreciated.

With the addition of an extra lane on both sides of the Lloyd, as well as an extra lane on Corbierre, I firmly believe this project could negatively affect residents' day-to-day life outside of merely travelling. I know it will impact mine due to the further propagation of noise pollution alone. This project will affect residents' means of commute, property value, exposure to traffic, and exposure to noise pollution. It is a means of changing our quality of life, and it is clear that accommodations are being made for residents on Forest Avenue but not for the residents of Corbierre. This does not make sense to me. Being that this project is through the state of Indiana there is not much to contend with because whether the residents

like it or not, it is happening. However, I strongly urge those finalizing the project this winter to reconsider and add some form of sound cancellation for the residents of Corbierre Ave. since the noise pollution is already so definitive.

I thank whoever reads this for their time and consideration.

Best,

Rachel Thomas

[redacted]

From: Jerry Hammer
To: Nicole Minton
Subject: the lloyd 44- Corbierre
Date: Wednesday, October 11, 2023 9:56:03 PM

EXTERNAL

Hello,
I am beyond concerned about how this affects houses on Corbierre Ave and the 'can not believe" sound barrier wall would be put on the side where there is a strip of land, an alley then garages , and storage barns to houses on Forrest Ave back yard. Houses on Corbierre will have their living rooms in the middle of the six-lane highway with an exit to boot. The noise pollution now is almost unbearable. But across from us, it is somehow worse for garages and an alley. I am sure it hits whatever threshold is required e never in my travels seen a six-lane plus highway next to residents' front door (only in Evansville?)
There is a barrier wall on Memorial Parkway the houses are hundreds of yards from road with I bet not a fourth of the traffic.
Really Tekopple exit should go all the way to either off Barker right or left or all the way to Rosenberg. Who benefits from having a highway in their front room?
There should have been offered to buy all homes on that side on Corbierre for what is being done. And across the highway in alleys and backyards, one will see not the alley or a garage but a sound barrier wall. It is wrong, Our houses should have been purchased not just a portion of our frontage so people can actually see our faces as they zoom past.

Jerry Hammer

John C. Scheer

[redacted]

October 9, 2023

Nicole Minton

Lochmueller Group

6200 Vogel Road

Evansville, IN. 47715

Dear Ms. Minton:

In response to the request for comments for the West Side Lloyd 4U projecct INDOT public hearing of September 26, 2023, I generally support the project and hope it will rapidly be done. I do think that you will need to make sure that the proposed turn from the westbound Lloyd to southbound Red Bank Road and Pearl Drive have enough turn lane space to not cause backups on the main westbound Lloyd. I also think the people on the north side of the Lloyd just west of Barker deserve a noise barrier. Other than those points, I am happy with the proposed project.

Sincerely,

John C. Scheer

John C. Scheer

The Lloyd4U COMMENT LOG

DATE	NAME	PHONE NUMBER	ADDRESS	EMAIL ADDRESS	CHECK ALL THAT APPLY	FREQUENCY	COMMENT
10/12/2023	Kate Bigge	[redacted]	[redacted]	[redacted]	I travel the Lloyd Expressway frequently	3-5 times per week	We need to make progress as a modern city and have a true cross-city travel option without stop lights. What happened to the plan to remove lights and add ramps, like was done at Fulton and 41? Adding more stop lights is not the solution. This city's road infrastructure makes us a laughing stock, and had created a reputation that this is a metro area to be avoided. Let's not put money into more stop lights.
10/12/2023	Jon Golding	[redacted]	[redacted]	[redacted]	I live along the Lloyd Expressway, I travel the Lloyd Expressway frequently	Multiple times a day	fewer stoplights
10/12/2023	Jonelle Riets	[redacted]	[redacted]	[redacted]	I travel the Lloyd Expressway frequently	3-5 times per week	We need more overpasses, not more stoplights. Already have waaaaaaay too many stoplights as it is.
10/12/2023	Dan Elg	[redacted]	[redacted]	[redacted]	I travel the Lloyd Expressway frequently	Daily	Overpasses, overpasses, overpasses. All money spent on updating the Lloyd should go to increasing the number of overpasses and reducing the number of stoplight intersections. The fact that there is no real freeway going east-west through Evansville (and not even any real side street that goes east-west all the way through) is absolutely ludicrous. It's a city of 120000. If we can't get to full freeway status, we should at least work towards it by adding overpasses over time.
10/12/2023	Melissa Mindrup	[redacted]	[redacted]	[redacted]	I travel the Lloyd Expressway frequently	Multiple times a day	We do not need more stoplights on the Lloyd! There are better ways the money could be spent.
10/12/2023	Mike Brown	[redacted]	[redacted]	[redacted]	I travel the Lloyd Expressway frequently	Daily	Please, no more stoplights. Overpasses would drastically improve drive time and safety
10/12/2023	Ryan Hilderbrand	[redacted]	[redacted]	[redacted]	I travel the Lloyd Expressway frequently	Daily	I didn't know the public comment phase was even open, much less that it is now closed. In the off-chance that I am able to still submit a comment:\r\n\r\nThe people of this city would rather us spend $150 million on three new overpasses than on a handful of new stoplights. It is already very difficult to get from USI to the east side in a reasonable amount of time; this plan will make it absolutely impossible.

Categorical Exclusion

Appendix H

Air Quality

U.S. Department of Transportation
Federal Highway Administration

Indiana Division

575 N. Pennsylvania St, Room 254
Indianapolis, IN 46204
317-226-7475
317-226-7341

September 27, 2023

In Reply Refer To:
HDA-IN

Ms. Lyndsay Quist
Deputy Commissioner Capital Program Management
Indiana Department of Transportation (INDOT)
100 North Senate Avenue
Indianapolis, IN 46204

Dear Ms. Quist:

We have completed our review of the INDOT's Amendment 2 to the FY 2024-2028 Indiana Statewide Transportation Improvement Program (STIP) dated September 26, 2023. This amendment is for the inclusion of the following documents by reference:

- Evansville Metropolitan Planning Organization (EMPO)
  FY24-28 Transportation Improvement Program (TIP) Amendment 1

- Kentuckiana Regional Planning and Development Agency (KIPDA)
  FY23-26 Transportation Improvement Program (TIP) Amendment 3

INDOT, EMPO and KIPDA have re-demonstrated fiscal constraint, air quality conformity, and provided opportunity for public comment and involvement, where applicable, regarding the documents identified above. The Federal Highway Administration (FHWA) considers this amendment to be in substantial compliance with the applicable requirements as sufficient to support a consistency finding for the STIP.

FHWA and the Federal Transit Administration (FTA) take formal action, through the development of the Federal Planning Finding (FPF), to evaluate and ensure that the STIP and MPO TIPs are developed according to statewide and metropolitan planning processes consistent with 23 U.S.C. 134 and 135, and 49 U.S.C. 5303 and 5304, as well as 23 CFR part 450, 500, and 49 CFR part 613. FHWA and FTA are required under 23 CFR 450.220 (b) to document and issue an FPF in conjunction with the approval of the STIP, or amended STIP. Based on the recently conducted FPF (dated August 31, 2023), FHWA and FTA find that the amended Indiana FY2024-2028 STIP substantially meets the transportation planning requirements and is approving the amended STIP (as recorded in Amendment 2) subject to the corrective actions outlined in the FPF. FHWA and FTA will continue to partner with the INDOT to ensure the previously developed action plan is implemented to address the corrective actions. If progress is not made in addressing the corrective actions, future amendments to the FY2024-2028 STIP, or adoption of the FY2026-2030 STIP, may not be approved by USDOT.

FHWA only recognizes years 2024-2027 in the STIP. Any projects and/or phases of projects added in years outside of 2024-2027 are considered illustrative, and thus ineligible for federal funding at this time.

Should you have any questions regarding this approval please contact Erica Tait at 317-226-7481 or e-mail at erica.tait@dot.gov.

Sincerely,

Erica Tait

Digitally signed by Erica Tait
Date: 2023.09.27 10:17:59 -04'00'

For: Jermaine R. Hannon
Division Administrator

Enclosure

cc: Michael McNeil, INDOT
April Leckie, INDOT

Table 4.4: TIP Projects Listing (Cont.)

Sponsor: Indiana Department of Transportation				All amounts in thousands							
Route / Des# / Length: / Description:	Project Limits / Planning Reference / Federal Funding Category	Amendment/ Modification Date	Phase	2024	2025	2026	2027	2028	Planning/ Cost to Complete	Federal Share	State Share
										2024-2028 Estimates	
Vanderburgh County											
US 41	Intersection with Hillsdale Rd., 2.04 mi. N of SR 57		PE							$ -	$ -
1400005			RW							$ -	$ -
0.105 mi.	NHPP	9/21/2023	CN	$5,448						$ 4,358	$ 1,090
Contract 37845; Intersection improvement project. Includes Des# 1900273 & 1900275, small structure replacements										Project Total *	$6,432
US 41	Intersection with Lynch Rd., 1.0 mi. N of SR 66		PE							$ -	$ -
1601011			RW							$ -	$ -
n/a	NHPP		CN			$1,337				$ 1,070	$ 267
Contract 39923; Intersection improvement with turn lanes										Project Total *	$1,540
US 41	From SR 66/SR 62 (Lloyd) to 3.2 mi N of SR 57		PE							$ -	$ -
1601066			RW							$ -	$ -
2.0 mi.	NHPP		CN	$28,117						$ 22,494	$ 5,623
Contract 41410; Pavement Replacement;										Project Total *	$30,504
I-64	Over Abandoned N & S Railroad, 0.82 mi E SR-65		PE							$ -	$ -
1900099			RW							$ -	$ -
n/a	NHPP		CN	$3,563						$ 3,207	$ 356
Contract 42187; Bridge Deck Replacement; Includes Des# 1900100, 2000767										Project Total *	$3,563
SR 62	From Vanderburgh/Posey County line east to St Joseph Ave		PE	$1,031						$ 825	$ 206
1900308			RW	$1,041						$ 833	$ 208
1.85 mi.	NHPP	9/14/2023	CN	$74,900	$23,300	$20,000				$ 94,560	$ 23,640
Contract 42287; Road Reconstruction & Intersection Improvements at Schutte, Boehne Camp, Red Bank, Rosenberger; Bridge Replacements at CSX Railroad, Carpenter Creek & Tekoppel Ave. and the pedestrian bridge over SR 62 at St Joe. Includes Des# 1500041, 1600060, 1602258, 1702066, 1900258, 1900260, 1900262, 1900264, 2001917, 2100041										Project Total *	$126,631
SR 62	At Vann Ave, Burkhardt Rd, Cross Pointe Blvd, Stockwell Rd		PE							$ -	$ -
1900292			RW	$65						$ 52	$ 13
n/a	NHPP	9/14/2023	CN	$27,251	$10,600					$ 30,281	$ 7,570
Contract 44898: Intersection Improvements; Includes Des# 1900268, 1900317, 2000217, 2201283										Project Total *	$37,916
SR 62	SR 62 from 3.92 mi W of S US 41 (Ingle Ave to 2.72 mi W of Jct US 41 (Wabash Ave)		PE	$10	$40					$ 40	$ 10
2301254			RW							$ -	$ -
1.99 mi.	NHPP	9/14/2023	CN			$3,670	$34,411			$ 30,465	$ 7,616
Contract 45152: Pavement replacement and interseciton improvements; includes Des# 1900263, 2000187, 1900308										Project Total *	$38,131
Various	Various Locations on US 41 and I-69		PE							$ -	$ -
2000987			RW							$ -	$ -
n/a	NHPP		CN	$2,417						$ 1,934	$ 483
Contract 42736; Small structure projects; Includes Des# 2001053										Project Total *	$3,068
SR 62	At Boehne Camp Rd and at Red Bank Rd		PE							$ -	$ -
1900258			RW	$20						$ 16	$ 4
n/a	NHPP		CN		$7,168					$ 5,734	$ 1,434
Contract 43199; Intersection Improvement; Includes Des# 1900260										Project Total *	$8,218
Various	Various locations in the Vincennes District		PE	$250						$ 200	$ 50
2002024			RW							$ -	$ -
n/a	STBG		CN		$5,171					$ 4,137	$ 1,034
Contract 43231; Bridge rehabilitation; Includes Des# 2002046, 2002134, 2002135, 2002368, 2200910, 2200911										Project Total *	$5,421
I-69	From US 41 to I-64		PE		$660					$ 594	$ 66
1802087			RW							$ -	$ -
n/a	NHPP		CN			$7,200				$ 6,480	$ 720
Contract 43506: ITS Traffic Management Systems; Includes Des# 2002562										Project Total *	$7,860
SR 57	From 1.32 mi N of US 41 to S jct of I 69		PE							$ -	$ -
2100260			RW							$ -	$ -
6.442 mi	NHPP		CN	$10		$5,329				$ 4,271	$ 1,068
Contract 43982; HMA Overlay, preventative maintenance.										Project Total *	$5,789
SR 66	Over UNT, 1.45 mi E of Jct SR 65		PE	$140						$ 112	$ 28
2100812			RW							$ -	$ -
n/a	STBG		CN			$430				$ 344	$ 86
Contract 43986; Small structure pipe lining.										Project Total *	$570
SR 62	At Boeke Rd. 1.01 mi E of US 41		PE	$980						$ 784	$ 196
2100044			RW		$100					$ 80	$ 20
0.1 mi	STBG	11/9/2023	CN			$2,499				$ 1,999	$ 500
Contract 44013; Intersection improvement with added turn lanes. Includes Des# 2100051 (at Stockwell Rd)										Project Total *	$3,579

Categorical Exclusion

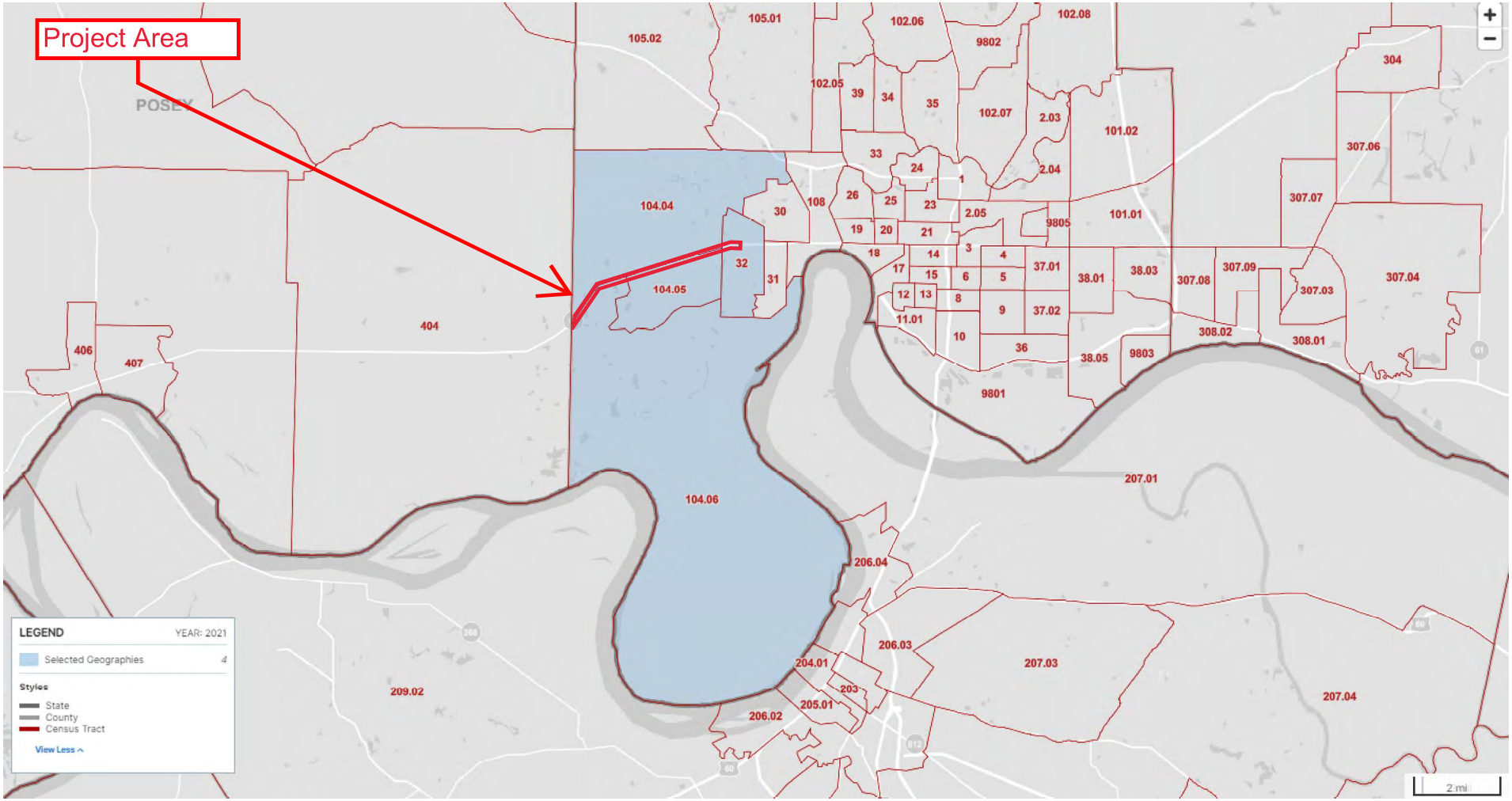
Appendix I

Other Information

Land and Water Conservation Fund (LWCF) County Property List for Indiana (Last Updated March 2022)

ProjectNumber	SubProjectCode	County	Property
1800013	1800013	Vanderburgh	Garvin Park
1800086	1800086	Vanderburgh	Wesselman Park and Par 3 Golf Course
1800093	1800093A	Vanderburgh	Howell Park
1800093	1800093B	Vanderburgh	Price Park
1800093	1800093C	Vanderburgh	Sunrise Park
1800093.4	1800093.4	Vanderburgh	Fourth and Main Park
1800094	1800094	Vanderburgh	Pigeon Creek Greenway, Stream Valley Park
1800100	1800100	Vanderburgh	Anthony C. Oates Park and Pool
1800109	1800109	Vanderburgh	Golfmoor Park & Lakeview Tennis Courts
1800224	1800224	Vanderburgh	Pigeon Creek Greenway, Stream Valley Park
1800224.2	1800224.2	Vanderburgh	Tepe Park
1800288	1800288	Vanderburgh	Burdette Park
1800333	1800333	Vanderburgh	Kleymeyer Park
1800334	1800334C	Vanderburgh	Stockwell Park
1800390	1800390	Vanderburgh	William J. Moutoux Park
1800496	1800496	Vanderburgh	Pigeon Creek Greenway, Stream Valley Park

*Park names may have changed. If acquisition of publically owned land or impacts to publically owned land is anticipated, coordination with IDNR, Division of Outdoor Recreation, should occur.


Project Area
POSEY
105.01
105.02
102.06
102.08
9802
304
102.05
39
34
35
102.07
2.03
101.02
307.06
33
24
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104.04
30
108
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LEGEND
YEAR: 2021
Selected Geographies
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State
County
Census Tract
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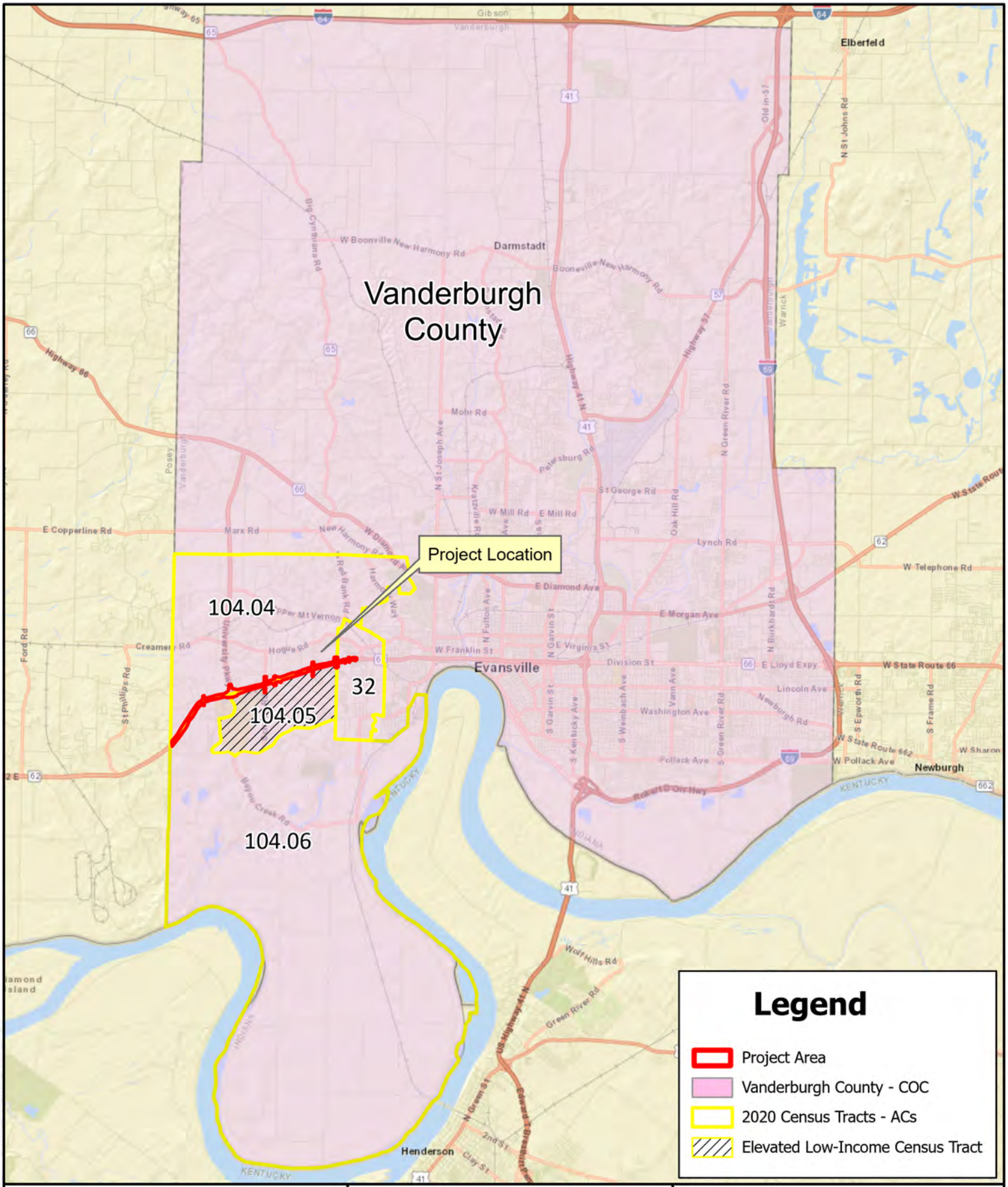
2016-2020 American Community Survey 5-Year Estimates	COC	AC 1	AC 2	AC 3	AC 4
	Vanderburgh County, IN	Census Tract 32, Vanderburgh County, IN	Census Tract 104.04, Vanderburgh County, IN	Census Tract 104.05, Vanderburgh County, IN	Census Tract 104.06, Vanderburgh County, IN
LOW-INCOME POPULATION					
Total Population for Whom Poverty Status is Determined	172,843	3,798	6,728	1,759	1,951
Total Population Below Poverty Level	26,353	606	368	465	70
Percent Low-Income	15.25%	15.96%	5.47%	26.44%	3.59%
125 Percent of COC	19.06%				
AC Percent Low-Income Greater Than 125 Percent of COC?		NO	NO	**YES**	NO
AC Percent Low-Income Greater Than 50 Percent?		NO	NO	NO	NO
Population of EJ Concern?		**NO**	**NO**	**YES**	**NO**
MINORITY POPULATION					
Total Population	179,695	3,798	6,821	3,928	1,981
Minority Population	31,430	288	511	413	30
Percent Minority	17.49%	7.58%	7.49%	10.51%	1.51%
125 Percent of COC	21.86%				
AC Percent Minority Greater Than 125 Percent of COC?		NO	NO	NO	NO
AC Percent Minority Greater Than 50 Percent?		NO	NO	NO	NO
Population of EJ Concern?		**NO**	**NO**	**NO**	**NO**



LOCHMUELLER GROUP

6200 Vogel Road
Evansville, IN 47715
Phone: (812) 479-6200
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EJ Analysis Map

Lead Des. No. 1900308

0 1.5 3 Miles

N

City: Evansville
County: Vanderburgh
Townships: Pigeon & Perry

SR 62, from Rosenberger Avenue (4.59 Mi W of S Jct US 41) to 2.72 Mi W of S Jct US 41
Road Reconstruction
Created: 3/13/2023, H. Hume

POVERTY STATUS IN THE PAST 12 MONTHS BY SEX BY AGE

United States® Census Bureau

Note: The table shown may have been modified by user selections. Some information may be missing.

DATA NOTES	
TABLE ID:	B17001
SURVEY/PROGRAM:	American Community Survey
VINTAGE:	2021
DATASET:	ACSDT5Y2021
PRODUCT:	ACS 5-Year Estimates Detailed Tables
UNIVERSE:	Population for whom poverty status is determined
FTP URL:	None
API URL:	https://api.census.gov/data/2021/acs/acs5
USER SELECTIONS	
TABLES	B17001
GEOS	Census Tract 104.04, Vanderburgh County, Indiana; Census Tract 104.05, Vanderburgh County, Indiana; Census Tract 32, Vanderburgh County, Indiana; Census Tract 104.06, Vanderburgh County, Indiana; Vanderburgh County, Indiana
EXCLUDED COLUMNS	None
APPLIED FILTERS	None
APPLIED SORTS	None
PIVOT & GROUPING	
PIVOT COLUMNS	None
PIVOT MODE	Off
ROW GROUPS	None
VALUE COLUMNS	None
WEB ADDRESS	https://data.census.gov/table?q=B17001:+POVERTY+STATUS+IN+THE+PAST+12+MONTHS+BY+SEX+BY+AGE&g=0500000US18163_1400000US18163003200,18163010404,18163010405,18163010406&tid=ACSDT5Y2021.B17001
TABLE NOTES	Although the American Community Survey (ACS) produces population, demographic and housing unit estimates, it is the Census Bureau's Population Estimates Program that produces and disseminates the official estimates of the population for the nation, states, counties, cities, and towns and estimates of housing units for states and counties.
	Supporting documentation on code lists, subject definitions, data accuracy, and statistical testing can be found on the American Community Survey website in the Technical Documentation section. Sample size and data quality measures (including coverage rates, allocation rates, and response rates) can be found on the American Community Survey website in the Methodology section.
	Source: U.S. Census Bureau, 2017-2021 American Community Survey 5-Year Estimates
	Data are based on a sample and are subject to sampling variability. The degree of uncertainty for an estimate arising from sampling variability is represented through the use of a margin of error. The value shown here is the 90 percent margin of error. The margin of error can be interpreted roughly as providing a 90 percent probability that the interval defined by the estimate minus the margin of error and the estimate plus the margin of error (the lower and upper confidence bounds) contains the true value. In addition to sampling variability, the ACS estimates are subject to nonsampling error (for a discussion of nonsampling variability, see ACS Technical Documentation). The effect of nonsampling error is not represented in these tables.
	The 2017-2021 American Community Survey (ACS) data generally reflect the March 2020 Office of Management and Budget (OMB) delineations of metropolitan and micropolitan statistical areas. In certain instances, the names, codes, and boundaries of the principal cities shown in ACS tables may differ from the OMB delineation lists due to differences in the effective dates of the geographic entities.
	Estimates of urban and rural populations, housing units, and characteristics reflect boundaries of urban areas defined based on Census 2010 data. As a result, data for urban and rural areas from the ACS do not necessarily reflect the results of ongoing urbanization.
	Explanation of Symbols:- The estimate could not be computed because there were an insufficient number of sample observations. For a ratio of medians estimate, one or both of the median estimates falls in the lowest interval or highest interval of an open-ended distribution. For a 5-year median estimate, the margin of error associated with a median was larger than the median itself.N The estimate or margin of error cannot be displayed because there were an insufficient number of sample cases in the selected geographic area. (X) The estimate or margin of error is not applicable or not available.median- The median falls in the lowest interval of an open-ended distribution (for example "2,500-")median+ The median falls in the highest interval of an open-ended distribution (for example "250,000+").** The margin of error could not be computed because there were an insufficient number of sample observations.*** The margin of error could not be computed because the median falls in the lowest interval or highest interval of an open-ended distribution.***** A margin of error is not appropriate because the corresponding estimate is controlled to an independent population or housing estimate. Effectively, the corresponding estimate has no sampling error and the margin of error may be treated as zero.
COLUMN NOTES	None

	Vanderburgh County, Indiana		Census Tract 32, Vanderburgh County, Indiana		Census Tract 104.04, Vanderburgh County, Indiana		Census Tract 104.05, Vanderburgh County, Indiana		Census Tract 104.06, Vanderburgh County, Indiana	
Label	Estimate	Margin of Error	Estimate	Margin of Error	Estimate	Margin of Error	Estimate	Margin of Error	Estimate	Margin of Error
Total:	172,843	±631	3,798	±589	6,728	±639	1,759	±382	1,951	±286
Income in the past 12 months below poverty level:	26,353	±1,742	606	±237	368	±195	465	±240	70	±50
Male:	11,307	±948	290	±110	116	±68	35	±38	29	±33
Under 5 years	1,265	±288	11	±17	0	±17	0	±12	0	±12
5 years	186	±118	0	±12	0	±17	0	±12	0	±12
6 to 11 years	1,399	±349	0	±12	0	±17	0	±12	0	±12
12 to 14 years	698	±202	0	±12	0	±17	0	±12	0	±12
15 years	235	±114	0	±12	0	±17	0	±12	0	±12
16 and 17 years	387	±131	12	±19	11	±17	0	±12	0	±12
18 to 24 years	1,380	±275	140	±80	51	±48	26	±35	9	±14
25 to 34 years	1,077	±257	71	±59	0	±17	0	±12	0	±12
35 to 44 years	967	±210	32	±42	0	±17	0	±12	0	±12
45 to 54 years	1,282	±300	9	±17	0	±17	0	±12	2	±4
55 to 64 years	1,490	±238	15	±17	14	±22	0	±12	9	±14
65 to 74 years	592	±175	0	±12	8	±13	0	±12	9	±14
75 years and over	349	±100	0	±12	32	±37	9	±14	0	±12
Female:	15,046	±1,039	316	±166	252	±171	430	±242	41	±30
Under 5 years	1,284	±240	32	±42	0	±17	0	±12	0	±12
5 years	270	±180	0	±12	0	±17	0	±12	0	±12
6 to 11 years	1,458	±325	92	±85	0	±17	0	±12	0	±12
12 to 14 years	773	±196	0	±12	16	±24	0	±12	0	±12
15 years	169	±94	0	±12	0	±17	0	±12	0	±12
16 and 17 years	459	±131	0	±12	0	±17	0	±12	0	±12
18 to 24 years	2,344	±331	100	±55	143	±135	366	±194	0	±12
25 to 34 years	2,260	±346	54	±40	8	±16	49	±76	0	±12
35 to 44 years	1,662	±264	0	±12	0	±17	0	±12	0	±12
45 to 54 years	1,286	±250	17	±22	18	±27	0	±12	0	±12
55 to 64 years	1,432	±239	12	±18	14	±23	15	±25	29	±26
65 to 74 years	664	±161	0	±12	20	±31	0	±12	10	±15
75 years and over	985	±197	9	±14	33	±35	0	±12	2	±4
Income in the past 12 months at or above poverty level:	146,490	±1,923	3,192	±634	6,360	±690	1,294	±246	1,881	±289
Male:	73,217	±1,008	1,465	±410	3,143	±331	532	±128	950	±212
Under 5 years	4,051	±305	45	±33	92	±84	5	±15	66	±62
5 years	619	±153	33	±32	17	±29	5	±15	0	±12
6 to 11 years	5,246	±424	50	±39	207	±81	11	±20	64	±40
12 to 14 years	2,790	±415	56	±66	105	±68	49	±31	13	±20
15 years	967	±186	6	±11	65	±51	22	±38	0	±12
16 and 17 years	1,724	±245	55	±66	126	±82	3	±11	0	±12
18 to 24 years	5,504	±307	176	±111	357	±161	43	±29	82	±49
25 to 34 years	11,137	±272	190	±77	328	±133	56	±62	49	±35
35 to 44 years	9,801	±265	99	±56	395	±180	80	±67	171	±64
45 to 54 years	8,986	±345	174	±101	463	±156	121	±54	98	±49
55 to 64 years	10,458	±245	363	±214	427	±133	43	±37	155	±79
65 to 74 years	7,837	±209	118	±59	398	±139	77	±47	142	±88
75 years and over	4,097	±124	100	±44	163	±76	17	±21	110	±51
Female:	73,273	±1,203	1,727	±321	3,217	±468	762	±178	931	±140
Under 5 years	3,630	±276	124	±79	122	±106	22	±31	43	±46
5 years	458	±146	7	±11	0	±17	0	±12	14	±20
6 to 11 years	5,007	±465	90	±51	328	±219	53	±38	141	±38
12 to 14 years	2,580	±377	147	±138	195	±90	22	±31	0	±12
15 years	787	±195	14	±22	200	±160	29	±36	0	±12
16 and 17 years	1,616	±214	39	±38	42	±39	26	±33	8	±15
18 to 24 years	4,748	±426	162	±119	266	±140	88	±59	36	±29
25 to 34 years	10,193	±366	261	±94	245	±109	103	±87	130	±76
35 to 44 years	9,041	±328	198	±67	471	±208	166	±92	64	±45
45 to 54 years	9,300	±299	208	±79	436	±140	83	±42	42	±36
55 to 64 years	11,250	±260	229	±83	464	±120	59	±37	191	±74
65 to 74 years	8,763	±221	157	±78	288	±71	78	±27	119	±63
75 years and over	5,900	±269	91	±44	160	±80	33	±26	143	±58

HISPANIC OR LATINO ORIGIN BY RACE

United States® Census Bureau

Note: The table shown may have been modified by user selections. Some information may be missing.

DATA NOTES	
TABLE ID:	B03002
SURVEY/PROGRAM:	American Community Survey
VINTAGE:	2021
DATASET:	ACSDT5Y2021
PRODUCT:	ACS 5-Year Estimates Detailed Tables
UNIVERSE:	Total population
FTP URL:	None
API URL:	https://api.census.gov/data/2021/acs/acs5
USER SELECTIONS	
TABLES	B03002
GEOS	Census Tract 104.05, Vanderburgh County, Indiana; Census Tract 104.06, Vanderburgh County, Indiana; Census Tract 32, Vanderburgh County, Indiana; Census Tract 104.04, Vanderburgh County, Indiana; Vanderburgh County, Indiana
EXCLUDED COLUMNS	None
APPLIED FILTERS	None
APPLIED SORTS	None
PIVOT & GROUPING	
PIVOT COLUMNS	None
PIVOT MODE	Off
ROW GROUPS	None
VALUE COLUMNS	None
WEB ADDRESS	https://data.census.gov/table?q=B03002&g=0500000US18163_1400000US18163003200,18163010404,18163010405,18163010406&tid=ACSDT5Y2021.B03002
TABLE NOTES	Although the American Community Survey (ACS) produces population, demographic and housing unit estimates, it is the Census Bureau's Population Estimates Program that produces and disseminates the official estimates of the population for the nation, states, counties, cities, and towns and estimates of housing units for states and counties.
	Supporting documentation on code lists, subject definitions, data accuracy, and statistical testing can be found on the American Community Survey website in the Technical Documentation section. Sample size and data quality measures (including coverage rates, allocation rates, and response rates) can be found on the American Community Survey website in the Methodology section.
	Source: U.S. Census Bureau, 2017-2021 American Community Survey 5-Year Estimates
	Data are based on a sample and are subject to sampling variability. The degree of uncertainty for an estimate arising from sampling variability is represented through the use of a margin of error. The value shown here is the 90 percent margin of error. The margin of error can be interpreted roughly as providing a 90 percent probability that the interval defined by the estimate minus the margin of error and the estimate plus the margin of error (the lower and upper confidence bounds) contains the true value. In addition to sampling variability, the ACS estimates are subject to nonsampling error (for a discussion of nonsampling variability, see ACS Technical Documentation). The effect of nonsampling error is not represented in these tables.
	The Hispanic origin and race codes were updated in 2020. For more information on the Hispanic origin and race code changes, please visit the American Community Survey Technical Documentation website.
	The 2017-2021 American Community Survey (ACS) data generally reflect the March 2020 Office of Management and Budget (OMB) delineations of metropolitan and micropolitan statistical areas. In certain instances, the names, codes, and boundaries of the principal cities shown in ACS tables may differ from the OMB delineation lists due to differences in the effective dates of the geographic entities.
	Estimates of urban and rural populations, housing units, and characteristics reflect boundaries of urban areas defined based on Census 2010 data. As a result, data for urban and rural areas from the ACS do not necessarily reflect the results of ongoing urbanization.
	Explanation of Symbols:- The estimate could not be computed because there were an insufficient number of sample observations. For a ratio of medians estimate, one or both of the median estimates falls in the lowest interval or highest interval of an open-ended distribution. For a 5-year median estimate, the margin of error associated with a median was larger than the median itself.N The estimate or margin of error cannot be displayed because there were an insufficient number of sample cases in the selected geographic area. (X) The estimate or margin of error is not applicable or not available.median- The median falls in the lowest interval of an open-ended distribution (for example "2,500-")median+ The median falls in the highest interval of an open-ended distribution (for example "250,000+").** The margin of error could not be computed because there were an insufficient number of sample observations.*** The margin of error could not be computed because the median falls in the lowest interval or highest interval of an open-ended distribution.***** A margin of error is not appropriate because the corresponding estimate is controlled to an independent population or housing estimate. Effectively, the corresponding estimate has no sampling error and the margin of error may be treated as zero.
COLUMN NOTES	None

	Vanderburgh County, Indiana		Census Tract 32, Vanderburgh County, Indiana		Census Tract 104.04, Vanderburgh County, Indiana		Census Tract 104.05, Vanderburgh County, Indiana		Census Tract 104.06, Vanderburgh County, Indiana	
Label	**Estimate**	**Margin of Error**	**Estimate**	**Margin of Error**	**Estimate**	**Margin of Error**	**Estimate**	**Margin of Error**	**Estimate**	**Margin of Error**
Total:	179,695	*****	3,798	±589	6,821	±635	3,928	±439	1,981	±287
Not Hispanic or Latino:	174,515	*****	3,686	±587	6,658	±638	3,820	±469	1,981	±287
White alone	148,265	±352	3,510	±569	6,310	±672	3,515	±425	1,951	±281
Black or African American alone	17,689	±613	32	±40	6	±9	193	±97	0	±12
American Indian and Alaska Native alone	63	±38	0	±12	0	±17	2	±4	0	±12
Asian alone	2,454	±289	124	±117	305	±244	65	±39	0	±12
Native Hawaiian and Other Pacific Islander alone	376	±80	0	±12	0	±17	0	±12	0	±12
Some other race alone	536	±405	0	±12	0	±17	0	±12	0	±12
Two or more races:	5,132	±785	20	±22	37	±47	45	±37	30	±42
Two races including Some other race	352	±200	0	±12	27	±44	0	±12	0	±12
Two races excluding Some other race, and three or more races	4,780	±759	20	±22	10	±17	45	±37	30	±42
Hispanic or Latino:	5,180	*****	112	±97	163	±146	108	±107	0	±12
White alone	2,517	±362	111	±97	11	±17	22	±20	0	±12
Black or African American alone	42	±38	0	±12	0	±17	0	±12	0	±12
American Indian and Alaska Native alone	55	±198	0	±12	0	±17	0	±12	0	±12
Asian alone	10	±20	0	±12	10	±20	0	±12	0	±12
Native Hawaiian and Other Pacific Islander alone	0	±29	0	±12	0	±17	0	±12	0	±12
Some other race alone	1,791	±362	1	±5	137	±147	58	±94	0	±12
Two or more races:	765	±249	0	±12	5	±12	28	±27	0	±12
Two races including Some other race	679	±243	0	±12	5	±12	26	±27	0	±12
Two races excluding Some other race, and three or more races	86	±60	0	±12	0	±17	2	±5	0	±12

From: Fair, Terri
To: Peter Putzier
Cc: Passmore, Andrew D
Subject: Des 2001917 - Draft EJ Analysis
Date: Thursday, April 13, 2023 9:26:48 AM
Attachments: DES 2001917 Draft EJ Analysis.pdf

EXTERNAL

INDOT-Environmental Services Division (ESD) has reviewed the project information along with the Environmental Justice (EJ) Analysis for the above referenced project. With the information provided, the project may require minimal right-of-way, require no relocations, and would not disrupt community cohesion or create a physical barrier. With the information provided, INDOT-ESD would not consider the impacts associated with this project as causing a disproportionately high and adverse effect on minority and/or low-income populations of EJ concern relative to non-EJ populations in accordance with the provisions of Executive Order 12898 and FHWA Order 6640.23a. No further EJ Analysis is required.

Stucture Number	Diameter (in)	Length (ft)	Station	Line	Existing Structure	Water Resources
101	30	161	135+46.07	PR-2	Existing 20" High Density Polyethelene (HDPE) Liner in 24" CMP	
102	32x49	171	144+75.08	PR-2	Existing 18" Cast Polypropelene (CPP) Liner	
103	18	175	155+09.94	PR-2	Existing 18" CMP	
104	24	230	158+05.56	PR-2	Existing 15" Plastic Liner in 18" CMP	UNT5 to Bayou Creek
105	24	280	163+06.44	PR-2	Existing 24" CMP	UNT4 to Bayou Creek
109	24	275	184+49.09	PR-2	Existing 24" CMP	
110	30	225	189+73.83	PR-2	Existing 30" CMP	
25	36	191	209+24.00	PR-2	Existing 24" CMP	
43	36	72	228+08.00	PR-2	Existing 18" CMP	
61	42	326	274+10.00	PR-2	Existing 36" CMP	UNT1 to Carpentier Creek
63	18	103	281+05.00	PR-2	Existing 18" CMP	
122	36	112	49+11.00	S-29-PR-2	Existing 18" CMP	
126	18	200	49+12.00	S-30-D	Existing 18" RCP	
127	15	109	52+34.00	S-30-D	Existing 12" CMP	
128	24	22	52+87.00	S-30-D	Existing 24" CMP	
134	15	166	48+27.00	S-32-PR-2	Existing 12" CMP	
137	30	152	50+67.00	S-33-PR-2	Existing 12" CMP	
138	15	198	49+27.00	S-34-PR-2	Existing 12" CMP	

Categorical Exclusion

Appendix J

Lloyd Expressway (SR 62) Corridor
Traffic Analysis

Lloyd Expressway (SR 62) Corridor Traffic Analysis

West Side Phase 2: West of Rosenberger Avenue to McDowell Road

Vanderburgh County/City of Evansville, Indiana

Des Nos: 2001917, 2100041, 1900262, 1900258, 1900260

November 2022

Prepared For:

Prepared By:

6200 Vogel Road

Evansville, IN 47715

Project Number: 119-0072

Table of Contents

LIST OF FIGURES

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EXECUTIVE SUMMARY

The purpose of this study is to develop and evaluate long-term traffic flow and safety improvement alternatives along the west end (Phase 2) of the Lloyd Expressway corridor (SR 62) in Evansville, Indiana, from west of Rosenberger Avenue to west of McDowell Road. Currently, motorists experience queueing, delays, and congestion during commuter peak hours resulting in driver dissatisfaction and discomfort. There are also numerous locations with safety concerns along the corridor.

Lochmueller Group previously completed a corridor analysis for Phase 1 of the west end of the SR 62 corridor (DES Nos: 1900308, 1900263, 1900264, 2000187; approved by INDOT in April 2022), extending from Wabash Avenue to Rosenberger Avenue. This Phase 2 study extends that Phase 1 analysis from just west of Rosenberger Avenue to west of McDowell Road. A single preferred alternative was identified for each intersection and interchange along the corridor with the objective of improving traffic operations and safety along the west end of the Lloyd Expressway corridor.

The study area limits include all intersections (signalized and unsignalized), right-in-right-out drives, and interchange ramps along SR 62 extending from west of Rosenberger Avenue to west of McDowell Road. The intersections of Red Bank Road & Pearl Drive, Red Bank Road & University Drive, and the University Parkway & Clarke Lane roundabout were included in the analysis due to their proximity to SR 62.

Traffic conditions were evaluated during the morning and afternoon commuter peak periods of a typical weekday. These periods represent peak times for traffic in the study area. If traffic can be accommodated at these times, it stands to reason that adequate capacity would be available the remainder of the day, as well as on weekends.

Lochmueller Group also previously completed an Engineering Assessment study along the SR 62 corridor in 2018. The study included analyzing alternative intersection configurations for the signalized intersections of SR 62 with Red Bank Road, Boehne Camp Road, and Schutte Road. The previous study recommended that all three intersections be of the same configuration, as it could cause confusion to mix multiple alternative intersection types when spaced closely. The previous Engineering Assessment study along SR 62 recommended partial Continues-Flow-Intersections (CFI) at all three signalized intersections because Red Bank Road functions optimally under future conditions as a CFI. The Boehne Camp and Schutte Road intersections with SR 62 were given the same recommendation to maintain corridor continuity. However, through the continued design of the Lloyd Expressway projects, including the west side Phase 1 and east side analyses, to our understanding there is no longer a concern of mixing multiple alternative intersection types along the corridor. Numerous treatment types are proposed at intersections along the corridor due to differing characteristics. Therefore, this analysis was free to consider additional solutions for the intersections of Boehne Camp Road and Schutte Road with SR 62.

For this reason, potential improvements for the corridor were considered with the primary objectives of both improving traffic operations and correctable safety issues if any were present. Recommendations by location along the corridor are as follows:

SR 62 and Red Bank Road

- The traffic patterns at the intersection of SR 62 and Red Bank Road would greatly benefit from a partial east-west CFI, also known as a displaced left turn intersection. The modified intersection would consist of single eastbound and westbound left turn lanes, eliminating the uneven lane utilization within the existing dual westbound left turn lanes.
- The eastern CFI sub intersection, where the westbound displaced left turn and northbound right turn intersect with the mainline, is in close proximity to the Culver's right-turn-only access drive. Due to this close proximity, this access drive should be closed.
- The westbound left storage bay for the CFI eastern sub intersection extends back into the middle ¾-access drive between Red Bank Road and Rosenberger Avenue. This access should be restricted to right-turns-only.
- Access to/from Weston Road via Red Bank Road should be closed. Traffic would be rerouted through the signalized intersection of Red Bank Road and University Drive.

SR 62 and Boehne Camp Road

- Modify the southbound approach to include a single dedicated left lane, single through lane, and right turn lane.
- The northbound approach should consist of dual left turns, a single through lane, and a dedicated right turn lane.
- The southbound left turn movement would operate under protected/permissive phasing so long as sufficient offset is provided to ensure adequate sight distance of oncoming through traffic. Northbound left turns would operate under protected only phasing.

SR 62 and Schutte Road, Middle Mount Vernon Road, and Felstead Road

- There are multiple instances of rear end collisions at both Felstead Road and Schutte Road. Given the proximity of Schutte Road, Felstead Road, and Middle Mount Vernon Road, any proposed solution should treat this area as a "network" to reduce crashes without significantly impacting traffic performance.
- A series of both signalized and unsignalized Reduced Conflict intersections (RCI) are proposed at Schutte Road, Felstead Road, and Middle Mount Vernon Road. An eastbound U-turn located east of Middle Mount Vernon Road will serve northbound thru and left turning movements originating from Schutte Road, Felstead Road, and Middle Mount Vernon Road. Similarly, southbound thru and left turning motorists at Schutte Road would need to travel to the westbound U-Turn located west of Schutte Road.
- The southbound approach of Middle Mount Vernon utilizes a westbound U-turn location between Felstead Road and Schutte Road.
- INDOT has requested that vehicle detection loops (no signal head) be placed in the westbound U-Turn lane between Felstead Road and Schutte Road. This loop should call the westbound left turn phase at Schutte Road, which will stop eastbound mainline traffic at the Schutte Road signalized intersection, thereby providing a gap for U-turning traffic.

- The intersection of SR 62 with Schutte Road remains signalized with the mainline left turn movements allowed. Both the northbound and southbound side street approaches would be restricted to right-turns-only under a modified RCI configuration.
- The westbound U-Turn located west of Schutte Road should be signalized to run concurrent with side street traffic. Without this dedicated phase, the U-Turning traffic would experience significant delays during peak hours, and queues could potentially back up to Schutte Road.

SR 62 and McDowell Road

- The intersection of SR 62 and McDowell Road should be converted to a Restricted Crossing Intersection with U-Turn locations provided both east and west of McDowell Road. All intersections would remain unsignalized and yield to mainline traffic, including the U-Turns.

INTRODUCTION

Purpose

The purpose of this study is to develop and evaluate long-term traffic flow and safety improvement alternatives along the west end (Phase 2) of the Lloyd Expressway corridor (SR 62) in Evansville, Indiana, from west of Rosenberger Avenue to west of McDowell Road. Currently, motorists experience queueing, delays, and congestion during commuter peak hours resulting in driver dissatisfaction and discomfort. There are also numerous locations with safety concerns along the corridor. Lochmueller Group has completed a corridor analysis for Phase 1 of the west end of the SR 62 corridor (DES Nos: 1900308, 1900263, 1900264, 2000187; approved by the Indiana Department of Transportation (INDOT) in April 2022), extending from Wabash Avenue to Rosenberger Avenue. This Phase 2 study extends that Phase 1 analysis from just west of Rosenberger Avenue to west of McDowell Road. A single preferred alternative was identified for each intersection and interchange along the corridor with the objective of improving traffic operations and safety along the west end of the Lloyd Expressway corridor.

Study Overview

The study area limits include all intersections (signalized and unsignalized), right-in-right-out drives, and interchange ramps along SR 62 extending from west of Rosenberger Avenue to McDowell Road. The intersections of Red Bank Road & Pearl Drive, Red Bank Road & University Drive, and the University Parkway & Clarke Lane roundabout were included in the analysis due to their proximity to SR 62. The study area map is illustrated in **Figure 1**.

Traffic conditions were evaluated during the morning and afternoon commuter peak periods of a typical weekday. These periods represent peak times for traffic in the study area. If traffic can be accommodated at these times, it stands to reason that adequate capacity would be available the remainder of the day, as well as on weekends.

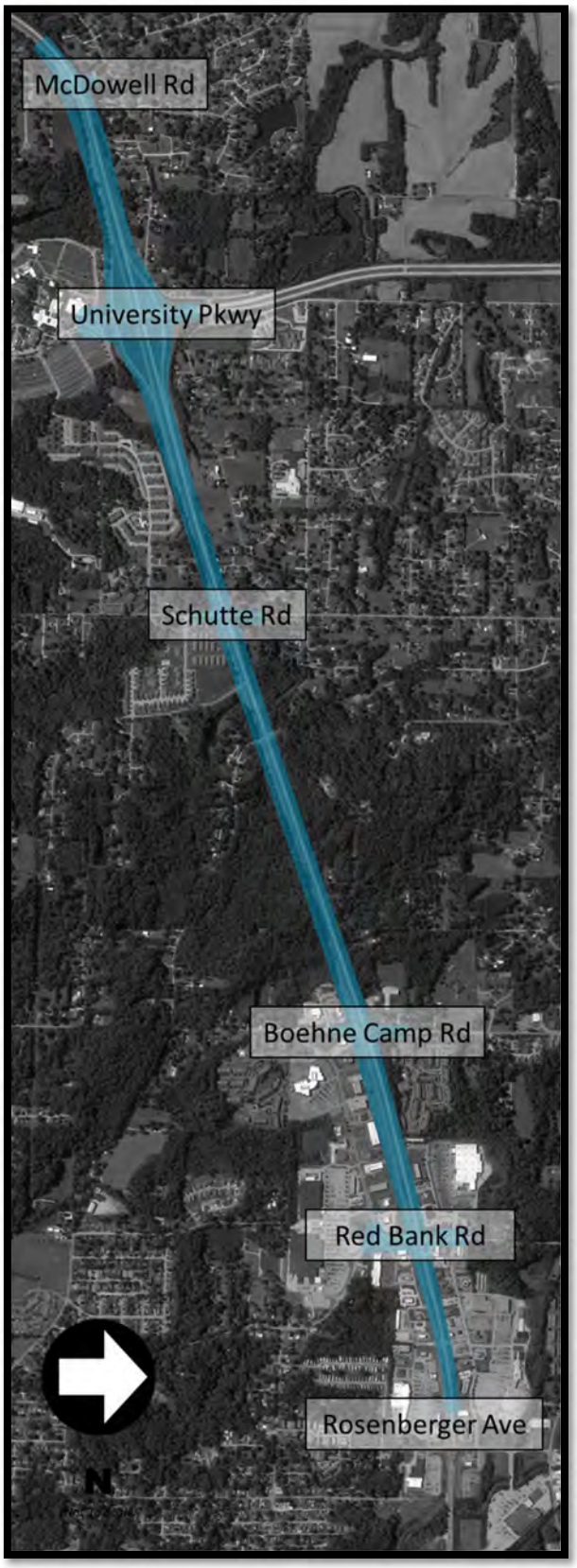

Figure 1: Study Area Map

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BACKGROUND

Data Collection & Field Inventory

Traffic Data

Traffic counts were performed during the weekday morning (7:00 AM to 9:00 AM) and afternoon (4:00 PM to 6:00 PM) peak periods of a typical weekday to quantify existing traffic volumes, including video-based turning movement counts at intersections, driveways, and ramps of interest. All traffic counts were provided and/or collected by The Indiana Department of Transportation (INDOT) or the Evansville Metropolitan Planning Organization (EMPO). From the data, the peak hours of traffic were determined to occur between 7:00 AM and 8:00 AM in the morning and from 4:15 PM to 5:15 PM during the afternoon.

The following traffic counts were collected in March 2021, and provided by EMPO:

- SR 62 and Schnuck's Eastern Access Drive (unsignalized, right-in-right-out)
- SR 62 and Middle ¾ Access Drive (unsignalized)
- SR 62 and Culver's Western Access Drive (unsignalized, right-in-right-out)
- SR 62 & Red Bank Road (signalized)
- SR 62 & Pearl Drive (signalized)
- SR 62 & Weston Road (unsignalized)
- SR 62 & University Drive (signalized)
- SR 62 & Boehne Camp Road (signalized)
- SR 62 & Schutte Road (signalized)
- University Parkway & SR 62 Westbound Ramps (unsignalized)
- University Parkway & SR 62 Eastbound Ramps (unsignalized)
- SR 62 & McDowell Road (unsignalized)

Traffic counts for Phase 2 were conducted in 2021 during the COVID-19 pandemic. When comparing the traffic volumes from Phase 1 to those of Phase 2, there was a noticeable deflation in Phase 2 mainline volumes, which was assumed attributable to COVID-19 pandemic impacts. To confirm, the 2021 traffic counts were compared to historic traffic counts along the SR 62 corridor.

Lochmueller Group previously conducted an Engineering Assessment study for INDOT along the SR 62 corridor in 2018, which included the intersections of SR 62 with Red Bank Road, Boehne Camp Road, and Schutte Road. This Engineering Assessment utilized traffic data collected in 2019, before COVID-19 impacts were realized along the corridor. A comparison of the 2019 and 2021 traffic counts at the intersections of SR 62 with Red Bank Road, Boehne Camp Road, and Schutte Road revealed that the mainline traffic volumes along the corridor at those intersections during 2021 were lower than the 2019 counts used in the SR 62 Engineering Assessment Study.

The difference between the volume balanced Phase 1 counts and those from Phase 2 directly corresponded to the mainline volume discrepancy between the 2021 traffic counts and the 2019 traffic counts that were conducted pre COVID-19 as part of the Engineering Assessment study. Therefore, the March 2021 traffic counts collected for Phase 2 were volume balanced with those from Phase 1. The resulting traffic volumes served as the existing traffic volumes for the westside Phase 2 corridor analysis.

The roundabout at University Parkway and Clarke Lane was requested by INDOT to be added into the corridor study analysis after the initial traffic counts had been collected. Therefore, traffic counts were not collected at this intersection as part of the westside Phase 2 corridor study. The most recent traffic count data available at this location was from 2014. The traffic volumes at the roundabout from 2014 were significantly higher than those which were collected at the University Parkway interchange ramps as part of the initial project traffic counts in March 2021. It is assumed that traffic entering and exiting the University of Southern Indiana's campus via the roundabout at University Parkway and Clarke Lane has been strongly impacted by COVID-19 as classes shifted to either a hybrid schedule or fully remote. For this reason, the 2014 traffic counts were volume balanced based on turning movement magnitude with the March 2021 traffic counts at the interchange ramps to the north.

Crash Data

Historical crash data for years 2018 through 2020 was obtained from INDOT for the entire corridor located within Vanderburgh County. The data specified crash characteristics such as number of crashes, crash severity (fatal, disabling injury, minor injury, property damage only), and type of crash (i.e., rear end, head-on).

Field Inventory

Detailed inventories of field conditions were performed to capture both physical and operational characteristics of the study area network. The physical inventory emphasized static features of the roadway and included items such as posted speed limits, number of travel lanes, lane designations at intersections, and traffic signal phasing (i.e. protected turn arrows versus permissive turning movements).

The operational inventory focused on traffic flows during the peak periods. Locations of congestion and traffic backups were identified and monitored to determine sources of constrained flows. Traffic speeds on ramps and at critical turning movements were noted. Lane changing behavior and lane utilization (the preference of drivers to use one lane over the other) were observed throughout the study area. Prevailing queue lengths at intersections were inventoried. Traffic signal operations were monitored to determine the quality of traffic progression along the SR 62 corridor and to identify locations where through traffic was consistently stopped. Maximum saturation flow rates were then field measured at various locations during the peak hours and used to calibrate traffic flow rates in the simulation models.

Analysis Methodology

Traffic

The traffic analysis was based primarily upon a traffic simulation model developed using VISSIM 2021 with Service Pack SP09. VISSIM is a microsimulation tool that accurately replicates individual vehicles and their interactions within complex traffic streams, such as interchanges, freeways, and expressway corridors with signalized intersections. Robust data and field observations were conducted to calibrate VISSIM to reproduce field conditions. In addition to VISSIM, a Synchro model of the study area was constructed for signal timing development and optimization, and to aid in volume balancing. HCS7, which uses methodologies based on the Highway Capacity Manual, 6th Edition (HCM) published by the Transportation Research Board, was used to evaluate merge, diverge, and weaving operations as a supplement to the VISSIM model.

The traffic models evaluate conditions during the morning and afternoon peak hours and provide performance measures as outputs. The main performance measures evaluated for intersections were delay, average queue length, and maximum queue length, while the performance measure evaluated for merging/diverging/weaving areas of ramp segments was density (passenger cars per mile per lane) which is a useful indicator of traffic flow stability and the potential for congestion. The ramp segments were also graded using levels of service (LOS) in accordance with the HCM. The density criteria for freeways are summarized in **Table 1**. Levels of services (LOS), which range from LOS A ("free flow") to LOS F ("oversaturated"), are measures of traffic flow that consider factors such as speed, delay, interruptions, safety, and driver comfort and convenience. LOS C, which is commonly used for design purposes, represents a segment with volumes utilizing approximately 70 to 80 percent of its capacity. However, LOS D is considered acceptable in urban and suburban settings.

Table 1: Freeway Level of Service Thresholds

Level of Service	Density	
	Basic Segment	Merge/Diverge/Weave Segment
A	0-11	0-10
B	> 11-18	>10-20
C	>18-26	>20-28
D	>26-35	>28-35
E	>35-45	>35
F	Over Capacity	Over Capacity

Density values expressed in passenger cars per mile per lane

Safety

The SR 62 corridor serves as one of the main thoroughfares for motorists to travel in the east and west directions across Evansville. Thus, the corridor experiences significant congestion during the morning and afternoon peak hours, which drives numerous safety issues. As stated previously, crash summary data was obtained from INDOT for years 2018 through 2020 for the safety analysis, which is the latest 3-year period of available data.

The data provided by INDOT was reviewed and revised as necessary to ensure appropriate classification of crash severity for injury and incapacitating crashes. Indiana's electronic reporting tool currently classifies a crash participant as having an incapacitating injury if that person was transported from the scene for medical treatment at an emergency room or trauma center.

A safety analysis was performed for the corridor by implementing several methodologies. RoadHAT 4.0 software was used for the initial analysis of the corridor. RoadHAT is a crash analysis tool that is compliant with the Highway Safety Manual methodology and is calibrated for Indiana roadways. RoadHAT calculates an Index of Crash Frequency (ICF) and Index of Crash Cost (ICC) for each studied location or segment. The index values represent the number of standard deviations (+/-) away from the average for the corresponding facility type (intersection, segment, or ramp). The higher the ICF value, the stronger the evidence for the location to classify as a high or severe crash location. Similarly, the higher the ICC value, the stronger the evidence that crashes at the location cost more than would

otherwise be expected, due to the incidence of higher severity crashes. The ICF and ICC were calculated for intersections, and interchange segments along the SR 62 corridor.

For more detailed analysis, crashes were further scrutinized to identify underlying patterns in crashes along the corridor and its adjacent roadways. The detailed analysis assessed tends in crash type, crash severity, and contributing circumstances that would be indicative of a correctable safety issue.

Model Calibration

The traffic simulation model calibration process began with the development of a base model, which aims to replicate existing conditions. As previously noted, a robust data collection effort was required to support this effort, including roadway geometry, turning speeds, traffic signal timings, etc. The first step in base model development involved coding the roadway geometry (number of lanes and link lengths) with links and connectors using a recent aerial as a template. The base model extents are shown in **Figure 2**.

Once the network backbone was established, free-flow speed distributions were created. Reduced speed zones were also established for turning movements and locations in the network where the roadway geometry physically limits speeds below the free-flow speed or posted speed limits. The next steps addressed traffic control. Traffic signal timings obtained from INDOT were input into the simulation, with detectors coded where applicable. Stop-controlled movements received stop signs coded into the network. Locations where yielding or traffic control priority needed to be established (such as a right-turn-on-red) were coded with conflict areas or priority rules. Conflict areas typically suffice unless further refinement of the gap times or yielding characteristics was necessary, in which case priority rules were deployed.

Traffic volumes were then represented in the VISSIM model as an origin-destination matrix estimated from turning movement counts. The matrix specifies the model's traffic patterns and the routes vehicles take to traverse the model network. Traffic entering the model network was coded using vehicle inputs. Vehicle inputs specify volumes and vehicle type compositions, which are grouped into passenger vehicles, trucks, light-goods, and buses. The origin-destination matrix was routed statically with routes traversing the entire network for optimum accuracy rather than simply intersection by intersection.

Since VISSIM starts with zero vehicles in the network, a warm-up period is needed to initiate the model with traffic prior to capturing data. The warm-up period is known as the seeding period and its length and volume characteristics were adjusted as part of the calibration process. Given the scale of the network, a 30-minute seeding period was used to establish background traffic before recording results.

Given the inherent stochastic nature of simulation (imposed by random seeds), multiple simulation runs using different seed numbers were required for each scenario and the reported model results were averaged across runs. Typically, 10 simulation runs are sufficient to obtain an appropriate level of confidence in the results.

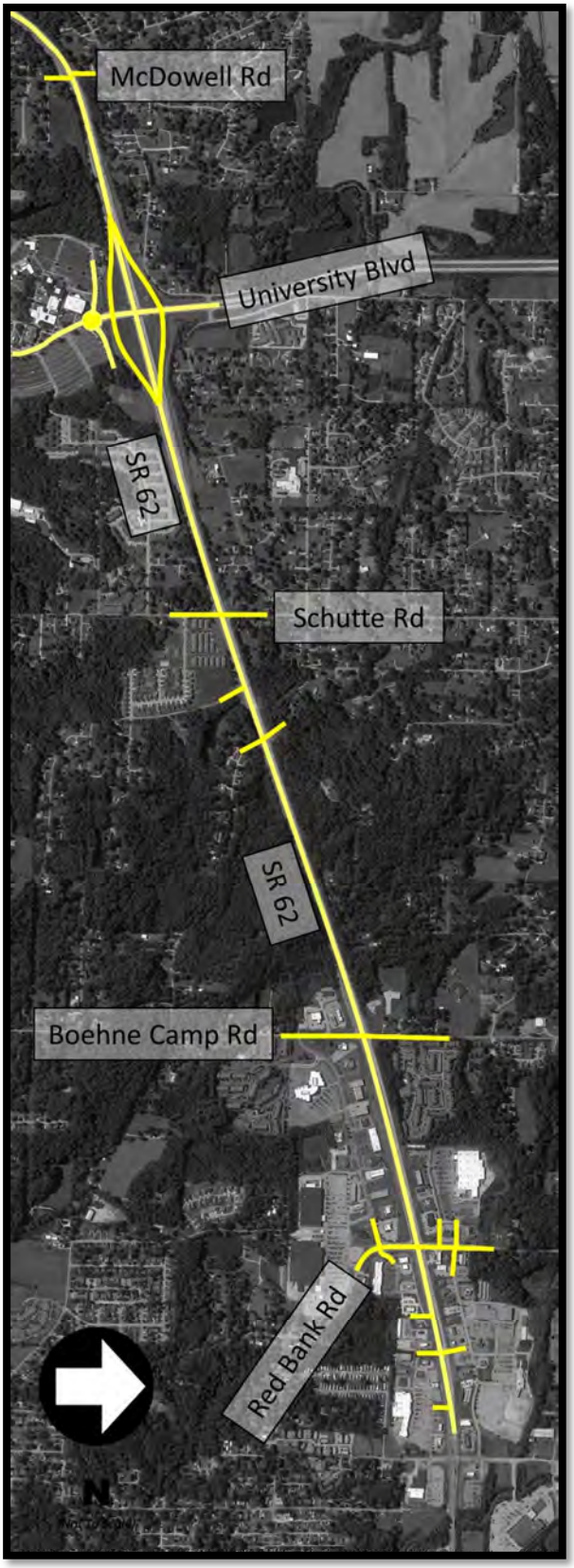


Figure 2. Base VISSIM Model Extents

The model calibration process finished with a detailed review of model parameters and thorough consideration of adjustments to improve the model's ability to replicate field conditions. The final calibration process compared data output from the model, such as travel times and flow rates, to field measurements of the same attributes. Specific calibration measures undertaken as part of developing this model were as follows:

- A modified version of VISSIM's default "urban" link driver behavior type was employed to reflect driving behavior more realistically in the Evansville region.
- Lane change distances, which specify the position where vehicles begin to consider making a lane change in advance of a downstream turn, were adjusted to reflect where vehicles change lanes based on field observations.
- More specifically, lane change distances were modified for the southbound approach at Red Bank Road and Pearl Drive to replicate the unbalanced vehicle stacking in the dual westbound left turn lanes at SR 62 and Red Bank Road.
- Further adjustments to the driving behavior along SR 62 were applied to reproduce saturation flow rates measured in the field. Emphasis was placed on the signalized intersections of SR 62 with Red Bank Road, Boehne Camp Road, and Schutte Road since the traffic signals run a static signal timing plan during the morning and afternoon peak hours. The modified driving behaviors in VISSIM reproduced nearly the same number of vehicles along SR 62 flowing through the signalized intersections in the eastbound and westbound directions, validating the calibration efforts. This technique is critical to replicate congestion and observed queue lengths at signalized intersections along SR 62.

EXISTING CONDITIONS

Existing conditions were evaluated to quantify existing traffic flow and safety deficiencies.

Existing Traffic Analysis

Within the study area, SR 62 is a multi-lane divided expressway with at-grade signalized intersections or grade separated overpasses at major cross streets. INDOT's traffic volume database estimates average daily traffic (ADT) on the eastern end of the SR 62 corridor study limit to be approximately 33,500 vehicles per day, and approximately 28,500 at the western limit. In other words, mainline traffic volumes decrease as you travel west along the corridor. During the morning peak hour, volumes are slightly heavier in the eastbound direction. In the afternoon peak hour, directional volumes are more evenly balanced along the corridor, although the westbound direction is slightly heavier. These patterns are consistent with the character of the corridor as a major commuter route. A summary of the existing traffic volumes throughout the corridor can be found in Appendix A. The analysis results pertaining to specific locations of interest are discussed in the following sections. All operating conditions tables convey VISSIM simulation modeling results. Detailed operating condition tables for the VISSIM analysis are located in Appendix B, while the HCS merge, diverge, and weave reports are included in Appendix C.

SR 62 at Red Bank Road

Both eastbound and westbound mainline through movements operate with minimal delay during both morning and afternoon peak periods, which is expected given the traffic signal is coordinated with both adjacent signals to the east and west. Pearl Drive provides access to a major commercial area along the south side of SR 62. A major travel pattern for traffic entering the development from the east is to make a westbound left from SR 62 onto Red Bank Road, and then immediately a southbound right onto Pearl Drive. Due to the proximity of Pearl Drive to SR 62, many vehicles stack in the outermost left turn lane at the intersection of SR 62 and Red Bank Road in anticipation of the upcoming right turn into the commercial area, creating an uneven lane utilization within the dual westbound left turn lanes. During the morning peak period, the uneven lane utilization is not a prominent issue as most businesses are closed, however, during the afternoon peak hour, the westbound left turn operates with unsatisfactory delays and a maximum queue of 465 feet.

Similarly, the northbound right turn operates with relatively high delay despite motorists being able to turn right on red. The maximum queue extends approximately 400 feet, and at times spills back into the signalized intersection with Pearl Drive. This is expected given the minimal amount of green time which is allocated to the side streets, and vehicles must yield to a high volume of mainline traffic when attempting to make a right turn on red, making it difficult to find acceptable gaps.

Weston Road has a full access drive onto Red Bank Road less than 200 feet north of SR 62 that provides access to commercial developments within the northwest quadrant of the intersection. During field observations, many vehicles were observed making an eastbound right turn on Weston Road and attempting to get into the southbound left turn lane at SR 62 and Red Bank Road. The southbound left turn queue regularly extends past Weston Road, thereby resulting in the turning vehicle blocking oncoming southbound traffic as it attempts to enter the southbound left turn lane at SR 62.

As shown in **Table 2**, the overall intersection performance is within an acceptable range of delay based on standard driver expectations for both the morning and afternoon peak hours.

Table 2: Existing Operating Conditions at SR 62 & Red Bank Road (VISSIM)

Intersection / Approach	Weekday AM Peak Hour			Weekday PM Peak Hour		
	Vehicle Delay (sec)	Average Queue (ft)	Maximum Queue (ft)	Vehicle Delay (sec)	Average Queue (ft)	Maximum Queue (ft)
Overall Intersection	18.3			29.6		
Eastbound Approach	9.0	34	439	19.1	168	886
Westbound Left	62.1	94	398	66.7	148	464
Westbound Thru	15.7	94	397	13.2	148	464
Westbound Approach	21.5	94	398	24.2	148	464
Northbound Right	18.5	29	158	37.7	129	396
Northbound Approach	30.9	32	159	52.8	130	396
Southbound Approach	36.1	40	200	49.0	81	250

Delay reported in seconds per vehicle

SR 62 at Boehne Camp Road

To the north, Boehne Camp Road provides access to residential housing and Perry Heights Middle School. The traffic signal operates a "school" plan which gives the side street additional green time during the morning peak hour (Action Plan 11, Pattern 11) and was included in the VISSIM model. The southbound approach along Boehne Camp Road is a single shared left-through-right lane, which prohibits left and right turning motorists from being able to bypass the through queue of traffic.

The southbound approach turning movements operate under permissive phasing only, while the northbound approach turning movements operate with protected/ permissive phasing. Given the intersection configuration and that SR 62 has a divided median, it is very difficult for motorists to make a permissive left turn. Many motorists pull past the stop bar, into the middle of the intersection, and wait for an acceptable gap to make a permissive left turn. As a result, southbound traffic experiences significant delays and queueing.

Similarly, to the south, Boehne Camp Road provides access to a large apartment complex as well as a connection to Pearl Drive. The northbound approach experiences an influx of northbound left turning motorists during the afternoon peak period. Given the short green time allocated to the side street during the afternoon peak period, the northbound approach operates with significant delays. The maximum queue extends approximately 440 feet, which blocks the Pearl Drive connection on the west side of the road.

As shown in **Table 3**, the intersection of SR 62 and Boehne Camp Road operates within an acceptable range of delay based on standard driver expectations during both morning and afternoon peak periods.

Table 3. Existing Operating Conditions at SR 62 & Boehne Camp Road (VISSIM)

Intersection / Approach	Weekday AM Peak Hour			Weekday PM Peak Hour		
	Vehicle Delay (sec)	Average Queue (ft)	Maximum Queue (ft)	Vehicle Delay (sec)	Average Queue (ft)	Maximum Queue (ft)
Overall Intersection	28.6			25.5		
Eastbound Approach	17.4	76	581	19.5	161	952
Westbound Approach	17.6	63	565	17.5	88	701
Northbound Left	32.2	21	167	84.9	139	429
Northbound Approach	26.5	22	174	66.3	139	438
Southbound Approach	126.1	384	872	77.3	53	244

Delay reported in seconds per vehicle

SR 62 at Schutte Road

The Schutte Road signal operates within an acceptable range of delay based on standard driver expectations during both the morning and afternoon peak hours, as shown in **Table 4**. The mainline left turn movements and side street approaches reflect higher delays which are common due to the longer cycle length required to move mainline traffic. The northbound and southbound side street approaches operate similarly to those at Boehne Camp Road. The southbound approach is a single shared left-through-right lane, while the northbound approach has a single dedicated left turn lane. The side streets at Schutte Road operate under permissive left turn phasing which makes it difficult for left turning

motorists to safely complete their turning movement given the intersection configuration and divided median.

Table 4. Existing Operating Condition at SR 62 & Schutte Road (VISSIM)

Intersection / Approach	Weekday AM Peak Hour			Weekday PM Peak Hour		
	Vehicle Delay (sec)	Average Queue (ft)	Maximum Queue (ft)	Vehicle Delay (sec)	Average Queue (ft)	Maximum Queue (ft)
Overall Intersection	13.1			17.0		
Eastbound Left	58.3	60	398	80.7	116	682
Eastbound Approach	15.7	60	398	18.9	116	682
Westbound Left	45.7	17	201	79.6	78	279
Westbound Approach	3.7	17	201	9.7	78	279
Northbound Approach	29.2	22	173	43.2	35	230
Southbound Approach	48.1	40	234	67.2	27	171

Delay reported in seconds per vehicle

SR 62 at Middle Mount Vernon Road, Felstead Road, and McDowell Road

Middle Mount Vernon Road serves as a major outlet for residents who live north of SR 62, many of whom use Middle Mount Vernon Road as a cut through route during the morning commuter peak period to avoid the traffic signal at Schutte Road. As shown in **Table 5**, the unsignalized intersection operates within an acceptable range of delay based on standard driver expectations during both the morning and afternoon peak hours, except for the southbound approach during the afternoon peak periods. This is a typical characteristic for an unsignalized side street along a principal arterial.

Table 5. Existing Operating Conditions at SR 62 & Middle Mount Vernon Road (VISSIM)

Intersection / Approach	Weekday AM Peak Hour			Weekday PM Peak Hour		
	Vehicle Delay (sec)	Average Queue (ft)	Maximum Queue (ft)	Vehicle Delay (sec)	Average Queue (ft)	Maximum Queue (ft)
Eastbound Left	0.0	0	0	0.0	0	0
Westbound Left	0.0	0	0	12.5	16	200
Northbound Approach	33.9	2	55	56.1	3	50
Southbound Approach	49.8	17	137	72.4	14	155

Delay reported in seconds per vehicle

Similarly, Felstead Road connects to the south side of SR 62 and provides a secondary access point to the apartment complex in the southeast quadrant of SR 62 and Schutte Road. Felstead Road also connects south to Broadway Avenue. The unsignalized intersection of SR 62 and Felstead Road operates within an acceptable range of delay based on standard driver expectations during both the morning and afternoon peak hours and is summarized in **Table 6**.

Table 6. Existing Operating Conditions at SR 62 & Felstead Road (VISSIM)

Intersection / Approach	Weekday AM Peak Hour			Weekday PM Peak Hour		
	Vehicle Delay (sec)	Average Queue (ft)	Maximum Queue (ft)	Vehicle Delay (sec)	Average Queue (ft)	Maximum Queue (ft)
Westbound Left	16.6	1	42	19.3	3	63
Northbound Approach	23.1	4	71	34.4	3	54

Delay reported in seconds per vehicle

McDowell Road north of SR 62 intersects Middle Mount Vernon Road and provides access to residential housing. McDowell Road turns into University Boulevard south of SR 62 with access to a small residential area, senior living, and the University of Southern Indiana campus. As shown in **Table 7**, the SR 62 and McDowell Road intersection operates within an acceptable range of delay based on standard driver expectations during both the morning and afternoon peak hours.

Table 7. Existing Operating Conditions at SR 62 & McDowell Road (VISSIM)

Intersection / Approach	Weekday AM Peak Hour			Weekday PM Peak Hour		
	Vehicle Delay (sec)	Average Queue (ft)	Maximum Queue (ft)	Vehicle Delay (sec)	Average Queue (ft)	Maximum Queue (ft)
Eastbound Left	8.5	1	27	8.6	1	49
Westbound Left	5.0	3	117	7.9	1	69
Northbound Approach	13.1	1	45	19.4	2	55
Southbound Approach	18.0	10	119	16.8	4	68

Delay reported in seconds per vehicle

University Parkway Interchange

Both eastbound and westbound SR 62 interchange terminals with University Parkway operate with minimal delays during both peak periods as summarized in **Table 8**. Similarly, the roundabout at University Parkway and Clarke Lane appears to operate within an acceptable range of delay based on standard driver expectations during both the morning and afternoon peak hours, as shown in **Table 9**. The maximum queues between the interchange ramps and the roundabout do not spill back or otherwise block upstream intersections.

During the morning peak period, the major flow of traffic is from the east along SR 62, traveling to the University of Southern Indiana campus. To prioritize this movement, the westbound left turn at the north ramp terminal operates under free-flow conditions while all other movements are under stop-control and yield to westbound left turning motorists. While there do not appear to be any traffic related deficiencies, this type of intersection control may present safety concerns for motorists who are not familiar with the area.

Table 8. Existing Operating Conditions at University Parkway & Ramp Terminals (VISSIM)

Intersection / Approach	Weekday AM Peak Hour			Weekday PM Peak Hour		
	Vehicle Delay (sec)	Average Queue (ft)	Maximum Queue (ft)	Vehicle Delay (sec)	Average Queue (ft)	Maximum Queue (ft)
University Boulevard & Westbound Ramp Terminals (stop-controlled, WBL Free-Flow)						
Westbound Approach	1.5	0	0	1.3	0	45
Northbound Approach	9.8	1	49	10.3	6	72
Southbound Approach	13.9	13	124	13.9	8	102
University Boulevard & Eastbound Ramp Terminals (side-street stop-controlled)						
Eastbound Approach	11.7	4	78	20.6	16	151
Southbound Left	2.6	0	27	9.1	4	91

Delay reported in seconds per vehicle

Table 9. Existing Operating Conditions at University Parkway & & Clarke Lane Roundabout (VISSIM)

Intersection / Approach	Weekday AM Peak Hour			Weekday PM Peak Hour		
	Vehicle Delay (sec)	Average Queue (ft)	Maximum Queue (ft)	Vehicle Delay (sec)	Average Queue (ft)	Maximum Queue (ft)
Overall Intersection	0.9			2.5		
Eastbound Approach	2.0	0	24	2.6	0	72
Westbound Approach	0.6	0	22	3.5	1	64
Northbound Approach	0.7	0	4	2.3	1	56
Southbound Approach	0.9	1	69	1.2	0	41

Delay reported in seconds per vehicle

Table 10 summarizes the HCS results for the merge and diverge segments at the SR 62 and University Parkway ramps. As shown, all merge and diverge segments operate with level of service B or better during both peak periods.

Table 10. Existing Operating SR 62 & University Parkway Merge & Diverge Segments (HCS)

Merge, Diverge, Weaving Segment	LOS (Density in Ramp Influence Area in pc/mi/ln)	
	Weekday AM Peak Hour	Weekday PM Peak Hour
1. University Boulevard onto SR 62 WB Entrance MERGE	A (8.8)	A (10.5)
2. WB SR 62 onto University Boulevard DIVERGE	A (8.0)	A (10.0)
3. University Boulevard onto SR 62 EB Entrance MERGE	A (10.4)	B (14.2)
4. EB SR 62 onto University Boulevard DIVERGE	A (8.7)	A (10.4)

Travel Time

Travel patterns along the corridor follow a typical commuter peak pattern, with an emphasis on eastbound travel during the morning peak, and westbound travel during the afternoon peak. However, eastbound, and westbound travel times are nearly identical along the corridor during the morning and afternoon peak periods, as summarized in **Table 11**. Since Phase 2 of this analysis is an extension of the modeling efforts previously completed for Phase 1, travel times were summarized for the corridor as a whole, from Wabash Avenue to McDowell Road. During the afternoon peak period, eastbound travel times are approximately 20 seconds longer than westbound travel times. Travel times are strongly dependent on the number of stops or red signals that mainline traffic experiences at each intersection. Given the timing plans along the corridor during the afternoon peak period and the location of vehicles in the platoon of traffic leaving Schutte Road traveling eastbound, a motorist may experience full or rolling stops at either Boehne Camp Road or Red Bank Road, which could account for the additional travel time.

Table 11. Existing Travel Times (VISSIM)

Routes	Travel Time (sec)	
	AM Peak Hour	PM Peak Hour
EB SR 62 (East of Wabash Avenue to West of McDowell Road)	487	510
WB SR 62 (West of McDowell Road to West of Wabash Avenue)	487	507

Existing Safety Analysis

Historical crash data from 2018 to 2020 was provided by INDOT. A safety analysis was completed for each major intersection, roadway segment, and the University Parkway interchange to quantify existing crash experiences. In accordance with RoadHAT standards, a crash was attributed to an intersection if it occurred within the intersection area, or within 250 feet of the intersection along either adjacent roadway. Similarly, a crash was included in an interchange segment if it occurred within the roadway stretch whose safety is affected by the interchange or its ramps. Typically, an interchange segment includes the freeway portion between the outermost ramp terminals as well as 1,500-feet upstream and downstream of the interchange area. Detailed existing conditions RoadHAT reports are included in Appendix D. The severities of these crashes at each intersection or segment are summarized in **Table 12**. **Table 13** summarizes both Index of Crash Frequency (ICF) and Index of Crash Cost (ICC) values for each study location generated by RoadHAT.

Table 12. Crash Severity by Location

Location	Type	Crash Severity			
		Fatal	Incapacitating	Minor Injury	PDO
Boehne Camp Rd to Middle Mount Vernon Rd	Segment	0	2	3	18
Felstead Rd to Middle Mount Vernon Rd	Segment	0	0	1	1
SR 62 and Boehne Camp Rd	Intersection	0	8	10	20
SR 62 and Felstead Rd	Intersection	0	0	2	6
Red Bank Road and Pearl Drive	Intersection	0	4	7	6
Red Bank Road and Weston Road	Intersection	0	1	1	3
SR 62 and Red Bank Road	Intersection	0	5	14	32
Schnuck's RIRO	Intersection	0	1	1	
SR 62 & Schutte Road	Intersection	0	3	6	15
SR 62 and McDowell Road	Intersection	0	5	3	11
SR 62 and Middle Mount Vernon Rd	Intersection	0	2	1	8
SR 62 Interchange Mainline Segment	Segment	0	1	2	7
University Parkway Segment	Segment	0	1	0	1
Boehne Camp Rd to Red Bank Rd	Segment	0	0	0	5
SR 62 and Middle Full Access Drive	Intersection	0	0	0	2
Red Bank Rd and University Dr	Intersection	0	0	0	1
University Pkwy Interchange to Schutte Rd	Segment	0	0	0	1
TOTAL		0	33	51	137

Table 13. RoadHAT Index of Crash Frequency and Cost

Location	Location Type	Index of Crash Frequency	Index of Crash Cost
SR 62 and McDowell Rd	Intersection	1.62	1.99
SR 62 Interchange Segment	Segment	-1.18	-1.33
University Pkwy	Segment	-0.92	-0.35
SR 62 between Schutte Rd and University Pkwy Interchange	Segment	-1.13	-1.20
SR 62 and Schutte Rd	Intersection	0.40	0.91
SR 62 and Felstead Rd	Intersection	0.44	-0.12
SR 62 between Fesltead Rd and Mt. Vernon Rd	Segment	-0.96	-0.79
SR 62 and Middle Mount Vernon Rd	Intersection	-0.47	-0.12
SR 62 between Mt. Vernon Rd and Boehne Camp Rd	Segment	-0.30	-0.16
SR 62 and Boehne Camp Rd	Intersection	0.16	1.55
SR 62 between Boehne Camp Rd and Red Bank Rd	Segment	-1.03	-1.26
SR 62 and Red Bank Rd	Intersection	-0.37	0.18
Red Bank Rd and Pearl Dr	Intersection	3.05	2.50
Red Bank Rd and Weston Rd	Intersection	0.59	0.81
Red Bank Rd and University Dr	Intersection	-0.30	-0.42
SR 62 and Full Access Drive	Intersection	-0.80	-0.75
SR 62 and Schnuck's RIRO	Intersection	-0.70	0.26

In total, 221 crashes occurred within the study limits, of which, approximately 60% are attributable to rear end collisions. **Figure 3** shows a heat map of rear end collisions along the corridor. Most rear end collisions occur at signalized intersections; however, there is a large cluster around Felstead Road and Middle Mount Vernon Road. Similarly, **Figure 4**, **Figure 5**, and **Figure 6** depict the manner of collision at each signalized intersection of Red Bank Road, Boehne Camp Road, and Schutte Road with SR 62. As shown, Red Bank Road has the highest number of crashes occurring at a signalized intersection. However, the intersection of Schutte Road with SR 62 yields the largest ICF value of 0.40. Over the 3-year crash horizon, 24 crashes occurred at the signalized intersection of SR 62 and Schutte Road, 22 of which were caused by rear end collisions.

The intersection of SR 62 and McDowell Road reflects an ICF of 1.62 and an ICC of 1.99 indicating that crashes are occurring more frequently than expected and are of higher severity. The predominant crash type at this intersection is right-angled collisions. When analyzing the unsignalized intersections of Felstead Road and Middle Mount Vernon Road with SR 62, 19 crashes occurred over the 3-year horizon. The prominent crash type was rear end crashes (14), however, two right angled collisions resulted in incapacitating injuries.

Field observations also yielded safety concerns along the corridor at the intersections of Middle Mount Vernon Road, Felstead Road, and McDowell Road with SR 62. The paved island in the center median provides a refuge for vehicles exiting the side street in order to avoid waiting for a gap in both eastbound and westbound directions of mainline traffic. During field observations, vehicles would yield to one direction of traffic, exit the side street, stop in the island as a refuge, and then yield to the

opposing direction of traffic before entering SR 62. It was not uncommon to see several vehicles stacked in the median island. Additional driver confusion and safety concerns arise when there are multiple vehicles attempting to enter and exit onto the side streets via SR 62, and cross the median island at the same time.

The signalized intersection of Red Bank Road and Pearl Drive yields the highest crash index values with an ICF of 3.05 and ICC of 2.50. The signalized intersection is owned by the City of Evansville. The crash narratives were investigated to provide further insight on possible correctable safety issues. Numerous rear end crashes occurred resulting in property damage only, most occurring on the westbound approach of the intersection, as vehicles are exiting the commercial development. Similarly, a number of crashes involved vehicles entering and exiting the access drives along Pearl Drive, just west of the signalized intersection. Lastly, a notable number of crashes occurred from southbound weaving vehicles attempting to merge into the southbound right turn lane to enter commercial developments west along Pearl Drive. This issue stems from the uneven dual westbound left turn lane utilization at SR 62 and Red Bank Road signalized intersection.

Figure 3. Rear End Crash Heatmap

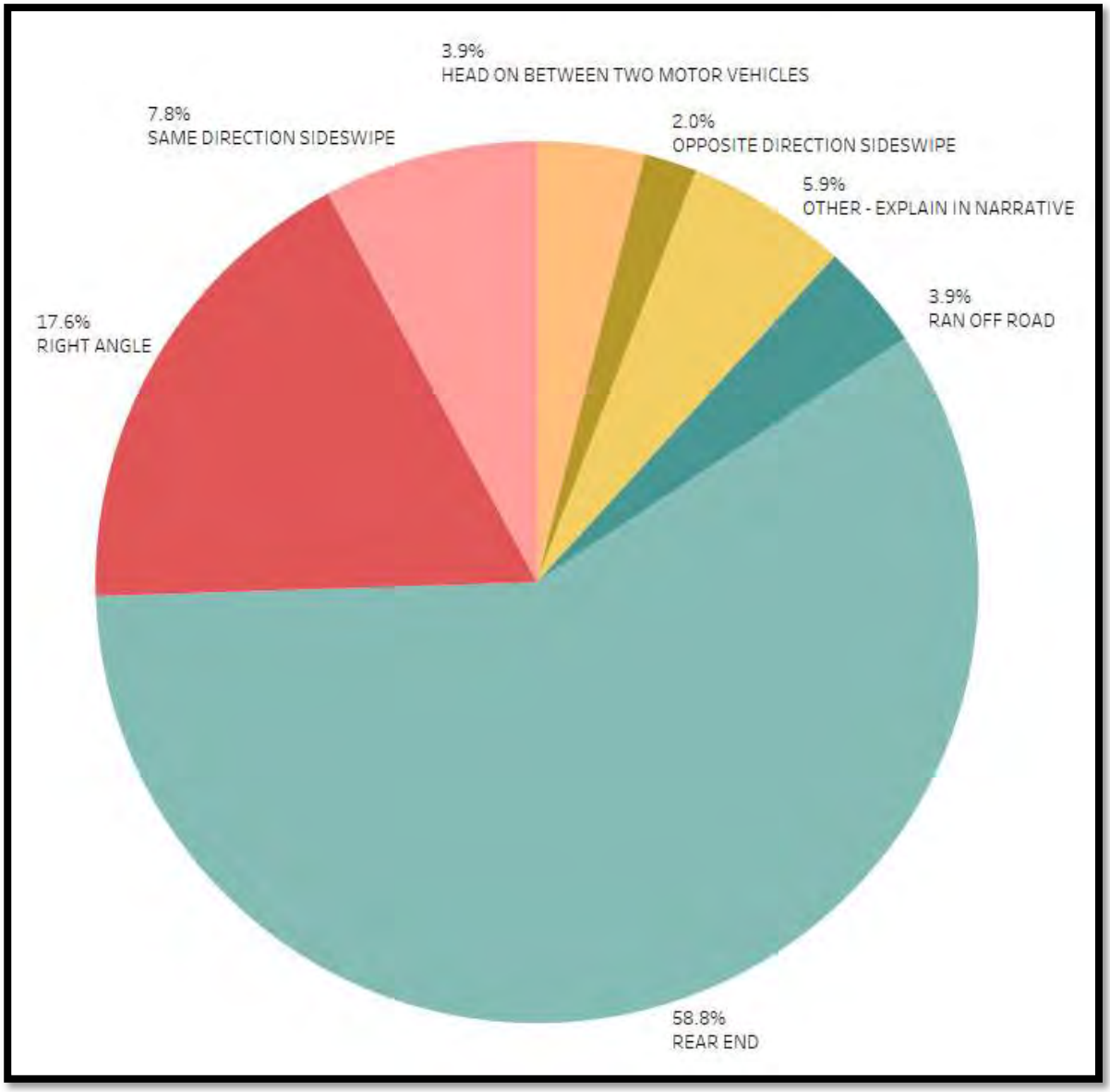


Figure 4. SR 62 and Red Bank Road Manner of Collisions

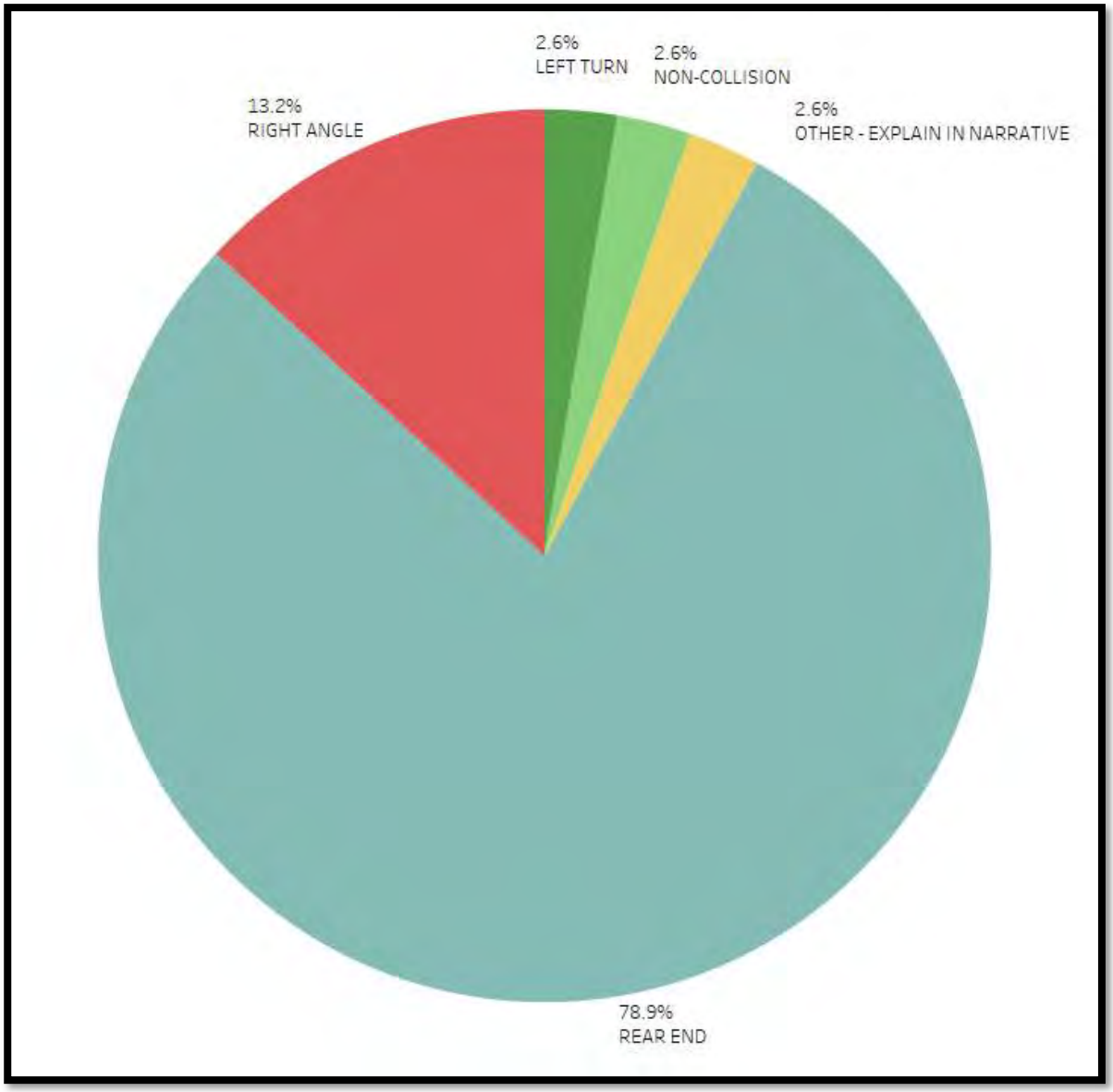


Figure 5. SR 62 and Boehne Camp Road Manner of Collisions

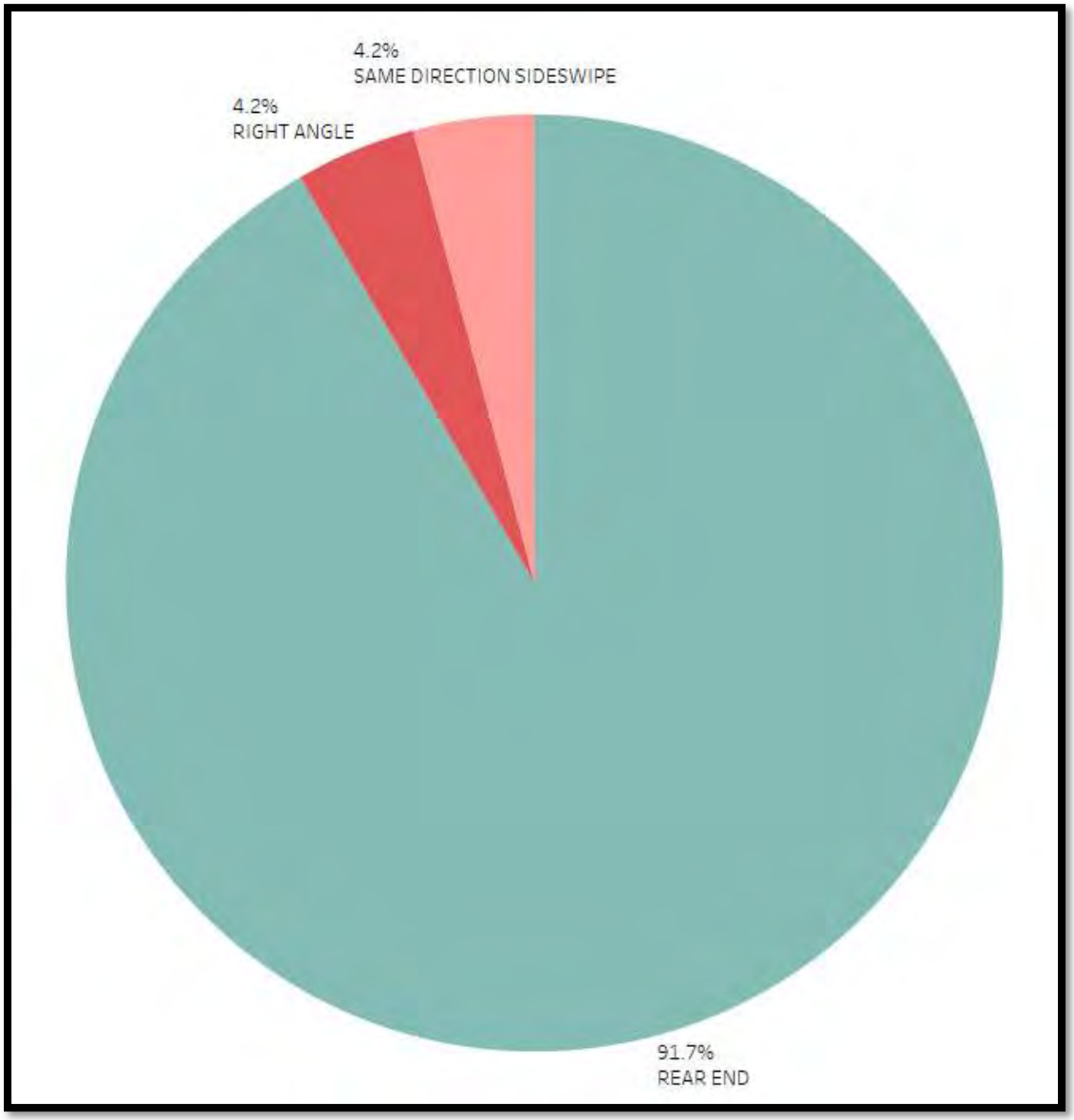


Figure 6. SR 62 and Schutte Road Manner of Collisions

2040 NO-BUILD CONDITIONS

The 2040 No-Build conditions were evaluated by applying forecasted traffic volumes to the existing roadway network, thereby simulating future corridor conditions if no mitigations or improvements are implemented. The 2040 forecasted traffic volumes were calculated by growing the existing traffic volumes at a 0.5% annual growth rate as determined by INDOT and EMPO, and as previously approved for use on the Lloyd west side Phase 1 and east side corridor analyses. A summary of the 2040 No-Build traffic volumes throughout the corridor are included in Appendix A. The forecasted 2040 traffic volumes were used to analyze traffic flow and safety deficiencies along the corridor. Detailed operating condition tables for the VISSIM analysis are located in Appendix B, while the HCS merge, diverge, and weave reports are included in Appendix C.

2040 No-Build Traffic Analysis

As stated previously, the SR 62 corridor is a major commuter route for motorists traveling in the east-west directions. The existing traffic analysis showed intersections, approaches, or turning movements that already function poorly or near capacity. **Table 14** summarizes the overall intersection delay for signalized intersections during the morning and afternoon peak hours, which was analyzed using VISSIM simulation modeling. As expected, side street performance at signalized intersections continues to worsen given the additional growth in traffic volumes. Most notably, the performance of the southbound approach of SR 62 and Boehne Camp Road degrades signficantly with excessive delays and queues. Similarly, and as expected, performance of the side street approaches at Middle Mount Vernon Road, Felstead Road, and McDowell Road decline as traffic exiting the side street must yield to smaller gaps in mainline traffic, as shown in **Table 15**.

Table 14. 2040 No-Build Signalized Intersection Operating Conditions (VISSIM)

Intersection	Weekday AM Peak Hour	Weekday PM Peak Hour
	Overall Intersection Vehicle Delay (seconds)	
SR 62 and Red Bank Road (signalized)	18.5	32.4
SR 62 and Boehne Camp Road (signalized)	33.9	28.1
SR 62 and Schutte Road (signalized)	14.8	17.8

Table 15: 2040 No-Build Unsignalized Intersection Operating Conditions (VISSIM)

Intersection / Approach	Weekday AM Peak Hour			Weekday PM Peak Hour		
	Vehicle Delay (sec)	Average Queue (ft)	Maximum Queue (ft)	Vehicle Delay (sec)	Average Queue (ft)	Maximum Queue (ft)
SR 62 and Middle Mount Vernon Road						
Northbound Approach	38.5	7	78	68.2	4	53
Southbound Approach	60.5	31	160	101.6	23	173
SR 62 and Felstead Road						
Northbound Approach	23.6	4	68	39.6	3	58
SR 62 and McDowell Road						
Northbound Approach	15.1	1	47	19.7	2	53
Southbound Approach	20.3	14	155	16.7	4	74

Delay reported in seconds per vehicle

VISSIM assigns delays and congestion to intersections for vehicles within certain speed and distance thresholds. Furthermore, the acceleration and deceleration of vehicles within rolling queues are sometimes outside of VISSIM's reporting thresholds for queuing. For this reason, vehicles in rolling queues along the corridor are significantly underrepresented as vehicle statistics are not collected when they accelerate and or travel above the set speed threshold.

The 2040 No-Build travel times are summarized in **Table 16**. As expected, travel times degrade during both peak periods. However, travel times dramatically increase in the westbound direction during the

afternoon peak period which can be attributed to the westbound rolling queue which extends back to the Barker Avenue interchange, as shown in **Figure 7**. As a result, the signalized intersection of SR 62 and Rosenberger Avenue meters the amount of traffic which enters the Phase 2 side of the model. At times, a rolling queue of traffic forms in the eastbound direction between Red Bank Road and Rosenberger Avenue, as shown in **Figure 8**.

Table 16. 2040 No-Build Travel Times (VISSIM)

Routes	Travel Time (sec)	
	AM Peak Hour	PM Peak Hour
EB SR 62 (East of Wabash Avenue to West of McDowell Road)	566	566
WB SR 62 (West of McDowell Road to West of Wabash Avenue)	508	673

Figure 7. 2040 No-Build PM Peak Period Westbound Rolling Queue (VISSIM)

Figure 8. 2040 No-Build PM Peak Period Eastbound Rolling Queue (VISSIM)

HCS7 was used to analyze all merging and diverging segments throughout the corridor under 2040 No-Build conditions, as shown in **Table 17**. All merging and diverging segments perform similar to existing operations, with incremental changes to densities and no changes in level of service.

Table 17. 2040 No-Build SR 62 & University Parkway Merge & Diverge Segments (HCS)

Merge, Diverge, or Weaving Segment	LOS (Density in Ramp Influence Area in pc/mi/ln)	
	Weekday AM Peak Hour	Weekday PM Peak Hour
1. University Boulevard onto SR 62 WB Entrance MERGE	A (9.6)	A (11.5)
2. WB SR 62 onto University Boulevard DIVERGE	A (8.8)	A (11.0)
3. University Boulevard onto SR 62 EB Entrance MERGE	A (11.4)	B (15.6)
4. EB SR 62 onto University Boulevard DIVERGE	A (11.5)	A (11.5)

2040 No-Build Safety Analysis

RoadHAT methodology is indexed to present value costs and historical crashes and should not be utilized as a predictive tool. Therefore, the methodology applied to the existing conditions was not reported for 2040 conditions.

Rather, it was concluded that with relatively consistent traffic growth in the corridor, each intersection and segment could expect crashes to increase and remain problematic without mitigation measures. Therefore, the high crash locations and segments identified for the existing conditions would likely remain such, and potentially only grow more severe in both crash frequency and cost in the future, absent improvements.

2040 Full-Build Alternatives Analysis

Past Analysis

As stated previously, Lochmueller Group completed an Engineering Assessment study along the SR 62 corridor in 2018, a copy of which is included in Appendix E. The study analyzed alternative intersection configurations at a high level for the signalized intersections of SR 62 with Red Bank Road, Boehne Camp Road, and Schutte Road. Preliminary alternatives were identified and studied at each intersection. The following alternatives were considered:

- Lane Modifications (all intersections)
- Partial east-west Continuous Flow Intersection (all intersections)
- Median U-Turn (Schutte Road & Boehne Camp), CFI (Red Bank Road)

Continuous Flow Intersection (CFI): Under a CFI or displaced left turn concept, the left turning vehicles are relocated to the far side of the opposing roadway, upstream of where they would turn left at a conventional intersection. The left turning vehicles travel on a roadway parallel to opposing traffic and execute a left turn simultaneously with through traffic at the primary intersection, eliminating the left turn phase for the approach at the primary intersection. Side street right turning motorists also use the parallel roadway and enter mainline traffic at the relocated intersection with the mainline left turns.

Median U-Turn: A median U-Turn restricts all left turns at the main intersection. Left turning traffic from the cross street must turn right at the intersection, then make a U-turn across the mainline median to complete their turn. Left turns from the mainline drive through the intersection, make a U-turn across the median, then make a right turn at the intersection to complete their turn. This specific configuration of Median U-Turn is typically referred to as a boulevard left.

The previous study recommended that all three intersections be of the same configuration, as it could cause confusion to mix multiple alternative intersection types when spaced closely. The previous Engineering Assessment study along SR 62 recommended partial CFIs at all three signalized intersections because Red Bank Road functions optimally under future conditions as a CFI. The Boehne Camp and Schutte Road intersections with SR 62 were given the same recommendation to maintain corridor continuity. However, through the continued design of the Lloyd Expressway projects, including the west side Phase 1 and east side analyses, to our understanding there is no longer a concern of mixing multiple alternative intersection types along the corridor. Numerous treatment types are proposed at intersections along the corridor due to differing characteristics. Therefore, this analysis was free to consider additional solutions for the intersections of Boehne Camp Road and Schutte Road with SR 62.

Recommended Intersection and Segment Alternatives

The following improvements are recommended as the preferred corridor improvements for implementation:

SR 62 and Red Bank Road

To address the business access patterns at this location that were previously described, the intersection of SR 62 and Red Bank Road would greatly benefit from a partial east-west CFI configuration.

Under a partial CFI configuration, the mainline left turn phases are removed from the main intersection. The left turn phases run concurrent with the side street, providing additional green time over a traditional signalized intersection configuration. With the increased mainline left turn capacity, the proposed CFI would consist of single eastbound and westbound left turn lanes instead of dual left turn lanes, eliminating the uneven lane utilization that the westbound left turn movement experiences today. Side street right turns are free flow at the main intersection and stop at the sub intersection crossovers with the mainline left turns. This provides more queueing distance along the eastern parallel CFI crossover road, and the northbound right turn would no longer spillback into the Pearl Drive signalized intersection with Red Bank Road.

The eastern CFI sub intersection, where the westbound displaced left turn and northbound right turn movements intersect with the mainline, is in close proximity to the existing Culver's right-turn-only access drive. Due to this close proximity, this access drive should close. Similarly, the westbound left storage bay for the CFI eastern sub intersection extends back into the existing ¾-access drive between Red Bank Road and Rosenberger Avenue. This drive should also be restricted to right-in-right-out. Lastly, access to/from Weston Road via Red Bank Road should close, if possible. Traffic would reroute through the signalized intersection of Red Bank Road and University Drive. **Figure 9** depicts the partial east-west CFI at SR 62 and Red Bank Road along with the suggested modifications to nearby access drives.

Figure 9. SR 62 and Red Bank Road + Nearby Access Drives Preferred Alternative Configuration (VISSIM)

SR 62 and Boehne Camp Road

- The existing conditions analysis did not reveal severe operational issues with the mainline turning movements at Boehne Camp Road. Rather, the southbound approach during the morning peak period, and the northbound approach during the afternoon peak period present with congestion and queueing concerns. These operational issues can be addressed through the addition of auxiliary turn lanes along the northbound and southbound approaches of Boehne Camp Road. The southbound approach should consist of a single dedicated left lane, single through lane, and right turn lane. The southbound left turn movement would operate under protected/permissive phasing so long as sufficient offset is provided to ensure adequate sight distance of oncoming through traffic. The northbound approach should consist of dual left turns, a single through lane, and a dedicated right turn lane. Northbound left turns would operate under protected only phasing. **Figure 10** depicts the necessary lane modifications.

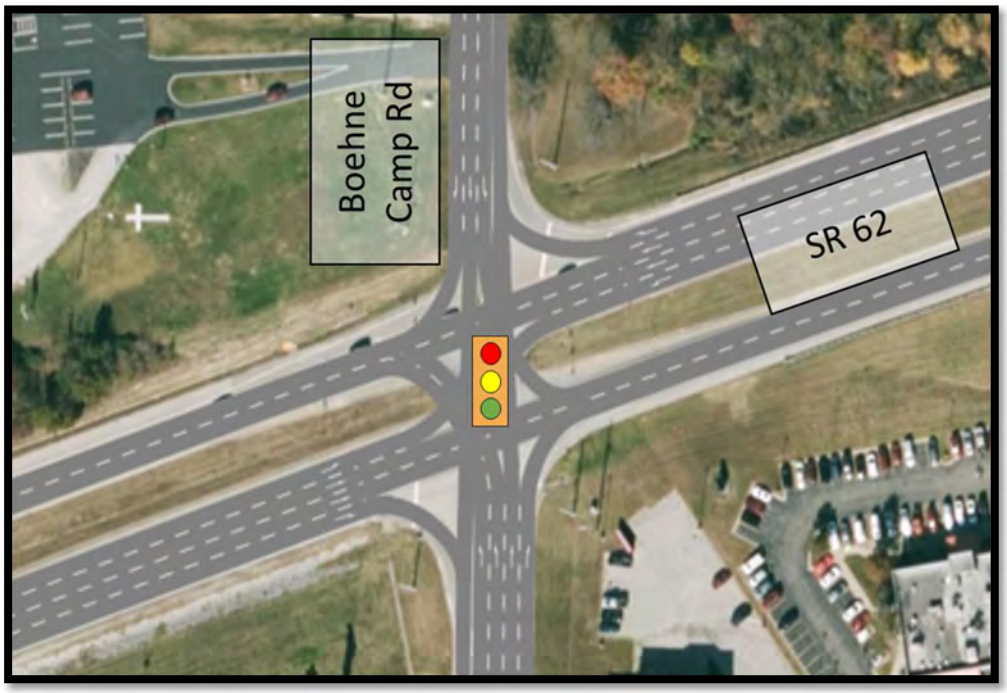


Figure 10. SR 62 and Boehne Camp Road Preferred Alternative Configuration (VISSIM)

SR 62 and Schutte Road, Middle Mount Vernon Road, and Felstead Road

Both Felstead Road and Middle Mount Vernon Road are located in close proximity to the signalized intersection of SR 62 and Schutte Road. Currently, the intersections of SR 62 at Felstead Road and SR 62 at Middle Mount Vernon Road are unsignalized. Schutte Road is the first signalized intersection for eastbound traveling motorists as they approach the Evansville metropolitan area. Hence, this segment of SR 62 functions more as a rural four-lane highway.

There are multiple instances of rear end collisions at both Felstead Road and Schutte Road. Given the close proximity of Schutte Road, Felstead Road, and Middle Mount Vernon Road, any proposed solution should treat this area as a "network" to reduce crashes without significantly impacting traffic performance.

Studies have shown that Reduced Conflict Intersections (RCI) significantly reduce all crash types and severities for high speed divided median roadways. Drivers wishing to cross the major roadway make a right turn, make a U-Turn, and then another right turn to continue in their intended direction of travel. Drivers wishing to make a left turn also make a right turn, make a U-Turn, and then continue in their intended direction of travel.

A series of both unsignalized RCI and signalized RCUT intersections are proposed at Schutte Road, Felstead Road, and Middle Mount Vernon Road. Felstead Road and Middle Mount Vernon Road are RCI intersections that utilize the same eastbound U-turn location east of Middle Mount Vernon Road. The southbound approach of Middle Mount Vernon utilizes a westbound U-turn location between Felstead Road and Schutte Road. These U-Turn locations are proposed as unsignalized locations. However, INDOT has requested that vehicle detection loops (no signal head) be placed in the U-Turn lane between Felstead Road and Schutte Road. This loop should call the westbound left turn phase at Schutte Road, which will stop eastbound mainline traffic at the Schutte Road signalized intersection, thereby providing a gap for U-Turning traffic.

The intersection of SR 62 with Schutte Road remains signalized with the mainline left turn movements allowed. Both the northbound and southbound side street approaches would be restricted to right-turns-only under a modified RCI configuration. A westbound U-Turn is provided just west of Schutte Road and should be signalized to run concurrent with side street traffic. Without this dedicated phase, the U-Turning traffic would experience significant delays during the peak hours, and queues could potentially back up to Schutte Road. Northbound motorists attempting to cross SR 62 or travel westbound along SR 62 need to travel to the eastbound U-Turn located east of Middle Mount Vernon Road.

The proposed alternative configuration for Schutte Road, Felstead Road, and Middle Mount Vernon Road is shown in **Figure 11**.

Figure 11. SR 62 at Schutte Road, Felstead Road, and Middle Mount Vernon Road Alternative Configuration (VISSIM)

SR 62 and McDowell Road

The intersection of SR 62 and McDowell Road is located west of the University Parkway interchange. The unsignalized intersection is located along a horizontal curve of SR 62 which presents sight distance issues for northbound traffic entering SR 62. The unsignalized intersection operates with driving behaviors very similar to those of Felstead Road and Middle Mount Vernon Road where the paved island in the center median is commonly used as a refuge for vehicles exiting the side street. However, the unsignalized intersection of SR 62 and McDowell Road experiences a higher index of crash frequency ICF (1.62). Similarly, the index of crash cost (ICC) is 1.99, indicating that the crashes at this location are also of higher severity.

An RCI is also proposed at McDowell Road, as depicted in **Figure 12**, to reduce crashes at the intersection. All intersections would remain unsignalized and yield to mainline traffic, including the U-Turns.

Figure 12. SR 62 and McDowell Road Alternative Configuration (VISSIM)

2040 Full-Build Traffic Analysis

Traffic operations were evaluated with respect to the aforementioned preferred alternative improvements throughout the study area. The 2040 No-Build traffic volumes were applied to the reconfigured roadway network. Traffic that previously utilized the ¾-access drive between Red Bank Road and Rosenberger Avenue and traffic that previously utilized Weston Road were reassigned to the roadway network in the following manner:

Weston Road: All traffic turning to and from Weston Road onto Red Bank Road was rerouted through the Red Bank Road and University Drive signalized intersection.

¾-Access Drive between Red Bank and Rosenberger: The preferred alternative eliminates mainline left turns at the ¾-access drive between Red Bank Road and Rosenberger Avenue, restricting it to right-turns-only. Mainline left turn traffic was reassigned to the Red Bank Road and Rosenberger Avenue signalized intersections with SR 62. Of the reassigned traffic, 65% was routed through Red Bank Road and 35% was rerouted through Rosenberger Avenue. These trip reassignment percentages were discussed and approved with INDOT.

A summary of the 2040 Full-Build traffic volumes are included in Appendix A. Detailed operating condition tables for the VISSIM analysis are located in Appendix B, while the HCS merge, diverge, and weave reports are included in Appendix C.

Preliminary analysis concluded that the cycle lengths utilized during the Phase 1 study were feasible for the Phase 2 signalized intersections. As expected, shorter cycle lengths lead to better side street operations, while longer cycle lengths benefit SR 62. 120-second and 130-second cycle lengths for both morning and afternoon peak periods, respectively, provide a balance between the two characteristics along the corridor.

The travel times for eastbound and westbound traffic along the corridor under the proposed signal timing plans are summarized in **Table 18**. During the morning peak hour, eastbound travel time is reduced by 20% and westbound travel time by 10%. Similarly, during the afternoon peak hour, westbound motorists experience a 17% reduction in travel time while eastbound motorist's travel time is reduced by 35%, as compared to the 2040 No-Build scenario. The significant reduction in travel time is due in part to the coordination of all signalized intersections from Wabash Avenue to Schutte Road.

Table 18. 2040 Full-Build Travel Times (VISSIM)

Routes	2040 Full-Build Travel Time (sec)		Reduction Compared to 2040 No-Build	
	AM Peak Hour	PM Peak Hour	AM Peak Hour	PM Peak Hour
EB SR 62 (East of Wabash Avenue to West of McDowell Road)	451	471	-20%	-17%
WB SR 62 (West of McDowell Road to West of Wabash Avenue)	458	436	-10%	-35%

The overall delay for the signalized intersections of SR 62 with Red Bank Road, Boehne Camp Road, and Schutte Road are presented in **Table 19**. As can be seen, Red Bank Road experiences a slight increase in delay during the morning peak period which can be attributed to reassigned traffic due to restricting the full access drive to the east to right-turns-only, the slightly longer cycle length along the corridor during the morning peak period, and allocated side street green time. During the afternoon peak hour, the partial east-west CFI at SR 62 and Red Bank Road provides reduction in overall delay.

As expected, the intersection of SR 62 and Boehne Camp Road greatly benefits from the side street lane modifications. The intersection of SR 62 and Schutte Road experiences a decrease in overall delay during the AM peak hour as compared to 2040 No-Build models despite the implementation of the reduced conflict intersections. The PM peak hour experiences a modest increase in overall delay. This is in part due to the northbound right turn motorists at Schutte Road that are directed to U-Turn east of Middle Mount Vernon Road. However, RCI configurations provide crash reduction benefits that outweigh the minor inconvenience of increased travel time/distances required to navigate the intersection.

Despite minor delay increases at a select few locations, average total network delay is a down 39% during the morning peak period, and 40% during the afternoon peak period when comparing the 2040 No-Build versus Full-Build models (Phase 1 + 2). Average total network delay represents the total delay experienced by every vehicle that enters and exits the VISSIM model within the simulation run.

Table 19. 2040 Full-Build Signalized Intersections Operating Conditions (VISSIM)

Intersection	Overall Intersection Vehicle Delay (seconds)		Reduction Compared to 2040 No-Build	
	AM Peak Hour	PM Peak Hour	AM Peak Hour	PM Peak Hour
SR 62 and Red Bank Road	20.8	27.3	12%	-16%
SR 62 and Boehne Camp Road	25.9	19.0	-24%	-32%
SR 62 and Schutte Road	13.8	14.9	-7%	16%

SR 62 at Red Bank Road

As shown in **Table 20**, the intersection of SR 62 and Red Bank Road operates favorably under 2040 Full-Build conditions during both the morning and afternoon peak periods. It should be noted, the results shown are aggregated as an intersection total across the main and sub intersections. Both eastbound and westbound mainline through movements continue to operate with acceptable delays based on conventional driver acceptance standards. Given the CFI configuration, the mainline left turns are allocated more green time as they run concurrent with the side street phases. The westbound left turn operates with approximately 55 seconds of delay during the afternoon peak period and a maximum queue of 530 feet despite being confined to a single turn lane. There are no weaving concerns for motorists who make a downstream southbound right turn onto Pearl Drive. With the implementation of a CFI, the side street right turns are now free flow at the CFI main intersection of SR 62 and Red Bank Road. Right turning vehicles now queue along the parallel CFI road at the crossover with mainline left turning vehicles. Hence, the northbound right turn queue no longer spills back into the Red Bank Road and Pearl Drive intersection.

The side street lane configurations were not altered. Hence, no major benefits are expected along the side street, except for the right turns which now operate as free flow at the CFI main intersection of SR 62 and Red Bank Road.

Table 20: 2040 Full-Build Operating Conditions at SR 62 & Red Bank Road (VISSIM)

Intersection / Approach	Weekday AM Peak Hour			Weekday PM Peak Hour		
	Vehicle Delay (sec)	Average Queue (ft)	Maximum Queue (ft)	Vehicle Delay (sec)	Average Queue (ft)	Maximum Queue (ft)
Overall Intersection	20.8			27.3		
Eastbound Approach	16.0	63	583	11.7	39	272
Westbound Left	60.7	71	355	55.6	130	541
Westbound Approach	14.2	71	355	20.1	130	541
Northbound Right	39.4	38	233	45.0	111	539
Northbound Approach	46.0	38	233	67.8	123	539
Southbound Approach	49.3	43	187	45.5	65	207

Delay reported in seconds per vehicle

SR 62 and Boehne Camp Road

With the proposed side street lane modifications, the intersection of SR 62 and Boehne Camp Road operates favorably in terms of driver perceived delay expectation. As shown in **Table 21**, the southbound approach, which previously experienced significant delays and queueing, greatly benefits from the additional dedicated turn lanes in addition to left turn protected/permissive phasing. Southbound left turn motorists now have a clear view of oncoming northbound through traffic when making a permissive left turn with a dedicated left turn bay.

The northbound left turn movement operates under protected phasing only due to the dual left turn lanes. Motorists experience moderate delays, but average and maximum queues are significantly reduced as compared to 2040 No-Build conditions.

The westbound queue exceeds 600 feet during the morning peak period. This is due to the proposed signal timing plan, which utilizes Boehne Camp Road as a stopping point for progression.

Table 21: 2040 Full-Build Operating Conditions at SR 62 & Boehne Camp Road (VISSIM)

Intersection / Approach	Weekday AM Peak Hour			Weekday PM Peak Hour		
	Vehicle Delay (sec)	Average Queue (ft)	Maximum Queue (ft)	Vehicle Delay (sec)	Average Queue (ft)	Maximum Queue (ft)
Overall Intersection	**25.9**			**19.0**		
Eastbound Approach	14.0	64	307	16.4	88	504
Westbound Approach	30.7	146	616	8.3	45	257
Northbound Left	65.5	41	144	73.8	82	301
Northbound Thru	67.1	41	145	53.5	83	301
Northbound Right	23.2	45	154	25.1	79	310
Northbound Approach	52.8	45	154	60.6	83	310
Southbound Left	49.5	63	309	46.3	26	131
Southbound Thru	55.4	63	309	68.0	26	131
Southbound right	17.9	66	322	20.2	30	145
Southbound Approach	42.6	66	322	49.7	30	145

Delay reported in seconds per vehicle

SR 62 at Schutte Road, Felstead Road, and Middle Mount Vernon Road

Table 22 summarizes the operating conditions for the intersections and U-Turns created by the reduced conflict intersections along SR 62 at Middle Mount Vernon Road, Felstead Road, and Schutte Road. As shown, all U-Turns east of Schutte Road operate favorably during both morning and afternoon peak periods. Maximum queues remain favorable with minor delays which is indicative of unsignalized U-Turning traffic waiting for acceptable gaps in mainline traffic. Likewise, side street approaches along Felstead Road and Middle Mount Vernon Road operate similar to 2040 No-Build conditions.

The signalized intersection with Schutte Road operates in accordance with driver perceived delay expectations during both peak hours. At times, maximum queues extend approximately 250 feet along the northbound approach. The eastbound mainline through movement operates as a trailing green overlap with the sub intersection to the west, which is required for the signalized westbound U-Turn sub intersection to function acceptably. Due to the trailing green overlap, the eastbound queue of traffic is shifted to the sub intersection rather than the Schutte Road main intersection. It is expected that eastbound rear end crashes will be reduced as the eastbound through queue is shifted further west beyond the crest of vertical curvature, making it much easier for arriving traffic to see the stopped queue ahead.

Table 22: 2040 Full-Build Operating Conditions at SR 62 & Middle Mount Vernon Road, Felstead Road, and Schutte Road (VISSIM)

Intersection / Approach	Weekday AM Peak Hour			Weekday PM Peak Hour		
	Vehicle Delay (sec)	Average Queue (ft)	Maximum Queue (ft)	Vehicle Delay (sec)	Average Queue (ft)	Maximum Queue (ft)
Westbound U-turn West of Schutte Road						
Eastbound Thru	6.6	28	286	7.7	45	426
Westbound U-Turn	27.3	23	173	39.1	15	107
SR 62 and Schutte Road						
Eastbound Approach	1.7	264	368	1.5	142	199
Westbound Approach	6.0	25	442	9.6	77	320
Northbound Right	44.7	44	234	54.9	56	265
Southbound Right	21.3	20	175	26.2	11	109
Westbound U-Turn Between Schutte Road and Felstead Road						
Westbound U-Turn	39.5	27	164	48.9	24	138
SR 62 and Felstead Road						
Northbound Right	32.1	7	79	34.4	4	60
SR 62 and Middle Mount Vernon Road						
Northbound Right	33.3	4	57	35.1	3	50
Southbound Right	36.9	20	157	41.6	8	93
Eastbound U-Turn East of Middle Mount Vernon Road						
Eastbound U-Turn	10.3	4	79	34.1	10	102

Delay reported in seconds per vehicle

University Parkway Interchange

All merge and diverge segments to/from SR 62 onto University Parkway interchange ramps are expected to operate similarly as they do in the 2040 No-Build scenario. **Table 23** summarizes the operating conditions at the eastbound and westbound SR 62 ramp terminals with University Parkway. As shown, both ramp terminals continue to operate favorably in terms of driver expected delay and queueing. Moderate delays are experienced by motorists exiting SR 62 at the eastbound ramp terminal.

Table 23. 2040 Full-Build Operating Conditions at University Parkway & Ramp Terminals (VISSIM)

Intersection / Approach	Weekday AM Peak Hour			Weekday PM Peak Hour		
	Vehicle Delay (sec)	Average Queue (ft)	Maximum Queue (ft)	Vehicle Delay (sec)	Average Queue (ft)	Maximum Queue (ft)
University Parkway & Westbound Ramp Terminals (stop-controlled, WBL Free-Flow)						
Westbound Approach	1.5	0	2	1.4	0	48
Northbound Approach	10.0	2	52	9.9	6	78
Southbound Approach	14.3	16	136	13.1	8	106
University Parkway & Eastbound Ramp Terminals (side-street stop-controlled)						
Eastbound Approach	12.4	4	85	28.8	28	215
Southbound Left	2.6	0	31	11.1	6	108

Delay reported in seconds per vehicle

There are no major performance degradations at the University Parkway and Clarke Lane roundabout as depicted in **Table 24**. All approaches continue to operate with minimal delays and queueing. Most importantly, the southbound approach does not spill back into the eastbound SR 62 ramp terminal during either morning or afternoon commuter peak period.

Table 24. 2040 Full-Build Operating Conditions at University Parkway & Clarke Lane Roundabout (VISSIM)

Intersection / Approach	Weekday AM Peak Hour			Weekday PM Peak Hour		
	Vehicle Delay (sec)	Average Queue (ft)	Maximum Queue (ft)	Vehicle Delay (sec)	Average Queue (ft)	Maximum Queue (ft)
Overall Intersection	0.9			2.8		
Eastbound Approach	1.9	0	20	2.8	0	64
Westbound Approach	0.6	0	11	4.0	1	69
Northbound Approach	0.8	0	9	2.8	1	85
Southbound Approach	0.9	1	65	1.3	0	45

Delay reported in seconds per vehicle

SR 62 and McDowell Road

Under 2040 Full-Build conditions, the reduced conflict intersection U-Turns would remain unsignalized. As expected, the westbound U-Turn turn operates with moderate delays during the morning peak period, as motorists from the south are traveling to the east along SR 62, shown in **Table 25**. Similarly, the westbound U-Turn operates with slightly higher delays during the afternoon peak period, as compared to the morning peak period, but shorter maximum queues. This is expected as there is more mainline eastbound volume during the afternoon peak period, and vehicles have more difficulty finding acceptable gaps in traffic. All other turning movements operate favorable given the implementation of the reduced conflict intersection. While it is not directly inherent in the results, motorists will experience a slight inconvenience, as the reduced conflict intersection requires further travel to the same destination due to the U-Turns. On the other hand, motorists experience a decrease in delay as they

must only yield to one direction of travel. Similarly, the safety benefits given this particular location's configuration characteristics far outweigh the slight degradation in traffic operations.

Table 25. 2040 Full-Build Operating Conditions at SR 62 and McDowell Road (VISSIM)

Intersection / Approach	Weekday AM Peak Hour			Weekday PM Peak Hour		
	Vehicle Delay (sec)	Average Queue (ft)	Maximum Queue (ft)	Vehicle Delay (sec)	Average Queue (ft)	Maximum Queue (ft)
Westbound U-Turn	25.7	23	178	38.0	17	136
Eastbound U-Turn	10.9	0	26	15.0	2	53
Northbound Right	13.7	1	44	16.7	2	51
Southbound Right	17.0	12	144	13.6	4	66

Delay reported in seconds per vehicle

2040 Full-Build Safety Analysis

RoadHAT is unable to quantify the safety impacts of the preferred alternatives throughout the corridor as it is not a predictive tool. Hence, the safety analysis to compare alternative configurations was performed using Crash Modification Factors (CMFs). A CMF is a multiplicative factor used to compute the expected number of crashes after implementing a given countermeasure at a specific site. A CMF reflects the safety effect of the countermeasure, whether a decrease in crashes is expected (CMF below 1.0), an increase in crashes is expected (CMF over 1.0), or no change in crashes is expected (CMF of 1.0).

CMFs were utilized for this analysis with the understanding that they represent the best information available to assess the potential safety benefits of these preferred alternatives. The Crash Modification Factors Clearinghouse is a database for CMFs that was utilized to determine the applicable CMFs for the preferred alternative treatment. The applied CMFs are summarized in **Table 26**, while the potential crash reductions are summarized in **Table 27**.

Applicable CMFs for removing a right-in-right-out access drive (Culver's access drive east of Red Bank Road) or full access drive (Weston Road) with the corresponding characteristics that match the study area were not directly found in the database. However, it is expected that removing an access drive has a direct impact on reducing crashes, as the number of conflict points are significantly lowered or removed entirely. As shown, the preferred alternatives could reduce total crashes along the corridor by up to 21%.

Table 26. Preferred Alternative Crash Modification Factors (CMFs)

Intersection / Segment	Roadway Treatment	CMF for Roadway Treatment	Total Reduction in Crashes
SR 62 and Red Bank Road	Convert a conventional signalized intersection to a continuous flow intersection (CFI)	*0.88*	12%
SR 62 and Boehne Camp Road	Change left turn phasing one more than one approach from permissive to protected/permissive	*0.96*	4%
SR 62 & Middle Mount Vernon Road	Convert a conventional unsignalized intersection to an unsignalized superstreet (RCI intersection)	*0.54*	46%
SR 62 & Felstead Road		*0.54*	46%
SR 62 & McDowell Road		*0.54*	46%
SR 62 & Schutte Road	Convert a conventional signalized intersection to a signalized superstreet (RCI intersection)	*0.85*	15%

Table 27. Potential Crash Reduction Comparison

Scenario / Impact	Intersection / Segment	Crashes				
		Fatal	In-Capacitating	Minor Injury	PDO	Total
Existing	SR 62 and Red Bank Road	0	5	14	32	51
	SR 62 and Boehne Camp Road	0	8	10	20	38
	SR 62 & Middle Mount Vernon Road	0	2	3	18	23
	SR 62 & Felstead Road	0	0	2	6	8
	SR 62 & McDowell Road	0	5	3	11	19
	SR 62 & Schutte Road	0	3	6	15	24
	Total	0	23	38	102	163
2040 Full-Build	SR 62 and Red Bank Road	0	4.4	12.3	28.1	44.7
	SR 62 and Boehne Camp Road	0	7.7	9.6	19.2	36.4
	SR 62 & Middle Mount Vernon Road	0	1.1	1.6	9.7	12.4
	SR 62 & Felstead Road	0	0.0	1.1	3.2	4.3
	SR 62 & McDowell Road	0	2.7	1.6	5.9	10.3
	SR 62 & Schutte Road	0	2.6	5.1	12.8	20.4
	Total	0	18.4	31.3	78.9	128.5
Relative Decrease		**0%**	**-20%**	**-18%**	**-23%**	**-21%**

CONCLUSIONS

The Lloyd Expressway (SR 62) Phase 2 corridor analysis from west of Rosenberger Avenue to McDowell Road concludes the following:

- The overall intersection operating conditions along the SR 62 corridor under existing traffic conditions perform within an acceptable range of delay based on standard driver expectations for both morning and afternoon peak hours. Particular turning movements operate with higher, unacceptable delays during both morning and afternoon peak periods. Similarly, the corridor experiences a high number of rear end crashes.
- As expected, the 2040 No-Build scenario results in a decline of traffic performance for the side street approaches, most notably at SR 62 and Boehne camp Road. Similarly, travel times degrade during both peak periods. However, travel times dramatically increase in the westbound direction during the afternoon peak period which can be attributed to the westbound rolling queue which extends back to the Barker Avenue interchange. As a result, the signalized intersection of SR 62 and Rosenberger Avenue meters the amount of traffic which enters the Phase 2 side of the model. At times, a rolling queue of traffic forms in the eastbound direction between Red Bank Road and Rosenberger Avenue.

Improvements for the corridor were considered with the primary objectives of both improving traffic operations and correctable safety issues if any were present. Recommendations by location along the corridor are as follows:

SR 62 and Red Bank Road

- The traffic patterns at the intersection of SR 62 and Red Bank Road would greatly benefit from a partial east-west CFI, also known as a displaced left turn intersection. The modified intersection would consist of single eastbound and westbound left turn lanes, eliminating the uneven lane utilization within the existing dual westbound left turn lanes.
- The eastern CFI sub intersection, where the westbound displaced left turn and northbound right turn intersect with the mainline, is in close proximity to the Culver's right-turn-only access drive. Due to this close proximity, this access drive should be closed.
- The westbound left storage bay for the CFI eastern sub intersection extends back into the middle ¾-access drive between Red Bank Road and Rosenberger Avenue. This access should be restricted to right-turns-only.
- Access to/from Weston Road via Red Bank Road should be closed. Traffic would be rerouted through the signalized intersection of Red Bank Road and University Drive.

SR 62 and Boehne Camp Road

- Modify the southbound approach to include a single dedicated left lane, single through lane, and right turn lane.
- The northbound approach should consist of dual left turns, a single through lane, and a dedicated right turn lane.

- The southbound left turn movement would operate under protected/permissive phasing so long as sufficient offset is provided to ensure adequate sight distance of oncoming through traffic. Northbound left turns would operate under protected only phasing.

SR 62 and Schutte Road, Middle Mount Vernon Road, and Felstead Road

- There are multiple instances of rear end collisions at both Felstead Road and Schutte Road. Given the proximity of Schutte Road, Felstead Road, and Middle Mount Vernon Road, any proposed solution should treat this area as a "network" to reduce crashes without significantly impacting traffic performance.
- A series of both signalized and unsignalized Reduced Conflict intersections (RCI) are proposed at Schutte Road, Felstead Road, and Middle Mount Vernon Road. An eastbound U-turn located east of Middle Mount Vernon Road will serve northbound thru and left turning movements originating from Schutte Road, Felstead Road, and Middle Mount Vernon Road. Similarly, southbound thru and left turning motorists at Schutte Road would need to travel to the westbound U-Turn located west of Schutte Road.
- The southbound approach of Middle Mount Vernon utilizes a westbound U-turn location between Felstead Road and Schutte Road.
- INDOT has requested that vehicle detection loops (no signal head) be placed in the westbound U-Turn lane between Felstead Road and Schutte Road. This loop should call the westbound left turn phase at Schutte Road, which will stop eastbound mainline traffic at the Schutte Road signalized intersection, thereby providing a gap for U-turning traffic.
- The intersection of SR 62 with Schutte Road remains signalized with the mainline left turn movements allowed. Both the northbound and southbound side street approaches would be restricted to right-turns-only under a modified RCI configuration.
- The westbound U-Turn located west of Schutte Road should be signalized to run concurrent with side street traffic. Without this dedicated phase, the U-Turning traffic would experience significant delays during peak hours, and queues could potentially back up to Schutte Road.

SR 62 and McDowell Road

- The intersection of SR 62 and McDowell Road should be converted to a Restricted Crossing Intersection with U-Turn locations provided both east and west of McDowell Road. All intersections would remain unsignalized and yield to mainline traffic, including the U-Turns.

Appendix

Appendix A: Traffic Volume Exhibits

Appendix B: Intersection Operating Conditions

Appendix C: HCS Merge/Diverge/Weave Reports

Appendix D: RoadHAT Reports

Appendix E: Previous Study Documents

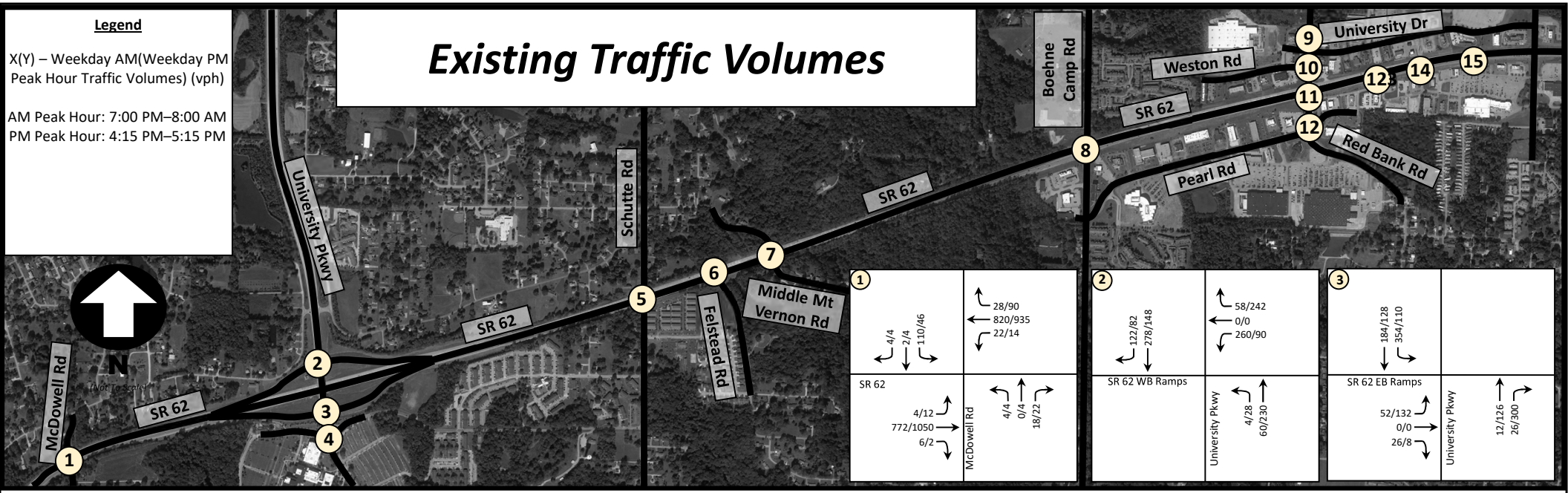
Appendix A: Traffic Volume Exhibits

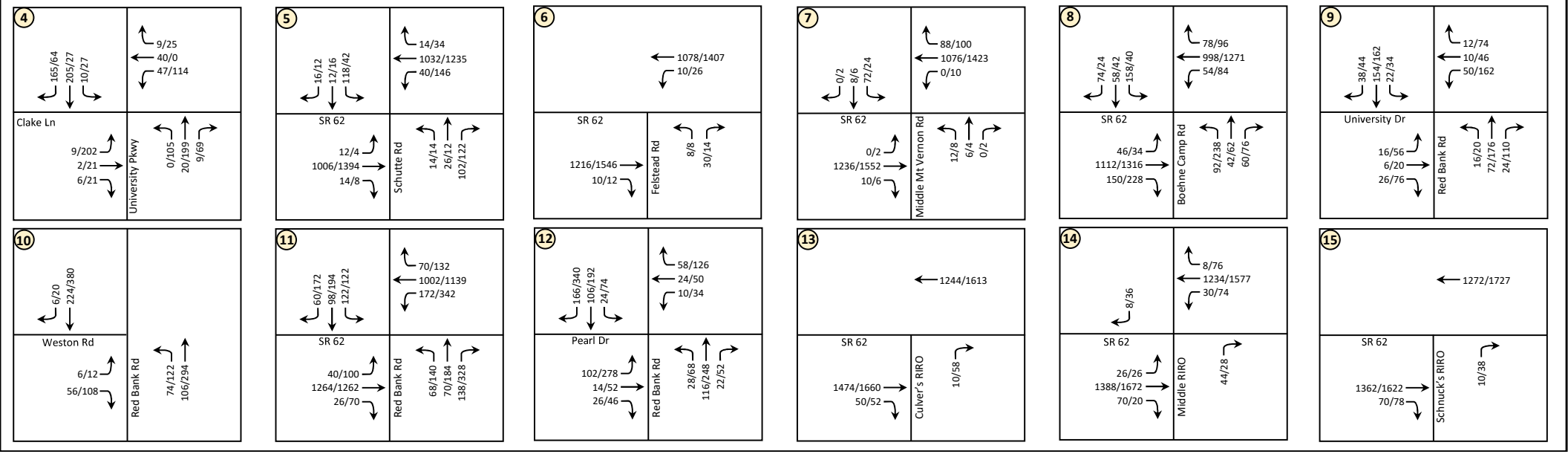
Existing Traffic Volumes

Legend

X(Y) – Weekday AM(Weekday PM Peak Hour Traffic Volumes) (vph)

AM Peak Hour: 7:00 PM–8:00 AM
PM Peak Hour: 4:15 PM–5:15 PM





2040 No-Build Traffic Volumes

Legend

X(Y) – Weekday AM(Weekday PM Peak Hour Traffic Volumes) (vph)

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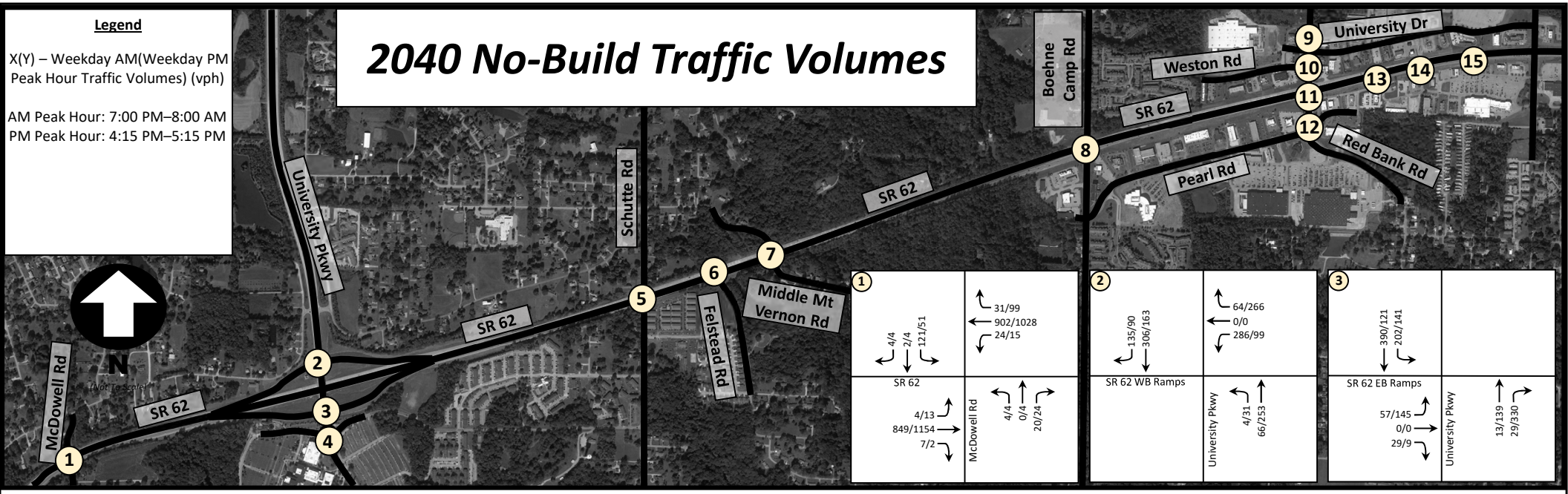
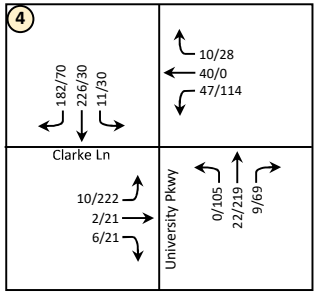
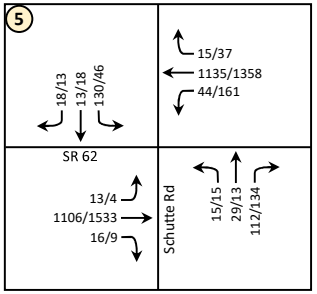
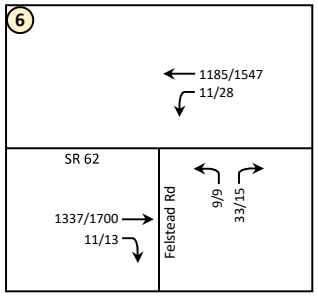
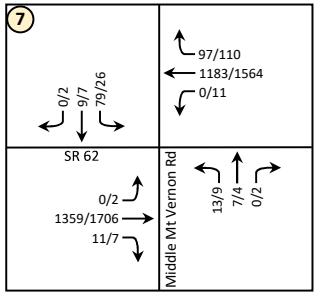
PM Peak Hour: 4:15 PM–5:15 PM

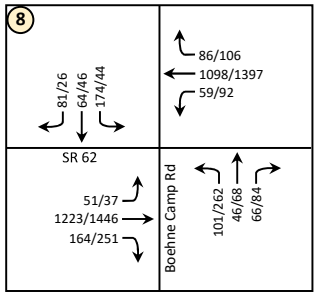


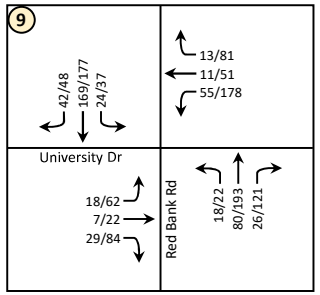


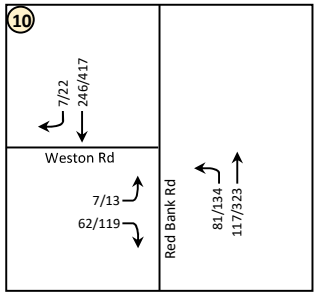


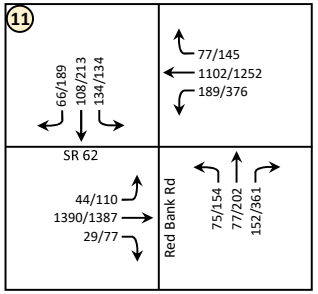


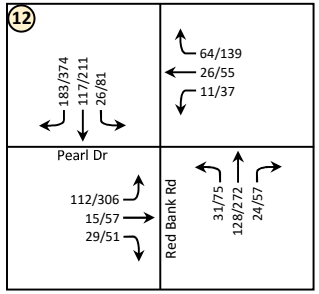


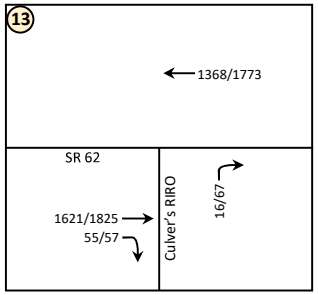


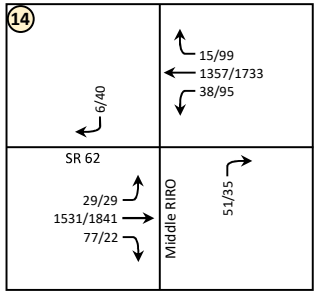


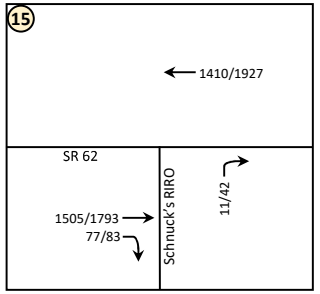










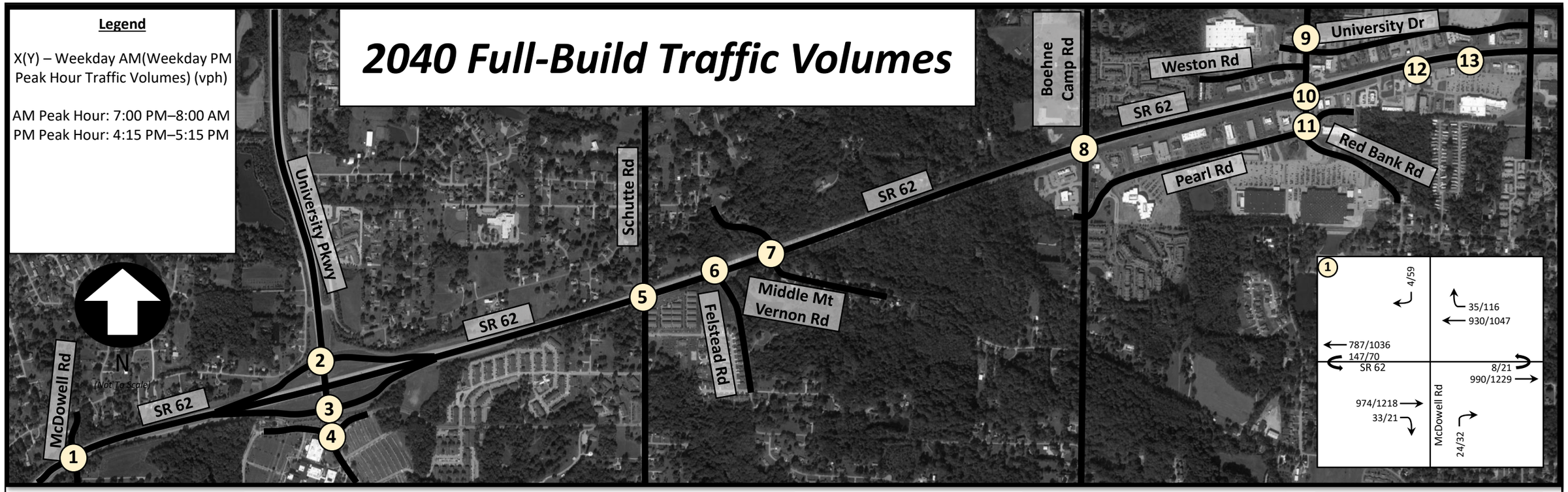


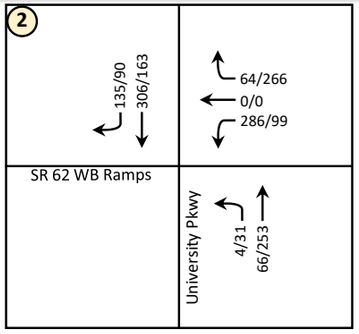
2040 Full-Build Traffic Volumes

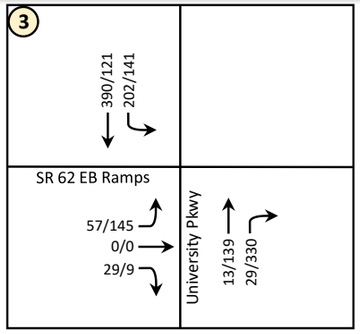
Legend

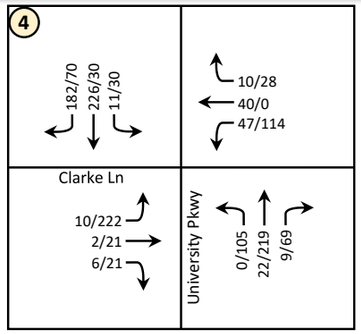
X(Y) – Weekday AM(Weekday PM Peak Hour Traffic Volumes) (vph)

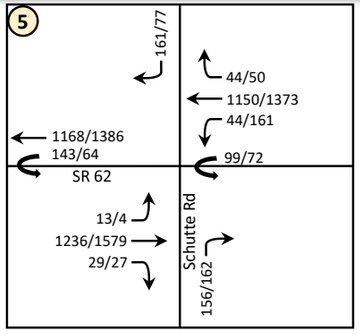
AM Peak Hour: 7:00 PM–8:00 AM
PM Peak Hour: 4:15 PM–5:15 PM

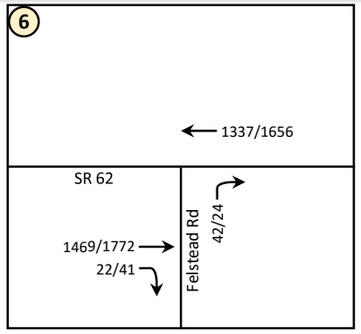


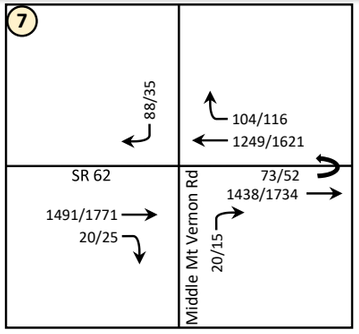


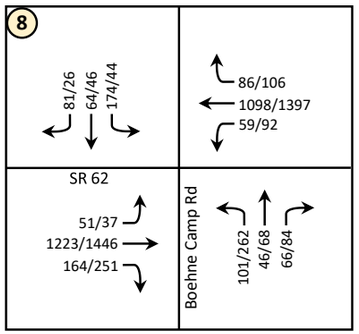


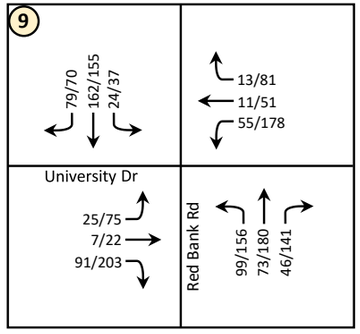


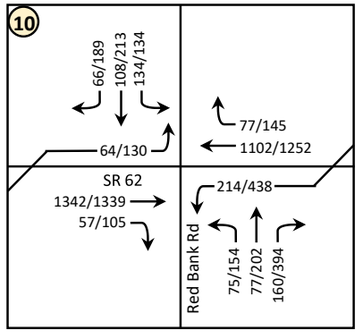


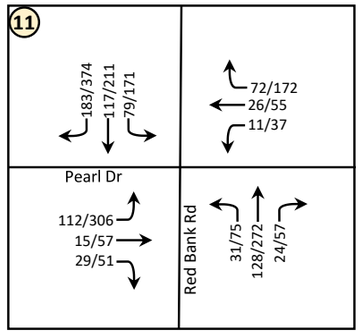


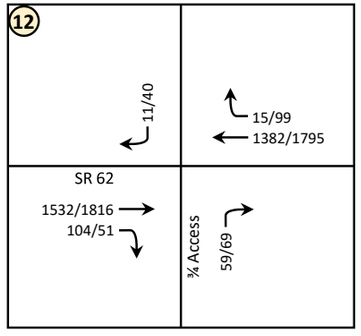


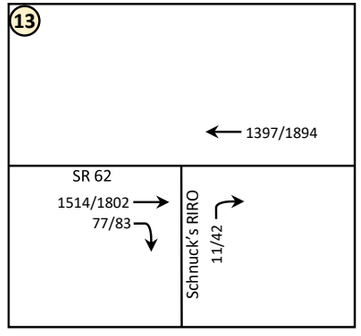












Appendix B: Intersection Operating Conditions

Existing Operating Conditions						
Intersection/Approach	Weekday AM Peak Hour			Weekday PM Peak Hour		
	Vehicle Delay (sec)	Average Queue (ft)	Maximum Queue (ft)	Vehicle Delay (sec)	Average Queue (ft)	Maximum Queue (ft)
SR 62 and Schnuck's Access Drive						
Overall Intersection	**0.7**			**1.5**		
Eastbound Thru	0.6	0	0	1.7	4	97
Eastbound Right	0.7	0	0	0.8	4	97
Eastbound Approach	0.6	0	0	1.7	4	97
Westbound Thru	0.8	0	0	0.8	0	3
Westbound Approach	0.8	0	0	0.8	0	3
Northbound Right	12.7	0	27	20.2	4	62
Northbound Approach	12.7	0	27	20.2	4	62
SR 62 and 3/4 Access Drive						
Overall Intersection	**0.8**			**1.5**		
Eastbound Left	12.0	1	41	18.7	3	61
Eastbound Thru	0.3	0	0	0.6	0	3
Eastbound Right	0.0	0	0	0	0	3
Eastbound Approach	0.5	1	41	0.9	3	61
Westbound Left	11.4	1	56	18.2	6	112
Westbound Thru	0.6	0	0	0.6	0	0
Westbound Right	0.4	0	0	0.7	0	0
Westbound Approach	0.8	1	56	1.3	6	112
Northbound Right	11.2	2	63	16.5	2	49
Northbound Approach	11.2	2	63	16.5	2	49
Southbound Right	17.4	1	35	24.8	5	75
Southbound Approach	17.4	1	35	24.8	5	75
SR 62 and Culver's Access Drive						
Overall Intersection	**0.7**			**1.1**		
Eastbound Thru	0.8	0	0	1.1	0	0
Eastbound Right	0.5	0	0	0.8	0	0
Eastbound Approach	0.8	0	0	1.1	0	0
Westbound Thru	0.4	0	0	0.4	0	0
Westbound Approach	0.4	0	0	0.4	0	0
Northbound Right	13.1	1	30	18.1	5	84
Northbound Approach	13.1	1	30	18.1	5	84

SR 62 & Red Bank Road (signalized)						
Overall Intersection	**18.3**			**29.6**		
Eastbound Left	73.1	34	439	78.6	168	886
Eastbound Thru	7.2	34	439	15.6	168	885
Eastbound Right	2.5	26	439	4.3	157	886
Eastbound Apprach	9.0	34	439	19.1	168	886
Westbound Left	62.1	94	398	66.7	148	464
Westbound Thru	15.7	94	397	13.2	148	464
Westbound Right	3.8	73	391	3.7	130	460
Westbound Approach	21.5	94	398	24.2	148	464
Northbound Left	40.5	28	159	75.5	127	396
Northbound Thru	46.6	32	159	63.4	130	396
Northbound Right	18.5	29	158	37.7	129	396
Northbound Approach	30.9	32	159	52.8	130	396
Southbound Left	41.5	38	199	58.9	79	250
Southbound Thru	44.3	40	200	61.4	81	250
Southbound Right	12.9	33	200	28.8	79	250
Southbound Approach	36.1	40	200	49.0	81	250
SR 62 & Weston Road						
Overall Intersection	**2.9**			**5.9**		
Eastbound Left	10.9	2	58	20.0	11	158
Eastbound Right	10.2	2	58	22.4	11	158
Eastbound Approach	10.2	2	58	22.2	11	158
Northbound Left	1.4	0	39	3.4	2	120
Northbound Thru	0.7	0	0	1.9	0	52
Northbound Approach	0.7	0	39	1.7	2	120
Southbound Thru	2.5	0	0	5.8	0	37
Southbound Right	1.2	0	0	1.1	0	37
Southbound Approach	2.5	0	0	5.6	0	37
SR 62 and University Drive (signalized)						
Overall Intersection	**5.9**			**9.8**		
Eastbound Left	13.9	1	51	17.1	5	70
Eastbound Thru	16.0	1	56	14.7	6	70
Eastbound Right	6.2	1	46	5.5	3	65
Eastbound Apprach	9.8	1	56	10.9	6	70
Westbound Left	14.8	4	66	19.6	19	135
Westbound Thru	12.8	4	66	15.9	18	135
Westbound Right	5.2	4	66	7.8	19	135
Westbound Approach	13.1	4	66	15.8	19	135
Northbound Left	4.7	0	34	7.0	1	53
Northbound Thru	3.3	1	72	6.9	7	174
Northbound Right	1.8	1	72	3.3	7	174
Northbound Approach	4.7	0	34	7.0	1	53
Southbound Left	4.1	2	82	9.6	6	102
Southbound Thru	4.2	3	82	7.7	6	101
Southbound Right	3.0	2	79	4.0	5	102
Southbound Approach	4.0	3	82	7.3	6	102

Red Bank Road and Pearl Drive (signalized)						
Overall Intersection	**9.3**			**17.8**		
Eastbound Left	19.2	10	98	28.1	39	283
Eastbound Thru	18.8	9	99	23.7	39	284
Eastbound Right	5.3	9	99	10.7	39	283
Eastbound Approach	16.7	10	99	25.2	39	284
Westbound Left	22.8	4	74	34.6	13	118
Westbound Thru	24.6	4	74	33.7	13	121
Westbound Right	5.6	0	43	11.5	3	107
Westbound Approach	12.3	4	74	20.3	13	121
Northbound Left	8.3	1	41	15.2	5	100
Northbound Thru	9.9	4	71	23.7	21	173
Northbound Right	4.9	3	69	7.7	19	173
Northbound Approach	8.3	1	41	15.2	5	100
Southbound Left	21.8	3	68	37.1	17	137
Southbound Thru	8.0	3	68	17.3	17	181
Southbound Right	1.1	0	41	3.0	3	215
Southbound Approach	5.3	3	68	11.4	17	215
SR 62 and Boehne Camp Road (signalized)						
Overall Intersection	**28.6**			**25.5**		
Eastbound Left	55.1	75	581	63.8	160	952
Eastbound Thru	17.6	76	581	20.6	161	952
Eastbound Right	4.7	61	576	5.9	148	947
Eastbound Apprach	17.4	76	581	19.5	161	952
Westbound Left	67.4	63	565	81.2	88	701
Westbound Thru	16.0	63	565	14.3	88	700
Westbound Right	3.8	28	554	4.0	40	689
Westbound Approach	17.6	63	565	17.5	88	701
Northbound Left	32.2	21	167	84.9	139	429
Northbound Thru	31.1	22	167	48.3	139	429
Northbound Right	14.9	20	174	25.2	129	438
Northbound Approach	26.5	22	174	66.3	139	438
Southbound Left	126.5	383	872	79.7	53	244
Southbound Thru	133.5	384	872	82.1	53	244
Southbound Right	119.2	384	872	64.5	53	244
Southbound Approach	126.1	384	872	77.3	53	244

SR 62 and Middle Mount Vernon Road						
Overall Intersection	**2.0**			**1.3**		
Eastbound left	0.0	0	0	0.0	0	0
Eastbound Thru	0.2	0	0	0.3	0	0
Eastbound Right	0.3	0	0	0.3	0	0
Eastbound Apprach	0.2	9	113	0.3	11	109
Westbound Left	0.0	0	0	12.5	16	201
Westbound Thru	0.2	0	40	0.2	0	0
Westbound Right	0.0	0	40	0.0	0	0
Westbound Approach	0.2	23	215	0.2	16	201
Northbound Left	34.0	2	55	56.4	3	50
Northbound Thru	33.7	2	55	55.2	3	50
Northbound Right	0.0	0	47	0.0	1	43
Northbound Approach	33.9	2	55	56.1	3	50
Southbound Left	49.6	17	137	73.8	14	155
Southbound Thru	51.7	17	137	67.1	14	155
Southbound Right	0.0	13	137	0.0	8	153
Southbound Approach	49.8	17	137	72.4	14	155
SR 62 and Felstead Road						
Overall Intersection	**0.9**			**0.9**		
Eastbound Thru	0.7	0	0	0.9	0	0
Eastbound Right	0.3	0	0	0.5	0	0
Eastbound Approach	0.7	0	0	0.9	0	0
Westbound Left	16.6	1	42	19.3	3	63
Westbound Thru	0.2	0	0	0.2	0	0
Westbound Approach	0.3	1	42	0.5	3	63
Northbound Left	28.1	3	70	52.9	2	53
Northbound Right	21.9	4	71	25.1	3	54
Northbound Approach	23.1	4	71	34.4	3	54
SR 62 and Schutte Road (signalized)						
Overall Intersection	**13.1**			**17.0**		
Eastbound Left	58.3	60	398	80.7	116	682
Eastbound Thru	15.2	46	364	18.7	100	649
Eastbound Right	12.0	46	364	14.6	100	648
Eastbound Apprach	15.7	60	398	18.9	116	682
Westbound Left	45.7	17	201	79.6	78	279
Westbound Thru	2.1	7	169	1.7	48	242
Westbound Right	0.9	5	170	0.0	11	235
Westbound Approach	3.7	17	201	9.7	78	279
Northbound Left	37.8	21	173	57.6	35	230
Northbound Thru	39.0	22	173	64.0	35	230
Northbound Right	25.7	22	173	39.3	35	230
Northbound Approach	29.2	22	173	43.2	35	230
Southbound Left	49.1	40	234	76.0	27	171
Southbound Thru	52.8	40	234	65.3	27	171
Southbound Right	36.0	40	232	41.5	27	170
Southbound Approach	48.1	40	234	67.2	27	171

University Parkway and SR 62 WB Ramps						
Overall Intersection	**8.5**			**7.7**		
Westbound Left	1.6	0	0	0.8	0	2
Westbound Right	0.8	0	0	1.5	0	45
Westbound Approach	1.5	0	0	1.3	0	45
Northbound Left	6.6	0	25	7.1	3	67
Northbound Thru	10.1	1	49	10.7	6	72
Northbound Approach	9.8	1	49	10.3	6	72
Southbound Thru	16.1	13	124	16.7	8	102
Southbound Right	8.4	8	123	8.5	4	92
Southbound Approach	13.9	13	124	13.9	8	102
University Parkway and SR 62 EB Ramps						
Overall Intersection	**2.5**			**5.5**		
Eastbound Left	12.8	3	78	20.9	16	151
Eastbound Right	9.3	4	78	15.7	16	151
Eastbound Approach	11.7	4	78	20.6	16	151
Northbound Thru	0.2	0	21	0.2	0	73
Northbound Right	0.5	0	21	0.7	0	73
Northbound Approach	0.4	0	21	0.6	0	73
Southbound Left	2.6	0	27	9.1	4	91
Southbound Thru	0.7	0	0	0.5	0	48
Southbound Approach	1.3	0	27	5.2	4	91
SR 62 and McDowell Road						
Overall Intersection	**1.5**			**1.0**		
Eastbound Left	8.5	0	27	9.3	1	53
Eastbound Thru	0.0	0	0	0.1	0	0
Eastbound Right	0.0	0	0	0.0	0	0
Eastbound Apprach	0.0	0	27	0.2	1	53
Westbound Left	5.0	2	117	8.2	2	101
Westbound Thru	0.1	0	0	0.2	0	0
Westbound Right	0.0	0	0	0.2	0	0
Westbound Approach	0.2	2	118	0.3	2	101
Northbound Left	27.3	1	43	26.3	2	57
Northbound Thru	0	0	0	25.8	2	57
Northbound Right	11.0	1	44	16.8	2	59
Northbound Approach	13.1	1	44	19.6	2	59
Southbound Left	18.0	10	119	16.9	4	73
Southbound Thru	19.2	10	119	26.5	4	73
Southbound Right	17.5	10	119	12.4	4	73
Southbound Approach	18.0	10	119	17.1	4	73

University Parkway and Clarke Lane Roundabout						
Overall Intersection	**0.9**			**2.5**		
Eastbound Left	1.7	0	24	1.7	0	72
Eastbound Right	0.8	0	24	0.9	0	72
Eastbound Apprach	2.0	0	24	2.6	0	72
Westbound Left	0	0	0	1.7	1	56
Westbound Right	0.3	0	4	2.1	1	56
Westbound Approach	0.7	0	4	2.3	1	56
Northbound Left	0	0	0	1.7	1	56
Northbound Right	0.3	0	4	2.1	1	56
Northbound Approach	0.7	0	4	2.3	1	56
Southbound Left	1.2	1	65	1.5	0	38
Southbound Right	1.2	1	69	1.2	0	41
Southbound Approach	0.9	1	69	1.2	0	41

2040 No Build Operating Conditions						
Intersection/Approach	Weekday AM Peak Hour			Weekday PM Peak Hour		
	Vehicle Delay (sec)	Average Queue (ft)	Maximum Queue (ft)	Vehicle Delay (sec)	Average Queue (ft)	Maximum Queue (ft)
SR 62 and Schnuck's Access Drive						
Overall Intersection	**1.6**			**6.7**		
Eastbound Thru	2.2	0	73	11.0	94	383
Eastbound Right	0.8	0	73	1.0	94	383
Eastbound Approach	2.1	0	73	10.6	94	383
Westbound Thru	0.9	0	0	1.0	0	0
Westbound Approach	0.9	0	0	1.0	0	0
Northbound Right	12.5	0	29	296.4	33	101
Northbound Approach	12.5	0	29	296.4	33	101
SR 62 and 3/4 Access Drive						
Overall Intersection	**1.5**			**5.2**		
Eastbound Left	13.8	2	58	22.9	15	198
Eastbound Thru	1.3	0	0	6.7	30	124
Eastbound Right	0.3	0	0	0.1	30	124
Eastbound Approach	1.5	2	58	6.9	30	198
Westbound Left	15.8	2	82	22.3	10	149
Westbound Thru	0.6	0	0	0.7	0	2
Westbound Right	0.6	0	0	0.5	0	2
Westbound Approach	0.9	2	82	1.7	10	149
Northbound Right	13.4	3	76	94.6	26	99
Northbound Approach	13.4	3	76	94.6	26	99
Southbound Right	16.6	1	34	29.3	6	81
Southbound Approach	16.6	1	34	29.3	6	81
SR 62 and Culver's Access Drive						
Overall Intersection	**1.2**			**2.9**		
Eastbound Thru	1.8	0	0	3.8	7	106
Eastbound Right	0.9	0	0	1.5	7	106
Eastbound Approach	1.7	0	0	3.7	7	106
Westbound Thru	0.4	0	0	0.4	0	0
Westbound Approach	0.4	0	0	0.4	0	0
Northbound Right	14.3	1	43	44.0	17	128
Northbound Approach	14.3	1	43	44.0	17	128

SR 62 & Red Bank Road (signalized)						
Overall Intersection	**18.5**			**32.4**		
Eastbound Left	75.7	30	524	78.3	219	1016
Eastbound Thru	5.5	31	524	16.2	219	1015
Eastbound Right	2.4	23	524	6.3	213	1016
Eastbound Apprach	7.4	31	524	19.8	219	1016
Westbound Left	67.5	112	485	74.1	170	519
Westbound Thru	16.9	112	485	13.5	170	519
Westbound Right	3.9	94	481	3.2	154	515
Westbound Approach	23.0	112	485	25.8	170	519
Northbound Left	40.6	31	184	91.7	195	458
Northbound Thru	48.6	37	187	63.6	198	458
Northbound Right	22.2	35	187	50.0	196	458
Northbound Approach	33.1	37	187	62.8	198	458
Southbound Left	43.6	45	216	62.5	93	256
Southbound Thru	43.0	46	216	62.1	94	256
Southbound Right	16.0	39	216	30.6	93	257
Southbound Approach	37.5	46	216	50.7	94	257
SR 62 & Weston Road						
Overall Intersection	**3.3**			**8.3**		
Eastbound Left	11.9	2	62	30.5	21	210
Eastbound Right	10.9	2	62	34.5	21	209
Eastbound Approach	11.0	2	62	34.1	21	210
Northbound Left	1.6	0	42	4.1	2	109
Northbound Thru	0.8	0	0	2.0	0	39
Northbound Approach	0.8	0	42	1.8	2	109
Southbound Thru	3.1	0	0	7.7	1	70
Southbound Right	1.1	0	0	1.1	1	70
Southbound Approach	3.1	0	0	7.4	1	70
SR 62 and University Drive (signalized)						
Overall Intersection	**6.3**			**10.3**		
Eastbound Left	16.2	2	65	17.8	6	77
Eastbound Thru	13.7	2	66	15.4	7	77
Eastbound Right	6.4	1	51	5.3	4	76
Eastbound Apprach	10.6	2	66	11.1	7	77
Westbound Left	15.1	5	74	21.3	22	155
Westbound Thru	13.6	5	74	15.3	22	155
Westbound Right	4.8	5	74	8.2	22	155
Westbound Approach	13.5	5	74	16.7	22	155
Northbound Left	4.1	0	42	7.6	1	51
Northbound Thru	3.9	1	76	6.8	8	207
Northbound Right	2.0	1	76	3.6	8	207
Northbound Approach	4.1	0	42	7.6	1	51
Southbound Left	4.4	3	86	10.2	8	109
Southbound Thru	4.6	3	86	8.8	8	109
Southbound Right	3.1	3	86	3.9	7	109
Southbound Approach	4.3	3	86	8.1	8	109

Red Bank Road and Pearl Drive (signalized)						
Overall Intersection	**9.4**			**23.0**		
Eastbound Left	19.4	11	114	36.3	52	376
Eastbound Thru	19.2	10	114	25.4	52	377
Eastbound Right	5.8	10	114	12.2	51	377
Eastbound Apprach	16.9	11	114	31.6	52	377
Westbound Left	23.3	4	60	36.3	23	217
Westbound Thru	22.4	4	60	36.6	23	217
Westbound Right	5.4	0	29	25.5	12	177
Westbound Approach	11.5	4	60	29.7	23	217
Northbound Left	8.1	1	42	16.5	7	139
Northbound Thru	10.3	4	87	33.3	28	190
Northbound Right	5.2	4	87	9.8	27	190
Northbound Approach	8.1	1	42	16.5	7	139
Southbound Left	25.1	3	64	39.7	20	145
Southbound Thru	7.6	3	86	20.8	21	206
Southbound Right	1.2	0	62	3.3	3	217
Southbound Approach	5.3	3	86	13.1	21	217
SR 62 and Boehne Camp Road (signalized)						
Overall Intersection	**33.9**			**28.1**		
Eastbound Left	55.4	95	622	70.7	213	1000
Eastbound Thru	18.9	96	622	20.5	214	1000
Eastbound Right	5.2	81	617	6.4	203	995
Eastbound Apprach	18.6	96	622	19.5	214	1000
Westbound Left	71.8	79	677	84.6	106	749
Westbound Thru	17.5	80	677	15.4	106	749
Westbound Right	4.8	40	652	4.6	49	717
Westbound Approach	19.2	80	677	18.9	106	749
Northbound Left	32.5	23	164	105.7	198	542
Northbound Thru	28.8	23	164	54.9	198	543
Northbound Right	17.5	21	173	34.9	188	551
Northbound Approach	26.9	23	173	82.8	198	551
Southbound Left	180.6	836	1250	84.5	63	271
Southbound Thru	182.5	836	1251	87.8	63	271
Southbound Right	170.0	836	1251	68.6	63	271
Southbound Approach	178.2	836	1251	82.5	63	271

SR 62 and Middle Mount Vernon Road						
Overall Intersection	**2.5**			**1.7**		
Eastbound Thru	0.3	0	0	0.4	0	0
Eastbound Right	0.4	0	0	0.3	0	0
Eastbound Apprach	0.3	16	135	0.3	15	111
Westbound Left	0.2	0	18	17.2	34	245
Westbound Thru	0.0	0	18	0.2	0	0
Westbound Right	28.7	39	234	0.0	0	0
Westbound Approach	0.3	39	235	0.2	34	245
Northbound Left	39.7	7	76	61.3	4	53
Northbound Thru	36.6	7	76	84.7	4	53
Northbound Right	0.0	5	78	0.0	1	49
Northbound Approach	38.5	7	78	68.2	4	53
Southbound Left	60.3	31	160	104.9	23	173
Southbound Thru	62.0	31	160	91.5	23	173
Southbound Right	0.0	27	160	0.0	18	173
Southbound Approach	60.5	31	160	101.6	23	173
SR 62 and Felstead Road						
Overall Intersection	**1.0**			**1.1**		
Eastbound Thru	0.8	0	0	1.0	0	0
Eastbound Right	0.2	0	0	0.3	0	0
Eastbound Approach	0.8	0	0	1.0	0	0
Westbound Left	19.3	1	44	25.1	4	60
Westbound Thru	0.2	0	0	0.2	0	0
Westbound Approach	0.4	1	44	0.6	4	60
Northbound Left	27.8	3	67	52.6	3	57
Northbound Right	22.4	4	68	32.2	3	58
Northbound Approach	23.6	4	68	39.6	3	58
SR 62 and Schutte Road (signalized)						
Overall Intersection	**14.8**			**17.8**		
Eastbound Left	60.3	78	461	75.8	150	832
Eastbound Thru	17.8	62	428	19.9	132	798
Eastbound Right	13.2	62	427	14.9	132	798
Eastbound Apprach	18.2	78	461	20.0	150	832
Westbound Left	47.6	19	171	80.1	85	290
Westbound Thru	2.0	7	136	1.6	55	252
Westbound Right	1.1	5	137	0.1	11	248
Westbound Approach	3.8	19	171	9.8	85	290
Northbound Left	40.9	25	194	66.2	40	244
Northbound Thru	41.0	25	194	56.4	40	244
Northbound Right	27.1	25	194	42.0	40	244
Northbound Approach	31.1	25	194	45.4	40	244
Southbound Left	56.7	53	259	77.1	31	184
Southbound Thru	54.9	53	259	66.9	31	184
Southbound Right	42.6	52	257	48.0	30	183
Southbound Approach	55.0	53	259	70.0	31	184

University Parkway and SR 62 WB Ramps						
Overall Intersection	**10.9**			**8.0**		
Westbound Left	1.6	0	0	0.8	0	0
Westbound Right	0.7	0	0	1.5	0	29
Westbound Approach	1.4	0	0	1.3	0	29
Northbound Left	7.9	0	33	7.5	4	70
Northbound Thru	13.2	2	54	10.9	7	73
Northbound Approach	12.8	2	54	10.5	7	73
Southbound Thru	21.6	24	165	17.2	9	108
Southbound Right	8.9	17	162	8.9	4	95
Southbound Approach	18.0	24	165	14.3	9	108
University Parkway and SR 62 EB Ramps						
Overall Intersection	**2.7**			**7.9**		
Eastbound Left	14.9	4	84	32.3	31	221
Eastbound Right	9.2	4	85	24.3	31	215
Eastbound Approach	13.0	4	85	31.8	31	221
Northbound Thru	0.2	0	0	0.2	0	73
Northbound Right	0.5	0	0	0.8	0	73
Northbound Approach	0.4	0	0	0.6	0	73
Southbound Left	2.6	0	36	11.8	6	108
Southbound Thru	0.7	0	0	0.5	1	65
Southbound Approach	1.4	0	36	6.7	6	108
SR 62 and McDowell Road						
Overall Intersection	**1.7**			**0.9**		
Eastbound Left	8.4	0	25	7.0	1	43
Eastbound Thru	0.0	0	0	0.1	0	0
Eastbound Right	0.0	0	0	0.0	0	0
Eastbound Apprach	0.1	0	25	0.1	1	43
Westbound Left	5.5	5	170	9.7	2	106
Westbound Thru	0.1	0	0	0.2	0	0
Westbound Right	0.1	0	0	0.2	0	0
Westbound Approach	0.3	5	171	0.3	2	106
Northbound Left	26.9	1	46	28.0	1	52
Northbound Thru	0.0	0	0	26.7	1	52
Northbound Right	12.7	1	47	16.7	2	53
Northbound Approach	15.1	1	47	19.7	2	53
Southbound Left	20.3	14	155	16.5	4	74
Southbound Thru	25.5	14	155	23.5	4	74
Southbound Right	18.4	13	155	14.6	4	74
Southbound Approach	20.3	14	155	16.7	4	74

University Parkway and Clarke Lane Roundabout						
Overall Intersection	**0.8**			**2.8**		
Eastbound Left	1.9	0	20	2.0	0	72
Eastbound Right	1.0	0	20	1.1	0	72
Eastbound Apprach	1.8	0	20	2.8	0	72
Westbound Left	0.6	0	9	4.0	1	69
Westbound Right	0.4	0	9	0.0	0	0
Westbound Approach	0.5	0	9	4.0	1	69
Northbound Left	0.0	0	0	2.0	1	77
Northbound Right	0.4	0	9	2.4	1	77
Northbound Approach	0.8	0	9	2.7	1	77
Southbound Left	1.2	0	52	1.6	0	40
Southbound Right	1.0	0	56	1.3	0	42
Southbound Approach	0.9	0	56	1.3	0	42

2040 Full Build Operating Conditions						
Intersection/Approach	Weekday AM Peak Hour			Weekday PM Peak Hour		
	Vehicle Delay (sec)	Average Queue (ft)	Maximum Queue (ft)	Vehicle Delay (sec)	Average Queue (ft)	Maximum Queue (ft)
SR 62 and Schnuck's Access Drive						
Northbound Right	21.1	1	34	163.7	29	142
SR 62 and 3/4 Access Drive (West of Schnuck's Access Drive)						
Overall Intersection	**1.3**			**2.4**		
Northbound Right	12.6	4	75	22.4	9	106
Southbound Right	16.8	1	35	28.9	6	77
SR 62 and Red Bank Road						
Overall Intersection	**20.8**			**27.3**		
Eastbound Left	70.4	20	163	67.2	39	222
Eastbound Thru	14.0	53	557	6.9	25	246
Eastbound Right	6.0	63	583	9.2	34	272
Eastbound Approach	16.0	63	583	11.7	39	272
Westbound Left	60.7	71	355	55.6	130	541
Westbound Thru	5.9	12	244	9.2	25	454
Westbound Right	3.4	19	284	5.7	37	494
Westbound Approach	14.2	71	355	20.1	130	541
Northbound Left	61.3	27	165	129.8	123	335
Northbound Thru	52.28	28	164	69.85	122	334
Northbound Right	39.4	38	233	45.0	111	539
Northbound Approach	46.0	38	233	67.8	123	539
Southbound Left	72.4	41	187	81.3	62	207
Southbound Thru	53.6	43	187	67.1	65	207
Southbound Right	1.1	0	48	1.4	2	67
Southbound Approach	49.3	43	187	45.5	65	207
Red Bank and University Drive						
Overall Intersection	**7.8**			**13.3**		
Eastbound Left	18.6	5	79	23.4	15	135
Eastbound Thru	17.6	6	83	16.9	17	136
Eastbound Right	6.9	3	78	7.0	13	135
Eastbound Approach	12.6	6	83	14.3	17	136
Westbound Left	19.6	6	82	30.8	34	259
Westbound Thru	15.4	6	82	20.3	34	259
Westbound Right	5.0	6	82	11.5	34	259
Westbound Approach	16.7	6	82	23.4	34	259
Northbound Left	5.5	2	103	10.1	8	176
Northbound Thru	3.6	1	68	7.4	8	184
Northbound Right	2.4	1	67	4.3	8	184
Northbound Approach	5.5	2	103	10.1	8	176
Southbound Left	5.3	5	98	14.2	11	118
Southbound Thru	6.3	5	98	12.5	11	118
Southbound Right	3.3	4	98	4.5	11	118
Southbound Approach	5.6	5	98	10.9	11	118

Red Bank and Pearl Drive						
Overall Intersection	**10.6**			**21.3**		
Eastbound Left	20.7	12	106	31.6	56	376
Eastbound Thru	20.3	12	107	27.1	56	377
Eastbound Right	6.3	11	106	13.1	55	376
Eastbound Approach	18.0	12	107	28.6	56	377
Westbound Left	27.5	4	71	39.5	17	130
Westbound thru	23.5	4	71	37.6	17	130
Westbound Right	2.9	0	39	6.3	4	96
Westbound Approach	9.9	4	71	17.6	17	130
Northbound Left	8.9	1	50	16.4	6	141
Northbound Thru	11.7	6	96	27.8	32	208
Northbound Right	5.9	5	96	10.1	31	208
Northbound Approach	10.4	6	96	23.1	32	208
Southbound Left	24.1	10	103	49.7	51	202
Southbound Thru	7.7	4	124	19.5	40	225
Southbound Right	0.9	0	51	2.1	5	200
Southbound Approach	7.8	10	124	17.5	51	225
SR 62 and Boehne Camp Road						
Overall Intersection	**25.9**			**19.0**		
Eastbound Left	61.9	64	307	73.4	87	504
Eastbound Thru	13.3	64	307	16.9	88	504
Eastbound Right	3.9	46	302	5.0	76	499
Eastbound Approach	14.0	64	307	16.4	88	504
Westbound Left	42.8	146	616	38.4	45	257
Westbound Thru	32.0	146	616	6.8	45	257
Westbound Right	6.1	115	606	2.6	10	241
Westbound Approach	30.7	146	616	8.3	45	257
Northbound Left	65.5	41	144	73.8	82	301
Northbound Thru	67.1	41	145	53.5	83	301
Northbound Right	23.2	45	154	25.1	79	310
Northbound Approach	52.8	45	154	60.6	83	310
Southbound Left	49.5	63	309	46.3	26	131
Southbound Thru	55.4	63	309	68.0	26	131
Southbound Right	17.9	66	322	20.2	30	145
Southbound Approach	42.6	66	322	49.7	30	145

U-Turn East of Middle Mt Vernon Road						
Eastbound U-Turn	10.3	4	79	34.1	10	102
SR 62 and Middle Mt. Vernon Road						
Northbound Right	33.3	4	57	35.1	3	50
Southbound Right	36.9	20	157	41.6	8	93
SR 62 and Felstead Road						
Northbound Right	32.1	7	79	34.4	4	60
WB U-Turn East of Schutte Road						
Westbound U-Turn	39.5	27	164	48.9	24	138
SR 62 and Schutte Road						
Overall Intersection	**7.1**			**8.3**		
Eastbound Left	50.5	6	95	51.2	5	118
Eastbound Thru	1.7	230	334	1.5	108	165
Eastbound Right	0.7	237	342	0.8	115	172
Eastbound Approach	1.7	264	368	1.5	142	199
Westbound Left	54.8	25	442	52.9	77	320
Westbound Thru	4.2	12	406	4.9	48	281
Westbound Right	0.8	9	407	1.6	32	281
Westbound Approach	6.0	25	442	9.6	77	320
Northbound Right	44.7	44	234	54.9	56	265
Northbound Approach	44.7	44	234	54.9	56	265
Southbound Right	21.3	20	175	26.2	11	109
Southbound Approach	21.3	20	175	26.2	11	109
WB U-Turn West of Schutte Road						
Eastbound Thru	6.6	28	286	7.7	45	426
Westbound U-Turn	27.3	23	173	39.1	15	107
SR 62 WB Ramps and University Parkway						
Overall Intersection	**8.8**			**7.5**		
Westbound Left	1.7	0	0	0.8	0	0
Westbound Right	0.8	0	2	1.6	0	48
Westbound Approach	1.5	0	2	1.4	0	48
Northbound Left	7.6	0	31	7.6	3	66
Northbound Thru	10.2	2	52	10.2	6	78
Northbound Approach	10.0	2	52	9.9	6	78
Southbound Thru	16.6	16	136	15.8	8	106
Southbound Right	8.6	10	133	8.2	4	91
Southbound Approach	14.3	16	136	13.1	8	106

SR 62 EB Ramps and University Parkway						
Overall Intersection	**2.6**			**7.3**		
Eastbound Left	13.9	4	84	29.3	28	215
Eastbound Right	9.6	4	85	22.0	27	215
Eastbound Approach	12.4	4	85	28.8	28	215
Northbound Thru	0.2	0	0	0.2	0	73
Northbound Right	0.5	0	0	0.8	0	73
Northbound Approach	0.4	0	0	0.6	0	73
Southbound Left	2.6	0	31	11.1	6	108
Southbound Thru	0.7	0	0	0.5	1	65
Southbound Approach	1.4	0	31	6.3	6	108
EB U-Turn East of McDowell Road						
Eastbound U-Turn	10.9	0	26	15.0	2	53
SR 62 and McDowell Road						
Northbound Right	13.7	1	44	16.7	2	51
Southbound Right	17.0	12	144	13.6	4	66
WB U-Turn West of McDowell Road						
Westbound U-Turn	25.7	23	178	38.0	17	136
University Parkway and Clarke Lane Roundabout						
Overall Intersection	**0.9**			**2.8**		
Eastbound Left	1.4	0	20	2.0	0	64
Eastbound Right	1.9	0	20	1.1	0	64
Eastbound Approach	1.9	0	20	2.8	0	64
Westbound Left	0.6	0	11	4.1	1	69
Westbound Right	0.4	0	11	3.67	1	69
Westbound Approach	0.6	0	11	4.0	1	69
Northbound Left	0.0	0	0	2.1	1	85
Northbound Right	0.4	0	9	2.3	1	85
Northbound Approach	0.8	0	9	2.8	1	85
Southbound Left	1.1	1	62	1.6	0	39
Southbound Right	1.2	1	65	1.2	0	45
Southbound Approach	0.9	1	65	1.3	0	45

Appendix C: HCS Merge/Diverge/Weave Reports

HCS7 Freeway Diverge Report

Project Information

Analyst	MS	Date	11/3/2021
Agency	Lochmueller	Analysis Year	2021
Jurisdiction		Time Period Analyzed	AM
Project Description	Existing Lloyd Expressway EB Diverge AM		

Geometric Data

	Freeway	Ramp
Number of Lanes (N)	2	1
Free-Flow Speed (FFS), mi/h	60.0	35.0
Segment Length (L) / Deceleration Length (L_D), ft	1500	650
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Side	Freeway	Right

Adjustment Factors

Driver Population	All Familiar	All Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Final Speed Adjustment Factor (SAF)	1.000	1.000
Final Capacity Adjustment Factor (CAF)	1.000	1.000
Demand Adjustment Factor (DAF)	1.000	1.000

Demand and Capacity

Demand Volume (V_i), veh/h	822	78
Peak Hour Factor (PHF)	0.92	0.92
Total Trucks, %	2.00	2.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (f_{HV})	0.980	0.980
Flow Rate (v_i), pc/h	912	87
Capacity (c), pc/h	4600	2000
Volume-to-Capacity Ratio (v/c)	0.20	0.04

Speed and Density

Upstream Equilibrium Distance (L_{EQ}), ft	-	Density in Ramp Influence Area (D_R), pc/mi/ln	6.2
Distance to Upstream Ramp (L_{UP}), ft	-	Speed Index (D_S)	0.436
Downstream Equilibrium Distance (L_{EQ}), ft	-	Flow Outer Lanes (v_{OA}), pc/h/ln	-
Distance to Downstream Ramp (L_{DOWN}), ft	-	Off-Ramp Influence Area Speed (S_R), mi/h	52.2
Prop. Freeway Vehicles in Lane 1 and 2 (P_{FD})	1.000	Outer Lanes Freeway Speed (S_O), mi/h	-
Flow in Lanes 1 and 2 (v_{12}), pc/h	912	Ramp Junction Speed (S), mi/h	52.2
Flow Entering Ramp-Infl. Area (v_{R12}), pc/h	-	Average Density (D), pc/mi/ln	8.7
Level of Service (LOS)	A		

HCS7 Freeway Diverge Report

Project Information

Analyst	MS	Date	11/3/2021
Agency	Lochmueller	Analysis Year	2021
Jurisdiction		Time Period Analyzed	AM
Project Description	Lloyd Expressway EB Diverge AM		

Geometric Data

	Freeway	Ramp
Number of Lanes (N)	2	1
Free-Flow Speed (FFS), mi/h	60.0	35.0
Segment Length (L) / Deceleration Length (L_D), ft	1500	650
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Side	Freeway	Right

Adjustment Factors

Driver Population	All Familiar	All Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Final Speed Adjustment Factor (SAF)	1.000	1.000
Final Capacity Adjustment Factor (CAF)	1.000	1.000
Demand Adjustment Factor (DAF)	1.000	1.000

Demand and Capacity

Demand Volume (V_i), veh/h	978	140
Peak Hour Factor (PHF)	0.92	0.92
Total Trucks, %	2.00	2.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (f_{HV})	0.980	0.980
Flow Rate (v_i), pc/h	1085	155
Capacity (c), pc/h	4600	2000
Volume-to-Capacity Ratio (v/c)	0.24	0.08

Speed and Density

Upstream Equilibrium Distance (L_{EQ}), ft	-	Density in Ramp Influence Area (D_R), pc/mi/ln	7.7
Distance to Upstream Ramp (L_{UP}), ft	-	Speed Index (D_S)	0.442
Downstream Equilibrium Distance (L_{EQ}), ft	-	Flow Outer Lanes (v_{OA}), pc/h/ln	-
Distance to Downstream Ramp (L_{DOWN}), ft	-	Off-Ramp Influence Area Speed (S_R), mi/h	52.0
Prop. Freeway Vehicles in Lane 1 and 2 (P_{FD})	1.000	Outer Lanes Freeway Speed (S_O), mi/h	-
Flow in Lanes 1 and 2 (v_{12}), pc/h	1085	Ramp Junction Speed (S), mi/h	52.0
Flow Entering Ramp-Infl. Area (v_{R12}), pc/h	-	Average Density (D), pc/mi/ln	10.4
Level of Service (LOS)	A		

HCS7 Freeway Merge Report

Project Information

Analyst	MS	Date	11/3/2021
Agency	Lochmueller	Analysis Year	2021
Jurisdiction		Time Period Analyzed	AM
Project Description	Existing Lloyd Expressway EB Merge AM		

Geometric Data

	Freeway	Ramp
Number of Lanes (N)	2	1
Free-Flow Speed (FFS), mi/h	60.0	35.0
Segment Length (L) / Acceleration Length (L_A), ft	1500	820
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Side	Freeway	Right

Adjustment Factors

Driver Population	All Familiar	All Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Final Speed Adjustment Factor (SAF)	1.000	1.000
Final Capacity Adjustment Factor (CAF)	1.000	1.000
Demand Adjustment Factor (DAF)	1.000	1.000

Demand and Capacity

Demand Volume (V_i), veh/h	822	210
Peak Hour Factor (PHF)	0.92	0.92
Total Trucks, %	2.00	2.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (f_{HV})	0.980	0.980
Flow Rate (v_i), pc/h	912	233
Capacity (c), pc/h	4600	2000
Volume-to-Capacity Ratio (v/c)	0.25	0.12

Speed and Density

Upstream Equilibrium Distance (L_{EQ}), ft	-	Density in Ramp Influence Area (D_R), pc/mi/ln	9.2
Distance to Upstream Ramp (L_{UP}), ft	-	Speed Index (M_S)	0.276
Downstream Equilibrium Distance (L_{EQ}), ft	-	Flow Outer Lanes (v_{OA}), pc/h/ln	-
Distance to Downstream Ramp (L_{DOWN}), ft	-	On-Ramp Influence Area Speed (S_R), mi/h	55.0
Prop. Freeway Vehicles in Lane 1 and 2 (P_{FM})	1.000	Outer Lanes Freeway Speed (S_O), mi/h	-
Flow in Lanes 1 and 2 (v_{12}), pc/h	912	Ramp Junction Speed (S), mi/h	55.0
Flow Entering Ramp-Infl. Area (v_{R12}), pc/h	1145	Average Density (D), pc/mi/ln	10.4
Level of Service (LOS)	A		

HCS7 Freeway Merge Report

Project Information

Analyst	MS	Date	11/3/2021
Agency	Lochmueller	Analysis Year	2021
Jurisdiction		Time Period Analyzed	PM
Project Description	Existing Lloyd Expressway EB Merge PM		

Geometric Data

	Freeway	Ramp
Number of Lanes (N)	2	1
Free-Flow Speed (FFS), mi/h	60.0	35.0
Segment Length (L) / Acceleration Length (L_A), ft	1500	820
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Side	Freeway	Right

Adjustment Factors

Driver Population	All Familiar	All Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Final Speed Adjustment Factor (SAF)	1.000	1.000
Final Capacity Adjustment Factor (CAF)	1.000	1.000
Demand Adjustment Factor (DAF)	1.000	1.000

Demand and Capacity

Demand Volume (V_i), veh/h	978	428
Peak Hour Factor (PHF)	0.92	0.92
Total Trucks, %	2.00	2.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (f_{HV})	0.980	0.980
Flow Rate (v_i), pc/h	1085	475
Capacity (c), pc/h	4600	2000
Volume-to-Capacity Ratio (v/c)	0.34	0.24

Speed and Density

Upstream Equilibrium Distance (L_{EQ}), ft	-	Density in Ramp Influence Area (D_R), pc/mi/ln	12.4
Distance to Upstream Ramp (L_{UP}), ft	-	Speed Index (M_S)	0.282
Downstream Equilibrium Distance (L_{EQ}), ft	-	Flow Outer Lanes (v_{OA}), pc/h/ln	-
Distance to Downstream Ramp (L_{DOWN}), ft	-	On-Ramp Influence Area Speed (S_R), mi/h	54.9
Prop. Freeway Vehicles in Lane 1 and 2 (P_{FM})	1.000	Outer Lanes Freeway Speed (S_O), mi/h	-
Flow in Lanes 1 and 2 (v_{12}), pc/h	1085	Ramp Junction Speed (S), mi/h	54.9
Flow Entering Ramp-Infl. Area (v_{R12}), pc/h	1560	Average Density (D), pc/mi/ln	14.2
Level of Service (LOS)	B		

HCS7 Freeway Diverge Report

Project Information

Analyst	MS	Date	11/3/2021
Agency	Lochmueller	Analysis Year	2021
Jurisdiction		Time Period Analyzed	AM
Project Description	Existing Lloyd Expressway WB 62 Diverge AM		

Geometric Data

	Freeway	Ramp
Number of Lanes (N)	2	1
Free-Flow Speed (FFS), mi/h	60.0	35.0
Segment Length (L) / Deceleration Length (L_D), ft	1500	650
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Side	Freeway	Right

Adjustment Factors

Driver Population	All Familiar	All Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Final Speed Adjustment Factor (SAF)	1.000	1.000
Final Capacity Adjustment Factor (CAF)	1.000	1.000
Demand Adjustment Factor (DAF)	1.000	1.000

Demand and Capacity

Demand Volume (V_i), veh/h	744	318
Peak Hour Factor (PHF)	0.92	0.92
Total Trucks, %	2.00	2.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (f_{HV})	0.980	0.980
Flow Rate (v_i), pc/h	825	353
Capacity (c), pc/h	4600	2000
Volume-to-Capacity Ratio (v/c)	0.18	0.18

Speed and Density

Upstream Equilibrium Distance (L_{EQ}), ft	-	Density in Ramp Influence Area (D_R), pc/mi/ln	5.5
Distance to Upstream Ramp (L_{UP}), ft	-	Speed Index (D_S)	0.460
Downstream Equilibrium Distance (L_{EQ}), ft	-	Flow Outer Lanes (v_{OA}), pc/h/ln	-
Distance to Downstream Ramp (L_{DOWN}), ft	-	Off-Ramp Influence Area Speed (S_R), mi/h	51.7
Prop. Freeway Vehicles in Lane 1 and 2 (P_{FD})	1.000	Outer Lanes Freeway Speed (S_O), mi/h	-
Flow in Lanes 1 and 2 (v_{12}), pc/h	825	Ramp Junction Speed (S), mi/h	51.7
Flow Entering Ramp-Infl. Area (v_{R12}), pc/h	-	Average Density (D), pc/mi/ln	8.0
Level of Service (LOS)	A		

HCS7 Freeway Diverge Report

Project Information

Analyst	MS	Date	11/3/2021
Agency	Lochmueller	Analysis Year	2021
Jurisdiction		Time Period Analyzed	
Project Description	Lloyd Expressway Existing WB Diverge PM		

Geometric Data

	Freeway	Ramp
Number of Lanes (N)	2	1
Free-Flow Speed (FFS), mi/h	60.0	35.0
Segment Length (L) / Deceleration Length (L_D), ft	1500	650
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Side	Freeway	Right

Adjustment Factors

Driver Population	All Familiar	All Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Final Speed Adjustment Factor (SAF)	1.000	1.000
Final Capacity Adjustment Factor (CAF)	1.000	1.000
Demand Adjustment Factor (DAF)	1.000	1.000

Demand and Capacity

Demand Volume (V_i), veh/h	929	332
Peak Hour Factor (PHF)	0.92	0.92
Total Trucks, %	2.00	2.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (f_{HV})	0.980	0.980
Flow Rate (v_i), pc/h	1030	368
Capacity (c), pc/h	4600	2000
Volume-to-Capacity Ratio (v/c)	0.22	0.18

Speed and Density

Upstream Equilibrium Distance (L_{EQ}), ft	-	Density in Ramp Influence Area (D_R), pc/mi/ln	7.3
Distance to Upstream Ramp (L_{UP}), ft	-	Speed Index (D_S)	0.461
Downstream Equilibrium Distance (L_{EQ}), ft	-	Flow Outer Lanes (v_{OA}), pc/h/ln	-
Distance to Downstream Ramp (L_{DOWN}), ft	-	Off-Ramp Influence Area Speed (S_R), mi/h	51.7
Prop. Freeway Vehicles in Lane 1 and 2 (P_{FD})	1.000	Outer Lanes Freeway Speed (S_O), mi/h	-
Flow in Lanes 1 and 2 (v_{12}), pc/h	1030	Ramp Junction Speed (S), mi/h	51.7
Flow Entering Ramp-Infl. Area (v_{R12}), pc/h	-	Average Density (D), pc/mi/ln	10.0
Level of Service (LOS)	A		

HCS7 Freeway Merge Report

Project Information

Analyst	MS	Date	11/3/2021
Agency	Lochmueller	Analysis Year	2021
Jurisdiction		Time Period Analyzed	AM
Project Description	Existing Lloyd Expressway WB 62 Merge		

Geometric Data

	Freeway	Ramp
Number of Lanes (N)	2	1
Free-Flow Speed (FFS), mi/h	60.0	35.0
Segment Length (L) / Acceleration Length (L_A), ft	1500	830
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Side	Freeway	Right

Adjustment Factors

Driver Population	All Familiar	All Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Final Speed Adjustment Factor (SAF)	1.000	1.000
Final Capacity Adjustment Factor (CAF)	1.000	1.000
Demand Adjustment Factor (DAF)	1.000	1.000

Demand and Capacity

Demand Volume (V_i), veh/h	744	126
Peak Hour Factor (PHF)	0.92	0.92
Total Trucks, %	2.00	2.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (f_{HV})	0.980	0.980
Flow Rate (v_i), pc/h	825	140
Capacity (c), pc/h	4600	2000
Volume-to-Capacity Ratio (v/c)	0.21	0.07

Speed and Density

Upstream Equilibrium Distance (L_{EQ}), ft	-	Density in Ramp Influence Area (D_R), pc/mi/ln	7.8
Distance to Upstream Ramp (L_{UP}), ft	-	Speed Index (M_S)	0.273
Downstream Equilibrium Distance (L_{EQ}), ft	-	Flow Outer Lanes (v_{OA}), pc/h/ln	-
Distance to Downstream Ramp (L_{DOWN}), ft	-	On-Ramp Influence Area Speed (S_R), mi/h	55.1
Prop. Freeway Vehicles in Lane 1 and 2 (P_{FM})	1.000	Outer Lanes Freeway Speed (S_O), mi/h	-
Flow in Lanes 1 and 2 (v_{12}), pc/h	825	Ramp Junction Speed (S), mi/h	55.1
Flow Entering Ramp-Infl. Area (v_{R12}), pc/h	965	Average Density (D), pc/mi/ln	8.8
Level of Service (LOS)	A		

HCS7 Freeway Merge Report

Project Information

Analyst	MS	Date	11/3/2021
Agency	Lochmueller	Analysis Year	2021
Jurisdiction		Time Period Analyzed	PM
Project Description	Lloyd Expressway Existing WB Merge PM		

Geometric Data

	Freeway	Ramp
Number of Lanes (N)	2	1
Free-Flow Speed (FFS), mi/h	60.0	35.0
Segment Length (L) / Acceleration Length (L_A), ft	1500	830
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Side	Freeway	Right

Adjustment Factors

Driver Population	All Familiar	All Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Final Speed Adjustment Factor (SAF)	1.000	1.000
Final Capacity Adjustment Factor (CAF)	1.000	1.000
Demand Adjustment Factor (DAF)	1.000	1.000

Demand and Capacity

Demand Volume (V_i), veh/h	929	110
Peak Hour Factor (PHF)	0.92	0.92
Total Trucks, %	2.00	2.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (f_{HV})	0.980	0.980
Flow Rate (v_i), pc/h	1030	122
Capacity (c), pc/h	4600	2000
Volume-to-Capacity Ratio (v/c)	0.25	0.06

Speed and Density

Upstream Equilibrium Distance (L_{EQ}), ft	-	Density in Ramp Influence Area (D_R), pc/mi/ln	9.3
Distance to Upstream Ramp (L_{UP}), ft	-	Speed Index (M_S)	0.275
Downstream Equilibrium Distance (L_{EQ}), ft	-	Flow Outer Lanes (v_{OA}), pc/h/ln	-
Distance to Downstream Ramp (L_{DOWN}), ft	-	On-Ramp Influence Area Speed (S_R), mi/h	55.0
Prop. Freeway Vehicles in Lane 1 and 2 (P_{FM})	1.000	Outer Lanes Freeway Speed (S_O), mi/h	-
Flow in Lanes 1 and 2 (v_{12}), pc/h	1030	Ramp Junction Speed (S), mi/h	55.0
Flow Entering Ramp-Infl. Area (v_{R12}), pc/h	1152	Average Density (D), pc/mi/ln	10.5
Level of Service (LOS)	A		

HCS7 Freeway Diverge Report

Project Information

Analyst	MS	Date	11/3/2021
Agency	Lochmueller	Analysis Year	2021
Jurisdiction		Time Period Analyzed	AM
Project Description	No-Build Lloyd Expressway EB Diverge AM		

Geometric Data

	Freeway	Ramp
Number of Lanes (N)	2	1
Free-Flow Speed (FFS), mi/h	60.0	35.0
Segment Length (L) / Deceleration Length (L_D), ft	1500	700
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Side	Freeway	Right

Adjustment Factors

Driver Population	All Familiar	All Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Final Speed Adjustment Factor (SAF)	1.000	1.000
Final Capacity Adjustment Factor (CAF)	1.000	1.000
Demand Adjustment Factor (DAF)	1.000	1.000

Demand and Capacity

Demand Volume (V_i), veh/h	1075	154
Peak Hour Factor (PHF)	0.92	0.92
Total Trucks, %	2.00	2.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (f_{HV})	0.980	0.980
Flow Rate (v_i), pc/h	1192	171
Capacity (c), pc/h	4600	2000
Volume-to-Capacity Ratio (v/c)	0.26	0.09

Speed and Density

Upstream Equilibrium Distance (L_{EQ}), ft	-	Density in Ramp Influence Area (D_R), pc/mi/ln	8.2
Distance to Upstream Ramp (L_{UP}), ft	-	Speed Index (D_S)	0.443
Downstream Equilibrium Distance (L_{EQ}), ft	-	Flow Outer Lanes (v_{OA}), pc/h/ln	-
Distance to Downstream Ramp (L_{DOWN}), ft	-	Off-Ramp Influence Area Speed (S_R), mi/h	52.0
Prop. Freeway Vehicles in Lane 1 and 2 (P_{FD})	1.000	Outer Lanes Freeway Speed (S_O), mi/h	-
Flow in Lanes 1 and 2 (v_{12}), pc/h	1192	Ramp Junction Speed (S), mi/h	52.0
Flow Entering Ramp-Infl. Area (v_{R12}), pc/h	-	Average Density (D), pc/mi/ln	11.5
Level of Service (LOS)	A		

HCS7 Freeway Diverge Report

Project Information

Analyst	MS	Date	11/3/2021
Agency	Lochmueller	Analysis Year	2021
Jurisdiction		Time Period Analyzed	AM
Project Description	Lloyd Expressway EB Diverge AM		

Geometric Data

	Freeway	Ramp
Number of Lanes (N)	2	1
Free-Flow Speed (FFS), mi/h	60.0	35.0
Segment Length (L) / Deceleration Length (L_D), ft	1500	700
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Side	Freeway	Right

Adjustment Factors

Driver Population	All Familiar	All Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Final Speed Adjustment Factor (SAF)	1.000	1.000
Final Capacity Adjustment Factor (CAF)	1.000	1.000
Demand Adjustment Factor (DAF)	1.000	1.000

Demand and Capacity

Demand Volume (V_i), veh/h	1075	154
Peak Hour Factor (PHF)	0.92	0.92
Total Trucks, %	2.00	2.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (f_{HV})	0.980	0.980
Flow Rate (v_i), pc/h	1192	171
Capacity (c), pc/h	4600	2000
Volume-to-Capacity Ratio (v/c)	0.26	0.09

Speed and Density

Upstream Equilibrium Distance (L_{EQ}), ft	-	Density in Ramp Influence Area (D_R), pc/mi/ln	8.2
Distance to Upstream Ramp (L_{UP}), ft	-	Speed Index (D_S)	0.443
Downstream Equilibrium Distance (L_{EQ}), ft	-	Flow Outer Lanes (v_{OA}), pc/h/ln	-
Distance to Downstream Ramp (L_{DOWN}), ft	-	Off-Ramp Influence Area Speed (S_R), mi/h	52.0
Prop. Freeway Vehicles in Lane 1 and 2 (P_{FD})	1.000	Outer Lanes Freeway Speed (S_O), mi/h	-
Flow in Lanes 1 and 2 (v_{12}), pc/h	1192	Ramp Junction Speed (S), mi/h	52.0
Flow Entering Ramp-Infl. Area (v_{R12}), pc/h	-	Average Density (D), pc/mi/ln	11.5
Level of Service (LOS)	A		

HCS7 Freeway Merge Report

Project Information

Analyst	MS	Date	11/3/2021
Agency	Lochmueller	Analysis Year	2040
Jurisdiction		Time Period Analyzed	AM
Project Description	No-Build Lloyd Expressway EB Merge AM		

Geometric Data

	Freeway	Ramp
Number of Lanes (N)	2	1
Free-Flow Speed (FFS), mi/h	60.0	35.0
Segment Length (L) / Acceleration Length (L_A), ft	1500	885
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Side	Freeway	Right

Adjustment Factors

Driver Population	All Familiar	All Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Final Speed Adjustment Factor (SAF)	1.000	1.000
Final Capacity Adjustment Factor (CAF)	1.000	1.000
Demand Adjustment Factor (DAF)	1.000	1.000

Demand and Capacity

Demand Volume (V_i), veh/h	904	231
Peak Hour Factor (PHF)	0.92	0.92
Total Trucks, %	2.00	2.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (f_{HV})	0.980	0.980
Flow Rate (v_i), pc/h	1003	256
Capacity (c), pc/h	4600	2000
Volume-to-Capacity Ratio (v/c)	0.27	0.13

Speed and Density

Upstream Equilibrium Distance (L_{EQ}), ft	-	Density in Ramp Influence Area (D_R), pc/mi/ln	9.7
Distance to Upstream Ramp (L_{UP}), ft	-	Speed Index (M_S)	0.273
Downstream Equilibrium Distance (L_{EQ}), ft	-	Flow Outer Lanes (v_{OA}), pc/h/ln	-
Distance to Downstream Ramp (L_{DOWN}), ft	-	On-Ramp Influence Area Speed (S_R), mi/h	55.1
Prop. Freeway Vehicles in Lane 1 and 2 (P_{FM})	1.000	Outer Lanes Freeway Speed (S_O), mi/h	-
Flow in Lanes 1 and 2 (v_{12}), pc/h	1003	Ramp Junction Speed (S), mi/h	55.1
Flow Entering Ramp-Infl. Area (v_{R12}), pc/h	1259	Average Density (D), pc/mi/ln	11.4
Level of Service (LOS)	A		

HCS7 Freeway Merge Report

Project Information

Analyst	MS	Date	11/3/2021
Agency	Lochmueller	Analysis Year	2021
Jurisdiction		Time Period Analyzed	PM
Project Description	No-Build Lloyd Expressway EB Merge PM		

Geometric Data

	Freeway	Ramp
Number of Lanes (N)	2	1
Free-Flow Speed (FFS), mi/h	60.0	35.0
Segment Length (L) / Acceleration Length (L_A), ft	1500	885
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Side	Freeway	Right

Adjustment Factors

Driver Population	All Familiar	All Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Final Speed Adjustment Factor (SAF)	1.000	1.000
Final Capacity Adjustment Factor (CAF)	1.000	1.000
Demand Adjustment Factor (DAF)	1.000	1.000

Demand and Capacity

Demand Volume (V_i), veh/h	1075	471
Peak Hour Factor (PHF)	0.92	0.92
Total Trucks, %	2.00	2.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (f_{HV})	0.980	0.980
Flow Rate (v_i), pc/h	1192	522
Capacity (c), pc/h	4600	2000
Volume-to-Capacity Ratio (v/c)	0.37	0.26

Speed and Density

Upstream Equilibrium Distance (L_{EQ}), ft	-	Density in Ramp Influence Area (D_R), pc/mi/ln	13.1
Distance to Upstream Ramp (L_{UP}), ft	-	Speed Index (M_S)	0.281
Downstream Equilibrium Distance (L_{EQ}), ft	-	Flow Outer Lanes (v_{OA}), pc/h/ln	-
Distance to Downstream Ramp (L_{DOWN}), ft	-	On-Ramp Influence Area Speed (S_R), mi/h	54.9
Prop. Freeway Vehicles in Lane 1 and 2 (P_{FM})	1.000	Outer Lanes Freeway Speed (S_O), mi/h	-
Flow in Lanes 1 and 2 (v_{12}), pc/h	1192	Ramp Junction Speed (S), mi/h	54.9
Flow Entering Ramp-Infl. Area (v_{R12}), pc/h	1714	Average Density (D), pc/mi/ln	15.6
Level of Service (LOS)	B		

HCS7 Freeway Diverge Report

Project Information

Analyst	MS	Date	11/3/2021
Agency	Lochmueller	Analysis Year	2040
Jurisdiction		Time Period Analyzed	AM
Project Description	No-Build Lloyd Expressway WB 62 Diverge AM		

Geometric Data

	Freeway	Ramp
Number of Lanes (N)	2	1
Free-Flow Speed (FFS), mi/h	60.0	35.0
Segment Length (L) / Deceleration Length (L_D), ft	1500	700
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Side	Freeway	Right

Adjustment Factors

Driver Population	All Familiar	All Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Final Speed Adjustment Factor (SAF)	1.000	1.000
Final Capacity Adjustment Factor (CAF)	1.000	1.000
Demand Adjustment Factor (DAF)	1.000	1.000

Demand and Capacity

Demand Volume (V_i), veh/h	818	350
Peak Hour Factor (PHF)	0.92	0.92
Total Trucks, %	2.00	2.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (f_{HV})	0.980	0.980
Flow Rate (v_i), pc/h	907	388
Capacity (c), pc/h	4600	2000
Volume-to-Capacity Ratio (v/c)	0.20	0.19

Speed and Density

Upstream Equilibrium Distance (L_{EQ}), ft	-	Density in Ramp Influence Area (D_R), pc/mi/ln	5.8
Distance to Upstream Ramp (L_{UP}), ft	-	Speed Index (D_S)	0.463
Downstream Equilibrium Distance (L_{EQ}), ft	-	Flow Outer Lanes (v_{OA}), pc/h/ln	-
Distance to Downstream Ramp (L_{DOWN}), ft	-	Off-Ramp Influence Area Speed (S_R), mi/h	51.7
Prop. Freeway Vehicles in Lane 1 and 2 (P_{FD})	1.000	Outer Lanes Freeway Speed (S_O), mi/h	-
Flow in Lanes 1 and 2 (v_{12}), pc/h	907	Ramp Junction Speed (S), mi/h	51.7
Flow Entering Ramp-Infl. Area (v_{R12}), pc/h	-	Average Density (D), pc/mi/ln	8.8
Level of Service (LOS)	A		

HCS7 Freeway Diverge Report

Project Information

Analyst	MS	Date	11/3/2021
Agency	Lochmueller	Analysis Year	2021
Jurisdiction		Time Period Analyzed	
Project Description	No-Build Lloyd Expressway WB Diverge PM		

Geometric Data

	Freeway	Ramp
Number of Lanes (N)	2	1
Free-Flow Speed (FFS), mi/h	60.0	35.0
Segment Length (L) / Deceleration Length (L_D), ft	1500	700
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Side	Freeway	Right

Adjustment Factors

Driver Population	All Familiar	All Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Final Speed Adjustment Factor (SAF)	1.000	1.000
Final Capacity Adjustment Factor (CAF)	1.000	1.000
Demand Adjustment Factor (DAF)	1.000	1.000

Demand and Capacity

Demand Volume (V_i), veh/h	1021	365
Peak Hour Factor (PHF)	0.92	0.92
Total Trucks, %	2.00	2.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (f_{HV})	0.980	0.980
Flow Rate (v_i), pc/h	1132	405
Capacity (c), pc/h	4600	2000
Volume-to-Capacity Ratio (v/c)	0.25	0.20

Speed and Density

Upstream Equilibrium Distance (L_{EQ}), ft	-	Density in Ramp Influence Area (D_R), pc/mi/ln	7.7
Distance to Upstream Ramp (L_{UP}), ft	-	Speed Index (D_S)	0.464
Downstream Equilibrium Distance (L_{EQ}), ft	-	Flow Outer Lanes (v_{OA}), pc/h/ln	-
Distance to Downstream Ramp (L_{DOWN}), ft	-	Off-Ramp Influence Area Speed (S_R), mi/h	51.6
Prop. Freeway Vehicles in Lane 1 and 2 (P_{FD})	1.000	Outer Lanes Freeway Speed (S_O), mi/h	-
Flow in Lanes 1 and 2 (v_{12}), pc/h	1132	Ramp Junction Speed (S), mi/h	51.6
Flow Entering Ramp-Infl. Area (v_{R12}), pc/h	-	Average Density (D), pc/mi/ln	11.0
Level of Service (LOS)	A		

HCS7 Freeway Merge Report

Project Information

Analyst	MS	Date	11/3/2021
Agency	Lochmueller	Analysis Year	2040
Jurisdiction		Time Period Analyzed	AM
Project Description	No-Build Lloyd Expressway WB 62 Merge		

Geometric Data

	Freeway	Ramp
Number of Lanes (N)	2	1
Free-Flow Speed (FFS), mi/h	60.0	35.0
Segment Length (L) / Acceleration Length (L_A), ft	1500	900
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Side	Freeway	Right

Adjustment Factors

Driver Population	All Familiar	All Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Final Speed Adjustment Factor (SAF)	1.000	1.000
Final Capacity Adjustment Factor (CAF)	1.000	1.000
Demand Adjustment Factor (DAF)	1.000	1.000

Demand and Capacity

Demand Volume (V_i), veh/h	818	139
Peak Hour Factor (PHF)	0.92	0.92
Total Trucks, %	2.00	2.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (f_{HV})	0.980	0.980
Flow Rate (v_i), pc/h	907	154
Capacity (c), pc/h	4600	2000
Volume-to-Capacity Ratio (v/c)	0.23	0.08

Speed and Density

Upstream Equilibrium Distance (L_{EQ}), ft	-	Density in Ramp Influence Area (D_R), pc/mi/ln	8.1
Distance to Upstream Ramp (L_{UP}), ft	-	Speed Index (M_S)	0.269
Downstream Equilibrium Distance (L_{EQ}), ft	-	Flow Outer Lanes (v_{OA}), pc/h/ln	-
Distance to Downstream Ramp (L_{DOWN}), ft	-	On-Ramp Influence Area Speed (S_R), mi/h	55.2
Prop. Freeway Vehicles in Lane 1 and 2 (P_{FM})	1.000	Outer Lanes Freeway Speed (S_O), mi/h	-
Flow in Lanes 1 and 2 (v_{12}), pc/h	907	Ramp Junction Speed (S), mi/h	55.2
Flow Entering Ramp-Infl. Area (v_{R12}), pc/h	1061	Average Density (D), pc/mi/ln	9.6
Level of Service (LOS)	A		

HCS7 Freeway Merge Report

Project Information

Analyst	MS	Date	11/3/2021
Agency	Lochmueller	Analysis Year	2021
Jurisdiction		Time Period Analyzed	PM
Project Description	No-Build Lloyd Expressway WB Merge PM		

Geometric Data

	Freeway	Ramp
Number of Lanes (N)	2	1
Free-Flow Speed (FFS), mi/h	60.0	35.0
Segment Length (L) / Acceleration Length (L_A), ft	1500	900
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Side	Freeway	Right

Adjustment Factors

Driver Population	All Familiar	All Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Final Speed Adjustment Factor (SAF)	1.000	1.000
Final Capacity Adjustment Factor (CAF)	1.000	1.000
Demand Adjustment Factor (DAF)	1.000	1.000

Demand and Capacity

Demand Volume (V_i), veh/h	1021	121
Peak Hour Factor (PHF)	0.92	0.92
Total Trucks, %	2.00	2.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (f_{HV})	0.980	0.980
Flow Rate (v_i), pc/h	1132	134
Capacity (c), pc/h	4600	2000
Volume-to-Capacity Ratio (v/c)	0.28	0.07

Speed and Density

Upstream Equilibrium Distance (L_{EQ}), ft	-	Density in Ramp Influence Area (D_R), pc/mi/ln	9.7
Distance to Upstream Ramp (L_{UP}), ft	-	Speed Index (M_S)	0.272
Downstream Equilibrium Distance (L_{EQ}), ft	-	Flow Outer Lanes (v_{OA}), pc/h/ln	-
Distance to Downstream Ramp (L_{DOWN}), ft	-	On-Ramp Influence Area Speed (S_R), mi/h	55.1
Prop. Freeway Vehicles in Lane 1 and 2 (P_{FM})	1.000	Outer Lanes Freeway Speed (S_O), mi/h	-
Flow in Lanes 1 and 2 (v_{12}), pc/h	1132	Ramp Junction Speed (S), mi/h	55.1
Flow Entering Ramp-Infl. Area (v_{R12}), pc/h	1266	Average Density (D), pc/mi/ln	11.5
Level of Service (LOS)	A		

Appendix D: RoadHAT Reports

RoadHAT 4D

Index of Crash Frequency and Cost - Form F1

Settings: Indiana state settings	Version: Version 4.1	
Location	SR 62 and McDowell Rd	
GIS		
Post		
Analyst	NDS	
Date	10/1/2021	

INPUT	
Road Facility Type	Unsignalized Urban State Intersection One AADT
Busiest Road AADT (veh/day)	20419
T Intersection Indicator (1 if present, 0 otherwise)	0
Crossing Road Principal Arterial Indicator (1 if present, 0 otherwise)	0
Crossing Road Minor Arterial Indicator (1 if present, 0 otherwise)	0
Crossing Road Major Collector Indicator (1 if present, 0 otherwise)	0
Crossing Road Minor Collector Indicator (1 if present, 0 otherwise)	0
First Year with Crash Data (yyyy)	2018
Last Year with Crash Data (yyyy)	2020
Number of Crashes (crash/period)	
Fatal and Incapacitating Injury Crashes	5
Non-Incapacitating and Possible Injury Crashes	3
Property Damage Only Crashes	11
Route or Road Type	Unsignalized Urban State Intersection One AADT
Average Crash Costs ($)	
Fatal and Incapacitating Injury Crashes	1928400
Non-Incapacitating and Possible Injury Crashes	358900
Property Damage Only Crashes	38000
Crash Cost Year (yyyy)	2017
OUTPUT	
Expected Crash Frequency (crash/year)	
Fatal and Incapacitating Injury Crashes	0.190
Non-Incapacitating and Possible Injury Crashes	0.18
Property Damage Only Crashes	1.76
All Crashes	2.13
Index of Crash Frequency	**1.62**

RoadHAT 4D

Index of Crash Frequency and Cost - Form F1

Settings: Indiana state settings	Version: Version 4.1	
Location	SR 62 and McDowell Rd	
GIS		
Post		
Analyst	NDS	
Date	10/1/2021	

Index of Crash Cost	**1.99**

Comments: Reviewed by SAB 7/13/2022

RoadHAT 4D

Index of Crash Frequency and Cost - Form F1

Settings: Indiana state settings	Version: Version 4.1	
Location	SR 62 Interchange at University Pkwy	
North of University of Southern Indiana		
GIS		
Post		
Analyst	NDS	
Date	10/1/2021	

INPUT	
Road Facility Type	Urban interchange freeway Segment
Beginning	0
End	1.07
AADT (veh/day)	24385
Diamond Interchange (1 if present, 0 otherwise)	1
Jug Interchange (1 if present, 0 otherwise)	0
Directional Interchange (1 if present, 0 otherwise)	0
First Year with Crash Data (yyyy)	2018
Last Year with Crash Data (yyyy)	2020
Number of Crashes (crash/period)	
Fatal and Incapacitating Injury Crashes	1
Non-Incapacitating and Possible Injury Crashes	2
Property Damage Only Crashes	7
Route or Road Type	Urban interchange freeway Segment
Average Crash Costs ($)	
Fatal and Incapacitating Injury Crashes	1840000
Non-Incapacitating and Possible Injury Crashes	321700
Property Damage Only Crashes	38000
Crash Cost Year (yyyy)	2017
OUTPUT	
Segment Length (mi)	1.07
Expected Crash Frequency (crash/year)	
Fatal and Incapacitating Injury Crashes	1.096
Non-Incapacitating and Possible Injury Crashes	1.03
Property Damage Only Crashes	19.07
All Crashes	21.20

RoadHAT 4D

Index of Crash Frequency and Cost - Form F1

Settings: Indiana state settings	Version: Version 4.1	
Location	SR 62 Interchange at University Pkwy	
North of University of Southern Indiana		
GIS		
Post		
Analyst	NDS	
Date	10/1/2021	

Index of Crash Frequency	**-1.18**
Index of Crash Cost	**-1.33**

Comments: Reviewed by SAB 7/13/2022

RoadHAT 4D

Index of Crash Frequency and Cost - Form F1

Settings: Indiana state settings	Version: Version 4.1	
Location	University Pkwy	
Interchange non-freeway segment		
GIS		
Post		
Analyst	NDS	
Date	10/1/2021	

INPUT	
Road Facility Type	Urban interchange non-freeway Segment
Beginning	0
End	0.17
AADT (veh/day)	22065
Clover Interchange (1 if present, 0 otherwise)	0
Diamond Interchange (1 if present, 0 otherwise)	1
Directional Interchange (1 if present, 0 otherwise)	0
Trumpet Interchange (1 if present, 0 otherwise)	0
First Year with Crash Data (yyyy)	2018
Last Year with Crash Data (yyyy)	2020
Number of Crashes (crash/period)	
Fatal and Incapacitating Injury Crashes	1
Non-Incapacitating and Possible Injury Crashes	0
Property Damage Only Crashes	1
Route or Road Type	Urban interchange non-freeway Segment
Average Crash Costs ($)	
Fatal and Incapacitating Injury Crashes	2095100
Non-Incapacitating and Possible Injury Crashes	339700
Property Damage Only Crashes	39000
Crash Cost Year (yyyy)	2017
OUTPUT	
Segment Length (mi)	0.17
Expected Crash Frequency (crash/year)	
Fatal and Incapacitating Injury Crashes	0.410
Non-Incapacitating and Possible Injury Crashes	0.58
Property Damage Only Crashes	4.94

RoadHAT 4D

Index of Crash Frequency and Cost - Form F1

Settings: Indiana state settings	Version: Version 4.1	
Location	University Pkwy	
Interchange non-freeway segment		
GIS		
Post		
Analyst	NDS	
Date	10/1/2021	

All Crashes	5.92
Index of Crash Frequency	**-0.92**
Index of Crash Cost	**-0.35**

Comments: Reviewed by SAB 7/13/2022

RoadHAT 4D

Index of Crash Frequency and Cost - Form F1

Settings: Indiana state settings	Version: Version 4.1	
Location	SR 62 between Schutte Rd and University Pkwy	
GIS		
Post		
Analyst		
Date	10/1/2021	

INPUT	
Road Facility Type	Urban multilane Segment
Beginning	20.855
End	21.592
AADT (veh/day)	24385
Intersection Density (int/mi)	0
First Year with Crash Data (yyyy)	2018
Last Year with Crash Data (yyyy)	2020
Number of Crashes (crash/period)	
Fatal and Incapacitating Injury Crashes	0
Non-Incapacitating and Possible Injury Crashes	0
Property Damage Only Crashes	1
Route or Road Type	Urban multilane Segment
Average Crash Costs ($)	
Fatal and Incapacitating Injury Crashes	1950400
Non-Incapacitating and Possible Injury Crashes	364100
Property Damage Only Crashes	37300
Crash Cost Year (yyyy)	2017
OUTPUT	
Segment Length (mi)	0.737
Expected Crash Frequency (crash/year)	
Fatal and Incapacitating Injury Crashes	0.744
Non-Incapacitating and Possible Injury Crashes	0.73
Property Damage Only Crashes	7.89
All Crashes	9.37
Index of Crash Frequency	**-1.13**
Index of Crash Cost	**-1.20**

RoadHAT 4D

Index of Crash Frequency and Cost - Form F1

Settings: Indiana state settings	Version: Version 4.1	
Location	SR 62 between Schutte Rd and University Pkwy	
GIS		
Post		
Analyst		
Date	10/1/2021	

Comments: Reviewed by SAB 7/13/2022

RoadHAT 4D

Index of Crash Frequency and Cost - Form F1

Settings: Indiana state settings	Version: Version 4.1	
Location	SR 62 and Schutte Rd	
GIS		
Post		
Analyst	NDS	
Date	10/1/2021	

INPUT	
Road Facility Type	Signalized Urban State Intersection
Busiest Road AADT (veh/day)	24385
Crossing Road AADT (veh/day)	1289
T Intersection Indicator (1 if present, 0 otherwise)	0
First Year with Crash Data (yyyy)	2018
Last Year with Crash Data (yyyy)	2020
Number of Crashes (crash/period)	
Fatal and Incapacitating Injury Crashes	3
Non-Incapacitating and Possible Injury Crashes	6
Property Damage Only Crashes	15
Route or Road Type	Signalized Urban State Intersection
Average Crash Costs ($)	
Fatal and Incapacitating Injury Crashes	1809300
Non-Incapacitating and Possible Injury Crashes	366800
Property Damage Only Crashes	40700
Crash Cost Year (yyyy)	2017
OUTPUT	
Expected Crash Frequency (crash/year)	
Fatal and Incapacitating Injury Crashes	0.511
Non-Incapacitating and Possible Injury Crashes	0.63
Property Damage Only Crashes	4.99
All Crashes	6.13
Index of Crash Frequency	**0.40**
Index of Crash Cost	**0.91**

RoadHAT 4D

Index of Crash Frequency and Cost - Form F1

Settings: Indiana state settings	Version: Version 4.1	
Location	SR 62 and Schutte Rd	
GIS		
Post		
Analyst	NDS	
Date	10/1/2021	

Comments: Reviewed by SAB 7/13/2022

RoadHAT 4D

Index of Crash Frequency and Cost - Form F1

Settings: Indiana state settings	Version: Version 4.1	
Location	SR 62 and Felstead Rd	
GIS		
Post		
Analyst	NDS	
Date	10/1/2021	

INPUT	
Road Facility Type	Unsignalized Urban State Intersection One AADT
Busiest Road AADT (veh/day)	24385
T Intersection Indicator (1 if present, 0 otherwise)	1
Crossing Road Principal Arterial Indicator (1 if present, 0 otherwise)	0
Crossing Road Minor Arterial Indicator (1 if present, 0 otherwise)	0
Crossing Road Major Collector Indicator (1 if present, 0 otherwise)	0
Crossing Road Minor Collector Indicator (1 if present, 0 otherwise)	0
First Year with Crash Data (yyyy)	2018
Last Year with Crash Data (yyyy)	2020
Number of Crashes (crash/period)	
Fatal and Incapacitating Injury Crashes	0
Non-Incapacitating and Possible Injury Crashes	2
Property Damage Only Crashes	6
Route or Road Type	Unsignalized Urban State Intersection One AADT
Average Crash Costs ($)	
Fatal and Incapacitating Injury Crashes	1928400
Non-Incapacitating and Possible Injury Crashes	358900
Property Damage Only Crashes	38000
Crash Cost Year (yyyy)	2017
OUTPUT	
Expected Crash Frequency (crash/year)	
Fatal and Incapacitating Injury Crashes	0.142
Non-Incapacitating and Possible Injury Crashes	0.15
Property Damage Only Crashes	1.47
All Crashes	1.77
Index of Crash Frequency	**0.44**

RoadHAT 4D

Index of Crash Frequency and Cost - Form F1

Settings: Indiana state settings	Version: Version 4.1	
Location	SR 62 and Felstead Rd	
GIS		
Post		
Analyst	NDS	
Date	10/1/2021	

Index of Crash Cost	**-0.12**

Comments: Reviewed by SAB 7/13/2022

RoadHAT 4D

Index of Crash Frequency and Cost - Form F1

Settings: Indiana state settings	Version: Version 4.1	
Location	SR 62 between Felstead Rd and Mt. Vernon Rd	
GIS		
Post		
Analyst	NDS	
Date	10/1/2021	

INPUT	
Road Facility Type	Urban multilane Segment
Beginning	21.592
End	21.905
AADT (veh/day)	24385
Intersection Density (int/mi)	0
First Year with Crash Data (yyyy)	2018
Last Year with Crash Data (yyyy)	2020
Number of Crashes (crash/period)	
Fatal and Incapacitating Injury Crashes	0
Non-Incapacitating and Possible Injury Crashes	1
Property Damage Only Crashes	1
Route or Road Type	Urban multilane Segment
Average Crash Costs ($)	
Fatal and Incapacitating Injury Crashes	1950400
Non-Incapacitating and Possible Injury Crashes	364100
Property Damage Only Crashes	37300
Crash Cost Year (yyyy)	2017
OUTPUT	
Segment Length (mi)	0.313
Expected Crash Frequency (crash/year)	
Fatal and Incapacitating Injury Crashes	0.288
Non-Incapacitating and Possible Injury Crashes	0.32
Property Damage Only Crashes	3.88
All Crashes	4.49
Index of Crash Frequency	**-0.96**
Index of Crash Cost	**-0.79**

RoadHAT 4D

Index of Crash Frequency and Cost - Form F1

Settings: Indiana state settings	Version: Version 4.1	
Location	SR 62 between Felstead Rd and Mt. Vernon Rd	
GIS		
Post		
Analyst	NDS	
Date	10/1/2021	

Comments: Reviewed by SAB 7/13/2022

RoadHAT 4D

Index of Crash Frequency and Cost - Form F1

Settings: Indiana state settings	Version: Version 4.1	
Location	SR 62 and Mt. Vernon Rd	
GIS		
Post		
Analyst	NDS	
Date	10/1/2021	

INPUT	
Road Facility Type	Unsignalized Urban State Intersection One AADT
Busiest Road AADT (veh/day)	24385
T Intersection Indicator (1 if present, 0 otherwise)	0
Crossing Road Principal Arterial Indicator (1 if present, 0 otherwise)	0
Crossing Road Minor Arterial Indicator (1 if present, 0 otherwise)	0
Crossing Road Major Collector Indicator (1 if present, 0 otherwise)	1
Crossing Road Minor Collector Indicator (1 if present, 0 otherwise)	0
First Year with Crash Data (yyyy)	2018
Last Year with Crash Data (yyyy)	2020
Number of Crashes (crash/period)	
Fatal and Incapacitating Injury Crashes	2
Non-Incapacitating and Possible Injury Crashes	1
Property Damage Only Crashes	8
Route or Road Type	Unsignalized Urban State Intersection One AADT
Average Crash Costs ($)	
Fatal and Incapacitating Injury Crashes	1928400
Non-Incapacitating and Possible Injury Crashes	358900
Property Damage Only Crashes	38000
Crash Cost Year (yyyy)	2017
OUTPUT	
Expected Crash Frequency (crash/year)	
Fatal and Incapacitating Injury Crashes	0.681
Non-Incapacitating and Possible Injury Crashes	0.66
Property Damage Only Crashes	5.40
All Crashes	6.74
Index of Crash Frequency	**-0.47**

RoadHAT 4D

Index of Crash Frequency and Cost - Form F1

Settings: Indiana state settings	Version: Version 4.1	
Location	SR 62 and Mt. Vernon Rd	
GIS		
Post		
Analyst	NDS	
Date	10/1/2021	

Index of Crash Cost	**-0.12**

Comments: Reviewed by SAB 7/13/2022

RoadHAT 4D

Index of Crash Frequency and Cost - Form F1

Settings: Indiana state settings	Version: Version 4.1	
Location	SR 62 between Mt. Vernon Rd and Boehne camp rd	
GIS		
Post		
Analyst	NDS	
Date	10/1/2021	

INPUT	
Road Facility Type	Urban multilane Segment
Beginning	21.905
End	22.630
AADT (veh/day)	27521
Intersection Density (int/mi)	0
First Year with Crash Data (yyyy)	2018
Last Year with Crash Data (yyyy)	2020
Number of Crashes (crash/period)	
Fatal and Incapacitating Injury Crashes	2
Non-Incapacitating and Possible Injury Crashes	3
Property Damage Only Crashes	18
Route or Road Type	Urban multilane Segment
Average Crash Costs ($)	
Fatal and Incapacitating Injury Crashes	1950400
Non-Incapacitating and Possible Injury Crashes	364100
Property Damage Only Crashes	37300
Crash Cost Year (yyyy)	2017
OUTPUT	
Segment Length (mi)	0.725
Expected Crash Frequency (crash/year)	
Fatal and Incapacitating Injury Crashes	0.812
Non-Incapacitating and Possible Injury Crashes	0.83
Property Damage Only Crashes	8.77
All Crashes	10.41
Index of Crash Frequency	**-0.30**
Index of Crash Cost	**-0.16**

RoadHAT 4D

Index of Crash Frequency and Cost - Form F1

Page 2/2

Settings: Indiana state settings	Version: Version 4.1	
Location	SR 62 between Mt. Vernon Rd and Boehne camp rd	
GIS		
Post		
Analyst	NDS	
Date	10/1/2021	

Comments: Reviewed by SAB 7/14/2020

RoadHAT 4D

Index of Crash Frequency and Cost - Form F1

Settings: Indiana state settings	Version: Version 4.1	
Location	SR 62 and Boehne Camp Rd	
GIS		
Post		
Analyst	NDS	
Date	10/1/2021	

INPUT	
Road Facility Type	Signalized Urban State Intersection One AADT
Busiest Road AADT (veh/day)	27521
T Intersection Indicator (1 if present, 0 otherwise)	0
Crossing Road Principal or Minor Arterial Indicator (1 if present, 0 otherwise)	0
Crossing Road Major or Minor Collector Indicator (1 if present, 0 otherwise)	1
First Year with Crash Data (yyyy)	2018
Last Year with Crash Data (yyyy)	2020
Number of Crashes (crash/period)	
Fatal and Incapacitating Injury Crashes	8
Non-Incapacitating and Possible Injury Crashes	10
Property Damage Only Crashes	20
Route or Road Type	Signalized Urban State Intersection One AADT
Average Crash Costs ($)	
Fatal and Incapacitating Injury Crashes	1809300
Non-Incapacitating and Possible Injury Crashes	366800
Property Damage Only Crashes	40700
Crash Cost Year (yyyy)	2017
OUTPUT	
Expected Crash Frequency (crash/year)	
Fatal and Incapacitating Injury Crashes	0.902
Non-Incapacitating and Possible Injury Crashes	1.25
Property Damage Only Crashes	9.08
All Crashes	11.23
Index of Crash Frequency	**0.16**
Index of Crash Cost	**1.55**

RoadHAT 4D

Index of Crash Frequency and Cost - Form F1

Settings: Indiana state settings	Version: Version 4.1	
Location	SR 62 and Boehne Camp Rd	
GIS		
Post		
Analyst	NDS	
Date	10/1/2021	

Comments: Reviewed by SAB 7/13/2022

RoadHAT 4D

Index of Crash Frequency and Cost - Form F1

Settings: Indiana state settings	Version: Version 4.1	
Location	SR 62 between Boehne Camp Rd and Red Bank Rd	
GIS		
Post		
Analyst	NDS	
Date	10/1/2021	

INPUT	
Road Facility Type	Urban multilane Segment
Beginning	22.135
End	22.630
AADT (veh/day)	27521
Intersection Density (int/mi)	0
First Year with Crash Data (yyyy)	2015
Last Year with Crash Data (yyyy)	2020
Number of Crashes (crash/period)	
Fatal and Incapacitating Injury Crashes	0
Non-Incapacitating and Possible Injury Crashes	0
Property Damage Only Crashes	5
Route or Road Type	Urban multilane Segment
Average Crash Costs ($)	
Fatal and Incapacitating Injury Crashes	1950400
Non-Incapacitating and Possible Injury Crashes	364100
Property Damage Only Crashes	37300
Crash Cost Year (yyyy)	2017
OUTPUT	
Segment Length (mi)	0.495
Expected Crash Frequency (crash/year)	
Fatal and Incapacitating Injury Crashes	0.532
Non-Incapacitating and Possible Injury Crashes	0.58
Property Damage Only Crashes	6.39
All Crashes	7.50
Index of Crash Frequency	**-1.03**
Index of Crash Cost	**-1.26**

RoadHAT 4D

Index of Crash Frequency and Cost - Form F1

Settings: Indiana state settings	Version: Version 4.1	
Location	SR 62 between Boehne Camp Rd and Red Bank Rd	
GIS		
Post		
Analyst	NDS	
Date	10/1/2021	

Comments: Reviewed by SAB 7/13/2022

RoadHAT 4D

Index of Crash Frequency and Cost - Form F1

Settings: Indiana state settings	Version: Version 4.1	
Location	SR 62 and Red Bank Rd	
GIS		
Post		
Analyst	NDS	
Date	10/1/2021	

INPUT	
Road Facility Type	Signalized Urban State Intersection
Busiest Road AADT (veh/day)	32094
Crossing Road AADT (veh/day)	15388
T Intersection Indicator (1 if present, 0 otherwise)	0
First Year with Crash Data (yyyy)	2018
Last Year with Crash Data (yyyy)	2020
Number of Crashes (crash/period)	
Fatal and Incapacitating Injury Crashes	5
Non-Incapacitating and Possible Injury Crashes	14
Property Damage Only Crashes	32
Route or Road Type	Signalized Urban State Intersection
Average Crash Costs ($)	
Fatal and Incapacitating Injury Crashes	1809300
Non-Incapacitating and Possible Injury Crashes	366800
Property Damage Only Crashes	40700
Crash Cost Year (yyyy)	2017
OUTPUT	
Expected Crash Frequency (crash/year)	
Fatal and Incapacitating Injury Crashes	1.599
Non-Incapacitating and Possible Injury Crashes	2.55
Property Damage Only Crashes	18.95
All Crashes	23.10
Index of Crash Frequency	**-0.37**
Index of Crash Cost	**0.18**

RoadHAT 4D

Index of Crash Frequency and Cost - Form F1

Settings: Indiana state settings	Version: Version 4.1	
Location	SR 62 and Red Bank Rd	
GIS		
Post		
Analyst	NDS	
Date	10/1/2021	

Comments: Reviewed by SAB 7/14/2022

RoadHAT 4D

Index of Crash Frequency and Cost - Form F1

Settings: Indiana local settings	Version: Version 4.1	
Location	Red Bank Rd and Pearl Dr	
GIS		
Post		
Analyst	NDS	
Date	10/1/2021	

INPUT	
Road Facility Type	City Non- Arterial Intersection One AADT
Busiest Road AADT (veh/day)	15388
Crossing Road Major or Minor Collector Indicator (1 if present, 0 otherwise)	0
First Year with Crash Data (yyyy)	2018
Last Year with Crash Data (yyyy)	2020
Number of Crashes (crash/period)	
Fatal and Incapacitating Injury Crashes	4
Non-Incapacitating and Possible Injury Crashes	7
Property Damage Only Crashes	6
Route or Road Type	City Non- Arterial Intersection One AADT
Average Crash Costs ($)	
Fatal and Incapacitating Injury Crashes	1699800
Non-Incapacitating and Possible Injury Crashes	363300
Property Damage Only Crashes	37300
Crash Cost Year (yyyy)	2017
OUTPUT	
Expected Crash Frequency (crash/year)	
Fatal and Incapacitating Injury Crashes	0.053
Non-Incapacitating and Possible Injury Crashes	0.10
Property Damage Only Crashes	0.53
All Crashes	0.68
Index of Crash Frequency	**3.05**
Index of Crash Cost	**2.50**

RoadHAT 4D

Index of Crash Frequency and Cost - Form F1

Settings: Indiana local settings	Version: Version 4.1	
Location	Red Bank Rd and Pearl Dr	
GIS		
Post		
Analyst	NDS	
Date	10/1/2021	

Comments: Reviewed by SAB

RoadHAT 4D

Index of Crash Frequency and Cost - Form F1

Settings: Indiana local settings	Version: Version 4.1	
Location	Red Bank Rd and Weston Rd	
GIS		
Post		
Analyst	NDS	
Date	10/1/2021	

INPUT	
Road Facility Type	Unsignalized Urban State Intersection One AADT
Busiest Road AADT (veh/day)	12691
T Intersection Indicator (1 if present, 0 otherwise)	1
Crossing Road Principal Arterial Indicator (1 if present, 0 otherwise)	0
Crossing Road Minor Arterial Indicator (1 if present, 0 otherwise)	0
Crossing Road Major Collector Indicator (1 if present, 0 otherwise)	0
Crossing Road Minor Collector Indicator (1 if present, 0 otherwise)	0
First Year with Crash Data (yyyy)	2018
Last Year with Crash Data (yyyy)	2020
Number of Crashes (crash/period)	
Fatal and Incapacitating Injury Crashes	1
Non-Incapacitating and Possible Injury Crashes	1
Property Damage Only Crashes	3
Route or Road Type	Unsignalized Urban State Intersection One AADT
Average Crash Costs ($)	
Fatal and Incapacitating Injury Crashes	1928400
Non-Incapacitating and Possible Injury Crashes	358900
Property Damage Only Crashes	38000
Crash Cost Year (yyyy)	2017
OUTPUT	
Expected Crash Frequency (crash/year)	
Fatal and Incapacitating Injury Crashes	0.073
Non-Incapacitating and Possible Injury Crashes	0.07
Property Damage Only Crashes	0.79
All Crashes	0.93
Index of Crash Frequency	**0.59**

RoadHAT 4D

Index of Crash Frequency and Cost - Form F1

Settings: Indiana local settings	Version: Version 4.1	
Location	Red Bank Rd and Weston Rd	
GIS		
Post		
Analyst	NDS	
Date	10/1/2021	

Index of Crash Cost	**0.81**

Comments: Reviewed by SAB 7/14/2022

RoadHAT 4D

Index of Crash Frequency and Cost - Form F1

Settings: Indiana local settings	Version: Version 4.1	
Location	Red Bank Rd and University Dr	
GIS		
Post		
Analyst	NDS	
Date	10/1/2021	

INPUT	
Road Facility Type	City Non- Arterial Intersection One AADT
Busiest Road AADT (veh/day)	12691
Crossing Road Major or Minor Collector Indicator (1 if present, 0 otherwise)	0
First Year with Crash Data (yyyy)	2018
Last Year with Crash Data (yyyy)	2020
Number of Crashes (crash/period)	
Fatal and Incapacitating Injury Crashes	0
Non-Incapacitating and Possible Injury Crashes	0
Property Damage Only Crashes	1
Route or Road Type	City Non- Arterial Intersection One AADT
Average Crash Costs ($)	
Fatal and Incapacitating Injury Crashes	1699800
Non-Incapacitating and Possible Injury Crashes	363300
Property Damage Only Crashes	37300
Crash Cost Year (yyyy)	2017
OUTPUT	
Expected Crash Frequency (crash/year)	
Fatal and Incapacitating Injury Crashes	0.046
Non-Incapacitating and Possible Injury Crashes	0.09
Property Damage Only Crashes	0.46
All Crashes	0.59
Index of Crash Frequency	**-0.30**
Index of Crash Cost	**-0.42**

RoadHAT 4D

Index of Crash Frequency and Cost - Form F1

Settings: Indiana local settings	Version: Version 4.1	
Location	Red Bank Rd and University Dr	
GIS		
Post		
Analyst	NDS	
Date	10/1/2021	

Comments: Reviewed by SAB 7/14/2022

RoadHAT 4D

Index of Crash Frequency and Cost - Form F1

Settings: Indiana state settings	Version: Version 4.1	
Location	Middle Unsignalized Intersection	
GIS		
Post		
Analyst	NDS	
Date		

INPUT	
Road Facility Type	Unsignalized Urban State Intersection One AADT
Busiest Road AADT (veh/day)	32094
T Intersection Indicator (1 if present, 0 otherwise)	0
Crossing Road Principal Arterial Indicator (1 if present, 0 otherwise)	0
Crossing Road Minor Arterial Indicator (1 if present, 0 otherwise)	0
Crossing Road Major Collector Indicator (1 if present, 0 otherwise)	0
Crossing Road Minor Collector Indicator (1 if present, 0 otherwise)	0
First Year with Crash Data (yyyy)	2018
Last Year with Crash Data (yyyy)	2020
Number of Crashes (crash/period)	
Fatal and Incapacitating Injury Crashes	0
Non-Incapacitating and Possible Injury Crashes	0
Property Damage Only Crashes	2
Route or Road Type	Unsignalized Urban State Intersection One AADT
Average Crash Costs ($)	
Fatal and Incapacitating Injury Crashes	1928400
Non-Incapacitating and Possible Injury Crashes	358900
Property Damage Only Crashes	38000
Crash Cost Year (yyyy)	2017
OUTPUT	
Expected Crash Frequency (crash/year)	
Fatal and Incapacitating Injury Crashes	0.303
Non-Incapacitating and Possible Injury Crashes	0.30
Property Damage Only Crashes	2.72
All Crashes	3.33
Index of Crash Frequency	**-0.80**

RoadHAT 4D

Index of Crash Frequency and Cost - Form F1

Settings: Indiana state settings	Version: Version 4.1	
Location	Middle Unsignalized Intersection	
GIS		
Post		
Analyst	NDS	
Date		

Index of Crash Cost	**-0.75**

Comments: Reviewed by SAB 7/14/2022

RoadHAT 4D

Index of Crash Frequency and Cost - Form F1

Settings: Indiana state settings	Version: Version 4.1	
Location	Schnuck's RIRO	
GIS		
Post		
Analyst	NDS	
Date	10/1/2021	

INPUT	
Road Facility Type	Unsignalized Urban State Intersection One AADT
Busiest Road AADT (veh/day)	32094
T Intersection Indicator (1 if present, 0 otherwise)	1
Crossing Road Principal Arterial Indicator (1 if present, 0 otherwise)	0
Crossing Road Minor Arterial Indicator (1 if present, 0 otherwise)	0
Crossing Road Major Collector Indicator (1 if present, 0 otherwise)	0
Crossing Road Minor Collector Indicator (1 if present, 0 otherwise)	0
First Year with Crash Data (yyyy)	2018
Last Year with Crash Data (yyyy)	2020
Number of Crashes (crash/period)	
Fatal and Incapacitating Injury Crashes	1
Non-Incapacitating and Possible Injury Crashes	1
Property Damage Only Crashes	0
Route or Road Type	Unsignalized Urban State Intersection One AADT
Average Crash Costs ($)	
Fatal and Incapacitating Injury Crashes	1928400
Non-Incapacitating and Possible Injury Crashes	358900
Property Damage Only Crashes	38000
Crash Cost Year (yyyy)	2017
OUTPUT	
Expected Crash Frequency (crash/year)	
Fatal and Incapacitating Injury Crashes	0.189
Non-Incapacitating and Possible Injury Crashes	0.21
Property Damage Only Crashes	1.92
All Crashes	2.31
Index of Crash Frequency	**-0.70**

RoadHAT 4D

Index of Crash Frequency and Cost - Form F1

Settings: Indiana state settings	Version: Version 4.1	
Location	Schnuck's RIRO	
GIS		
Post		
Analyst	NDS	
Date	10/1/2021	

Index of Crash Cost	**0.26**

Comments: Reviewed by SAB 7/14/2022

Appendix E: Previous Study Documents

To:	Mr. Duane Decker, INDOT
From:	Chris Beard, PE, PTOE
Date:	September 28, 2020
Subject:	SR 62 at Schutte, Boehne Camp, and Red Bank Roads Engineering Assessment Report Addendum

In response to comments provided by the Evansville MPO, Lochmueller Group is providing the following Addendum to the Engineering Assessment Report for SR 62 (Lloyd Expressway) at Schutte, Boehne Camp, and Red Bank Roads, submitted on May 29, 2020. This Addendum pertains to the presentation of information in **Table 8** of the previously submitted report. This table compared the three preliminary alternatives in terms of their anticipated operational benefit (quantified by intersection delay) compared to 2019 existing conditions.

Table 8: Alternative Concept Comparison (previously submitted)

Intersection	Alternative Concept Impacts (Reduction in Overall Intersection Delay from 2019 to 2040)		
	Lane Modifications	CFI	MUT (CFI at Red Bank)
Schutte Road			
AM Peak Period	20%	20%	53%
PM Peak Period	44%	53%	68%
Boehne Camp Road			
AM Peak Period	64%	76%	86%
PM Peak Period	17%	54%	31%
Red Bank Road			
AM Peak Period	0%	59%	59%
PM Peak Period	0%	38%	38%

However, in performing these comparisons, only the delay for the main intersection within the CFI and MUT alternatives was included in this summary. In hindsight, a more equitable comparison would have also incorporated adjacent U-turn and left-turn "crossover" sub-intersections that would be part of those alternatives. **Table 8** was revised accordingly and is presented for your review and consideration as **Table 8R**. Our revised approach utilized a weighted delay methodology to capture the total delay experienced by motorists traveling through the multiple sub-intersections of the CFI and MUT alternatives.

In addition, **Table 8** compared 2019 existing conditions with 2040 design year conditions for each alternative. A more consistent comparison would have utilized 2040 no build conditions as the

benchmark for the delay reduction calculations. In that case, changes in delay could only be attributable to the intersection alternatives themselves, rather than traffic growth. **Table 8R** updated the delay reduction calculations to compare directly with 2040 No Build conditions.

Table 8R: Alternative Concept Comparison (Updated)			
Intersection	**Alternative Concept Impacts (Reduction in Overall Intersection Delay from 2040 No Build to 2040 Build)**		
	Lane Modifications	**CFI**	**MUT (CFI at Red Bank)**
Schutte Road			
AM Peak Period	19%	0%	19%
PM Peak Period	44%	19%	39%
Boehne Camp Road			
AM Peak Period	61%	70%	72%
PM Peak Period	18%	43%	-22%
Red Bank Road			
AM Peak Period	0%	41%	41%
PM Peak Period	0%	30%	30%

As shown in **Table 8R**, the percent delay reduction would be smaller than previously reported, though it would still be significant. The CFI alternative would still be expected to perform better than the other alternatives when considered collectively across all three intersections for all time periods. Providing a consistent intersection type along the corridor was deemed important from the perspective of maintaining continuity and not violating driver expectations.

In addition, the CFI would continue to provide safety benefits, as previously reported. This was a key consideration in the selection of the CFI as the recommended alternative. Therefore, despite the modifications to **Table 8**, the conclusions of the May 29, 2020 Engineering Assessment Report hold, that a CFI is recommended as the preferred intersection alternative at the SR 62 intersections with Schutte, Boehne Camp, and Red Bank Roads.

It should be noted that the operational performance of the CFI, as reported in **Table 8R**, would further benefit from the recommended modernization of the traffic signal system and optimization of traffic signal timings along the SR 62 corridor. In an effort to be conservative and isolate the effects of the intersection configuration changes, the preceding alternatives analysis excluded the benefits of corridor signal timing optimization. Incorporating timing improvements into this analysis would only further increase the expected delay reductions above and beyond the values reported in **Table 8R**.

We trust that this Addendum addresses concerns involving the reported delay reductions in **Table 8** from the Engineering Assessment Report for SR 62 (Lloyd Expressway) at Schutte, Boehne Camp, and Red Bank Roads. Please contact me at (314) 621-3395 or cbeard@lochgroup.com should you have any questions or require additional information.

MAY 29, 2020

SR 62 (Lloyd Expressway) at Schutte, Boehne Camp, and Red Bank Roads

Engineering Assessment Report

Vanderburgh County, Indiana

Prepared for:

INDOT Vincennes District

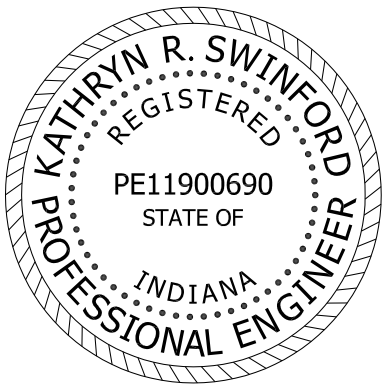
3650 South US Highway 41

Vincennes, IN 47591

RFP O180214

I certify that this Traffic Impact Analysis report has been prepared by me or under my immediate supervision and that I have experience and training in the field of traffic and transportation engineering.

Kathryn Swinford on May 29, 2020



Prepared by:

Lochmueller Group

411 N. 10th Street, Suite 200

St. Louis, MO 63101

314.621.3395

Project No: 118-0017-CHY

REPORT CONCURRENCE

This document was prepared by:

Kathryn Swinford _____ on _____5/29/2020_____

Name: Kathryn Swinford, PE, PTOE

Title: Senior Traffic Engineer for Lochmueller Group, Inc.

Reviewed by:
Asset Engineer Review

_____ on _____

Name: (Date)

Title:

Recommend: APPROVAL / DISAPPROVAL

Reviewed by:
Scope Manager Review

_____ on _____

Name: (Date)

Title:

Recommend: APPROVAL / DISAPPROVAL

Reviewed by:
SAM Review

_____ on _____

Name: (Date)

Title, District:

APPROVE / DISAPPROVE

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LIST OF FIGURES

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EXECUTIVE SUMMARY

Lochmueller Group prepared an engineering assessment report (study) to evaluate the feasibility of implementing intersection improvements at the intersections of Indiana State Route (SR) 62 (Lloyd Expressway) with Schutte Road, Boehne Camp Road, and Red Bank Road in Vanderburgh County, Indiana. The existing intersections experience congestion during peak hours, which results in numerous safety issues.

Recommendation

Based on the following analysis, a partial east-west CFI is recommended at SR 62 and Red Bank Road. Therefore, a partial east-west CFI is recommended at Boehne Camp Road and Schutte Road as well.

- Improves overall intersection delay during the Forecasted 2040 condition by approximately 20% and 53% at SR 62 and Schutte Road, 76% and 54% at SR 62 and Boehne Camp Road, and 59% and 38% at SR 62 and Red Bank Road in the AM and PM peaks, respectively, from the Existing 2019 conditions.
- A partial CFI has 28 conflict points, as compared to the 32 with a conventional intersection. This reduction in conflict points may improve safety performance of the intersection, although safety data studying this effect is limited for partial CFI applications. The Alternative Intersections/Interchanges: Informational Report (AIIR) dated April 2010, suggests a CMF of 0.76 is appropriate for a full CFI. Therefore, for a partial CFI, the expected crash reduction would be up to half the benefit of the full CFI, with a CMF of 0.88.
- **Schutte Road/SR 62: Total Estimated Cost - $4,905,000**
- **Boehne Camp Road/SR 62: Total Estimated Cost - $4,335,000**
- **Red Bank Road/SR 62: Total Estimated Cost - $5,870,000**

It is recommended that a Signal Coordination and Timing (SCAT) study be prepared for the SR 62 corridor to review and optimize signal operations for a study area greater than the scope of this study in conjunction with the proposed improvements in an effort to potentially lower the corridor cycle lengths.

According to INDOT, only SR 62 & Red Bank Road is expected to experience growth throughout the future design period. If growth occurs at the intersections of SR 62 and Schutte Road and SR 62 and Boehne Camp Road, the analysis and recommendations found within this report could be impacted, and therefore should be adjusted to include updated growth values.

Consideration should be given to implementing the following access management:

- Should a CFI be implemented at SR 62 & Red Bank Road –
  - Close the existing RIRO drive east of Red Bank Road (located approximately 850 feet east of the intersection).
  - Close the intersection of Weston Road with Red Bank Road (located approximately 170 feet north of SR 62)
- Should a CFI or MUT be implemented at SR 62 & Schutte Road –
  - Close the existing full access drive at Felstead Road, east of Schutte Road.

It is acknowledged that some of these facilities are outside of INDOT control. Every effort should be taken to achieve current access management standards as part of any roadway improvement project. However, the implementation of the preferred alternative should not be contingent upon the successful negotiation of these access management considerations.

INTRODUCTION

Lochmueller Group prepared an engineering assessment report (study) to evaluate the feasibility of implementing intersection improvements at the intersections of Indiana State Route (SR) 62 (Lloyd Expressway) and Schutte Road, Boehne Camp Road, and Red Bank Road in Vanderburgh County, Indiana. The existing intersections experience congestion during peak hours, which drives numerous safety issues.

The study evaluates existing, design year baseline, and design year build conditions. For purposes of this study, a design year of 2040 was assumed. These scenarios and their contents are explained in detail in subsequent sections. Aerial images of the existing intersections are provided in **Figure 1, Figure 2,** and **Figure 3**.

Figure 1: SR 62 and Schutte Road – Existing Conditions

Figure 2: SR 62 and Boehne Camp Road – Existing Conditions

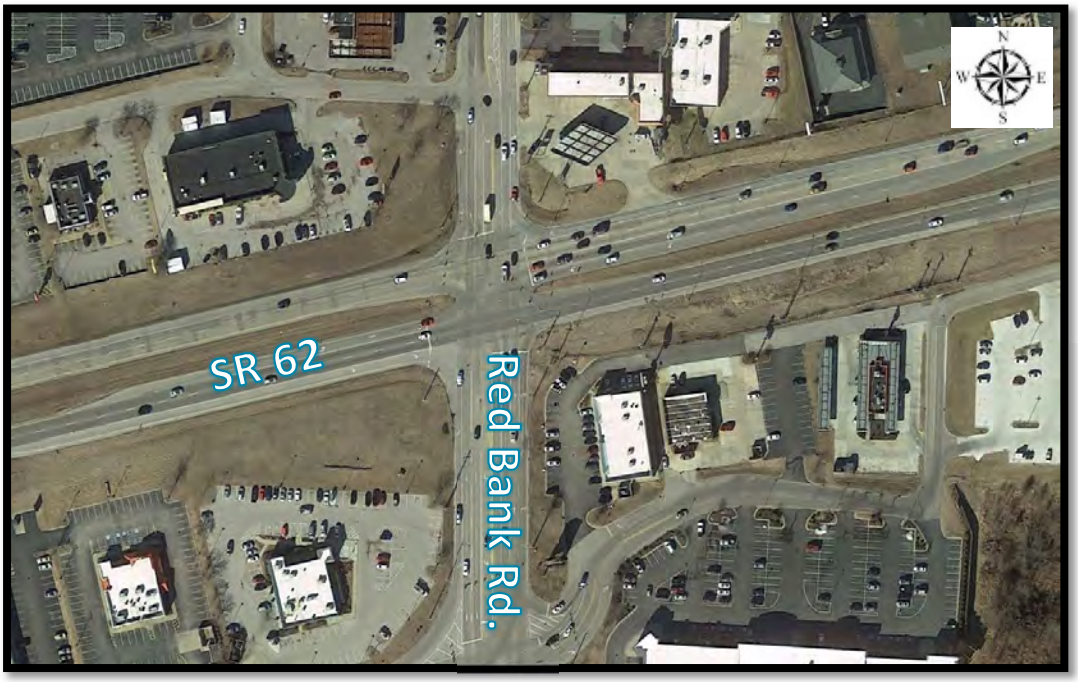

Figure 3: SR 62 and Red Bank Road – Existing Conditions

STUDY AREA

The study area consists of three signalized intersections: SR 62 and Schutte, Boehne Road, and Red Bank Roads. The purpose of the traffic study was to determine the feasibility of implementing various preliminary alternative concepts at the intersections to address safety concerns, evaluate the impacts of the preliminary alternatives at each of the study intersections, and determine a preferred alternative concept for implementation. The evaluation focused on the typical weekday morning (7:00 AM to 9:00 AM) and typical weekday evening (4:00 PM to 6:00 PM) peaks since these periods represent the busiest times for travel at the intersection. If the intersections traffic can be accommodated during these peak periods, it stands to reason that adequate capacity would be available throughout the remainder of the day. This study was prepared in accordance with the assumptions and parameters discussed and approved by the Indiana Department of Transportation (INDOT).

EXISTING CONDITIONS

In order to identify the traffic impacts associated with the proposed roadway improvements, it was first necessary to quantify the roadway and traffic, as they currently exist.

Roadway Network

Each study intersection was inventoried to identify existing roadway types, lane configurations, functional classifications, posted speeds, access provisions, and intersection control.

SR 62 is classified as a principal arterial according to INDOT functional classification maps and extends in the east-west direction, spanning the City of Evansville and serving as a regional connector to Mt. Vernon and Newburgh. Schutte Road and Boehne Camp Road are major collectors, serving residential areas to the north and south of SR 62. Red Bank Road is a major collector to the south of SR 62 and serves both commercial and residential areas. North of SR 62, Red Bank Road is a minor arterial, providing connectivity to New Harmony Road and State Route 66.

The speed limit along SR 62 is 50 miles per hour (mph) near the intersections of Boehne Camp Road and Red Bank Road. Between Boehne Camp Road and Schutte Road, the speed limit increases to 55 mph. The speed limits along Schutte Road, Boehne Camp Road, and Red Bank Road near SR 62 are 35, 35, and 30 miles per hour, respectively.

Based on 24 hour counts collected in August and September 2019, after local schools were in session, SR 62 carries an annual average daily traffic (AADT) of approximately 32,000 to 36,600 vehicles per day (vpd) between Schutte Road and Red Bank Road. Schutte Road, Boehne Camp Road, and Red Bank Road each carry an AADT of approximately 3,700 vpd, 7,500 vpd, and 14,400 vpd near SR 62, respectively. The AADT count information is included in the existing traffic volume counts, and can be found in the Appendix.

The intersections of SR 62 and Schutte, Boehne Camp, and Red Bank Roads are all signalized. SR 62 is a four lane divided highway with a grass median. Dedicated left turn lanes are provided on SR 62 at all three study intersections. The westbound left turn at Red Bank Road has dual left turn lanes. Dedicated right turn lanes are also provided on SR 62 at all three study intersections, except on the eastbound

approach at Schutte Road. The southbound approaches at both Schutte Road and Boehne Camp Road provide a single, shared lane. The northbound approach at Schutte Road provides a dedicated left turn lane, while the northbound approach at Boehne Camp Road provides dedicated left and right turn lanes. Red Bank Road has dedicated left and right turn lanes on both its northbound and southbound approaches.

Pedestrian and Bicycle Accommodations

The study corridor spans from a more suburban setting near Schutte Road and Boehne Camp Road, to a more urban setting near the commercialized area surrounding Red Bank Road. However, no pedestrian accommodations are provided along the roadways or at the intersections within the study area. Pedestrian accommodations were not a focus of this analysis due to the lack of existing pedestrian accessibility surrounding the study area. There are also no bicycle accommodations within the study area; bicyclists share the road with vehicles.

Traffic Volumes

The Existing 2019 traffic volumes for SR 62 at Schutte Road, Boehne Camp Road, and Red Bank Road were provided by the Indiana Department of Transportation (INDOT), and are shown in **Figure 4**, while the turning movement count data can be found in the Appendix. The peak hours for a majority of the study area were determined to occur from 7:00 AM to 8:00 AM and 4:15 PM to 5:15 PM for morning and afternoon peak period, respectively. The afternoon peak period for Schutte Road occurred from 4:00 PM to 5:00 PM.

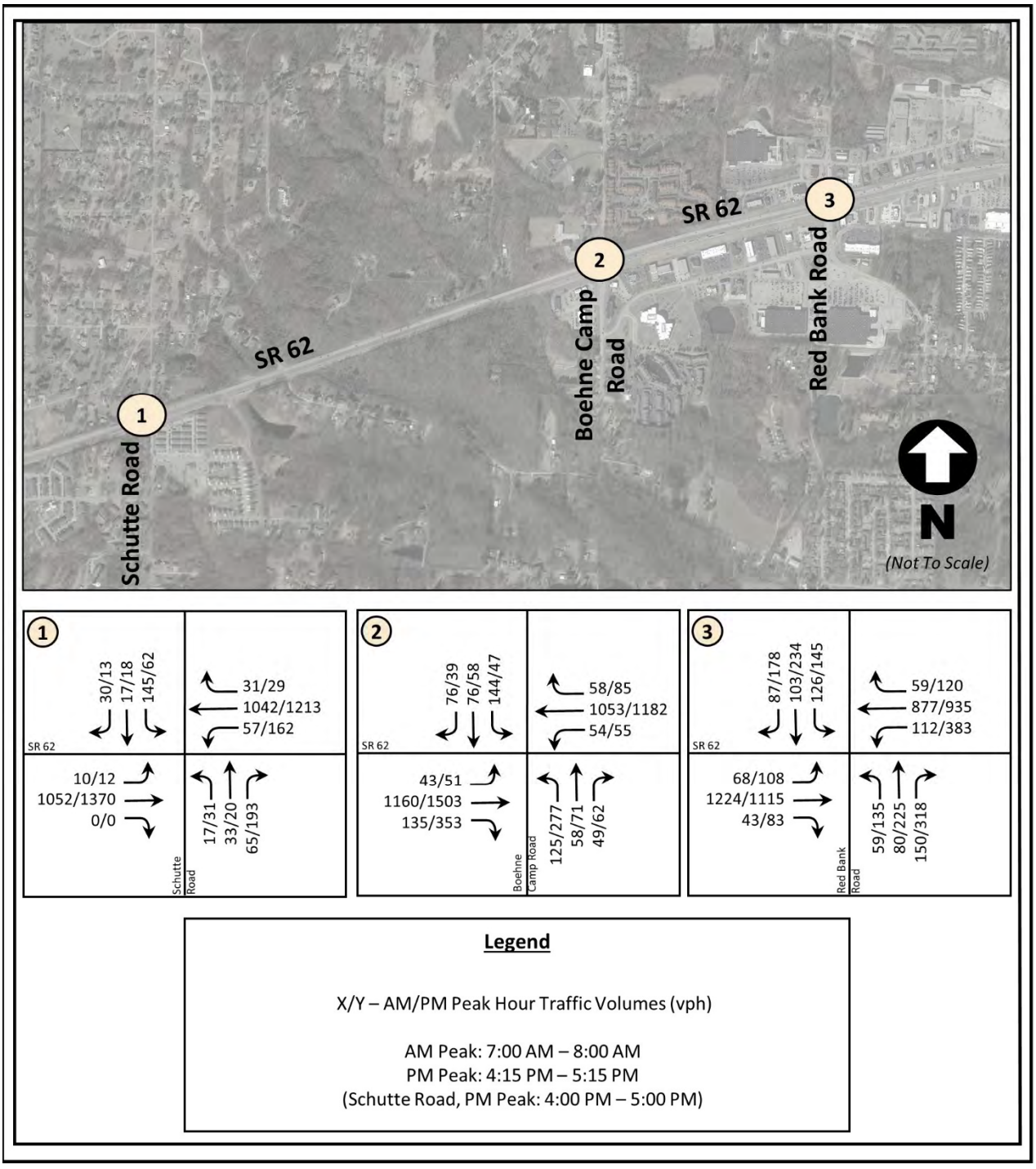

Figure 4: SR 62 at Schutte, Boehne Camp, and Red Bank Roads Existing Traffic Volumes

Existing Operating Conditions

Traffic operating conditions were evaluated using Synchro 10 traffic modeling software, with results based upon the methodologies outlined in the *Highway Capacity Manual, 6th Edition* (HCM) published by the Transportation Research Board. The performance of a transportation system is quantified by Levels of Service (LOS), which are measures of traffic flow that consider factors such as speed, delay, interruptions, safety, driver comfort and convenience. There are six levels of service ranging from LOS A ("free flow") to LOS F ("oversaturated"). LOS D is typically considered acceptable for peak conditions in urban and suburban areas.

Signalized intersections reflect higher delay tolerances as compared to unsignalized and roundabout locations because motorists are accustomed to and accepting of longer delays at signals. For signalized and all-way stop intersections, the average control delay per vehicle is estimated for each movement and then aggregated for each approach and the intersection as a whole. For intersections with partial (side-street) stop control, the delay is calculated for the minor movements only (side-street approaches and major road left-turns) since through traffic on the major road is not required to stop. The thresholds for intersection levels of service are summarized in **Table 1.**

Table 1: Intersection Level of Service Thresholds for Vehicles

Level of Service	Delay per Vehicle (sec/veh)	
	Signalized	**Unsignalized/Roundabout**
A	< 10	0-10
B	> 10-20	> 10-15
C	> 20-35	> 15-25
D	> 35-55	> 25-35
E	> 55-80	> 35-50
F	> 80	> 50

Existing operating conditions are summarized in and are presented in terms of LOS, delay (seconds per vehicle), 95th percentile queue length, and volume to capacity ratio (v/c). The Existing Conditions Synchro reports can be found in the Appendix.

As can be seen, many of the existing approach movements operate with acceptable LOS (D or better) during both peak periods. However, the southbound approaches at SR 62 and Schutte Road and Boehne Camp Road operate with LOS F during both peak periods. The northbound approach at SR 62 and Boehne Camp Road also operates with LOS F during the PM peak period. The delay on the southbound approach at SR 62 and Boehne Camp Road is so pronounced that the entire intersection functions with LOS E during the AM peak period. It is clear that these side street approaches do not have enough capacity to handle their respective vehicular demands.

Table 2: 2019 Existing Operating Conditions		
Approach/Movement	**LOS (Delay, sec) [Queue Length, feet] <v/c ratio>**	
	AM Peak Period	**PM Peak Period**
SR 62 and Schutte Road		
Eastbound Approach	***C (22.2)***	***C (24.2)***
Left Turn	D (53.4) [26] <0.12>	E (73.1) [37] <0.16>
Through/Right	C (21.9) [406] <0.65>	C (23.8) [642] <0.69>
Westbound Approach	***A (7.8)***	***B (15.6)***
Left Turn	E (69.9) [m75] <0.53>	E (76.4) [m188] <0.78>
Through	A (4.7) [m102] <0.58>	A (7.8) [m458] <0.49>
Right Turn	A (0.0) [m0] <0.04>	A (0.3) [m1] <0.03>
Northbound Approach	***B (19.7)***	***C (21.2)***
Left Turn	D (35.9) [29] <0.08>	E (59.5) [66] <0.19>
Through/Right	B (17.0) [58] <0.30>	B (15.6) [105] <0.57>
Southbound Approach	***F (88.4)***	***F (423.0)***
Left/Through/Right	F (88.4) [#246] <0.96>	F (423.0) [#248] <1.75>
Overall Intersection	**C (21.4)**	**D (35.5)**
SR 62 and Boehne Camp Road		
Eastbound Approach	***B (11.9)***	***C (22.6)***
Left Turn	E (66.2) [m54] <0.42>	F (93.6) [m77] <0.53>
Through	B (11.2) [m156] <0.68>	C (24.3) [m882] <0.80>
Right Turn	A (0.6) [m1] <0.16>	A (5.2) [m128] <0.40>
Westbound Approach	***D (40.9)***	***C (27.2)***
Left Turn	D (54.9) [m84] <0.55>	E (71.6) [m100] <0.52>
Through	D (42.1) [526] <0.68>	C (26.7) [560] <0.57>
Right Turn	A (6.1) [m23] <0.08>	A (4.4) [m26] <0.09>
Northbound Approach	***C (31.9)***	***F (117.1)***
Left Turn	D (43.3) [136] <0.51>	F (161.0) [#529] <1.18>
Through	C (34.1) [72] <0.13>	D (47.0) [106] <0.17>
Right Turn	A (0.4) [0] <0.10>	A (0.6) [0] <0.13>
Southbound Approach	***F (450.8)***	***F (105.9)***
Left/Through/Right	F (450.8) [#465] <1.91>	F (105.9) [#264] <0.91>
Overall Intersection	**E (80.0)**	**D (37.5)**

Table 2: 2019 Existing Operating Conditions		
Approach/Movement	**LOS (Delay, sec) [Queue Length, feet] <v/c ratio>**	
	AM Peak Period	**PM Peak Period**
SR 62 and Red Bank Road		
Eastbound Approach	***D (41.5)***	***D (41.3)***
Left Turn	D (40.4) [m70] <0.49>	E (58.9) [m146] <0.71>
Through	D (43.0) [m586] <0.78>	D (41.8) [560] <0.70>
Right Turn	A (1.3) [m0] <0.06>	B (12.1) [m34] <0.11>
Westbound Approach	***C (24.4)***	***D (36.5)***
Left Turn	E (56.1) [74] <0.46>	E (78.6) [263] <0.85>
Through	C (22.0) [310] <0.56>	C (23.4) [428] <0.52>
Right Turn	A (0.2) [0] <0.08>	A (3.3) [35] <0.14>
Northbound Approach	***C (25.5)***	***E (58.1)***
Left Turn	D (37.8) [74] <0.27>	E (67.7) [193] <0.69>
Through	D (43.8) [54] <0.18>	E (77.8) [175] <0.72>
Right Turn	B (10.9) [56] <0.46>	D (40.1) [#256] <0.88>
Southbound Approach	***C (32.1)***	***D (52.7)***
Left Turn	D (43.6) [137] <0.50>	E (66.9) [200] <0.70>
Through	D (43.2) [65] <0.20>	E (72.9) [174] <0.66>
Right Turn	A (2.3) [6] <0.25>	B (14.5) [76] <0.56>
Overall Intersection	**C (33.1)**	**D (44.0)**

SAFETY ANALYSIS

As stated previously, the existing intersections experience congestion during peak hours, which drives numerous safety issues. Traffic crash data obtained from INDOT for the years 2015 to 2018, which was the latest year of available data, was analyzed for the SR 62 at Schutte, Boehne Camp, and Red Bank Roads. **Figure 5** shows the total number of crashes per year at the study intersections from 2015 to 2018. **Table 3** breaks down the total annual crashes by location. As shown, the number fluctuated over the four-year period ranging from a low of 108 crashes in 2015 to a high of 114 crashes in 2016. Collision diagrams of the crashes experienced at the intersections from 2015 to 2018 are shown in the Appendix.

Table 3: Total Annual Crashes by Location					
Location	2015	2016	2017	2018	Total
Schutte	33	30	29	23	115
Boehne Camp	29	38	32	46	145
Red Bank	46	46	49	43	184
Total	**108**	**114**	**110**	**112**	**444**

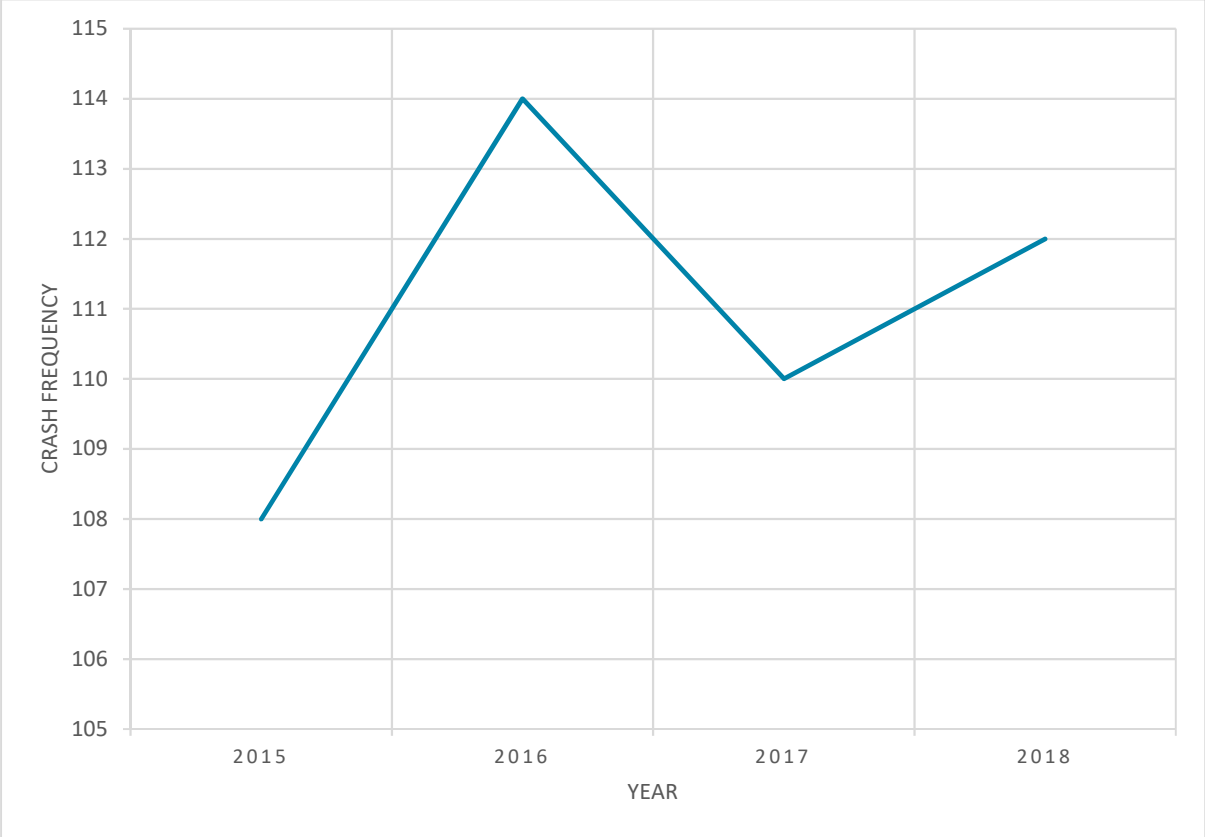

Figure 5: Overall Crash Trend

Table 4 shows the crash severity by type at the study intersections. Crash severity levels have been divided into the following categories: Incapacitating Injury; Injury; Property Damage Only (PDO). There were a total of 45 incapacitating injury-related crashes, 40 injury-related crashes and 359 Property Damage Only (PDO) crashes.

Table 4: Crash Severity by Location				
Location	Incapacitating Injury	Injury	PDO	Total
Schutte	9	11	95	115
Boehne Camp	16	15	114	145
Red Bank	20	14	150	184
Total	**45**	**40**	**359**	**444**

Crashes at the intersection were also categorized based on the different crash types. **Figure 6** illustrates the different intersection crash types between 2015 and 2018. According to the chart, rear-end crashes were the most prominent type of crash, accounting for 73% of overall crashes. A high percentage of rear end crashes are typically the result of congested corridor conditions. SR 62 is a highly traveled corridor, and experiences congested conditions during both peak periods. Other prominent crash types at the intersections were right angle crashes (11%), and same direction sideswipe (5%).

Figure 7 presents all the potential contributing crash factors at the study intersection. Most of the crashes occurred due to following another vehicle too closely (65%) and failure to yield right of way (12%). Following too closely typically results in a rear end collision, while failure to yield usually results in a left turn or right angle crash. Rear end crashes and right angle crashes make up a majority of the crash types experienced at the intersection. This indicates that corridor and intersection congestion are likely factors in most of the crashes that occur at these intersections.

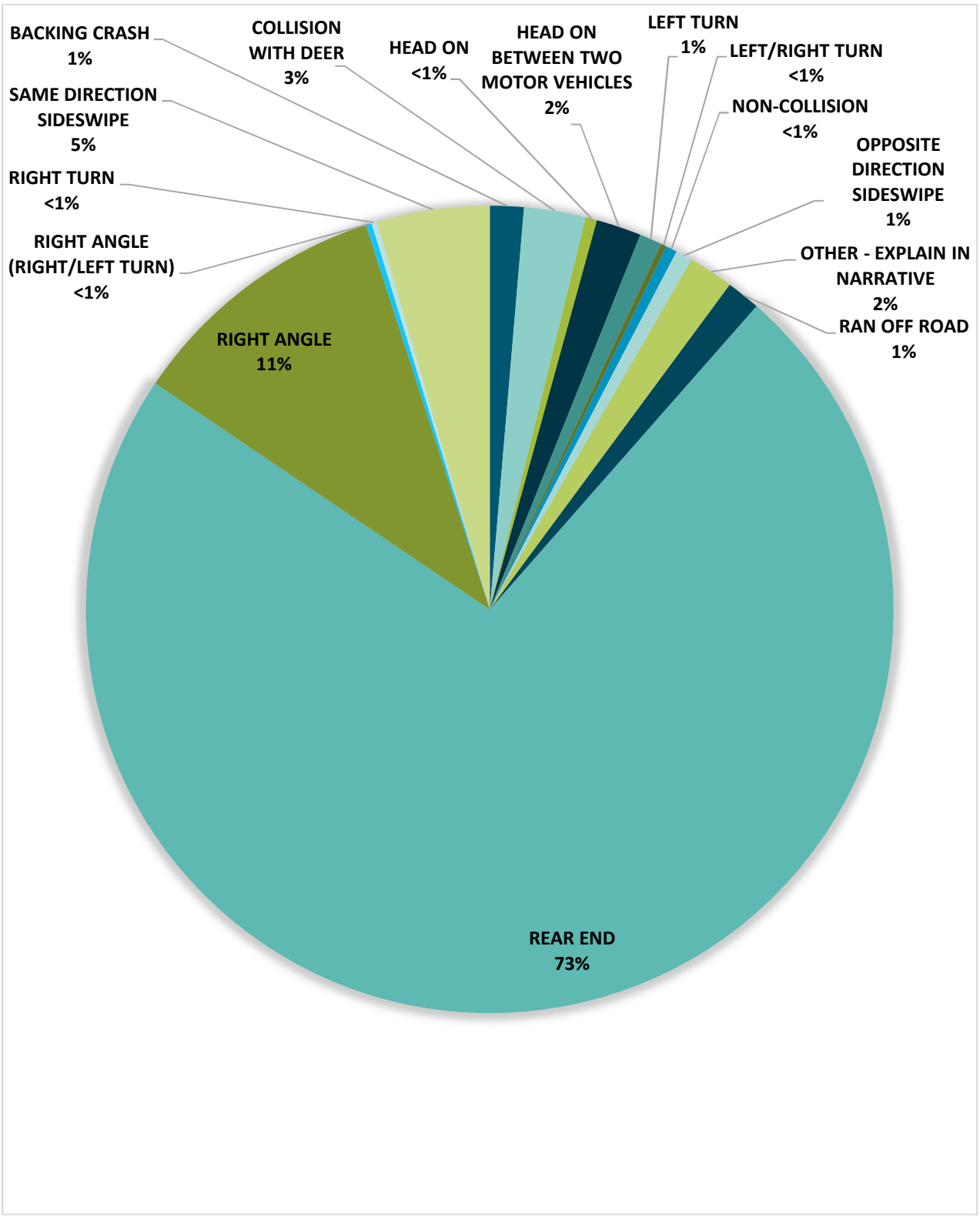

Figure 6: Intersection Crash Types

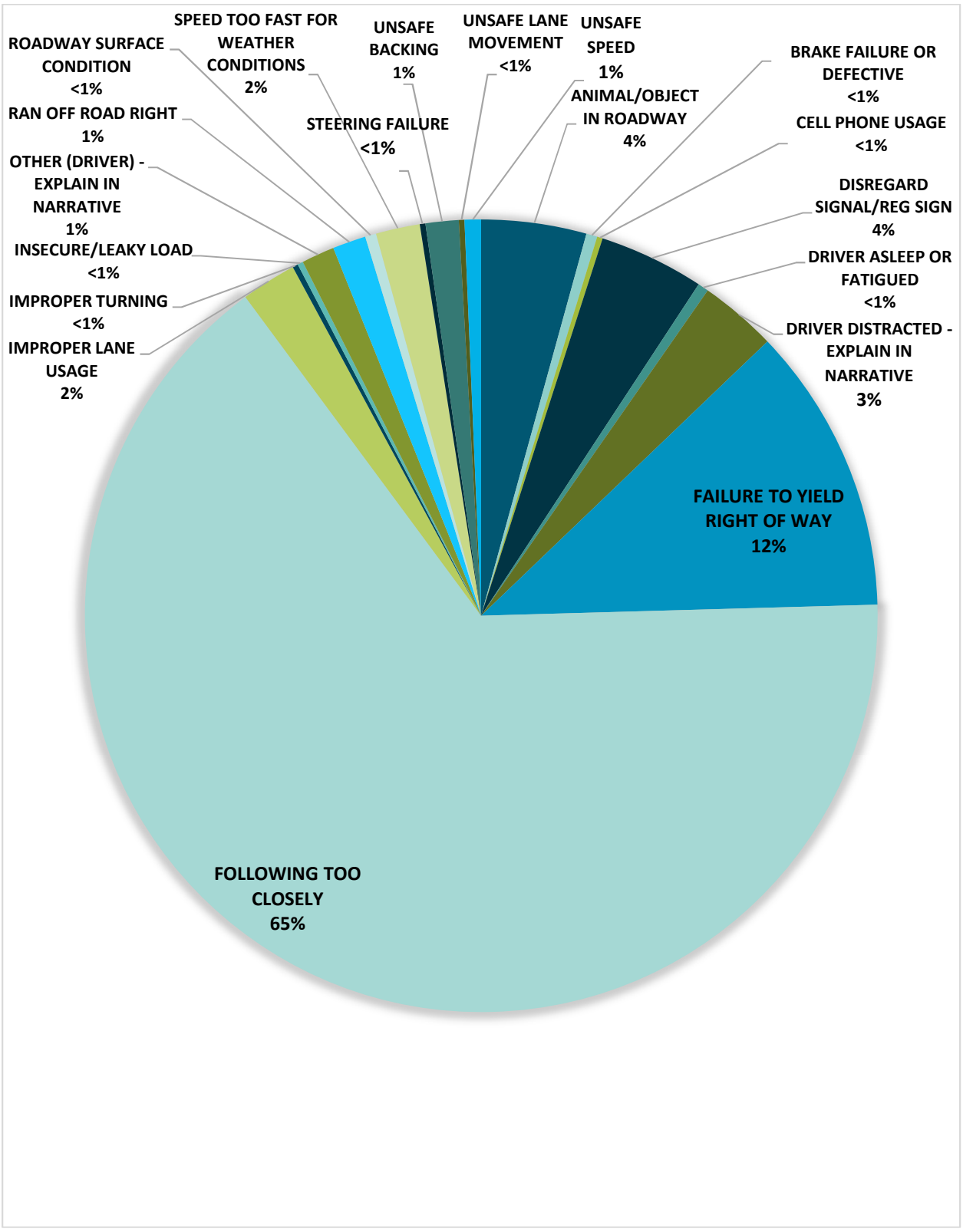

Figure 7: Potential Contributing Crash Factors

Figure 8 and **Figure 9** show the crash frequency of the study intersections by day of the week and by time of day, respectively. As shown in **Figure 8,** the highest number of crashes occurred on Wednesdays, with almost 90 crashes total. Every other weekday experienced nearly 70 or more crashes over the study period, with a reduction in crashes on Saturdays and Sundays. According to **Figure 9**, 5:00 PM was the time of day that experienced the highest number of crashes, which coincides with the PM peak period for the corridor.

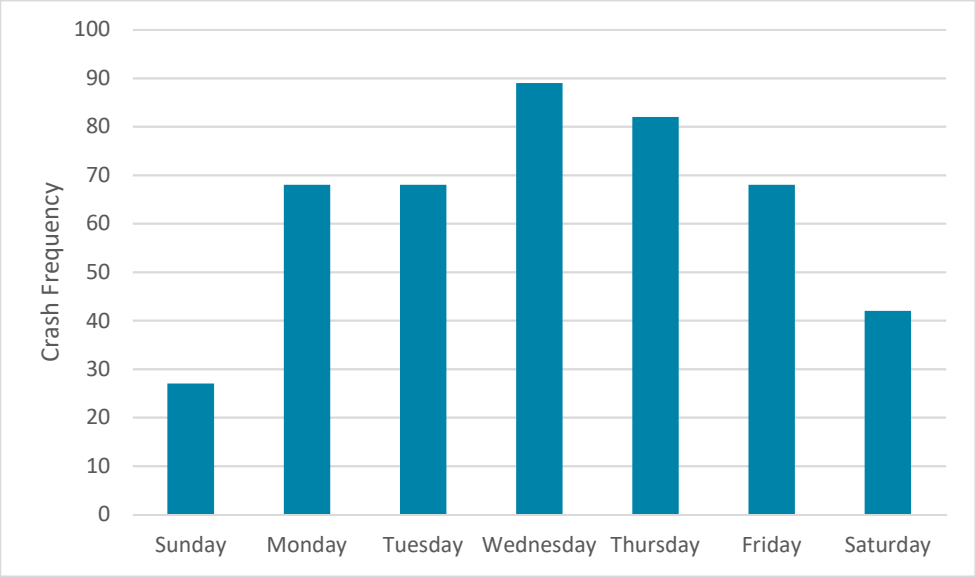

Figure 8: Crash Frequency by Day of the Week

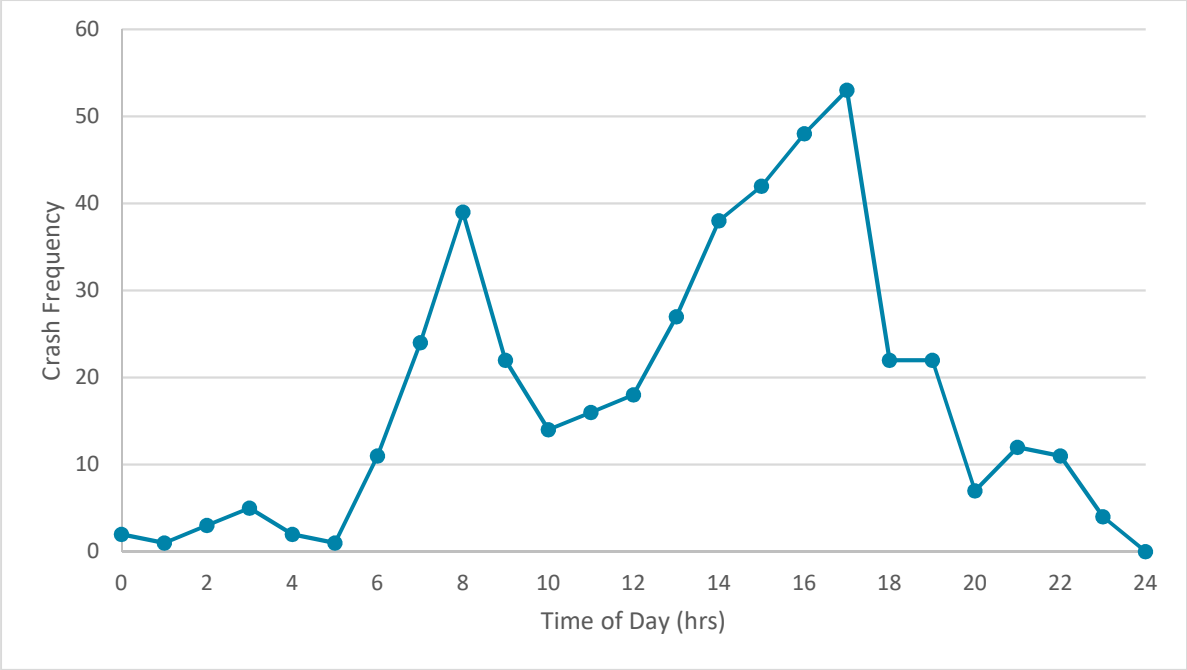

Figure 9: Crash Frequency by Time of the Day

Figure 10 shows crash frequency by road surface conditions for the study period. About 83% of the crashes occurred on dry road surface conditions. Wet road surface conditions accounted for about 15% of all crashes. **Figure 11** shows crash frequency by roadway lighting conditions. Almost 74% of the crashes occurred in daylight conditions, 11% of the crashes occurred at night on not lighted roadway sections, and 10% of the crashes occurred at night on lighted roadway sections.

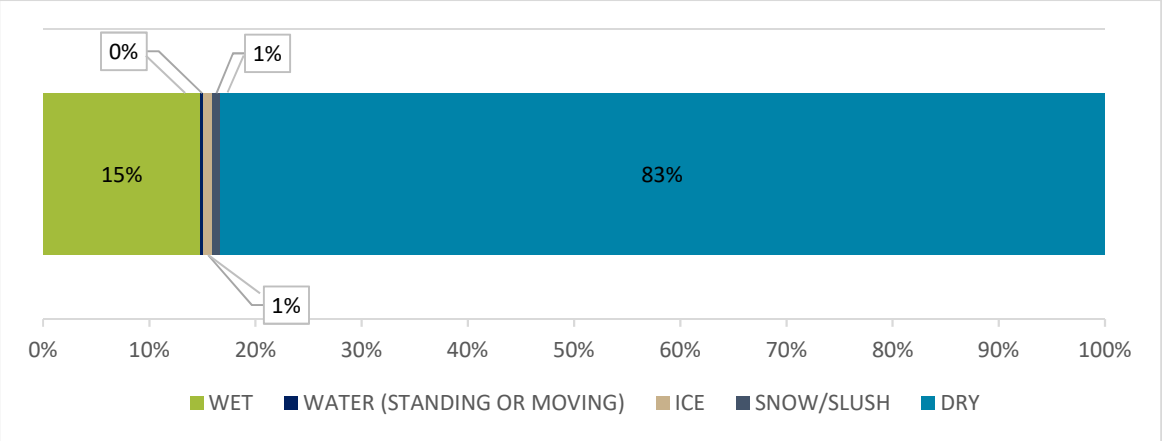

Figure 10: Crashes by Surface Condition

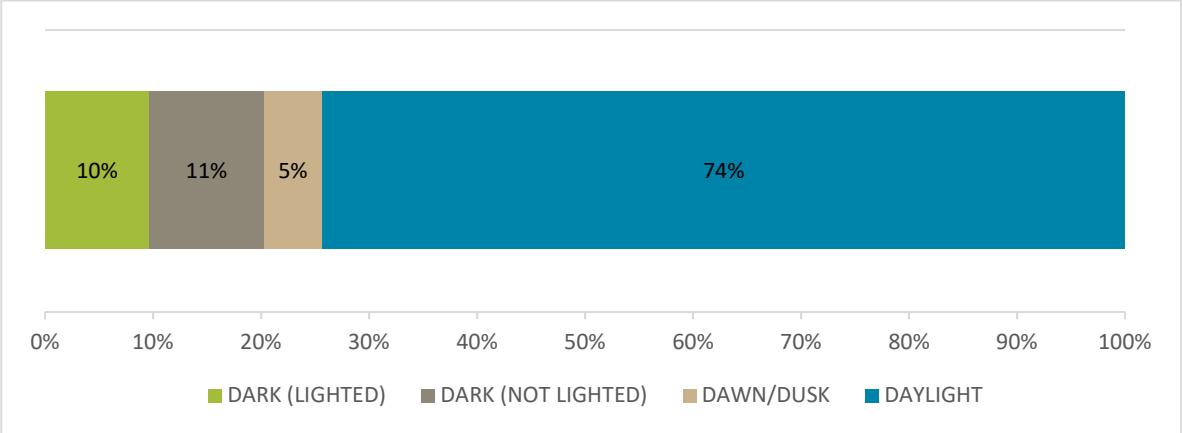

Figure 11: Crashes by Lighting Condition

The Index of Crash Frequency (ICF) and Index of Crash Cost (ICC) were calculated for the intersection under existing conditions. The calculations were completed using RoadHAT, which is a crash analysis tool developed by Purdue University, that is compliant with the Highway Safety Manual methodology and is calibrated for Indiana roadways. If the location has an ICF or ICC value greater than 2, then the location may be considered a high crash or severe crash location. The higher the ICF value, the stronger the evidence for the location being a high or severe crash location. **Table 5** displays the RoadHAT results for the existing conditions. The RoadHAT reports are also shown in the Appendix.

Table 5: SR 62 at Schutte, Boehne Camp, and Red Bank Roads Existing Conditions RoadHAT Analysis	
Index of Crash Frequency (ICF)	
Schutte Road	**1.77**
Boehne Camp Road	**2.22**
Red Bank Road	**3.49**
Index of Crash Cost (ICC)	
Schutte Road	**2.79**
Boehne Camp Road	**3.91**
Red Bank Road	**4.68**

As can be seen, the ICF value for each intersection is near, or above 2, which means the intersections may be considered high crash locations. The ICC values are also near 3 for Schutte Road, and near, or above 4 for Boehne Camp and Red Bank Roads. ICC is thought to provide evidence that a location experiences total cost of crashes higher than a typical cost expected for this location given its exposure to risk. This indicates that not only are the intersections high crash locations, but the crashes experienced at the intersections are higher cost crashes than what would otherwise be expected.

2040 BASELINE CONDITIONS

For the purposes of this study, the future design period is 20 years, with the future design year assumed to be 2040. As such, baseline conditions were analyzed for the year 2040. It was necessary to forecast anticipated traffic growth within the study area based on "background" growth from general increasing population and commercial growth in the region. The growth rates used to calculate the 2040 baseline traffic volumes in this analysis were provided by INDOT, and can be found in **Table 6**. The 2040 baseline traffic volumes are shown in **Figure 12**.

The intersections of SR 62 and Schutte Road and SR 62 and Boehne Camp Road are not projected to grow between the existing 2019 and baseline 2040 conditions, thus no growth rates are shown for those two intersections. If growth does occur at the intersections of SR 62 and Schutte Road or SR 62 and Boehne Camp Road, the analysis and recommendations found within this report could be impacted, and therefore should be adjusted to include updated growth values. No specific nearby background developments were identified for inclusion in the study.

Table 6: SR 62 and Red Bank Road Growth Rates – Provided by INDOT	
Approach	Growth Rate
Northbound	1.23%
Southbound	1.00%
Eastbound	0.39%
Westbound	0.30%

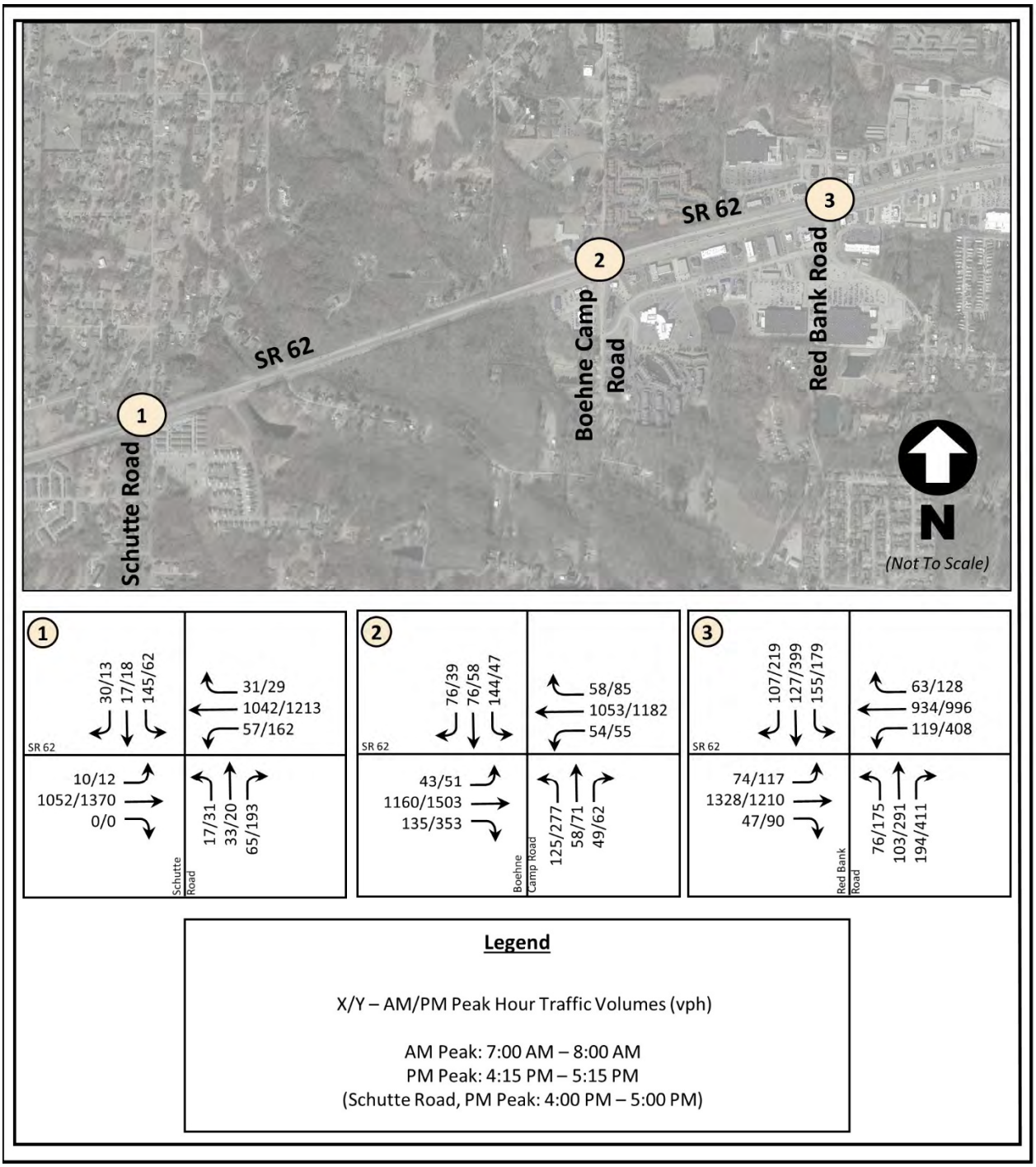

Figure 12: SR 62 at Schutte, Boehne Camp, and Red Bank Roads 2040 Baseline Traffic Volumes

2040 Baseline Operating Conditions

The 2040 baseline operating conditions were analyzed under existing roadway geometry using the 2040 Baseline traffic volumes shown in **Figure 12**. Similar to existing conditions, the 2040 baseline operating conditions were analyzed using Synchro 10, with LOS, delay, 95th percentile queue, and volume to capacity ratio as the measures of effectiveness. The 2040 baseline operating conditions are shown in **Table 7**. The 2040 Baseline Conditions Synchro reports can be found in the Appendix.

As can be seen, the 2040 baseline conditions are similar to existing conditions. Additionally, the northbound and southbound approaches at Red Bank Road will operate with LOS F during the PM peak period due to the expected background growth, resulting in the overall intersection operating at LOS E. It is clear that by 2040, the side street approaches at each of the study intersections will not have enough capacity to handle their respective vehicular demands.

Table 7: 2040 Baseline Operating Conditions

Approach/Movement	LOS (Delay, sec) [Queue Length, feet] <v/c ratio>	
	AM Peak Period	PM Peak Period
SR 62 and Schutte Road		
Eastbound Approach	***C (22.2)***	***C (24.2)***
Left Turn	D (53.4) [26] <0.12>	E (73.1) [37] <0.16>
Through/Right	C (21.9) [406] <0.65>	C (23.8) [642] <0.69>
Westbound Approach	***A (7.7)***	***B (15.8)***
Left Turn	E (69.9) [m75] <0.53>	E (77.3) [m189] <0.78>
Through	A (4.6) [m103] <0.58>	A (7.9) [m455] <0.49>
Right Turn	A (0.1) [m0] <0.04>	A (0.3) [m1] <0.03>
Northbound Approach	***B (19.7)***	***C (21.2)***
Left Turn	D (35.9) [29] <0.08>	E (59.5) [66] <0.19>
Through/Right	B (17.0) [58] <0.30>	B (15.6) [105] <0.57>
Southbound Approach	***F (88.4)***	***F (423.0)***
Left/Through/Right	F (88.4) [#246] <0.96>	F (423.0) [#248] <1.75>
Overall Intersection	**C (21.4)**	**D (35.6)**

Table 7: 2040 Baseline Operating Conditions		
Approach/Movement	LOS (Delay, sec) [Queue Length, feet] <v/c ratio>	
	AM Peak Period	PM Peak Period
SR 62 and Boehne Camp Road		
Eastbound Approach	***B (11.9)***	***C (22.6)***
Left Turn	E (66.2) [m54] <0.42>	F (93.6) [m77] <0.53>
Through	B (11.2) [m156] <0.68>	C (24.3) [m882] <0.80>
Right Turn	A (0.6) [m1] <0.16>	A (5.2) [m128] <0.40>
Westbound Approach	***D (41.3)***	***C (28.5)***
Left Turn	D (3.5) [m80] <0.55>	E (71.0) [m89] <0.52>
Through	D (42.6) [533] <0.68>	C (28.3) [572] <0.57>
Right Turn	A (6.2) [m21] <0.08>	A (4.4) [m24] <0.09>
Northbound Approach	***C (31.9)***	***F (117.1)***
Left Turn	D (43.3) [136] <0.51>	F (161.0) [#529] <1.18>
Through	C (34.1) [72] <0.13>	D (47.0) [106] <0.17>
Right Turn	A (0.4) [0] <0.10>	A (0.6) [0] <0.13>
Southbound Approach	***F (450.8)***	***F (105.9)***
Left/Through/Right	F (450.8) [#465] <1.91>	F (105.9) [#264] <0.91>
Overall Intersection	**F (80.1)**	**D (37.9)**
SR 62 and Red Bank Road		
Eastbound Approach	***D (43.5)***	***D (43.9)***
Left Turn	D (43.7) [m79] <0.54>	E (60.4) [m161] <0.73>
Through	D (45.0) [m630] <0.85>	D (44.6) [603] <0.79>
Right Turn	A (1.5) [m0] <0.06>	B (13.4) [m42] <0.12>
Westbound Approach	***C (25.1)***	***D (38.3)***
Left Turn	E (56.9) [79] <0.49>	E (79.9) [#282] <0.87>
Through	C (22.7) [336] <0.60>	C (25.8) [471] <0.58>
Right Turn	A (0.2) [0] <0.08>	A (3.3) [37] <0.15>
Northbound Approach	***C (30.5)***	***F (113.9)***
Left Turn	D (40.2) [91] <0.36>	F (130.0) [#319] <1.05>
Through	D (44.5) [67] <0.23>	F (89.7) [#253] <0.88>
Right Turn	B (19.3) [102] <0.60>	F (124.2) [#520] <1.17>
Southbound Approach	***D (35.3)***	***F (83.8)***
Left Turn	D (49.4) [166] <0.62>	F (90.7) [#280] <0.90>
Through	D (43.8) [77] <0.25>	F (116.1) [#350] <1.03>
Right Turn	A (4.7) [24] <0.31>	B (19.4) [115] <0.64>
Overall Intersection	**D (35.1)**	**E (62.3)**

PRELIMINARY ALTERNATIVE CONCEPT CONSIDERATION

As a first step towards selecting preliminary alternative concepts for consideration, the 2040 traffic volumes were applied to the "Capacity Analysis for Planning of Junctions" (CAP-X) tool provided by the United States Department of Transportation Federal Highway Administration (FHWA). CAP-X is a tool that can be used to evaluate innovative junction designs using peak traffic volumes. The intersections are evaluated using the method of critical lane volume summation to provide a brief planning capacity assessment for each type of intersection, and then rank the different alternatives accordingly. The tool compares 17 different types of innovative junctions that assists in narrowing down an array of design choices to focus on more effective intersection and interchange designs prior to conducting more complex traffic simulations. The 2040 PM traffic volumes were used in the CAP-X tool to anticipate a worst case scenario throughout the design period, as the PM peak period is typically the controlling peak hour for capacity. The results of the CAP-X analysis are shown in **Figure 13, Figure 14,** and **Figure 15.**

Results for Intersections													
#	TYPE OF INTERSECTION	Sheet	Zone 1 (North)		Zone 2 (South)		Zone 3 (East)		Zone 4 (West)		Zone 5 (Center)		Overall v/c Ratio	Ranking
			CLV	V/C	CLV	V/C	CLV	V/C	CLV	V/C	CLV	V/C		
1	Conventional	Full									1000	0.62	0.62	8
2	Conventional Shared RT LN	CSRL									1144	0.71	0.71	14
3.1	Quadrant Roadway	S-W			377	0.24			906	0.57	962	0.60	0.60	6
3.2		N-E	260	0.16			863	0.54			936	0.59	0.59	5
3.3		S-E			336	0.21	336	0.21			786	0.49	0.49	1
3.4		N-W	234	0.15					765	0.48	933	0.58	0.58	4
4.1	Partial Displaced Left Turn	N-S	98	0.06	217	0.14					1091	0.68	0.68	13
4.2		E-W					904	0.56	647	0.40	823	0.51	0.56	2
5	Displaced Left Turn	FULL	98	0.06	217	0.14	904	0.56	647	0.40	765	0.48	0.56	2
6.1	Restricted Crossing U-Turn	N-S	970	0.61	1130	0.71	2718	1.70	2299	1.44			1.70	15
6.2		E-W	745	0.47	1023	0.64	781	0.49	806	0.50			0.64	12
7.1	Median U-Turn	N-S	340	0.21	343	0.21					1004	0.63	0.63	11
7.2		E-W					771	0.48	990	0.62	974	0.61	0.62	7
8.1	Partial Median U-Turn	N-S	134	0.08	328	0.20					1003	0.63	0.63	9
8.2		E-W					731	0.46	911	0.57	1003	0.63	0.63	9

Figure 13: Schutte Road CAP-X Comparison Results

Results for Intersections														
#	TYPE OF INTERSECTION	Sheet	Zone 1 (North)		Zone 2 (South)		Zone 3 (East)		Zone 4 (West)		Zone 5 (Center)		Overall v/c Ratio	Ranking
			CLV	V/C	CLV	V/C	CLV	V/C	CLV	V/C	CLV	V/C		
1	Conventional	Full									1198	0.75	0.75	10
2	Conventional Shared RT LN	CSRL									1353	0.85	0.85	14
3.1	Quadrant Roadway	S-W			549	0.34			1123	0.70	898	0.56	0.70	3
3.2		N-E	438	0.27			1076	0.67			1148	0.72	0.72	7
3.3		S-E			478	0.30	478	0.30			900	0.56	0.56	1
3.4		N-W	678	0.42					1272	0.79	1122	0.70	0.79	12
4.1	Partial Displaced Left Turn	N-S	175	0.11	413	0.26					1123	0.70	0.70	3
4.2		E-W					849	0.53	799	0.50	1123	0.70	0.70	5
5	Displaced Left Turn	FULL	175	0.11	413	0.26	849	0.53	799	0.50	1064	0.67	0.67	2
6.1	Restricted Crossing U-Turn	N-S	1725	1.08	2399	1.50	2671	1.67	2610	1.63			1.67	15
6.2		E-W	917	0.57	1282	0.80	1118	0.70	1106	0.69			0.80	13
7.1	Median U-Turn	N-S	571	0.36	543	0.34					1147	0.72	0.72	6
7.2		E-W					1093	0.68	1103	0.69	1200	0.75	0.75	11
8.1	Partial Median U-Turn	N-S	501	0.31	478	0.30					1149	0.72	0.72	8
8.2		E-W					740	0.46	1043	0.65	1149	0.72	0.72	8

Figure 14: Boehne Camp Road CAP-X Comparison Results

Results for Intersections														
#	TYPE OF INTERSECTION	Sheet	Zone 1 (North)		Zone 2 (South)		Zone 3 (East)		Zone 4 (West)		Zone 5 (Center)		Overall v/c Ratio	Ranking
			CLV	V/C	CLV	V/C	CLV	V/C	CLV	V/C	CLV	V/C		
1	Conventional	Full									1129	0.71	0.71	8
2	Conventional Shared RT LN	CSRL									1245	0.78	0.78	14
3.1	Quadrant Roadway	S-W			415	0.26			929	0.58	1060	0.66	0.66	7
3.2		N-E	480	0.30			898	0.56			1018	0.64	0.64	4
3.3		S-E			707	0.44	707	0.44			848	0.53	0.53	1
3.4		N-W	723	0.45					881	0.55	1060	0.66	0.66	6
4.1	Partial Displaced Left Turn	N-S	330	0.21	463	0.29					1050	0.66	0.66	5
4.2		E-W					857	0.54	666	0.42	914	0.57	0.57	3
5	Displaced Left Turn	FULL	330	0.21	463	0.29	857	0.54	666	0.42	756	0.47	0.54	2
6.1	Restricted Crossing U-Turn	N-S	710	0.44	876	0.55	2607	1.63	1872	1.17			1.63	15
6.2		E-W	887	0.55	1062	0.66	1200	0.75	1165	0.73			0.75	10
7.1	Median U-Turn	N-S	952	0.59	677	0.42					1168	0.73	0.73	9
7.2		E-W					1050	0.66	1014	0.63	1224	0.76	0.76	13
8.1	Partial Median U-Turn	N-S	462	0.29	537	0.34					1218	0.76	0.76	11
8.2		E-W					876	0.55	1165	0.73	1218	0.76	0.76	11

Figure 15: Red Bank Road CAP-X Comparison Results

Because Schutte Road, Boehne Camp Road, and Red Bank Road are all within 1.5 miles of each other along SR 62, any future improvements to the intersections should be cohesive and provide continuity along the corridor for drivers. It is not advisable to mix multiple alternative intersection types as drivers could be confused with different intersection types so closely spaced.

As can be seen from **Figure 13, Figure 14,** and **Figure 15**, the alternative intersection types theoretically function very well across the three study area intersections, except for the north-south Restricted Crossing U-Turn (RCUT) intersections at Schutte Road. A Quadrant Roadway Intersection (QRI), Displaced Left Turn (also known as a Continuous Flow Intersection or CFI), or Median U-Turn (MUT) score well at Boehne Camp Road. A Quadrant Roadway Intersection (QRI) or Displaced Left Turn (CFI) score well at Red Bank Road. It should also be noted that conventional intersection layouts score well at all three intersections. This indicates that, in theory, the current geometric layout of the intersections can function well, and other improvements such as auxiliary turn lanes may improve upon existing operating conditions.

It should be noted that the CAP-X tool is a high level analysis that looks at limited factors when ranking alternatives. More in depth analysis should be used in conjunction with the CAP-X tool to further scrutinize any alternative concepts.

Continuous Flow Intersection (CFI)

Under a CFI concept, the left turning vehicles are relocated to the far side of the opposing roadway, upstream of where they would turn left at a conventional intersection. The left turning vehicles travel on a roadway parallel to opposing traffic and execute a left turn simultaneously with through traffic at the primary intersection, eliminating the left turn phase for the approach at the primary intersection.

Full intersection CFI's at Schutte Road, Boehne Camp Road, and Red Bank Road were not considered as a preliminary alternative concept due to limited available right-of-way (ROW) and the presence of businesses along the north and south approaches to the intersections, particularly at Red Bank Road. For the same reasons, partial north-south CFI's were not considered. However, SR 62 provides greater pavement width and available ROW in its existing configuration. Implementing partial east-west CFI's along SR 62 would disrupt few parcels and access drives. Therefore, partial east-west CFI's at all three study intersections along SR 62 were considered as an alternative concept for the study.

The intersections of SR 62 and Red Bank Road, SR 62 and Boehne Camp Road, would have traditional partial east-west CFI configurations. The eastbound approach to SR 62 and Schutte Road would maintain its existing configuration, while the westbound approach would consist of a partial east-west CFI configuration that also facilitates eastbound u-turning vehicles. This is due to the location of the SR 62 and University Parkway interchange, which has ramps beginning and ending approximately 2,000 feet west of Schutte Road. Reconstruction of any part of the interchange is not advisable as part of this study, and therefore any alternative concepts need to avoid disturbing the ramps. Due to the close spacing of the University Parkway ramps and Schutte Road, there is not enough distance between the two intersections to install a CFI on the eastbound approach due to the required upstream crossover intersection. Therefore, eastbound left turning vehicles will continue straight through the intersection, and be served via a single U-turn lane at the upstream crossover intersection as part of the CFI

configuration on the westbound approach. After completing a U-Turn, the left turning vehicles will then make a right turn on Schutte Road, thus completing their intended movement.

This configuration replaces the existing intersection at each location with three intersections, which are all signalized, except for SR 62 and Schutte Road, which would replace the existing intersection with two signalized intersections. As the CFI's would only be implemented along the eastbound and westbound approaches, the northbound and southbound approaches would remain traditional intersection approaches. Under the proposed CFI scenario, the northbound and southbound approaches of Schutte Road and the southbound approach at Boehne Camp Road should all be expanded to provide separate left turn, through, and right turn lanes, if possible. The northbound and southbound approaches at Red Bank Road, and the northbound approach at Boehne Camp Road would remain as shown in the existing conditions, because they already have separate left turn, through, and right turn lanes. The upstream left turn cross overs for the CFI's along SR 62 would utilize single left turn lanes. The eastbound and westbound approaches of SR 62 at the intersections with Boehne Camp Road and Red Bank Road would retain two through lanes and a single dedicated right turn lane. The westbound approach of SR 62 at the intersection with Schutte would also retain two through lanes and a single dedicated right turn lane.

Quadrant Roadway Intersection (QRI)

A quadrant roadway intersection (QRI) removes all left turning traffic from the main intersection via a connecting "ring" roadway located within one of the intersection quadrants. This results in a two-phase main intersection, while the secondary intersections require three phases.

While scoring favorably for all three study intersections, a QRI was not considered at any of the study intersection locations as an alternative concept for this study due to the lack of open space and available right-of-way within the intersection quadrants. Each of the intersection quadrants at the three study intersections are vastly developed, leaving no room for a connection to a quadrant roadway without demolishing existing structures. In addition, QRI's are most implementable when the existing road network already has intersections or side streets that could be used or converted to support it, of which there is none near the subject intersections.

Median U-Turn (MUT)

A median U-Turn restricts all left turns at the main intersection. Left turning traffic from the cross street must turn right at the intersection, then make a U-turn across the mainline median to complete their turn. Left turns from the mainline drive through the intersection, make a U-turn across the median, then make a right turn at the intersection to complete their turn.

While median U-turn alternatives score well at Schutte Road and Boehne Camp Road, they score less favorably at Red Bank Road, with only a marginal improvement over conventional intersection configurations. This is because the median U-turn alternatives greatly inconvenience left turning vehicles, and SR 62 and Red Bank Road has a high volume of left turning vehicles drawn by the heavy commercial development north and south of SR 62. The severe impacts projected to the left turn movements at SR 62 & Red Bank Road eliminate a median U-turn scenario from consideration at this location.

Therefore, no median U-turn scenario was considered for Red Bank Road. However, a median U-turn scenario was analyzed for Schutte Road and Boehne Camp Road as a preliminary alternative concept.

The intersection of SR 62 and Boehne Camp Road would require dual median U-turn lanes for both the eastbound and westbound U-turn. Dual U-turn lanes are required due to the large number of U-turning vehicles, specifically in the PM peak period. This is because two left turn movements (southbound/westbound, and northbound/eastbound) are required to utilize each median U-turn to traverse the intersection and continue in their intended direction of travel. The intersection will also require dual northbound and southbound right turn lanes for the same reason. Would be northbound and southbound left turners are now required to first take a right turn, which effectively doubles the right turn volumes. The northbound and southbound approach would retain a single through lane of travel. The eastbound and westbound approaches would both have two through lanes of travel and dedicated right turn lanes, as is shown in the existing condition.

The intersection of SR 62 and Schutte Road would require dual westbound median U-turn lanes, but only a single eastbound median U-turn lane. Again, the dual median U-turn lane is required due to the volume of vehicles using the median U-turn. The northbound approach would have a single through lane of travel, with a dedicated right turn lane. The southbound approach would remain as shown in the existing conditions, providing for a shared through/right lane. The eastbound approach would provide a through and shared through/right lane, while the westbound approach would provide two through lanes of travel and a dedicated right turn lane, as is shown in existing conditions.

Restricted Crossing U-Turn (RCUT)

An RCUT intersection restricts both through movements and left turn movements from a cross street at the intersection with the mainline, and facilitates those movements via U-turns, much like the Median U-Turn concept. While Schutte Road, Boehne Camp Road and Red Bank Road are not major arterial roadways through Evansville, they are key access points along SR 62, which is an access controlled expressway. Restricting through movements from Red Bank Road at the intersection with SR 62 would likely not be received well by the public as the intersection of SR 62 and Red Bank Road is a heavily commercialized area, and businesses would be negatively impacted. Therefore, no RCUT scenario was considered for Red Bank Road.

There are approximately 50 and 130 through vehicles at SR 62 and Schutte Road and SR 62 and Boehne Camp Road during either peak hour, respectively. Restricting through movements at either of these intersections would not be as severe as restricting through movements from Red Bank Road. However, the through volumes are high enough that they would certainly add strain to the median U-turns, which already require dual U-turn lanes to facilitate left turns at the intersection. Therefore, RCUT scenarios were not analyzed for Schutte Road or Boehne Camp Road for preliminary alternative concepts. The median U-turn scenarios are conceptually similar to the RCUT scenarios, except the RCUT scenario would place even more strain on the median U-turn locations.

Lane Modifications

The southbound approach at SR 62 and Schutte Road, and the southbound approach at SR 62 and Boehne Camp Road are a shared, single lane. This configuration drastically impedes the operations of

these approaches since turning vehicles are required to share a lane with vehicles traveling through the intersection, which leads to through vehicles getting stuck behind turning vehicles as they wait for safe gaps in opposing traffic. When the existing lane geometry does not adequately serve the vehicle demand, more of the traffic signal cycle time is given to that approach in an effort to mitigate the delay, thereby taking overall cycle time away from the mainline SR 62 movements. In an effort to give the mainline SR 62 movements as much cycle time as possible, the side street approaches should have as much built capacity as possible, and be modified such that they provide separate left turn, through, and right turn lanes. The northbound and southbound approaches at Red Bank Road and the northbound approach at SR 62 and Boehne Camp Road already provide for separate left turn, through, and right turn lanes. Therefore, modifying the northbound and southbound approaches at SR 62 and Schutte Road and the southbound approach at SR 62 and Boehne Camp Road to have separate left turn, through, and right turn lanes was considered as an alternative concept for this study.

Access Management

As a best practice, access management policies should be enacted along this portion of SR 62 and be included in any alternative concept by closing unsignalized access points, or at a minimum restricting unsignalized access points to right-in right-out (RIRO) access only. These policies are particularly important near heavily developed commercial areas, like the area along SR 62 east of Red Bank Road. Most of the crashes along SR 62 within the study area consist of rear end and right angle crashes. Rear end crashes can happen easily if a vehicle enters SR 62 from an unsignalized access drive. Turning vehicles may not have enough time or space to accelerate within the gaps in the mainline traffic stream to avoid a collision. Additionally, right angle crashes can easily occur if left turning vehicles from an unsignalized access drive do not have enough time or space to safely cross the mainline traffic stream to avoid a collision.

Specifically, consideration should be given to closing the existing RIRO drive east of Red Bank Road should a CFI be implemented at SR 62 & Red Bank Road. The westbound left turn cross over intersection upstream of Red Bank Road would be located approximately 500 feet east of Red Bank Road, which would be 300 feet west of the existing RIRO access. The INDOT Driveway Permit Manual, the standard for intersection and access spacing according to the INDOT Access Management Guide, suggests that an upstream clearance of at least 570 feet is desired for highways with a speed limit of 50 mph, but at a minimum should be at least 440 feet. Therefore, the existing RIRO would no longer be in compliance with recommended access management guidelines. A network of internal roadways exists south of SR 62 such that vehicles would still have access to SR 62 should the RIRO access be closed.

Consideration should be given to closing the intersection of Weston Road with Red Bank Road, located approximately 170 feet north of SR 62. The INDOT Driveway Permit Manual suggests that an upstream clearance of at least 250 feet is desired for roadways with a speed limit of 30 mph, but at a minimum should be at least 190 feet. This would be particularly beneficial should the southbound approach turn lanes ever require extension. A network of internal development roadways exists west of Red Bank Road such that vehicles would still have access to Red Bank Road should the access at Weston Road be terminated.

Consideration should be given to closing the existing full access drive at Felstead Road, east of Schutte Road, should a CFI or MUT be implemented at SR 62 & Schutte Road. The westbound left turn cross over or U-turn intersection upstream of Schutte Road would be located approximately 500 feet east of Schutte Road, which would be approximately 400 feet west of the existing RIRO access at Felstead Road. The INDOT Driveway Permit Manual suggests that an upstream clearance of at least 570 feet is desired for highways with a speed limit of 50 mph, but at a minimum should be at least 440 feet. Therefore, the existing full access drive would no longer be in compliance with recommended access management guidelines. Vehicles could still access SR 62 via Schutte Road by way of Stellar Drive. If this option is not acceptable to surrounding stakeholders, an additional connection should be explored to connect Felstead Road to Schutte Road to facilitate access to SR 62.

It is acknowledged that some of these facilities are outside of INDOT control. Every effort should be taken to achieve current access management standards as part of any roadway improvement project. However, the implementation of the preferred alternative should not be contingent upon the successful negotiation of these access management considerations.

PRELIMINARY ALTERNATIVE CONCEPT ANALYSIS

The following preliminary alternative concepts were selected for analysis:

- Lane Modifications (Schutte Road/Boehne Camp Road)
- Partial east-west CFI (Schutte Road/Boehne Camp Road/Red Bank Road)
- Median U-Turn (Schutte Road/Boehne Camp Road/[Red Bank Road CFI])

Preliminary conceptual drawings for the three alternative concepts at the study intersections can be found included in the Appendix.

Preliminary Alternative Concept Operating Conditions

The preliminary alterative concepts need to perform well throughout the future design period, which is assumed to be 2040. A preliminary Synchro analysis was conducted for each alternative concept during the weekday morning and afternoon commuter peak hours using the Baseline 2040 traffic volumes shown in **Figure 12.**

Similar to existing conditions, the preliminary alternative concept operating conditions were analyzed using Synchro 10, with LOS, delay, 95th percentile queue, and volume-to-capacity ratio as the measures of effectiveness. The impacts of the various alternatives are compared in **Table 8**, and highlight the percent reduction in overall intersection delay as compared from 2019 existing conditions to 2040 forecasted conditions. **Table 9**, **Table 10**, and **Table 11** present the Preliminary Alternative Concept operating conditions for each intersection, respectively. The Preliminary Alternative Concept operating conditions Synchro reports can be found in the Appendix.

Existing cycle lengths were used in the preliminary analysis signal timings. Capacity and queue values are very sensitive to signal timing parameters. The long cycle lengths for the AM and PM peak periods (114 and 150 seconds, respectively) may be restrictive to the operations of the CFI and Median U-turn concepts, which may function better with lower cycle lengths if the SR 62 left turn phases are removed. SR 62 is a coordinated system, which is why the existing cycle length was retained for this preliminary

analysis. However, if any of the study intersections were the controlling intersection along the system, and the current lane configuration is dictating the long cycle length, then improving these three intersections may allow for a decrease in cycle length. A decrease in cycle length could further improve the operations of the preliminary alternative concepts from those shown in the following tables; as well as, benefiting the remaining intersections along the entire coordinated signal system. **Table H.1** and **Table H.2**, which are included in the Appendix, show an example of the improvements possible with reduced cycle lengths (90 seconds). It is recommended that, in conjunction with the selected preferred alternative, a Signal Coordination and Timing (SCAT) study be prepared for the SR 62 corridor to review and optimize signal operations for a study area greater than the scope of this study.

Table 8: Alternative Concept Comparison

Intersection	Alternative Concept Impacts (Reduction in Overall Intersection Delay from 2019 to 2040)		
	Lane Modifications	CFI	MUT (CFI at Red Bank)
Schutte Road			
AM Peak Period	20%	20%	53%
PM Peak Period	44%	53%	68%
Boehne Camp Road			
AM Peak Period	64%	76%	86%
PM Peak Period	17%	54%	31%
Red Bank Road			
AM Peak Period	0%	59%	59%
PM Peak Period	0%	38%	38%

Table 9: Preliminary Alternative Concept Year 2040 Operating Conditions – Lane Reconfiguration		
Approach/Movement	**LOS (Delay, sec) [Queue Length, feet] <v/c ratio>**	
	Option 1 - Lane Reconfiguration	
	AM Peak Period	**PM Peak Period**
SR 62 and Schutte Road		
Eastbound Approach	***C (20.5)***	***C (21.1)***
Left Turn	D (53.4) [26] <0.12>	E (73.1) [37] <0.16>
Through/Right	C (20.1) [406] <0.62>	C (20.6) [642] <0.65>
Westbound Approach	***A (7.5)***	***B (14.1)***
Left Turn	E (74.3) [m83] <0.53>	F (83.1) [m198] <0.78>
Through	A (4.1) [91] <0.55>	A (5.2) [516] <0.47>
Right Turn	A (0.1) [m0] <0.04>	A (0.3) [m1] <0.02>
U-Turn	A (0.1) [m0] <0.04>	A (0.3) [m1] <0.02>
Northbound Approach	***B (18.9)***	***C (23.8)***
Left Turn	D (36.3) [29] <0.08>	E (62.7) [66] <0.23>
Through	D (36.8) [47] <0.12>	E (59.0) [47] <0.11>
Right Turn	A (5.5) [14] <0.22>	B (13.9) [77] <0.59>
Southbound Approach	***D (51.3)***	***E (63.8)***
Left Turn	E (63.5) [168] <0.78>	E (78.5) [108] <0.58>
Through	D (35.8) [29] <0.07>	E (59.6) [41] <0.13>
Right Turn	A (0.6) [0] <0.11>	A (0.4) [0] <0.06>
Overall Intersection	**B (17.3)**	**B (19.9)**
SR 62 and Boehne Camp Road		
Eastbound Approach	***B (12.0)***	***C (24.0)***
Left Turn	E (67.7) [m59] <0.42>	F (90.9) [m83] <0.53>
Through	B (11.3) [154] <0.67>	C (25.8) [894] <0.81>
Right Turn	A (0.5) [m2] <0.16>	A (6.8) [136] <0.40>
U-Turn	A (0.5) [m2] <0.16>	A (6.8) [136] <0.40>
Westbound Approach	***D (40.6)***	***C (28.8)***
Left Turn	D (53.5) [m80] <0.55>	E (71.1) [m89] <0.52>
Through	D (41.8) [533] <0.67>	C (28.6) [m572] <0.58>
Right Turn	A (6.3) [m21] <0.08>	A (4.4) [m24] <0.09>
U-Turn	A (6.3) [m21] <0.08>	A (4.4) [m24] <0.09>
Northbound Approach	***D (40.4)***	***E (67.5)***
Left Turn	D (46.4) [136] <0.57>	F (84.2) [#376] <0.91>
Through	E (60.1) [90] <0.43>	E (60.1) [123] <0.25>
Right Turn	A (1.6) [0] <0.19>	A (1.0) [0] <0.17>

Table 9: Preliminary Alternative Concept Year 2040 Operating Conditions – Lane Reconfiguration		
Approach/Movement	**LOS (Delay, sec) [Queue Length, feet] <v/c ratio>**	
	Option 1 - Lane Reconfiguration	
	AM Peak Period	**PM Peak Period**
SR 62 and Boehne Camp Road (continued)		
Southbound Approach	***D (43.6)***	***D (47.1)***
Left Turn	D (54.5) [149] <0.74>	D (52.7) [79] <0.35>
Through	E (59.3) [94] <0.62>	E (72.3) [100] <0.56>
Right Turn	A (7.2) [0] <0.40>	A (2.5) [0] <0.22>
Overall Intersection	**C (29.1)**	**C (31.1)**
SR 62 and Red Bank Road		
Eastbound Approach	***D (44.2)***	***D (44.5)***
Left Turn	D (47.9) [m87] <0.54>	E (60.6) [m159] <0.73>
Through	D (45.5) [679] <0.85>	D (45.2) [604] <0.79>
Right Turn	A (1.4) [m0] <0.06>	B (13.5) [m42] <0.12>
Westbound Approach	***C (25.1)***	***D (38.3)***
Left Turn	E (56.9) [79] <0.49>	E (79.9) [#282] <0.87>
Through	C (22.7) [336] <0.60>	C (25.8) [471] <0.58>
Right Turn	A (0.2) [0] <0.08>	A (3.3) [37] <0.15>
Northbound Approach	***C (30.5)***	***F (113.9)***
Left Turn	D (40.2) [91] <0.36>	F (130.0) [#319] <1.05>
Through	D (44.5) [67] <0.23>	F (89.7) [#253] <0.88>
Right Turn	B (19.3) [102] <0.60>	F (124.2) [#520] <1.17>
Southbound Approach	***D (35.3)***	***F (83.8)***
Left Turn	D (49.4) [166] <0.62>	F (90.7) [#280] <0.90>
Through	D (43.8) [77] <0.25>	F (116.1) [#350] <1.03>
Right Turn	A (4.7) [24] <0.31>	B (19.4) [115] <0.64>
Overall Intersection	**D (35.4)**	**E (62.4)**

Table 10: Preliminary Alternative Concept Year 2040 Operating Conditions – CFI		
Approach/Movement	**LOS (Delay, sec) [Queue Length, feet] <v/c ratio>**	
	Option 2 - CFI	
	AM Peak Period	**PM Peak Period**
SR 62 and Schutte Road – Main Intersection		
Eastbound Approach	***C (20.5)***	***C (21.1)***
Through	B (10.5) [246] <0.51>	B (13.6) [500] <0.57>
Westbound Approach	***B (16.5)***	***B (17.0)***
Through	B (16.9) [434] <0.52>	B (17.6) [558] <0.49>
Right Turn	A (0.8) [1] <0.03>	A (0.8) [2] <0.03>
Northbound Approach	***C (20.9)***	***B (10.2)***
Left Turn	D (35.9) [29] <0.10>	D (43.9) [54] <0.12>
Through	D (54.7) [57] <0.28>	E (55.1) [45] <0.09>
Right Turn	A (0.1) [0] <0.05>	A (0.2) [0] <0.13>
Southbound Approach	***D (42.8)***	***D (42.2)***
Left Turn	D (51.4) [157] <0.67>	D (47.7) [87] <0.29>
Through	D (43.9) [34] <0.07>	D (53.5) [39] <0.07>
Right Turn	A (0.8) [0] <0.11>	A (0.3) [0] <0.05>
Westbound CFI Left Turn	***A (3.2)***	***B (15.5)***
Left Turn	A (3.2) [0] <0.06>	B (15.5) [258] <0.13>
Overall Intersection	**B (16.2)**	**B (15.9)**
SR 62 and Schutte Road – East Intersection		
Eastbound Approach	***A (2.7)***	***A (2.5)***
Through	A (2.2) [62] <0.47>	A (1.9) [44] <0.52>
U-Turn	E (59.2) [m16] <0.08>	E (72.8) [m23] <0.05>
Westbound Approach	***A (8.7)***	***B (17.6)***
Left Turn	D (53.1) [82] <0.48>	E (65.0) [206] <0.70>
Through	A (6.4) [225] <0.44>	B (11.4) [451] <0.44>
Northbound Approach	***A (9.5)***	***E (60.2)***
Right Turn	A (9.5) [14] <0.37>	E (60.2) [222] <0.77>
Overall Intersection	**A (5.7)**	**B (13.2)**
SR 62 and Boehne Camp Road – Main Intersection		
Eastbound Approach	***C (22.8)***	***B (17.3)***
Through	C (25.0) [538] <0.53>	C (21.2) [618] <0.73>
Right Turn	A (3.6) [46] <0.11>	A (0.8) [6] <0.27>
U-Turn	A (3.6) [46] <0.11>	A (0.8) [6] <0.27>

Table 10: Preliminary Alternative Concept Year 2040 Operating Conditions – CFI		
Approach/Movement	LOS (Delay, sec) [Queue Length, feet] <v/c ratio>	
	Option 2 - CFI	
	AM Peak Period	PM Peak Period
SR 62 and Boehne Camp Road – Main Intersection (continued)		
Westbound Approach	***A (9.2)***	***A (8.4)***
Through	A (9.6) [187] <0.53>	A (9.0) [155] <0.52>
Right Turn	A (0.6) [4] <0.05>	A (0.3) [3] <0.07>
U-Turn	A (0.6) [4] <0.05>	A (0.3) [3] <0.07>
Northbound Approach	***D (35.4)***	***D (43.0)***
Left Turn	D (42.8) [130] <0.49>	D (50.6) [326] <0.65>
Through	D (49.2) [83] <0.29>	D (50.6) [108] <0.19>
Right Turn	A (0.0) [0] <0.03>	A (0.0) [0] <0.04>
Southbound Approach	***D (41.4)***	***D (44.5)***
Left Turn	D (54.9) [142] <0.74>	D (42.4) [70] <0.25>
Through	E (57.0) [97] <0.54>	E (76.0) [109] <0.45>
Right Turn	A (0.1) [0] <0.07>	A (0.0) [0] <0.03>
Eastbound CFI Left Turn	***A (8.6)***	***A (6.9)***
Left Turn	A (8.6) [76] <0.04>	A (6.9) [108] <0.05>
Westbound CFI Left Turn	***A (8.1)***	***C (24.8)***
Left Turn	A (8.1) [91] <0.05>	C (24.8) [108] <0.05>
Overall Intersection	**C (20.5)**	**B (18.3)**
SR 62 and Boehne Camp Road – West Intersection		
Eastbound Approach	***A (1.5)***	***A (2.3)***
Left Turn	D (38.3) [63] <0.23>	E (69.3) [m101] <0.41>
Through	A (0.3) [0] <0.39>	A (1.2) [0] <0.56>
Westbound Approach	***A (2.1)***	***A (1.2)***
Through	A (2.1) [49] <0.49>	A (1.2) [56] <0.47>
Southbound Approach	***C (22.0)***	***A (2.2)***
Right Turn	C (22.0) [38] <0.46>	A (2.2) [0] <0.21>
Overall Intersection	**A (2.6)**	**A (2.3)**
SR 62 and Boehne Camp Road – East Intersection		
Eastbound Approach	***A (2.6)***	***A (1.8)***
Through	A (2.6) [88] <0.47>	A (1.8) [27] <0.65>
Westbound Approach	***A (2.6)***	***A (2.6)***
Left Turn	D (48.3) [86] <0.32>	E (58.3) [m92] <0.15>
Through	A (0.3) [0] <0.37>	A (0.2) [0] <0.35>

Table 10: Preliminary Alternative Concept Year 2040 Operating Conditions – CFI		
Approach/Movement	**LOS (Delay, sec) [Queue Length, feet] <v/c ratio>**	
	Option 2 - CFI	
	AM Peak Period	**PM Peak Period**
SR 62 and Boehne Camp Road – East Intersection (continued)		
Northbound Approach	***B (11.9)***	***C (24.7)***
Right Turn	B (11.9) [15] <0.29>	C (24.7) [64] <0.18>
Overall Intersection	**A (2.8)**	**A (2.6)**
SR 62 and Red Bank Road – Main Intersection		
Eastbound Approach	***B (10.8)***	***A (2.8)***
Through	B (11.1) [238] <0.65>	C (34.8) [495] <0.71>
Right Turn	A (0.8) [5] <0.04>	A (5.5) [40] <0.10>
Westbound Approach	***B (11.7)***	***C (25.5)***
Through	B (12.4) [253] <0.45>	C (28.4) [493] <0.57>
Right Turn	A (1.1) [11[<0.06>	A (2.5) [31] <0.13>
Northbound Approach	***B (19.0)***	***C (20.1)***
Left Turn	C (33.5) [85] <0.27>	D (35.4) [168] <0.54>
Through	D (44.0) [65] <0.24>	D (38.8) [156] <0.28>
Right Turn	A (0.2) [0] <0.14>	A (0.4) [0] <0.27>
Southbound Approach	***C (30.3)***	***C (27.7)***
Left Turn	D (39.5) [153] <0.51>	C (33.0) [167] <0.46>
Through	D (44.5) [76] <0.27>	D (40.5) [205] <0.37>
Right Turn	A (0.1) [0] <0.07>	A (0.2) [0] <0.14>
Eastbound CFI Left Turn	***B (11.9)***	***D (42.3)***
Left Turn	B (11.9) [117] <0.07>	D (42.3) [209] <0.14>
Westbound CFI Left Turn	***B (11.4)***	***D (48.7)***
Left Turn	B (11.4) [167] <0.12>	D (48.7) [576] <0.49>
Overall Intersection	**B (14.3)**	**C (29.4)**
SR 62 and Red Bank Road – West Intersection		
Eastbound Approach	***A (2.8)***	***C (32.8)***
Left Turn	D (49.8) [115] <0.33>	C (30.4) [m153] <0.23>
Through	A (0.3) [0] <0.42>	A (0.3) [0] <0.39>
Westbound Approach	***A (1.6)***	***A (7.1)***
Through	A (1.6) [31] <0.40>	A (7.1) [107] <0.56>
Southbound Approach	***A (5.2)***	***C (33.2)***
Right Turn	A (5.2) [25] <0.33>	C (33.2) [209] <0.44>
Overall Intersection	**A (2.5)**	**A (6.9)**

Table 10: Preliminary Alternative Concept Year 2040 Operating Conditions – CFI		
Approach/Movement	**LOS (Delay, sec) [Queue Length, feet] <v/c ratio>**	
	Option 2 - CFI	
	AM Peak Period	**PM Peak Period**
SR 62 and Red Bank Road – East Intersection		
Eastbound Approach	***A (2.9)***	***A (7.1)***
Through	A (2.9) [71] <0.60>	A (7.1) [113] <0.69>
Westbound Approach	***A (5.8)***	***B (15.2)***
Left Turn	D (53.0) [147] <0.52>	E (56.6) [491] <0.77>
Through	A (0.2) [0] <0.30>	A (0.2) [0] <0.33>
Northbound Approach	***D (54.0)***	***E (60.1)***
Right Turn	D (54.0) [194] <0.77>	E (60.1) [505] <0.84>
Overall Intersection	**A (7.5)**	**B (17.4)**

Table 11: Preliminary Alternative Concept Year 2040 Operating Conditions – MUT		
Approach/Movement	**LOS (Delay, sec) [Queue Length, feet] <v/c ratio>**	
	Option 3 - MUT	
	AM Peak Period	**PM Peak Period**
SR 62 and Schutte Road – Main Intersection		
Eastbound Approach	***A (6.9)***	***A (7.8)***
Through	A (6.9) [161] <0.56>	A (7.8) [192] <0.61>
Westbound Approach	***A (4.6)***	***A (3.8)***
Through	A (4.7) [93] <0.51>	A (3.9) [92] <0.52>
Right Turn	A (1.0) [1] <0.04>	A (0.5) [m1] <0.03>
Northbound Approach	***C (27.2)***	***E (65.1)***
Through	D (38.3) [46] <0.13>	D (50.0) [42] <0.07>
Right Turn	C (22.7) [59] <0.34>	E (66.5) [271] <0.80>
Southbound Approach	***D (47.5)***	***C (32.9)***
Through	D (47.5) [155] <0.77>	C (32.9) [85] <0.39>
Overall Intersection	**B (10.1)**	**B (11.3)**
SR 62 and Schutte Road – West Intersection		
Eastbound Approach	***A (7.6)***	***A (9.1)***
Through	A (7.6) [246] <0.43>	A (9.1) [423] <0.54>
Westbound Approach	***A (7.3)***	***B (10.1)***
Through	A (0.2) [0] <0.32>	A (0.3) [0] <0.37>
U-Turn	D (45.7) [113] <0.37>	E (64.9) [165] <0.43>
Overall Intersection	**A (7.4)**	**A (9.6)**
SR 62 and Schutte Road – East Intersection		
Eastbound Approach	***A (1.2)***	***A (1.9)***
Through	A (0.3) [0] <0.38>	A (0.4) [0] <0.48>
U-Turn	D (46.7) [m37] <0.09>	E (61.0) [m68] <0.16>
Westbound Approach	***A (6.5)***	***B (11.0)***
Through	A (6.5) [311] <0.46>	B (11.0) [552] <0.55>
Overall Intersection	**A (3.7)**	**A (6.1)**
SR 62 and Boehne Camp Road – Main Intersection		
Eastbound Approach	***A (5.4)***	***C (20.9)***
Through	A (6.0) [98] <0.54>	C (23.9) [725] <0.73>
Right Turn	A (0.9) [5] <0.16>	B (11.8) [178] <0.50>
Westbound Approach	***A (4.9)***	***A (8.9)***
Through	A (5.2) [126] <0.55>	B (10.1) [187] <0.69>
Right Turn	A (0.8) [3] <0.10>	A (1.0) [14] <0.22>

Table 11: Preliminary Alternative Concept Year 2040 Operating Conditions – MUT		
Approach/Movement	**LOS (Delay, sec) [Queue Length, feet] <v/c ratio>**	
	Option 3 - MUT	
	AM Peak Period	**PM Peak Period**
SR 62 and Boehne Camp Road – Main Intersection (continued)		
Northbound Approach	***C (32.9)***	***D (47.4)***
Through	D (42.1) [76] <0.21>	D (46.4) [316] <0.53>
Right Turn	C (29.8) [78] <0.37>	D (47.9) [332] <0.69>
Southbound Approach	***D (44.1)***	***D (50.1)***
Through	D (46.2) [89] <0.39>	E (59.0) [477] <0.80>
Right Turn	D (43.3) [98] <0.68>	D (41.2) [221] <0.52>
Overall Intersection	**B (11.3)**	**C (25.8)**
SR 62 and Boehne Camp Road – West Intersection		
Eastbound Approach	***B (17.2)***	***C (23.8)***
Through	B (17.2) [611] <0.54>	C (23.8) [675] <0.68>
Westbound Approach	***A (6.1)***	***B (16.9)***
Through	A (0.3) [0] <0.37>	A (0.3) [0] <0.41>
U-Turn	D (43.2) [106] <0.40>	E (56.4) [362] <0.61>
Overall Intersection	**B (11.4)**	**B (19.8)**
SR 62 and Boehne Camp Road – East Intersection		
Eastbound Approach	***A (6.2)***	***A (6.5)***
Through	A (0.3) [0] <0.40>	A (0.4) [0] <0.54>
U-Turn	D (53.2) [100] <0.34>	D (43.8) [163] <0.30>
Westbound Approach	***A (5.8)***	***C (23.9)***
Through	A (5.8) [158] <0.47>	C (23.9) [860] <0.73>
Overall Intersection	**A (6.0)**	**B (13.8)**
SR 62 and Red Bank Road – Main Intersection		
Eastbound Approach	***B (10.7)***	***D (39.2)***
Through	B (11.0) [250] <0.65>	D (41.3) [742] <0.71>
Right Turn	A (0.6) [4] <0.04>	B (10.4) [65] <0.10>
Westbound Approach	***B (11.7)***	***C (25.5)***
Through	B (12.4) [253] <0.45>	C (28.4) [493] <0.57>
Right Turn	A (1.1) [11] <0.06>	A (2.5) [31] <0.13>
Northbound Approach	***B (19.0)***	***C (20.1)***
Left Turn	C (33.5) [85] <0.27>	D (35.4) [168] <0.54>
Through	D (44.0) [65] <0.24>	D (38.8) [156] <0.28>
Right Turn	A (0.2) [0] <0.14>	A (0.4) [0] <0.27>

Table 11: Preliminary Alternative Concept Year 2040 Operating Conditions – MUT		
Approach/Movement	**LOS (Delay, sec) [Queue Length, feet] <v/c ratio>**	
	Option 3 - MUT	
	AM Peak Period	**PM Peak Period**
SR 62 and Red Bank Road – Main Intersection (continued)		
Southbound Approach	***C (30.3)***	***C (27.7)***
Left Turn	D (39.5) [153] <0.51>	C (33.0) [167] <0.46>
Through	D (44.5) [76] <0.27>	D (40.5) [205] <0.37>
Right Turn	A (0.1) [0] <0.07>	A (0.2) [0] <0.14>
Eastbound CFI Left Turn	***B (11.6)***	***D (38.0)***
Left Turn	B (11.6) [115] <0.07>	D (38.0) [209] <0.14>
Westbound CFI Left Turn	***B (11.4)***	***D (48.7)***
Left Turn	B (11.4) [167] <0.12>	D (48.7) [576] <0.49>
Overall Intersection	**B (14.2)**	**C (31.1)**
SR 62 and Red Bank Road – West Intersection		
Eastbound Approach	***A (2.8)***	***A (2.7)***
Left Turn	D (48.8) [106] <0.33>	C (28.5) [107] <0.23>
Through	A (0.3) [0] <0.42>	A (0.4) [0] <0.39>
Westbound Approach	***A (1.6)***	***A (7.1)***
Through	A (1.6) [31] <0.40>	A (7.1) [107] <0.56>
Southbound Approach	***A (5.2)***	***C (33.2)***
Right Turn	A (5.2) [25] <0.33>	C (33.2) [209] <0.44>
Overall Intersection	**A (2.4)**	**A (6.9)**
SR 62 and Red Bank Road – East Intersection		
Eastbound Approach	***A (2.9)***	***A (7.1)***
Through	A (2.9) [71] <0.60>	A (7.1) [113] <0.69>
SR 62 and Red Bank Road – East Intersection (continued)		
Westbound Approach	***A (5.8)***	***B (15.2)***
Left Turn	D (53.0) [147] <0.52>	E (56.6) [491] <0.77>
Through	A (0.2) [0] <0.30>	A (0.2) [0] <0.33>
Northbound Approach	***D (54.0)***	***E (60.1)***
Right Turn	D (54.0) [194] <0.77>	E (60.1) [505] <0.84>
Overall Intersection	**A (7.5)**	**B (17.4)**

PRELIMINARY ALTERNATIVE CONCEPTS SCREENING SUMMARY

"The Initial, Feasibility Screening" flow chart found in the INDOT Intersection Decision Guide was referenced throughout the preliminary alternative concepts selection process to test each option for feasibility. A summary of the contents of the "Initial, Feasibility Screening" flow chart is summarized below. Included within the summary is a statement about each preliminary alternative concept and the ability of that concept to meet the stated feasibility criteria.

1. **Is it feasible and reasonable given site and geometric characteristics; notably right-of-way constraints, sheer nature of the junction, and presence or absence of median potential?**

Lane Modifications – Requires new ROW to be obtained along the northbound and southbound approaches at Schutte Road. Impacts are anticipated to a church, an apartment complex, and residential properties.

CFI – Requires new ROW in the southeast quadrant of SR 62 & Red Bank Road. Minimal ROW is required in the northwest and southeast quadrants of the SR 62 & Boehne Camp Road intersection. If side streets are also improved to provide separate left, through, and right turn lanes, new ROW will need to be obtained along the northbound and southbound approaches at Schutte Road. Impacts would be anticipated to a church, an apartment complex, and residential properties.

MUT – This alternative was only reviewed at Schutte Road and Boehne Camp Road. No additional ROW is required at either intersection.

2. **Is there a realistic expectation it will address essential project intent and does it do so in a manner in balance with the scale of the problem?**

Lane Modifications – Improves overall intersection delay during the Forecasted 2040 condition, as compared to the Existing 2019 conditions, by approximately 20% and 44% at SR 62 and Schutte Road, and 64% and 17% at SR 62 and Boehne Camp Road in the AM and PM peaks, respectively. There would be no improvements to operations at SR 62 and Red Bank Road since the existing and proposed geometric configuration is the same.

CFI – Improves overall intersection delay during the Forecasted 2040 condition, as compared to the Existing 2019 conditions, by approximately 20% and 53% at SR 62 and Schutte Road, 76% and 54% at SR 62 and Boehne Camp Road, and 59% and 38% at SR 62 and Red Bank Road in the AM and PM peaks, respectively. A CFI is the preferred option at Red Bank Road. An east-west CFI at SR 62 and Red Bank would allow the left turn movements to benefit from the same cycle time that the through movements are allowed, which greatly increases their cycle share over the current conventional intersection configuration. With the added cycle time, a dual westbound left turn lane is no longer required, which means that the westbound left turn weaving issue related to Pearl Drive can be eliminated with the implementation of a CFI.

MUT – Improves overall intersection delay during the Forecasted 2040 condition, as compared to the Existing 2019 conditions, by approximately 53% and 68% at SR 62 and Schutte Road, and 86% and 31%

at SR 62 and Boehne Camp Road in the AM and PM peaks, respectively. A MUT is not an option at Red Bank Road due to the severe impacts projected to the heavy left turn movements.

3. Does it likely improve or preserve existing state of performance relative to traffic safety, irrespective of essential project intent, be it mobility or safety?

Lane Modifications – Modifying the existing northbound and southbound approaches at SR 62 and Schutte Road and the southbound approach at SR 62 and Boehne Camp Road to dedicated left turn/through/right turn lanes may help reduce crashes at the intersection. The crash modification factor (CMF) for the addition of a left turn lane at a four leg signalized intersection is 0.924. The CMF's for the installation of a right turn lane are very close to 1.0 for overall crashes, which indicates that there may not be a significant reduction in overall crashes from installing a right turn lane at a four leg signalized intersection. However, installing a right turn lane has a CMF of 0.70 for rear end crashes, which means that rear end crashes could potentially be reduced by up to 30% on approaches where a dedicated right turn lane was installed.

CFI –A partial CFI has 28 conflict points, as compared to the 32 with a conventional intersection. This reduction in conflict points may improve safety performance of the intersection, although safety data studying this effect is limited for partial CFI applications. The Alternative Intersections/Interchanges: Informational Report (AIIR) dated April 2010, suggests a CMF of 0.76 is appropriate for a full CFI. Therefore, for a partial CFI, the expected crash reduction would be up to half the benefit of the full CFI, with a CMF of 0.88.

MUT – From a safety perspective, the main intersection signal is simplified with the removal of left turning movements, and there are fewer conflict points at the main intersections than at a conventional intersection. According to the INDOT Intersection Decision Guide, replacement of a conventional intersection by a Median U-Turn can reduce the total crash frequency by up to 25-50%.

All crash modification factors were obtained from the Crash Modification Factor Clearinghouse: http://www.cmfclearinghouse.org/

4. Is it feasible and reasonable with respect to all other factors:

- Initial capital and recurring costs
- Stakeholders, customers
- Project development time
- Continuity, uniformity
- Environmental impacts
- Utility impacts
- Additional factors

Lane Modification

- Initial costs to construct:
  - **Schutte Road/SR 62**
    - Construction $940,000
    - Utility - $75,000
    - R/W Acquisition - $10,000
    - Preliminary Engineering and R/W Engineering/Services - $250,000

        - Construction Inspection - $120,000
        - **Total Estimated Cost - $1,395,000**
    - **Boehne Camp Road/SR 62**
        - Construction $630,000
        - Utility - $25,000
        - Preliminary Engineering $150,000
        - Construction Inspection - $80,000
        - **Total Estimated Cost - $885,000**
- Addition of Turn lanes at Schutte Road will require R/W acquisition, potential Utility Conflicts, and will include the construction of a retaining wall to avoid apartments in SE quadrant.
- Modifications at Boehne Camp road are not anticipated to require any additional R/W. The potential for utility conflicts exist.
- Driver expectancy would remain the same, as the function of each study intersection would not drastically change.
- Public involvement would be minimal in implementing lane modifications, as adding auxiliary turn lanes is a common improvement requiring little to no change in traffic patterns.
- Pedestrian accommodations are not currently provided at any of the intersections within the study area. Should they be desired, pedestrians would be accommodated the same as at a conventional intersection under the proposed lane modifications.
- Lane modifications at Schutte Road and Boehne Camp Road would require less than 0.5 acres of R/W and therefore a Categorical Exclusion Level 1 (CE-1) environmental document is anticipated to be required for each project. The improvements at Schutte Road may disturb more than 1 acre and require an IDEM Rule 5 Permit. No permits are anticipated to be required at the Boehne Camp Road Intersection.
- It appears overhead and underground utilities would be impacted at the SR 62 and Schutte Road and SR 62 and Boehne Camp Road intersections.
- The existing signalized intersections at Schutte Road and Boehne Camp Road are not lighted. Installing intersection lighting has a CMF of 0.88, which translates to a potential 12% reduction in all nighttime crash types. Lighting of the intersections would help improve safety and is recommended.

<u>CFI</u>

- Initial costs to construct:
    - **Schutte Road/SR 62**
        - Construction $3,570,000
        - Utility - $75,000
        - R/W Acquisition - $10,000
        - Preliminary Engineering and R/W Engineering/Services - $800,000
        - Construction Inspection - $450,000
        - **Total Estimated Cost - $4,905,000**
    - **Boehne Camp Road/SR 62**
        - Construction $3,170,000
        - Utility - $75,000
        - R/W Acquisition - $10,000
        - Preliminary Engineering and R/W Engineering/Services - $680,000
        - Construction Inspection - $400,000

        - **Total Estimated Cost - $4,335,000**
    - **Red Bank Road/SR 62**
        - Construction $4,380,000
        - Utility - $25,000
        - R/W Acquisition - $5,000
        - Preliminary Engineering and R/W Engineering/Services - $910,000
        - Construction Inspection - $550,000
        - **Total Estimated Cost - $5,870,000**
- Modifications at Schutte Road will require R/W acquisition, potential Utility Conflicts, and will include the construction of a retaining wall to avoid apartments in SE quadrant.
- Modifications at Boehne Camp Road will require R/W acquisition, potential Utility Conflicts, and will include the construction of a retaining wall in NW and SE quadrants.
- Modifications at Red Bank Road will require R/W acquisition, potential Utility Conflicts, and will include the construction of a retaining wall to avoid commercial business in SE quadrant.
- The CFI's would have initial costs to construct the parallel left turn roadways, as well as increased recurring costs to maintain the extra pavement.
- Driver expectancy would be relatively the same, as the northbound and southbound approaches would not change under this concept, and the eastbound and westbound left turning vehicles would still complete their intended turning movements within the vicinity of the main intersections.
- Public involvement would be key to successfully implementing the partial east-west CFI's, as this intersection configuration is new to the surrounding area. Allowing enough time to educate and familiarize the motoring public with the new intersection configuration, including through the construction phases, should be included in the project development timeline.
- The project will result in permanent traffic alterations by having the left turn movement separated and moved prior to the intersection and therefore a Categorical Exclusion Level 4 (CE-4) environmental document will be required. The improvements at Schutte, Boehne Camp, and Red Bank may disturb more than 1 acre and require an IDEM Rule 5 Permit. No other permits are anticipated.
- Tree removal and roadside ditch reconstruction would be included in the construction of the CFI's. Additionally, it appears that overhead and underground utilities would be impacted in the quadrants of each intersection during construction.
- Pedestrian accommodations are not currently provided at any of the intersections within the study area. It should be noted that if pedestrian accommodations are desired, pedestrians may suffer from this configuration as they will be required to traverse two additional lanes to cross SR 62. However, the configuration of a CFI is such that pedestrian refuge islands can be implemented to aide safe pedestrian crossings. The presence of a pedestrian refuge island would afford pedestrians the opportunity to cross SR 62 in two stages, which is ideal for less confident members of the non-motoring public that may use this intersection.
- Rear end crashes are by far the most frequent crash type throughout the study area, which is indicative of a congested corridor. Implementing CFI's at the study intersections would allow the cycle time currently used for eastbound and westbound left turn movements to be given to the mainline SR 62 movements. This could help decrease delay and congestion experienced along SR 62, and in turn assist in reducing rear end crashes along the corridor.
- Another expressed concern at SR 62 and Red Bank Road is the interaction of the westbound left turn movement in relation to Pearl Drive south of SR 62. Pearl Drive serves a heavily commercialized area and many of the westbound left turning vehicles wish to continue west on

Pearl Drive. Because the westbound left turn movement at SR 62 and Red Bank Road currently has dual left turn lanes, vehicles in the inner left turn lane have limited space to merge right to turn onto Pearl Drive. This creates hazardous weaving conditions. Additionally, since many motorists in the area have likely experienced these hazardous weaving conditions before, they choose to use the outer left turn lane over the inside left turn lane, creating a pronounced lane utilization imbalance. When lane imbalance occurs at dual turning movements, the benefit of having the dual lanes is greatly diminished, and the movement operates similar to as if it only had a single turn lane. An east-west CFI at SR 62 and Red Bank would allow the left turn movements to benefit from the same cycle time that the through movements are allowed, which greatly increases their cycle share over the current conventional intersection configuration. With the added cycle time, a dual left turn lane is no longer required as a single lane would suffice, which means that the westbound left turn weaving issue related to Pearl Drive can be eliminated with the implementation of a CFI.

- The existing signalized intersections at Schutte Road and Boehne Camp Road are not lighted. Installing intersection lighting has a CMF of 0.88, which translates to a potential 12% reduction in all nighttime crash types. Lighting of the intersections would help improve safety and is recommended.

MUT

- Initial costs to construct:
  - **Schutte Road/SR 62**
    - Construction $2,270,000
    - Utility - $25,000
    - Preliminary Engineering - $500,000
    - Construction Inspection - $285,000
    - **Total Estimated Cost - $3,080,000**
  - **Boehne Camp Road/SR 62**
    - Construction $2,905,000
    - Utility - $10,000
    - Preliminary Engineering - $600,000
    - Construction Inspection - $365,000
    - **Total Estimated Cost - $3,880,000**
- Modifications at Schutte Road are not anticipated to require any additional R/W. The potential for utility conflicts exist.
- Modifications at Boehne Camp Road are not anticipated to require any additional R/W. The potential for utility conflicts exist.
- The MUT alternative would have initial costs to construct the required dual median U-turn lanes, as well as increased recurring costs to maintain the extra pavement.
- Driver expectancy would be tested for the median U-Turn concept, as left turning vehicles would need to bypass the main intersection and make a U-Turn, or make a right turn and then a U-Turn to travel in their intended direction.
- Public involvement would be key to successfully implementing a Median U-Turn, as this intersection configuration is new to the surrounding area. Allowing enough time to educate and familiarize the motoring public with the new intersection configuration, including through the construction phases, should be included in the project development timeline.

- The project will result in permanent traffic alterations by having the left turn movement separated and moved prior to the intersection and therefore a Categorical Exclusion Level 4 (CE-4) environmental document will be required. The improvements at Schutte, Boehne Camp, and Red Bank may disturb more than 1 acre and require an IDEM Rule 5 Permit. No other permits are anticipated.
- It appears that overhead and underground utilities would be impacted in the quadrants of each intersection during construction.
- Pedestrian accommodations are not currently provided at any of the intersections within the study area. If desired, pedestrians may be easily accommodated at the main intersection and may feel safer than at a traditional intersection due to the minimized lane width and two stage signal timing. The lane geometry is such that a pedestrian refuge island could also be provided. The presence of a pedestrian refuge island would afford pedestrians the opportunity to cross SR 62 in two stages, which is ideal for less confident members of the non-motoring public that may use this intersection.
- Rear end crashes are by far the most frequent crash type throughout the study area, which is indicative of a congested corridor. Implementing MUT's at the study intersections would allow the cycle time currently used for eastbound and westbound left turn movements to be given to the mainline SR 62 movements. This could help decrease delay and congestion experienced along SR 62, and in turn assist in reducing rear end crashes along the corridor.
- The existing signalized intersections at Schutte Road and Boehne Camp Road are not lighted. Installing intersection lighting has a CMF of 0.88, which translates to a potential 12% reduction in all nighttime crash types. Lighting of the intersections would help improve safety and is recommended.

PREFERRED ALTERNATIVE CONCEPT

Lochmueller Group's recommendation is for any future improvements to the study intersections to be cohesive and provide continuity along the corridor for drivers. Because Schutte Road, Boehne Camp Road, and Red Bank Road are all within 1.5 miles of each other along SR 62, it could cause confusion to mix multiple alternative intersection types so closely spaced.

Based on the preceding analysis, a partial east-west CFI is recommended at SR 62 and Red Bank Road. Therefore, a partial east-west CFI is recommended at Boehne Camp Road and Schutte Road as well. An east-west CFI at SR 62 and Red Bank would allow the left turn movements to benefit from the same cycle time that the through movements are allowed, which greatly increases their cycle share over the current conventional intersection configuration. With the added cycle time, a dual westbound left turn lane is no longer required, which means that the westbound left turn weaving issue related to Pearl Drive can be eliminated with the implementation of a CFI.

Due to the close spacing to the SR 62 and University Parkway interchange, a modified east-west CFI configuration is recommended at the SR 62 and Schutte Road intersection. A traditional east-west CFI configuration should be provided on the westbound approach, but the eastbound approach to SR 62 and Schutte Road would maintain its existing configuration. Eastbound left turning vehicles will continue straight through the intersection, and be served via a single U-turn lane at the upstream crossover intersection as part of the CFI configuration on the westbound approach.

It is recommended that, in conjunction with the proposed improvements, a Signal Coordination and Timing (SCAT) study be prepared for the SR 62 corridor in order to optimize signal operations for a study area greater than the scope of this study in an effort to potentially lower the corridor cycle lengths.

According to INDOT, only SR 62 & Red Bank Road is expected to experience growth throughout the future design period. If growth occurs at the intersections of SR 62 and Schutte Road and SR 62 and Boehne Camp Road, the analysis and recommendations found within this report could be impacted, and therefore should be adjusted to include updated growth values.

Consideration should be given to closing the existing RIRO drive east of Red Bank Road should a CFI be implemented at SR 62 & Red Bank Road. A network of internal roadways exists south of SR 62 such that vehicles would still have access to SR 62 should the RIRO access be closed. Consideration should also be given to closing the intersection of Weston Road with Red Bank Road, located approximately 170 feet north of SR 62. A network of internal development roadways exists west of Red Bank Road such that vehicles would still have access to Red Bank Road should the access at Weston Road be terminated. Consideration should be given to closing the existing full access drive at Felstead Road, east of Schutte Road, should a CFI or MUT be implemented at SR 62 & Schutte Road. Vehicles could still access SR 62 via Schutte Road by way of Stellar Drive. If this option is not acceptable to surrounding stakeholders, an additional connection should be explored to connect Felstead Road to Schutte Road to facilitate access to SR 62. It is acknowledged that some of these facilities are outside of INDOT control. Every effort should be taken to achieve current access management standards as part of any roadway improvement project. However, the implementation of the preferred alternative should not be contingent upon the successful negotiation of these access management considerations.

CONCLUSIONS AND RECOMMENDATIONS

Lochmueller Group prepared the preceding engineering assessment report to evaluate the feasibility of implementing intersection improvements at the intersections of Indiana State Route (SR) 62 (Lloyd Expressway) and Schutte Road, Boehne Camp Road, and Red Bank Road in Vanderburgh County, Indiana. The existing intersections experience congestion during peak hours, which drives numerous safety issues. The report concludes the following:

Existing Trends

- Based on 24 hour counts collected in early Fall 2019, SR 62 carries an annual average daily traffic (AADT) of approximately 32,000 to 36,600 vehicles per day (vpd) between Schutte Road and Red Bank Road. Schutte Road, Boehne Camp Road, and Red Bank Road each carry an AADT of approximately 3,700 vpd, 7,500 vpd, and 14,400 vpd near SR 62, respectively.
- The peak hours for a majority of the study area were determined to occur from 7:00 AM to 8:00 AM and 4:15 PM to 5:15 PM for morning and afternoon peak period, respectively. The afternoon peak period for Schutte Road occurred from 4:00 PM to 5:00 PM.
- Many of the existing approach movements operate with acceptable LOS (D or better) during both peak periods. However, the southbound approaches at SR 62 and Schutte Road and Boehne Camp Road operate with LOS F during both peak periods. The northbound approach at SR 62 and Boehne Camp Road also operates with LOS F during the PM peak period. The delay on

the southbound approach at SR 62 and Boehne Camp Road is so pronounced that the entire intersection functions with LOS E during the AM peak period. It is clear that these side street approaches do not have enough capacity to handle their respective vehicular demands.

- A total of 444 crashes occurred at the study intersections from 2015 to 2018, which was the latest year of available data. Of the 444, 45 were incapacitating injury, 40 were injury, and 359 were property damage only crashes.
- Rear-end crashes were the most prominent type of crash, accounting for 73% of overall crashes. Other prominent crash types at the intersection were right angle crashes (11%), and same direction sideswipe (5%).This is also supported by the noted crash factors of following another vehicle too closely (65%) and failure to yield right of way (12%).
- The ICF value for each intersection is near, or above 2, which means the intersections may be considered high crash locations. The ICC values are also near 3 for Schutte Road, and near, or above 4 for Boehne Camp and Red Bank Roads. This indicates that not only are the intersections high crash locations, but the crashes experienced at the intersections are higher cost crashes than what would otherwise be expected.

2040 Conditions

- The 2040 baseline conditions are similar to existing conditions. Additionally, the northbound and southbound approaches at Red Bank Road would operate with LOS F during the PM peak period due to the expected background growth, resulting in the overall intersection operating at LOS E. It is clear that by 2040, the side street approaches at each of the study intersections would not have enough capacity to handle their respective vehicular demands.
- The following preliminary alternative concepts were selected for analysis:
    - Lane Modifications (Schutte Road/Boehne Camp Road)
        - Improves overall intersection delay during the Forecasted 2040 condition by approximately 20% and 44% at SR 62 and Schutte Road, and 64% and 17% at SR 62 and Boehne Camp Road in the AM and PM peaks, respectively, from the Existing 2019 conditions. There would be no improvements to operations at SR 62 and Red Bank Road since the existing and proposed geometric configuration is the same.
        - Modifying the existing northbound and southbound approaches at SR 62 and Schutte Road and the southbound approach at SR 62 and Boehne Camp Road to dedicated left turn/through/right turn lanes may help reduce crashes at the intersection. The crash modification factor (CMF) for the addition of a left turn lane at a four leg signalized intersection is 0.924. The CMF's for the installation of a right turn lane are very close to 1.0 for overall crashes, which indicates that there may not be a significant reduction in overall crashes from installing a right turn lane at a four leg signalized intersection. However, installing a right turn lane has a CMF of 0.70 for rear end crashes, which means that rear end crashes could potentially be reduced by up to 30% on approaches where a dedicated right turn lane was installed.
        - **Schutte Road/SR 62: Total Estimated Cost - $1,395,000**
        - **Boehne Camp Road/SR 62: Total Estimated Cost - $885,000**
    - Partial east-west CFI (Schutte Road/Boehne Camp Road/Red Bank Road)

- Improves overall intersection delay during the Forecasted 2040 condition by approximately 20% and 53% at SR 62 and Schutte Road, 76% and 54% at SR 62 and Boehne Camp Road, and 59% and 38% at SR 62 and Red Bank Road in the AM and PM peaks, respectively, from the Existing 2019 conditions. A CFI is the preferred option at Red Bank Road. An east-west CFI at SR 62 and Red Bank would allow the left turn movements to benefit from the same cycle time that the through movements are allowed, which greatly increases their cycle share over the current conventional intersection configuration. With the added cycle time, a dual westbound left turn lane is no longer required, which means that the westbound left turn weaving issue related to Pearl Drive can be eliminated with the implementation of a CFI.
- A partial CFI has 28 conflict points, as compared to the 32 with a conventional intersection. This reduction in conflict points may improve safety performance of the intersection, although safety data studying this effect is limited for partial CFI applications. The Alternative Intersections/Interchanges: Informational Report (AIIR) dated April 2010, suggests a CMF of 0.76 is appropriate for a full CFI. Therefore, for a partial CFI, the expected crash reduction would be up to half the benefit of the full CFI, with a CMF of 0.88.
- **Schutte Road/SR 62: Total Estimated Cost - $4,905,000**
- **Boehne Camp Road/SR 62: Total Estimated Cost - $4,335,000**
- **Red Bank Road/SR 62: Total Estimated Cost - $5,870,000**

o Median U-Turn (Schutte Road/Boehne Camp Road/[Red Bank Road CFI])

- Improves overall intersection delay during the Forecasted 2040 condition by approximately 53% and 68% at SR 62 and Schutte Road, and 86% and 31% at SR 62 and Boehne Camp Road in the AM and PM peaks, respectively, from the Existing 2019 conditions. A MUT is not an option at Red Bank Road due to the severe impacts projected to the heavy left turn movements.
- From a safety perspective, the main intersection signal is simplified with the removal of left turning movements, and there are fewer conflict points at the main intersections than at a conventional intersection. According to the INDOT Intersection Decision Guide, replacement of a conventional intersection by a Median U-Turn can reduce the total crash frequency by up to 25-50%.
- **Schutte Road/SR 62: Total Estimated Cost - $3,080,000**
- **Boehne Camp Road/SR 62: Total Estimated Cost - $3,880,000**

Recommendation

Based on the preceding analysis, a partial east-west CFI is recommended at SR 62 and Red Bank Road. Therefore, a partial east-west CFI is recommended at Boehne Camp Road and Schutte Road, as well, in order to provide for consistency amongst a driver's expectations. Due to the close spacing to the SR 62 and University Parkway interchange, a modified CFI configuration is recommended at the SR 62 and Schutte Road intersection. A traditional east-west CFI configuration should be provided on the westbound approach, but the eastbound approach to SR 62 and Schutte Road would maintain its existing configuration. Eastbound left turning vehicles will continue straight through the intersection, and be served via a single U-turn lane at the upstream crossover intersection as part of the CFI configuration on the westbound approach.

In conjunction with the recommended improvements, it is recommended that a Signal Coordination and Timing (SCAT) study be prepared for the SR 62 corridor in an effort optimize signal operations for a study area greater than the scope of this study. To do so will potentially lower the corridor cycle lengths.

According to INDOT, only SR 62 & Red Bank Road is expected to experience growth throughout the future design period. If growth occurs at the intersections of SR 62 and Schutte Road and SR 62 and Boehne Camp Road, the analysis and recommendations found within this report could be impacted, and therefore should be adjusted to include updated growth values.

Consideration should be given to closing the existing RIRO drive east of Red Bank Road should a CFI be implemented at SR 62 & Red Bank Road. A network of internal roadways exists south of SR 62 such that vehicles would still have access to SR 62 should the RIRO access be closed. Consideration should be given to closing the intersection of Weston Road with Red Bank Road, located approximately 170 feet north of SR 62. A network of internal development roadways exists west of Red Bank Road such that vehicles would still have access to Red Bank Road should the access at Weston Road be terminated. Consideration should be given to closing the existing full access drive at Felstead Road, east of Schutte Road, should a CFI or MUT be implemented at SR 62 & Schutte Road. Vehicles could still access SR 62 via Schutte Road by way of Stellar Drive. If this option is not acceptable to surrounding stakeholders, an additional connection should be explored to connect Felstead Road to Schutte Road to facilitate access to SR 62. It is acknowledged that some of these facilities are outside of INDOT control. Every effort should be taken to achieve current access management standards as part of any roadway improvement project. However, the implementation of the preferred alternative should not be contingent upon the successful negotiation of these access management considerations.

APPENDIX

Appendix A: Traffic Data

Appendix B: Existing Conditions (2019) Synchro Reports

Appendix C: Collision Diagrams

Appendix D: RoadHAT Reports

Appendix E: 2040 Baseline Conditions (2040) Synchro Reports

Appendix F: Preliminary Conceptual Drawings

Appendix G: Preliminary Alternative Concept Synchro Reports

Appendix H: Reduced Cycle Length (90 Second) Operational Analysis Tables

Appendix I: Itemized Construction Estimates

Appendix A: Traffic Data

EMPO/INDOT SR 62 @ Schutte Rd - TMC
Wed Aug 14, 2019
Full Length (5 PM-5 PM (+1))
All Classes (Motorcycles, Cars, Light Goods Vehicles, Single-Unit Trucks, Articulated Trucks, Buses)
All Movements
ID: 685927, Location: 37.970523, -87.663538

Provided by: Indiana DOT
100 N. Senate Ave.,
Indianapolis, IN, 46204, US

Leg	Schutte Rd					SR 62					Schutte Rd					SR 62					
Direction	Southbound					Westbound					Northbound					Eastbound					
Time	R	T	L	U	App	R	T	L	U	App	R	T	L	U	App	R	T	L	U	App	Int
2019-08-14 5:00PM	7	17	53	0	**77**	25	1026	103	0	**1154**	127	14	30	0	**171**	0	1126	9	2	**1137**	**2539**
6:00PM	8	16	34	0	**58**	21	757	87	0	**865**	91	8	15	0	**114**	8	555	6	0	**569**	**1606**
7:00PM	5	16	21	0	**42**	18	647	103	2	**770**	87	11	14	0	**112**	3	425	1	0	**429**	**1353**
8:00PM	6	8	23	0	**37**	21	585	108	2	**716**	100	13	9	0	**122**	9	289	5	0	**303**	**1178**
9:00PM	2	4	8	0	**14**	14	378	93	0	**485**	51	4	5	0	**60**	10	210	0	0	**220**	**779**
10:00PM	1	2	4	0	**7**	7	206	49	0	**262**	34	1	8	0	**43**	2	144	1	0	**147**	**459**
11:00PM	0	2	4	0	**6**	1	122	35	0	**158**	20	4	0	0	**24**	5	101	0	0	**106**	**294**
2019-08-15 12:00AM	0	0	1	0	**1**	2	56	15	0	**73**	25	2	6	0	**33**	3	54	0	0	**57**	**164**
1:00AM	1	1	2	0	**4**	2	43	8	0	**53**	7	0	2	0	**9**	0	38	0	0	**38**	**104**
2:00AM	0	1	0	0	**1**	2	48	4	0	**54**	6	0	0	0	**6**	1	40	1	0	**42**	**103**
3:00AM	0	1	0	0	**1**	0	96	1	0	**97**	2	1	1	0	**4**	1	55	0	0	**56**	**158**
4:00AM	1	0	4	0	**5**	0	186	5	0	**191**	10	0	2	0	**12**	0	185	0	0	**185**	**393**
5:00AM	6	0	7	0	**13**	0	626	7	1	**634**	18	1	6	0	**25**	3	354	0	0	**357**	**1029**
6:00AM	13	2	74	0	**89**	7	720	31	0	**758**	62	9	11	0	**82**	4	930	3	0	**937**	**1866**
7:00AM	30	17	145	0	**192**	31	1042	57	0	**1130**	65	33	17	0	**115**	0	1052	10	1	**1063**	**2500**
8:00AM	23	19	91	0	**133**	12	917	73	1	**1003**	55	13	14	0	**82**	0	767	4	0	**771**	**1989**
9:00AM	15	6	63	0	**84**	13	850	74	0	**937**	74	2	7	0	**83**	4	697	3	1	**705**	**1809**
10:00AM	10	6	38	0	**54**	15	797	71	0	**883**	91	10	8	0	**109**	4	751	3	2	**760**	**1806**
11:00AM	14	11	56	0	**81**	17	886	97	0	**1000**	149	8	10	0	**167**	2	1013	5	1	**1021**	**2269**
12:00PM	17	7	42	0	**66**	21	973	114	0	**1108**	151	7	6	0	**164**	0	983	2	0	**985**	**2323**
1:00PM	8	6	43	0	**57**	16	1068	129	0	**1213**	132	7	2	0	**141**	0	903	2	2	**907**	**2318**
2:00PM	12	13	49	0	**74**	18	1047	117	0	**1182**	163	18	11	0	**192**	2	1136	9	1	**1148**	**2596**
3:00PM	15	25	103	0	**143**	17	1094	151	0	**1262**	175	19	19	0	**213**	5	1201	14	1	**1221**	**2839**
4:00PM	13	18	62	0	**93**	29	1213	162	1	**1405**	193	20	31	0	**244**	0	1370	12	3	**1385**	**3127**
Total	207	198	927	0	**1332**	309	15383	1694	7	**17393**	1888	205	234	0	**2327**	66	14379	90	14	**14549**	**35601**
% Approach	15.5%	14.9%	69.6%	0%	-	1.8%	88.4%	9.7%	0%	-	81.1%	8.8%	10.1%	0%	-	0.5%	98.8%	0.6%	0.1%	-	-
% Total	0.6%	0.6%	2.6%	0%	**3.7%**	0.9%	43.2%	4.8%	0%	**48.9%**	5.3%	0.6%	0.7%	0%	**6.5%**	0.2%	40.4%	0.3%	0%	**40.9%**	-
Motorcycles	1	0	1	0	**2**	0	51	3	0	**54**	6	1	3	0	**10**	1	48	0	0	**49**	115
% Motorcycles	0.5%	0%	0.1%	0%	**0.2%**	0%	0.3%	0.2%	0%	**0.3%**	0.3%	0.5%	1.3%	0%	**0.4%**	1.5%	0.3%	0%	0%	**0.3%**	0.3%
Cars	160	163	790	0	**1113**	283	11928	1526	4	**13741**	1626	166	183	0	**1975**	65	12121	57	12	**12255**	29084
% Cars	77.3%	82.3%	85.2%	0%	**83.6%**	91.6%	77.5%	90.1%	57.1%	**79.0%**	86.1%	81.0%	78.2%	0%	**84.9%**	98.5%	84.3%	63.3%	85.7%	**84.2%**	81.7%
Light Goods Vehicles	40	30	107	0	**177**	15	2684	149	2	**2850**	233	28	45	0	**306**	0	1578	30	2	**1610**	4943
% Light Goods Vehicles	19.3%	15.2%	11.5%	0%	**13.3%**	4.9%	17.4%	8.8%	28.6%	**16.4%**	12.3%	13.7%	19.2%	0%	**13.1%**	0%	11.0%	33.3%	14.3%	**11.1%**	13.9%
Single-Unit Trucks	3	1	10	0	**14**	5	269	7	0	**281**	16	1	2	0	**19**	0	224	0	0	**224**	538
% Single-Unit Trucks	1.4%	0.5%	1.1%	0%	**1.1%**	1.6%	1.7%	0.4%	0%	**1.6%**	0.8%	0.5%	0.9%	0%	**0.8%**	0%	1.6%	0%	0%	**1.5%**	1.5%
Articulated Trucks	0	0	0	0	**0**	0	425	4	1	**430**	3	0	0	0	**3**	0	392	0	0	**392**	825
% Articulated Trucks	0%	0%	0%	0%	**0%**	0%	2.8%	0.2%	14.3%	**2.5%**	0.2%	0%	0%	0%	**0.1%**	0%	2.7%	0%	0%	**2.7%**	2.3%
Buses	3	4	19	0	**26**	6	26	5	0	**37**	4	9	1	0	**14**	0	16	3	0	**19**	96
% Buses	1.4%	2.0%	2.0%	0%	**2.0%**	1.9%	0.2%	0.3%	0%	**0.2%**	0.2%	4.4%	0.4%	0%	**0.6%**	0%	0.1%	3.3%	0%	**0.1%**	0.3%

*L: Left, R: Right, T: Thru, U: U-Turn

EMPO/INDOT SR 62 @ Schutte Rd - TMC
Wed Aug 14, 2019
Full Length (5 PM-5 PM (+1))
All Classes (Motorcycles, Cars, Light Goods Vehicles, Single-Unit Trucks, Articulated Trucks, Buses)
All Movements
ID: 685927, Location: 37.970523, -87.663538

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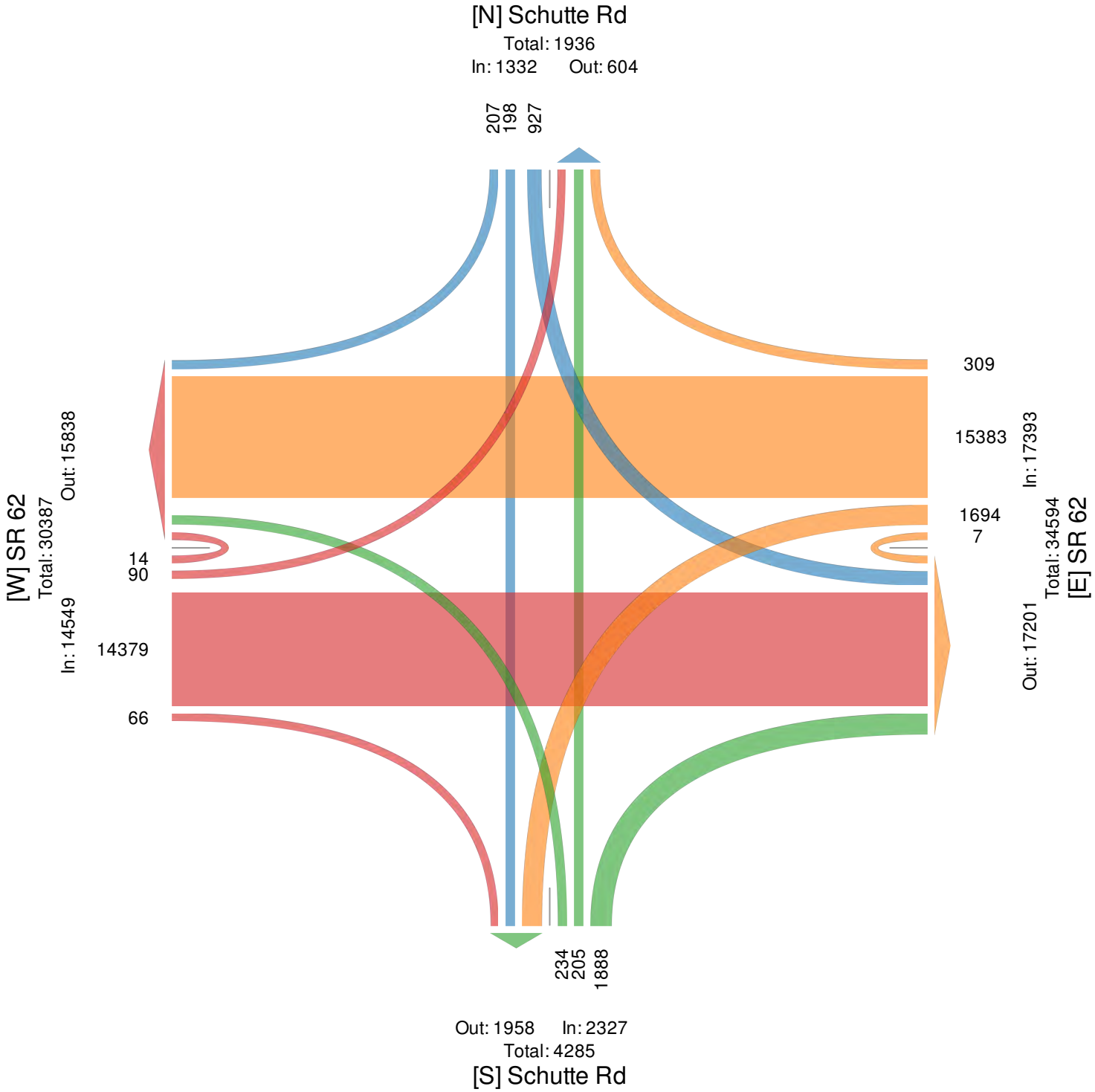
100 N. Senate Ave.,
Indianapolis, IN, 46204, US



EMPO/INDOT SR 62 @ Schutte Rd - TMC
Thu Aug 15, 2019
AM Peak (Aug 15 2019 7AM - 8 AM)
All Classes (Motorcycles, Cars, Light Goods Vehicles, Single-Unit Trucks, Articulated Trucks, Buses)
All Movements
ID: 685927, Location: 37.970523, -87.663538

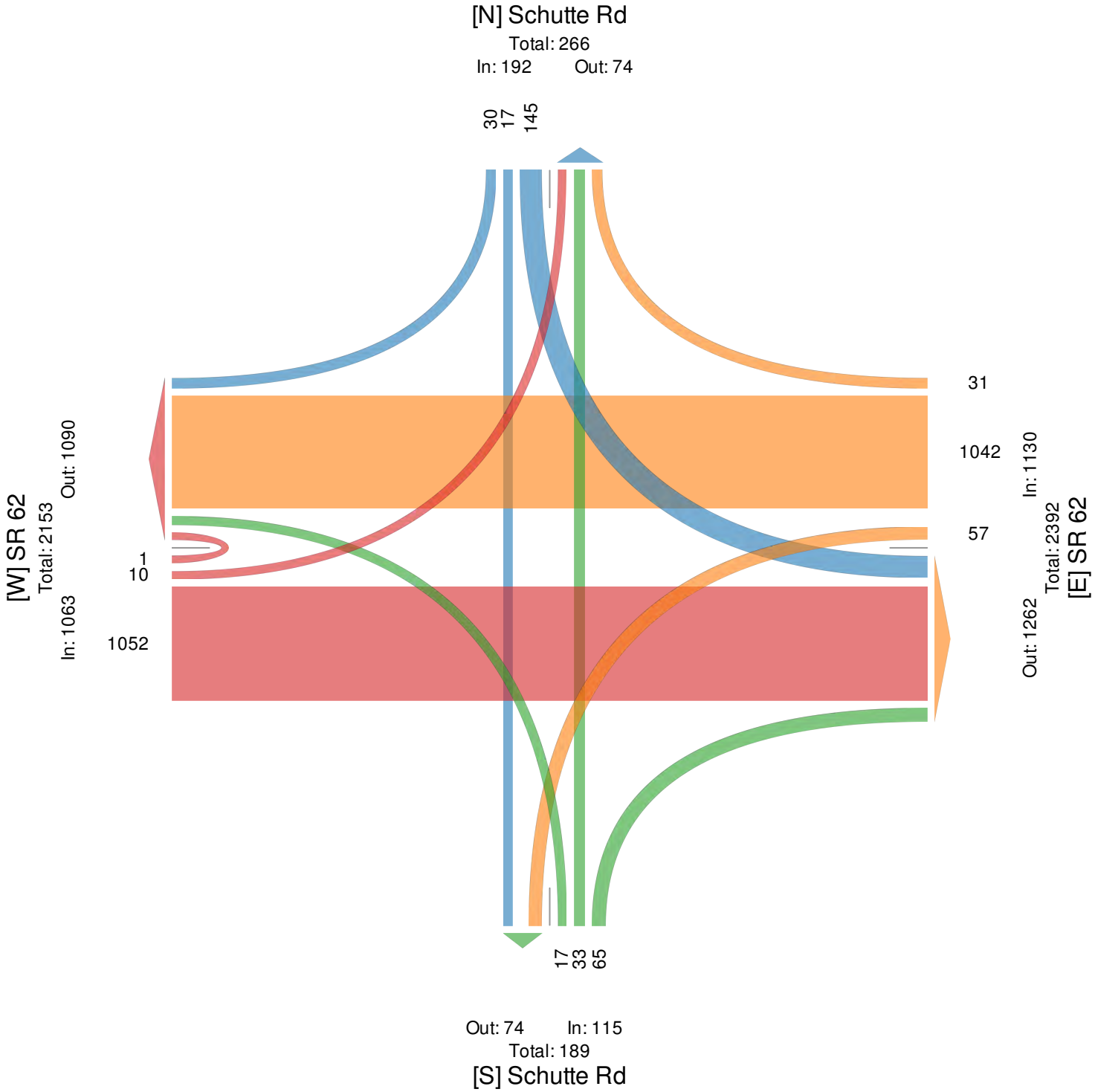
Provided by: Indiana DOT
100 N. Senate Ave.,
Indianapolis, IN, 46204, US

Leg	Schutte Rd					SR 62					Schutte Rd					SR 62					
Direction	Southbound					Westbound					Northbound					Eastbound					
Time	R	T	L	U	App	R	T	L	U	App	R	T	L	U	App	R	T	L	U	App	Int
2019-08-15 7:00AM	1	6	40	0	**47**	6	204	8	0	**218**	21	14	3	0	**38**	0	312	2	0	**314**	**617**
7:15AM	6	4	29	0	**39**	7	277	19	0	**303**	18	2	5	0	**25**	0	266	2	0	**268**	**635**
7:30AM	11	4	25	0	**40**	6	253	12	0	**271**	11	5	5	0	**21**	0	262	3	1	**266**	**598**
7:45AM	12	3	51	0	**66**	12	308	18	0	**338**	15	12	4	0	**31**	0	212	3	0	**215**	**650**
Total	30	17	145	0	**192**	31	1042	57	0	**1130**	65	33	17	0	**115**	0	1052	10	1	**1063**	**2500**
% Approach	15.6%	8.9%	75.5%	0%	-	2.7%	92.2%	5.0%	0%	-	56.5%	28.7%	14.8%	0%	-	0%	99.0%	0.9%	0.1%	-	-
% Total	1.2%	0.7%	5.8%	0%	**7.7%**	1.2%	41.7%	2.3%	0%	**45.2%**	2.6%	1.3%	0.7%	0%	**4.6%**	0%	42.1%	0.4%	0%	**42.5%**	-
PHF	0.625	0.708	0.711	-	**0.727**	0.646	0.846	0.750	-	**0.836**	0.774	0.589	0.850	-	**0.757**	-	0.843	0.833	0.250	**0.846**	0.962
Motorcycles	0	0	0	0	**0**	0	2	0	0	**2**	0	0	0	0	**0**	0	1	0	0	**1**	3
% Motorcycles	0%	0%	0%	0%	**0%**	0%	0.2%	0%	0%	**0.2%**	0%	0%	0%	0%	**0%**	0%	0.1%	0%	0%	**0.1%**	0.1%
Cars	25	14	133	0	**172**	26	773	47	0	**846**	53	27	14	0	**94**	0	874	5	1	**880**	1992
% Cars	83.3%	82.4%	91.7%	0%	**89.6%**	83.9%	74.2%	82.5%	0%	**74.9%**	81.5%	81.8%	82.4%	0%	**81.7%**	0%	83.1%	50.0%	100%	**82.8%**	79.7%
Light Goods Vehicles	4	2	9	0	**15**	3	203	8	0	**214**	12	2	3	0	**17**	0	142	4	0	**146**	392
% Light Goods Vehicles	13.3%	11.8%	6.2%	0%	**7.8%**	9.7%	19.5%	14.0%	0%	**18.9%**	18.5%	6.1%	17.6%	0%	**14.8%**	0%	13.5%	40.0%	0%	**13.7%**	15.7%
Single-Unit Trucks	0	0	0	0	**0**	2	30	1	0	**33**	0	1	0	0	**1**	0	9	0	0	**9**	43
% Single-Unit Trucks	0%	0%	0%	0%	**0%**	6.5%	2.9%	1.8%	0%	**2.9%**	0%	3.0%	0%	0%	**0.9%**	0%	0.9%	0%	0%	**0.8%**	1.7%
Articulated Trucks	0	0	0	0	**0**	0	29	1	0	**30**	0	0	0	0	**0**	0	24	0	0	**24**	54
% Articulated Trucks	0%	0%	0%	0%	**0%**	0%	2.8%	1.8%	0%	**2.7%**	0%	0%	0%	0%	**0%**	0%	2.3%	0%	0%	**2.3%**	2.2%
Buses	1	1	3	0	**5**	0	5	0	0	**5**	0	3	0	0	**3**	0	2	1	0	**3**	16
% Buses	3.3%	5.9%	2.1%	0%	**2.6%**	0%	0.5%	0%	0%	**0.4%**	0%	9.1%	0%	0%	**2.6%**	0%	0.2%	10.0%	0%	**0.3%**	0.6%

*L: Left, R: Right, T: Thru, U: U-Turn

EMPO/INDOT SR 62 @ Schutte Rd - TMC
Thu Aug 15, 2019
AM Peak (Aug 15 2019 7AM - 8 AM)
All Classes (Motorcycles, Cars, Light Goods Vehicles, Single-Unit Trucks, Articulated Trucks, Buses)
All Movements
ID: 685927, Location: 37.970523, -87.663538

Provided by: Indiana DOT
100 N. Senate Ave.,
Indianapolis, IN, 46204, US



EMPO/INDOT SR 62 @ Schutte Rd - TMC

Thu Aug 15, 2019
Midday Peak (Aug 15 2019 11:30AM - 12:30 PM)
All Classes (Motorcycles, Cars, Light Goods Vehicles, Single-Unit Trucks, Articulated Trucks, Buses)
All Movements
ID: 685927, Location: 37.970523, -87.663538

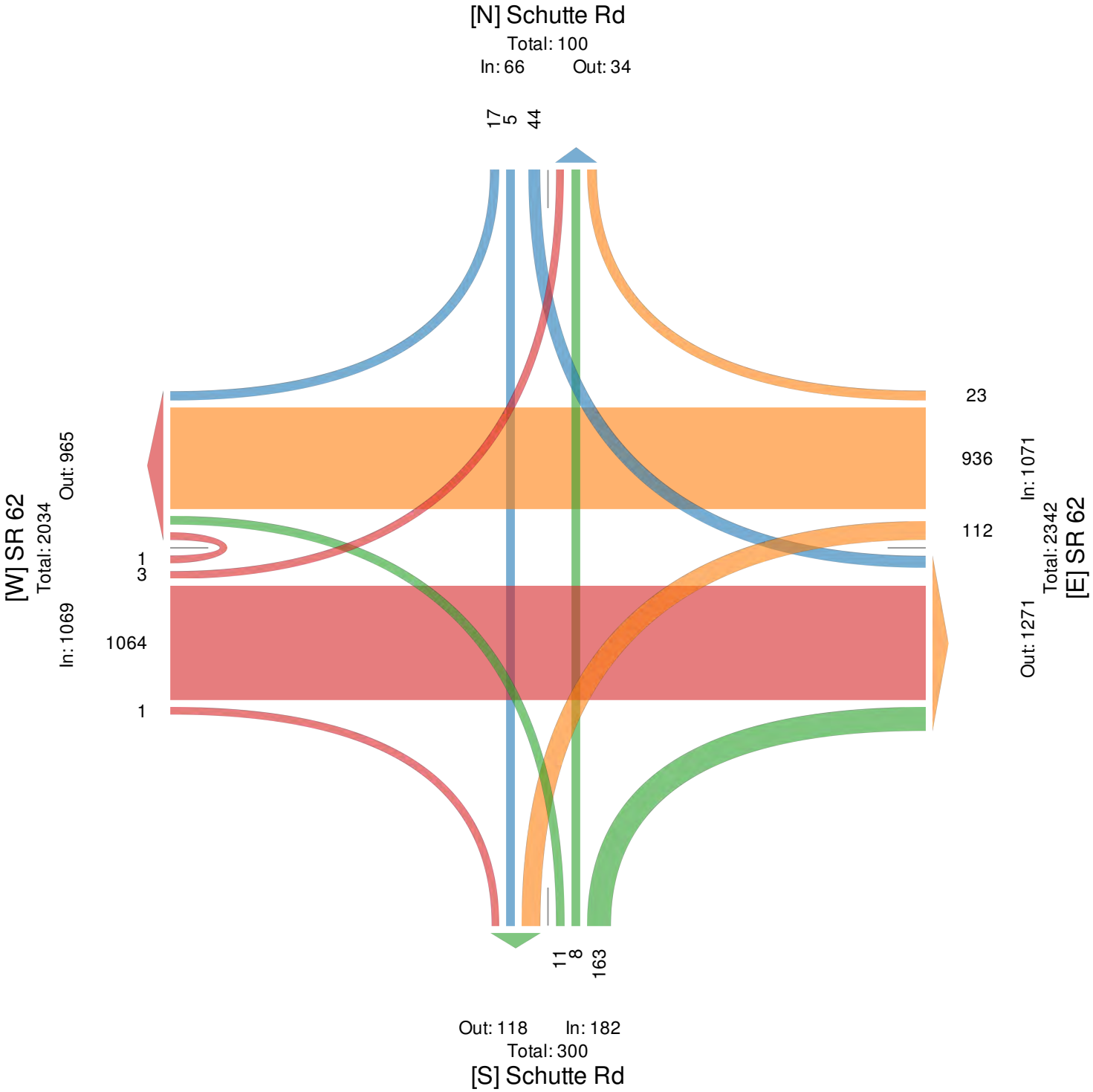
Provided by: Indiana DOT
100 N. Senate Ave.,
Indianapolis, IN, 46204, US

Leg	Schutte Rd					SR 62					Schutte Rd					SR 62					
Direction	Southbound					Westbound					Northbound					Eastbound					
Time	R	T	L	U	App	R	T	L	U	App	R	T	L	U	App	R	T	L	U	App	Int
2019-08-15 11:30AM	4	1	11	0	**16**	4	227	20	0	**251**	34	3	5	0	**42**	0	293	1	0	**294**	**603**
11:45AM	4	3	17	0	**24**	5	235	33	0	**273**	47	2	1	0	**50**	1	268	1	1	**271**	**618**
12:00PM	3	0	6	0	**9**	5	242	30	0	**277**	41	2	3	0	**46**	0	250	0	0	**250**	**582**
12:15PM	6	1	10	0	**17**	9	232	29	0	**270**	41	1	2	0	**44**	0	253	1	0	**254**	**585**
Total	17	5	44	0	**66**	23	936	112	0	**1071**	163	8	11	0	**182**	1	1064	3	1	**1069**	**2388**
% Approach	25.8%	7.6%	66.7%	0%	-	2.1%	87.4%	10.5%	0%	-	89.6%	4.4%	6.0%	0%	-	0.1%	99.5%	0.3%	0.1%	-	-
% Total	0.7%	0.2%	1.8%	0%	**2.8%**	1.0%	39.2%	4.7%	0%	**44.8%**	6.8%	0.3%	0.5%	0%	**7.6%**	0%	44.6%	0.1%	0%	**44.8%**	-
PHF	0.708	0.417	0.647	-	**0.688**	0.639	0.967	0.848	-	**0.967**	0.867	0.667	0.550	-	**0.910**	0.250	0.908	0.750	0.250	**0.909**	0.966
Motorcycles	0	0	0	0	**0**	0	2	0	0	**2**	1	0	0	0	**1**	0	6	0	0	**6**	9
% Motorcycles	0%	0%	0%	0%	**0%**	0%	0.2%	0%	0%	**0.2%**	0.6%	0%	0%	0%	**0.5%**	0%	0.6%	0%	0%	**0.6%**	0.4%
Cars	13	4	39	0	**56**	21	691	98	0	**810**	144	6	10	0	**160**	1	863	3	1	**868**	1894
% Cars	76.5%	80.0%	88.6%	0%	**84.8%**	91.3%	73.8%	87.5%	0%	**75.6%**	88.3%	75.0%	90.9%	0%	**87.9%**	100%	81.1%	100%	100%	**81.2%**	79.3%
Light Goods Vehicles	4	1	4	0	**9**	2	199	14	0	**215**	14	2	1	0	**17**	0	124	0	0	**124**	365
% Light Goods Vehicles	23.5%	20.0%	9.1%	0%	**13.6%**	8.7%	21.3%	12.5%	0%	**20.1%**	8.6%	25.0%	9.1%	0%	**9.3%**	0%	11.7%	0%	0%	**11.6%**	15.3%
Single-Unit Trucks	0	0	1	0	**1**	0	17	0	0	**17**	3	0	0	0	**3**	0	27	0	0	**27**	48
% Single-Unit Trucks	0%	0%	2.3%	0%	**1.5%**	0%	1.8%	0%	0%	**1.6%**	1.8%	0%	0%	0%	**1.6%**	0%	2.5%	0%	0%	**2.5%**	2.0%
Articulated Trucks	0	0	0	0	**0**	0	27	0	0	**27**	1	0	0	0	**1**	0	43	0	0	**43**	71
% Articulated Trucks	0%	0%	0%	0%	**0%**	0%	2.9%	0%	0%	**2.5%**	0.6%	0%	0%	0%	**0.5%**	0%	4.0%	0%	0%	**4.0%**	3.0%
Buses	0	0	0	0	**0**	0	0	0	0	**0**	0	0	0	0	**0**	0	1	0	0	**1**	1
% Buses	0%	0%	0%	0%	**0%**	0%	0%	0%	0%	**0%**	0%	0%	0%	0%	**0%**	0%	0.1%	0%	0%	**0.1%**	0%

*L: Left, R: Right, T: Thru, U: U-Turn

EMPO/INDOT SR 62 @ Schutte Rd - TMC
Thu Aug 15, 2019
Midday Peak (Aug 15 2019 11:30AM - 12:30 PM)
All Classes (Motorcycles, Cars, Light Goods Vehicles, Single-Unit Trucks, Articulated Trucks, Buses)
All Movements
ID: 685927, Location: 37.970523, -87.663538

Provided by: Indiana DOT
100 N. Senate Ave.,
Indianapolis, IN, 46204, US



EMPO/INDOT SR 62 @ Schutte Rd - TMC

Thu Aug 15, 2019
PM Peak (Aug 15 2019 4PM - 5 PM) - Overall Peak Hour
All Classes (Motorcycles, Cars, Light Goods Vehicles, Single-Unit Trucks, Articulated Trucks, Buses)
All Movements
ID: 685927, Location: 37.970523, -87.663538

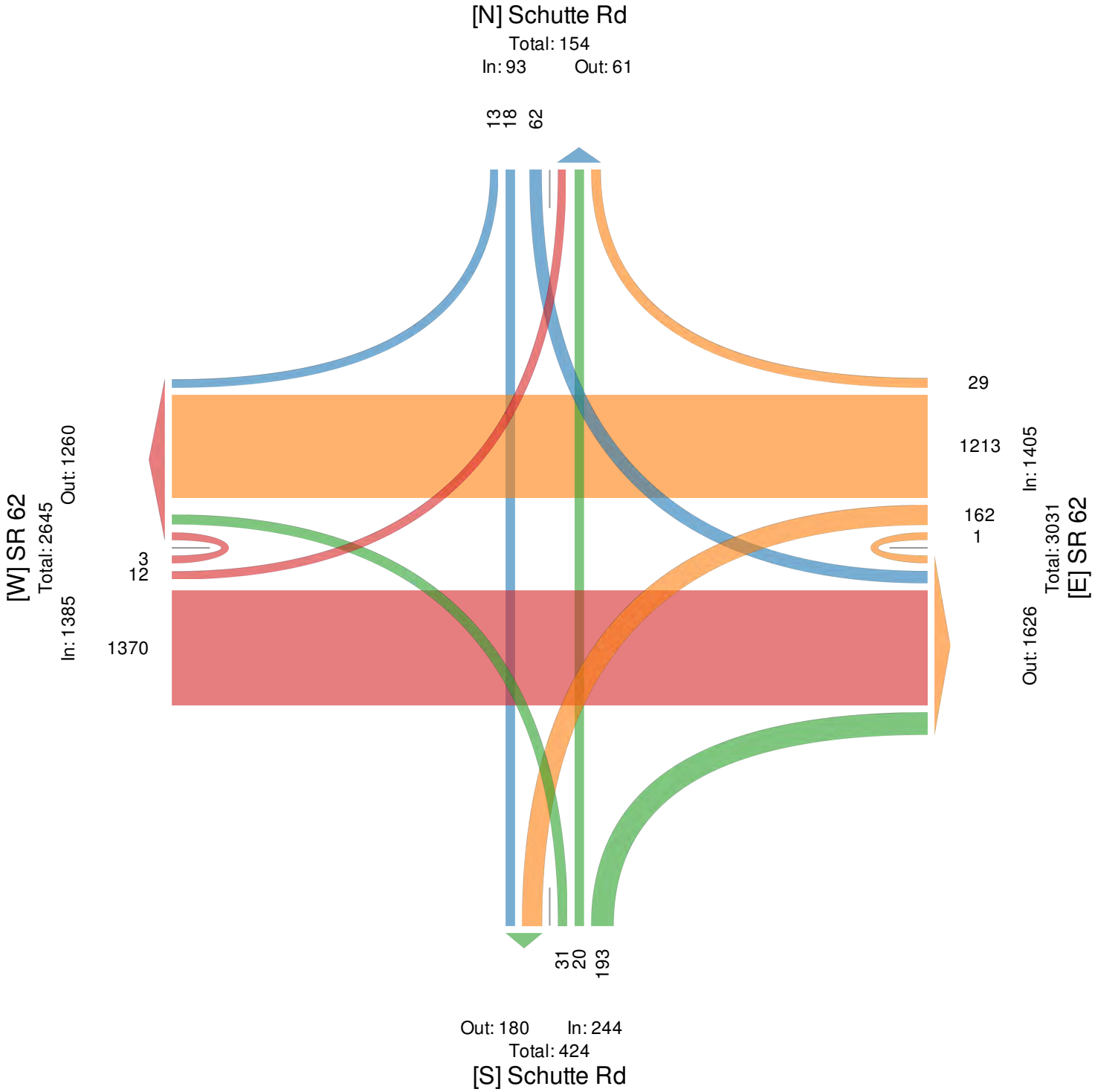
Provided by: Indiana DOT
100 N. Senate Ave.,
Indianapolis, IN, 46204, US

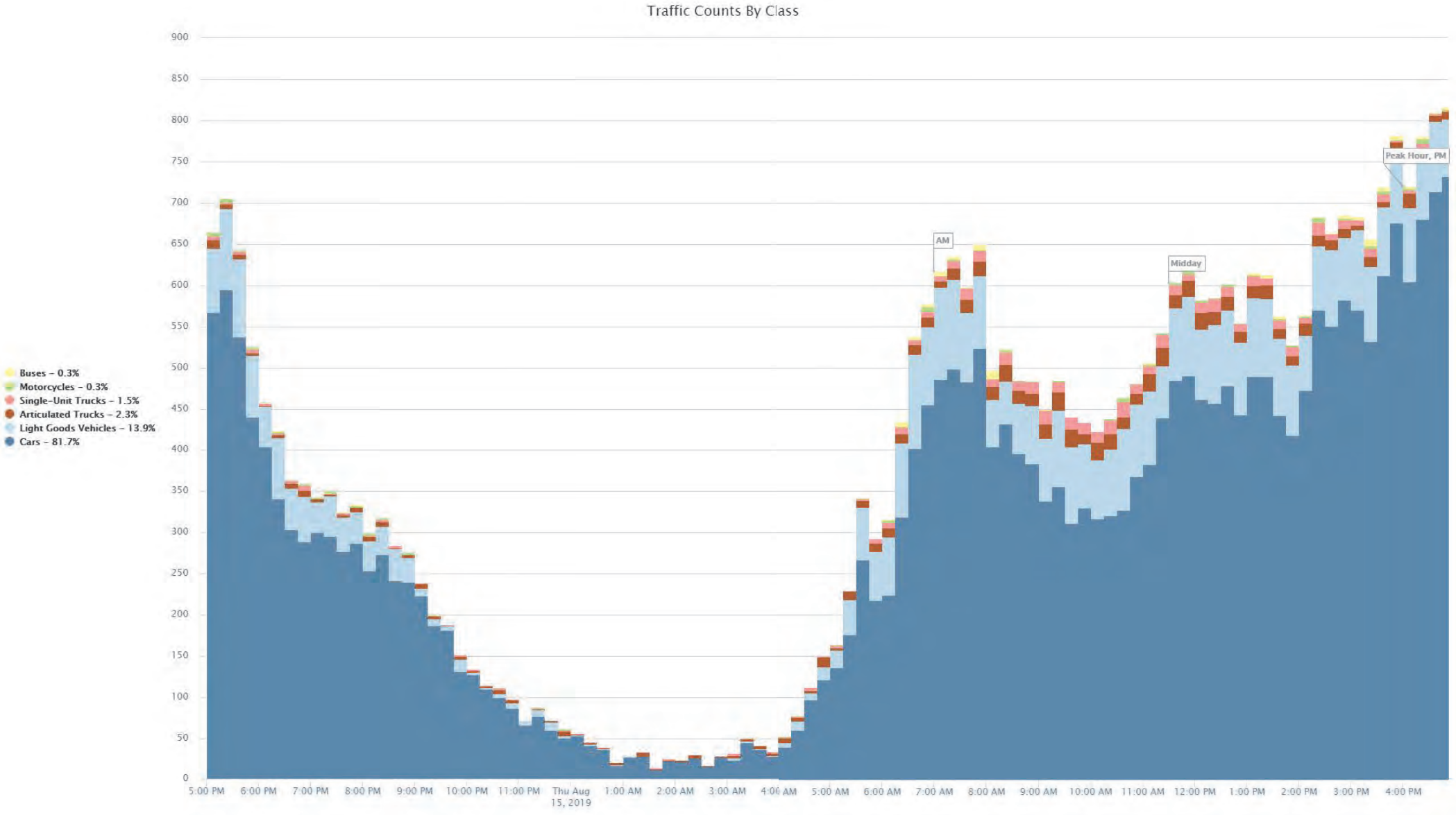
Leg	Schutte Rd					SR 62					Schutte Rd					SR 62					
Direction	Southbound					Westbound					Northbound					Eastbound					
Time	R	T	L	U	App	R	T	L	U	App	R	T	L	U	App	R	T	L	U	App	Int
2019-08-15 4:00PM	2	2	7	0	**11**	7	280	51	1	**339**	47	6	6	0	**59**	0	308	3	0	**311**	**720**
4:15PM	6	5	14	0	**25**	9	299	38	0	**346**	47	3	5	0	**55**	0	352	2	0	**354**	**780**
4:30PM	3	4	18	0	**25**	7	316	31	0	**354**	50	6	7	0	**63**	0	362	3	3	**368**	**810**
4:45PM	2	7	23	0	**32**	6	318	42	0	**366**	49	5	13	0	**67**	0	348	4	0	**352**	**817**
Total	13	18	62	0	**93**	29	1213	162	1	**1405**	193	20	31	0	**244**	0	1370	12	3	**1385**	**3127**
% Approach	14.0%	19.4%	66.7%	0%	-	2.1%	86.3%	11.5%	0.1%	-	79.1%	8.2%	12.7%	0%	-	0%	98.9%	0.9%	0.2%	-	-
% Total	0.4%	0.6%	2.0%	0%	**3.0%**	0.9%	38.8%	5.2%	0%	**44.9%**	6.2%	0.6%	1.0%	0%	**7.8%**	0%	43.8%	0.4%	0.1%	**44.3%**	-
PHF	0.542	0.643	0.674	-	**0.727**	0.806	0.954	0.794	0.250	**0.960**	0.965	0.833	0.596	-	**0.910**	-	0.946	0.750	0.250	**0.941**	0.957
Motorcycles	0	0	0	0	**0**	0	3	1	0	**4**	0	0	0	0	**0**	0	6	0	0	**6**	10
% Motorcycles	0%	0%	0%	0%	**0%**	0%	0.2%	0.6%	0%	**0.3%**	0%	0%	0%	0%	**0%**	0%	0.4%	0%	0%	**0.4%**	0.3%
Cars	11	15	54	0	**80**	26	969	144	0	**1139**	161	15	24	0	**200**	0	1303	6	2	**1311**	2730
% Cars	84.6%	83.3%	87.1%	0%	**86.0%**	89.7%	79.9%	88.9%	0%	**81.1%**	83.4%	75.0%	77.4%	0%	**82.0%**	0%	95.1%	50.0%	66.7%	**94.7%**	87.3%
Light Goods Vehicles	2	3	6	0	**11**	3	212	14	1	**230**	30	5	7	0	**42**	0	31	6	1	**38**	321
% Light Goods Vehicles	15.4%	16.7%	9.7%	0%	**11.8%**	10.3%	17.5%	8.6%	100%	**16.4%**	15.5%	25.0%	22.6%	0%	**17.2%**	0%	2.3%	50.0%	33.3%	**2.7%**	10.3%
Single-Unit Trucks	0	0	1	0	**1**	0	5	0	0	**5**	0	0	0	0	**0**	0	9	0	0	**9**	15
% Single-Unit Trucks	0%	0%	1.6%	0%	**1.1%**	0%	0.4%	0%	0%	**0.4%**	0%	0%	0%	0%	**0%**	0%	0.7%	0%	0%	**0.6%**	0.5%
Articulated Trucks	0	0	0	0	**0**	0	21	1	0	**22**	0	0	0	0	**0**	0	20	0	0	**20**	42
% Articulated Trucks	0%	0%	0%	0%	**0%**	0%	1.7%	0.6%	0%	**1.6%**	0%	0%	0%	0%	**0%**	0%	1.5%	0%	0%	**1.4%**	1.3%
Buses	0	0	1	0	**1**	0	3	2	0	**5**	2	0	0	0	**2**	0	1	0	0	**1**	9
% Buses	0%	0%	1.6%	0%	**1.1%**	0%	0.2%	1.2%	0%	**0.4%**	1.0%	0%	0%	0%	**0.8%**	0%	0.1%	0%	0%	**0.1%**	0.3%

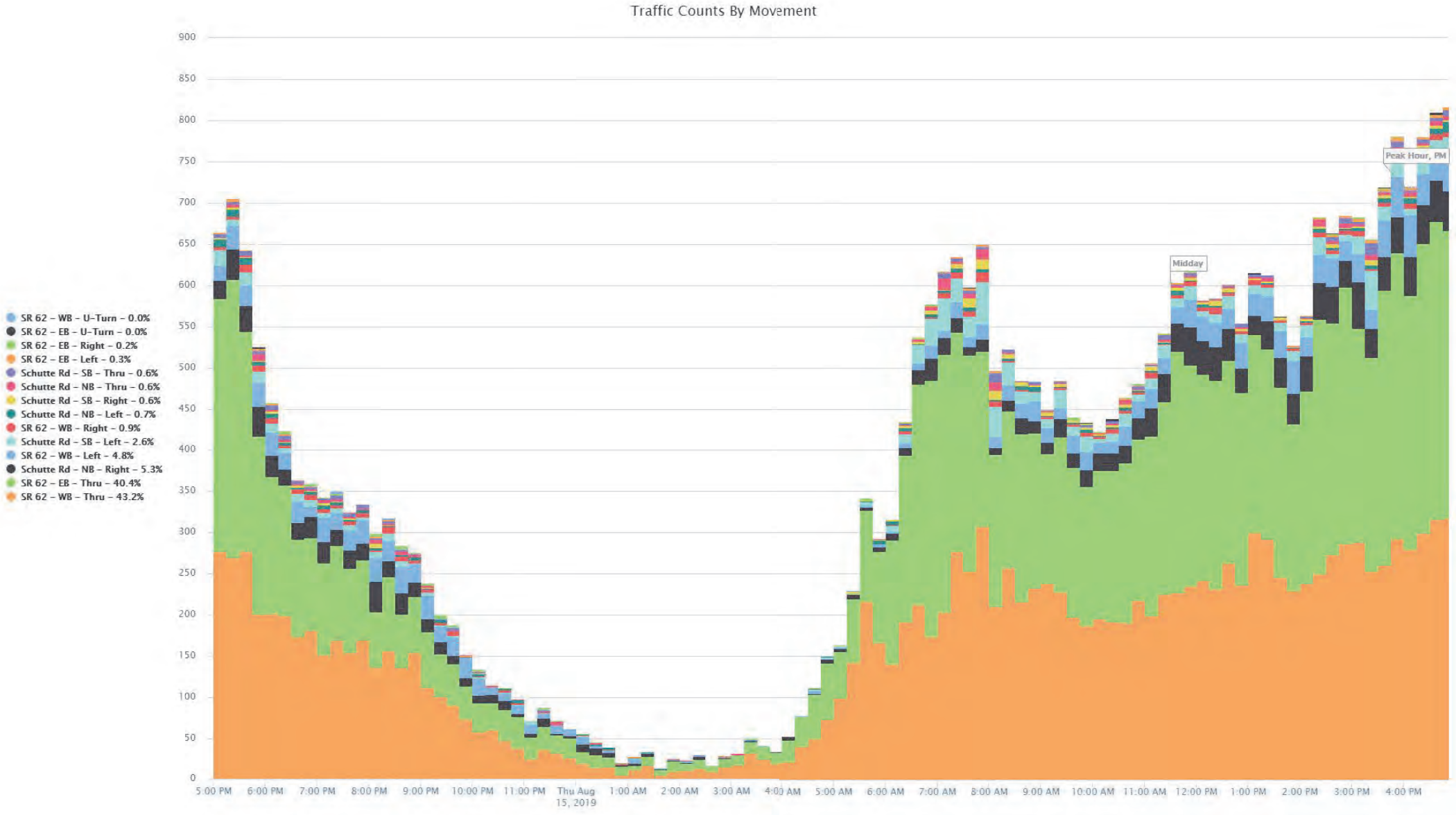
*L: Left, R: Right, T: Thru, U: U-Turn

EMPO/INDOT SR 62 @ Schutte Rd - TMC
Thu Aug 15, 2019
PM Peak (Aug 15 2019 4PM - 5 PM) - Overall Peak Hour
All Classes (Motorcycles, Cars, Light Goods Vehicles, Single-Unit Trucks, Articulated Trucks, Buses)
All Movements
ID: 685927, Location: 37.970523, -87.663538

Provided by: Indiana DOT
100 N. Senate Ave.,
Indianapolis, IN, 46204, US




Traffic Counts By Class
Buses – 0.3%
Motorcycles – 0.3%
Single-Unit Trucks – 1.5%
Articulated Trucks – 2.3%
Light Goods Vehicles – 13.9%
Cars – 81.7%
900
850
800
750
700
650
600
550
500
450
400
350
300
250
200
150
100
50
0
AM
Midday
Peak Hour, PM
5:00 PM
6:00 PM
7:00 PM
8:00 PM
9:00 PM
10:00 PM
11:00 PM
Thu Aug 15, 2019
1:00 AM
2:00 AM
3:00 AM
4:00 AM
5:00 AM
6:00 AM
7:00 AM
8:00 AM
9:00 AM
10:00 AM
11:00 AM
12:00 PM
1:00 PM
2:00 PM
3:00 PM
4:00 PM


Traffic Counts By Movement
SR 62 – WB – U-Turn – 0.0%
SR 62 – EB – U-Turn – 0.0%
SR 62 – EB – Right – 0.2%
SR 62 – EB – Left – 0.3%
Schutte Rd – SB – Thru – 0.6%
Schutte Rd – NB – Thru – 0.6%
Schutte Rd – SB – Right – 0.6%
Schutte Rd – NB – Left – 0.7%
SR 62 – WB – Right – 0.9%
Schutte Rd – SB – Left – 2.6%
SR 62 – WB – Left – 4.8%
Schutte Rd – NB – Right – 5.3%
SR 62 – EB – Thru – 40.4%
SR 62 – WB – Thru – 43.2%
900
850
800
750
700
650
600
550
500
450
400
350
300
250
200
150
100
50
0
Midday
Peak Hour, PM
5:00 PM
6:00 PM
7:00 PM
8:00 PM
9:00 PM
10:00 PM
11:00 PM
Thu Aug 15, 2019
1:00 AM
2:00 AM
3:00 AM
4:00 AM
5:00 AM
6:00 AM
7:00 AM
8:00 AM
9:00 AM
10:00 AM
11:00 AM
12:00 PM
1:00 PM
2:00 PM
3:00 PM
4:00 PM

INDIANA DEPARTMENT OF TRANSPORTATION

August 28, 2019 1:38 pm

PROJECT TRAFFIC FORECAST REPORT

DES No.: P190004

SR-62 SR 62 at 6.65 mi W of US 41

From RP 20+80 to RP 21+0

Vanderburgh County

Prepared For

Duane Decker

On

06/11/2019

By

INDOT, Office of Traffic Statistics
Technical Planning Support & Programming Division
Gregory A. Katter, PE, Supervisor
100 N. Senate Ave, N955
Indianapolis, Indiana 46204
INDOTTrafficForecasts@indot.IN.gov

PROJECT TRAFFIC FORECAST REPORT

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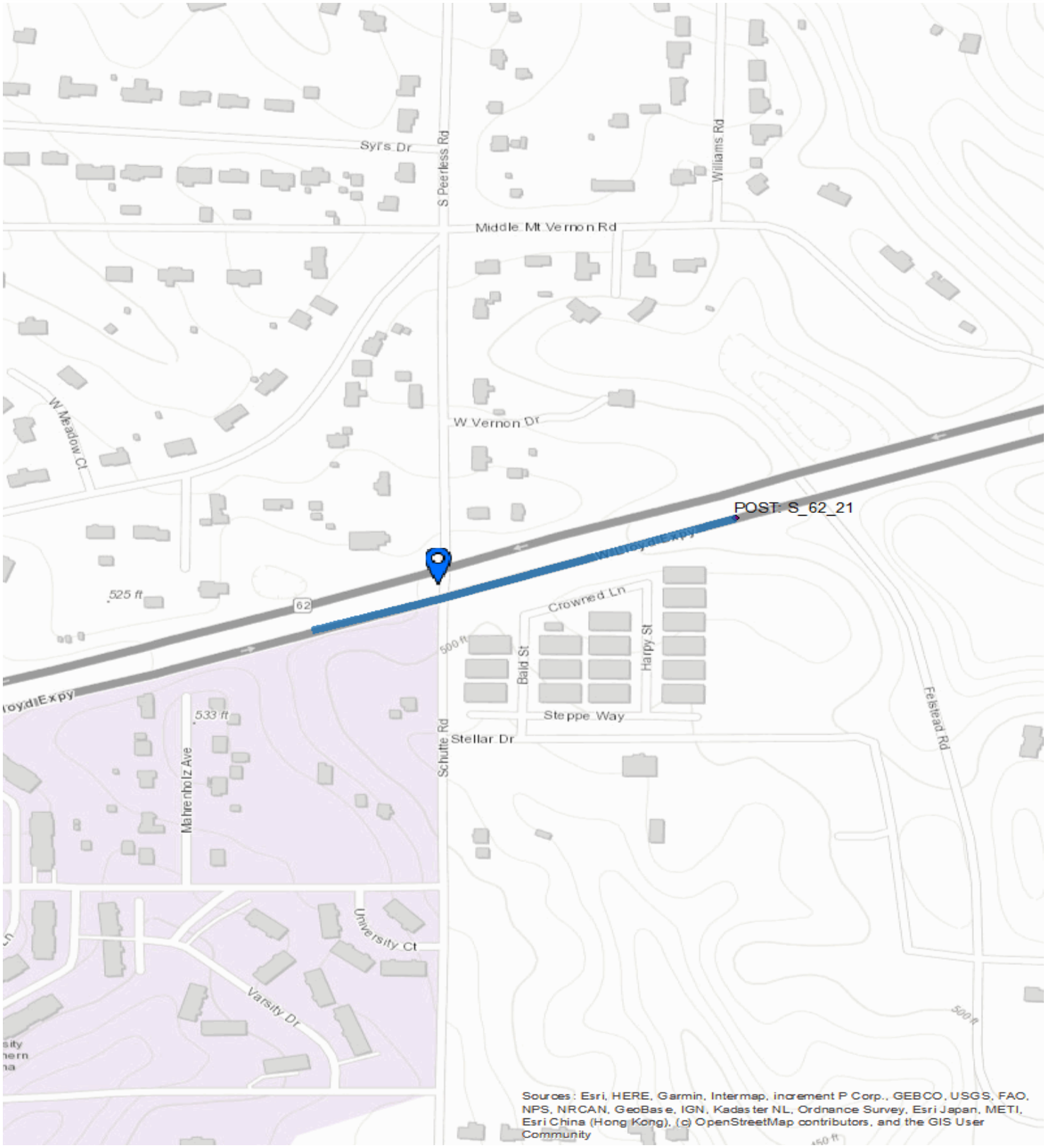
INDIANA DEPARTMENT OF TRANSPORTATION

August 28, 2019 1:38 pm

PROJECT TRAFFIC FORECAST REPORT



INDIANA DEPARTMENT OF TRANSPORTATION

August 28, 2019 1:38 pm

PROJECT TRAFFIC FORECAST REPORT

Segment: 1

Segment Name SR 62 WB

Route Name SR 62 WB

From Measure 182.780

To Measure 183.590

Forecast Year	Projected Annual Average Daily Traffic	Negative AADT	Positive AADT
2018	24,385	12,489	11,896
2025	24,385	12,489	11,896
2035	24,385	12,489	11,896
2040	24,385	12,489	11,896
2045	24,385	12,489	11,896

Design Hourly Volume (DHV) in Design Year as percentage of AADT

Year	DHV
2045	9.66%

Peak Hour Forecast

AM Peak Hour 07:00

PM Peak Hour 04:00

Commercial Vehicles (FHWA Scheme F Classes 4 - 13)

4.96% of AADT

3.99% of DHV

Directional Split

48.78% of AADT Travels in Positive Travel Direction

The per year growth user for this forecast is 0.00% and is applied as a linear growth.

It should be recognized by users of this forecast that the base year AADT has an accuracy of plus or minus 10%. It should also be understood that while this report may include forecasts with up to six apparent significant figures, the accuracy should not be interpreted as being greater than two significant figures. It is the responsibility of designers to exercise professional judgement when using this data to influence decisions.

INDIANA DEPARTMENT OF TRANSPORTATION

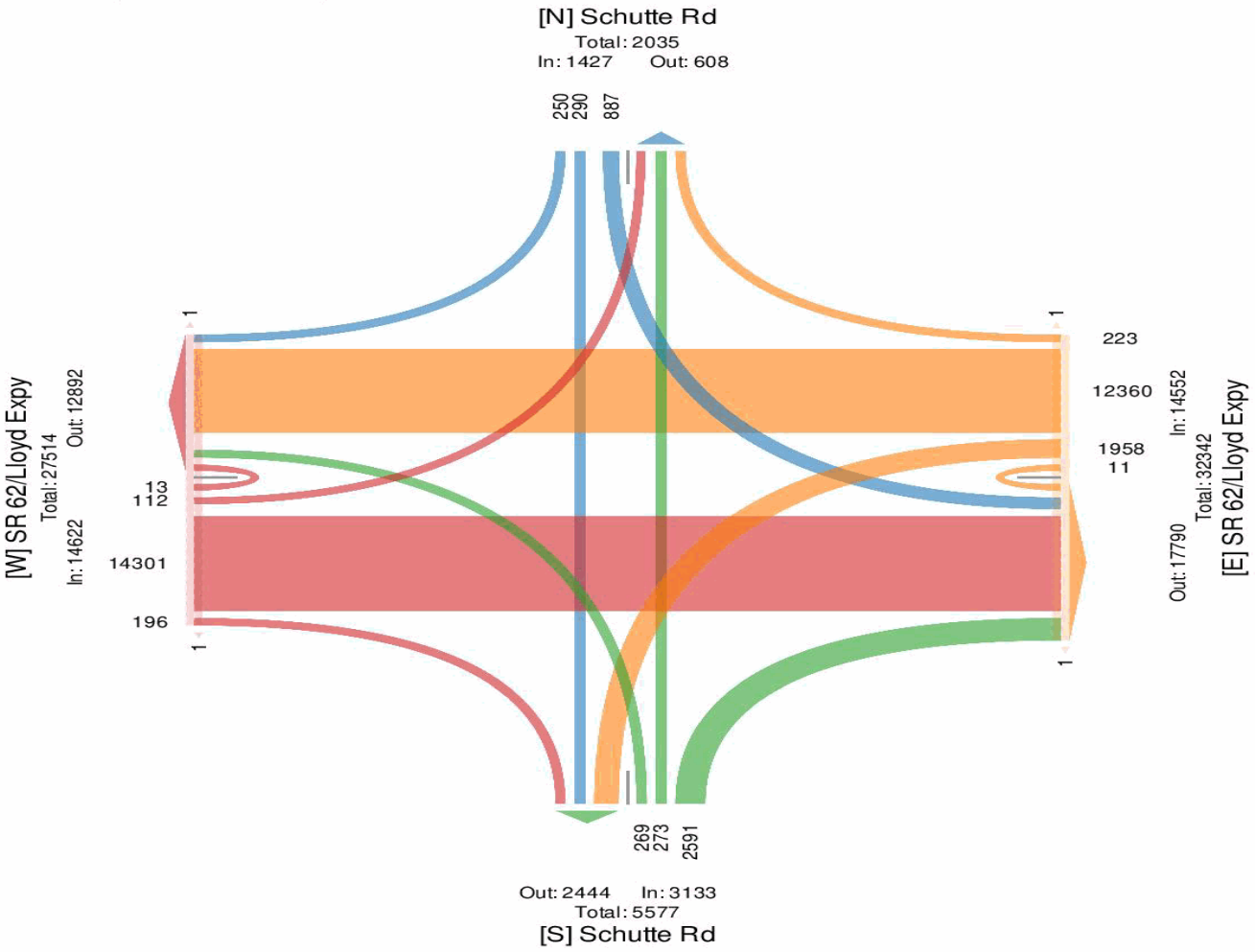
August 28, 2019 1:38 pm

PROJECT TRAFFIC FORECAST REPORT

Intersection: 1

EMPO/INDOT SR 62/Lloyd Expy @ Schutte Rd - TMC
Tue Apr 23, 2019
Full Length (1 PM-1 PM (+1))
All Classes (Motorcycles, Cars, Light Goods Vehicles, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 650447, Location: 37.970523, -87.663538

Provided by: Indiana DOT
100 N. Senate Ave.,
Indianapolis, IN, 46204, US



INDIANA DEPARTMENT OF TRANSPORTATION

August 28, 2019 1:38 pm

PROJECT TRAFFIC FORECAST REPORT

Location: SR 62 at 6.65 mi W of US 41

The table below contains the projected Annual Average Daily Traffic (AADT) in each requested year for each approach and movement.
The per year growth rate used for each approach is indicated in the table below. It is applied as a straight line growth.
For the purpose of this report a commercial vehicle would fall into FHWA Scheme F Classes 4 through 13. They are identified by MioVision as either an Articulated Truck, a Bus, or a Single-Unit Truck.

Daily Movement Forecast

Approach Road Name	Approach Direction	Movement	Total	Count Year AADT	Growth Rate	Construction Year AADT 2025	Intermediate Year 1 AADT 2035	Intermediate Year 2 AADT 2040	Design Year AADT 2045	Commercial Percentage
SR 62	East	Right	223	214	0.00%	214	214	214	214	4.04%
SR 62	East	Thru	12,360	11,866	0.00%	11,866	11,866	11,866	11,866	4.98%
SR 62	East	Left	1,958	1,880	0.00%	1,880	1,880	1,880	1,880	0.56%
SR 62	East	U-Turn	11	11	0.00%	11	11	11	11	9.09%
SR 62	East	Total	14,552	13,970	0.00%	13,970	13,970	13,970	13,970	0.00%
SCHUTTE RD	North	Right	250	240	0.00%	240	240	240	240	1.20%
SCHUTTE RD	North	Thru	290	278	0.00%	278	278	278	278	1.03%
SCHUTTE RD	North	Left	887	852	0.00%	852	852	852	852	4.17%
SCHUTTE RD	North	U-Turn	0	0	0.00%	0	0	0	0	0.00%
SCHUTTE RD	North	Total	1,427	1,370	0.00%	1,370	1,370	1,370	1,370	0.00%
SCHUTTE RD SB	South	Right	2,591	2,487	0.00%	2,487	2,487	2,487	2,487	1.58%
SCHUTTE RD SB	South	Thru	273	262	0.00%	262	262	262	262	4.76%
SCHUTTE RD SB	South	Left	269	258	0.00%	258	258	258	258	2.23%
SCHUTTE RD SB	South	U-Turn	0	0	0.00%	0	0	0	0	0.00%
SCHUTTE RD SB	South	Total	3,133	3,008	0.00%	3,008	3,008	3,008	3,008	0.00%
SR 62 WB	West	Right	196	188	0.00%	188	188	188	188	0.00%
SR 62 WB	West	Thru	14,301	13,729	0.00%	13,729	13,729	13,729	13,729	4.73%
SR 62 WB	West	Left	112	108	0.00%	108	108	108	108	2.68%
SR 62 WB	West	U-Turn	13	12	0.00%	12	12	12	12	0.00%
SR 62 WB	West	Total	14,622	14,037	0.00%	14,037	14,037	14,037	14,037	0.00%

Growth Rate Notes

INDIANA DEPARTMENT OF TRANSPORTATION

August 28, 2019 1:38 pm

PROJECT TRAFFIC FORECAST REPORT

Location: SR 62 at 6.65 mi W of US 41

The table below contains the projected traffic volumes in each requested year for approach and movement during the morning and afternoon peak hour.
The morning and afternoon peak hours are those 60 minute periods during which the most vehicles pass through the intersection.

AM PM Peak Movement Forecast

Approach Direction	Growth Rate	Movement	Interval	Total Vehicles	Commercial % AADT	Count Year AADT	Construction Year AADT 2025	Intermediate Year 1 AADT 2035	Intermediate Year 2 AADT 2040	Design Year AADT 2045
East	0.00%	Left	7:00 AM	36	8.33%	35	35	35	35	35
East	0.00%	Thru	7:00 AM	790	5.95%	758	758	758	758	758
East	0.00%	Right	7:00 AM	21	0.00%	20	20	20	20	20
East	0.00%	U-Turn	7:00 AM	1	100.00%	1	1	1	1	1
North	0.00%	Left	7:00 AM	136	3.68%	131	131	131	131	131
North	0.00%	Thru	7:00 AM	28	0.00%	27	27	27	27	27
North	0.00%	Right	7:00 AM	25	0.00%	24	24	24	24	24
North	0.00%	U-Turn	7:00 AM	0	0.00%	0	0	0	0	0
South	0.00%	Left	7:00 AM	27	3.70%	26	26	26	26	26
South	0.00%	Thru	7:00 AM	41	4.88%	39	39	39	39	39
South	0.00%	Right	7:00 AM	90	2.22%	86	86	86	86	86
South	0.00%	U-Turn	7:00 AM	0	0.00%	0	0	0	0	0
West	0.00%	Left	7:00 AM	12	8.33%	12	12	12	12	12
West	0.00%	Thru	7:00 AM	966	3.21%	927	927	927	927	927
West	0.00%	Right	7:00 AM	14	0.00%	13	13	13	13	13
West	0.00%	U-Turn	7:00 AM	0	0.00%	0	0	0	0	0
East	0.00%	Left	3:45 PM	152	0.00%	146	146	146	146	146
East	0.00%	Thru	3:45 PM	851	2.82%	817	817	817	817	817
East	0.00%	Right	3:45 PM	12	0.00%	12	12	12	12	12
East	0.00%	U-Turn	3:45 PM	2	0.00%	2	2	2	2	2
North	0.00%	Left	3:45 PM	70	4.29%	67	67	67	67	67
North	0.00%	Thru	3:45 PM	20	0.00%	19	19	19	19	19
North	0.00%	Right	3:45 PM	21	0.00%	20	20	20	20	20
North	0.00%	U-Turn	3:45 PM	0	0.00%	0	0	0	0	0
South	0.00%	Left	3:45 PM	21	0.00%	20	20	20	20	20
South	0.00%	Thru	3:45 PM	26	0.00%	25	25	25	25	25
South	0.00%	Right	3:45 PM	227	1.76%	218	218	218	218	218
South	0.00%	U-Turn	3:45 PM	0	0.00%	0	0	0	0	0
West	0.00%	Left	3:45 PM	19	0.00%	18	18	18	18	18
West	0.00%	Thru	3:45 PM	1487	2.56%	1,428	1,428	1,428	1,428	1,428
West	0.00%	Right	3:45 PM	14	0.00%	13	13	13	13	13
West	0.00%	U-Turn	3:45 PM	2	0.00%	2	2	2	2	2

It should be recognized by users of this forecast that the base year AADT has an accuracy of plus or minus 10%. It should also be understood that while this report may include forecasts with up to six apparent significant figures, the accuracy should not be interpreted as being greater than two significant figures. It is the responsibility of designers to exercise professional judgement when using this data to influence decisions.

EMPO/INDOT SR 62/Lloyd Expy @ Boehne Camp Rd - TMC

Wed Sep 4, 2019
Full Length (11 AM-11 AM (+1))
All Classes (Motorcycles, Cars, Light Goods Vehicles, Single-Unit Trucks, Articulated Trucks, Buses)
All Movements
ID: 690851, Location: 37.974653, -87.645983

Provided by: Indiana DOT
100 N. Senate Ave.,
Indianapolis, IN, 46204, US

Leg	Boehne Camp Rd					SR 62					Boehne Camp Rd					SR 62					
Direction	Southbound					Westbound					Northbound					Eastbound					
Time	R	T	L	U	App	R	T	L	U	App	R	T	L	U	App	R	T	L	U	App	Int
2019-09-04 11:00AM	20	50	48	0	**118**	45	779	55	0	**879**	95	52	222	0	**369**	287	807	25	1	**1120**	**2486**
12:00PM	29	51	50	0	**130**	44	841	65	0	**950**	86	49	273	0	**408**	240	941	27	1	**1209**	**2697**
1:00PM	28	46	41	0	**115**	50	794	57	3	**904**	79	69	228	0	**376**	215	938	19	1	**1173**	**2568**
2:00PM	45	62	63	0	**170**	56	958	67	2	**1083**	80	65	230	0	**375**	270	1077	42	0	**1389**	**3017**
3:00PM	21	50	48	0	**119**	62	1050	50	0	**1162**	107	61	213	0	**381**	294	1184	37	0	**1515**	**3177**
4:00PM	45	58	40	0	**143**	91	1149	60	5	**1305**	55	73	261	0	**389**	326	1528	53	0	**1907**	**3744**
5:00PM	29	52	43	0	**124**	95	1186	70	3	**1354**	68	61	283	0	**412**	299	1190	37	1	**1527**	**3417**
6:00PM	24	73	41	0	**138**	67	851	53	1	**972**	43	95	236	0	**374**	201	755	43	2	**1001**	**2485**
7:00PM	30	50	37	0	**117**	73	733	50	1	**857**	44	71	238	0	**353**	162	557	24	1	**744**	**2071**
8:00PM	30	19	41	0	**90**	50	654	42	0	**746**	36	51	194	0	**281**	136	444	31	0	**611**	**1728**
9:00PM	7	16	19	0	**42**	35	439	31	0	**505**	35	20	104	0	**159**	75	293	11	0	**379**	**1085**
10:00PM	7	14	12	0	**33**	24	249	12	0	**285**	18	13	76	0	**107**	57	257	12	0	**326**	**751**
11:00PM	3	6	10	0	**19**	15	155	12	1	**183**	13	10	24	0	**47**	26	132	6	0	**164**	**413**
2019-09-05 12:00AM	4	6	6	0	**16**	6	88	10	1	**105**	8	7	21	0	**36**	23	77	4	0	**104**	**261**
1:00AM	1	3	3	0	**7**	2	43	2	0	**47**	6	3	11	0	**20**	2	42	2	0	**46**	**120**
2:00AM	0	1	2	0	**3**	5	57	1	0	**63**	2	1	4	0	**7**	5	33	2	0	**40**	**113**
3:00AM	8	3	5	0	**16**	2	84	1	1	**88**	3	3	8	0	**14**	4	41	1	0	**46**	**164**
4:00AM	4	4	15	0	**23**	4	142	1	0	**147**	3	1	9	0	**13**	19	193	2	0	**214**	**397**
5:00AM	14	5	23	0	**42**	6	648	2	1	**657**	23	4	32	0	**59**	30	406	3	0	**439**	**1197**
6:00AM	24	25	64	0	**113**	46	779	19	1	**845**	46	18	70	0	**134**	108	988	17	0	**1113**	**2205**
7:00AM	76	76	144	0	**296**	58	1056	54	0	**1168**	49	58	125	0	**232**	135	1160	43	0	**1338**	**3034**
8:00AM	50	42	47	0	**139**	27	1209	51	3	**1290**	60	26	138	0	**224**	148	827	10	0	**985**	**2638**
9:00AM	26	28	37	1	**92**	37	656	46	2	**741**	59	24	113	0	**196**	154	713	17	1	**885**	**1914**
10:00AM	40	42	36	0	**118**	33	867	54	0	**954**	78	37	159	0	**274**	190	829	22	0	**1041**	**2387**
Total	565	782	875	1	**2223**	933	15467	865	25	**17290**	1096	872	3272	0	**5240**	3406	15412	490	8	**19316**	**44069**
% Approach	25.4%	35.2%	39.4%	0%	-	5.4%	89.5%	5.0%	0.1%	-	20.9%	16.6%	62.4%	0%	-	17.6%	79.8%	2.5%	0%	-	-
% Total	1.3%	1.8%	2.0%	0%	**5.0%**	2.1%	35.1%	2.0%	0.1%	**39.2%**	2.5%	2.0%	7.4%	0%	**11.9%**	7.7%	35.0%	1.1%	0%	**43.8%**	-
Motorcycles	1	0	2	0	**3**	0	68	5	0	**73**	4	5	16	0	**25**	10	64	1	0	**75**	176
% Motorcycles	0.2%	0%	0.2%	0%	**0.1%**	0%	0.4%	0.6%	0%	**0.4%**	0.4%	0.6%	0.5%	0%	**0.5%**	0.3%	0.4%	0.2%	0%	**0.4%**	0.4%
Cars	437	651	735	1	**1824**	846	11961	698	18	**13523**	868	719	2754	0	**4341**	3134	11836	413	5	**15388**	35076
% Cars	77.3%	83.2%	84.0%	100%	**82.1%**	90.7%	77.3%	80.7%	72.0%	**78.2%**	79.2%	82.5%	84.2%	0%	**82.8%**	92.0%	76.8%	84.3%	62.5%	**79.7%**	79.6%
Light Goods Vehicles	76	119	110	0	**305**	45	2670	146	7	**2868**	209	138	479	0	**826**	196	2746	65	3	**3010**	7009
% Light Goods Vehicles	13.5%	15.2%	12.6%	0%	**13.7%**	4.8%	17.3%	16.9%	28.0%	**16.6%**	19.1%	15.8%	14.6%	0%	**15.8%**	5.8%	17.8%	13.3%	37.5%	**15.6%**	15.9%
Single-Unit Trucks	14	4	7	0	**25**	14	284	11	0	**309**	12	5	16	0	**33**	31	278	10	0	**319**	686
% Single-Unit Trucks	2.5%	0.5%	0.8%	0%	**1.1%**	1.5%	1.8%	1.3%	0%	**1.8%**	1.1%	0.6%	0.5%	0%	**0.6%**	0.9%	1.8%	2.0%	0%	**1.7%**	1.6%
Articulated Trucks	1	1	4	0	**6**	1	452	4	0	**457**	3	0	4	0	**7**	2	457	0	0	**459**	929
% Articulated Trucks	0.2%	0.1%	0.5%	0%	**0.3%**	0.1%	2.9%	0.5%	0%	**2.6%**	0.3%	0%	0.1%	0%	**0.1%**	0.1%	3.0%	0%	0%	**2.4%**	2.1%
Buses	36	7	17	0	**60**	27	32	1	0	**60**	0	5	3	0	**8**	33	31	1	0	**65**	193
% Buses	6.4%	0.9%	1.9%	0%	**2.7%**	2.9%	0.2%	0.1%	0%	**0.3%**	0%	0.6%	0.1%	0%	**0.2%**	1.0%	0.2%	0.2%	0%	**0.3%**	0.4%

*L: Left, R: Right, T: Thru, U: U-Turn

EMPO/INDOT SR 62/Lloyd Expy @ Boehne Camp Rd - TMC
Wed Sep 4, 2019
Full Length (11 AM-11 AM (+1))
All Classes (Motorcycles, Cars, Light Goods Vehicles, Single-Unit Trucks, Articulated Trucks, Buses)
All Movements
ID: 690851, Location: 37.974653, -87.645983

Provided by: Indiana DOT
100 N. Senate Ave.,
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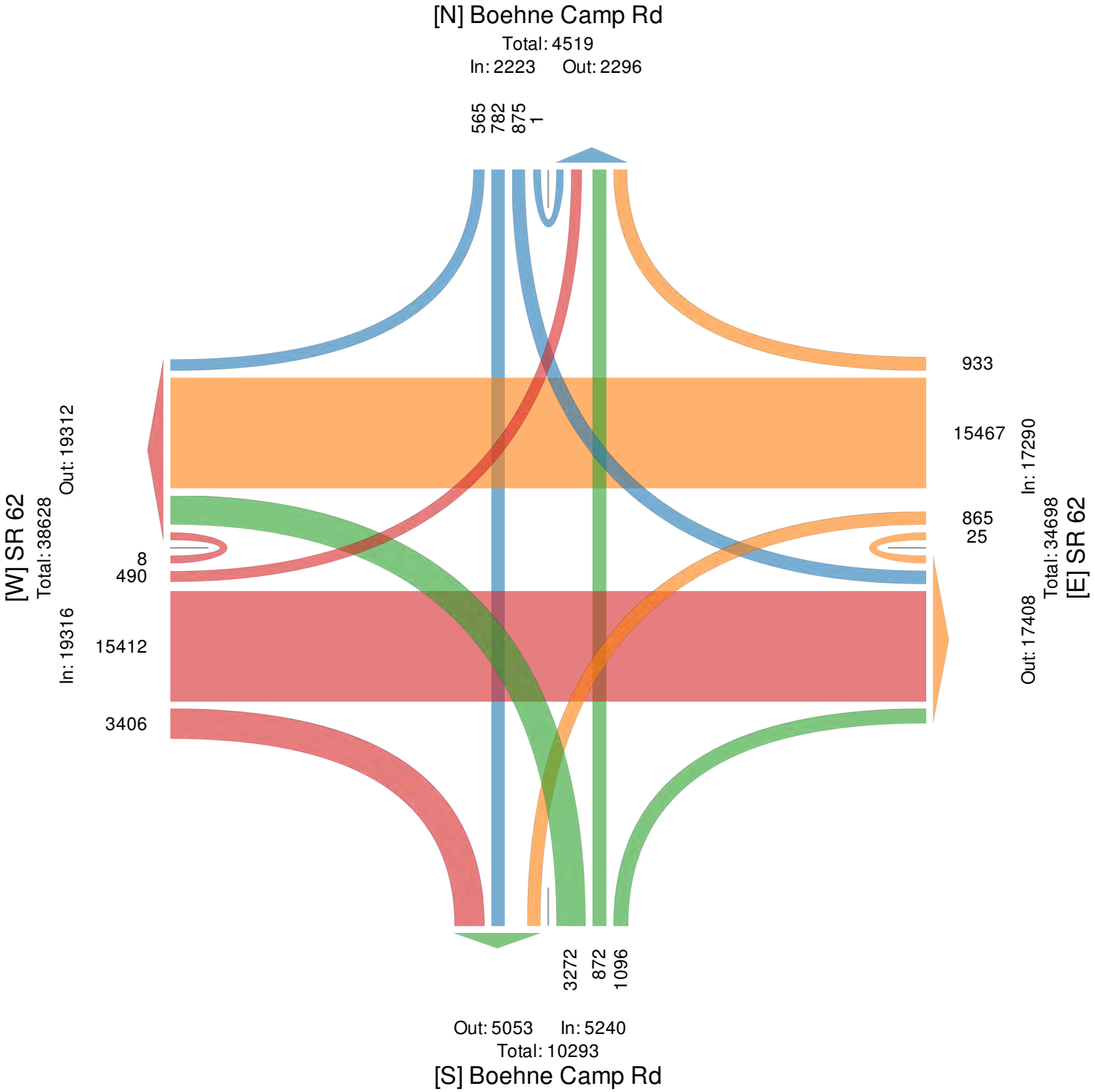

EMPO/INDOT SR 62/Lloyd Expy @ Boehne Camp Rd - TMC

Wed Sep 4, 2019
Midday Peak (Sep 04 2019 12PM - 1 PM)
All Classes (Motorcycles, Cars, Light Goods Vehicles, Single-Unit Trucks, Articulated Trucks, Buses)
All Movements
ID: 690851, Location: 37.974653, -87.645983

Provided by: Indiana DOT
100 N. Senate Ave.,
Indianapolis, IN, 46204, US

Leg	Boehne Camp Rd					SR 62					Boehne Camp Rd					SR 62					
Direction	Southbound					Westbound					Northbound					Eastbound					
Time	R	T	L	U	App	R	T	L	U	App	R	T	L	U	App	R	T	L	U	App	Int
2019-09-04 12:00PM	4	12	13	0	**29**	8	171	18	0	**197**	23	8	68	0	**99**	94	303	13	0	**410**	**735**
12:15PM	7	19	9	0	**35**	15	186	15	0	**216**	23	16	55	0	**94**	53	226	5	0	**284**	**629**
12:30PM	7	9	17	0	**33**	5	257	17	0	**279**	24	9	81	0	**114**	42	195	2	0	**239**	**665**
12:45PM	11	11	11	0	**33**	16	227	15	0	**258**	16	16	69	0	**101**	51	217	7	1	**276**	**668**
Total	29	51	50	0	**130**	44	841	65	0	**950**	86	49	273	0	**408**	240	941	27	1	**1209**	**2697**
% Approach	22.3%	39.2%	38.5%	0%	-	4.6%	88.5%	6.8%	0%	-	21.1%	12.0%	66.9%	0%	-	19.9%	77.8%	2.2%	0.1%	-	-
% Total	1.1%	1.9%	1.9%	0%	**4.8%**	1.6%	31.2%	2.4%	0%	**35.2%**	3.2%	1.8%	10.1%	0%	**15.1%**	8.9%	34.9%	1.0%	0%	**44.8%**	-
PHF	0.659	0.671	0.735	-	**0.929**	0.688	0.818	0.903	-	**0.851**	0.896	0.766	0.843	-	**0.895**	0.638	0.776	0.519	0.250	**0.737**	0.917
Motorcycles	0	0	0	0	**0**	0	3	0	0	**3**	0	0	2	0	**2**	0	4	0	0	**4**	9
% Motorcycles	0%	0%	0%	0%	**0%**	0%	0.4%	0%	0%	**0.3%**	0%	0%	0.7%	0%	**0.5%**	0%	0.4%	0%	0%	**0.3%**	0.3%
Cars	22	43	38	0	**103**	38	630	47	0	**715**	70	40	230	0	**340**	210	682	24	1	**917**	2075
% Cars	75.9%	84.3%	76.0%	0%	**79.2%**	86.4%	74.9%	72.3%	0%	**75.3%**	81.4%	81.6%	84.2%	0%	**83.3%**	87.5%	72.5%	88.9%	100%	**75.8%**	76.9%
Light Goods Vehicles	3	8	10	0	**21**	4	136	16	0	**156**	15	8	40	0	**63**	25	175	2	0	**202**	442
% Light Goods Vehicles	10.3%	15.7%	20.0%	0%	**16.2%**	9.1%	16.2%	24.6%	0%	**16.4%**	17.4%	16.3%	14.7%	0%	**15.4%**	10.4%	18.6%	7.4%	0%	**16.7%**	16.4%
Single-Unit Trucks	1	0	0	0	**1**	1	21	1	0	**23**	1	1	1	0	**3**	3	37	1	0	**41**	68
% Single-Unit Trucks	3.4%	0%	0%	0%	**0.8%**	2.3%	2.5%	1.5%	0%	**2.4%**	1.2%	2.0%	0.4%	0%	**0.7%**	1.3%	3.9%	3.7%	0%	**3.4%**	2.5%
Articulated Trucks	0	0	0	0	**0**	0	48	1	0	**49**	0	0	0	0	**0**	0	42	0	0	**42**	91
% Articulated Trucks	0%	0%	0%	0%	**0%**	0%	5.7%	1.5%	0%	**5.2%**	0%	0%	0%	0%	**0%**	0%	4.5%	0%	0%	**3.5%**	3.4%
Buses	3	0	2	0	**5**	1	3	0	0	**4**	0	0	0	0	**0**	2	1	0	0	**3**	12
% Buses	10.3%	0%	4.0%	0%	**3.8%**	2.3%	0.4%	0%	0%	**0.4%**	0%	0%	0%	0%	**0%**	0.8%	0.1%	0%	0%	**0.2%**	0.4%

*L: Left, R: Right, T: Thru, U: U-Turn

EMPO/INDOT SR 62/Lloyd Expy @ Boehne Camp Rd - TMC
Wed Sep 4, 2019
Midday Peak (Sep 04 2019 12PM - 1 PM)
All Classes (Motorcycles, Cars, Light Goods Vehicles, Single-Unit Trucks, Articulated Trucks, Buses)
All Movements
ID: 690851, Location: 37.974653, -87.645983

Provided by: Indiana DOT
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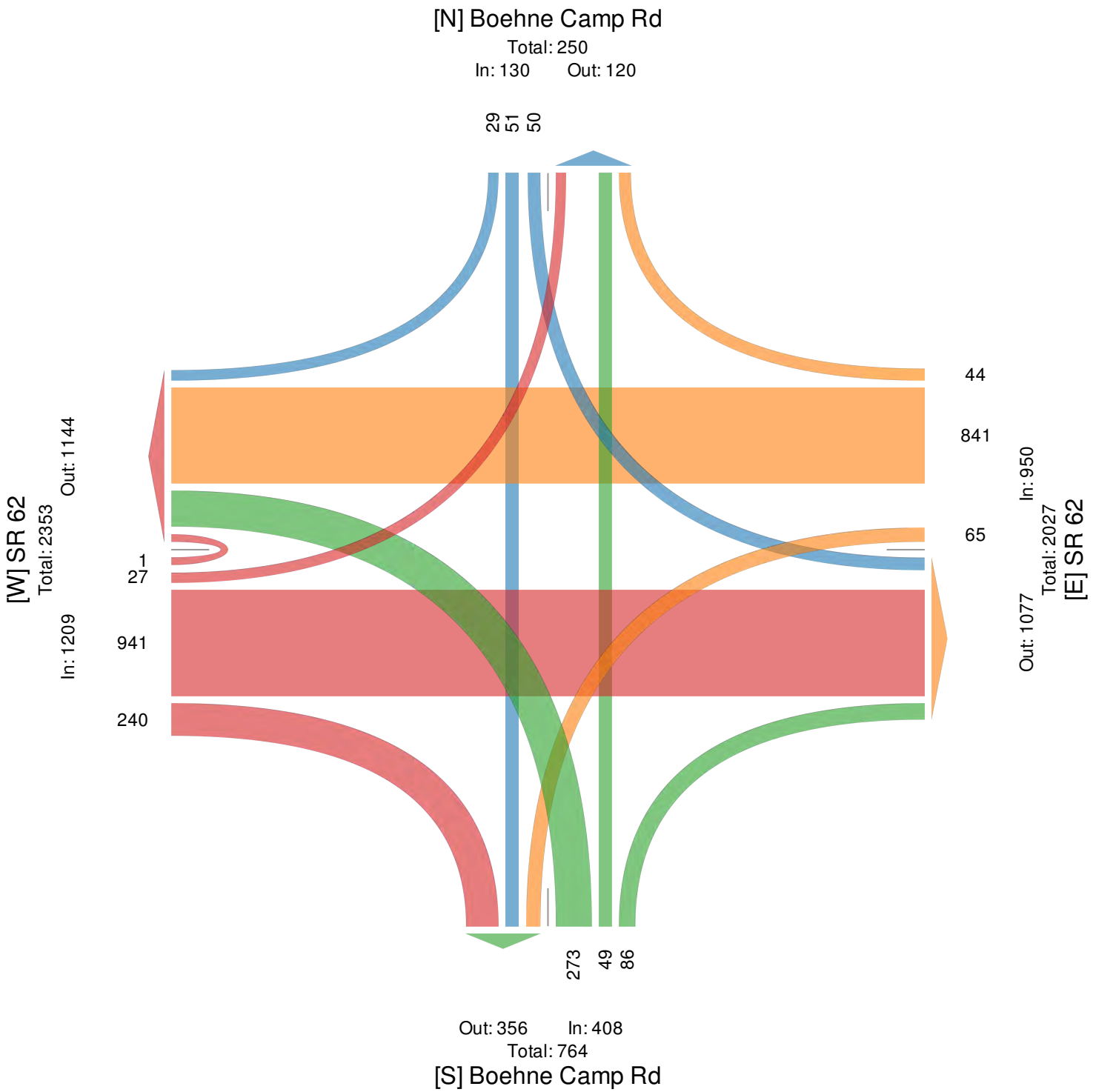


EMPO/INDOT SR 62/Lloyd Expy @ Boehne Camp Rd - TMC

Wed Sep 4, 2019
PM Peak (Sep 04 2019 4:15PM - 5:15 PM) - Overall Peak Hour
All Classes (Motorcycles, Cars, Light Goods Vehicles, Single-Unit Trucks, Articulated Trucks, Buses)
All Movements
ID: 690851, Location: 37.974653, -87.645983

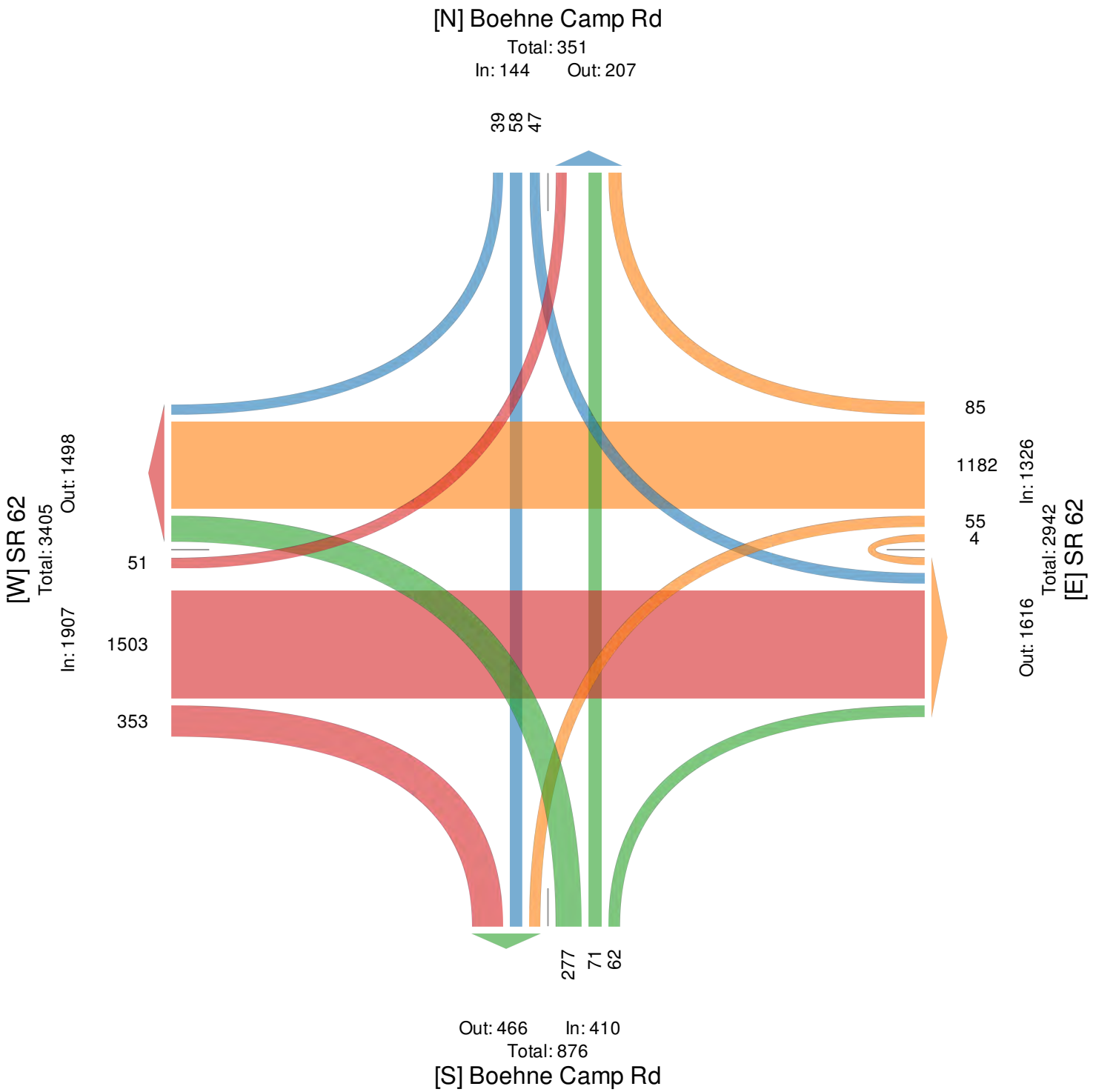
Provided by: Indiana DOT
100 N. Senate Ave.,
Indianapolis, IN, 46204, US

Leg	Boehne Camp Rd					SR 62					Boehne Camp Rd					SR 62					
Direction	Southbound					Westbound					Northbound					Eastbound					
Time	R	T	L	U	App	R	T	L	U	App	R	T	L	U	App	R	T	L	U	App	Int
2019-09-04 4:15PM	9	20	13	0	**42**	20	304	9	1	**334**	12	19	67	0	**98**	80	396	10	0	**486**	**960**
4:30PM	15	11	9	0	**35**	22	297	18	2	**339**	13	13	72	0	**98**	93	427	19	0	**539**	**1011**
4:45PM	13	13	9	0	**35**	20	286	16	1	**323**	16	19	71	0	**106**	91	371	14	0	**476**	**940**
5:00PM	2	14	16	0	**32**	23	295	12	0	**330**	21	20	67	0	**108**	89	309	8	0	**406**	**876**
Total	39	58	47	0	**144**	85	1182	55	4	**1326**	62	71	277	0	**410**	353	1503	51	0	**1907**	**3787**
% Approach	27.1%	40.3%	32.6%	0%	-	6.4%	89.1%	4.1%	0.3%	-	15.1%	17.3%	67.6%	0%	-	18.5%	78.8%	2.7%	0%	-	-
% Total	1.0%	1.5%	1.2%	0%	**3.8%**	2.2%	31.2%	1.5%	0.1%	**35.0%**	1.6%	1.9%	7.3%	0%	**10.8%**	9.3%	39.7%	1.3%	0%	**50.4%**	-
PHF	0.650	0.725	0.734	-	**0.857**	0.924	0.972	0.764	0.500	**0.978**	0.738	0.888	0.962	-	**0.949**	0.949	0.880	0.671	-	**0.885**	0.936
Motorcycles	0	0	1	0	**1**	0	2	0	0	**2**	0	1	1	0	**2**	2	8	0	0	**10**	15
% Motorcycles	0%	0%	2.1%	0%	**0.7%**	0%	0.2%	0%	0%	**0.2%**	0%	1.4%	0.4%	0%	**0.5%**	0.6%	0.5%	0%	0%	**0.5%**	0.4%
Cars	31	51	38	0	**120**	81	947	42	3	**1073**	49	61	229	0	**339**	330	1202	45	0	**1577**	3109
% Cars	79.5%	87.9%	80.9%	0%	**83.3%**	95.3%	80.1%	76.4%	75.0%	**80.9%**	79.0%	85.9%	82.7%	0%	**82.7%**	93.5%	80.0%	88.2%	0%	**82.7%**	82.1%
Light Goods Vehicles	6	6	8	0	**20**	2	207	12	1	**222**	12	9	46	0	**67**	19	255	5	0	**279**	588
% Light Goods Vehicles	15.4%	10.3%	17.0%	0%	**13.9%**	2.4%	17.5%	21.8%	25.0%	**16.7%**	19.4%	12.7%	16.6%	0%	**16.3%**	5.4%	17.0%	9.8%	0%	**14.6%**	15.5%
Single-Unit Trucks	0	0	0	0	**0**	0	5	1	0	**6**	1	0	1	0	**2**	0	14	1	0	**15**	23
% Single-Unit Trucks	0%	0%	0%	0%	**0%**	0%	0.4%	1.8%	0%	**0.5%**	1.6%	0%	0.4%	0%	**0.5%**	0%	0.9%	2.0%	0%	**0.8%**	0.6%
Articulated Trucks	0	0	0	0	**0**	0	21	0	0	**21**	0	0	0	0	**0**	0	22	0	0	**22**	43
% Articulated Trucks	0%	0%	0%	0%	**0%**	0%	1.8%	0%	0%	**1.6%**	0%	0%	0%	0%	**0%**	0%	1.5%	0%	0%	**1.2%**	1.1%
Buses	2	1	0	0	**3**	2	0	0	0	**2**	0	0	0	0	**0**	2	2	0	0	**4**	9
% Buses	5.1%	1.7%	0%	0%	**2.1%**	2.4%	0%	0%	0%	**0.2%**	0%	0%	0%	0%	**0%**	0.6%	0.1%	0%	0%	**0.2%**	0.2%

*L: Left, R: Right, T: Thru, U: U-Turn

EMPO/INDOT SR 62/Lloyd Expy @ Boehne Camp Rd - TMC
Wed Sep 4, 2019
PM Peak (Sep 04 2019 4:15PM - 5:15 PM) - Overall Peak Hour
All Classes (Motorcycles, Cars, Light Goods Vehicles, Single-Unit Trucks, Articulated Trucks, Buses)
All Movements
ID: 690851, Location: 37.974653, -87.645983

Provided by: Indiana DOT
100 N. Senate Ave.,
Indianapolis, IN, 46204, US



EMPO/INDOT SR 62/Lloyd Expy @ Boehne Camp Rd - TMC

Thu Sep 5, 2019
AM Peak (Sep 05 2019 7AM - 8 AM)
All Classes (Motorcycles, Cars, Light Goods Vehicles, Single-Unit Trucks, Articulated Trucks, Buses)
All Movements
ID: 690851, Location: 37.974653, -87.645983

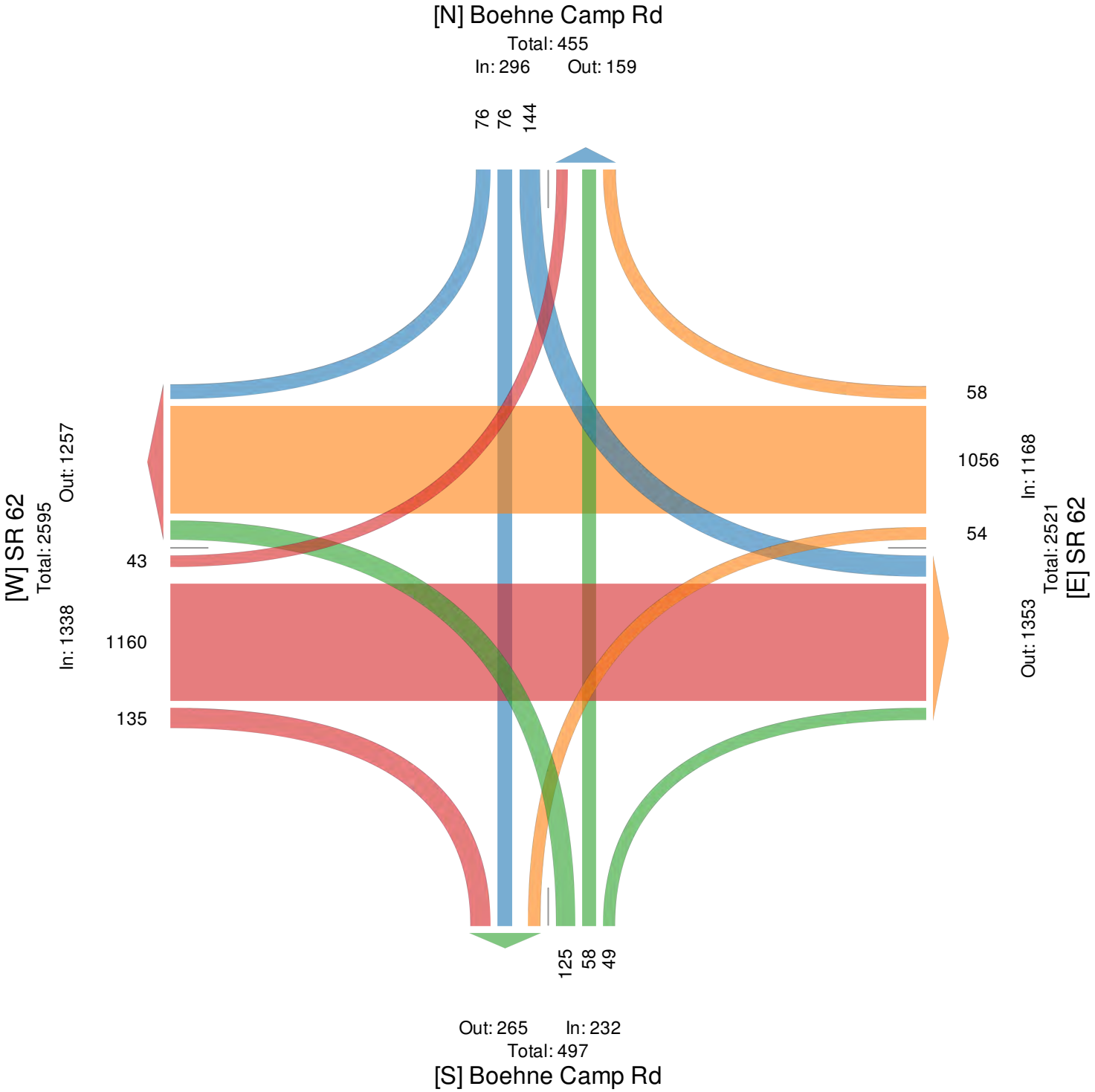
Provided by: Indiana DOT
100 N. Senate Ave.,
Indianapolis, IN, 46204, US

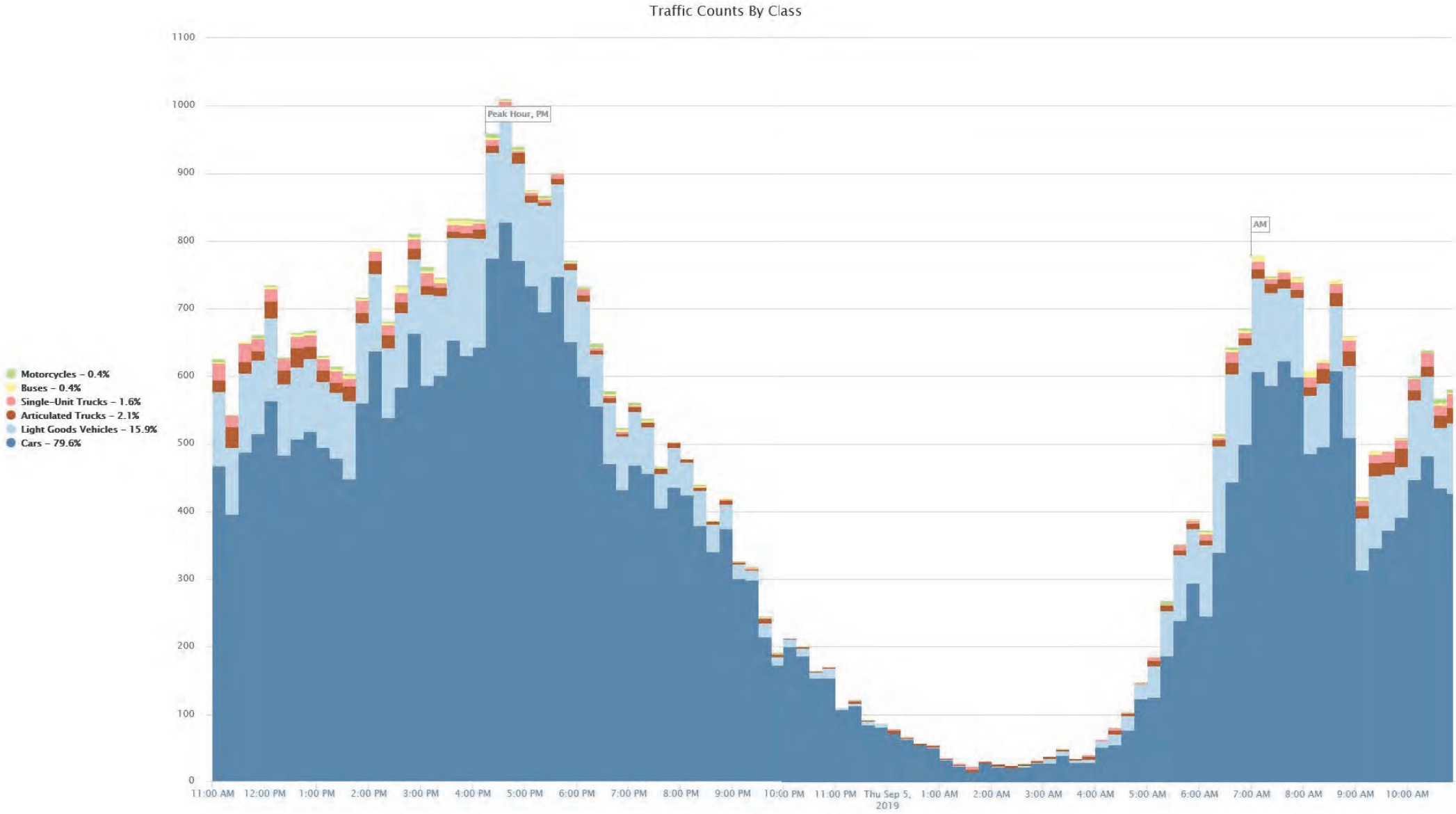
Leg	Boehne Camp Rd					SR 62					Boehne Camp Rd					SR 62					
Direction	Southbound					Westbound					Northbound					Eastbound					
Time	R	T	L	U	App	R	T	L	U	App	R	T	L	U	App	R	T	L	U	App	Int
2019-09-05 7:00AM	17	26	69	0	**112**	32	202	9	0	**243**	16	24	17	0	**57**	34	310	23	0	**367**	**779**
7:15AM	19	28	39	0	**86**	10	235	16	0	**261**	11	16	28	0	**55**	35	299	13	0	**347**	**749**
7:30AM	20	6	22	0	**48**	6	296	15	0	**317**	13	8	41	0	**62**	32	299	0	0	**331**	**758**
7:45AM	20	16	14	0	**50**	10	323	14	0	**347**	9	10	39	0	**58**	34	252	7	0	**293**	**748**
Total	76	76	144	0	**296**	58	1056	54	0	**1168**	49	58	125	0	**232**	135	1160	43	0	**1338**	**3034**
% Approach	25.7%	25.7%	48.6%	0%	-	5.0%	90.4%	4.6%	0%	-	21.1%	25.0%	53.9%	0%	-	10.1%	86.7%	3.2%	0%	-	-
% Total	2.5%	2.5%	4.7%	0%	**9.8%**	1.9%	34.8%	1.8%	0%	**38.5%**	1.6%	1.9%	4.1%	0%	**7.6%**	4.4%	38.2%	1.4%	0%	**44.1%**	-
PHF	0.950	0.679	0.522	-	**0.661**	0.453	0.817	0.844	-	**0.841**	0.766	0.604	0.762	-	**0.935**	0.964	0.935	0.467	-	**0.911**	0.974
Motorcycles	0	0	0	0	**0**	0	2	0	0	**2**	0	0	0	0	**0**	0	2	0	0	**2**	4
% Motorcycles	0%	0%	0%	0%	**0%**	0%	0.2%	0%	0%	**0.2%**	0%	0%	0%	0%	**0%**	0%	0.2%	0%	0%	**0.1%**	0.1%
Cars	64	60	126	0	**250**	46	808	43	0	**897**	31	51	100	0	**182**	119	932	36	0	**1087**	2416
% Cars	84.2%	78.9%	87.5%	0%	**84.5%**	79.3%	76.5%	79.6%	0%	**76.8%**	63.3%	87.9%	80.0%	0%	**78.4%**	88.1%	80.3%	83.7%	0%	**81.2%**	79.6%
Light Goods Vehicles	9	13	16	0	**38**	6	193	10	0	**209**	17	5	25	0	**47**	10	191	6	0	**207**	501
% Light Goods Vehicles	11.8%	17.1%	11.1%	0%	**12.8%**	10.3%	18.3%	18.5%	0%	**17.9%**	34.7%	8.6%	20.0%	0%	**20.3%**	7.4%	16.5%	14.0%	0%	**15.5%**	16.5%
Single-Unit Trucks	0	1	0	0	**1**	6	18	1	0	**25**	0	1	0	0	**1**	2	11	0	0	**13**	40
% Single-Unit Trucks	0%	1.3%	0%	0%	**0.3%**	10.3%	1.7%	1.9%	0%	**2.1%**	0%	1.7%	0%	0%	**0.4%**	1.5%	0.9%	0%	0%	**1.0%**	1.3%
Articulated Trucks	0	0	0	0	**0**	0	27	0	0	**27**	1	0	0	0	**1**	1	22	0	0	**23**	51
% Articulated Trucks	0%	0%	0%	0%	**0%**	0%	2.6%	0%	0%	**2.3%**	2.0%	0%	0%	0%	**0.4%**	0.7%	1.9%	0%	0%	**1.7%**	1.7%
Buses	3	2	2	0	**7**	0	8	0	0	**8**	0	1	0	0	**1**	3	2	1	0	**6**	22
% Buses	3.9%	2.6%	1.4%	0%	**2.4%**	0%	0.8%	0%	0%	**0.7%**	0%	1.7%	0%	0%	**0.4%**	2.2%	0.2%	2.3%	0%	**0.4%**	0.7%

*L: Left, R: Right, T: Thru, U: U-Turn

EMPO/INDOT SR 62/Lloyd Expy @ Boehne Camp Rd - TMC
Thu Sep 5, 2019
AM Peak (Sep 05 2019 7AM - 8 AM)
All Classes (Motorcycles, Cars, Light Goods Vehicles, Single-Unit Trucks, Articulated Trucks, Buses)
All Movements
ID: 690851, Location: 37.974653, -87.645983

Provided by: Indiana DOT
100 N. Senate Ave.,
Indianapolis, IN, 46204, US




Traffic Counts By Class
Peak Hour, PM
AM
Motorcycles – 0.4%
Buses – 0.4%
Single-Unit Trucks – 1.6%
Articulated Trucks – 2.1%
Light Goods Vehicles – 15.9%
Cars – 79.6%
1100
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700
600
500
400
300
200
100
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11:00 AM
12:00 PM
1:00 PM
2:00 PM
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Thu Sep 5, 2019
1:00 AM
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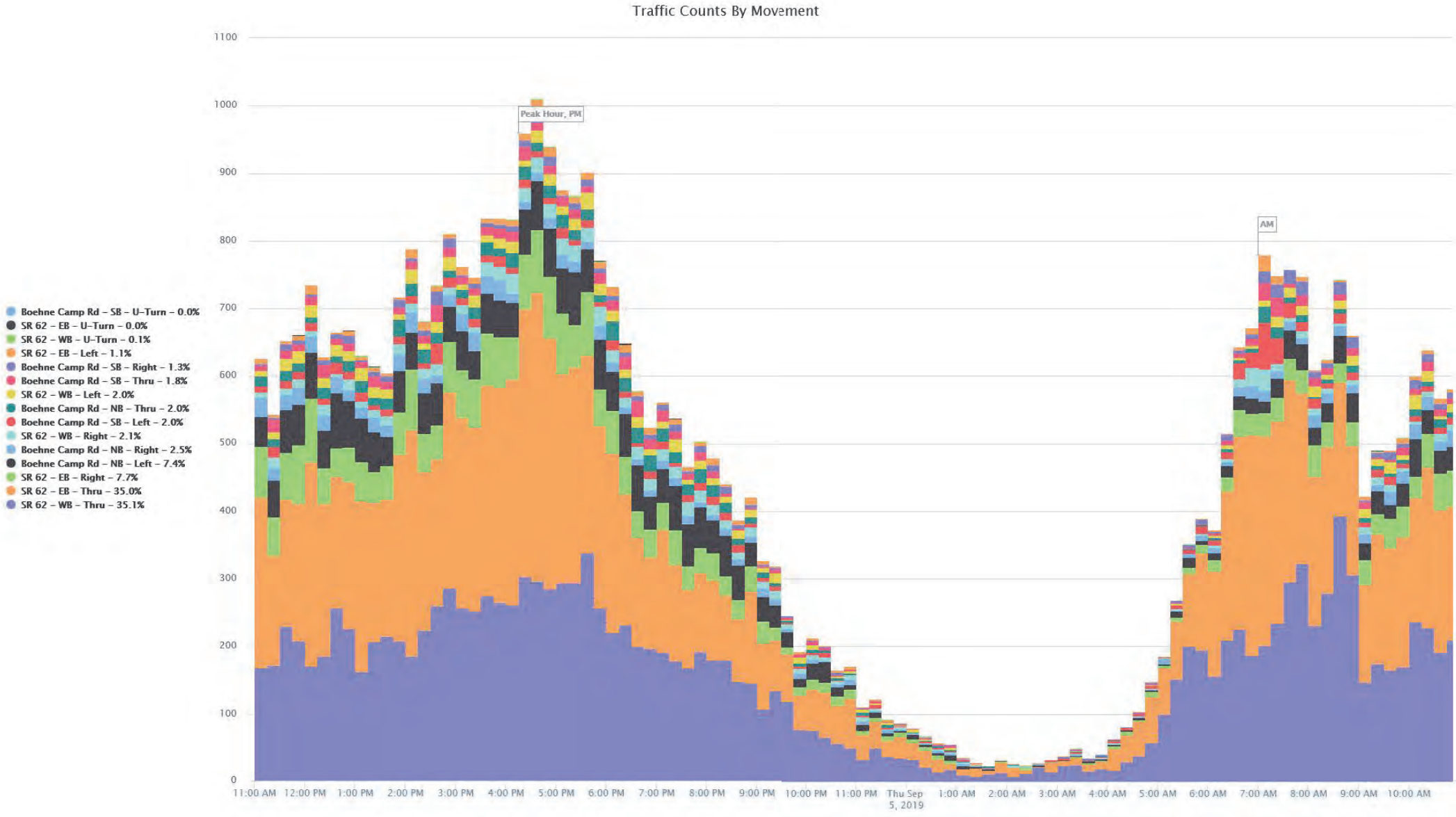
10:00 AM


Traffic Counts By Movement
Peak Hour, PM
AM
Boehne Camp Rd – SB – U–Turn – 0.0%
SR 62 – EB – U–Turn – 0.0%
SR 62 – WB – U–Turn – 0.1%
SR 62 – EB – Left – 1.1%
Boehne Camp Rd – SB – Right – 1.3%
Boehne Camp Rd – SB – Thru – 1.8%
SR 62 – WB – Left – 2.0%
Boehne Camp Rd – NB – Thru – 2.0%
Boehne Camp Rd – SB – Left – 2.0%
SR 62 – WB – Right – 2.1%
Boehne Camp Rd – NB – Right – 2.5%
Boehne Camp Rd – NB – Left – 7.4%
SR 62 – EB – Right – 7.7%
SR 62 – EB – Thru – 35.0%
SR 62 – WB – Thru – 35.1%
1100
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900
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700
600
500
400
300
200
100
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11:00 AM
12:00 PM
1:00 PM
2:00 PM
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Thu Sep 5, 2019
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9:00 AM
10:00 AM

INDIANA DEPARTMENT OF TRANSPORTATION

August 28, 2019 1:33 pm

PROJECT TRAFFIC FORECAST REPORT

DES No.: P190003

SR-62 SR 62 at 5.61 mi W of US 41

From RP 21+80 to RP 22+0

Vanderburgh County

Prepared For

Duane Decker

On

06/11/2019

By

INDOT, Office of Traffic Statistics
Technical Planning Support & Programming Division
Gregory A. Katter, PE, Supervisor
100 N. Senate Ave, N955
Indianapolis, Indiana 46204
INDOTTrafficForecasts@indot.IN.gov

INDIANA DEPARTMENT OF TRANSPORTATION

August 28, 2019 1:33 pm

PROJECT TRAFFIC FORECAST REPORT

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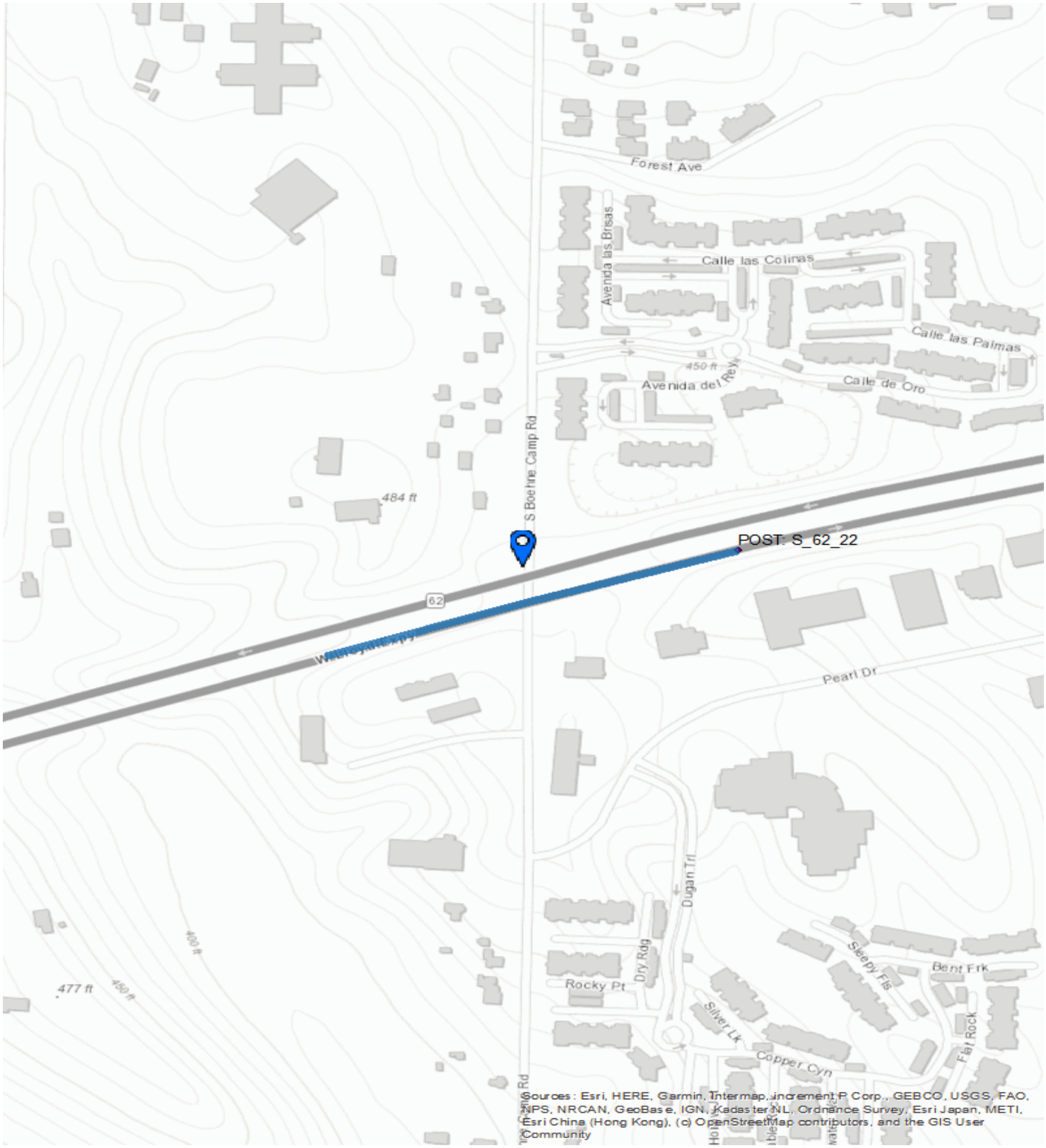
INDIANA DEPARTMENT OF TRANSPORTATION

August 28, 2019 1:33 pm

PROJECT TRAFFIC FORECAST REPORT



INDIANA DEPARTMENT OF TRANSPORTATION

August 28, 2019 1:33 pm

PROJECT TRAFFIC FORECAST REPORT

Segment: 1

Segment Name SR 62

Route Name SR 62

From Measure 21.750

To Measure 22.740

Forecast Year	Projected Annual Average Daily Traffic	Negative AADT	Positive AADT
2018	24,385	12,489	11,896
2025	24,385	12,489	11,896
2035	24,385	12,489	11,896
2040	24,385	12,489	11,896
2045	24,385	12,489	11,896

Design Hourly Volume (DHV) in Design Year as percentage of AADT

Year	DHV
2045	9.66%

Peak Hour Forecast

AM Peak Hour 07:00

PM Peak Hour 04:00

Commercial Vehicles (FHWA Scheme F Classes 4 - 13)

4.96% of AADT

3.99% of DHV

Directional Split

48.78% of AADT Travels in Positive Travel Direction

The per year growth user for this forecast is 0.00% and is applied as a linear growth.

It should be recognized by users of this forecast that the base year AADT has an accuracy of plus or minus 10%. It should also be understood that while this report may include forecasts with up to six apparent significant figures, the accuracy should not be interpreted as being greater than two significant figures. It is the responsibility of designers to exercise professional judgement when using this data to influence decisions.

INDIANA DEPARTMENT OF TRANSPORTATION

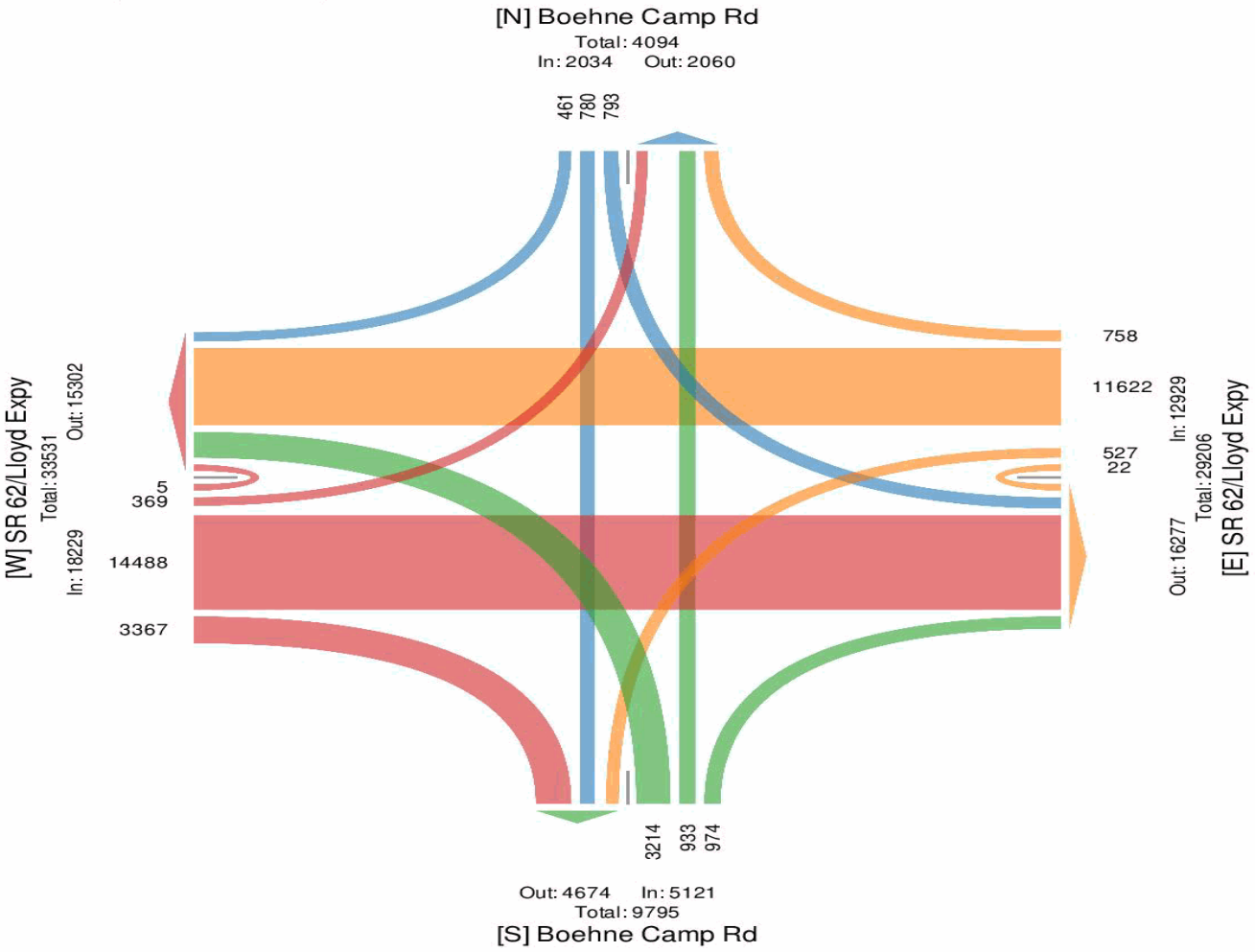
August 28, 2019 1:33 pm

PROJECT TRAFFIC FORECAST REPORT

Intersection: 1

EMPO/INDOT SR 62/Lloyd Expy @ Boehne Camp Rd - TMC
Tue Apr 23, 2019
Full Length (1 PM-1 PM (+1))
All Classes (Motorcycles, Cars, Light Goods Vehicles, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 650444, Location: 37.974653, -87.645983

Provided by: Indiana DOT
100 N. Senate Ave.,
Indianapolis, IN, 46204, US



INDIANA DEPARTMENT OF TRANSPORTATION

August 28, 2019 1:33 pm

PROJECT TRAFFIC FORECAST REPORT

Location: SR 62 at 5.61 mi W of US 41

The table below contains the projected Annual Average Daily Traffic (AADT) in each requested year for each approach and movement.
The per year growth rate used for each approach is indicated in the table below. It is applied as a straight line growth.
For the purpose of this report a commercial vehicle would fall into FHWA Scheme F Classes 4 through 13. They are identified by MioVision as either an Articulated Truck, a Bus, or a Single-Unit Truck.

Daily Movement Forecast

Approach Road Name	Approach Direction	Movement	Total	Count Year AADT	Growth Rate	Construction Year AADT 2025	Intermediate Year 1 AADT 2035	Intermediate Year 2 AADT 2040	Design Year AADT 2045	Commercial Percentage
SR 62	East	Right	758	728	0.00%	728	728	728	728	4.22%
SR 62	East	Thru	11,622	11,157	0.00%	11,157	11,157	11,157	11,157	5.13%
SR 62	East	Left	527	506	0.00%	506	506	506	506	3.04%
SR 62	East	U-Turn	22	21	0.00%	21	21	21	21	4.55%
SR 62	East	Total	12,929	12,412	0.00%	12,412	12,412	12,412	12,412	0.00%
BOEHNE CAMP RD	North	Right	461	443	0.00%	443	443	443	443	6.51%
BOEHNE CAMP RD	North	Thru	780	749	0.00%	749	749	749	749	2.05%
BOEHNE CAMP RD	North	Left	793	761	0.00%	761	761	761	761	1.51%
BOEHNE CAMP RD	North	U-Turn	0	0	0.00%	0	0	0	0	0.00%
BOEHNE CAMP RD	North	Total	2,034	1,953	0.00%	1,953	1,953	1,953	1,953	0.00%
BOEHNE CAMP RD SB	South	Right	974	935	0.00%	935	935	935	935	2.36%
BOEHNE CAMP RD SB	South	Thru	933	896	0.00%	896	896	896	896	2.04%
BOEHNE CAMP RD SB	South	Left	3,214	3,085	0.00%	3,085	3,085	3,085	3,085	1.09%
BOEHNE CAMP RD SB	South	U-Turn	0	0	0.00%	0	0	0	0	0.00%
BOEHNE CAMP RD SB	South	Total	5,121	4,916	0.00%	4,916	4,916	4,916	4,916	0.00%
SR 62 WB	West	Right	3,367	3,232	0.00%	3,232	3,232	3,232	3,232	1.63%
SR 62 WB	West	Thru	14,488	13,908	0.00%	13,908	13,908	13,908	13,908	4.86%
SR 62 WB	West	Left	369	354	0.00%	354	354	354	354	1.36%
SR 62 WB	West	U-Turn	5	5	0.00%	5	5	5	5	0.00%
SR 62 WB	West	Total	18,229	17,500	0.00%	17,500	17,500	17,500	17,500	0.00%

Growth Rate Notes

INDIANA DEPARTMENT OF TRANSPORTATION

August 28, 2019 1:33 pm

PROJECT TRAFFIC FORECAST REPORT

Location: SR 62 at 5.61 mi W of US 41

The table below contains the projected traffic volumes in each requested year for approach and movement during the morning and afternoon peak hour.
The morning and afternoon peak hours are those 60 minute periods during which the most vehicles pass through the intersection.

AM PM Peak Movement Forecast

Approach Direction	Growth Rate	Movement	Interval	Total Vehicles	Commercial % AADT	Count Year AADT	Construction Year AADT 2025	Intermediate Year 1 AADT 2035	Intermediate Year 2 AADT 2040	Design Year AADT 2045
East	0.00%	Left	6:45 AM	12	25.00%	12	12	12	12	12
East	0.00%	Thru	6:45 AM	680	6.77%	653	653	653	653	653
East	0.00%	Right	6:45 AM	64	3.13%	61	61	61	61	61
East	0.00%	U-Turn	6:45 AM	0	0.00%	0	0	0	0	0
North	0.00%	Left	6:45 AM	134	2.24%	129	129	129	129	129
North	0.00%	Thru	6:45 AM	80	6.25%	77	77	77	77	77
North	0.00%	Right	6:45 AM	54	1.85%	52	52	52	52	52
North	0.00%	U-Turn	6:45 AM	0	0.00%	0	0	0	0	0
South	0.00%	Left	6:45 AM	100	5.00%	96	96	96	96	96
South	0.00%	Thru	6:45 AM	62	4.84%	60	60	60	60	60
South	0.00%	Right	6:45 AM	48	2.08%	46	46	46	46	46
South	0.00%	U-Turn	6:45 AM	0	0.00%	0	0	0	0	0
West	0.00%	Left	6:45 AM	56	1.79%	54	54	54	54	54
West	0.00%	Thru	6:45 AM	1223	3.03%	1,174	1,174	1,174	1,174	1,174
West	0.00%	Right	6:45 AM	108	0.93%	104	104	104	104	104
West	0.00%	U-Turn	6:45 AM	0	0.00%	0	0	0	0	0
East	0.00%	Left	3:45 PM	31	0.00%	30	30	30	30	30
East	0.00%	Thru	3:45 PM	759	3.16%	729	729	729	729	729
East	0.00%	Right	3:45 PM	57	3.51%	55	55	55	55	55
East	0.00%	U-Turn	3:45 PM	1	0.00%	1	1	1	1	1
North	0.00%	Left	3:45 PM	42	0.00%	40	40	40	40	40
North	0.00%	Thru	3:45 PM	63	1.59%	60	60	60	60	60
North	0.00%	Right	3:45 PM	35	5.71%	34	34	34	34	34
North	0.00%	U-Turn	3:45 PM	0	0.00%	0	0	0	0	0
South	0.00%	Left	3:45 PM	263	0.00%	252	252	252	252	252
South	0.00%	Thru	3:45 PM	82	2.44%	79	79	79	79	79
South	0.00%	Right	3:45 PM	64	0.00%	61	61	61	61	61
South	0.00%	U-Turn	3:45 PM	0	0.00%	0	0	0	0	0
West	0.00%	Left	3:45 PM	49	0.00%	47	47	47	47	47
West	0.00%	Thru	3:45 PM	1381	2.75%	1,326	1,326	1,326	1,326	1,326
West	0.00%	Right	3:45 PM	343	1.17%	329	329	329	329	329
West	0.00%	U-Turn	3:45 PM	0	0.00%	0	0	0	0	0

It should be recognized by users of this forecast that the base year AADT has an accuracy of plus or minus 10%. It should also be understood that while this report may include forecasts with up to six apparent significant figures, the accuracy should not be interpreted as being greater than two significant figures. It is the responsibility of designers to exercise professional judgement when using this data to influence decisions.

EMPO/INDOT SR 62 @ Red Bank Rd - TMC
Tue Aug 13, 2019
Full Length (4 PM-4 PM (+1))
All Classes (Motorcycles, Cars, Light Goods Vehicles, Single-Unit Trucks, Articulated Trucks, Buses)
All Movements
ID: 685918, Location: 37.976393, -87.636936

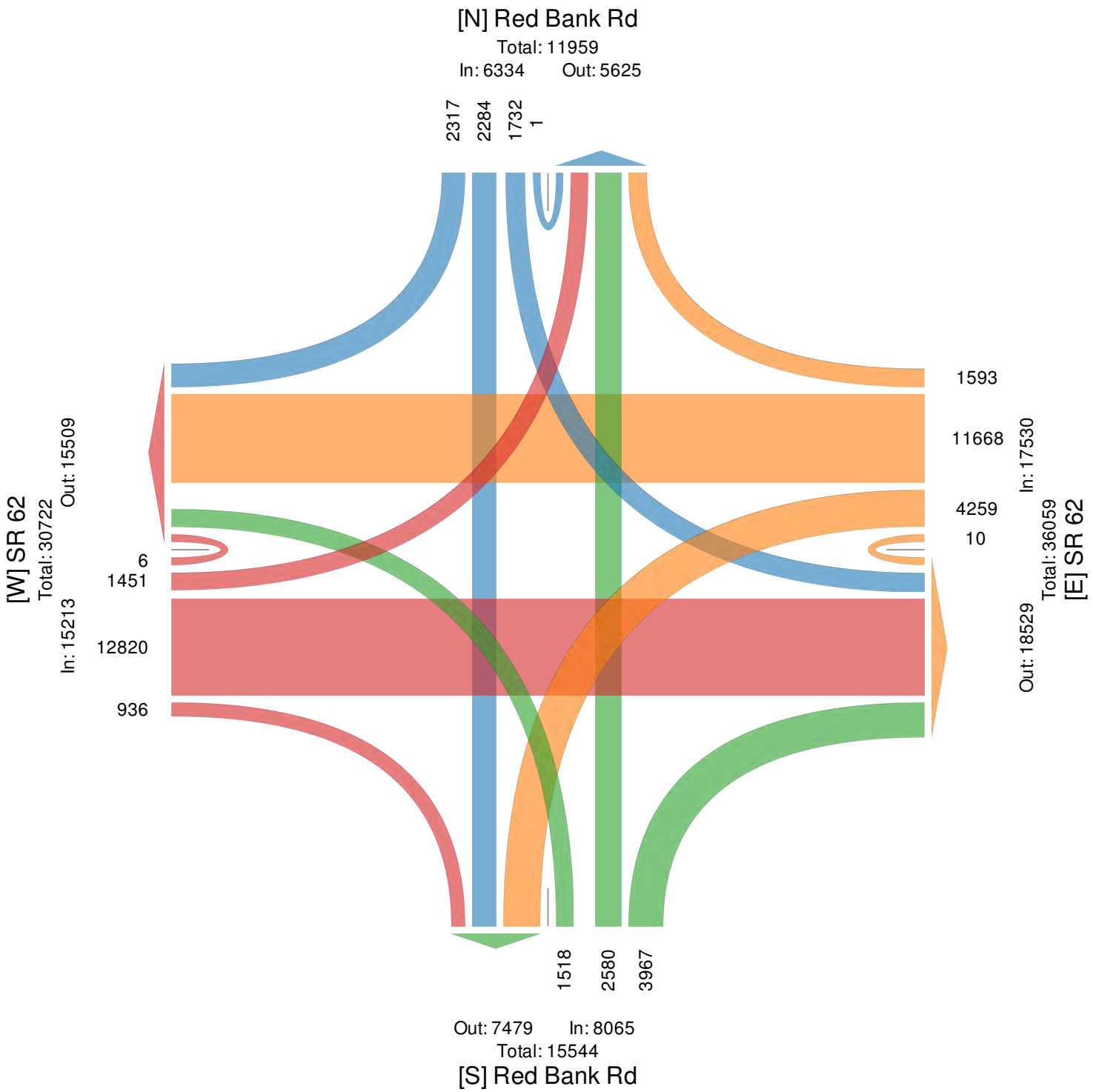
Provided by: Indiana DOT
100 N. Senate Ave.,
Indianapolis, IN, 46204, US

Leg	Red Bank Rd					SR 62					Red Bank Rd					SR 62					
Direction	Southbound					Westbound					Northbound					Eastbound					
Time	R	T	L	U	App	R	T	L	U	App	R	T	L	U	App	R	T	L	U	App	Int
2019-08-13 4:00PM	194	230	133	0	**557**	139	893	358	3	**1393**	284	218	128	0	**630**	80	1117	113	2	**1312**	**3892**
5:00PM	143	249	109	0	**501**	112	859	389	0	**1360**	321	244	121	0	**686**	65	913	87	0	**1065**	**3612**
6:00PM	104	185	94	0	**383**	78	580	297	1	**956**	266	183	100	0	**549**	53	507	61	1	**622**	**2510**
7:00PM	124	151	65	0	**340**	74	504	238	1	**817**	226	182	108	0	**516**	35	311	47	1	**394**	**2067**
8:00PM	79	89	48	0	**216**	67	393	163	0	**623**	195	140	72	0	**407**	27	263	41	0	**331**	**1577**
9:00PM	45	51	28	0	**124**	43	368	102	0	**513**	144	53	50	0	**247**	10	179	23	1	**213**	**1097**
10:00PM	34	27	32	0	**93**	32	164	56	0	**252**	87	24	27	0	**138**	18	170	13	0	**201**	**684**
11:00PM	11	22	13	0	**46**	23	133	44	0	**200**	49	22	19	0	**90**	8	100	10	0	**118**	**454**
2019-08-14 12:00AM	8	6	9	1	**24**	11	89	25	0	**125**	30	17	7	0	**54**	4	68	4	0	**76**	**279**
1:00AM	5	7	15	0	**27**	11	41	15	1	**68**	24	6	4	0	**34**	0	43	6	0	**49**	**178**
2:00AM	4	6	4	0	**14**	13	32	16	1	**62**	16	6	1	0	**23**	2	34	1	0	**37**	**136**
3:00AM	8	7	5	0	**20**	4	74	12	0	**90**	7	5	4	0	**16**	3	45	1	0	**49**	**175**
4:00AM	3	11	8	0	**22**	6	182	31	0	**219**	18	10	6	0	**34**	7	184	4	0	**195**	**470**
5:00AM	40	20	38	0	**98**	30	603	41	0	**674**	38	17	16	0	**71**	7	419	25	0	**451**	**1294**
6:00AM	62	43	74	0	**179**	39	728	74	0	**841**	73	35	32	0	**140**	21	1057	38	0	**1116**	**2276**
7:00AM	87	103	126	0	**316**	59	877	112	0	**1048**	150	80	59	0	**289**	43	1224	68	0	**1335**	**2988**
8:00AM	87	114	86	0	**287**	78	621	164	0	**863**	127	87	51	0	**265**	28	787	71	0	**886**	**2301**
9:00AM	106	114	105	0	**325**	85	611	178	1	**875**	174	142	50	0	**366**	35	696	84	0	**815**	**2381**
10:00AM	147	131	121	0	**399**	93	609	235	0	**937**	232	145	69	0	**446**	54	655	111	0	**820**	**2602**
11:00AM	159	139	105	0	**403**	115	571	388	0	**1074**	273	171	78	0	**522**	85	733	122	0	**940**	**2939**
12:00PM	210	161	152	0	**523**	110	580	371	0	**1061**	317	182	114	0	**613**	99	724	131	0	**954**	**3151**
1:00PM	189	134	127	0	**450**	92	612	315	1	**1020**	361	210	108	0	**679**	91	698	129	1	**919**	**3068**
2:00PM	226	133	127	0	**486**	143	729	330	1	**1203**	272	206	157	0	**635**	82	878	106	0	**1066**	**3390**
3:00PM	242	151	108	0	**501**	136	815	305	0	**1256**	283	195	137	0	**615**	79	1015	155	0	**1249**	**3621**
Total	2317	2284	1732	1	**6334**	1593	11668	4259	10	**17530**	3967	2580	1518	0	**8065**	936	12820	1451	6	**15213**	**47142**
% Approach	36.6%	36.1%	27.3%	0%	-	9.1%	66.6%	24.3%	0.1%	-	49.2%	32.0%	18.8%	0%	-	6.2%	84.3%	9.5%	0%	-	-
% Total	4.9%	4.8%	3.7%	0%	**13.4%**	3.4%	24.8%	9.0%	0%	**37.2%**	8.4%	5.5%	3.2%	0%	**17.1%**	2.0%	27.2%	3.1%	0%	**32.3%**	-
Motorcycles	12	8	7	0	**27**	7	31	13	0	**51**	11	12	4	0	**27**	0	55	8	0	**63**	168
% Motorcycles	0.5%	0.4%	0.4%	0%	**0.4%**	0.4%	0.3%	0.3%	0%	**0.3%**	0.3%	0.5%	0.3%	0%	**0.3%**	0%	0.4%	0.6%	0%	**0.4%**	0.4%
Cars	1712	1794	1378	1	**4885**	1340	8627	3570	9	**13546**	3189	2084	1295	0	**6568**	899	9502	1097	6	**11504**	36503
% Cars	73.9%	78.5%	79.6%	100%	**77.1%**	84.1%	73.9%	83.8%	90.0%	**77.3%**	80.4%	80.8%	85.3%	0%	**81.4%**	96.0%	74.1%	75.6%	100%	**75.6%**	77.4%
Light Goods Vehicles	559	449	299	0	**1307**	191	2310	616	1	**3118**	682	470	195	0	**1347**	17	2548	333	0	**2898**	8670
% Light Goods Vehicles	24.1%	19.7%	17.3%	0%	**20.6%**	12.0%	19.8%	14.5%	10.0%	**17.8%**	17.2%	18.2%	12.8%	0%	**16.7%**	1.8%	19.9%	22.9%	0%	**19.0%**	18.4%
Single-Unit Trucks	19	13	26	0	**58**	27	226	34	0	**287**	30	12	7	0	**49**	9	241	10	0	**260**	654
% Single-Unit Trucks	0.8%	0.6%	1.5%	0%	**0.9%**	1.7%	1.9%	0.8%	0%	**1.6%**	0.8%	0.5%	0.5%	0%	**0.6%**	1.0%	1.9%	0.7%	0%	**1.7%**	1.4%
Articulated Trucks	8	2	13	0	**23**	16	435	20	0	**471**	18	1	13	0	**32**	8	435	2	0	**445**	971
% Articulated Trucks	0.3%	0.1%	0.8%	0%	**0.4%**	1.0%	3.7%	0.5%	0%	**2.7%**	0.5%	0%	0.9%	0%	**0.4%**	0.9%	3.4%	0.1%	0%	**2.9%**	2.1%
Buses	7	18	9	0	**34**	12	39	6	0	**57**	37	1	4	0	**42**	3	39	1	0	**43**	176
% Buses	0.3%	0.8%	0.5%	0%	**0.5%**	0.8%	0.3%	0.1%	0%	**0.3%**	0.9%	0%	0.3%	0%	**0.5%**	0.3%	0.3%	0.1%	0%	**0.3%**	0.4%

*L: Left, R: Right, T: Thru, U: U-Turn

EMPO/INDOT SR 62 @ Red Bank Rd - TMC
Tue Aug 13, 2019
Full Length (4 PM-4 PM (+1))
All Classes (Motorcycles, Cars, Light Goods Vehicles, Single-Unit Trucks, Articulated Trucks, Buses)
All Movements
ID: 685918, Location: 37.976393, -87.636936

Provided by: Indiana DOT
100 N. Senate Ave.,
Indianapolis, IN, 46204, US



EMPO/INDOT SR 62 @ Red Bank Rd - TMC

Tue Aug 13, 2019
PM Peak (Aug 13 2019 4:15PM - 5:15 PM) - Overall Peak Hour
All Classes (Motorcycles, Cars, Light Goods Vehicles, Single-Unit Trucks, Articulated Trucks, Buses)
All Movements
ID: 685918, Location: 37.976393, -87.636936

Provided by: Indiana DOT
100 N. Senate Ave.,
Indianapolis, IN, 46204, US

Leg	Red Bank Rd					SR 62					Red Bank Rd					SR 62					
Direction	Southbound					Westbound					Northbound					Eastbound					
Time	R	T	L	U	App	R	T	L	U	App	R	T	L	U	App	R	T	L	U	App	Int
2019-08-13 4:15PM	48	59	42	0	**149**	35	246	87	0	**368**	72	56	34	0	**162**	17	275	24	0	**316**	**995**
4:30PM	47	49	26	0	**122**	36	213	76	1	**326**	70	58	32	0	**160**	18	305	29	0	**352**	**960**
4:45PM	54	61	35	0	**150**	30	254	106	0	**390**	79	55	34	0	**168**	29	304	30	0	**363**	**1071**
5:00PM	29	65	42	0	**136**	19	222	114	0	**355**	97	56	35	0	**188**	19	231	25	0	**275**	**954**
Total	178	234	145	0	**557**	120	935	383	1	**1439**	318	225	135	0	**678**	83	1115	108	0	**1306**	**3980**
% Approach	32.0%	42.0%	26.0%	0%	-	8.3%	65.0%	26.6%	0.1%	-	46.9%	33.2%	19.9%	0%	-	6.4%	85.4%	8.3%	0%	-	-
% Total	4.5%	5.9%	3.6%	0%	**14.0%**	3.0%	23.5%	9.6%	0%	**36.2%**	8.0%	5.7%	3.4%	0%	**17.0%**	2.1%	28.0%	2.7%	0%	**32.8%**	-
PHF	0.824	0.900	0.863	-	**0.928**	0.833	0.920	0.840	0.250	**0.922**	0.820	0.970	0.964	-	**0.902**	0.716	0.914	0.900	-	**0.899**	0.929
Motorcycles	0	0	0	0	**0**	1	0	0	0	**1**	0	1	0	0	**1**	0	1	1	0	**2**	4
% Motorcycles	0%	0%	0%	0%	**0%**	0.8%	0%	0%	0%	**0.1%**	0%	0.4%	0%	0%	**0.1%**	0%	0.1%	0.9%	0%	**0.2%**	0.1%
Cars	116	187	113	0	**416**	110	706	328	1	**1145**	266	186	110	0	**562**	79	877	85	0	**1041**	3164
% Cars	65.2%	79.9%	77.9%	0%	**74.7%**	91.7%	75.5%	85.6%	100%	**79.6%**	83.6%	82.7%	81.5%	0%	**82.9%**	95.2%	78.7%	78.7%	0%	**79.7%**	79.5%
Light Goods Vehicles	60	45	29	0	**134**	8	199	51	0	**258**	48	37	24	0	**109**	2	205	19	0	**226**	727
% Light Goods Vehicles	33.7%	19.2%	20.0%	0%	**24.1%**	6.7%	21.3%	13.3%	0%	**17.9%**	15.1%	16.4%	17.8%	0%	**16.1%**	2.4%	18.4%	17.6%	0%	**17.3%**	18.3%
Single-Unit Trucks	2	0	1	0	**3**	0	5	4	0	**9**	1	1	0	0	**2**	1	18	3	0	**22**	36
% Single-Unit Trucks	1.1%	0%	0.7%	0%	**0.5%**	0%	0.5%	1.0%	0%	**0.6%**	0.3%	0.4%	0%	0%	**0.3%**	1.2%	1.6%	2.8%	0%	**1.7%**	0.9%
Articulated Trucks	0	0	1	0	**1**	1	23	0	0	**24**	0	0	1	0	**1**	1	13	0	0	**14**	40
% Articulated Trucks	0%	0%	0.7%	0%	**0.2%**	0.8%	2.5%	0%	0%	**1.7%**	0%	0%	0.7%	0%	**0.1%**	1.2%	1.2%	0%	0%	**1.1%**	1.0%
Buses	0	2	1	0	**3**	0	2	0	0	**2**	3	0	0	0	**3**	0	1	0	0	**1**	9
% Buses	0%	0.9%	0.7%	0%	**0.5%**	0%	0.2%	0%	0%	**0.1%**	0.9%	0%	0%	0%	**0.4%**	0%	0.1%	0%	0%	**0.1%**	0.2%

*L: Left, R: Right, T: Thru, U: U-Turn

EMPO/INDOT SR 62 @ Red Bank Rd - TMC

Tue Aug 13, 2019

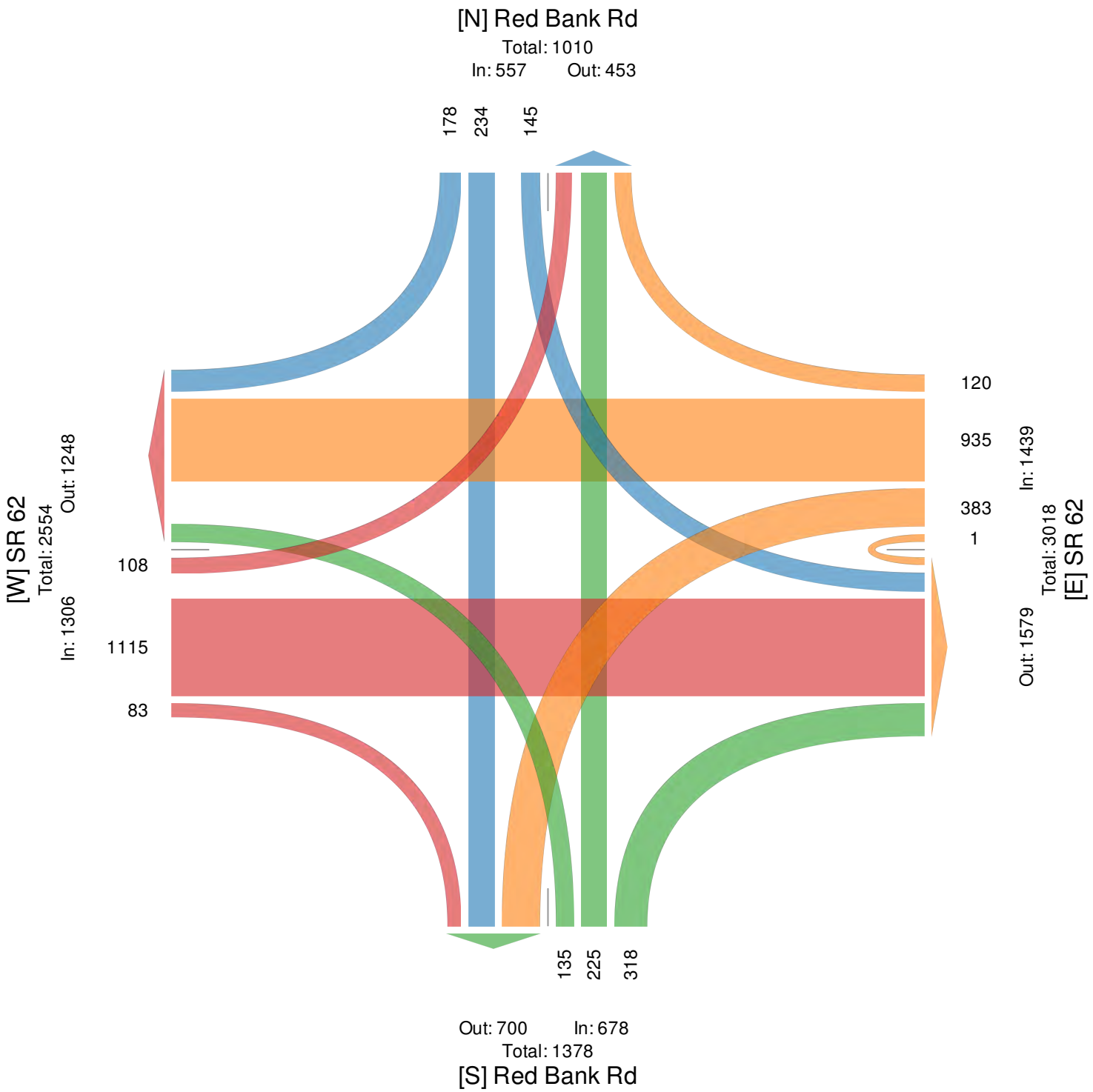
PM Peak (Aug 13 2019 4:15PM - 5:15 PM) - Overall Peak Hour

All Classes (Motorcycles, Cars, Light Goods Vehicles, Single-Unit Trucks, Articulated Trucks, Buses)

All Movements

ID: 685918, Location: 37.976393, -87.636936

Provided by: Indiana DOT
100 N. Senate Ave.,
Indianapolis, IN, 46204, US



EMPO/INDOT SR 62 @ Red Bank Rd - TMC

Wed Aug 14, 2019
AM Peak (Aug 14 2019 7AM - 8 AM)
All Classes (Motorcycles, Cars, Light Goods Vehicles, Single-Unit Trucks, Articulated Trucks, Buses)
All Movements
ID: 685918, Location: 37.976393, -87.636936

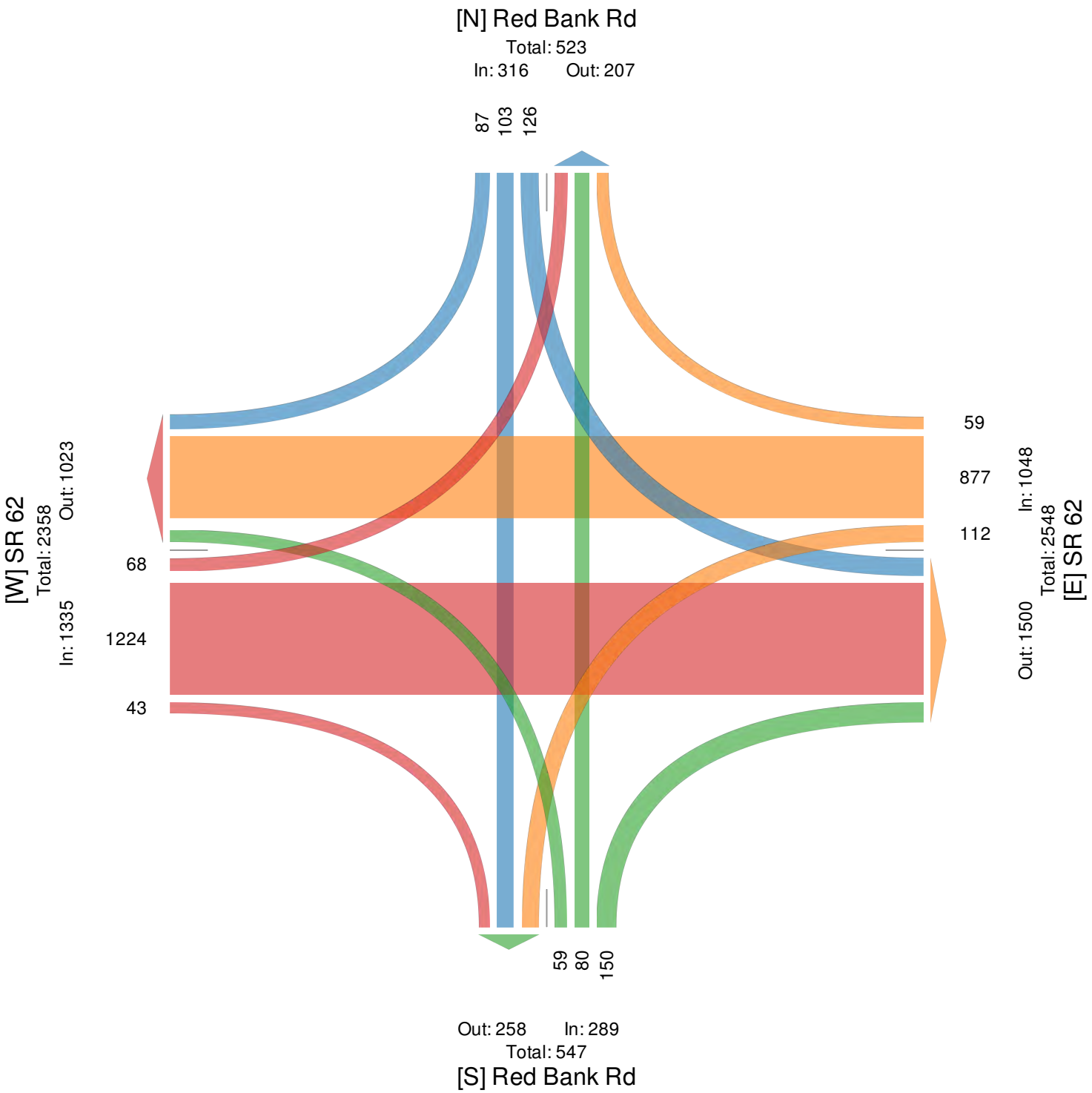
Provided by: Indiana DOT
100 N. Senate Ave.,
Indianapolis, IN, 46204, US

Leg	Red Bank Rd					SR 62					Red Bank Rd					SR 62					
Direction	Southbound					Westbound					Northbound					Eastbound					
Time	R	T	L	U	App	R	T	L	U	App	R	T	L	U	App	R	T	L	U	App	Int
2019-08-14 7:00AM	16	21	38	0	**75**	21	191	21	0	**233**	34	27	15	0	**76**	18	347	14	0	**379**	**763**
7:15AM	27	28	30	0	**85**	11	243	28	0	**282**	46	9	12	0	**67**	8	320	15	0	**343**	**777**
7:30AM	28	24	31	0	**83**	12	214	29	0	**255**	40	26	17	0	**83**	6	289	11	0	**306**	**727**
7:45AM	16	30	27	0	**73**	15	229	34	0	**278**	30	18	15	0	**63**	11	268	28	0	**307**	**721**
Total	87	103	126	0	**316**	59	877	112	0	**1048**	150	80	59	0	**289**	43	1224	68	0	**1335**	**2988**
% Approach	27.5%	32.6%	39.9%	0%	-	5.6%	83.7%	10.7%	0%	-	51.9%	27.7%	20.4%	0%	-	3.2%	91.7%	5.1%	0%	-	-
% Total	2.9%	3.4%	4.2%	0%	**10.6%**	2.0%	29.4%	3.7%	0%	**35.1%**	5.0%	2.7%	2.0%	0%	**9.7%**	1.4%	41.0%	2.3%	0%	**44.7%**	-
PHF	0.777	0.858	0.829	-	**0.929**	0.702	0.902	0.824	-	**0.929**	0.815	0.741	0.868	-	**0.870**	0.597	0.882	0.607	-	**0.881**	0.961
Motorcycles	0	0	0	0	**0**	0	2	0	0	**2**	0	0	1	0	**1**	0	7	1	0	**8**	11
% Motorcycles	0%	0%	0%	0%	**0%**	0%	0.2%	0%	0%	**0.2%**	0%	0%	1.7%	0%	**0.3%**	0%	0.6%	1.5%	0%	**0.6%**	0.4%
Cars	68	78	114	0	**260**	45	658	93	0	**796**	104	58	46	0	**208**	42	982	57	0	**1081**	2345
% Cars	78.2%	75.7%	90.5%	0%	**82.3%**	76.3%	75.0%	83.0%	0%	**76.0%**	69.3%	72.5%	78.0%	0%	**72.0%**	97.7%	80.2%	83.8%	0%	**81.0%**	78.5%
Light Goods Vehicles	18	22	9	0	**49**	11	173	13	0	**197**	37	22	10	0	**69**	0	208	10	0	**218**	533
% Light Goods Vehicles	20.7%	21.4%	7.1%	0%	**15.5%**	18.6%	19.7%	11.6%	0%	**18.8%**	24.7%	27.5%	16.9%	0%	**23.9%**	0%	17.0%	14.7%	0%	**16.3%**	17.8%
Single-Unit Trucks	0	1	1	0	**2**	0	14	3	0	**17**	5	0	0	0	**5**	1	8	0	0	**9**	33
% Single-Unit Trucks	0%	1.0%	0.8%	0%	**0.6%**	0%	1.6%	2.7%	0%	**1.6%**	3.3%	0%	0%	0%	**1.7%**	2.3%	0.7%	0%	0%	**0.7%**	1.1%
Articulated Trucks	1	0	2	0	**3**	2	27	0	0	**29**	0	0	1	0	**1**	0	16	0	0	**16**	49
% Articulated Trucks	1.1%	0%	1.6%	0%	**0.9%**	3.4%	3.1%	0%	0%	**2.8%**	0%	0%	1.7%	0%	**0.3%**	0%	1.3%	0%	0%	**1.2%**	1.6%
Buses	0	2	0	0	**2**	1	3	3	0	**7**	4	0	1	0	**5**	0	3	0	0	**3**	17
% Buses	0%	1.9%	0%	0%	**0.6%**	1.7%	0.3%	2.7%	0%	**0.7%**	2.7%	0%	1.7%	0%	**1.7%**	0%	0.2%	0%	0%	**0.2%**	0.6%

*L: Left, R: Right, T: Thru, U: U-Turn

EMPO/INDOT SR 62 @ Red Bank Rd - TMC
Wed Aug 14, 2019
AM Peak (Aug 14 2019 7AM - 8 AM)
All Classes (Motorcycles, Cars, Light Goods Vehicles, Single-Unit Trucks, Articulated Trucks, Buses)
All Movements
ID: 685918, Location: 37.976393, -87.636936

Provided by: Indiana DOT
100 N. Senate Ave.,
Indianapolis, IN, 46204, US



EMPO/INDOT SR 62 @ Red Bank Rd - TMC

Wed Aug 14, 2019
Midday Peak (Aug 14 2019 12PM - 1 PM)
All Classes (Motorcycles, Cars, Light Goods Vehicles, Single-Unit Trucks, Articulated Trucks, Buses)
All Movements
ID: 685918, Location: 37.976393, -87.636936

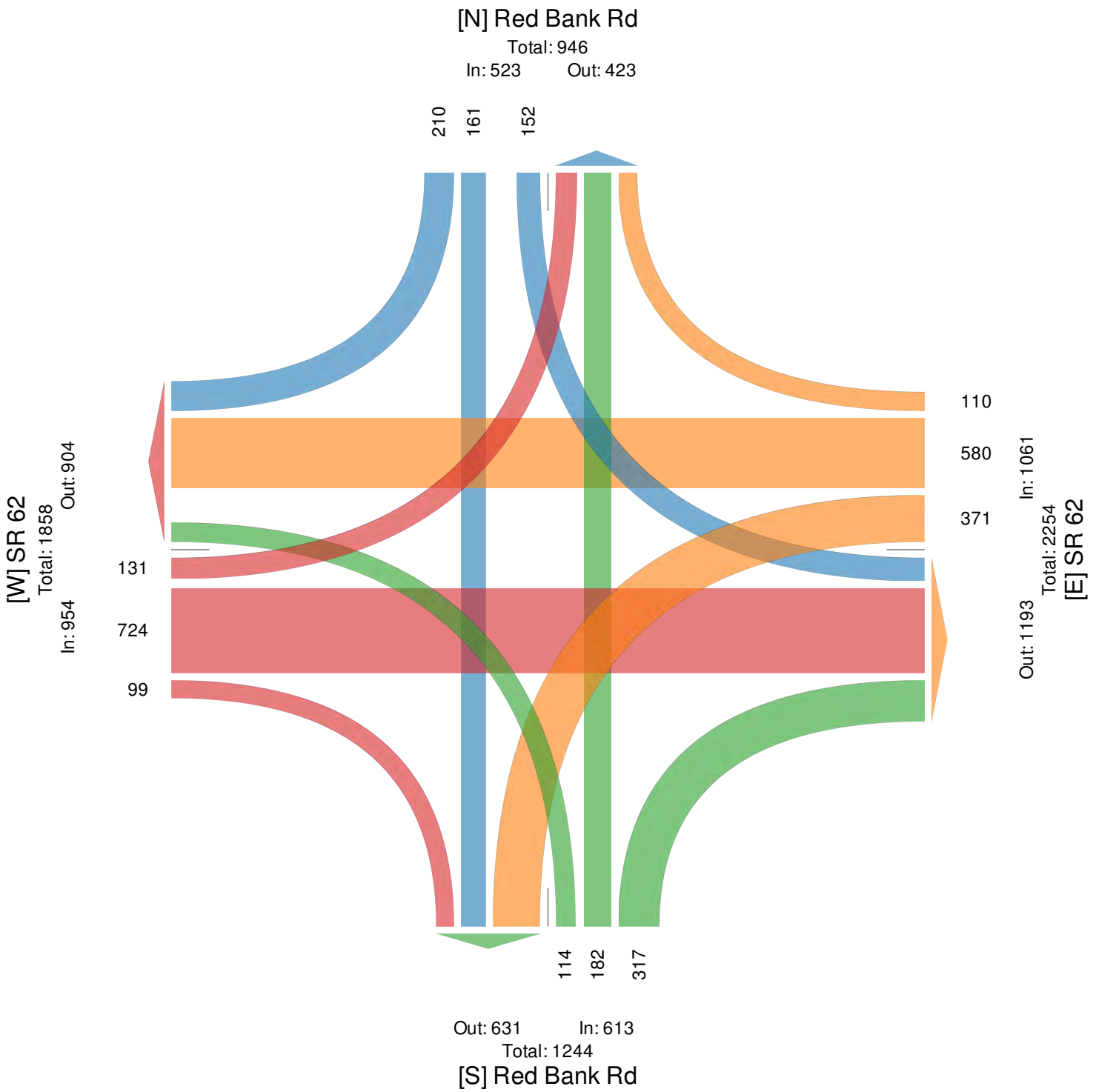
Provided by: Indiana DOT
100 N. Senate Ave.,
Indianapolis, IN, 46204, US

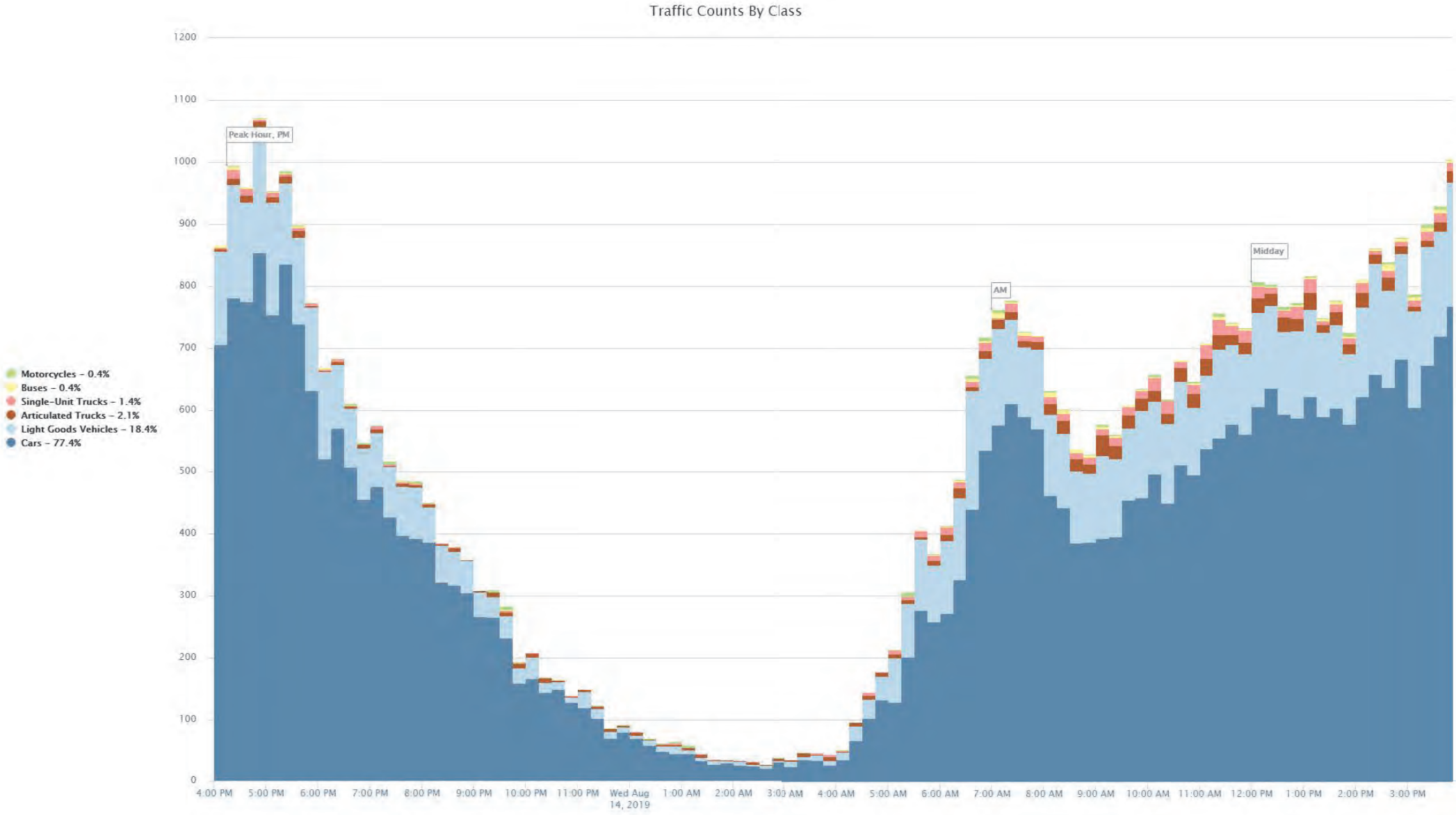
Leg	Red Bank Rd					SR 62					Red Bank Rd					SR 62					
Direction	Southbound					Westbound					Northbound					Eastbound					
Time	R	T	L	U	App	R	T	L	U	App	R	T	L	U	App	R	T	L	U	App	Int
2019-08-14 12:00PM	57	43	49	0	**149**	36	148	94	0	**278**	78	37	25	0	**140**	35	174	31	0	**240**	**807**
12:15PM	60	43	37	0	**140**	22	143	89	0	**254**	95	54	18	0	**167**	17	191	34	0	**242**	**803**
12:30PM	49	30	30	0	**109**	22	144	97	0	**263**	78	51	30	0	**159**	21	183	32	0	**236**	**767**
12:45PM	44	45	36	0	**125**	30	145	91	0	**266**	66	40	41	0	**147**	26	176	34	0	**236**	**774**
Total	210	161	152	0	**523**	110	580	371	0	**1061**	317	182	114	0	**613**	99	724	131	0	**954**	**3151**
% Approach	40.2%	30.8%	29.1%	0%	-	10.4%	54.7%	35.0%	0%	-	51.7%	29.7%	18.6%	0%	-	10.4%	75.9%	13.7%	0%	-	-
% Total	6.7%	5.1%	4.8%	0%	**16.6%**	3.5%	18.4%	11.8%	0%	**33.7%**	10.1%	5.8%	3.6%	0%	**19.5%**	3.1%	23.0%	4.2%	0%	**30.3%**	-
PHF	0.875	0.894	0.776	-	**0.878**	0.764	0.980	0.956	-	**0.954**	0.834	0.843	0.695	-	**0.918**	0.707	0.948	0.963	-	**0.986**	0.976
Motorcycles	2	1	1	0	**4**	1	1	1	0	**3**	0	2	0	0	**2**	0	6	2	0	**8**	17
% Motorcycles	1.0%	0.6%	0.7%	0%	**0.8%**	0.9%	0.2%	0.3%	0%	**0.3%**	0%	1.1%	0%	0%	**0.3%**	0%	0.8%	1.5%	0%	**0.8%**	0.5%
Cars	162	114	108	0	**384**	75	441	312	0	**828**	261	147	95	0	**503**	97	513	96	0	**706**	2421
% Cars	77.1%	70.8%	71.1%	0%	**73.4%**	68.2%	76.0%	84.1%	0%	**78.0%**	82.3%	80.8%	83.3%	0%	**82.1%**	98.0%	70.9%	73.3%	0%	**74.0%**	76.8%
Light Goods Vehicles	41	42	41	0	**124**	28	91	53	0	**172**	51	32	16	0	**99**	0	134	31	0	**165**	560
% Light Goods Vehicles	19.5%	26.1%	27.0%	0%	**23.7%**	25.5%	15.7%	14.3%	0%	**16.2%**	16.1%	17.6%	14.0%	0%	**16.2%**	0%	18.5%	23.7%	0%	**17.3%**	17.8%
Single-Unit Trucks	2	2	2	0	**6**	3	18	3	0	**24**	2	1	1	0	**4**	1	23	1	0	**25**	59
% Single-Unit Trucks	1.0%	1.2%	1.3%	0%	**1.1%**	2.7%	3.1%	0.8%	0%	**2.3%**	0.6%	0.5%	0.9%	0%	**0.7%**	1.0%	3.2%	0.8%	0%	**2.6%**	1.9%
Articulated Trucks	3	1	0	0	**4**	3	28	2	0	**33**	0	0	2	0	**2**	1	45	1	0	**47**	86
% Articulated Trucks	1.4%	0.6%	0%	0%	**0.8%**	2.7%	4.8%	0.5%	0%	**3.1%**	0%	0%	1.8%	0%	**0.3%**	1.0%	6.2%	0.8%	0%	**4.9%**	2.7%
Buses	0	1	0	0	**1**	0	1	0	0	**1**	3	0	0	0	**3**	0	3	0	0	**3**	8
% Buses	0%	0.6%	0%	0%	**0.2%**	0%	0.2%	0%	0%	**0.1%**	0.9%	0%	0%	0%	**0.5%**	0%	0.4%	0%	0%	**0.3%**	0.3%

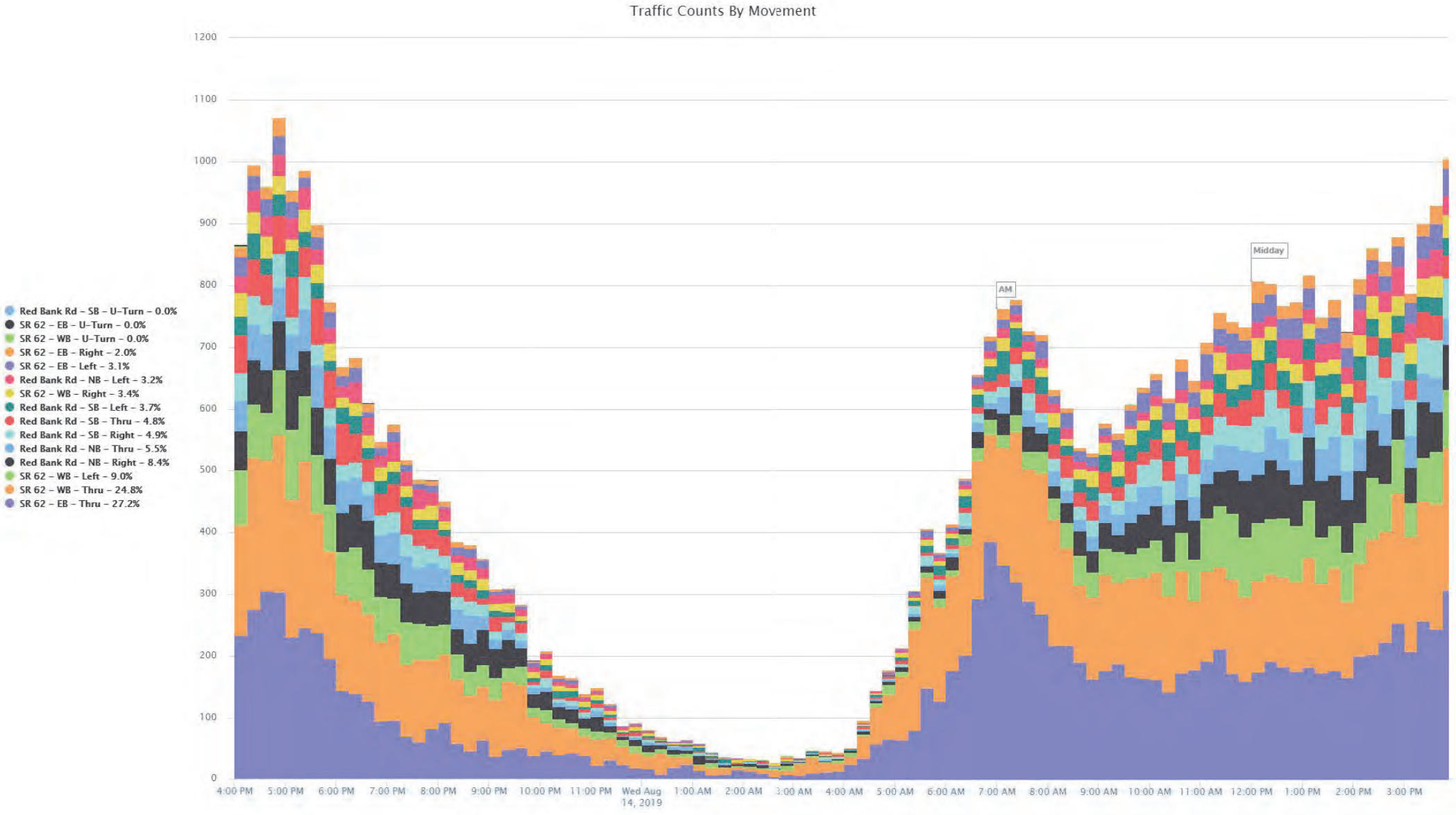
*L: Left, R: Right, T: Thru, U: U-Turn

EMPO/INDOT SR 62 @ Red Bank Rd - TMC
Wed Aug 14, 2019
Midday Peak (Aug 14 2019 12PM - 1 PM)
All Classes (Motorcycles, Cars, Light Goods Vehicles, Single-Unit Trucks, Articulated Trucks, Buses)
All Movements
ID: 685918, Location: 37.976393, -87.636936

Provided by: Indiana DOT
100 N. Senate Ave.,
Indianapolis, IN, 46204, US




Traffic Counts By Class
1200
1100
1000
900
800
700
600
500
400
300
200
100
0
Peak Hour, PM
AM
Midday
Motorcycles – 0.4%
Buses – 0.4%
Single-Unit Trucks – 1.4%
Articulated Trucks – 2.1%
Light Goods Vehicles – 18.4%
Cars – 77.4%
4:00 PM
5:00 PM
6:00 PM
7:00 PM
8:00 PM
9:00 PM
10:00 PM
11:00 PM
Wed Aug 14, 2019
1:00 AM
2:00 AM
3:00 AM
4:00 AM
5:00 AM
6:00 AM
7:00 AM
8:00 AM
9:00 AM
10:00 AM
11:00 AM
12:00 PM
1:00 PM
2:00 PM
3:00 PM


Traffic Counts By Movement
Red Bank Rd – SB – U–Turn – 0.0%
SR 62 – EB – U–Turn – 0.0%
SR 62 – WB – U–Turn – 0.0%
SR 62 – EB – Right – 2.0%
SR 62 – EB – Left – 3.1%
Red Bank Rd – NB – Left – 3.2%
SR 62 – WB – Right – 3.4%
Red Bank Rd – SB – Left – 3.7%
Red Bank Rd – SB – Thru – 4.8%
Red Bank Rd – SB – Right – 4.9%
Red Bank Rd – NB – Thru – 5.5%
Red Bank Rd – NB – Right – 8.4%
SR 62 – WB – Left – 9.0%
SR 62 – WB – Thru – 24.8%
SR 62 – EB – Thru – 27.2%
1200
1100
1000
900
800
700
600
500
400
300
200
100
0
AM
Midday
4:00 PM
5:00 PM
6:00 PM
7:00 PM
8:00 PM
9:00 PM
10:00 PM
11:00 PM
Wed Aug 14, 2019
1:00 AM
2:00 AM
3:00 AM
4:00 AM
5:00 AM
6:00 AM
7:00 AM
8:00 AM
9:00 AM
10:00 AM
11:00 AM
12:00 PM
1:00 PM
2:00 PM
3:00 PM

INDIANA DEPARTMENT OF TRANSPORTATION

September 30, 2019 11:36 am

PROJECT TRAFFIC FORECAST REPORT

DES No.: P190002

SR-62 SR-62 SR 62 at 5.10 Mi W of US 41

From RP 22+30 to RP 22+50

Vanderburgh County

Prepared For

Duane Decker

On

09/20/2019

By

INDOT, Office of Traffic Statistics
Technical Planning Support & Programming Division
Gregory A. Katter, PE, Supervisor
100 N. Senate Ave, N955
Indianapolis, Indiana 46204
INDOTTrafficForecasts@indot.IN.gov

PROJECT TRAFFIC FORECAST REPORT

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INDIANA DEPARTMENT OF TRANSPORTATION

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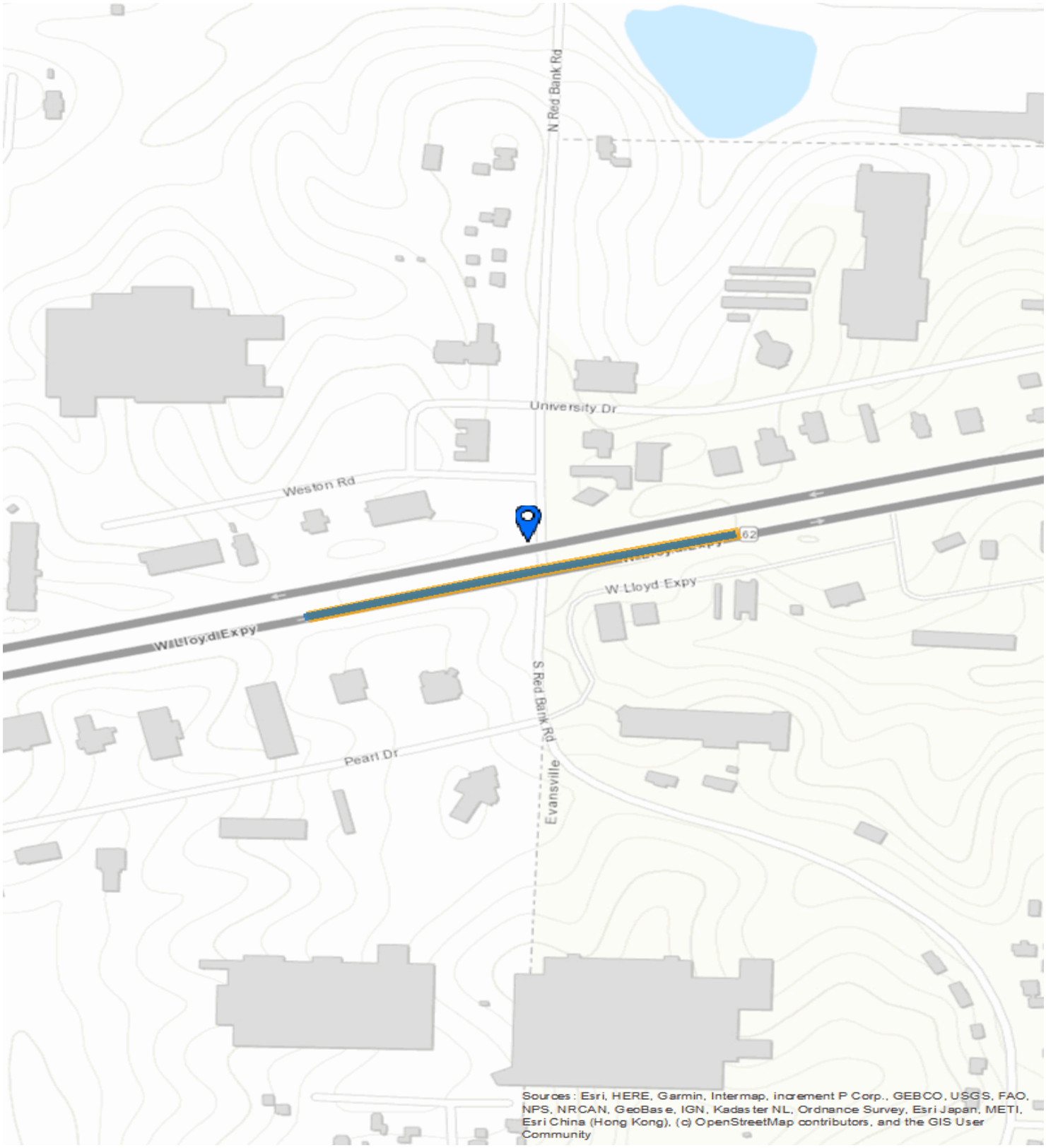
PROJECT TRAFFIC FORECAST REPORT



INDIANA DEPARTMENT OF TRANSPORTATION

September 30, 2019 11:36 am

PROJECT TRAFFIC FORECAST REPORT

Segment: 1

Route Name SR-62

From Measure 23.030

To Measure 23.135

Forecast Year	Projected Annual Average Daily Traffic	Negative AADT	Positive AADT
2018	24,385	12,489	11,896
2025	24,897	12,751	12,146
2035	25,629	13,126	12,503
2040	25,994	13,313	12,681
2045	26,360	13,501	12,860

Design Hourly Volume (DHV) in Design Year as percentage of AADT

Year	DHV
2045	9.66%

Peak Hour Forecast

AM Peak Hour 07:00

PM Peak Hour 04:00

Commercial Vehicles (FHWA Scheme F Classes 4 - 13)

4.96% of AADT

3.99% of DHV

Directional Split

48.78% of AADT Travels in Positive Travel Direction

The per year growth user for this forecast is 0.30% and is applied as a linear growth.

It should be recognized by users of this forecast that the base year AADT has an accuracy of plus or minus 10%. It should also be understood that while this report may include forecasts with up to six apparent significant figures, the accuracy should not be interpreted as being greater than two significant figures. It is the responsibility of designers to exercise professional judgement when using this data to influence decisions.

INDIANA DEPARTMENT OF TRANSPORTATION

September 30, 2019 11:36 am

PROJECT TRAFFIC FORECAST REPORT

Segment: 2

Route Name SR-62
From Measure 23.140
To Measure 23.230

Forecast Year	Projected Annual Average Daily Traffic	Negative AADT	Positive AADT
2018	32,094	15,522	16,572
2025	32,970	15,946	17,024
2035	34,222	16,551	17,671
2040	34,848	16,854	17,994
2045	35,473	17,156	18,317

Design Hourly Volume (DHV) in Design Year as percentage of AADT

Year	DHV
2045	8.91%

Peak Hour Forecast

AM Peak Hour 07:00
PM Peak Hour 04:00

Commercial Vehicles (FHWA Scheme F Classes 4 - 13)

4.08% of AADT
3.53% of DHV

Directional Split

51.64% of AADT Travels in Positive Travel Direction

The per year growth user for this forecast is 0.39% and is applied as a linear growth.

It should be recognized by users of this forecast that the base year AADT has an accuracy of plus or minus 10%. It should also be understood that while this report may include forecasts with up to six apparent significant figures, the accuracy should not be interpreted as being greater than two significant figures. It is the responsibility of designers to exercise professional judgement when using this data to influence decisions.

INDIANA DEPARTMENT OF TRANSPORTATION

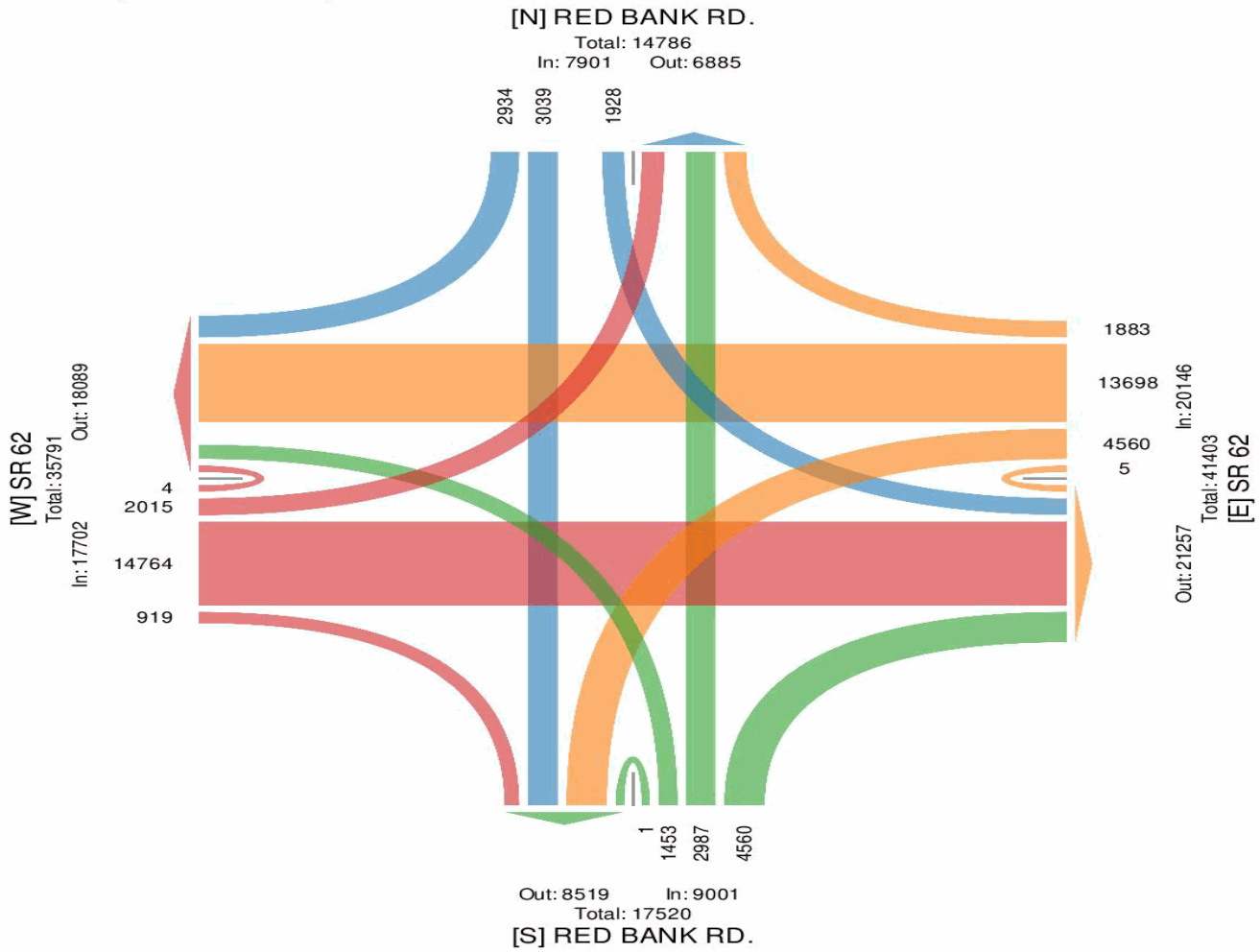
September 30, 2019 11:36 am

PROJECT TRAFFIC FORECAST REPORT

Intersection: 1

VD SR 62 and RED BANK RD, EVANSVILLE VANDERB... - TMC
Wed Apr 1, 2015
Full Length (10 AM-10 AM (+1))
All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks)
All Movements
ID: 221146, Location: 37.976393, -87.636936

Provided by: Indiana DOT
100 N. Senate Ave., Indianapolis, IN, 46204, US



INDIANA DEPARTMENT OF TRANSPORTATION

September 30, 2019 11:36 am

PROJECT TRAFFIC FORECAST REPORT

Location: SR-62 SR 62 at 5.10 Mi W of US 41

The table below contains the projected Annual Average Daily Traffic (AADT) in each requested year for each approach and movement.
The per year growth rate used for each approach is indicated in the table below. It is applied as a straight line growth.
For the purpose of this report a commercial vehicle would fall into FHWA Scheme F Classes 4 through 13. They are identified by MioVision as either an Articulated Truck, a Bus, or a Single-Unit Truck.

Daily Movement Forecast

Approach Road Name	Approach Direction	Movement	Total	Count Year AADT	Growth Rate	Construction Year AADT 2025	Intermediate Year 1 AADT 2035	Intermediate Year 2 AADT 2040	Design Year AADT 2045	Commercial Percentage
SR 62	East	Right	1,883	1,730	0.39%	1,798	1,865	1,899	1,933	1.06%
SR 62	East	Thru	13,698	12,588	0.39%	13,079	13,570	13,816	14,061	3.53%
SR 62	East	Left	4,560	4,191	0.39%	4,354	4,518	4,599	4,681	0.61%
SR 62	East	U-Turn	5	5	0.39%	5	5	5	5	0.00%
SR 62	East	Total	20,146	18,514	0.39%	19,236	19,958	20,319	20,680	0.00%
RED BANK RD	North	Right	2,934	2,696	1.23%	3,029	3,361	3,527	3,694	0.10%
RED BANK RD	North	Thru	3,039	2,793	1.23%	3,137	3,482	3,654	3,826	0.17%
RED BANK RD	North	Left	1,928	1,772	1.23%	1,990	2,209	2,318	2,427	0.47%
RED BANK RD	North	U-Turn	0	0	1.23%	0	0	0	0	0.00%
RED BANK RD	North	Total	7,901	7,261	1.23%	8,156	9,052	9,499	9,947	0.00%
RED BANK RD SB	South	Right	4,560	4,191	1.00%	4,610	5,029	5,238	5,448	0.61%
RED BANK RD SB	South	Thru	2,987	2,745	1.00%	3,020	3,294	3,431	3,569	0.07%
RED BANK RD SB	South	Left	1,453	1,335	1.00%	1,469	1,602	1,669	1,736	0.28%
RED BANK RD SB	South	U-Turn	1	1	1.00%	1	1	1	1	0.00%
RED BANK RD SB	South	Total	9,001	8,272	1.00%	9,099	9,926	10,340	10,753	0.00%
SR 62 WB	West	Right	919	845	0.30%	870	895	908	921	0.33%
SR 62 WB	West	Thru	14,764	13,568	0.30%	13,975	14,382	14,586	14,789	3.07%
SR 62 WB	West	Left	2,015	1,852	0.30%	1,907	1,963	1,991	2,018	0.05%
SR 62 WB	West	U-Turn	4	4	0.30%	4	4	4	4	0.00%
SR 62 WB	West	Total	17,702	16,268	0.30%	16,756	17,244	17,488	17,732	0.00%

Growth Rate Notes

INDIANA DEPARTMENT OF TRANSPORTATION

September 30, 2019 11:36 am

PROJECT TRAFFIC FORECAST REPORT

Location: SR-62 SR 62 at 5.10 Mi W of US 41

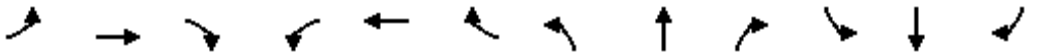
The table below contains the projected traffic volumes in each requested year for approach and movement during the morning and afternoon peak hour.
The morning and afternoon peak hours are those 60 minute periods during which the most vehicles pass through the intersection.

AM PM Peak Movement Forecast

Approach Direction	Growth Rate	Movement	Interval	Total Vehicles	Commercial % AADT	Count Year AADT	Construction Year AADT 2025	Intermediate Year 1 AADT 2035	Intermediate Year 2 AADT 2040	Design Year AADT 2045
East	0.39%	Left	11:45 AM	376	0.27%	346	359	373	380	386
East	0.39%	Thru	11:45 AM	757	5.68%	696	723	750	764	777
East	0.39%	Right	11:45 AM	136	0.74%	125	130	135	137	140
East	0.39%	U-Turn	11:45 AM	0	0.00%	0	0	0	0	0
North	1.23%	Left	11:45 AM	177	0.00%	163	183	203	213	223
North	1.23%	Thru	11:45 AM	277	0.00%	255	286	318	334	349
North	1.23%	Right	11:45 AM	210	0.48%	193	217	241	252	264
North	1.23%	U-Turn	11:45 AM	0	0.00%	0	0	0	0	0
South	1.00%	Left	11:45 AM	87	1.15%	80	88	96	100	104
South	1.00%	Thru	11:45 AM	236	0.42%	217	239	260	271	282
South	1.00%	Right	11:45 AM	315	0.32%	289	318	347	361	376
South	1.00%	U-Turn	11:45 AM	0	0.00%	0	0	0	0	0
West	0.30%	Left	11:45 AM	159	0.00%	146	150	155	157	159
West	0.30%	Thru	11:45 AM	842	5.11%	774	797	820	832	844
West	0.30%	Right	11:45 AM	71	0.00%	65	67	69	70	71
West	0.30%	U-Turn	11:45 AM	0	0.00%	0	0	0	0	0
East	0.39%	Left	4:45 PM	399	0.00%	367	381	396	403	410
East	0.39%	Thru	4:45 PM	1123	1.69%	1,032	1,072	1,112	1,133	1,153
East	0.39%	Right	4:45 PM	149	0.67%	137	142	148	150	153
East	0.39%	U-Turn	4:45 PM	1	0.00%	1	1	1	1	1
North	1.23%	Left	4:45 PM	156	0.00%	143	161	178	187	196
North	1.23%	Thru	4:45 PM	297	0.00%	273	307	340	357	374
North	1.23%	Right	4:45 PM	273	0.00%	251	282	313	328	344
North	1.23%	U-Turn	4:45 PM	0	0.00%	0	0	0	0	0
South	1.00%	Left	4:45 PM	152	0.00%	140	154	168	175	182
South	1.00%	Thru	4:45 PM	276	0.00%	254	279	305	318	330
South	1.00%	Right	4:45 PM	330	0.91%	303	333	364	379	394
South	1.00%	U-Turn	4:45 PM	0	0.00%	0	0	0	0	0
West	0.30%	Left	4:45 PM	160	0.00%	147	151	156	158	160
West	0.30%	Thru	4:45 PM	1112	1.71%	1,022	1,053	1,083	1,099	1,114
West	0.30%	Right	4:45 PM	92	0.00%	85	88	90	91	93
West	0.30%	U-Turn	4:45 PM	0	0.00%	0	0	0	0	0

It should be recognized by users of this forecast that the base year AADT has an accuracy of plus or minus 10%. It should also be understood that while this report may include forecasts with up to six apparent significant figures, the accuracy should not be interpreted as being greater than two significant figures. It is the responsibility of designers to exercise professional judgement when using this data to influence decisions.

Appendix B: Existing Conditions (2019) Synchro Reports



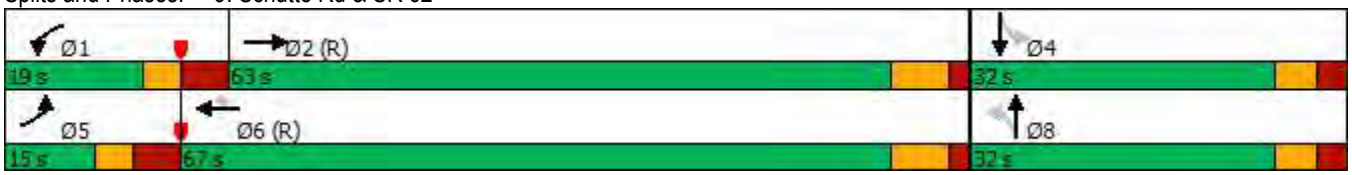
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	10	1052	0	57	1042	31	17	33	65	145	17	30
Future Volume (vph)	10	1052	0	57	1042	31	17	33	65	145	17	30
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	11	11	11
Storage Length (ft)	270		0	1000		250	100		0	0		0
Storage Lanes	1		0	1		1	1		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt						0.850		0.900			0.979	
Flt Protected	0.950			0.950			0.950				0.964	
Satd. Flow (prot)	1752	3505	0	1703	3406	1524	1736	1644	0	0	1683	0
Flt Permitted	0.950			0.950			0.676				0.682	
Satd. Flow (perm)	1752	3505	0	1703	3406	1524	1235	1644	0	0	1191	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						101		82			8	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		465			5456			614			1006	
Travel Time (s)		10.6			124.0			14.0			22.9	
Peak Hour Factor	0.85	0.85	0.85	0.84	0.84	0.84	0.76	0.76	0.76	0.73	0.73	0.73
Heavy Vehicles (%)	3%	3%	3%	6%	6%	6%	4%	4%	4%	3%	3%	3%
Adj. Flow (vph)	12	1238	0	68	1240	37	22	43	86	199	23	41
Shared Lane Traffic (%)												
Lane Group Flow (vph)	12	1238	0	68	1240	37	22	129	0	0	263	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		30			30			12			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.04	1.04	1.04
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Prot	NA		Prot	NA	Perm	Perm	NA		Perm	NA	
Protected Phases	5	2		1	6			8			4	
Permitted Phases						6	8			4		
Detector Phase	5	2		1	6	6	8	8		4	4	
Switch Phase												
Minimum Initial (s)	5.0	20.0		5.0	20.0	20.0	8.0	8.0		8.0	8.0	
Minimum Split (s)	12.3	26.9		12.3	26.9	26.9	14.3	14.3		14.3	14.3	
Total Split (s)	15.0	63.0		19.0	67.0	67.0	32.0	32.0		32.0	32.0	
Total Split (%)	13.2%	55.3%		16.7%	58.8%	58.8%	28.1%	28.1%		28.1%	28.1%	
Maximum Green (s)	7.7	56.1		11.7	60.1	60.1	25.7	25.7		25.7	25.7	
Yellow Time (s)	3.2	5.0		3.2	5.0	5.0	3.6	3.6		3.6	3.6	
All-Red Time (s)	4.1	1.9		4.1	1.9	1.9	2.7	2.7		2.7	2.7	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0			0.0	
Total Lost Time (s)	7.3	6.9		7.3	6.9	6.9	6.3	6.3			6.3	
Lead/Lag	Lead	Lag		Lead	Lag	Lag						
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes						
Vehicle Extension (s)	3.0	5.0		2.0	5.0	5.0	5.0	5.0		5.0	5.0	

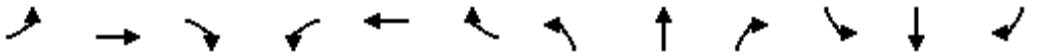
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Minimum Gap (s)	0.2	3.0		0.2	3.0	3.0	0.2	0.2		0.2	0.2	
Time Before Reduce (s)	0.0	30.0		0.0	30.0	30.0	0.0	0.0		0.0	0.0	
Time To Reduce (s)	0.0	20.0		0.0	20.0	20.0	0.0	0.0		0.0	0.0	
Recall Mode	None	C-Max		None	C-Max	C-Max	None	None		None	None	
Act Effct Green (s)	6.4	61.6		8.7	72.1	72.1	25.7	25.7			25.7	
Actuated g/C Ratio	0.06	0.54		0.08	0.63	0.63	0.23	0.23			0.23	
v/c Ratio	0.12	0.65		0.53	0.58	0.04	0.08	0.30			0.96	
Control Delay	53.4	21.9		69.9	4.7	0.0	35.9	17.0			88.4	
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0			0.0	
Total Delay	53.4	21.9		69.9	4.7	0.0	35.9	17.0			88.4	
LOS	D	C		E	A	A	D	B			F	
Approach Delay		22.2			7.8			19.7			88.4	
Approach LOS		C			A			B			F	
Queue Length 50th (ft)	9	343		52	82	0	13	28			187	
Queue Length 95th (ft)	26	406		m75	m102	m0	29	58			#246	
Internal Link Dist (ft)		385			5376			534			926	
Turn Bay Length (ft)	270			1000		250	100					
Base Capacity (vph)	118	1893		174	2153	1001	278	434			274	
Starvation Cap Reductn	0	0		0	0	0	0	0			0	
Spillback Cap Reductn	0	0		0	0	0	0	0			0	
Storage Cap Reductn	0	0		0	0	0	0	0			0	
Reduced v/c Ratio	0.10	0.65		0.39	0.58	0.04	0.08	0.30			0.96	

Intersection Summary			
Area Type:	Other		
Cycle Length: 114			
Actuated Cycle Length: 114			
Offset: 1 (1%), Referenced to phase 2:EBT and 6:WBT, Start of 1st Green			
Natural Cycle: 80			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.96			
Intersection Signal Delay: 21.4		Intersection LOS: C	
Intersection Capacity Utilization 67.8%		ICU Level of Service C	
Analysis Period (min) 15			

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 9: Schutte Rd & SR 62





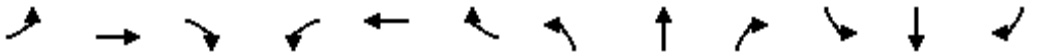
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	43	1160	135	54	1053	58	125	58	49	144	76	76
Future Volume (vph)	43	1160	135	54	1053	58	125	58	49	144	76	76
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	250		520	270		330	310		150	0		50
Storage Lanes	1		1	1		1	1		1	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850			0.850			0.850		0.965	
Flt Protected	0.950			0.950			0.950				0.976	
Satd. Flow (prot)	1752	3505	1568	1719	3438	1538	1770	1863	1583	0	1737	0
Flt Permitted	0.950			0.950			0.487				0.814	
Satd. Flow (perm)	1752	3505	1568	1719	3438	1538	907	1863	1583	0	1449	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			*151			*151			*156		*14	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		5456			185			1003			773	
Travel Time (s)		124.0			4.2			22.8			17.6	
Peak Hour Factor	0.91	0.91	0.91	0.84	0.84	0.84	0.94	0.94	0.94	0.66	0.66	0.66
Heavy Vehicles (%)	3%	3%	3%	5%	5%	5%	2%	2%	2%	3%	3%	3%
Adj. Flow (vph)	47	1275	148	64	1254	69	133	62	52	218	115	115
Shared Lane Traffic (%)												
Lane Group Flow (vph)	47	1275	148	64	1254	69	133	62	52	0	448	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Prot	NA	Perm	Prot	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases			2			6	8		8	4		
Detector Phase	5	2	2	1	6	6	3	8	8	7	4	
Switch Phase												
Minimum Initial (s)	4.0	30.0	30.0	4.0	30.0	30.0	4.0	10.0	10.0	4.0	10.0	
Minimum Split (s)	9.9	36.9	36.9	9.9	36.9	36.9	10.5	22.5	22.5	10.5	16.4	
Total Split (s)	16.0	64.0	64.0	15.0	63.0	63.0	11.0	23.0	23.0	12.0	24.0	
Total Split (%)	14.0%	56.1%	56.1%	13.2%	55.3%	55.3%	9.6%	20.2%	20.2%	10.5%	21.1%	
Maximum Green (s)	10.1	57.1	57.1	9.1	56.1	56.1	4.5	16.6	16.6	5.5	17.6	
Yellow Time (s)	3.2	4.7	4.7	3.2	4.7	4.7	3.2	3.2	3.2	3.2	3.2	
All-Red Time (s)	2.7	2.2	2.2	2.7	2.2	2.2	3.3	3.2	3.2	3.3	3.2	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	
Total Lost Time (s)	5.9	6.9	6.9	5.9	6.9	6.9	6.5	6.4	6.4		6.4	
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
Vehicle Extension (s)	2.0	5.0	5.0	2.0	5.0	5.0	1.0	3.0	3.0	1.0	3.0	
Minimum Gap (s)	0.2	3.0	3.0	0.2	3.0	3.0	0.2	0.2	0.2	0.2	0.2	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Time Before Reduce (s)	0.0	20.0	20.0	0.0	20.0	20.0	0.0	0.0	0.0	0.0	0.0	
Time To Reduce (s)	0.0	20.0	20.0	0.0	20.0	20.0	0.0	0.0	0.0	0.0	0.0	
Recall Mode	None	C-Max	C-Max	None	C-Max	C-Max	None	None	None	None	None	
Act Effct Green (s)	7.4	60.6	60.6	7.7	60.9	60.9	28.5	28.6	28.6		17.6	
Actuated g/C Ratio	0.06	0.53	0.53	0.07	0.53	0.53	0.25	0.25	0.25		0.15	
v/c Ratio	0.42	0.68	0.16	0.55	0.68	0.08	0.51	0.13	0.10		1.91	
Control Delay	66.2	11.2	0.6	54.9	42.1	6.1	43.3	34.1	0.4		450.8	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	
Total Delay	66.2	11.2	0.6	54.9	42.1	6.1	43.3	34.1	0.4		450.8	
LOS	E	B	A	D	D	A	D	C	A		F	
Approach Delay		11.9			40.9			31.9			450.8	
Approach LOS		B			D			C			F	
Queue Length 50th (ft)	36	135	1	46	488	4	79	35	0		~501	
Queue Length 95th (ft)	m54	m156	m1	m84	526	m23	136	72	0		#465	
Internal Link Dist (ft)		5376			105			923			693	
Turn Bay Length (ft)	250		520	270		330	310		150			
Base Capacity (vph)	155	1863	904	137	1836	891	260	467	514		235	
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0		0	
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0		0	
Storage Cap Reductn	0	0	0	0	0	0	0	0	0		0	
Reduced v/c Ratio	0.30	0.68	0.16	0.47	0.68	0.08	0.51	0.13	0.10		1.91	

Intersection Summary

Area Type: Other
Cycle Length: 114
Actuated Cycle Length: 114
Offset: 2 (2%), Referenced to phase 2:EBT and 6:WBT, Start of 1st Green
Natural Cycle: 90
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 1.91
Intersection Signal Delay: 80.0 Intersection LOS: E
Intersection Capacity Utilization 74.7% ICU Level of Service D
Analysis Period (min) 15
* User Entered Value
~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 12: Boehne Camp Rd & SR 62

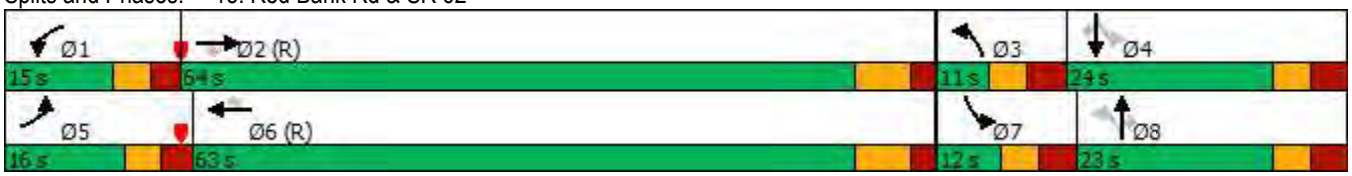


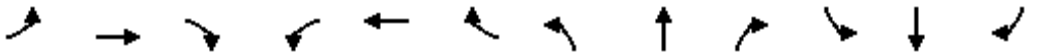
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	68	1224	43	112	877	59	59	80	150	126	103	87
Future Volume (vph)	68	1224	43	112	877	59	59	80	150	126	103	87
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	265		500	560		380	280		260	145		160
Storage Lanes	1		1	2		1	1		1	1		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	1.00	0.97	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Frt			0.850			0.850			0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	3539	1583	3303	3406	1524	1736	3471	1553	1770	3539	1583
Flt Permitted	0.950			0.950			0.682			0.655		
Satd. Flow (perm)	1770	3539	1583	3303	3406	1524	1246	3471	1553	1220	3539	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			151			151			172			156
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		2475			1052			372			444	
Travel Time (s)		56.3			23.9			8.5			10.1	
Peak Hour Factor	0.88	0.88	0.88	0.93	0.93	0.93	0.87	0.87	0.87	0.93	0.93	0.93
Heavy Vehicles (%)	2%	2%	2%	6%	6%	6%	4%	4%	4%	2%	2%	2%
Adj. Flow (vph)	77	1391	49	120	943	63	68	92	172	135	111	94
Shared Lane Traffic (%)												
Lane Group Flow (vph)	77	1391	49	120	943	63	68	92	172	135	111	94
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24			24			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Prot	NA	Perm	Prot	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases			2			6	8		8	4		4
Detector Phase	5	2	2	1	6	6	3	8	8	7	4	4
Switch Phase												
Minimum Initial (s)	4.0	30.0	30.0	4.0	30.0	30.0	4.0	10.0	10.0	4.0	10.0	10.0
Minimum Split (s)	9.9	36.9	36.9	9.9	36.9	36.9	10.5	16.4	16.4	10.5	16.4	16.4
Total Split (s)	16.0	64.0	64.0	15.0	63.0	63.0	11.0	23.0	23.0	12.0	24.0	24.0
Total Split (%)	14.0%	56.1%	56.1%	13.2%	55.3%	55.3%	9.6%	20.2%	20.2%	10.5%	21.1%	21.1%
Maximum Green (s)	10.1	57.1	57.1	9.1	56.1	56.1	4.5	16.6	16.6	5.5	17.6	17.6
Yellow Time (s)	3.2	4.7	4.7	3.2	4.7	4.7	3.2	3.2	3.2	3.2	3.2	3.2
All-Red Time (s)	2.7	2.2	2.2	2.7	2.2	2.2	3.3	3.2	3.2	3.3	3.2	3.2
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.9	6.9	6.9	5.9	6.9	6.9	6.5	6.4	6.4	6.5	6.4	6.4
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	2.0	5.0	5.0	2.0	5.0	5.0	1.0	3.0	3.0	1.0	3.0	3.0
Minimum Gap (s)	0.2	3.0	3.0	0.2	3.0	3.0	0.2	0.2	0.2	0.2	0.2	0.2

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Time Before Reduce (s)	0.0	20.0	20.0	0.0	20.0	20.0	0.0	0.0	0.0	0.0	0.0	0.0
Time To Reduce (s)	0.0	20.0	20.0	0.0	20.0	20.0	0.0	0.0	0.0	0.0	0.0	0.0
Recall Mode	Max	C-Max	C-Max	Max	C-Max	C-Max	Max	Max	Max	Max	Max	Max
Act Effct Green (s)	10.1	57.1	57.1	9.1	56.1	56.1	21.0	16.6	16.6	23.0	17.6	17.6
Actuated g/C Ratio	0.09	0.50	0.50	0.08	0.49	0.49	0.18	0.15	0.15	0.20	0.15	0.15
v/c Ratio	0.49	0.78	0.06	0.46	0.56	0.08	0.27	0.18	0.46	0.50	0.20	0.25
Control Delay	40.4	43.0	1.3	56.1	22.0	0.2	37.8	43.8	10.9	43.6	43.2	2.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	40.4	43.0	1.3	56.1	22.0	0.2	37.8	43.8	10.9	43.6	43.2	2.3
LOS	D	D	A	E	C	A	D	D	B	D	D	A
Approach Delay		41.5			24.4			25.5			32.1	
Approach LOS		D			C			C			C	
Queue Length 50th (ft)	55	572	0	44	247	0	39	31	0	81	37	0
Queue Length 95th (ft)	m70	m586	m0	74	310	0	74	54	56	137	65	6
Internal Link Dist (ft)		2395			972			292			364	
Turn Bay Length (ft)	265		500	560		380	280		260	145		160
Base Capacity (vph)	156	1772	868	263	1676	826	248	505	373	272	546	376
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.49	0.78	0.06	0.46	0.56	0.08	0.27	0.18	0.46	0.50	0.20	0.25

Intersection Summary			
Area Type:	Other		
Cycle Length: 114			
Actuated Cycle Length: 114			
Offset: 2 (2%), Referenced to phase 2:EBT and 6:WBT, Start of 1st Green			
Natural Cycle: 80			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.78			
Intersection Signal Delay: 33.1		Intersection LOS: C	
Intersection Capacity Utilization 66.8%		ICU Level of Service C	
Analysis Period (min) 15			
m Volume for 95th percentile queue is metered by upstream signal.			

Splits and Phases: 15: Red Bank Rd & SR 62





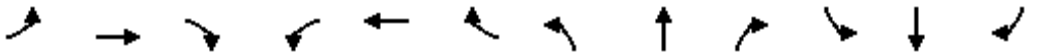
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	12	1370	0	162	1213	29	31	20	193	62	18	13
Future Volume (vph)	12	1370	0	162	1213	29	31	20	193	62	18	13
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	11	11	11
Storage Length (ft)	270		0	1000		250	100		100	150		100
Storage Lanes	1		0	1		1	1		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt						0.850		0.864			0.981	
Flt Protected	0.950			0.950			0.950				0.968	
Satd. Flow (prot)	1770	3539	0	1770	3539	1583	1770	1609	0	0	1710	0
Flt Permitted	0.950			0.950			0.673				0.271	
Satd. Flow (perm)	1770	3539	0	1770	3539	1583	1254	1609	0	0	479	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						77		212			5	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		465			5456			614			1006	
Travel Time (s)		10.6			124.0			14.0			22.9	
Peak Hour Factor	0.94	0.94	0.94	0.96	0.96	0.96	0.91	0.91	0.91	0.73	0.73	0.73
Adj. Flow (vph)	13	1457	0	169	1264	30	34	22	212	85	25	18
Shared Lane Traffic (%)												
Lane Group Flow (vph)	13	1457	0	169	1264	30	34	234	0	0	128	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		30			30			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.04	1.04	1.04
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Prot	NA		Prot	NA	Perm	Perm	NA		Perm	NA	
Protected Phases	5	2		1	6			8			4	
Permitted Phases						6	8			4		
Detector Phase	5	2		1	6	6	8	8		4	4	
Switch Phase												
Minimum Initial (s)	5.0	20.0		5.0	20.0	20.0	8.0	8.0		8.0	8.0	
Minimum Split (s)	12.3	26.9		12.3	26.9	26.9	14.3	14.3		14.3	14.3	
Total Split (s)	21.0	90.0		32.0	101.0	101.0	28.0	28.0		28.0	28.0	
Total Split (%)	14.0%	60.0%		21.3%	67.3%	67.3%	18.7%	18.7%		18.7%	18.7%	
Maximum Green (s)	13.7	83.1		24.7	94.1	94.1	21.7	21.7		21.7	21.7	
Yellow Time (s)	3.2	5.0		3.2	5.0	5.0	3.6	3.6		3.6	3.6	
All-Red Time (s)	4.1	1.9		4.1	1.9	1.9	2.7	2.7		2.7	2.7	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0			0.0	
Total Lost Time (s)	7.3	6.9		7.3	6.9	6.9	6.3	6.3			6.3	
Lead/Lag	Lead	Lag		Lead	Lag	Lag						
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes						
Vehicle Extension (s)	3.0	5.0		2.0	5.0	5.0	5.0	5.0		5.0	5.0	
Minimum Gap (s)	0.2	3.0		0.2	3.0	3.0	0.2	0.2		0.2	0.2	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Time Before Reduce (s)	0.0	30.0		0.0	30.0	30.0	0.0	0.0		0.0	0.0	
Time To Reduce (s)	0.0	20.0		0.0	20.0	20.0	0.0	0.0		0.0	0.0	
Recall Mode	None	C-Max		None	C-Max	C-Max	None	None		None	None	
Act Effct Green (s)	6.7	89.3		18.5	109.0	109.0	21.7	21.7			21.7	
Actuated g/C Ratio	0.04	0.60		0.12	0.73	0.73	0.14	0.14			0.14	
v/c Ratio	0.16	0.69		0.78	0.49	0.03	0.19	0.57			1.75	
Control Delay	73.1	23.8		76.4	7.8	0.3	59.5	15.6			423.0	
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0			0.0	
Total Delay	73.1	23.8		76.4	7.8	0.3	59.5	15.6			423.0	
LOS	E	C		E	A	A	E	B			F	
Approach Delay		24.2			15.6			21.2			423.0	
Approach LOS		C			B			C			F	
Queue Length 50th (ft)	13	497		140	36	0	30	19			~182	
Queue Length 95th (ft)	37	642		m188	m458	m1	66	105			#248	
Internal Link Dist (ft)		385			5376			534			926	
Turn Bay Length (ft)	270			1000		250	100					
Base Capacity (vph)	161	2106		291	2572	1171	181	414			73	
Starvation Cap Reductn	0	0		0	0	0	0	0			0	
Spillback Cap Reductn	0	0		0	0	0	0	0			0	
Storage Cap Reductn	0	0		0	0	0	0	0			0	
Reduced v/c Ratio	0.08	0.69		0.58	0.49	0.03	0.19	0.57			1.75	

Intersection Summary

Area Type: Other
Cycle Length: 150
Actuated Cycle Length: 150
Offset: 89 (59%), Referenced to phase 2:EBT and 6:WBT, Start of 1st Green
Natural Cycle: 80
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 1.75
Intersection Signal Delay: 35.5 Intersection LOS: D
Intersection Capacity Utilization 88.8% ICU Level of Service E
Analysis Period (min) 15
~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 9: Schutte Rd & SR 62



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	51	1503	353	55	1182	85	277	71	62	47	58	39
Future Volume (vph)	51	1503	353	55	1182	85	277	71	62	47	58	39
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	260		520	270		330	310		150	150		100
Storage Lanes	1		1	1		1	1		1	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850			0.850			0.850		0.964	
Flt Protected	0.950			0.950			0.950				0.984	
Satd. Flow (prot)	1770	3539	1583	1770	3539	1583	1770	1863	1583	0	1767	0
Flt Permitted	0.950			0.950			0.391				0.861	
Satd. Flow (perm)	1770	3539	1583	1770	3539	1583	728	1863	1583	0	1546	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			*151			*151			*156		*14	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		5456			2661			1003			773	
Travel Time (s)		124.0			60.5			22.8			17.6	
Peak Hour Factor	0.89	0.89	0.89	0.98	0.98	0.98	0.95	0.95	0.95	0.86	0.86	0.86
Adj. Flow (vph)	57	1689	397	56	1206	87	292	75	65	55	67	45
Shared Lane Traffic (%)												
Lane Group Flow (vph)	57	1689	397	56	1206	87	292	75	65	0	167	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Prot	NA	Perm	Prot	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases			2			6	8		8	4		
Detector Phase	5	2	2	1	6	6	3	8	8	7	4	
Switch Phase												
Minimum Initial (s)	4.0	30.0	30.0	4.0	30.0	30.0	4.0	10.0	10.0	4.0	10.0	
Minimum Split (s)	9.9	36.9	36.9	9.9	36.9	36.9	10.5	16.4	16.4	10.5	16.4	
Total Split (s)	27.0	78.0	78.0	30.0	81.0	81.0	18.0	22.0	22.0	20.0	24.0	
Total Split (%)	18.0%	52.0%	52.0%	20.0%	54.0%	54.0%	12.0%	14.7%	14.7%	13.3%	16.0%	
Maximum Green (s)	21.1	71.1	71.1	24.1	74.1	74.1	11.5	15.6	15.6	13.5	17.6	
Yellow Time (s)	3.2	4.7	4.7	3.2	4.7	4.7	3.2	3.2	3.2	3.2	3.2	
All-Red Time (s)	2.7	2.2	2.2	2.7	2.2	2.2	3.3	3.2	3.2	3.3	3.2	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	
Total Lost Time (s)	5.9	6.9	6.9	5.9	6.9	6.9	6.5	6.4	6.4		6.4	
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
Vehicle Extension (s)	2.0	5.0	5.0	2.0	5.0	5.0	1.0	3.0	3.0	1.0	3.0	
Minimum Gap (s)	0.2	3.0	3.0	0.2	3.0	3.0	0.2	0.2	0.2	0.2	0.2	
Time Before Reduce (s)	0.0	20.0	20.0	0.0	20.0	20.0	0.0	0.0	0.0	0.0	0.0	

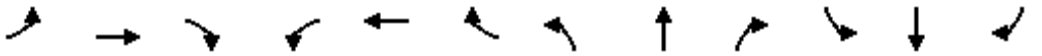
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Time To Reduce (s)	0.0	20.0	20.0	0.0	20.0	20.0	0.0	0.0	0.0	0.0	0.0	
Recall Mode	None	C-Max	C-Max	None	C-Max	C-Max	None	None	None	None	None	
Act Effct Green (s)	9.2	89.2	89.2	9.2	89.2	89.2	34.6	34.7	34.7		16.7	
Actuated g/C Ratio	0.06	0.59	0.59	0.06	0.59	0.59	0.23	0.23	0.23		0.11	
v/c Ratio	0.53	0.80	0.40	0.52	0.57	0.09	1.18	0.17	0.13		0.91	
Control Delay	93.6	24.3	5.2	71.6	26.7	4.4	161.0	47.0	0.6		105.9	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	
Total Delay	93.6	24.3	5.2	71.6	26.7	4.4	161.0	47.0	0.6		105.9	
LOS	F	C	A	E	C	A	F	D	A		F	
Approach Delay		22.6			27.2			117.1			105.9	
Approach LOS		C			C			F			F	
Queue Length 50th (ft)	51	808	129	55	380	1	~311	59	0		150	
Queue Length 95th (ft)	m77	m882	m128	m100	560	m26	#529	106	0		#264	
Internal Link Dist (ft)		5376			2581			923			693	
Turn Bay Length (ft)	260		520	270		330	310		150			
Base Capacity (vph)	248	2104	1002	284	2103	1002	247	430	485		193	
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0		0	
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0		0	
Storage Cap Reductn	0	0	0	0	0	0	0	0	0		0	
Reduced v/c Ratio	0.23	0.80	0.40	0.20	0.57	0.09	1.18	0.17	0.13		0.87	

Intersection Summary

Area Type: Other
Cycle Length: 150
Actuated Cycle Length: 150
Offset: 103 (69%), Referenced to phase 2:EBT and 6:WBT, Start of 1st Green
Natural Cycle: 90
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 1.18
Intersection Signal Delay: 37.5 Intersection LOS: D
Intersection Capacity Utilization 78.8% ICU Level of Service D
Analysis Period (min) 15

* User Entered Value
~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 12: Boehne Camp & SR 62



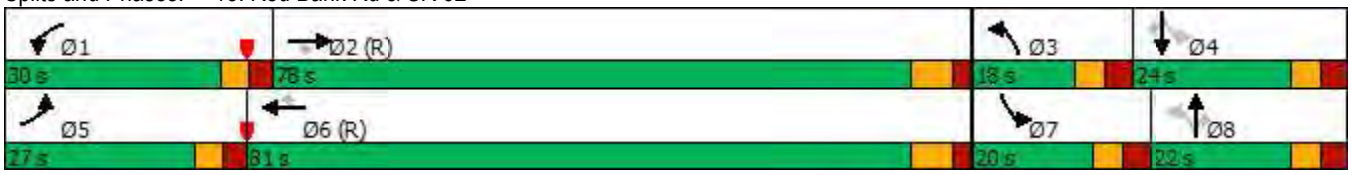
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	108	1115	83	383	935	120	135	225	318	145	234	178
Future Volume (vph)	108	1115	83	383	935	120	135	225	318	145	234	178
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	265		500	560		380	280		260	145		160
Storage Lanes	1		1	2		1	1		1	1		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	1.00	0.97	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Frt			0.850			0.850			0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1752	3505	1568	3433	3539	1583	1770	3539	1583	1770	3539	1583
Flt Permitted	0.950			0.950			0.480			0.387		
Satd. Flow (perm)	1752	3505	1568	3433	3539	1583	894	3539	1583	721	3539	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			115			130			271			191
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		2661			1055			494			562	
Travel Time (s)		60.5			24.0			11.2			12.8	
Peak Hour Factor	0.90	0.90	0.90	0.92	0.92	0.92	0.90	0.90	0.90	0.93	0.93	0.93
Heavy Vehicles (%)	3%	3%	3%	2%	2%	2%	2%	2%	2%	2%	2%	2%
Adj. Flow (vph)	120	1239	92	416	1016	130	150	250	353	156	252	191
Shared Lane Traffic (%)												
Lane Group Flow (vph)	120	1239	92	416	1016	130	150	250	353	156	252	191
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24			24			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Prot	NA	Perm	Prot	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases			2			6	8		8	4		4
Detector Phase	5	2	2	1	6	6	3	8	8	7	4	4
Switch Phase												
Minimum Initial (s)	4.0	30.0	30.0	4.0	30.0	30.0	4.0	10.0	10.0	4.0	10.0	10.0
Minimum Split (s)	9.9	36.9	36.9	9.9	36.9	36.9	10.5	16.4	16.4	10.5	16.4	16.4
Total Split (s)	27.0	78.0	78.0	30.0	81.0	81.0	18.0	22.0	22.0	20.0	24.0	24.0
Total Split (%)	18.0%	52.0%	52.0%	20.0%	54.0%	54.0%	12.0%	14.7%	14.7%	13.3%	16.0%	16.0%
Maximum Green (s)	21.1	71.1	71.1	24.1	74.1	74.1	11.5	15.6	15.6	13.5	17.6	17.6
Yellow Time (s)	3.2	4.7	4.7	3.2	4.7	4.7	3.2	3.2	3.2	3.2	3.2	3.2
All-Red Time (s)	2.7	2.2	2.2	2.7	2.2	2.2	3.3	3.2	3.2	3.3	3.2	3.2
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.9	6.9	6.9	5.9	6.9	6.9	6.5	6.4	6.4	6.5	6.4	6.4
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	2.0	5.0	5.0	2.0	5.0	5.0	1.0	3.0	3.0	1.0	3.0	3.0
Minimum Gap (s)	0.2	3.0	3.0	0.2	3.0	3.0	0.2	0.2	0.2	0.2	0.2	0.2

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Time Before Reduce (s)	0.0	20.0	20.0	0.0	20.0	20.0	0.0	0.0	0.0	0.0	0.0	0.0
Time To Reduce (s)	0.0	20.0	20.0	0.0	20.0	20.0	0.0	0.0	0.0	0.0	0.0	0.0
Recall Mode	None	C-Max	C-Max	None	C-Max	C-Max	None	None	None	None	None	None
Act Effct Green (s)	14.6	75.7	75.7	21.5	82.6	82.6	25.6	14.7	14.7	28.4	16.1	16.1
Actuated g/C Ratio	0.10	0.50	0.50	0.14	0.55	0.55	0.17	0.10	0.10	0.19	0.11	0.11
v/c Ratio	0.71	0.70	0.11	0.85	0.52	0.14	0.69	0.72	0.88	0.70	0.66	0.56
Control Delay	58.9	41.8	12.1	78.6	23.4	3.3	67.7	77.8	40.1	66.9	72.9	14.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	58.9	41.8	12.1	78.6	23.4	3.3	67.7	77.8	40.1	66.9	72.9	14.5
LOS	E	D	B	E	C	A	E	E	D	E	E	B
Approach Delay		41.3			36.5			58.1			52.7	
Approach LOS		D			D			E			D	
Queue Length 50th (ft)	121	445	18	206	330	0	124	126	80	129	125	0
Queue Length 95th (ft)	m146	560	m34	263	428	35	193	175	#256	200	174	76
Internal Link Dist (ft)		2581			975			414			482	
Turn Bay Length (ft)	265		500	560		380	280		260	145		160
Base Capacity (vph)	246	1768	847	551	1948	929	223	368	407	236	415	354
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.49	0.70	0.11	0.75	0.52	0.14	0.67	0.68	0.87	0.66	0.61	0.54

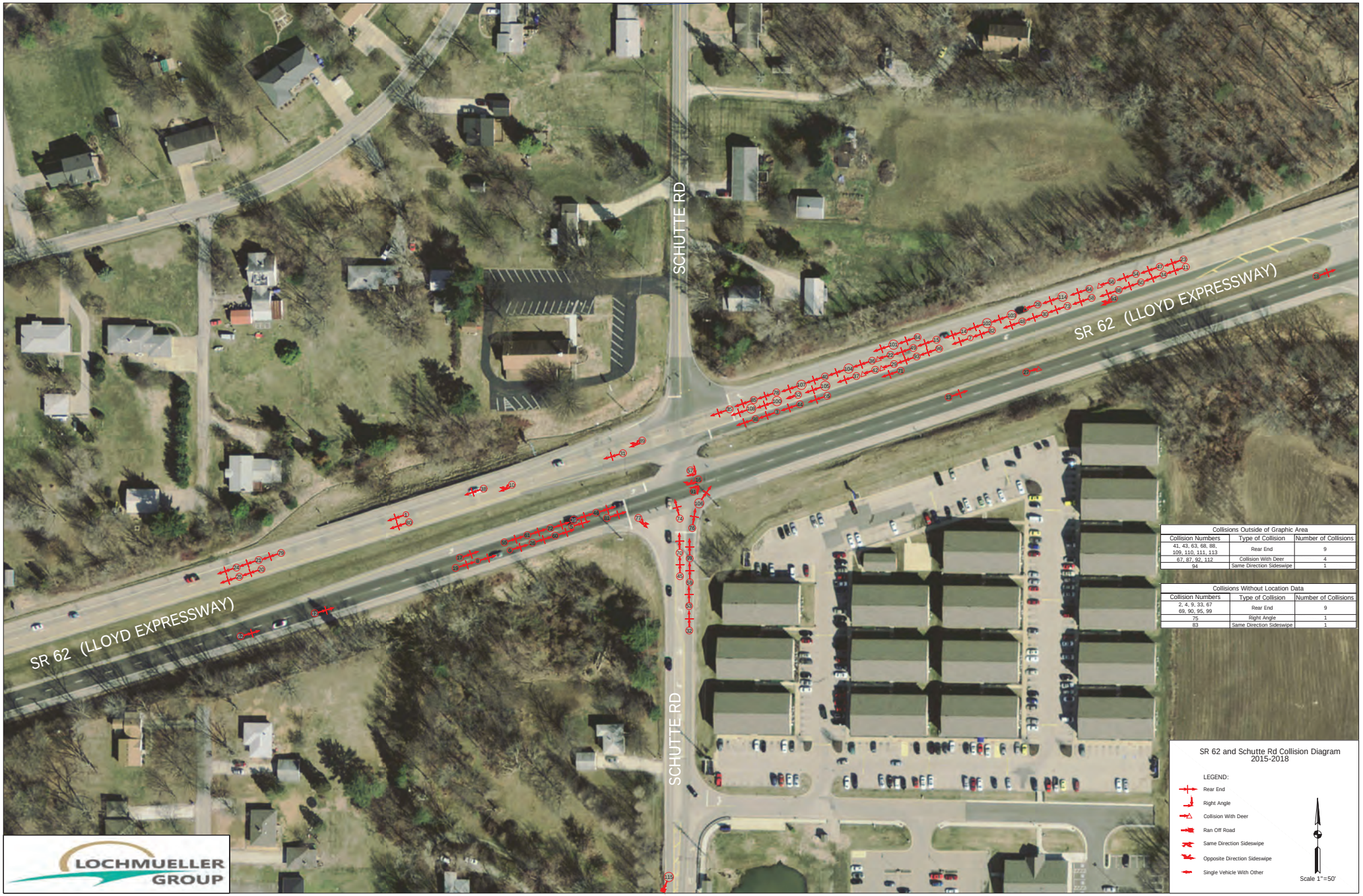
Intersection Summary

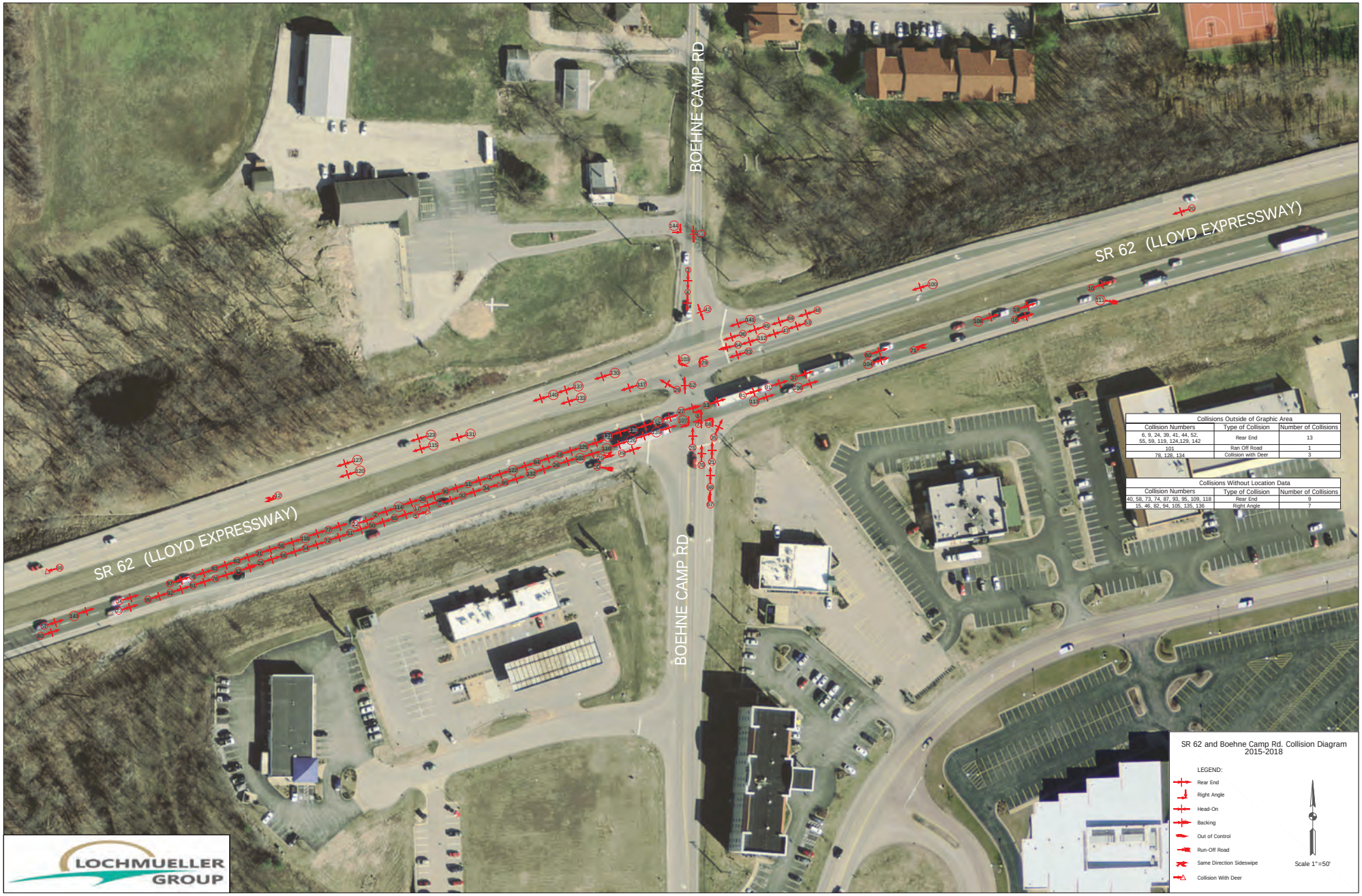
Area Type: Other
Cycle Length: 150
Actuated Cycle Length: 150
Offset: 103 (69%), Referenced to phase 2:EBT and 6:WBT, Start of 1st Green
Natural Cycle: 90
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.88
Intersection Signal Delay: 44.0 Intersection LOS: D
Intersection Capacity Utilization 79.5% ICU Level of Service D
Analysis Period (min) 15
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

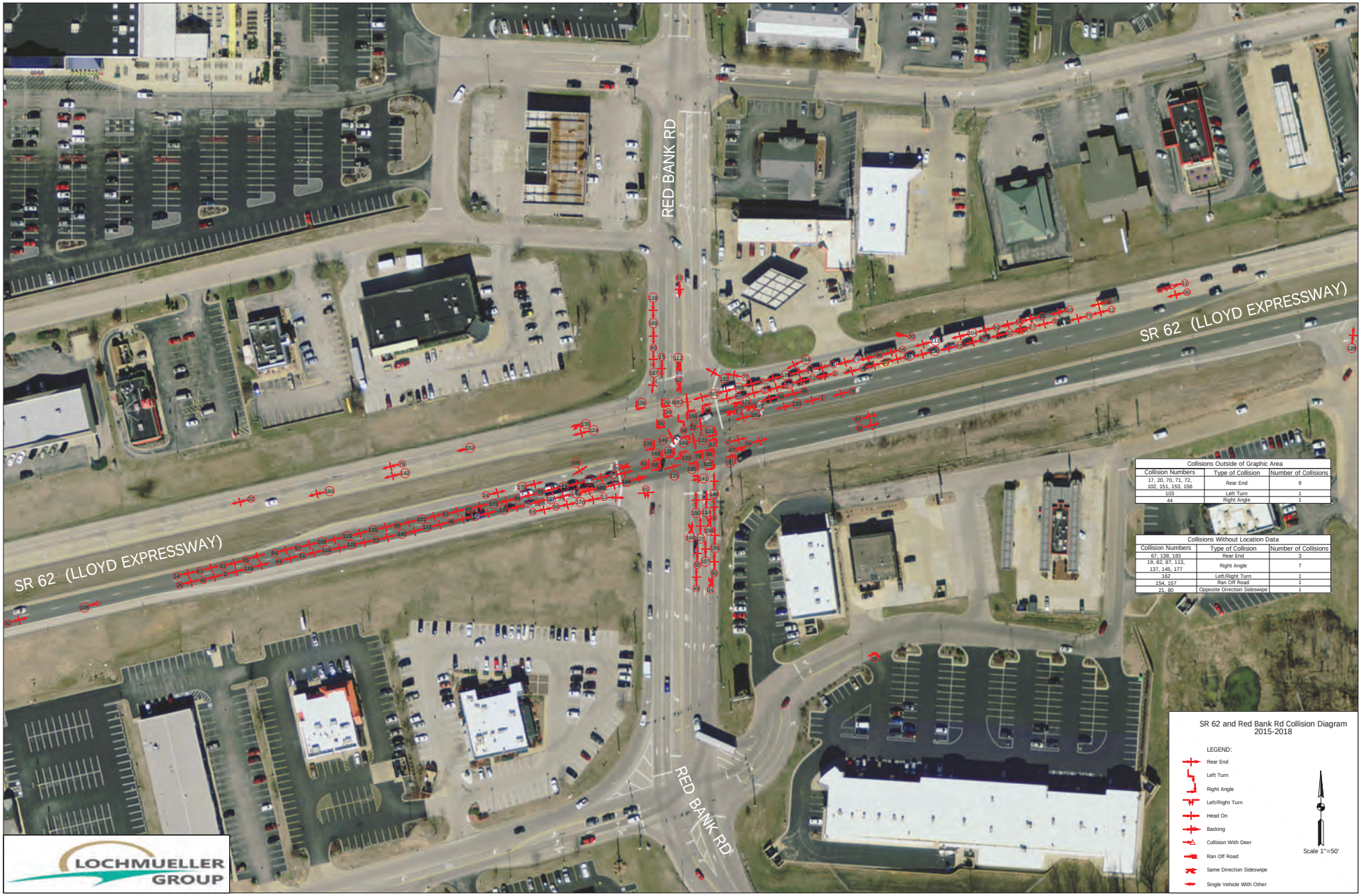
Splits and Phases: 15: Red Bank Rd & SR 62



Appendix C: Collision Diagrams


SCHUTTE RD
SR 62 (LLOYD EXPRESSWAY)
SR 62 (LLOYD EXPRESSWAY)
SCHUTTE RD
LOCHMUELLER GROUP
Collisions Outside of Graphic Area
Collision Numbers | Type of Collision | Number of Collisions
41, 43, 63, 68, 88, 109, 110, 111, 113 | Rear End | 9
67, 87, 92, 112 | Collision With Deer | 4
94 | Same Direction Sideswipe | 1
Collisions Without Location Data
Collision Numbers | Type of Collision | Number of Collisions
2, 4, 9, 33, 67 69, 90, 95, 99 | Rear End | 9
75 | Right Angle | 1
83 | Same Direction Sideswipe | 1
SR 62 and Schutte Rd Collision Diagram 2015-2018
LEGEND:
Rear End
Right Angle
Collision With Deer
Ran Off Road
Same Direction Sideswipe
Opposite Direction Sideswipe
Single Vehicle With Other
Scale 1"=50'


BOEHNE CAMP RD
SR 62 (LLOYD EXPRESSWAY)
SR 62 (LLOYD EXPRESSWAY)
BOEHNE CAMP RD
Collisions Outside of Graphic Area
Collision Numbers | Type of Collision | Number of Collisions
6, 9, 24, 39, 41, 44, 52, 55, 59, 119, 124,129, 142 | Rear End | 13
101 | Ran Off Road | 1
78, 128, 134 | Collision with Deer | 3
Collisions Without Location Data
Collision Numbers | Type of Collision | Number of Collisions
40, 58, 73, 74, 87, 93, 95, 109, 118 | Rear End | 9
15, 46, 82, 94, 105, 135, 136 | Right Angle | 7
SR 62 and Boehne Camp Rd. Collision Diagram 2015-2018
LEGEND:
Rear End
Right Angle
Head-On
Backing
Out of Control
Run-Off Road
Same Direction Sideswipe
Collision With Deer
Scale 1"=50'
LOCHMUELLER GROUP


RED BANK RD
SR 62 (LLOYD EXPRESSWAY)
SR 62 (LLOYD EXPRESSWAY)
RED BANK RD
Collisions Outside of Graphic Area
Collision Numbers | Type of Collision | Number of Collisions
17, 20, 70, 71, 72, 102, 151, 153, 156 | Rear End | 9
103 | Left Turn | 1
44 | Right Angle | 1
Collisions Without Location Data
Collision Numbers | Type of Collision | Number of Collisions
67, 138, 183 | Rear End | 3
19, 82, 87, 113, 137, 145, 177 | Right Angle | 7
162 | Left/Right Turn | 1
154, 157 | Ran Off Road | 1
21, 80 | Opposite Direction Sideswipe | 1
SR 62 and Red Bank Rd Collision Diagram
2015-2018
LEGEND:
Rear End
Left Turn
Right Angle
Left/Right Turn
Head On
Backing
Collision With Deer
Ran Off Road
Same Direction Sideswipe
Single Vehicle With Other
Scale 1"=50'
LOCHMUELLER GROUP

Appendix D: RoadHAT Reports

Index of Crash Frequency and Cost - Form F1

Page 1/2

Location	SR 62 & Schutte Road	
Vanderburgh County, Indiana		
GIS		
Post		
Analyst	Lochmueller Group	
Date	4/22/2020	

INPUT	
Road Facility Type	Signalized Urban State-Local Intersection
Major Road AADT (veh/day)	34594
T-intersection Indicator (1 if present, 0 otherwise)	0
Arterial Indicator for Crossing Local Road (1 if present, 0 otherwise)	1
First Year with Crash Data (yyyy)	2015
Last Year with Crash Data (yyyy)	2018
Number of Crashes (crash/period)	
Fatal and Incapacitating Injury Crashes	9
Non-Incapacitating and Possible Injury Crashes	11
Property Damage Only Crashes	95
Route or Road Type	Signalized Urban State-Local Intersection
Average Crash Costs ($)	
Fatal and Incapacitating Injury Crashes	219500
Non-Incapacitating and Possible Injury Crashes	31300
Property Damage Only Crashes	7100
Crash Cost Year (yyyy)	2018
OUTPUT	
Expected Crash Frequency (crash/year)	
Fatal and Incapacitating Injury Crashes	0.168
Non-Incapacitating and Possible Injury Crashes	2.80
Property Damage Only Crashes	10.59
All Crashes	13.56
Index of Crash Frequency	**1.77**
Index of Crash Cost	**2.79**

Index of Crash Frequency and Cost - Form F1

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Location	SR 62 & Schutte Road	
Vanderburgh County, Indiana		
GIS		
Post		
Analyst	Lochmueller Group	
Date	4/22/2020	

Comments:

Index of Crash Frequency and Cost - Form F1

Page 1/2

Location	SR 62 & Boehne Camp Road	
Vanderburgh County, Indiana		
GIS		
Post		
Analyst	Lochmueller Group	
Date	4/22/2020	

INPUT	
Road Facility Type	Signalized Urban State-Local Intersection
Major Road AADT (veh/day)	38628
T-intersection Indicator (1 if present, 0 otherwise)	0
Arterial Indicator for Crossing Local Road (1 if present, 0 otherwise)	1
First Year with Crash Data (yyyy)	2015
Last Year with Crash Data (yyyy)	2018
Number of Crashes (crash/period)	
Fatal and Incapacitating Injury Crashes	16
Non-Incapacitating and Possible Injury Crashes	15
Property Damage Only Crashes	114
Route or Road Type	Signalized Urban State-Local Intersection
Average Crash Costs ($)	
Fatal and Incapacitating Injury Crashes	219500
Non-Incapacitating and Possible Injury Crashes	31300
Property Damage Only Crashes	7100
Crash Cost Year (yyyy)	2018
OUTPUT	
Expected Crash Frequency (crash/year)	
Fatal and Incapacitating Injury Crashes	0.183
Non-Incapacitating and Possible Injury Crashes	3.15
Property Damage Only Crashes	11.72
All Crashes	15.05
Index of Crash Frequency	**2.22**
Index of Crash Cost	**3.91**

Index of Crash Frequency and Cost - Form F1

Page 2/2

Location	SR 62 & Boehne Camp Road	
Vanderburgh County, Indiana		
GIS		
Post		
Analyst	Lochmueller Group	
Date	4/22/2020	

Comments:

Index of Crash Frequency and Cost - Form F1

Page 1/2

Location	SR 62 & Red Bank Road	
Vanderburgh County, Indiana		
GIS		
Post		
Analyst	Lochmueller Group	
Date	4/22/2020	

INPUT	
Road Facility Type	Signalized Urban State-Local Intersection
Major Road AADT (veh/day)	36059
T-intersection Indicator (1 if present, 0 otherwise)	0
Arterial Indicator for Crossing Local Road (1 if present, 0 otherwise)	1
First Year with Crash Data (yyyy)	2015
Last Year with Crash Data (yyyy)	2018
Number of Crashes (crash/period)	
Fatal and Incapacitating Injury Crashes	20
Non-Incapacitating and Possible Injury Crashes	14
Property Damage Only Crashes	150
Route or Road Type	Signalized Urban State-Local Intersection
Average Crash Costs ($)	
Fatal and Incapacitating Injury Crashes	219500
Non-Incapacitating and Possible Injury Crashes	31300
Property Damage Only Crashes	7100
Crash Cost Year (yyyy)	2018
OUTPUT	
Expected Crash Frequency (crash/year)	
Fatal and Incapacitating Injury Crashes	0.173
Non-Incapacitating and Possible Injury Crashes	2.93
Property Damage Only Crashes	11.00
All Crashes	14.10
Index of Crash Frequency	**3.49**
Index of Crash Cost	**4.68**

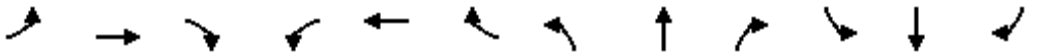
Index of Crash Frequency and Cost - Form F1

Page 2/2

Location	SR 62 & Red Bank Road	
Vanderburgh County, Indiana		
GIS		
Post		
Analyst	Lochmueller Group	
Date	4/22/2020	

Comments:

Appendix E: 2040 Baseline Conditions (2040) Synchro Reports



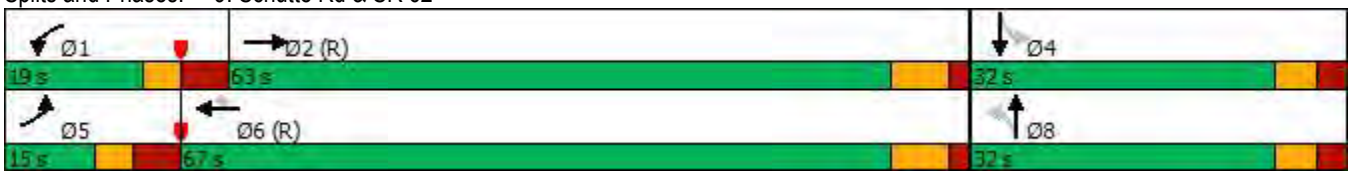
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	10	1052	0	57	1042	31	17	33	65	145	17	30
Future Volume (vph)	10	1052	0	57	1042	31	17	33	65	145	17	30
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	11	11	11
Storage Length (ft)	270		0	1000		250	100		0	0		0
Storage Lanes	1		0	1		1	1		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt						0.850		0.900			0.979	
Flt Protected	0.950			0.950			0.950				0.964	
Satd. Flow (prot)	1752	3505	0	1703	3406	1524	1736	1644	0	0	1683	0
Flt Permitted	0.950			0.950			0.676				0.682	
Satd. Flow (perm)	1752	3505	0	1703	3406	1524	1235	1644	0	0	1191	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						101		82			8	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		465			5456			614			1006	
Travel Time (s)		10.6			124.0			14.0			22.9	
Peak Hour Factor	0.85	0.85	0.85	0.84	0.84	0.84	0.76	0.76	0.76	0.73	0.73	0.73
Heavy Vehicles (%)	3%	3%	3%	6%	6%	6%	4%	4%	4%	3%	3%	3%
Adj. Flow (vph)	12	1238	0	68	1240	37	22	43	86	199	23	41
Shared Lane Traffic (%)												
Lane Group Flow (vph)	12	1238	0	68	1240	37	22	129	0	0	263	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		30			30			12			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.04	1.04	1.04
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Prot	NA		Prot	NA	Perm	Perm	NA		Perm	NA	
Protected Phases	5	2		1	6			8			4	
Permitted Phases						6	8			4		
Detector Phase	5	2		1	6	6	8	8		4	4	
Switch Phase												
Minimum Initial (s)	5.0	20.0		5.0	20.0	20.0	8.0	8.0		8.0	8.0	
Minimum Split (s)	12.3	26.9		12.3	26.9	26.9	14.3	14.3		14.3	14.3	
Total Split (s)	15.0	63.0		19.0	67.0	67.0	32.0	32.0		32.0	32.0	
Total Split (%)	13.2%	55.3%		16.7%	58.8%	58.8%	28.1%	28.1%		28.1%	28.1%	
Maximum Green (s)	7.7	56.1		11.7	60.1	60.1	25.7	25.7		25.7	25.7	
Yellow Time (s)	3.2	5.0		3.2	5.0	5.0	3.6	3.6		3.6	3.6	
All-Red Time (s)	4.1	1.9		4.1	1.9	1.9	2.7	2.7		2.7	2.7	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0			0.0	
Total Lost Time (s)	7.3	6.9		7.3	6.9	6.9	6.3	6.3			6.3	
Lead/Lag	Lead	Lag		Lead	Lag	Lag						
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes						
Vehicle Extension (s)	3.0	5.0		2.0	5.0	5.0	5.0	5.0		5.0	5.0	

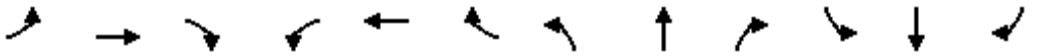
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Minimum Gap (s)	0.2	3.0		0.2	3.0	3.0	0.2	0.2		0.2	0.2	
Time Before Reduce (s)	0.0	30.0		0.0	30.0	30.0	0.0	0.0		0.0	0.0	
Time To Reduce (s)	0.0	20.0		0.0	20.0	20.0	0.0	0.0		0.0	0.0	
Recall Mode	None	C-Max		None	C-Max	C-Max	None	None		None	None	
Act Effct Green (s)	6.4	61.6		8.7	72.1	72.1	25.7	25.7			25.7	
Actuated g/C Ratio	0.06	0.54		0.08	0.63	0.63	0.23	0.23			0.23	
v/c Ratio	0.12	0.65		0.53	0.58	0.04	0.08	0.30			0.96	
Control Delay	53.4	21.9		69.9	4.6	0.1	35.9	17.0			88.4	
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0			0.0	
Total Delay	53.4	21.9		69.9	4.6	0.1	35.9	17.0			88.4	
LOS	D	C		E	A	A	D	B			F	
Approach Delay		22.2			7.7			19.7			88.4	
Approach LOS		C			A			B			F	
Queue Length 50th (ft)	9	343		52	80	0	13	28			187	
Queue Length 95th (ft)	26	406		m75	m103	m0	29	58			#246	
Internal Link Dist (ft)		385			5376			534			926	
Turn Bay Length (ft)	270			1000		250	100					
Base Capacity (vph)	118	1893		174	2153	1001	278	434			274	
Starvation Cap Reductn	0	0		0	0	0	0	0			0	
Spillback Cap Reductn	0	0		0	0	0	0	0			0	
Storage Cap Reductn	0	0		0	0	0	0	0			0	
Reduced v/c Ratio	0.10	0.65		0.39	0.58	0.04	0.08	0.30			0.96	

Intersection Summary

Area Type: Other
Cycle Length: 114
Actuated Cycle Length: 114
Offset: 1 (1%), Referenced to phase 2:EBT and 6:WBT, Start of 1st Green
Natural Cycle: 80
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.96
Intersection Signal Delay: 21.4 Intersection LOS: C
Intersection Capacity Utilization 67.8% ICU Level of Service C
Analysis Period (min) 15
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 9: Schutte Rd & SR 62





Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	43	1160	135	54	1053	58	125	58	49	144	76	76
Future Volume (vph)	43	1160	135	54	1053	58	125	58	49	144	76	76
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	250		520	270		330	310		150	0		50
Storage Lanes	1		1	1		1	1		1	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850			0.850			0.850		0.965	
Flt Protected	0.950			0.950			0.950				0.976	
Satd. Flow (prot)	1752	3505	1568	1719	3438	1538	1770	1863	1583	0	1737	0
Flt Permitted	0.950			0.950			0.487				0.814	
Satd. Flow (perm)	1752	3505	1568	1719	3438	1538	907	1863	1583	0	1449	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			*151			*151			*156		*14	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		5456			185			1003			773	
Travel Time (s)		124.0			4.2			22.8			17.6	
Peak Hour Factor	0.91	0.91	0.91	0.84	0.84	0.84	0.94	0.94	0.94	0.66	0.66	0.66
Heavy Vehicles (%)	3%	3%	3%	5%	5%	5%	2%	2%	2%	3%	3%	3%
Adj. Flow (vph)	47	1275	148	64	1254	69	133	62	52	218	115	115
Shared Lane Traffic (%)												
Lane Group Flow (vph)	47	1275	148	64	1254	69	133	62	52	0	448	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Prot	NA	Perm	Prot	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases			2			6	8		8	4		
Detector Phase	5	2	2	1	6	6	3	8	8	7	4	
Switch Phase												
Minimum Initial (s)	4.0	30.0	30.0	4.0	30.0	30.0	4.0	10.0	10.0	4.0	10.0	
Minimum Split (s)	9.9	36.9	36.9	9.9	36.9	36.9	10.5	22.5	22.5	10.5	16.4	
Total Split (s)	16.0	64.0	64.0	15.0	63.0	63.0	11.0	23.0	23.0	12.0	24.0	
Total Split (%)	14.0%	56.1%	56.1%	13.2%	55.3%	55.3%	9.6%	20.2%	20.2%	10.5%	21.1%	
Maximum Green (s)	10.1	57.1	57.1	9.1	56.1	56.1	4.5	16.6	16.6	5.5	17.6	
Yellow Time (s)	3.2	4.7	4.7	3.2	4.7	4.7	3.2	3.2	3.2	3.2	3.2	
All-Red Time (s)	2.7	2.2	2.2	2.7	2.2	2.2	3.3	3.2	3.2	3.3	3.2	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	
Total Lost Time (s)	5.9	6.9	6.9	5.9	6.9	6.9	6.5	6.4	6.4		6.4	
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
Vehicle Extension (s)	2.0	5.0	5.0	2.0	5.0	5.0	1.0	3.0	3.0	1.0	3.0	
Minimum Gap (s)	0.2	3.0	3.0	0.2	3.0	3.0	0.2	0.2	0.2	0.2	0.2	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Time Before Reduce (s)	0.0	20.0	20.0	0.0	20.0	20.0	0.0	0.0	0.0	0.0	0.0	
Time To Reduce (s)	0.0	20.0	20.0	0.0	20.0	20.0	0.0	0.0	0.0	0.0	0.0	
Recall Mode	None	C-Max	C-Max	None	C-Max	C-Max	None	None	None	None	None	
Act Effct Green (s)	7.4	60.6	60.6	7.7	60.9	60.9	28.5	28.6	28.6		17.6	
Actuated g/C Ratio	0.06	0.53	0.53	0.07	0.53	0.53	0.25	0.25	0.25		0.15	
v/c Ratio	0.42	0.68	0.16	0.55	0.68	0.08	0.51	0.13	0.10		1.91	
Control Delay	66.2	11.2	0.6	53.5	42.6	6.2	43.3	34.1	0.4		450.8	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	
Total Delay	66.2	11.2	0.6	53.5	42.6	6.2	43.3	34.1	0.4		450.8	
LOS	E	B	A	D	D	A	D	C	A		F	
Approach Delay		11.9			41.3			31.9			450.8	
Approach LOS		B			D			C			F	
Queue Length 50th (ft)	36	135	1	46	496	4	79	35	0		~501	
Queue Length 95th (ft)	m54	m156	m1	m80	533	m21	136	72	0		#465	
Internal Link Dist (ft)		5376			105			923			693	
Turn Bay Length (ft)	250		520	270		330	310		150			
Base Capacity (vph)	155	1863	904	137	1836	891	260	467	514		235	
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0		0	
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0		0	
Storage Cap Reductn	0	0	0	0	0	0	0	0	0		0	
Reduced v/c Ratio	0.30	0.68	0.16	0.47	0.68	0.08	0.51	0.13	0.10		1.91	

Intersection Summary			
Area Type:	Other		
Cycle Length: 114			
Actuated Cycle Length: 114			
Offset: 2 (2%), Referenced to phase 2:EBT and 6:WBT, Start of 1st Green			
Natural Cycle: 90			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.91			
Intersection Signal Delay: 80.1		Intersection LOS: F	
Intersection Capacity Utilization 74.7%		ICU Level of Service D	
Analysis Period (min) 15			

* User Entered Value

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

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

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

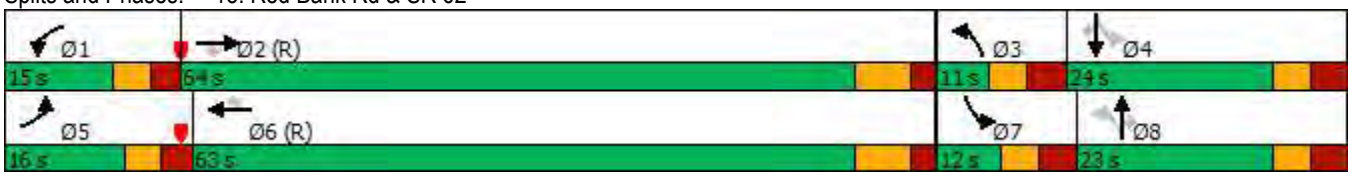
Splits and Phases: 12: Boehne Camp Rd & SR 62

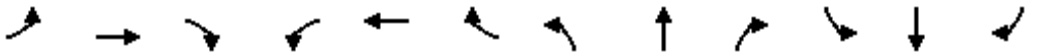
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	74	1328	47	119	934	63	76	103	194	155	127	107
Future Volume (vph)	74	1328	47	119	934	63	76	103	194	155	127	107
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	265		500	560		380	280		260	145		160
Storage Lanes	1		1	2		1	1		1	1		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	1.00	0.97	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Frt			0.850			0.850			0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	3539	1583	3303	3406	1524	1736	3471	1553	1770	3539	1583
Flt Permitted	0.950			0.950			0.665			0.639		
Satd. Flow (perm)	1770	3539	1583	3303	3406	1524	1215	3471	1553	1190	3539	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			151			151			174			156
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		2475			1052			372			444	
Travel Time (s)		56.3			23.9			8.5			10.1	
Peak Hour Factor	0.88	0.88	0.88	0.93	0.93	0.93	0.87	0.87	0.87	0.93	0.93	0.93
Heavy Vehicles (%)	2%	2%	2%	6%	6%	6%	4%	4%	4%	2%	2%	2%
Adj. Flow (vph)	84	1509	53	128	1004	68	87	118	223	167	137	115
Shared Lane Traffic (%)												
Lane Group Flow (vph)	84	1509	53	128	1004	68	87	118	223	167	137	115
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24			24			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Prot	NA	Perm	Prot	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases			2			6	8		8	4		4
Detector Phase	5	2	2	1	6	6	3	8	8	7	4	4
Switch Phase												
Minimum Initial (s)	4.0	30.0	30.0	4.0	30.0	30.0	4.0	10.0	10.0	4.0	10.0	10.0
Minimum Split (s)	9.9	36.9	36.9	9.9	36.9	36.9	10.5	16.4	16.4	10.5	16.4	16.4
Total Split (s)	16.0	64.0	64.0	15.0	63.0	63.0	11.0	23.0	23.0	12.0	24.0	24.0
Total Split (%)	14.0%	56.1%	56.1%	13.2%	55.3%	55.3%	9.6%	20.2%	20.2%	10.5%	21.1%	21.1%
Maximum Green (s)	10.1	57.1	57.1	9.1	56.1	56.1	4.5	16.6	16.6	5.5	17.6	17.6
Yellow Time (s)	3.2	4.7	4.7	3.2	4.7	4.7	3.2	3.2	3.2	3.2	3.2	3.2
All-Red Time (s)	2.7	2.2	2.2	2.7	2.2	2.2	3.3	3.2	3.2	3.3	3.2	3.2
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.9	6.9	6.9	5.9	6.9	6.9	6.5	6.4	6.4	6.5	6.4	6.4
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	2.0	5.0	5.0	2.0	5.0	5.0	1.0	3.0	3.0	1.0	3.0	3.0
Minimum Gap (s)	0.2	3.0	3.0	0.2	3.0	3.0	0.2	0.2	0.2	0.2	0.2	0.2

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Time Before Reduce (s)	0.0	20.0	20.0	0.0	20.0	20.0	0.0	0.0	0.0	0.0	0.0	0.0
Time To Reduce (s)	0.0	20.0	20.0	0.0	20.0	20.0	0.0	0.0	0.0	0.0	0.0	0.0
Recall Mode	Max	C-Max	C-Max	Max	C-Max	C-Max	Max	Max	Max	Max	Max	Max
Act Effct Green (s)	10.1	57.1	57.1	9.1	56.1	56.1	21.0	16.6	16.6	23.0	17.6	17.6
Actuated g/C Ratio	0.09	0.50	0.50	0.08	0.49	0.49	0.18	0.15	0.15	0.20	0.15	0.15
v/c Ratio	0.54	0.85	0.06	0.49	0.60	0.08	0.36	0.23	0.60	0.62	0.25	0.31
Control Delay	43.7	45.0	1.5	56.9	22.7	0.2	40.2	44.5	19.3	49.4	43.8	4.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	43.7	45.0	1.5	56.9	22.7	0.2	40.2	44.5	19.3	49.4	43.8	4.7
LOS	D	D	A	E	C	A	D	D	B	D	D	A
Approach Delay		43.5			25.1			30.5			35.3	
Approach LOS		D			C			C			D	
Queue Length 50th (ft)	60	621	0	47	270	0	51	41	32	102	46	0
Queue Length 95th (ft)	m79	m630	m0	79	336	0	91	67	102	166	77	24
Internal Link Dist (ft)		2395			972			292			364	
Turn Bay Length (ft)	265		500	560		380	280		260	145		160
Base Capacity (vph)	156	1772	868	263	1676	826	244	505	374	268	546	376
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.54	0.85	0.06	0.49	0.60	0.08	0.36	0.23	0.60	0.62	0.25	0.31

Intersection Summary			
Area Type:	Other		
Cycle Length: 114			
Actuated Cycle Length: 114			
Offset: 2 (2%), Referenced to phase 2:EBT and 6:WBT, Start of 1st Green			
Natural Cycle: 90			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.85			
Intersection Signal Delay: 35.1		Intersection LOS: D	
Intersection Capacity Utilization 78.4%		ICU Level of Service D	
Analysis Period (min) 15			
m Volume for 95th percentile queue is metered by upstream signal.			

Splits and Phases: 15: Red Bank Rd & SR 62





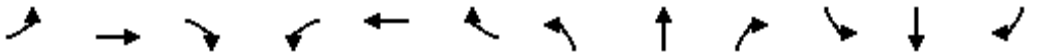
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	12	1370	0	162	1213	29	31	20	193	62	18	13
Future Volume (vph)	12	1370	0	162	1213	29	31	20	193	62	18	13
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	11	11	11
Storage Length (ft)	270		0	1000		250	100		0	0		0
Storage Lanes	1		0	1		1	1		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt						0.850		0.864			0.981	
Flt Protected	0.950			0.950			0.950				0.968	
Satd. Flow (prot)	1770	3539	0	1770	3539	1583	1770	1609	0	0	1710	0
Flt Permitted	0.950			0.950			0.673				0.271	
Satd. Flow (perm)	1770	3539	0	1770	3539	1583	1254	1609	0	0	479	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						77		212			5	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		465			5456			614			1006	
Travel Time (s)		10.6			124.0			14.0			22.9	
Peak Hour Factor	0.94	0.94	0.94	0.96	0.96	0.96	0.91	0.91	0.91	0.73	0.73	0.73
Adj. Flow (vph)	13	1457	0	169	1264	30	34	22	212	85	25	18
Shared Lane Traffic (%)												
Lane Group Flow (vph)	13	1457	0	169	1264	30	34	234	0	0	128	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		30			30			12			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.04	1.04	1.04
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Prot	NA		Prot	NA	Perm	Perm	NA		Perm	NA	
Protected Phases	5	2		1	6			8			4	
Permitted Phases						6	8			4		
Detector Phase	5	2		1	6	6	8	8		4	4	
Switch Phase												
Minimum Initial (s)	5.0	20.0		5.0	20.0	20.0	8.0	8.0		8.0	8.0	
Minimum Split (s)	12.3	26.9		12.3	26.9	26.9	14.3	14.3		14.3	14.3	
Total Split (s)	21.0	90.0		32.0	101.0	101.0	28.0	28.0		28.0	28.0	
Total Split (%)	14.0%	60.0%		21.3%	67.3%	67.3%	18.7%	18.7%		18.7%	18.7%	
Maximum Green (s)	13.7	83.1		24.7	94.1	94.1	21.7	21.7		21.7	21.7	
Yellow Time (s)	3.2	5.0		3.2	5.0	5.0	3.6	3.6		3.6	3.6	
All-Red Time (s)	4.1	1.9		4.1	1.9	1.9	2.7	2.7		2.7	2.7	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0			0.0	
Total Lost Time (s)	7.3	6.9		7.3	6.9	6.9	6.3	6.3			6.3	
Lead/Lag	Lead	Lag		Lead	Lag	Lag						
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes						
Vehicle Extension (s)	3.0	5.0		2.0	5.0	5.0	5.0	5.0		5.0	5.0	
Minimum Gap (s)	0.2	3.0		0.2	3.0	3.0	0.2	0.2		0.2	0.2	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Time Before Reduce (s)	0.0	30.0		0.0	30.0	30.0	0.0	0.0		0.0	0.0	
Time To Reduce (s)	0.0	20.0		0.0	20.0	20.0	0.0	0.0		0.0	0.0	
Recall Mode	None	C-Max		None	C-Max	C-Max	None	None		None	None	
Act Effct Green (s)	6.7	89.3		18.5	109.0	109.0	21.7	21.7			21.7	
Actuated g/C Ratio	0.04	0.60		0.12	0.73	0.73	0.14	0.14			0.14	
v/c Ratio	0.16	0.69		0.78	0.49	0.03	0.19	0.57			1.75	
Control Delay	73.1	23.8		77.3	7.9	0.3	59.5	15.6			423.0	
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0			0.0	
Total Delay	73.1	23.8		77.3	7.9	0.3	59.5	15.6			423.0	
LOS	E	C		E	A	A	E	B			F	
Approach Delay		24.2			15.8			21.2			423.0	
Approach LOS		C			B			C			F	
Queue Length 50th (ft)	13	497		140	36	0	30	19			~182	
Queue Length 95th (ft)	37	642		m189	m455	m1	66	105			#248	
Internal Link Dist (ft)		385			5376			534			926	
Turn Bay Length (ft)	270			1000		250	100					
Base Capacity (vph)	161	2106		291	2572	1171	181	414			73	
Starvation Cap Reductn	0	0		0	0	0	0	0			0	
Spillback Cap Reductn	0	0		0	0	0	0	0			0	
Storage Cap Reductn	0	0		0	0	0	0	0			0	
Reduced v/c Ratio	0.08	0.69		0.58	0.49	0.03	0.19	0.57			1.75	

Intersection Summary

Area Type: Other
Cycle Length: 150
Actuated Cycle Length: 150
Offset: 89 (59%), Referenced to phase 2:EBT and 6:WBT, Start of 1st Green
Natural Cycle: 80
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 1.75
Intersection Signal Delay: 35.6 Intersection LOS: D
Intersection Capacity Utilization 88.8% ICU Level of Service E
Analysis Period (min) 15
~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 9: Schutte Rd & SR 62



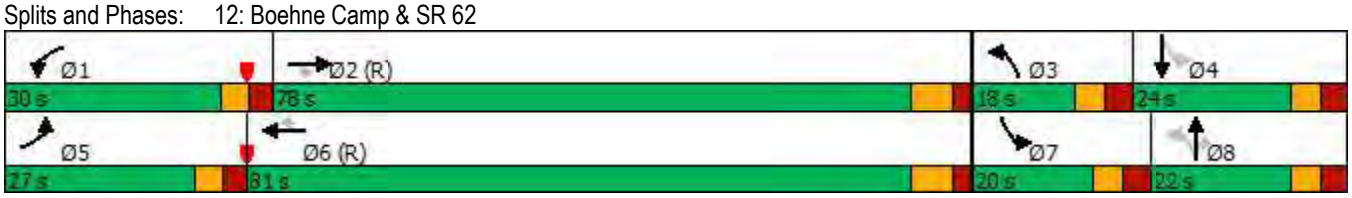
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	51	1503	353	55	1182	85	277	71	62	47	58	39
Future Volume (vph)	51	1503	353	55	1182	85	277	71	62	47	58	39
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	260		520	270		330	300		150	0		0
Storage Lanes	1		1	1		1	1		1	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850			0.850			0.850		0.964	
Flt Protected	0.950			0.950			0.950				0.984	
Satd. Flow (prot)	1770	3539	1583	1770	3539	1583	1770	1863	1583	0	1767	0
Flt Permitted	0.950			0.950			0.391				0.861	
Satd. Flow (perm)	1770	3539	1583	1770	3539	1583	728	1863	1583	0	1546	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			*151			*151			*156		*14	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		5456			185			1003			773	
Travel Time (s)		124.0			4.2			22.8			17.6	
Peak Hour Factor	0.89	0.89	0.89	0.98	0.98	0.98	0.95	0.95	0.95	0.86	0.86	0.86
Adj. Flow (vph)	57	1689	397	56	1206	87	292	75	65	55	67	45
Shared Lane Traffic (%)												
Lane Group Flow (vph)	57	1689	397	56	1206	87	292	75	65	0	167	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Prot	NA	Perm	Prot	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases			2			6	8		8	4		
Detector Phase	5	2	2	1	6	6	3	8	8	7	4	
Switch Phase												
Minimum Initial (s)	4.0	30.0	30.0	4.0	30.0	30.0	4.0	10.0	10.0	4.0	10.0	
Minimum Split (s)	9.9	36.9	36.9	9.9	36.9	36.9	10.5	16.4	16.4	10.5	16.4	
Total Split (s)	27.0	78.0	78.0	30.0	81.0	81.0	18.0	22.0	22.0	20.0	24.0	
Total Split (%)	18.0%	52.0%	52.0%	20.0%	54.0%	54.0%	12.0%	14.7%	14.7%	13.3%	16.0%	
Maximum Green (s)	21.1	71.1	71.1	24.1	74.1	74.1	11.5	15.6	15.6	13.5	17.6	
Yellow Time (s)	3.2	4.7	4.7	3.2	4.7	4.7	3.2	3.2	3.2	3.2	3.2	
All-Red Time (s)	2.7	2.2	2.2	2.7	2.2	2.2	3.3	3.2	3.2	3.3	3.2	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	
Total Lost Time (s)	5.9	6.9	6.9	5.9	6.9	6.9	6.5	6.4	6.4		6.4	
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
Vehicle Extension (s)	2.0	5.0	5.0	2.0	5.0	5.0	1.0	3.0	3.0	1.0	3.0	
Minimum Gap (s)	0.2	3.0	3.0	0.2	3.0	3.0	0.2	0.2	0.2	0.2	0.2	
Time Before Reduce (s)	0.0	20.0	20.0	0.0	20.0	20.0	0.0	0.0	0.0	0.0	0.0	

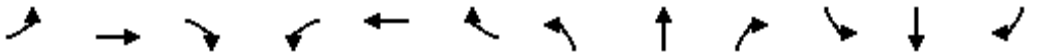
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Time To Reduce (s)	0.0	20.0	20.0	0.0	20.0	20.0	0.0	0.0	0.0	0.0	0.0	
Recall Mode	None	C-Max	C-Max	None	C-Max	C-Max	None	None	None	None	None	
Act Effct Green (s)	9.2	89.2	89.2	9.2	89.2	89.2	34.6	34.7	34.7		16.7	
Actuated g/C Ratio	0.06	0.59	0.59	0.06	0.59	0.59	0.23	0.23	0.23		0.11	
v/c Ratio	0.53	0.80	0.40	0.52	0.57	0.09	1.18	0.17	0.13		0.91	
Control Delay	93.6	24.3	5.2	71.0	28.3	4.4	161.0	47.0	0.6		105.9	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	
Total Delay	93.6	24.3	5.2	71.0	28.3	4.4	161.0	47.0	0.6		105.9	
LOS	F	C	A	E	C	A	F	D	A		F	
Approach Delay		22.6			28.5			117.1			105.9	
Approach LOS		C			C			F			F	
Queue Length 50th (ft)	51	808	129	55	405	3	~311	59	0		150	
Queue Length 95th (ft)	m77	m882	m128	m89	m572	m24	#529	106	0		#264	
Internal Link Dist (ft)		5376			105			923			693	
Turn Bay Length (ft)	260		520	270		330	300		150			
Base Capacity (vph)	248	2104	1002	284	2103	1002	247	430	485		193	
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0		0	
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0		0	
Storage Cap Reductn	0	0	0	0	0	0	0	0	0		0	
Reduced v/c Ratio	0.23	0.80	0.40	0.20	0.57	0.09	1.18	0.17	0.13		0.87	

Intersection Summary

Area Type: Other
Cycle Length: 150
Actuated Cycle Length: 150
Offset: 103 (69%), Referenced to phase 2:EBT and 6:WBT, Start of 1st Green
Natural Cycle: 90
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 1.18
Intersection Signal Delay: 37.9 Intersection LOS: D
Intersection Capacity Utilization 78.8% ICU Level of Service D
Analysis Period (min) 15
* User Entered Value
~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 12: Boehne Camp & SR 62



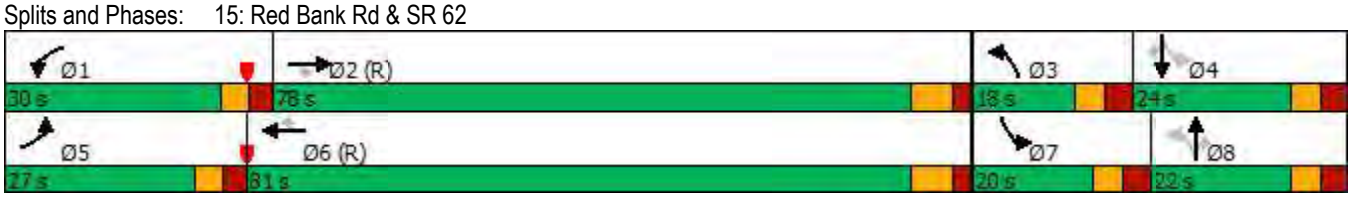


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	117	1210	90	408	996	128	175	291	411	179	399	219
Future Volume (vph)	117	1210	90	408	996	128	175	291	411	179	399	219
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	265		500	560		380	280		260	145		160
Storage Lanes	1		1	2		1	1		1	1		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	1.00	0.97	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Frt			0.850			0.850			0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1752	3505	1568	3433	3539	1583	1770	3539	1583	1770	3539	1583
Flt Permitted	0.950			0.950			0.255			0.256		
Satd. Flow (perm)	1752	3505	1568	3433	3539	1583	475	3539	1583	477	3539	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			115			139			253			209
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		2478			1055			494			562	
Travel Time (s)		56.3			24.0			11.2			12.8	
Peak Hour Factor	0.90	0.90	0.90	0.92	0.92	0.92	0.90	0.90	0.90	0.93	0.93	0.93
Heavy Vehicles (%)	3%	3%	3%	2%	2%	2%	2%	2%	2%	2%	2%	2%
Adj. Flow (vph)	130	1344	100	443	1083	139	194	323	457	192	429	235
Shared Lane Traffic (%)												
Lane Group Flow (vph)	130	1344	100	443	1083	139	194	323	457	192	429	235
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24			24			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Prot	NA	Perm	Prot	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases			2			6	8		8	4		4
Detector Phase	5	2	2	1	6	6	3	8	8	7	4	4
Switch Phase												
Minimum Initial (s)	4.0	30.0	30.0	4.0	30.0	30.0	4.0	10.0	10.0	4.0	10.0	10.0
Minimum Split (s)	9.9	36.9	36.9	9.9	36.9	36.9	10.5	16.4	16.4	10.5	16.4	16.4
Total Split (s)	27.0	78.0	78.0	30.0	81.0	81.0	18.0	22.0	22.0	20.0	24.0	24.0
Total Split (%)	18.0%	52.0%	52.0%	20.0%	54.0%	54.0%	12.0%	14.7%	14.7%	13.3%	16.0%	16.0%
Maximum Green (s)	21.1	71.1	71.1	24.1	74.1	74.1	11.5	15.6	15.6	13.5	17.6	17.6
Yellow Time (s)	3.2	4.7	4.7	3.2	4.7	4.7	3.2	3.2	3.2	3.2	3.2	3.2
All-Red Time (s)	2.7	2.2	2.2	2.7	2.2	2.2	3.3	3.2	3.2	3.3	3.2	3.2
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.9	6.9	6.9	5.9	6.9	6.9	6.5	6.4	6.4	6.5	6.4	6.4
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	2.0	5.0	5.0	2.0	5.0	5.0	1.0	3.0	3.0	1.0	3.0	3.0
Minimum Gap (s)	0.2	3.0	3.0	0.2	3.0	3.0	0.2	0.2	0.2	0.2	0.2	0.2

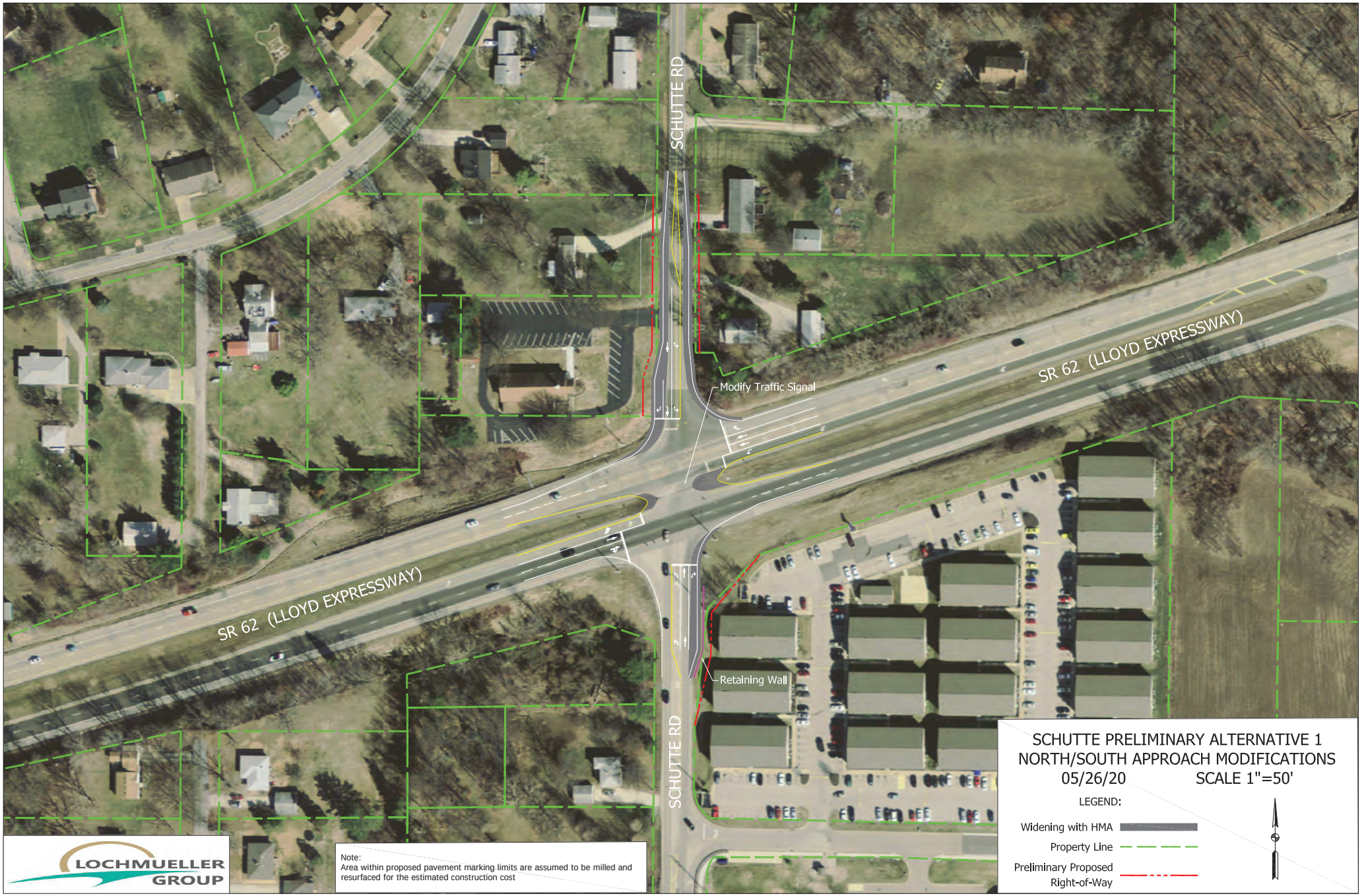
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Time Before Reduce (s)	0.0	20.0	20.0	0.0	20.0	20.0	0.0	0.0	0.0	0.0	0.0	0.0
Time To Reduce (s)	0.0	20.0	20.0	0.0	20.0	20.0	0.0	0.0	0.0	0.0	0.0	0.0
Recall Mode	None	C-Max	C-Max	None	C-Max	C-Max	None	None	None	None	None	None
Act Effct Green (s)	15.4	72.9	72.9	22.3	79.8	79.8	27.1	15.7	15.7	30.9	17.6	17.6
Actuated g/C Ratio	0.10	0.49	0.49	0.15	0.53	0.53	0.18	0.10	0.10	0.21	0.12	0.12
v/c Ratio	0.73	0.79	0.12	0.87	0.58	0.15	1.05	0.88	1.17	0.90	1.03	0.64
Control Delay	60.4	44.6	13.4	79.9	25.8	3.3	130.0	89.7	124.2	90.7	116.1	19.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	60.4	44.6	13.4	79.9	25.8	3.3	130.0	89.7	124.2	90.7	116.1	19.4
LOS	E	D	B	E	C	A	F	F	F	F	F	B
Approach Delay		43.9			38.3			113.9			83.8	
Approach LOS		D			D			F			F	
Queue Length 50th (ft)	132	484	22	218	366	0	~174	166	~296	162	~236	23
Queue Length 95th (ft)	m161	603	m42	#282	471	37	#319	#253	#520	#280	#350	115
Internal Link Dist (ft)		2398			975			414			482	
Turn Bay Length (ft)	265		500	560		380	280		260	145		160
Base Capacity (vph)	246	1702	820	551	1883	907	184	369	391	214	415	370
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.53	0.79	0.12	0.80	0.58	0.15	1.05	0.88	1.17	0.90	1.03	0.64

Intersection Summary	
Area Type:	Other
Cycle Length: 150	
Actuated Cycle Length: 150	
Offset: 103 (69%), Referenced to phase 2:EBT and 6:WBT, Start of 1st Green	
Natural Cycle: 100	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.17	
Intersection Signal Delay: 62.3	Intersection LOS: E
Intersection Capacity Utilization 87.1%	ICU Level of Service E
Analysis Period (min) 15	
~ Volume exceeds capacity, queue is theoretically infinite.	
Queue shown is maximum after two cycles.	
# 95th percentile volume exceeds capacity, queue may be longer.	
Queue shown is maximum after two cycles.	
m Volume for 95th percentile queue is metered by upstream signal.	

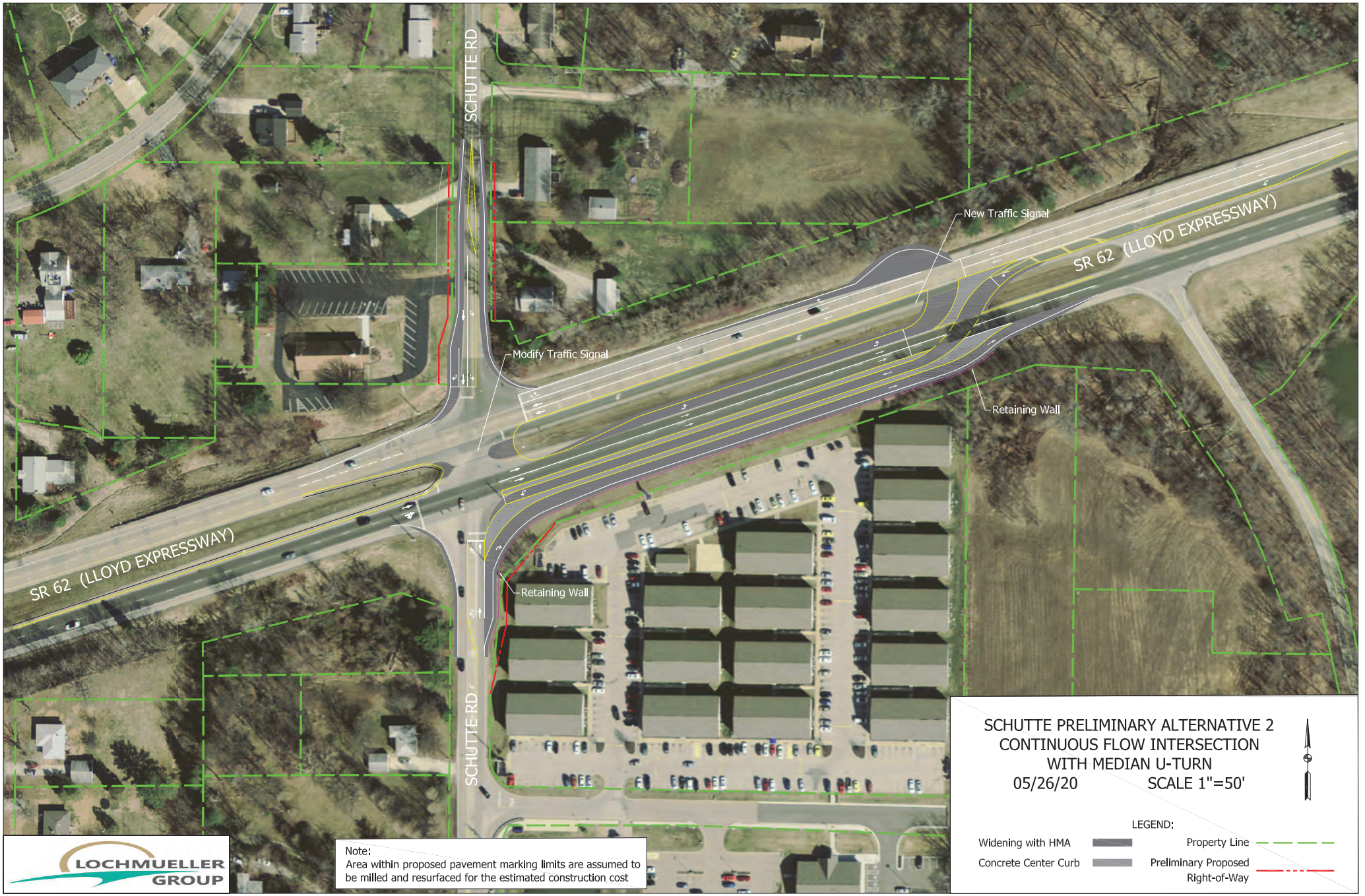
Splits and Phases: 15: Red Bank Rd & SR 62



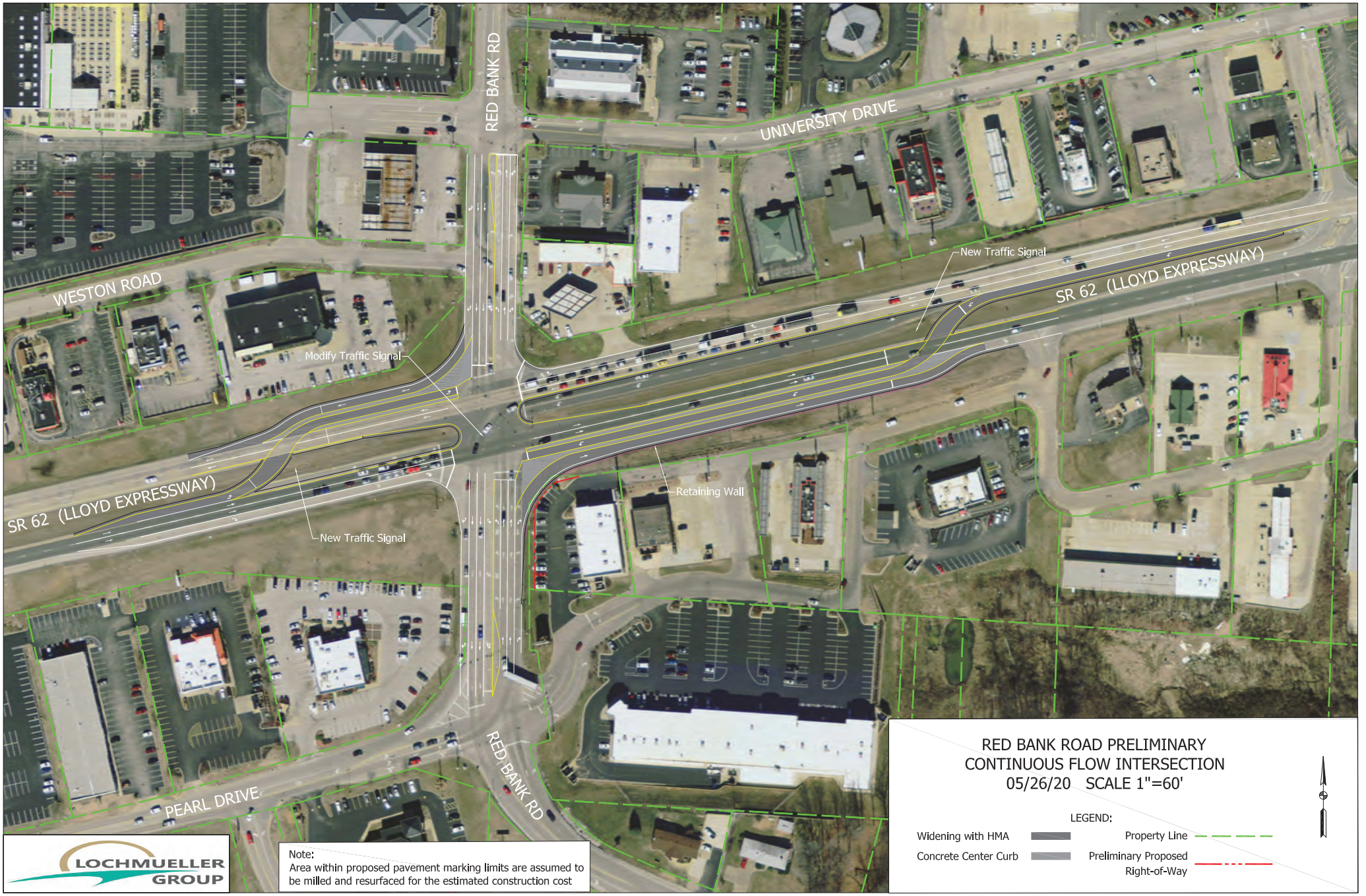
Appendix F: Preliminary Conceptual Drawings

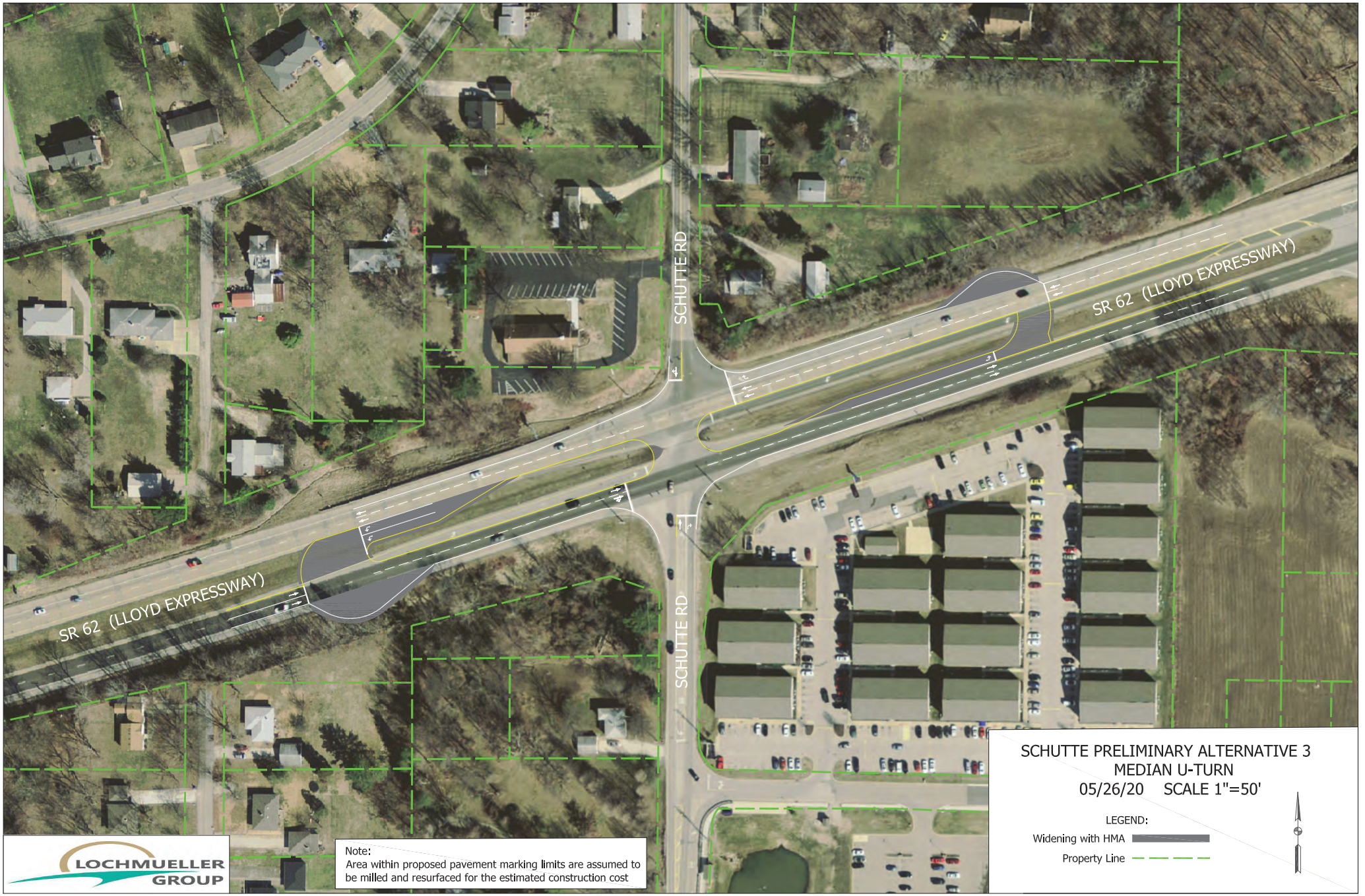

SCHUTTE RD
SR 62 (LLOYD EXPRESSWAY)
Modify Traffic Signal
SR 62 (LLOYD EXPRESSWAY)
Retaining Wall
SCHUTTE RD
LOCHMUELLER GROUP
Note:
Area within proposed pavement marking limits are assumed to be milled and resurfaced for the estimated construction cost
SCHUTTE PRELIMINARY ALTERNATIVE 1
NORTH/SOUTH APPROACH MODIFICATIONS
05/26/20 SCALE 1"=50'
LEGEND:
Widening with HMA
Property Line
Preliminary Proposed Right-of-Way


BOEHNE CAMP RD
Modify Traffic Signal
SR 62 (LLOYD EXPRESSWAY)
SR 62 (LLOYD EXPRESSWAY)
BOEHNE CAMP RD
LOCHMUELLER GROUP
BOEHNE CAMP PRELIMINARY ALTERNATIVE 1
NORTH/SOUTH APPROACH MODIFICATIONS
05/26/20
SCALE 1"=50'
LEGEND:
Widening with HMA
Property Line
Preliminary Proposed Right-of-Way


SCHUTTE RD
SR 62 (LLOYD EXPRESSWAY)
New Traffic Signal
Modify Traffic Signal
Retaining Wall
Retaining Wall
SR 62 (LLOYD EXPRESSWAY)
SCHUTTE RD
SCHUTTE PRELIMINARY ALTERNATIVE 2
CONTINUOUS FLOW INTERSECTION
WITH MEDIAN U-TURN
05/26/20 SCALE 1"=50'
LEGEND:
Widening with HMA
Concrete Center Curb
Property Line
Preliminary Proposed Right-of-Way
LOCHMUELLER GROUP
Note:
Area within proposed pavement marking limits are assumed to be milled and resurfaced for the estimated construction cost

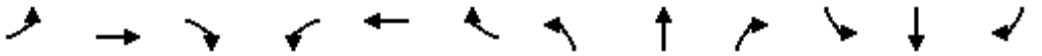

BOEHNE CAMP RD
SR 62 (LLOYD EXPRESSWAY)
New Traffic Signal
Modify Traffic Signal
Retaining Wall
Retaining Wall
New Traffic Signal
SR 62 (LLOYD EXPRESSWAY)
BOEHNE CAMP RD
LOCHMUELLER GROUP
Note:
Area within proposed pavement marking limits are assumed to be milled and resurfaced for the estimated construction cost
BOEHNE CAMP PRELIMIARY ALTERNATIVE 2
CONTINUOUS FLOW INTERSECTION
05/26/20 SCALE 1"=50'
LEGEND:
Widening with HMA
Concrete Center Curb
Property Line
Preliminary Proposed Right-of-Way


RED BANK RD
UNIVERSITY DRIVE
WESTON ROAD
SR 62 (LLOYD EXPRESSWAY)
New Traffic Signal
Modify Traffic Signal
SR 62 (LLOYD EXPRESSWAY)
New Traffic Signal
Retaining Wall
PEARL DRIVE
RED BANK RD
LOCHMUELLER GROUP
Note:
Area within proposed pavement marking limits are assumed to be milled and resurfaced for the estimated construction cost
RED BANK ROAD PRELIMINARY
CONTINUOUS FLOW INTERSECTION
05/26/20 SCALE 1"=60'
LEGEND:
Widening with HMA
Concrete Center Curb
Property Line
Preliminary Proposed Right-of-Way


SCHUTTE RD
SR 62 (LLOYD EXPRESSWAY)
SCHUTTE RD
SR 62 (LLOYD EXPRESSWAY)
LOCHMUELLER GROUP
Note:
Area within proposed pavement marking limits are assumed to be milled and resurfaced for the estimated construction cost
SCHUTTE PRELIMINARY ALTERNATIVE 3
MEDIAN U-TURN
05/26/20 SCALE 1"=50'
LEGEND:
Widening with HMA
Property Line


BOEHNE CAMP RD
New Traffic Signal
Modify Traffic Signal
SR 62 (LLOYD EXPRESSWAY)
SR 62 (LLOYD EXPRESSWAY)
New Traffic Signal
BOEHNE CAMP RD
LOCHMUELLER GROUP
Note:
Area within proposed pavement marking limits are assumed to be milled and resurfaced for the estimated construction cost
BOEHNE CAMP PRELIMINARY ALTERNATIVE 3
MEDIAN U-TURN
05/26/20 SCALE 1"=50'
LEGEND:
Widening with HMA
Property Line

Appendix G: Preliminary Alternative Concept Synchro Reports



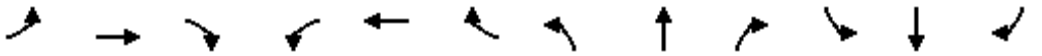
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	10	1052	0	57	1042	31	17	33	65	145	17	30
Future Volume (vph)	10	1052	0	57	1042	31	17	33	65	145	17	30
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	11	11	11
Storage Length (ft)	270		0	1000		250	100		100	150		100
Storage Lanes	1		0	1		1	1		1	1		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt						0.850			0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1752	3505	0	1703	3406	1524	1736	1827	1553	1694	1783	1516
Flt Permitted	0.950			0.950			0.742			0.729		
Satd. Flow (perm)	1752	3505	0	1703	3406	1524	1356	1827	1553	1300	1783	1516
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						101			107			107
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		465			5456			614			1006	
Travel Time (s)		10.6			124.0			14.0			22.9	
Peak Hour Factor	0.85	0.85	0.85	0.84	0.84	0.84	0.76	0.76	0.76	0.73	0.73	0.73
Heavy Vehicles (%)	3%	3%	3%	6%	6%	6%	4%	4%	4%	3%	3%	3%
Adj. Flow (vph)	12	1238	0	68	1240	37	22	43	86	199	23	41
Shared Lane Traffic (%)												
Lane Group Flow (vph)	12	1238	0	68	1240	37	22	43	86	199	23	41
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		30			30			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.04	1.04	1.04
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Prot	NA		Prot	NA	Perm	Perm	NA	Perm	Perm	NA	Perm
Protected Phases	5	2		1	6			8			4	
Permitted Phases						6	8		8	4		4
Detector Phase	5	2		1	6	6	8	8	8	4	4	4
Switch Phase												
Minimum Initial (s)	5.0	20.0		5.0	20.0	20.0	8.0	8.0	8.0	8.0	8.0	8.0
Minimum Split (s)	12.3	26.9		12.3	26.9	26.9	14.3	14.3	14.3	14.3	14.3	14.3
Total Split (s)	15.0	63.0		19.0	67.0	67.0	32.0	32.0	32.0	32.0	32.0	32.0
Total Split (%)	13.2%	55.3%		16.7%	58.8%	58.8%	28.1%	28.1%	28.1%	28.1%	28.1%	28.1%
Maximum Green (s)	7.7	56.1		11.7	60.1	60.1	25.7	25.7	25.7	25.7	25.7	25.7
Yellow Time (s)	3.2	5.0		3.2	5.0	5.0	3.6	3.6	3.6	3.6	3.6	3.6
All-Red Time (s)	4.1	1.9		4.1	1.9	1.9	2.7	2.7	2.7	2.7	2.7	2.7
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	7.3	6.9		7.3	6.9	6.9	6.3	6.3	6.3	6.3	6.3	6.3
Lead/Lag	Lead	Lag		Lead	Lag	Lag						
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes						
Vehicle Extension (s)	3.0	5.0		2.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Minimum Gap (s)	0.2	3.0		0.2	3.0	3.0	0.2	0.2	0.2	0.2	0.2	0.2
Time Before Reduce (s)	0.0	30.0		0.0	30.0	30.0	0.0	0.0	0.0	0.0	0.0	0.0
Time To Reduce (s)	0.0	20.0		0.0	20.0	20.0	0.0	0.0	0.0	0.0	0.0	0.0
Recall Mode	None	C-Max		None	C-Max	C-Max	None	None	None	None	None	None
Act Effct Green (s)	6.4	64.8		8.7	75.3	75.3	22.5	22.5	22.5	22.5	22.5	22.5
Actuated g/C Ratio	0.06	0.57		0.08	0.66	0.66	0.20	0.20	0.20	0.20	0.20	0.20
v/c Ratio	0.12	0.62		0.53	0.55	0.04	0.08	0.12	0.22	0.78	0.07	0.11
Control Delay	53.4	20.1		74.3	4.1	0.1	36.3	36.8	5.5	63.5	35.8	0.6
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	53.4	20.1		74.3	4.1	0.1	36.3	36.8	5.5	63.5	35.8	0.6
LOS	D	C		E	A	A	D	D	A	E	D	A
Approach Delay		20.5			7.5			18.9			51.3	
Approach LOS		C			A			B			D	
Queue Length 50th (ft)	9	334		53	62	0	13	26	0	136	14	0
Queue Length 95th (ft)	26	406		m83	91	m0	29	47	14	168	29	0
Internal Link Dist (ft)		385			5376			534			926	
Turn Bay Length (ft)	270			1000		250	100		100	150		100
Base Capacity (vph)	118	1991		174	2249	1041	305	411	432	293	401	424
Starvation Cap Reductn	0	0		0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0		0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0		0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.10	0.62		0.39	0.55	0.04	0.07	0.10	0.20	0.68	0.06	0.10

Intersection Summary

Area Type: Other
Cycle Length: 114
Actuated Cycle Length: 114
Offset: 1 (1%), Referenced to phase 2:EBT and 6:WBT, Start of 1st Green
Natural Cycle: 70
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.78
Intersection Signal Delay: 17.3 Intersection LOS: B
Intersection Capacity Utilization 65.0% ICU Level of Service C
Analysis Period (min) 15
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 9: Schutte Rd & SR 62

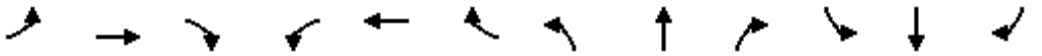


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	43	1160	135	54	1053	58	125	58	49	144	76	76
Future Volume (vph)	43	1160	135	54	1053	58	125	58	49	144	76	76
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	250		520	270		330	310		150	150		100
Storage Lanes	1		1	1		1	1		1	1		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850			0.850			0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1752	3505	1568	1719	3438	1538	1770	1863	1583	1752	1845	1568
Flt Permitted	0.950			0.950			0.683			0.412		
Satd. Flow (perm)	1752	3505	1568	1719	3438	1538	1272	1863	1583	760	1845	1568
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			*151			*151			*156		*14	156
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		5456			2659			1003			773	
Travel Time (s)		124.0			60.4			22.8			17.6	
Peak Hour Factor	0.91	0.91	0.91	0.84	0.84	0.84	0.94	0.94	0.94	0.66	0.66	0.66
Heavy Vehicles (%)	3%	3%	3%	5%	5%	5%	2%	2%	2%	3%	3%	3%
Adj. Flow (vph)	47	1275	148	64	1254	69	133	62	52	218	115	115
Shared Lane Traffic (%)												
Lane Group Flow (vph)	47	1275	148	64	1254	69	133	62	52	218	115	115
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Prot	NA	Perm	Prot	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases			2			6	8		8	4		4
Detector Phase	5	2	2	1	6	6	3	8	8	7	4	4
Switch Phase												
Minimum Initial (s)	4.0	30.0	30.0	4.0	30.0	30.0	4.0	10.0	10.0	4.0	10.0	10.0
Minimum Split (s)	9.9	36.9	36.9	9.9	36.9	36.9	10.5	22.5	22.5	10.5	16.4	16.4
Total Split (s)	16.0	64.0	64.0	15.0	63.0	63.0	20.0	15.0	15.0	20.0	15.0	15.0
Total Split (%)	14.0%	56.1%	56.1%	13.2%	55.3%	55.3%	17.5%	13.2%	13.2%	17.5%	13.2%	13.2%
Maximum Green (s)	10.1	57.1	57.1	9.1	56.1	56.1	13.5	8.6	8.6	13.5	8.6	8.6
Yellow Time (s)	3.2	4.7	4.7	3.2	4.7	4.7	3.2	3.2	3.2	3.2	3.2	3.2
All-Red Time (s)	2.7	2.2	2.2	2.7	2.2	2.2	3.3	3.2	3.2	3.3	3.2	3.2
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.9	6.9	6.9	5.9	6.9	6.9	6.5	6.4	6.4	6.5	6.4	6.4
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	2.0	5.0	5.0	2.0	5.0	5.0	1.0	3.0	3.0	1.0	3.0	3.0
Minimum Gap (s)	0.2	3.0	3.0	0.2	3.0	3.0	0.2	0.2	0.2	0.2	0.2	0.2

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Time Before Reduce (s)	0.0	20.0	20.0	0.0	20.0	20.0	0.0	0.0	0.0	0.0	0.0	0.0
Time To Reduce (s)	0.0	20.0	20.0	0.0	20.0	20.0	0.0	0.0	0.0	0.0	0.0	0.0
Recall Mode	None	C-Max	C-Max	None	C-Max	C-Max	None	None	None	None	None	None
Act Effct Green (s)	7.4	61.7	61.7	7.7	62.0	62.0	17.1	8.9	8.9	24.1	10.7	10.7
Actuated g/C Ratio	0.06	0.54	0.54	0.07	0.54	0.54	0.15	0.08	0.08	0.21	0.09	0.09
v/c Ratio	0.42	0.67	0.16	0.55	0.67	0.08	0.57	0.43	0.19	0.74	0.62	0.40
Control Delay	67.7	11.3	0.5	53.5	41.8	6.3	46.4	60.1	1.6	54.5	59.3	7.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	67.7	11.3	0.5	53.5	41.8	6.3	46.4	60.1	1.6	54.5	59.3	7.2
LOS	E	B	A	D	D	A	D	E	A	D	E	A
Approach Delay		12.0			40.6			40.4			43.6	
Approach LOS		B			D			D			D	
Queue Length 50th (ft)	37	131	0	46	496	4	79	44	0	138	71	0
Queue Length 95th (ft)	m59	154	m2	m80	533	m21	136	90	0	149	94	0
Internal Link Dist (ft)		5376			2579			923			693	
Turn Bay Length (ft)	250		520	270		330	310		150	150		100
Base Capacity (vph)	155	1896	917	137	1868	904	285	145	267	294	186	288
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.30	0.67	0.16	0.47	0.67	0.08	0.47	0.43	0.19	0.74	0.62	0.40

Intersection Summary			
Area Type:	Other		
Cycle Length: 114			
Actuated Cycle Length: 114			
Offset: 2 (2%), Referenced to phase 2:EBT and 6:WBT, Start of 1st Green			
Natural Cycle: 90			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.74			
Intersection Signal Delay: 29.1		Intersection LOS: C	
Intersection Capacity Utilization 66.0%		ICU Level of Service C	
Analysis Period (min) 15			
* User Entered Value			
m Volume for 95th percentile queue is metered by upstream signal.			

Splits and Phases: 12: Boehne Camp Rd & SR 62

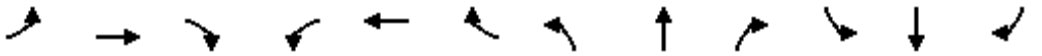


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	74	1328	47	119	934	63	76	103	194	155	127	107
Future Volume (vph)	74	1328	47	119	934	63	76	103	194	155	127	107
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	265		500	560		380	280		260	145		160
Storage Lanes	1		1	2		1	1		1	1		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	1.00	0.97	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Frt			0.850			0.850			0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	3539	1583	3303	3406	1524	1736	3471	1553	1770	3539	1583
Flt Permitted	0.950			0.950			0.665			0.639		
Satd. Flow (perm)	1770	3539	1583	3303	3406	1524	1215	3471	1553	1190	3539	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			151			151			174			156
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		2659			1052			372			444	
Travel Time (s)		60.4			23.9			8.5			10.1	
Peak Hour Factor	0.88	0.88	0.88	0.93	0.93	0.93	0.87	0.87	0.87	0.93	0.93	0.93
Heavy Vehicles (%)	2%	2%	2%	6%	6%	6%	4%	4%	4%	2%	2%	2%
Adj. Flow (vph)	84	1509	53	128	1004	68	87	118	223	167	137	115
Shared Lane Traffic (%)												
Lane Group Flow (vph)	84	1509	53	128	1004	68	87	118	223	167	137	115
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24			24			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Prot	NA	Perm	Prot	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases			2			6	8		8	4		4
Detector Phase	5	2	2	1	6	6	3	8	8	7	4	4
Switch Phase												
Minimum Initial (s)	4.0	30.0	30.0	4.0	30.0	30.0	4.0	10.0	10.0	4.0	10.0	10.0
Minimum Split (s)	9.9	36.9	36.9	9.9	36.9	36.9	10.5	16.4	16.4	10.5	16.4	16.4
Total Split (s)	16.0	64.0	64.0	15.0	63.0	63.0	11.0	23.0	23.0	12.0	24.0	24.0
Total Split (%)	14.0%	56.1%	56.1%	13.2%	55.3%	55.3%	9.6%	20.2%	20.2%	10.5%	21.1%	21.1%
Maximum Green (s)	10.1	57.1	57.1	9.1	56.1	56.1	4.5	16.6	16.6	5.5	17.6	17.6
Yellow Time (s)	3.2	4.7	4.7	3.2	4.7	4.7	3.2	3.2	3.2	3.2	3.2	3.2
All-Red Time (s)	2.7	2.2	2.2	2.7	2.2	2.2	3.3	3.2	3.2	3.3	3.2	3.2
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.9	6.9	6.9	5.9	6.9	6.9	6.5	6.4	6.4	6.5	6.4	6.4
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	2.0	5.0	5.0	2.0	5.0	5.0	1.0	3.0	3.0	1.0	3.0	3.0
Minimum Gap (s)	0.2	3.0	3.0	0.2	3.0	3.0	0.2	0.2	0.2	0.2	0.2	0.2

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Time Before Reduce (s)	0.0	20.0	20.0	0.0	20.0	20.0	0.0	0.0	0.0	0.0	0.0	0.0
Time To Reduce (s)	0.0	20.0	20.0	0.0	20.0	20.0	0.0	0.0	0.0	0.0	0.0	0.0
Recall Mode	Max	C-Max	C-Max	Max	C-Max	C-Max	Max	Max	Max	Max	Max	Max
Act Effct Green (s)	10.1	57.1	57.1	9.1	56.1	56.1	21.0	16.6	16.6	23.0	17.6	17.6
Actuated g/C Ratio	0.09	0.50	0.50	0.08	0.49	0.49	0.18	0.15	0.15	0.20	0.15	0.15
v/c Ratio	0.54	0.85	0.06	0.49	0.60	0.08	0.36	0.23	0.60	0.62	0.25	0.31
Control Delay	47.9	45.5	1.4	56.9	22.7	0.2	40.2	44.5	19.3	49.4	43.8	4.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	47.9	45.5	1.4	56.9	22.7	0.2	40.2	44.5	19.3	49.4	43.8	4.7
LOS	D	D	A	E	C	A	D	D	B	D	D	A
Approach Delay		44.2			25.1			30.5			35.3	
Approach LOS		D			C			C			D	
Queue Length 50th (ft)	61	621	0	47	270	0	51	41	32	102	46	0
Queue Length 95th (ft)	m87	679	m0	79	336	0	91	67	102	166	77	24
Internal Link Dist (ft)		2579			972			292			364	
Turn Bay Length (ft)	265		500	560		380	280		260	145		160
Base Capacity (vph)	156	1772	868	263	1676	826	244	505	374	268	546	376
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.54	0.85	0.06	0.49	0.60	0.08	0.36	0.23	0.60	0.62	0.25	0.31

Intersection Summary		
Area Type:	Other	
Cycle Length: 114		
Actuated Cycle Length: 114		
Offset: 2 (2%), Referenced to phase 2:EBT and 6:WBT, Start of 1st Green		
Natural Cycle: 90		
Control Type: Actuated-Coordinated		
Maximum v/c Ratio: 0.85		
Intersection Signal Delay: 35.4	Intersection LOS: D	
Intersection Capacity Utilization 78.4%	ICU Level of Service D	
Analysis Period (min) 15		
m Volume for 95th percentile queue is metered by upstream signal.		

Splits and Phases: 15: Red Bank Rd & SR 62



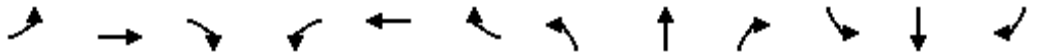
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	12	1370	0	162	1213	29	31	20	193	62	18	13
Future Volume (vph)	12	1370	0	162	1213	29	31	20	193	62	18	13
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	11	11	11
Storage Length (ft)	270		0	1000		250	100		100	150		100
Storage Lanes	1		0	1		1	1		1	1		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt						0.850			0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	3539	0	1770	3539	1583	1770	1863	1583	1711	1801	1531
Flt Permitted	0.950			0.950			0.741			0.743		
Satd. Flow (perm)	1770	3539	0	1770	3539	1583	1380	1863	1583	1338	1801	1531
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						77			212			135
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		465			5456			614			1006	
Travel Time (s)		10.6			124.0			14.0			22.9	
Peak Hour Factor	0.94	0.94	0.94	0.96	0.96	0.96	0.91	0.91	0.91	0.73	0.73	0.73
Adj. Flow (vph)	13	1457	0	169	1264	30	34	22	212	85	25	18
Shared Lane Traffic (%)												
Lane Group Flow (vph)	13	1457	0	169	1264	30	34	22	212	85	25	18
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		30			30			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.04	1.04	1.04
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Prot	NA		Prot	NA	Perm	Perm	NA	Perm	Perm	NA	Perm
Protected Phases	5	2		1	6			8			4	
Permitted Phases						6	8		8	4		4
Detector Phase	5	2		1	6	6	8	8	8	4	4	4
Switch Phase												
Minimum Initial (s)	5.0	20.0		5.0	20.0	20.0	8.0	8.0	8.0	8.0	8.0	8.0
Minimum Split (s)	12.3	26.9		12.3	26.9	26.9	14.3	14.3	14.3	14.3	14.3	14.3
Total Split (s)	21.0	90.0		32.0	101.0	101.0	28.0	28.0	28.0	28.0	28.0	28.0
Total Split (%)	14.0%	60.0%		21.3%	67.3%	67.3%	18.7%	18.7%	18.7%	18.7%	18.7%	18.7%
Maximum Green (s)	13.7	83.1		24.7	94.1	94.1	21.7	21.7	21.7	21.7	21.7	21.7
Yellow Time (s)	3.2	5.0		3.2	5.0	5.0	3.6	3.6	3.6	3.6	3.6	3.6
All-Red Time (s)	4.1	1.9		4.1	1.9	1.9	2.7	2.7	2.7	2.7	2.7	2.7
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	7.3	6.9		7.3	6.9	6.9	6.3	6.3	6.3	6.3	6.3	6.3
Lead/Lag	Lead	Lag		Lead	Lag	Lag						
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes						
Vehicle Extension (s)	3.0	5.0		2.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Gap (s)	0.2	3.0		0.2	3.0	3.0	0.2	0.2	0.2	0.2	0.2	0.2

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Time Before Reduce (s)	0.0	30.0		0.0	30.0	30.0	0.0	0.0	0.0	0.0	0.0	0.0
Time To Reduce (s)	0.0	20.0		0.0	20.0	20.0	0.0	0.0	0.0	0.0	0.0	0.0
Recall Mode	None	C-Max		None	C-Max	C-Max	None	None	None	None	None	None
Act Effct Green (s)	6.7	94.6		18.5	114.3	114.3	16.4	16.4	16.4	16.4	16.4	16.4
Actuated g/C Ratio	0.04	0.63		0.12	0.76	0.76	0.11	0.11	0.11	0.11	0.11	0.11
v/c Ratio	0.16	0.65		0.78	0.47	0.02	0.23	0.11	0.59	0.58	0.13	0.06
Control Delay	73.1	20.6		83.1	5.2	0.3	62.7	59.0	13.9	78.5	59.6	0.4
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	73.1	20.6		83.1	5.2	0.3	62.7	59.0	13.9	78.5	59.6	0.4
LOS	E	C		F	A	A	E	E	B	E	E	A
Approach Delay		21.1			14.1			23.8			63.8	
Approach LOS		C			B			C			E	
Queue Length 50th (ft)	13	452		140	14	0	31	20	0	80	22	0
Queue Length 95th (ft)	37	642		m198	516	m1	66	47	77	108	41	0
Internal Link Dist (ft)		385			5376			534			926	
Turn Bay Length (ft)	270			1000		250	100		100	150		100
Base Capacity (vph)	161	2231		291	2696	1224	199	269	410	193	260	336
Starvation Cap Reductn	0	0		0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0		0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0		0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.08	0.65		0.58	0.47	0.02	0.17	0.08	0.52	0.44	0.10	0.05

Intersection Summary

Area Type: Other
Cycle Length: 150
Actuated Cycle Length: 150
Offset: 89 (59%), Referenced to phase 2:EBT and 6:WBT, Start of 1st Green
Natural Cycle: 70
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.78
Intersection Signal Delay: 19.9 Intersection LOS: B
Intersection Capacity Utilization 74.0% ICU Level of Service D
Analysis Period (min) 15
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 9: Schutte Rd & SR 62



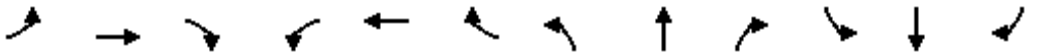
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	51	1503	353	55	1182	85	277	71	62	47	58	39
Future Volume (vph)	51	1503	353	55	1182	85	277	71	62	47	58	39
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	260		520	270		330	310		150	150		100
Storage Lanes	1		1	1		1	1		1	1		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850			0.850			0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	3539	1583	1770	3539	1583	1770	1863	1583	1770	1863	1583
Flt Permitted	0.950			0.950			0.431			0.708		
Satd. Flow (perm)	1770	3539	1583	1770	3539	1583	803	1863	1583	1319	1863	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			*151			*151			*156		*14	119
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		5456			2661			1003			773	
Travel Time (s)		124.0			60.5			22.8			17.6	
Peak Hour Factor	0.89	0.89	0.89	0.98	0.98	0.98	0.95	0.95	0.95	0.86	0.86	0.86
Adj. Flow (vph)	57	1689	397	56	1206	87	292	75	65	55	67	45
Shared Lane Traffic (%)												
Lane Group Flow (vph)	57	1689	397	56	1206	87	292	75	65	55	67	45
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Prot	NA	Perm	Prot	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases			2			6	8		8	4		4
Detector Phase	5	2	2	1	6	6	3	8	8	7	4	4
Switch Phase												
Minimum Initial (s)	4.0	30.0	30.0	4.0	30.0	30.0	4.0	10.0	10.0	4.0	10.0	10.0
Minimum Split (s)	9.9	36.9	36.9	9.9	36.9	36.9	10.5	16.4	16.4	10.5	16.4	16.4
Total Split (s)	27.0	78.0	78.0	30.0	81.0	81.0	27.0	15.0	15.0	27.0	15.0	15.0
Total Split (%)	18.0%	52.0%	52.0%	20.0%	54.0%	54.0%	18.0%	10.0%	10.0%	18.0%	10.0%	10.0%
Maximum Green (s)	21.1	71.1	71.1	24.1	74.1	74.1	20.5	8.6	8.6	20.5	8.6	8.6
Yellow Time (s)	3.2	4.7	4.7	3.2	4.7	4.7	3.2	3.2	3.2	3.2	3.2	3.2
All-Red Time (s)	2.7	2.2	2.2	2.7	2.2	2.2	3.3	3.2	3.2	3.3	3.2	3.2
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.9	6.9	6.9	5.9	6.9	6.9	6.5	6.4	6.4	6.5	6.4	6.4
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	2.0	5.0	5.0	2.0	5.0	5.0	1.0	3.0	3.0	1.0	3.0	3.0
Minimum Gap (s)	0.2	3.0	3.0	0.2	3.0	3.0	0.2	0.2	0.2	0.2	0.2	0.2
Time Before Reduce (s)	0.0	20.0	20.0	0.0	20.0	20.0	0.0	0.0	0.0	0.0	0.0	0.0

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Time To Reduce (s)	0.0	20.0	20.0	0.0	20.0	20.0	0.0	0.0	0.0	0.0	0.0	0.0
Recall Mode	None	C-Max	C-Max	None	C-Max	C-Max	None	None	None	None	None	None
Act Effct Green (s)	9.2	88.2	88.2	9.2	88.2	88.2	35.5	24.0	24.0	15.7	8.6	8.6
Actuated g/C Ratio	0.06	0.59	0.59	0.06	0.59	0.59	0.24	0.16	0.16	0.10	0.06	0.06
v/c Ratio	0.53	0.81	0.40	0.52	0.58	0.09	0.91	0.25	0.17	0.35	0.56	0.22
Control Delay	90.9	25.8	6.8	71.1	28.6	4.4	84.2	60.1	1.0	52.7	72.3	2.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	90.9	25.8	6.8	71.1	28.6	4.4	84.2	60.1	1.0	52.7	72.3	2.5
LOS	F	C	A	E	C	A	F	E	A	D	E	A
Approach Delay		24.0			28.8			67.5			47.1	
Approach LOS		C			C			E			D	
Queue Length 50th (ft)	51	792	172	55	405	3	264	66	0	43	51	0
Queue Length 95th (ft)	m83	894	136	m89	m572	m24	#376	123	0	79	100	0
Internal Link Dist (ft)		5376			2581			923			693	
Turn Bay Length (ft)	260		520	270		330	310		150	150		100
Base Capacity (vph)	248	2082	993	284	2081	993	322	298	384	316	120	202
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.23	0.81	0.40	0.20	0.58	0.09	0.91	0.25	0.17	0.17	0.56	0.22

Intersection Summary

Area Type: Other
Cycle Length: 150
Actuated Cycle Length: 150
Offset: 103 (69%), Referenced to phase 2:EBT and 6:WBT, Start of 1st Green
Natural Cycle: 90
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.91
Intersection Signal Delay: 31.1 Intersection LOS: C
Intersection Capacity Utilization 78.8% ICU Level of Service D
Analysis Period (min) 15
* User Entered Value
\# 95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 12: Boehne Camp & SR 62



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	117	1210	90	408	996	128	175	291	411	179	399	219
Future Volume (vph)	117	1210	90	408	996	128	175	291	411	179	399	219
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	265		500	560		380	280		260	145		160
Storage Lanes	1		1	2		1	1		1	1		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	1.00	0.97	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Frt			0.850			0.850			0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1752	3505	1568	3433	3539	1583	1770	3539	1583	1770	3539	1583
Flt Permitted	0.950			0.950			0.255			0.256		
Satd. Flow (perm)	1752	3505	1568	3433	3539	1583	475	3539	1583	477	3539	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			115			139			253			209
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		2661			1055			494			562	
Travel Time (s)		60.5			24.0			11.2			12.8	
Peak Hour Factor	0.90	0.90	0.90	0.92	0.92	0.92	0.90	0.90	0.90	0.93	0.93	0.93
Heavy Vehicles (%)	3%	3%	3%	2%	2%	2%	2%	2%	2%	2%	2%	2%
Adj. Flow (vph)	130	1344	100	443	1083	139	194	323	457	192	429	235
Shared Lane Traffic (%)												
Lane Group Flow (vph)	130	1344	100	443	1083	139	194	323	457	192	429	235
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24			24			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Prot	NA	Perm	Prot	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases			2			6	8		8	4		4
Detector Phase	5	2	2	1	6	6	3	8	8	7	4	4
Switch Phase												
Minimum Initial (s)	4.0	30.0	30.0	4.0	30.0	30.0	4.0	10.0	10.0	4.0	10.0	10.0
Minimum Split (s)	9.9	36.9	36.9	9.9	36.9	36.9	10.5	16.4	16.4	10.5	16.4	16.4
Total Split (s)	27.0	78.0	78.0	30.0	81.0	81.0	18.0	22.0	22.0	20.0	24.0	24.0
Total Split (%)	18.0%	52.0%	52.0%	20.0%	54.0%	54.0%	12.0%	14.7%	14.7%	13.3%	16.0%	16.0%
Maximum Green (s)	21.1	71.1	71.1	24.1	74.1	74.1	11.5	15.6	15.6	13.5	17.6	17.6
Yellow Time (s)	3.2	4.7	4.7	3.2	4.7	4.7	3.2	3.2	3.2	3.2	3.2	3.2
All-Red Time (s)	2.7	2.2	2.2	2.7	2.2	2.2	3.3	3.2	3.2	3.3	3.2	3.2
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.9	6.9	6.9	5.9	6.9	6.9	6.5	6.4	6.4	6.5	6.4	6.4
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	2.0	5.0	5.0	2.0	5.0	5.0	1.0	3.0	3.0	1.0	3.0	3.0
Minimum Gap (s)	0.2	3.0	3.0	0.2	3.0	3.0	0.2	0.2	0.2	0.2	0.2	0.2

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Time Before Reduce (s)	0.0	20.0	20.0	0.0	20.0	20.0	0.0	0.0	0.0	0.0	0.0	0.0
Time To Reduce (s)	0.0	20.0	20.0	0.0	20.0	20.0	0.0	0.0	0.0	0.0	0.0	0.0
Recall Mode	None	C-Max	C-Max	None	C-Max	C-Max	None	None	None	None	None	None
Act Effct Green (s)	15.4	72.9	72.9	22.3	79.8	79.8	27.1	15.7	15.7	30.9	17.6	17.6
Actuated g/C Ratio	0.10	0.49	0.49	0.15	0.53	0.53	0.18	0.10	0.10	0.21	0.12	0.12
v/c Ratio	0.73	0.79	0.12	0.87	0.58	0.15	1.05	0.88	1.17	0.90	1.03	0.64
Control Delay	60.6	45.2	13.5	79.9	25.8	3.3	130.0	89.7	124.2	90.7	116.1	19.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	60.6	45.2	13.5	79.9	25.8	3.3	130.0	89.7	124.2	90.7	116.1	19.4
LOS	E	D	B	E	C	A	F	F	F	F	F	B
Approach Delay		44.5			38.3			113.9			83.8	
Approach LOS		D			D			F			F	
Queue Length 50th (ft)	132	485	22	218	366	0	~174	166	~296	162	~236	23
Queue Length 95th (ft)	m159	604	m42	#282	471	37	#319	#253	#520	#280	#350	115
Internal Link Dist (ft)		2581			975			414			482	
Turn Bay Length (ft)	265		500	560		380	280		260	145		160
Base Capacity (vph)	246	1702	820	551	1883	907	184	369	391	214	415	370
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.53	0.79	0.12	0.80	0.58	0.15	1.05	0.88	1.17	0.90	1.03	0.64

Intersection Summary			
Area Type:	Other		
Cycle Length: 150			
Actuated Cycle Length: 150			
Offset: 103 (69%), Referenced to phase 2:EBT and 6:WBT, Start of 1st Green			
Natural Cycle: 100			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.17			
Intersection Signal Delay: 62.4		Intersection LOS: E	
Intersection Capacity Utilization 87.1%		ICU Level of Service E	
Analysis Period (min) 15			
~ Volume exceeds capacity, queue is theoretically infinite.			
Queue shown is maximum after two cycles.			
# 95th percentile volume exceeds capacity, queue may be longer.			
Queue shown is maximum after two cycles.			
m Volume for 95th percentile queue is metered by upstream signal.			

Splits and Phases: 15: Red Bank Rd & SR 62

Lane Group	EBT	WBT	WBR	NBL	NBT	NBR2	SBL2	SBT	SBR	NWL2
Lane Configurations										
Traffic Volume (vph)	1062	1052	31	17	33	65	145	17	30	57
Future Volume (vph)	1062	1052	31	17	33	65	145	17	30	57
Ideal Flow (vphpl)	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000
Storage Length (ft)			350	150					150	
Storage Lanes			1	1					1	
Taper Length (ft)				100						
Lane Util. Factor	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850			0.850			0.850	
Flt Protected				0.950			0.950			0.950
Satd. Flow (prot)	3689	3585	1604	1827	1923	1635	1845	1942	1650	1792
Flt Permitted				0.742			0.494			0.950
Satd. Flow (perm)	3689	3585	1604	1427	1923	1635	959	1942	1650	1792
Right Turn on Red			Yes			Yes			Yes	
Satd. Flow (RTOR)			37			144			86	
Link Speed (mph)	45	50			40			40		
Link Distance (ft)	1420	548			584			515		
Travel Time (s)	21.5	7.5			10.0			8.8		
Peak Hour Factor	0.85	0.84	0.84	0.76	0.76	0.76	0.73	0.73	0.73	0.84
Heavy Vehicles (%)	3%	6%	6%	4%	4%	4%	3%	3%	3%	6%
Adj. Flow (vph)	1249	1252	37	22	43	86	199	23	41	68
Shared Lane Traffic (%)										
Lane Group Flow (vph)	1249	1252	37	22	43	86	199	23	41	68
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left
Median Width(ft)	12	12			12			12		
Link Offset(ft)	0	0			0			0		
Crosswalk Width(ft)	16	16			16			16		
Two way Left Turn Lane										
Headway Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Turning Speed (mph)			9	15		9	15		9	15
Turn Type	NA	NA	pm+ov	pm+pt	NA	Free	pm+pt	NA	Perm	Prot
Protected Phases	2	2	7	3	8		7	4		5
Permitted Phases			2	8		Free	4		4	
Detector Phase	2	2	7	3	8		7	4	4	5
Switch Phase										
Minimum Initial (s)	10.0	10.0	7.0	7.0	10.0		7.0	10.0	10.0	7.0
Minimum Split (s)	24.0	24.0	13.0	13.0	24.0		13.0	24.0	24.0	13.0
Total Split (s)	82.0	82.0	17.0	17.0	15.0		17.0	15.0	15.0	82.0
Total Split (%)	71.9%	71.9%	14.9%	14.9%	13.2%		14.9%	13.2%	13.2%	71.9%
Maximum Green (s)	76.0	76.0	11.0	11.0	9.0		11.0	9.0	9.0	76.0
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0		2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0	6.0	6.0		6.0	6.0	6.0	6.0
Lead/Lag			Lead	Lead	Lag		Lead	Lag	Lag	
Lead-Lag Optimize?					Yes			Yes	Yes	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0	3.0
Recall Mode	C-Max	C-Max	None	None	None		None	None	None	C-Max

Lane Group	EBT	WBT	WBR	NBL	NBT	NBR2	SBL2	SBT	SBR	NWL2
Walk Time (s)	7.0	7.0			7.0			7.0	7.0	
Flash Dont Walk (s)	11.0	11.0			11.0			11.0	11.0	
Pedestrian Calls (#/hr)	0	0			0			0	0	
Act Effct Green (s)	76.0	76.0	93.0	16.3	9.0	114.0	24.9	20.5	20.5	76.0
Actuated g/C Ratio	0.67	0.67	0.82	0.14	0.08	1.00	0.22	0.18	0.18	0.67
v/c Ratio	0.51	0.52	0.03	0.10	0.28	0.05	0.67	0.07	0.11	0.06
Control Delay	10.5	16.9	0.8	35.9	54.7	0.1	51.4	43.9	0.8	3.2
Queue Delay	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	10.5	16.9	0.8	35.9	54.7	0.1	51.4	43.9	0.8	3.2
LOS	B	B	A	D	D	A	D	D	A	A
Approach Delay	10.5	16.5			20.9			42.8		
Approach LOS	B	B			C			D		
Queue Length 50th (ft)	221	333	0	13	30	0	127	13	0	0
Queue Length 95th (ft)	246	434	1	29	57	0	157	34	0	0
Internal Link Dist (ft)	1340	468			504			435		
Turn Bay Length (ft)			350	150		150	150		150	
Base Capacity (vph)	2459	2390	1315	288	151	1635	295	349	367	1194
Starvation Cap Reductn	0	185	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.51	0.57	0.03	0.08	0.28	0.05	0.67	0.07	0.11	0.06

Intersection Summary			
Area Type:	Other		
Cycle Length: 114			
Actuated Cycle Length: 114			
Offset: 1 (1%), Referenced to phase 2:EBWB and 5:NWL, Start of 1st Green			
Natural Cycle: 65			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.67			
Intersection Signal Delay: 16.2		Intersection LOS: B	
Intersection Capacity Utilization 58.9%		ICU Level of Service B	
Analysis Period (min) 15			

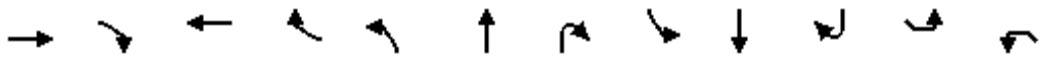
Splits and Phases: 1: Schutte Rd & SR 62

Lane Group	EBU	EBT	EBR	WBL	WBT	NEL	NER	Ø2	Ø3	Ø4	Ø5	Ø7
Lane Configurations												
Traffic Volume (vph)	10	1197	0	57	1073	0	65					
Future Volume (vph)	10	1197	0	57	1073	0	65					
Ideal Flow (vphpl)	2000	2000	2000	2000	2000	2000	2000					
Storage Length (ft)	250		0	100		0	0					
Storage Lanes	1		0	1		0	1					
Taper Length (ft)	25			100		25						
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00					
Frt							0.865					
Flt Protected	0.950			0.950								
Satd. Flow (prot)	1845	3689	0	1792	3585	0	1663					
Flt Permitted	0.950			0.950								
Satd. Flow (perm)	1845	3689	0	1792	3585	0	1663					
Right Turn on Red			No				Yes					
Satd. Flow (RTOR)							111					
Link Speed (mph)		45			50	45						
Link Distance (ft)		548			4430	408						
Travel Time (s)		8.3			60.4	6.2						
Peak Hour Factor	0.85	0.85	0.85	0.84	0.84	0.76	0.76					
Heavy Vehicles (%)	3%	3%	3%	6%	6%	4%	4%					
Adj. Flow (vph)	12	1408	0	68	1277	0	86					
Shared Lane Traffic (%)												
Lane Group Flow (vph)	12	1408	0	68	1277	0	86					
Enter Blocked Intersection	No	No	No	No	No	No	No					
Lane Alignment	R NA	Left	Right	Left	Left	Left	Right					
Median Width(ft)		12			12	0						
Link Offset(ft)		0			0	50						
Crosswalk Width(ft)		16			16	16						
Two way Left Turn Lane												
Headway Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94					
Turning Speed (mph)	9		9	15		15	9					
Turn Type	Prot	NA		Prot	NA		Over					
Protected Phases	8	2 7		8	2 7		8	2	3	4	5	7
Permitted Phases												
Detector Phase	8	2 7		8	2 7		8					
Switch Phase												
Minimum Initial (s)	10.0			10.0			10.0	10.0	7.0	10.0	7.0	7.0
Minimum Split (s)	24.0			24.0			24.0	24.0	13.0	24.0	13.0	13.0
Total Split (s)	15.0			15.0			15.0	82.0	17.0	15.0	82.0	17.0
Total Split (%)	13.2%			13.2%			13.2%	72%	15%	13%	72%	15%
Maximum Green (s)	9.0			9.0			9.0	76.0	11.0	9.0	76.0	11.0
Yellow Time (s)	4.0			4.0			4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	2.0			2.0			2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0			0.0			0.0					
Total Lost Time (s)	6.0			6.0			6.0					
Lead/Lag	Lag			Lag			Lag		Lead	Lag		Lead
Lead-Lag Optimize?	Yes			Yes			Yes			Yes		
Vehicle Extension (s)	3.0			3.0			3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None			None			None	C-Max	None	None	C-Max	None

Lane Group	EBU	EBT	EBR	WBL	WBT	NEL	NER	Ø2	Ø3	Ø4	Ø5	Ø7
Walk Time (s)	7.0			7.0			7.0	7.0		7.0		
Flash Dont Walk (s)	11.0			11.0			11.0	11.0		11.0		
Pedestrian Calls (#/hr)	0			0			0	0		0		
Act Effct Green (s)	9.0	93.0		9.0	93.0		9.0					
Actuated g/C Ratio	0.08	0.82		0.08	0.82		0.08					
v/c Ratio	0.08	0.47		0.48	0.44		0.37					
Control Delay	59.2	2.1		53.1	6.4		9.5					
Queue Delay	0.0	0.1		0.0	0.0		0.0					
Total Delay	59.2	2.2		53.1	6.4		9.5					
LOS	E	A		D	A		A					
Approach Delay		2.7			8.7	9.5						
Approach LOS		A			A	A						
Queue Length 50th (ft)	9	60		42	215		0					
Queue Length 95th (ft)	m16	62		82	225		14					
Internal Link Dist (ft)		468			4350	328						
Turn Bay Length (ft)	250			100								
Base Capacity (vph)	145	3009		141	2924		233					
Starvation Cap Reductn	0	291		0	0		0					
Spillback Cap Reductn	0	0		0	136		0					
Storage Cap Reductn	0	0		0	0		0					
Reduced v/c Ratio	0.08	0.52		0.48	0.46		0.37					

Intersection Summary			
Area Type:	Other		
Cycle Length: 114			
Actuated Cycle Length: 114			
Offset: 1 (1%), Referenced to phase 2:EBWB and 5:NWL, Start of 1st Green			
Natural Cycle: 65			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.67			
Intersection Signal Delay: 5.7		Intersection LOS: A	
Intersection Capacity Utilization 49.8%		ICU Level of Service A	
Analysis Period (min) 15			
m Volume for 95th percentile queue is metered by upstream signal.			

Splits and Phases: 4: Schutte Rd East Int. & SR 62

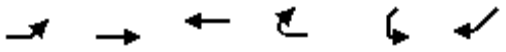


Lane Group	EBT	EBR2	WBT	WBR2	NBL2	NBT	NBR2	SBL2	SBT	SBR2	SEL2	NWL2
Lane Configurations												
Traffic Volume (vph)	1160	135	1053	58	125	58	49	144	76	76	43	54
Future Volume (vph)	1160	135	1053	58	125	58	49	144	76	76	43	54
Ideal Flow (vphpl)	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000
Storage Length (ft)												
Storage Lanes												
Taper Length (ft)												
Lane Util. Factor	0.95	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.850		0.850			0.850			0.850		
Flt Protected					0.950			0.950			0.950	0.950
Satd. Flow (prot)	3689	1650	3619	1619	1863	1961	1667	1845	1942	1650	1845	1810
Flt Permitted					0.683			0.549			0.950	0.950
Satd. Flow (perm)	3689	1650	3619	1619	1339	1961	1667	1066	1942	1650	1845	1810
Right Turn on Red		Yes		Yes			Yes			Yes		
Satd. Flow (RTOR)		148		69			144			144		
Link Speed (mph)	45		50			40			40			
Link Distance (ft)	523		548			603			510			
Travel Time (s)	7.9		7.5			10.3			8.7			
Peak Hour Factor	0.91	0.91	0.84	0.84	0.94	0.94	0.94	0.66	0.66	0.66	0.91	0.84
Heavy Vehicles (%)	3%	3%	5%	5%	2%	2%	2%	3%	3%	3%	3%	5%
Adj. Flow (vph)	1275	148	1254	69	133	62	52	218	115	115	47	64
Shared Lane Traffic (%)												
Lane Group Flow (vph)	1275	148	1254	69	133	62	52	218	115	115	47	64
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left
Median Width(ft)	12		12			12			12			
Link Offset(ft)	0		0			0			0			
Crosswalk Width(ft)	16		16			16			16			
Two way Left Turn Lane												
Headway Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Turning Speed (mph)		9		9	15		9	15		9	15	15
Turn Type	NA	pm+ov	NA	pm+ov	pm+pt	NA	Free	pm+pt	NA	Free	Prot	Prot
Protected Phases	2	3	2	7	3	8		7	4		5	5
Permitted Phases		2		2	8		Free	4		Free		
Detector Phase	2	3	2	7	3	8		7	4		5	5
Switch Phase												
Minimum Initial (s)	10.0	7.0	10.0	7.0	7.0	10.0		7.0	10.0		7.0	7.0
Minimum Split (s)	24.0	13.0	24.0	13.0	13.0	24.0		13.0	24.0		13.0	13.0
Total Split (s)	74.0	15.0	74.0	15.0	15.0	25.0		15.0	25.0		74.0	74.0
Total Split (%)	64.9%	13.2%	64.9%	13.2%	13.2%	21.9%		13.2%	21.9%		64.9%	64.9%
Maximum Green (s)	68.0	9.0	68.0	9.0	9.0	19.0		9.0	19.0		68.0	68.0
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0		4.0	4.0		4.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0		2.0	2.0		2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0	6.0	6.0	6.0		6.0	6.0		6.0	6.0
Lead/Lag		Lead		Lead	Lead	Lag		Lead	Lag			
Lead-Lag Optimize?						Yes			Yes			
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0		3.0	3.0
Recall Mode	C-Max	None	C-Max	None	None	None		None	None		C-Max	C-Max

Lane Group	EBT	EBR2	WBT	WBR2	NBL2	NBT	NBR2	SBL2	SBT	SBR2	SEL2	NWL2
Walk Time (s)	7.0		7.0			7.0			7.0			
Flash Dont Walk (s)	11.0		11.0			11.0			11.0			
Pedestrian Calls (#/hr)	0		0			0			0			
Act Effct Green (s)	74.5	89.5	74.5	93.9	19.5	12.5	114.0	22.7	12.5	114.0	74.5	74.5
Actuated g/C Ratio	0.65	0.79	0.65	0.82	0.17	0.11	1.00	0.20	0.11	1.00	0.65	0.65
v/c Ratio	0.53	0.11	0.53	0.05	0.49	0.29	0.03	0.74	0.54	0.07	0.04	0.05
Control Delay	24.8	3.6	9.5	0.6	42.8	49.2	0.0	54.9	57.0	0.1	8.6	8.1
Queue Delay	0.2	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	25.0	3.6	9.6	0.6	42.8	49.2	0.0	54.9	57.0	0.1	8.6	8.1
LOS	C	A	A	A	D	D	A	D	E	A	A	A
Approach Delay	22.8		9.2			35.4			41.4			
Approach LOS	C		A			D			D			
Queue Length 50th (ft)	422	11	173	0	80	43	0	139	81	0	35	50
Queue Length 95th (ft)	538	46	187	4	130	83	0	142	97	0	76	91
Internal Link Dist (ft)	443		468			523			430			
Turn Bay Length (ft)		350		350	300		150	150		150		
Base Capacity (vph)	2409	1326	2363	1345	270	326	1667	295	323	1650	1205	1182
Starvation Cap Reductn	400	0	365	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.63	0.11	0.63	0.05	0.49	0.19	0.03	0.74	0.36	0.07	0.04	0.05

Intersection Summary			
Area Type:	Other		
Cycle Length: 114			
Actuated Cycle Length: 114			
Offset: 2 (2%), Referenced to phase 2:EBWB and 5:NWSEL, Start of 1st Green			
Natural Cycle: 65			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.74			
Intersection Signal Delay: 20.5		Intersection LOS: C	
Intersection Capacity Utilization 61.4%		ICU Level of Service B	
Analysis Period (min) 15			

Splits and Phases: 31: Boehne Camp Rd & SR 62

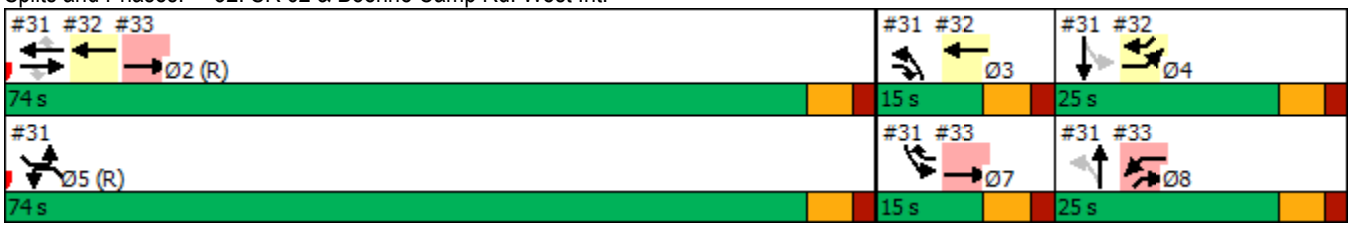


Lane Group	EBL	EBT	WBT	WBR	SWL	SWR	Ø2	Ø3	Ø5	Ø7	Ø8
Lane Configurations											
Traffic Volume (vph)	43	1295	1178	0	0	76					
Future Volume (vph)	43	1295	1178	0	0	76					
Ideal Flow (vphpl)	2000	2000	2000	2000	2000	1900					
Storage Length (ft)	200			0	0	0					
Storage Lanes	1			0	0	1					
Taper Length (ft)	100				25						
Lane Util. Factor	1.00	0.95	0.95	1.00	1.00	1.00					
Frt						0.865					
Flt Protected	0.950										
Satd. Flow (prot)	1845	3689	3619	0	0	1596					
Flt Permitted	0.950										
Satd. Flow (perm)	1845	3689	3619	0	0	1596					
Right Turn on Red				No		Yes					
Satd. Flow (RTOR)						84					
Link Speed (mph)		50	50		50						
Link Distance (ft)		4430	523		344						
Travel Time (s)		60.4	7.1		4.7						
Peak Hour Factor	0.91	0.91	0.84	0.84	0.66	0.66					
Heavy Vehicles (%)	3%	3%	5%	5%	3%	3%					
Adj. Flow (vph)	47	1423	1402	0	0	115					
Shared Lane Traffic (%)											
Lane Group Flow (vph)	47	1423	1402	0	0	115					
Enter Blocked Intersection	No	No	No	No	No	No					
Lane Alignment	Left	Left	Left	Right	Left	Right					
Median Width(ft)		12	12		0						
Link Offset(ft)		0	0		50						
Crosswalk Width(ft)		16	16		16						
Two way Left Turn Lane											
Headway Factor	0.94	0.94	0.94	0.94	0.94	1.00					
Turning Speed (mph)	15			9	15	9					
Turn Type	Prot	NA	NA			Over					
Protected Phases	4	Free	2 3			4	2	3	5	7	8
Permitted Phases											
Detector Phase	4		2 3			4					
Switch Phase											
Minimum Initial (s)	10.0					10.0	10.0	7.0	7.0	7.0	10.0
Minimum Split (s)	24.0					24.0	24.0	13.0	13.0	13.0	24.0
Total Split (s)	25.0					25.0	74.0	15.0	74.0	15.0	25.0
Total Split (%)	21.9%					21.9%	65%	13%	65%	13%	22%
Maximum Green (s)	19.0					19.0	68.0	9.0	68.0	9.0	19.0
Yellow Time (s)	4.0					4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	2.0					2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0					0.0					
Total Lost Time (s)	6.0					6.0					
Lead/Lag	Lag					Lag		Lead		Lead	Lag
Lead-Lag Optimize?	Yes					Yes					Yes
Vehicle Extension (s)	3.0					3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None					None	C-Max	None	C-Max	None	None

Lane Group	EBL	EBT	WBT	WBR	SWL	SWR	Ø2	Ø3	Ø5	Ø7	Ø8
Walk Time (s)	7.0					7.0	7.0				7.0
Flash Dont Walk (s)	11.0					11.0	11.0				11.0
Pedestrian Calls (#/hr)	0					0	0				0
Act Effct Green (s)	12.5	114.0	89.5			12.5					
Actuated g/C Ratio	0.11	1.00	0.79			0.11					
v/c Ratio	0.23	0.39	0.49			0.46					
Control Delay	38.3	0.3	2.0			22.0					
Queue Delay	0.0	0.0	0.1			0.0					
Total Delay	38.3	0.3	2.1			22.0					
LOS	D	A	A			C					
Approach Delay		1.5	2.1		22.0						
Approach LOS		A	A		C						
Queue Length 50th (ft)	32	0	41			21					
Queue Length 95th (ft)	63	0	49			38					
Internal Link Dist (ft)		4350	443		264						
Turn Bay Length (ft)	200										
Base Capacity (vph)	307	3689	2839			336					
Starvation Cap Reductn	0	0	226			0					
Spillback Cap Reductn	0	302	0			0					
Storage Cap Reductn	0	0	0			0					
Reduced v/c Ratio	0.15	0.42	0.54			0.34					

Intersection Summary			
Area Type:	Other		
Cycle Length: 114			
Actuated Cycle Length: 114			
Offset: 2 (2%), Referenced to phase 2:EBWB and 5:NWSEL, Start of 1st Green			
Natural Cycle: 65			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.74			
Intersection Signal Delay: 2.6		Intersection LOS: A	
Intersection Capacity Utilization 49.3%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 32: SR 62 & Boehne Camp Rd. West Int.

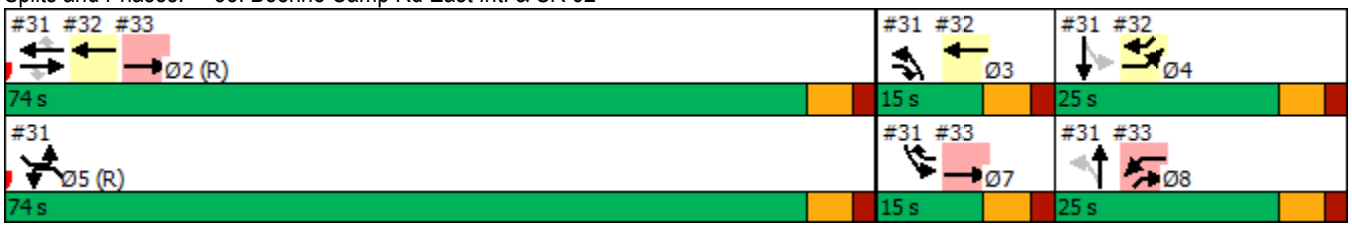


Lane Group	EBT	EBR	WBL	WBT	NEL	NER	Ø2	Ø3	Ø4	Ø5	Ø7
Lane Configurations											
Traffic Volume (vph)	1304	0	54	1111	0	49					
Future Volume (vph)	1304	0	54	1111	0	49					
Ideal Flow (vphpl)	2000	2000	2000	2000	2000	2000					
Storage Length (ft)		0	100		0	0					
Storage Lanes		0	1		0	1					
Taper Length (ft)			100		25						
Lane Util. Factor	0.95	1.00	1.00	0.95	1.00	1.00					
Frt						0.865					
Flt Protected			0.950								
Satd. Flow (prot)	3689	0	1810	3619	0	1680					
Flt Permitted			0.950								
Satd. Flow (perm)	3689	0	1810	3619	0	1680					
Right Turn on Red		No				Yes					
Satd. Flow (RTOR)						79					
Link Speed (mph)	45			50	45						
Link Distance (ft)	548			1629	408						
Travel Time (s)	8.3			22.2	6.2						
Peak Hour Factor	0.91	0.91	0.84	0.84	0.66	0.66					
Heavy Vehicles (%)	3%	3%	5%	5%	3%	3%					
Adj. Flow (vph)	1433	0	64	1323	0	74					
Shared Lane Traffic (%)											
Lane Group Flow (vph)	1433	0	64	1323	0	74					
Enter Blocked Intersection	No	No	No	No	No	No					
Lane Alignment	Left	Right	Left	Left	Left	Right					
Median Width(ft)	12			12	0						
Link Offset(ft)	0			0	50						
Crosswalk Width(ft)	16			16	16						
Two way Left Turn Lane											
Headway Factor	0.94	0.94	0.94	0.94	0.94	0.94					
Turning Speed (mph)		9	15		15	9					
Turn Type	NA		Prot	NA		Over					
Protected Phases	2 7		8	Free		8	2	3	4	5	7
Permitted Phases											
Detector Phase	2 7		8			8					
Switch Phase											
Minimum Initial (s)			10.0			10.0	10.0	7.0	10.0	7.0	7.0
Minimum Split (s)			24.0			24.0	24.0	13.0	24.0	13.0	13.0
Total Split (s)			25.0			25.0	74.0	15.0	25.0	74.0	15.0
Total Split (%)			21.9%			21.9%	65%	13%	22%	65%	13%
Maximum Green (s)			19.0			19.0	68.0	9.0	19.0	68.0	9.0
Yellow Time (s)			4.0			4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)			2.0			2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)			0.0			0.0					
Total Lost Time (s)			6.0			6.0					
Lead/Lag			Lag			Lag		Lead	Lag		Lead
Lead-Lag Optimize?			Yes			Yes			Yes		
Vehicle Extension (s)			3.0			3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode			None			None	C-Max	None	None	C-Max	None

Lane Group	EBT	EBR	WBL	WBT	NEL	NER	Ø2	Ø3	Ø4	Ø5	Ø7
Walk Time (s)			7.0			7.0	7.0		7.0		
Flash Dont Walk (s)			11.0			11.0	11.0		11.0		
Pedestrian Calls (#/hr)			0			0	0		0		
Act Effct Green (s)	93.9		12.5	114.0		12.5					
Actuated g/C Ratio	0.82		0.11	1.00		0.11					
v/c Ratio	0.47		0.32	0.37		0.29					
Control Delay	2.5		48.3	0.3		11.9					
Queue Delay	0.1		0.0	0.0		0.0					
Total Delay	2.6		48.3	0.3		11.9					
LOS	A		D	A		B					
Approach Delay	2.6			2.6	11.9						
Approach LOS	A			A	B						
Queue Length 50th (ft)	81		47	3		0					
Queue Length 95th (ft)	88		86	0		15					
Internal Link Dist (ft)	468			1549	328						
Turn Bay Length (ft)			100								
Base Capacity (vph)	3037		301	3619		345					
Starvation Cap Reductn	271		0	0		0					
Spillback Cap Reductn	0		0	0		0					
Storage Cap Reductn	0		0	0		0					
Reduced v/c Ratio	0.52		0.21	0.37		0.21					

Intersection Summary			
Area Type:	Other		
Cycle Length: 114			
Actuated Cycle Length: 114			
Offset: 2 (2%), Referenced to phase 2:EBWB and 5:NWSEL, Start of 1st Green			
Natural Cycle: 65			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.74			
Intersection Signal Delay: 2.8		Intersection LOS: A	
Intersection Capacity Utilization 52.6%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 33: Boehne Camp Rd East Int. & SR 62

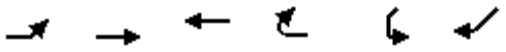


Lane Group	EBT	EBR2	WBT	WBR2	NBL2	NBT	NBR2	SBL2	SBT	SBR2	SEL2	NWL2
Lane Configurations												
Traffic Volume (vph)	1328	47	934	63	76	103	194	155	127	107	74	119
Future Volume (vph)	1328	47	934	63	76	103	194	155	127	107	74	119
Ideal Flow (vphpl)	2000	1900	2000	2000	2000	2000	2000	2000	2000	2000	2000	1900
Storage Length (ft)												
Storage Lanes												
Taper Length (ft)												
Lane Util. Factor	0.95	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00
Frt		0.850		0.850			0.850			0.850		
Flt Protected					0.950			0.950			0.950	0.950
Satd. Flow (prot)	3725	1583	3585	1604	1827	3654	1635	1863	3725	1667	1863	1703
Flt Permitted					0.665			0.677			0.950	0.950
Satd. Flow (perm)	3725	1583	3585	1604	1279	3654	1635	1327	3725	1667	1863	1703
Right Turn on Red		Yes		Yes			Yes			Yes		
Satd. Flow (RTOR)		53		68			223			144		
Link Speed (mph)	45		50			40			40			
Link Distance (ft)	523		548			544			471			
Travel Time (s)	7.9		7.5			9.3			8.0			
Peak Hour Factor	0.88	0.88	0.93	0.93	0.87	0.87	0.87	0.93	0.93	0.93	0.88	0.93
Heavy Vehicles (%)	2%	2%	6%	6%	4%	4%	4%	2%	2%	2%	2%	6%
Adj. Flow (vph)	1509	53	1004	68	87	118	223	167	137	115	84	128
Shared Lane Traffic (%)												
Lane Group Flow (vph)	1509	53	1004	68	87	118	223	167	137	115	84	128
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left
Median Width(ft)	12		12			12			12			
Link Offset(ft)	0		0			0			0			
Crosswalk Width(ft)	16		16			16			16			
Two way Left Turn Lane												
Headway Factor	0.94	1.00	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	1.00
Turning Speed (mph)		9		9	15		9	15		9	15	15
Turn Type	NA	pm+ov	NA	pm+ov	pm+pt	NA	Free	pm+pt	NA	Free	Prot	Prot
Protected Phases	2	3	2	7	3	8		7	4		5	5
Permitted Phases		2		2	8		Free	4		Free		
Detector Phase	2	3	2	7	3	8		7	4		5	5
Switch Phase												
Minimum Initial (s)	10.0	7.0	10.0	7.0	7.0	10.0		7.0	10.0		7.0	7.0
Minimum Split (s)	24.0	13.0	24.0	13.0	13.0	24.0		13.0	24.0		13.0	13.0
Total Split (s)	74.0	15.0	74.0	15.0	15.0	25.0		15.0	25.0		74.0	74.0
Total Split (%)	64.9%	13.2%	64.9%	13.2%	13.2%	21.9%		13.2%	21.9%		64.9%	64.9%
Maximum Green (s)	68.0	9.0	68.0	9.0	9.0	19.0		9.0	19.0		68.0	68.0
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0		4.0	4.0		4.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0		2.0	2.0		2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0	6.0	6.0	6.0		6.0	6.0		6.0	6.0
Lead/Lag		Lead		Lead	Lead	Lag		Lead	Lag			
Lead-Lag Optimize?						Yes			Yes			
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0		3.0	3.0
Recall Mode	C-Max	None	C-Max	None	None	None		None	None		C-Max	C-Max

Lane Group	EBT	EBR2	WBT	WBR2	NBL2	NBT	NBR2	SBL2	SBT	SBR2	SEL2	NWL2
Walk Time (s)	7.0		7.0			7.0			7.0			
Flash Dont Walk (s)	11.0		11.0			11.0			11.0			
Pedestrian Calls (#/hr)	0		0			0			0			
Act Effct Green (s)	71.5	86.5	71.5	86.5	24.5	15.5	114.0	24.5	15.5	114.0	71.5	71.5
Actuated g/C Ratio	0.63	0.76	0.63	0.76	0.21	0.14	1.00	0.21	0.14	1.00	0.63	0.63
v/c Ratio	0.65	0.04	0.45	0.06	0.27	0.24	0.14	0.51	0.27	0.07	0.07	0.12
Control Delay	10.9	0.8	12.2	1.1	33.5	44.0	0.2	39.5	44.5	0.1	11.9	11.4
Queue Delay	0.2	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	11.1	0.8	12.4	1.1	33.5	44.0	0.2	39.5	44.5	0.1	11.9	11.4
LOS	B	A	B	A	C	D	A	D	D	A	B	B
Approach Delay	10.8		11.7			19.0			30.3			
Approach LOS	B		B			B			C			
Queue Length 50th (ft)	207	0	190	0	49	41	0	98	47	0	66	99
Queue Length 95th (ft)	238	5	253	11	85	65	0	153	76	0	117	167
Internal Link Dist (ft)	443		468			464			391			
Turn Bay Length (ft)		250		350	350		350	150		150		
Base Capacity (vph)	2334	1213	2247	1232	318	609	1635	328	620	1667	1167	1067
Starvation Cap Reductn	227	0	463	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.72	0.04	0.56	0.06	0.27	0.19	0.14	0.51	0.22	0.07	0.07	0.12

Intersection Summary			
Area Type:	Other		
Cycle Length: 114			
Actuated Cycle Length: 114			
Offset: 0 (0%), Referenced to phase 2:EBWB and 5:NWSEL, Start of 1st Green, Master Intersection			
Natural Cycle: 75			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.77			
Intersection Signal Delay: 14.3		Intersection LOS: B	
Intersection Capacity Utilization 75.9%		ICU Level of Service D	
Analysis Period (min) 15			

Splits and Phases: 10: Red Bank Rd & SR 62



Lane Group	EBL	EBT	WBT	WBR	SWL	SWR	Ø2	Ø3	Ø5	Ø7	Ø8
Lane Configurations											
Traffic Volume (vph)	74	1375	1010	0	0	107					
Future Volume (vph)	74	1375	1010	0	0	107					
Ideal Flow (vphpl)	2000	2000	2000	2000	2000	1900					
Storage Length (ft)	200			0	0	0					
Storage Lanes	1			0	0	1					
Taper Length (ft)	100				25						
Lane Util. Factor	1.00	0.95	0.95	1.00	1.00	1.00					
Frt						0.865					
Flt Protected	0.950										
Satd. Flow (prot)	1863	3725	3585	0	0	1611					
Flt Permitted	0.950										
Satd. Flow (perm)	1863	3725	3585	0	0	1611					
Right Turn on Red				No		Yes					
Satd. Flow (RTOR)						153					
Link Speed (mph)		50	50		50						
Link Distance (ft)		1629	523		346						
Travel Time (s)		22.2	7.1		4.7						
Peak Hour Factor	0.88	0.88	0.93	0.93	0.93	0.93					
Heavy Vehicles (%)	2%	2%	6%	6%	2%	2%					
Adj. Flow (vph)	84	1563	1086	0	0	115					
Shared Lane Traffic (%)											
Lane Group Flow (vph)	84	1563	1086	0	0	115					
Enter Blocked Intersection	No	No	No	No	No	No					
Lane Alignment	Left	Left	Left	Right	Left	Right					
Median Width(ft)		12	12		0						
Link Offset(ft)		0	0		50						
Crosswalk Width(ft)		16	16		16						
Two way Left Turn Lane											
Headway Factor	0.94	0.94	0.94	0.94	0.94	1.00					
Turning Speed (mph)	15			9	15	9					
Turn Type	Prot	NA	NA			Over					
Protected Phases	4	Free	2 3			4	2	3	5	7	8
Permitted Phases											
Detector Phase	4		2 3			4					
Switch Phase											
Minimum Initial (s)	10.0					10.0	10.0	7.0	7.0	7.0	10.0
Minimum Split (s)	24.0					24.0	24.0	13.0	13.0	13.0	24.0
Total Split (s)	25.0					25.0	74.0	15.0	74.0	15.0	25.0
Total Split (%)	21.9%					21.9%	65%	13%	65%	13%	22%
Maximum Green (s)	19.0					19.0	68.0	9.0	68.0	9.0	19.0
Yellow Time (s)	4.0					4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	2.0					2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0					0.0					
Total Lost Time (s)	6.0					6.0					
Lead/Lag	Lag					Lag		Lead		Lead	Lag
Lead-Lag Optimize?	Yes					Yes					Yes
Vehicle Extension (s)	3.0					3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None					None	C-Max	None	C-Max	None	None

Lane Group	EBL	EBT	WBT	WBR	SWL	SWR	Ø2	Ø3	Ø5	Ø7	Ø8
Walk Time (s)	7.0					7.0	7.0				7.0
Flash Dont Walk (s)	11.0					11.0	11.0				11.0
Pedestrian Calls (#/hr)	0					0	0				0
Act Effct Green (s)	15.5	114.0	86.5			15.5					
Actuated g/C Ratio	0.14	1.00	0.76			0.14					
v/c Ratio	0.33	0.42	0.40			0.33					
Control Delay	49.8	0.3	1.5			5.2					
Queue Delay	0.0	0.0	0.1			0.0					
Total Delay	49.8	0.3	1.6			5.2					
LOS	D	A	A			A					
Approach Delay		2.8	1.6		5.2						
Approach LOS		A	A		A						
Queue Length 50th (ft)	64	0	21			0					
Queue Length 95th (ft)	115	0	31			25					
Internal Link Dist (ft)		1549	443		266						
Turn Bay Length (ft)	200										
Base Capacity (vph)	310	3725	2719			396					
Starvation Cap Reductn	0	0	357			0					
Spillback Cap Reductn	0	0	0			0					
Storage Cap Reductn	0	0	0			0					
Reduced v/c Ratio	0.27	0.42	0.46			0.29					

Intersection Summary			
Area Type:	Other		
Cycle Length: 114			
Actuated Cycle Length: 114			
Offset: 0 (0%), Referenced to phase 2:EBWB and 5:NWSEL, Start of 1st Green, Master Intersection			
Natural Cycle: 75			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.77			
Intersection Signal Delay: 2.5		Intersection LOS: A	
Intersection Capacity Utilization 44.9%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 11: SR 62 & Red Bank Rd West Int.

Lane Group	EBT	EBR	WBL	WBT	NEL	NER	Ø2	Ø3	Ø4	Ø5	Ø7
Lane Configurations											
Traffic Volume (vph)	1483	0	119	997	0	194					
Future Volume (vph)	1483	0	119	997	0	194					
Ideal Flow (vphpl)	2000	2000	2000	2000	2000	2000					
Storage Length (ft)		0	100		0	0					
Storage Lanes		0	1		0	1					
Taper Length (ft)			100		25						
Lane Util. Factor	0.95	1.00	1.00	0.95	1.00	1.00					
Frt						0.865					
Flt Protected			0.950								
Satd. Flow (prot)	3725	0	1792	3585	0	1696					
Flt Permitted			0.950								
Satd. Flow (perm)	3725	0	1792	3585	0	1696					
Right Turn on Red		No				Yes					
Satd. Flow (RTOR)						49					
Link Speed (mph)	45			50	45						
Link Distance (ft)	548			820	408						
Travel Time (s)	8.3			11.2	6.2						
Peak Hour Factor	0.88	0.88	0.93	0.93	0.93	0.93					
Heavy Vehicles (%)	2%	2%	6%	6%	2%	2%					
Adj. Flow (vph)	1685	0	128	1072	0	209					
Shared Lane Traffic (%)											
Lane Group Flow (vph)	1685	0	128	1072	0	209					
Enter Blocked Intersection	No	No	No	No	No	No					
Lane Alignment	Left	Right	Left	Left	Left	Right					
Median Width(ft)	12			12	0						
Link Offset(ft)	0			0	50						
Crosswalk Width(ft)	16			16	16						
Two way Left Turn Lane											
Headway Factor	0.94	0.94	0.94	0.94	0.94	0.94					
Turning Speed (mph)		9	15		15	9					
Turn Type	NA		Prot	NA		Over					
Protected Phases	2 7		8	Free		8	2	3	4	5	7
Permitted Phases											
Detector Phase	2 7		8			8					
Switch Phase											
Minimum Initial (s)			10.0			10.0	10.0	7.0	10.0	7.0	7.0
Minimum Split (s)			24.0			24.0	24.0	13.0	24.0	13.0	13.0
Total Split (s)			25.0			25.0	74.0	15.0	25.0	74.0	15.0
Total Split (%)			21.9%			21.9%	65%	13%	22%	65%	13%
Maximum Green (s)			19.0			19.0	68.0	9.0	19.0	68.0	9.0
Yellow Time (s)			4.0			4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)			2.0			2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)			0.0			0.0					
Total Lost Time (s)			6.0			6.0					
Lead/Lag			Lag			Lag		Lead	Lag		Lead
Lead-Lag Optimize?			Yes			Yes			Yes		
Vehicle Extension (s)			3.0			3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode			None			None	C-Max	None	None	C-Max	None

Lane Group	EBT	EBR	WBL	WBT	NEL	NER	Ø2	Ø3	Ø4	Ø5	Ø7
Walk Time (s)			7.0			7.0	7.0		7.0		
Flash Dont Walk (s)			11.0			11.0	11.0		11.0		
Pedestrian Calls (#/hr)			0			0	0		0		
Act Effct Green (s)	86.5		15.5	114.0		15.5					
Actuated g/C Ratio	0.76		0.14	1.00		0.14					
v/c Ratio	0.60		0.52	0.30		0.77					
Control Delay	2.8		53.0	0.2		54.0					
Queue Delay	0.1		0.0	0.0		0.0					
Total Delay	2.9		53.0	0.2		54.0					
LOS	A		D	A		D					
Approach Delay	2.9			5.8	54.0						
Approach LOS	A			A	D						
Queue Length 50th (ft)	63		88	0		114					
Queue Length 95th (ft)	71		147	0		194					
Internal Link Dist (ft)	468			740	328						
Turn Bay Length (ft)			100								
Base Capacity (vph)	2825		298	3585		323					
Starvation Cap Reductn	210		0	0		0					
Spillback Cap Reductn	0		0	0		0					
Storage Cap Reductn	0		0	0		0					
Reduced v/c Ratio	0.64		0.43	0.30		0.65					

Intersection Summary			
Area Type:	Other		
Cycle Length: 114			
Actuated Cycle Length: 114			
Offset: 0 (0%), Referenced to phase 2:EBWB and 5:NWSEL, Start of 1st Green, Master Intersection			
Natural Cycle: 75			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.77			
Intersection Signal Delay: 7.5		Intersection LOS: A	
Intersection Capacity Utilization 60.4%		ICU Level of Service B	
Analysis Period (min) 15			

Splits and Phases: 12: Red Bank Rd East Int. & SR 62

Lane Group	EBT	WBT	WBR	NBL	NBT	NBR2	SBL2	SBT	SBR	NWL2
Lane Configurations										
Traffic Volume (vph)	1382	1213	41	31	20	193	62	18	13	162
Future Volume (vph)	1382	1213	41	31	20	193	62	18	13	162
Ideal Flow (vphpl)	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000
Storage Length (ft)			350	150					150	
Storage Lanes			1	1					1	
Taper Length (ft)				100						
Lane Util. Factor	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850			0.850			0.850	
Flt Protected				0.950			0.950			0.950
Satd. Flow (prot)	3725	3725	1667	1863	1961	1667	1863	1961	1667	1863
Flt Permitted				0.741			0.628			0.950
Satd. Flow (perm)	3725	3725	1667	1453	1961	1667	1231	1961	1667	1863
Right Turn on Red			Yes			Yes			Yes	
Satd. Flow (RTOR)			43			212			65	
Link Speed (mph)	45	50			40			40		
Link Distance (ft)	1420	548			584			515		
Travel Time (s)	21.5	7.5			10.0			8.8		
Peak Hour Factor	0.94	0.96	0.96	0.91	0.91	0.91	0.73	0.73	0.73	0.96
Adj. Flow (vph)	1470	1264	43	34	22	212	85	25	18	169
Shared Lane Traffic (%)										
Lane Group Flow (vph)	1470	1264	43	34	22	212	85	25	18	169
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left
Median Width(ft)	12	12			12			12		
Link Offset(ft)	0	0			0			0		
Crosswalk Width(ft)	16	16			16			16		
Two way Left Turn Lane										
Headway Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Turning Speed (mph)			9	15		9	15		9	15
Turn Type	NA	NA	pm+ov	pm+pt	NA	Free	pm+pt	NA	Perm	Prot
Protected Phases	2	2	7	3	8		7	4		5
Permitted Phases			2	8		Free	4		4	
Detector Phase	2	2	7	3	8		7	4	4	5
Switch Phase										
Minimum Initial (s)	10.0	10.0	7.0	7.0	10.0		7.0	10.0	10.0	7.0
Minimum Split (s)	24.0	24.0	13.0	13.0	24.0		13.0	24.0	24.0	13.0
Total Split (s)	100.0	100.0	15.0	15.0	35.0		15.0	35.0	35.0	100.0
Total Split (%)	66.7%	66.7%	10.0%	10.0%	23.3%		10.0%	23.3%	23.3%	66.7%
Maximum Green (s)	94.0	94.0	9.0	9.0	29.0		9.0	29.0	29.0	94.0
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0		2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0	6.0	6.0		6.0	6.0	6.0	6.0
Lead/Lag			Lead	Lead	Lag		Lead	Lag	Lag	
Lead-Lag Optimize?					Yes			Yes	Yes	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0	3.0
Recall Mode	C-Max	C-Max	None	None	None		None	None	None	C-Max
Walk Time (s)	7.0	7.0			7.0			7.0	7.0	

Lane Group	EBT	WBT	WBR	NBL	NBT	NBR2	SBL2	SBT	SBR	NWL2
Flash Dont Walk (s)	11.0	11.0			11.0			11.0	11.0	
Pedestrian Calls (#/hr)	0	0			0			0	0	
Act Effct Green (s)	103.5	103.5	118.5	27.3	19.5	150.0	31.3	25.9	25.9	103.5
Actuated g/C Ratio	0.69	0.69	0.79	0.18	0.13	1.00	0.21	0.17	0.17	0.69
v/c Ratio	0.57	0.49	0.03	0.12	0.09	0.13	0.29	0.07	0.05	0.13
Control Delay	13.6	17.5	0.8	43.9	55.1	0.2	47.7	53.5	0.3	15.5
Queue Delay	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	13.6	17.6	0.8	43.9	55.1	0.2	47.7	53.5	0.3	15.5
LOS	B	B	A	D	E	A	D	D	A	B
Approach Delay	13.6	17.0			10.2			42.2		
Approach LOS	B	B			B			D		
Queue Length 50th (ft)	354	398	0	27	19	0	68	22	0	177
Queue Length 95th (ft)	500	558	2	54	45	0	87	39	0	258
Internal Link Dist (ft)	1340	468			504			435		
Turn Bay Length (ft)			350	150		150	150		150	
Base Capacity (vph)	2570	2570	1326	300	379	1667	294	385	379	1285
Starvation Cap Reductn	0	212	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.57	0.54	0.03	0.11	0.06	0.13	0.29	0.06	0.05	0.13

Intersection Summary			
Area Type:	Other		
Cycle Length: 150			
Actuated Cycle Length: 150			
Offset: 89 (59%), Referenced to phase 2:EBWB and 5:NWL, Start of 1st Green			
Natural Cycle: 70			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.77			
Intersection Signal Delay: 15.9		Intersection LOS: B	
Intersection Capacity Utilization 68.1%		ICU Level of Service C	
Analysis Period (min) 15			

Splits and Phases: 1: Schutte Rd & SR 62

Lane Group	EBU	EBT	EBR	WBL	WBT	NEL	NER	Ø2	Ø3	Ø4	Ø5	Ø7
Lane Configurations												
Traffic Volume (vph)	12	1432	0	162	1242	0	193					
Future Volume (vph)	12	1432	0	162	1242	0	193					
Ideal Flow (vphpl)	2000	2000	2000	2000	2000	2000	2000					
Storage Length (ft)	250		0	100		0	0					
Storage Lanes	1		0	1		0	1					
Taper Length (ft)	25			100		25						
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00					
Frt							0.865					
Flt Protected	0.950			0.950								
Satd. Flow (prot)	1863	3725	0	1863	3725	0	1696					
Flt Permitted	0.950			0.950								
Satd. Flow (perm)	1863	3725	0	1863	3725	0	1696					
Right Turn on Red			No				Yes					
Satd. Flow (RTOR)							66					
Link Speed (mph)		45			50	45						
Link Distance (ft)		548			4430	408						
Travel Time (s)		8.3			60.4	6.2						
Peak Hour Factor	0.94	0.94	0.94	0.96	0.96	0.91	0.91					
Adj. Flow (vph)	13	1523	0	169	1294	0	212					
Shared Lane Traffic (%)												
Lane Group Flow (vph)	13	1523	0	169	1294	0	212					
Enter Blocked Intersection	No	No	No	No	No	No	No					
Lane Alignment	R NA	Left	Right	Left	Left	Left	Right					
Median Width(ft)		12			12	0						
Link Offset(ft)		0			0	50						
Crosswalk Width(ft)		16			16	16						
Two way Left Turn Lane												
Headway Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94					
Turning Speed (mph)	9		9	15		15	9					
Turn Type	Prot	NA		Prot	NA		Over					
Protected Phases	8	2 7		8	2 7		8	2	3	4	5	7
Permitted Phases												
Detector Phase	8	2 7		8	2 7		8					
Switch Phase												
Minimum Initial (s)	10.0			10.0			10.0	10.0	7.0	10.0	7.0	7.0
Minimum Split (s)	24.0			24.0			24.0	24.0	13.0	24.0	13.0	13.0
Total Split (s)	35.0			35.0			35.0	100.0	15.0	35.0	100.0	15.0
Total Split (%)	23.3%			23.3%			23.3%	67%	10%	23%	67%	10%
Maximum Green (s)	29.0			29.0			29.0	94.0	9.0	29.0	94.0	9.0
Yellow Time (s)	4.0			4.0			4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	2.0			2.0			2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0			0.0			0.0					
Total Lost Time (s)	6.0			6.0			6.0					
Lead/Lag	Lag			Lag			Lag		Lead	Lag		Lead
Lead-Lag Optimize?	Yes			Yes			Yes			Yes		
Vehicle Extension (s)	3.0			3.0			3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None			None			None	C-Max	None	None	C-Max	None
Walk Time (s)	7.0			7.0			7.0	7.0		7.0		

Lane Group	EBU	EBT	EBR	WBL	WBT	NEL	NER	Ø2	Ø3	Ø4	Ø5	Ø7
Flash Dont Walk (s)	11.0			11.0			11.0	11.0		11.0		
Pedestrian Calls (#/hr)	0			0			0	0		0		
Act Effct Green (s)	19.5	118.5		19.5	118.5		19.5					
Actuated g/C Ratio	0.13	0.79		0.13	0.79		0.13					
v/c Ratio	0.05	0.52		0.70	0.44		0.77					
Control Delay	72.8	1.9		65.0	11.4		60.2					
Queue Delay	0.0	0.0		0.0	0.0		0.0					
Total Delay	72.8	1.9		65.0	11.4		60.2					
LOS	E	A		E	B		E					
Approach Delay		2.5			17.6	60.2						
Approach LOS		A			B	E						
Queue Length 50th (ft)	13	39		144	330		142					
Queue Length 95th (ft)	m23	44		206	451		222					
Internal Link Dist (ft)		468			4350	328						
Turn Bay Length (ft)	250			100								
Base Capacity (vph)	360	2943		360	2943		381					
Starvation Cap Reductn	0	201		0	0		0					
Spillback Cap Reductn	0	0		0	88		0					
Storage Cap Reductn	0	0		0	0		0					
Reduced v/c Ratio	0.04	0.56		0.47	0.45		0.56					

Intersection Summary			
Area Type:	Other		
Cycle Length: 150			
Actuated Cycle Length: 150			
Offset: 89 (59%), Referenced to phase 2:EBWB and 5:NWL, Start of 1st Green			
Natural Cycle: 70			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.77			
Intersection Signal Delay: 13.2		Intersection LOS: B	
Intersection Capacity Utilization 59.0%		ICU Level of Service B	
Analysis Period (min) 15			

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

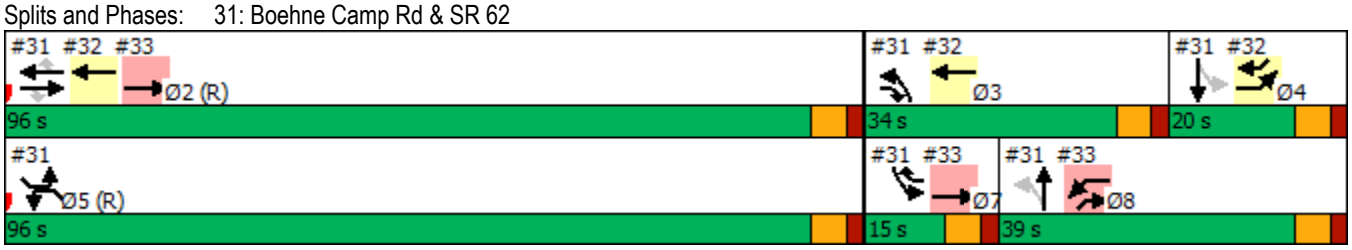
Splits and Phases: 4: Schutte Rd East Int. & SR 62

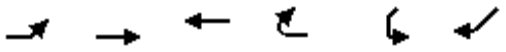
Lane Group	EBT	EBR2	WBT	WBR2	NBL2	NBT	NBR2	SBL2	SBT	SBR2	SEL2	NWL2
Lane Configurations												
Traffic Volume (vph)	1503	353	1182	85	277	71	62	47	58	39	51	55
Future Volume (vph)	1503	353	1182	85	277	71	62	47	58	39	51	55
Ideal Flow (vphpl)	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000
Storage Length (ft)												
Storage Lanes												
Taper Length (ft)												
Lane Util. Factor	0.95	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.850		0.850			0.850			0.850		
Flt Protected					0.950			0.950			0.950	0.950
Satd. Flow (prot)	3725	1667	3725	1667	1863	1961	1667	1863	1961	1667	1863	1863
Flt Permitted					0.466			0.708			0.950	0.950
Satd. Flow (perm)	3725	1667	3725	1667	914	1961	1667	1388	1961	1667	1863	1863
Right Turn on Red		Yes		Yes			Yes			Yes		
Satd. Flow (RTOR)		397		87			153			153		
Link Speed (mph)	45		50			40			40			
Link Distance (ft)	523		548			603			510			
Travel Time (s)	7.9		7.5			10.3			8.7			
Peak Hour Factor	0.89	0.89	0.98	0.98	0.95	0.95	0.95	0.86	0.86	0.86	0.89	0.98
Adj. Flow (vph)	1689	397	1206	87	292	75	65	55	67	45	57	56
Shared Lane Traffic (%)												
Lane Group Flow (vph)	1689	397	1206	87	292	75	65	55	67	45	57	56
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left
Median Width(ft)	12		12			12			12			
Link Offset(ft)	0		0			0			0			
Crosswalk Width(ft)	16		16			16			16			
Two way Left Turn Lane												
Headway Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Turning Speed (mph)		9		9	15		9	15		9	15	15
Turn Type	NA	pm+ov	NA	pm+ov	pm+pt	NA	Free	pm+pt	NA	Free	Prot	Prot
Protected Phases	2	3	2	7	3	8		7	4		5	5
Permitted Phases		2		2	8		Free	4		Free		
Detector Phase	2	3	2	7	3	8		7	4		5	5
Switch Phase												
Minimum Initial (s)	10.0	7.0	10.0	7.0	7.0	10.0		7.0	10.0		7.0	7.0
Minimum Split (s)	24.0	13.0	24.0	13.0	13.0	24.0		13.0	24.0		13.0	13.0
Total Split (s)	96.0	34.0	96.0	15.0	34.0	39.0		15.0	20.0		96.0	96.0
Total Split (%)	64.0%	22.7%	64.0%	10.0%	22.7%	26.0%		10.0%	13.3%		64.0%	64.0%
Maximum Green (s)	90.0	28.0	90.0	9.0	28.0	33.0		9.0	14.0		90.0	90.0
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0		4.0	4.0		4.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0		2.0	2.0		2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0	6.0	6.0	6.0		6.0	6.0		6.0	6.0
Lead/Lag		Lead		Lead	Lead	Lag		Lead	Lag			
Lead-Lag Optimize?						Yes			Yes			
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0		3.0	3.0
Recall Mode	C-Max	None	C-Max	None	None	None		None	None		C-Max	C-Max
Walk Time (s)	7.0		7.0			7.0			7.0			

Lane Group	EBT	EBR2	WBT	WBR2	NBL2	NBT	NBR2	SBL2	SBT	SBR2	SEL2	NWL2
Flash Dont Walk (s)	11.0		11.0			11.0			11.0			
Pedestrian Calls (#/hr)	0		0			0			0			
Act Effct Green (s)	92.8	126.7	92.8	107.8	45.2	30.2	150.0	20.3	11.3	150.0	92.8	92.8
Actuated g/C Ratio	0.62	0.84	0.62	0.72	0.30	0.20	1.00	0.14	0.08	1.00	0.62	0.62
v/c Ratio	0.73	0.27	0.52	0.07	0.65	0.19	0.04	0.25	0.45	0.03	0.05	0.05
Control Delay	20.5	0.5	8.6	0.3	50.6	50.6	0.0	42.4	76.0	0.0	6.9	24.8
Queue Delay	0.7	0.3	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	21.2	0.8	9.0	0.3	50.6	50.6	0.0	42.4	76.0	0.0	6.9	24.8
LOS	C	A	A	A	D	D	A	D	E	A	A	C
Approach Delay	17.3		8.4			43.0			44.5			
Approach LOS	B		A			D			D			
Queue Length 50th (ft)	388	0	141	1	239	62	0	39	64	0	0	59
Queue Length 95th (ft)	618	6	155	3	326	108	0	70	109	0	108	108
Internal Link Dist (ft)	443		468			523			430			
Turn Bay Length (ft)		350		350	300		150	150		150		
Base Capacity (vph)	2305	1470	2305	1222	452	431	1667	216	183	1667	1152	1152
Starvation Cap Reductn	275	551	502	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.83	0.43	0.67	0.07	0.65	0.17	0.04	0.25	0.37	0.03	0.05	0.05

Intersection Summary			
Area Type:	Other		
Cycle Length: 150			
Actuated Cycle Length: 150			
Offset: 103 (69%), Referenced to phase 2:EBWB and 5:NWSEL, Start of 1st Green			
Natural Cycle: 80			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.73			
Intersection Signal Delay: 18.3		Intersection LOS: B	
Intersection Capacity Utilization 77.4%		ICU Level of Service D	
Analysis Period (min) 15			

Splits and Phases: 31: Boehne Camp Rd & SR 62





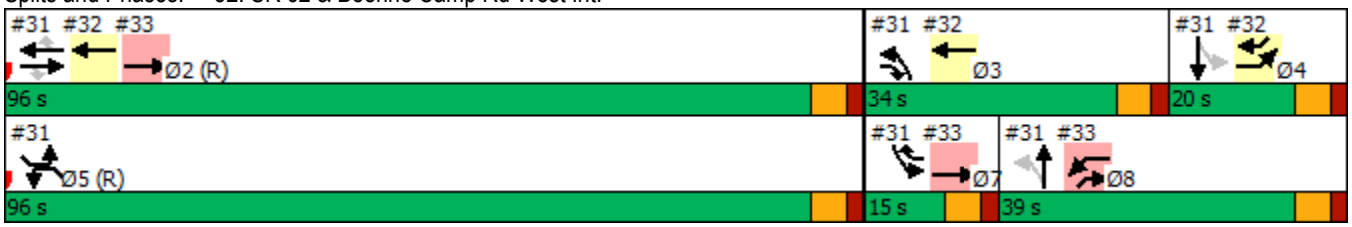
Lane Group	EBL	EBT	WBT	WBR	SWL	SWR	Ø2	Ø3	Ø5	Ø7	Ø8
Lane Configurations											
Traffic Volume (vph)	51	1856	1459	0	0	39					
Future Volume (vph)	51	1856	1459	0	0	39					
Ideal Flow (vphpl)	2000	2000	2000	2000	2000	1900					
Storage Length (ft)	200			0	0	0					
Storage Lanes	1			0	0	1					
Taper Length (ft)	100				25						
Lane Util. Factor	1.00	0.95	0.95	1.00	1.00	1.00					
Frt						0.865					
Flt Protected	0.950										
Satd. Flow (prot)	1863	3725	3725	0	0	1611					
Flt Permitted	0.950										
Satd. Flow (perm)	1863	3725	3725	0	0	1611					
Right Turn on Red				No		Yes					
Satd. Flow (RTOR)						100					
Link Speed (mph)		50	50		50						
Link Distance (ft)		4430	523		344						
Travel Time (s)		60.4	7.1		4.7						
Peak Hour Factor	0.89	0.89	0.98	0.98	0.86	0.86					
Adj. Flow (vph)	57	2085	1489	0	0	45					
Shared Lane Traffic (%)											
Lane Group Flow (vph)	57	2085	1489	0	0	45					
Enter Blocked Intersection	No	No	No	No	No	No					
Lane Alignment	Left	Left	Left	Right	Left	Right					
Median Width(ft)		12	12		0						
Link Offset(ft)		0	0		50						
Crosswalk Width(ft)		16	16		16						
Two way Left Turn Lane											
Headway Factor	0.94	0.94	0.94	0.94	0.94	1.00					
Turning Speed (mph)	15			9	15	9					
Turn Type	Prot	NA	NA			Over					
Protected Phases	4	Free	2 3			4	2	3	5	7	8
Permitted Phases											
Detector Phase	4		2 3			4					
Switch Phase											
Minimum Initial (s)	10.0					10.0	10.0	7.0	7.0	7.0	10.0
Minimum Split (s)	24.0					24.0	24.0	13.0	13.0	13.0	24.0
Total Split (s)	20.0					20.0	96.0	34.0	96.0	15.0	39.0
Total Split (%)	13.3%					13.3%	64%	23%	64%	10%	26%
Maximum Green (s)	14.0					14.0	90.0	28.0	90.0	9.0	33.0
Yellow Time (s)	4.0					4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	2.0					2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0					0.0					
Total Lost Time (s)	6.0					6.0					
Lead/Lag	Lag					Lag		Lead		Lead	Lag
Lead-Lag Optimize?	Yes					Yes					Yes
Vehicle Extension (s)	3.0					3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None					None	C-Max	None	C-Max	None	None
Walk Time (s)	7.0					7.0	7.0				7.0

Lane Group	EBL	EBT	WBT	WBR	SWL	SWR	Ø2	Ø3	Ø5	Ø7	Ø8
Flash Dont Walk (s)	11.0					11.0	11.0				11.0
Pedestrian Calls (#/hr)	0					0	0				0
Act Effct Green (s)	11.3	150.0	126.7			11.3					
Actuated g/C Ratio	0.08	1.00	0.84			0.08					
v/c Ratio	0.41	0.56	0.47			0.21					
Control Delay	69.3	1.1	1.1			2.2					
Queue Delay	0.0	0.1	0.1			0.0					
Total Delay	69.3	1.2	1.2			2.2					
LOS	E	A	A			A					
Approach Delay		3.0	1.2		2.2						
Approach LOS		A	A		A						
Queue Length 50th (ft)	55	27	18			0					
Queue Length 95th (ft)	m101	0	56			0					
Internal Link Dist (ft)		4350	443		264						
Turn Bay Length (ft)	200										
Base Capacity (vph)	173	3725	3149			241					
Starvation Cap Reductn	0	0	441			0					
Spillback Cap Reductn	0	346	0			0					
Storage Cap Reductn	0	0	0			0					
Reduced v/c Ratio	0.33	0.62	0.55			0.19					

Intersection Summary			
Area Type:	Other		
Cycle Length: 150			
Actuated Cycle Length: 150			
Offset: 103 (69%), Referenced to phase 2:EBWB and 5:NWSEL, Start of 1st Green			
Natural Cycle: 80			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.73			
Intersection Signal Delay: 2.3		Intersection LOS: A	
Intersection Capacity Utilization 56.6%		ICU Level of Service B	
Analysis Period (min) 15			

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

Splits and Phases: 32: SR 62 & Boehne Camp Rd West Int.



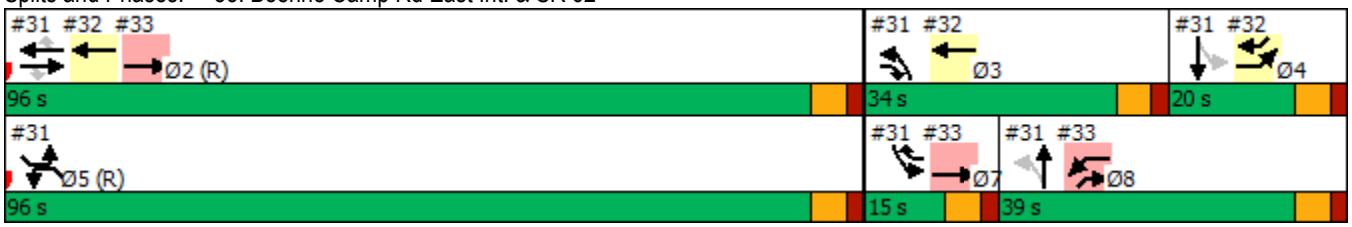
Lane Group	EBT	EBR	WBL	WBT	NEL	NER	Ø2	Ø3	Ø4	Ø5	Ø7
Lane Configurations											
Traffic Volume (vph)	1550	0	55	1267	0	62					
Future Volume (vph)	1550	0	55	1267	0	62					
Ideal Flow (vphpl)	2000	2000	2000	2000	2000	2000					
Storage Length (ft)		0	100		0	0					
Storage Lanes		0	1		0	1					
Taper Length (ft)			100		25						
Lane Util. Factor	0.95	1.00	1.00	0.95	1.00	1.00					
Frt						0.865					
Flt Protected			0.950								
Satd. Flow (prot)	3725	0	1863	3725	0	1696					
Flt Permitted			0.950								
Satd. Flow (perm)	3725	0	1863	3725	0	1696					
Right Turn on Red		No				Yes					
Satd. Flow (RTOR)						38					
Link Speed (mph)	45			50	45						
Link Distance (ft)	548			1629	408						
Travel Time (s)	8.3			22.2	6.2						
Peak Hour Factor	0.89	0.89	0.98	0.98	0.95	0.95					
Adj. Flow (vph)	1742	0	56	1293	0	65					
Shared Lane Traffic (%)											
Lane Group Flow (vph)	1742	0	56	1293	0	65					
Enter Blocked Intersection	No	No	No	No	No	No					
Lane Alignment	Left	Right	Left	Left	Left	Right					
Median Width(ft)	12			12	0						
Link Offset(ft)	0			0	50						
Crosswalk Width(ft)	16			16	16						
Two way Left Turn Lane											
Headway Factor	0.94	0.94	0.94	0.94	0.94	0.94					
Turning Speed (mph)		9	15		15	9					
Turn Type	NA		Prot	NA		Over					
Protected Phases	2 7		8	Free		8	2	3	4	5	7
Permitted Phases											
Detector Phase	2 7		8			8					
Switch Phase											
Minimum Initial (s)			10.0			10.0	10.0	7.0	10.0	7.0	7.0
Minimum Split (s)			24.0			24.0	24.0	13.0	24.0	13.0	13.0
Total Split (s)			39.0			39.0	96.0	34.0	20.0	96.0	15.0
Total Split (%)			26.0%			26.0%	64%	23%	13%	64%	10%
Maximum Green (s)			33.0			33.0	90.0	28.0	14.0	90.0	9.0
Yellow Time (s)			4.0			4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)			2.0			2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)			0.0			0.0					
Total Lost Time (s)			6.0			6.0					
Lead/Lag			Lag			Lag		Lead	Lag		Lead
Lead-Lag Optimize?			Yes			Yes			Yes		
Vehicle Extension (s)			3.0			3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode			None			None	C-Max	None	None	C-Max	None
Walk Time (s)			7.0			7.0	7.0		7.0		

Lane Group	EBT	EBR	WBL	WBT	NEL	NER	Ø2	Ø3	Ø4	Ø5	Ø7
Flash Dont Walk (s)			11.0			11.0	11.0		11.0		
Pedestrian Calls (#/hr)			0			0	0		0		
Act Effct Green (s)	107.8		30.2	150.0		30.2					
Actuated g/C Ratio	0.72		0.20	1.00		0.20					
v/c Ratio	0.65		0.15	0.35		0.18					
Control Delay	1.7		58.3	0.2		24.7					
Queue Delay	0.1		0.0	0.0		0.0					
Total Delay	1.8		58.3	0.2		24.7					
LOS	A		E	A		C					
Approach Delay	1.8			2.6	24.7						
Approach LOS	A			A	C						
Queue Length 50th (ft)	24		52	0		22					
Queue Length 95th (ft)	27		m92	0		64					
Internal Link Dist (ft)	468			1549	328						
Turn Bay Length (ft)			100								
Base Capacity (vph)	2677		409	3725		402					
Starvation Cap Reductn	165		0	0		0					
Spillback Cap Reductn	0		0	0		0					
Storage Cap Reductn	0		0	0		0					
Reduced v/c Ratio	0.69		0.14	0.35		0.16					

Intersection Summary			
Area Type:	Other		
Cycle Length: 150			
Actuated Cycle Length: 150			
Offset: 103 (69%), Referenced to phase 2:EBWB and 5:NWSEL, Start of 1st Green			
Natural Cycle: 80			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.73			
Intersection Signal Delay: 2.6		Intersection LOS: A	
Intersection Capacity Utilization 59.0%		ICU Level of Service B	
Analysis Period (min) 15			

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

Splits and Phases: 33: Boehne Camp Rd East Int. & SR 62

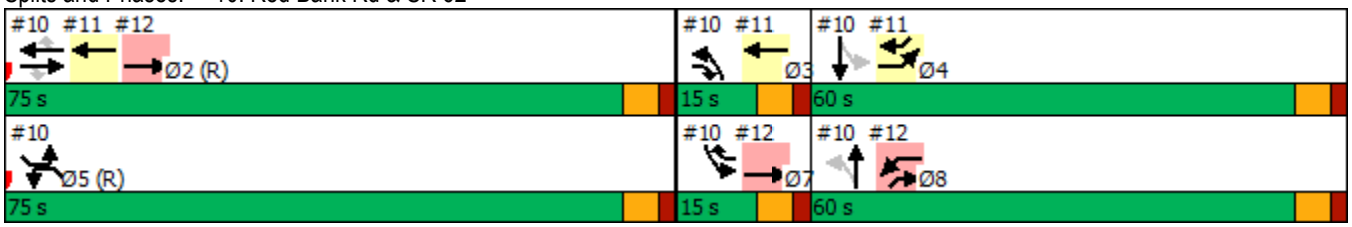


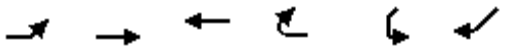
Lane Group	EBT	EBR2	WBT	WBR2	NBL2	NBT	NBR2	SBL2	SBT	SBR2	SEL2	NWL2
Lane Configurations												
Traffic Volume (vph)	1210	90	996	128	175	291	411	179	399	219	117	408
Future Volume (vph)	1210	90	996	128	175	291	411	179	399	219	117	408
Ideal Flow (vphpl)	2000	1900	2000	2000	2000	2000	2000	2000	2000	2000	2000	1900
Storage Length (ft)												
Storage Lanes												
Taper Length (ft)												
Lane Util. Factor	0.95	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00
Frt		0.850		0.850			0.850			0.850		
Flt Protected					0.950			0.950			0.950	0.950
Satd. Flow (prot)	3689	1568	3725	1667	1863	3725	1667	1863	3725	1667	1845	1770
Flt Permitted					0.406			0.499			0.950	0.950
Satd. Flow (perm)	3689	1568	3725	1667	796	3725	1667	978	3725	1667	1845	1770
Right Turn on Red		Yes		Yes			Yes			Yes		
Satd. Flow (RTOR)		85		139			457			235		
Link Speed (mph)	45		50			40			40			
Link Distance (ft)	523		548			544			471			
Travel Time (s)	7.9		7.5			9.3			8.0			
Peak Hour Factor	0.90	0.90	0.92	0.92	0.90	0.90	0.90	0.93	0.93	0.93	0.90	0.92
Heavy Vehicles (%)	3%	3%	2%	2%	2%	2%	2%	2%	2%	2%	3%	2%
Adj. Flow (vph)	1344	100	1083	139	194	323	457	192	429	235	130	443
Shared Lane Traffic (%)												
Lane Group Flow (vph)	1344	100	1083	139	194	323	457	192	429	235	130	443
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left
Median Width(ft)	12		12			12			12			
Link Offset(ft)	0		0			0			0			
Crosswalk Width(ft)	16		16			16			16			
Two way Left Turn Lane												
Headway Factor	0.94	1.00	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	1.00
Turning Speed (mph)		9		9	15		9	15		9	15	15
Turn Type	NA	pm+ov	NA	pm+ov	pm+pt	NA	Free	pm+pt	NA	Free	Prot	Prot
Protected Phases	2	3	2	7	3	8		7	4		5	5
Permitted Phases		2		2	8		Free	4		Free		
Detector Phase	2	3	2	7	3	8		7	4		5	5
Switch Phase												
Minimum Initial (s)	10.0	7.0	10.0	7.0	7.0	10.0		7.0	10.0		7.0	7.0
Minimum Split (s)	24.0	13.0	24.0	13.0	13.0	24.0		13.0	24.0		13.0	13.0
Total Split (s)	75.0	15.0	75.0	15.0	15.0	60.0		15.0	60.0		75.0	75.0
Total Split (%)	50.0%	10.0%	50.0%	10.0%	10.0%	40.0%		10.0%	40.0%		50.0%	50.0%
Maximum Green (s)	69.0	9.0	69.0	9.0	9.0	54.0		9.0	54.0		69.0	69.0
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0		4.0	4.0		4.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0		2.0	2.0		2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0	6.0	6.0	6.0		6.0	6.0		6.0	6.0
Lead/Lag		Lead		Lead	Lead	Lag		Lead	Lag			
Lead-Lag Optimize?						Yes			Yes			
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0		3.0	3.0
Recall Mode	C-Max	None	C-Max	None	None	None		None	None		C-Max	C-Max

Lane Group	EBT	EBR2	WBT	WBR2	NBL2	NBT	NBR2	SBL2	SBT	SBR2	SEL2	NWL2
Walk Time (s)	7.0		7.0			7.0			7.0			
Flash Dont Walk (s)	11.0		11.0			11.0			11.0			
Pedestrian Calls (#/hr)	0		0			0			0			
Act Effct Green (s)	76.6	91.6	76.6	91.6	55.4	46.4	150.0	55.4	46.4	150.0	76.6	76.6
Actuated g/C Ratio	0.51	0.61	0.51	0.61	0.37	0.31	1.00	0.37	0.31	1.00	0.51	0.51
v/c Ratio	0.71	0.10	0.57	0.13	0.54	0.28	0.27	0.46	0.37	0.14	0.14	0.49
Control Delay	33.9	5.5	27.9	2.5	35.4	38.8	0.4	33.0	40.5	0.2	42.3	43.9
Queue Delay	0.9	0.0	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.8
Total Delay	34.8	5.5	28.4	2.5	35.4	38.8	0.4	33.0	40.5	0.2	42.3	48.7
LOS	C	A	C	A	D	D	A	C	D	A	D	D
Approach Delay	32.8		25.5			20.1			27.7			
Approach LOS	C		C			C			C			
Queue Length 50th (ft)	367	3	384	0	122	124	0	121	170	0	135	462
Queue Length 95th (ft)	495	40	493	31	168	156	0	167	205	0	209	576
Internal Link Dist (ft)	443		468			464			391			
Turn Bay Length (ft)		250		350	350		350	150		150		
Base Capacity (vph)	1883	990	1901	1071	358	1341	1667	414	1341	1667	941	903
Starvation Cap Reductn	265	0	396	0	0	0	0	0	0	0	0	381
Spillback Cap Reductn	3	0	8	0	0	0	45	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.83	0.10	0.72	0.13	0.54	0.24	0.28	0.46	0.32	0.14	0.14	0.85

Intersection Summary			
Area Type:	Other		
Cycle Length: 150			
Actuated Cycle Length: 150			
Offset: 103 (69%), Referenced to phase 2:EBWB and 5:NWSEL, Start of 1st Green			
Natural Cycle: 80			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.84			
Intersection Signal Delay: 29.4		Intersection LOS: C	
Intersection Capacity Utilization 91.0%		ICU Level of Service E	
Analysis Period (min) 15			

Splits and Phases: 10: Red Bank Rd & SR 62



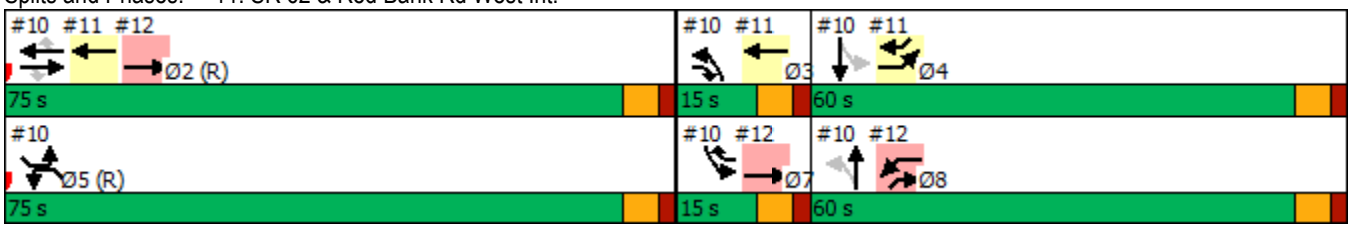


Lane Group	EBL	EBT	WBT	WBR	SWL	SWR	Ø2	Ø3	Ø5	Ø7	Ø8
Lane Configurations											
Traffic Volume (vph)	117	1300	1171	0	0	219					
Future Volume (vph)	117	1300	1171	0	0	219					
Ideal Flow (vphpl)	2000	2000	2000	2000	2000	1900					
Storage Length (ft)	200			0	0	0					
Storage Lanes	1			0	0	1					
Taper Length (ft)	100				25						
Lane Util. Factor	1.00	0.95	0.95	1.00	1.00	1.00					
Frt						0.865					
Flt Protected	0.950										
Satd. Flow (prot)	1845	3689	3725	0	0	1611					
Flt Permitted	0.950										
Satd. Flow (perm)	1845	3689	3725	0	0	1611					
Right Turn on Red				No		Yes					
Satd. Flow (RTOR)						52					
Link Speed (mph)		50	50		50						
Link Distance (ft)		1629	523		346						
Travel Time (s)		22.2	7.1		4.7						
Peak Hour Factor	0.90	0.90	0.92	0.92	0.93	0.93					
Heavy Vehicles (%)	3%	3%	2%	2%	2%	2%					
Adj. Flow (vph)	130	1444	1273	0	0	235					
Shared Lane Traffic (%)											
Lane Group Flow (vph)	130	1444	1273	0	0	235					
Enter Blocked Intersection	No	No	No	No	No	No					
Lane Alignment	Left	Left	Left	Right	Left	Right					
Median Width(ft)		12	12		0						
Link Offset(ft)		0	0		50						
Crosswalk Width(ft)		16	16		16						
Two way Left Turn Lane											
Headway Factor	0.94	0.94	0.94	0.94	0.94	1.00					
Turning Speed (mph)	15			9	15	9					
Turn Type	Prot	NA	NA			Over					
Protected Phases	4	Free	2 3			4	2	3	5	7	8
Permitted Phases											
Detector Phase	4		2 3			4					
Switch Phase											
Minimum Initial (s)	10.0					10.0	10.0	7.0	7.0	7.0	10.0
Minimum Split (s)	24.0					24.0	24.0	13.0	13.0	13.0	24.0
Total Split (s)	60.0					60.0	75.0	15.0	75.0	15.0	60.0
Total Split (%)	40.0%					40.0%	50%	10%	50%	10%	40%
Maximum Green (s)	54.0					54.0	69.0	9.0	69.0	9.0	54.0
Yellow Time (s)	4.0					4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	2.0					2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0					0.0					
Total Lost Time (s)	6.0					6.0					
Lead/Lag	Lag					Lag		Lead		Lead	Lag
Lead-Lag Optimize?	Yes					Yes					Yes
Vehicle Extension (s)	3.0					3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None					None	C-Max	None	C-Max	None	None

Lane Group	EBL	EBT	WBT	WBR	SWL	SWR	Ø2	Ø3	Ø5	Ø7	Ø8
Walk Time (s)	7.0					7.0	7.0				7.0
Flash Dont Walk (s)	11.0					11.0	11.0				11.0
Pedestrian Calls (#/hr)	0					0	0				0
Act Effct Green (s)	46.4	150.0	91.6			46.4					
Actuated g/C Ratio	0.31	1.00	0.61			0.31					
v/c Ratio	0.23	0.39	0.56			0.44					
Control Delay	30.4	0.2	7.0			33.2					
Queue Delay	0.0	0.0	0.1			0.0					
Total Delay	30.4	0.3	7.1			33.2					
LOS	C	A	A			C					
Approach Delay		2.8	7.1		33.2						
Approach LOS		A	A		C						
Queue Length 50th (ft)	104	0	93			140					
Queue Length 95th (ft)	m153	0	107			209					
Internal Link Dist (ft)		1549	443		266						
Turn Bay Length (ft)	200										
Base Capacity (vph)	664	3689	2274			613					
Starvation Cap Reductn	0	0	182			0					
Spillback Cap Reductn	0	522	0			0					
Storage Cap Reductn	0	0	0			0					
Reduced v/c Ratio	0.20	0.46	0.61			0.38					

Intersection Summary			
Area Type:	Other		
Cycle Length: 150			
Actuated Cycle Length: 150			
Offset: 103 (69%), Referenced to phase 2:EBWB and 5:NWSEL, Start of 1st Green			
Natural Cycle: 80			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.84			
Intersection Signal Delay: 6.9		Intersection LOS: A	
Intersection Capacity Utilization 54.3%		ICU Level of Service A	
Analysis Period (min) 15			
m Volume for 95th percentile queue is metered by upstream signal.			

Splits and Phases: 11: SR 62 & Red Bank Rd West Int.

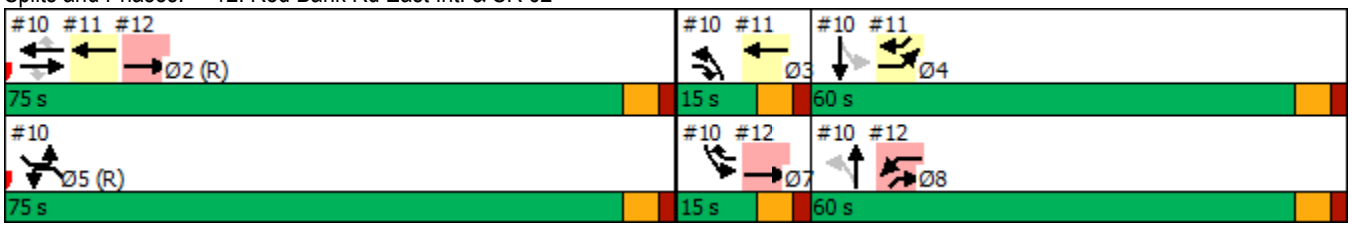


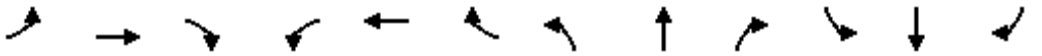
Lane Group	EBT	EBR	WBL	WBT	NEL	NER	Ø2	Ø3	Ø4	Ø5	Ø7
Lane Configurations											
Traffic Volume (vph)	1389	0	408	1124	0	411					
Future Volume (vph)	1389	0	408	1124	0	411					
Ideal Flow (vphpl)	2000	2000	2000	2000	2000	2000					
Storage Length (ft)		0	100		0	0					
Storage Lanes		0	1		0	1					
Taper Length (ft)			100		25						
Lane Util. Factor	0.95	1.00	1.00	0.95	1.00	1.00					
Frt						0.865					
Flt Protected			0.950								
Satd. Flow (prot)	3689	0	1863	3725	0	1696					
Flt Permitted			0.950								
Satd. Flow (perm)	3689	0	1863	3725	0	1696					
Right Turn on Red		No				Yes					
Satd. Flow (RTOR)						26					
Link Speed (mph)	45			50	45						
Link Distance (ft)	548			820	408						
Travel Time (s)	8.3			11.2	6.2						
Peak Hour Factor	0.90	0.90	0.92	0.92	0.90	0.90					
Heavy Vehicles (%)	3%	3%	2%	2%	2%	2%					
Adj. Flow (vph)	1543	0	443	1222	0	457					
Shared Lane Traffic (%)											
Lane Group Flow (vph)	1543	0	443	1222	0	457					
Enter Blocked Intersection	No	No	No	No	No	No					
Lane Alignment	Left	Right	Left	Left	Left	Right					
Median Width(ft)	12			12	0						
Link Offset(ft)	0			0	50						
Crosswalk Width(ft)	16			16	16						
Two way Left Turn Lane											
Headway Factor	0.94	0.94	0.94	0.94	0.94	0.94					
Turning Speed (mph)		9	15		15	9					
Turn Type	NA		Prot	NA		Over					
Protected Phases	2 7		8	Free		8	2	3	4	5	7
Permitted Phases											
Detector Phase	2 7		8			8					
Switch Phase											
Minimum Initial (s)			10.0			10.0	10.0	7.0	10.0	7.0	7.0
Minimum Split (s)			24.0			24.0	24.0	13.0	24.0	13.0	13.0
Total Split (s)			60.0			60.0	75.0	15.0	60.0	75.0	15.0
Total Split (%)			40.0%			40.0%	50%	10%	40%	50%	10%
Maximum Green (s)			54.0			54.0	69.0	9.0	54.0	69.0	9.0
Yellow Time (s)			4.0			4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)			2.0			2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)			0.0			0.0					
Total Lost Time (s)			6.0			6.0					
Lead/Lag			Lag			Lag		Lead	Lag		Lead
Lead-Lag Optimize?			Yes			Yes			Yes		
Vehicle Extension (s)			3.0			3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode			None			None	C-Max	None	None	C-Max	None

Lane Group	EBT	EBR	WBL	WBT	NEL	NER	Ø2	Ø3	Ø4	Ø5	Ø7
Walk Time (s)			7.0			7.0	7.0		7.0		
Flash Dont Walk (s)			11.0			11.0	11.0		11.0		
Pedestrian Calls (#/hr)			0			0	0		0		
Act Effct Green (s)	91.6		46.4	150.0		46.4					
Actuated g/C Ratio	0.61		0.31	1.00		0.31					
v/c Ratio	0.69		0.77	0.33		0.84					
Control Delay	6.9		55.8	0.2		59.3					
Queue Delay	0.2		0.8	0.0		0.8					
Total Delay	7.1		56.6	0.2		60.1					
LOS	A		E	A		E					
Approach Delay	7.1			15.2	60.1						
Approach LOS	A			B	E						
Queue Length 50th (ft)	102		388	0		392					
Queue Length 95th (ft)	113		491	0		505					
Internal Link Dist (ft)	468			740	328						
Turn Bay Length (ft)			100								
Base Capacity (vph)	2252		670	3725		627					
Starvation Cap Reductn	159		0	0		38					
Spillback Cap Reductn	0		63	126		0					
Storage Cap Reductn	0		0	0		0					
Reduced v/c Ratio	0.74		0.73	0.34		0.78					

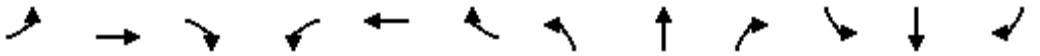
Intersection Summary			
Area Type:	Other		
Cycle Length: 150			
Actuated Cycle Length: 150			
Offset: 103 (69%), Referenced to phase 2:EBWB and 5:NWSEL, Start of 1st Green			
Natural Cycle: 80			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.84			
Intersection Signal Delay: 17.4		Intersection LOS: B	
Intersection Capacity Utilization 70.7%		ICU Level of Service C	
Analysis Period (min) 15			

Splits and Phases: 12: Red Bank Rd East Int. & SR 62





Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	1207	57	0	1116	41	0	33	82	0	17	175
Future Volume (vph)	0	1207	57	0	1116	41	0	33	82	0	17	175
Ideal Flow (vphpl)	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000
Storage Length (ft)	0		250	0		350	150		150	150		150
Storage Lanes	0		0	0		1	0		1	0		0
Taper Length (ft)	25			25			100			100		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.993				0.850			0.850		0.877	
Flt Protected												
Satd. Flow (prot)	0	3663	0	0	3585	1604	0	1923	1635	0	1703	0
Flt Permitted												
Satd. Flow (perm)	0	3663	0	0	3585	1604	0	1923	1635	0	1703	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		8				49			56		68	
Link Speed (mph)		45			50			40			40	
Link Distance (ft)		641			548			584			515	
Travel Time (s)		9.7			7.5			10.0			8.8	
Peak Hour Factor	0.85	0.85	0.85	0.84	0.84	0.84	0.76	0.76	0.76	0.73	0.73	0.73
Heavy Vehicles (%)	3%	3%	3%	6%	6%	6%	4%	4%	4%	3%	3%	3%
Adj. Flow (vph)	0	1420	67	0	1329	49	0	43	108	0	23	240
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	1487	0	0	1329	49	0	43	108	0	263	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24			24			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors		2			2	1		2	1		2	
Detector Template		Thru			Thru	Right		Thru	Right		Thru	
Leading Detector (ft)		100			100	20		100	20		100	
Trailing Detector (ft)		0			0	0		0	0		0	
Detector 1 Position(ft)		0			0	0		0	0		0	
Detector 1 Size(ft)		6			6	20		6	20		6	
Detector 1 Type		Cl+Ex			Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)		0.0			0.0	0.0		0.0	0.0		0.0	
Detector 1 Queue (s)		0.0			0.0	0.0		0.0	0.0		0.0	
Detector 1 Delay (s)		0.0			0.0	0.0		0.0	0.0		0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type		NA			NA	Perm		NA	Perm		NA	
Protected Phases		2			6			8			4	



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases						6			8			
Detector Phase		2			6	6		8	8		4	
Switch Phase												
Minimum Initial (s)		10.0			10.0	10.0		10.0	10.0		10.0	
Minimum Split (s)		24.0			24.0	24.0		24.0	24.0		24.0	
Total Split (s)		79.0			79.0	79.0		35.0	35.0		35.0	
Total Split (%)		69.3%			69.3%	69.3%		30.7%	30.7%		30.7%	
Maximum Green (s)		73.0			73.0	73.0		29.0	29.0		29.0	
Yellow Time (s)		4.0			4.0	4.0		4.0	4.0		4.0	
All-Red Time (s)		2.0			2.0	2.0		2.0	2.0		2.0	
Lost Time Adjust (s)		0.0			0.0	0.0		0.0	0.0		0.0	
Total Lost Time (s)		6.0			6.0	6.0		6.0	6.0		6.0	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)		3.0			3.0	3.0		3.0	3.0		3.0	
Recall Mode		C-Max			None	None		None	None		None	
Walk Time (s)		7.0			7.0	7.0		7.0	7.0		7.0	
Flash Dont Walk (s)		11.0			11.0	11.0		11.0	11.0		11.0	
Pedestrian Calls (#/hr)		0			0	0		0	0		0	
Act Effct Green (s)		82.8			82.8	82.8		19.2	19.2		19.2	
Actuated g/C Ratio		0.73			0.73	0.73		0.17	0.17		0.17	
v/c Ratio		0.56			0.51	0.04		0.13	0.34		0.77	
Control Delay		6.9			4.7	1.0		38.3	22.7		47.5	
Queue Delay		0.0			0.0	0.0		0.0	0.0		0.0	
Total Delay		6.9			4.7	1.0		38.3	22.7		47.5	
LOS		A			A	A		D	C		D	
Approach Delay		6.9			4.6			27.2			47.5	
Approach LOS		A			A			C			D	
Queue Length 50th (ft)		148			94	1		27	33		139	
Queue Length 95th (ft)		161			93	1		46	59		155	
Internal Link Dist (ft)		561			468			504			435	
Turn Bay Length (ft)						350			150			
Base Capacity (vph)		2664			2605	1179		489	457		483	
Starvation Cap Reductn		115			79	0		0	0		0	
Spillback Cap Reductn		0			0	0		0	0		0	
Storage Cap Reductn		0			0	0		0	0		0	
Reduced v/c Ratio		0.58			0.53	0.04		0.09	0.24		0.54	

Intersection Summary			
Area Type:	Other		
Cycle Length: 114			
Actuated Cycle Length: 114			
Offset: 0 (0%), Referenced to phase 2:EBT, Start of 1st Green			
Natural Cycle: 60			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.77			
Intersection Signal Delay: 10.1		Intersection LOS: B	
Intersection Capacity Utilization 54.5%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 1: Schutte Rd & SR 62

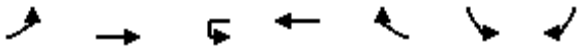
Lane Group	EBU	EBT	EBR	WBL	WBT	NBL	NBR	Ø2	Ø4
Lane Configurations									
Traffic Volume (vph)	27	1262	0	0	1130	0	0		
Future Volume (vph)	27	1262	0	0	1130	0	0		
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900		
Storage Length (ft)	250		0	0		0	0		
Storage Lanes	1		0	0		0	0		
Taper Length (ft)	25			100		75			
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00		
Frt									
Flt Protected	0.950								
Satd. Flow (prot)	1770	3539	0	0	3539	0	0		
Flt Permitted	0.950								
Satd. Flow (perm)	1770	3539	0	0	3539	0	0		
Right Turn on Red			Yes				Yes		
Satd. Flow (RTOR)									
Link Speed (mph)		45			50	30			
Link Distance (ft)		548			4430	178			
Travel Time (s)		8.3			60.4	4.0			
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95		
Adj. Flow (vph)	28	1328	0	0	1189	0	0		
Shared Lane Traffic (%)									
Lane Group Flow (vph)	28	1328	0	0	1189	0	0		
Enter Blocked Intersection	No	No	No	No	No	No	No		
Lane Alignment	R NA	Left	Right	Left	Left	Left	Right		
Median Width(ft)		12			12	0			
Link Offset(ft)		0			0	0			
Crosswalk Width(ft)		16			16	16			
Two way Left Turn Lane									
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00		
Turning Speed (mph)	9		9	15		15	9		
Number of Detectors	1	2			2				
Detector Template	Left	Thru			Thru				
Leading Detector (ft)	20	100			100				
Trailing Detector (ft)	0	0			0				
Detector 1 Position(ft)	0	0			0				
Detector 1 Size(ft)	20	6			6				
Detector 1 Type	Cl+Ex	Cl+Ex			Cl+Ex				
Detector 1 Channel									
Detector 1 Extend (s)	0.0	0.0			0.0				
Detector 1 Queue (s)	0.0	0.0			0.0				
Detector 1 Delay (s)	0.0	0.0			0.0				
Detector 2 Position(ft)		94			94				
Detector 2 Size(ft)		6			6				
Detector 2 Type		Cl+Ex			Cl+Ex				
Detector 2 Channel									
Detector 2 Extend (s)		0.0			0.0				
Turn Type	Prot	NA			NA				
Protected Phases	8	Free			6			2	4
Permitted Phases									

Lane Group	EBU	EBT	EBR	WBL	WBT	NBL	NBR	Ø2	Ø4
Detector Phase	8				6				
Switch Phase									
Minimum Initial (s)	10.0				10.0			10.0	10.0
Minimum Split (s)	24.0				24.0			24.0	24.0
Total Split (s)	35.0				79.0			79.0	35.0
Total Split (%)	30.7%				69.3%			69%	31%
Maximum Green (s)	29.0				73.0			73.0	29.0
Yellow Time (s)	4.0				4.0			4.0	4.0
All-Red Time (s)	2.0				2.0			2.0	2.0
Lost Time Adjust (s)	0.0				0.0				
Total Lost Time (s)	6.0				6.0				
Lead/Lag									
Lead-Lag Optimize?									
Vehicle Extension (s)	3.0				3.0			3.0	3.0
Recall Mode	None				None			C-Max	None
Walk Time (s)	7.0				7.0			7.0	7.0
Flash Dont Walk (s)	11.0				11.0			11.0	11.0
Pedestrian Calls (#/hr)	0				0			0	0
Act Effct Green (s)	19.2	114.0			82.8				
Actuated g/C Ratio	0.17	1.00			0.73				
v/c Ratio	0.09	0.38			0.46				
Control Delay	46.7	0.3			6.5				
Queue Delay	0.0	0.0			0.0				
Total Delay	46.7	0.3			6.5				
LOS	D	A			A				
Approach Delay		1.2			6.5				
Approach LOS		A			A				
Queue Length 50th (ft)	20	0			132				
Queue Length 95th (ft)	m37	0			311				
Internal Link Dist (ft)		468			4350	98			
Turn Bay Length (ft)	250								
Base Capacity (vph)	450	3539			2571				
Starvation Cap Reductn	0	0			0				
Spillback Cap Reductn	0	0			0				
Storage Cap Reductn	0	0			0				
Reduced v/c Ratio	0.06	0.38			0.46				

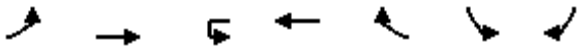
Intersection Summary			
Area Type:	Other		
Cycle Length: 114			
Actuated Cycle Length: 114			
Offset: 0 (0%), Referenced to phase 2:EBT, Start of 1st Green			
Natural Cycle: 60			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.77			
Intersection Signal Delay: 3.7		Intersection LOS: A	
Intersection Capacity Utilization 42.0%		ICU Level of Service A	
Analysis Period (min) 15			

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

Splits and Phases: 4: Schutte East MUT & SR 62



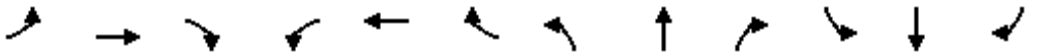
Lane Group	EBL	EBT	WBU	WBT	WBR	SBL	SBR	Ø6	Ø8
Lane Configurations		↑↑	⇈	↑↑					
Traffic Volume (vph)	0	1062	202	1089	0	0	0		
Future Volume (vph)	0	1062	202	1089	0	0	0		
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900		
Storage Length (ft)	0		250		0	0	0		
Storage Lanes	0		2		0	0	0		
Taper Length (ft)	75		75			75			
Lane Util. Factor	1.00	0.95	0.97	0.95	1.00	1.00	1.00		
Frt									
Flt Protected			0.950						
Satd. Flow (prot)	0	3539	3433	3539	0	0	0		
Flt Permitted			0.950						
Satd. Flow (perm)	0	3539	3433	3539	0	0	0		
Right Turn on Red					Yes		Yes		
Satd. Flow (RTOR)									
Link Speed (mph)		45		50		30			
Link Distance (ft)		792		641		144			
Travel Time (s)		12.0		8.7		3.3			
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95		
Adj. Flow (vph)	0	1118	213	1146	0	0	0		
Shared Lane Traffic (%)									
Lane Group Flow (vph)	0	1118	213	1146	0	0	0		
Enter Blocked Intersection	No	No	No	No	No	No	No		
Lane Alignment	Left	Left	R NA	Left	Right	Left	Right		
Median Width(ft)		24		24		0			
Link Offset(ft)		0		0		0			
Crosswalk Width(ft)		16		16		16			
Two way Left Turn Lane									
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00		
Turning Speed (mph)	15		9		9	15	9		
Number of Detectors		2	1	2					
Detector Template		Thru	Left	Thru					
Leading Detector (ft)		100	20	100					
Trailing Detector (ft)		0	0	0					
Detector 1 Position(ft)		0	0	0					
Detector 1 Size(ft)		6	20	6					
Detector 1 Type		Cl+Ex	Cl+Ex	Cl+Ex					
Detector 1 Channel									
Detector 1 Extend (s)		0.0	0.0	0.0					
Detector 1 Queue (s)		0.0	0.0	0.0					
Detector 1 Delay (s)		0.0	0.0	0.0					
Detector 2 Position(ft)		94		94					
Detector 2 Size(ft)		6		6					
Detector 2 Type		Cl+Ex		Cl+Ex					
Detector 2 Channel									
Detector 2 Extend (s)		0.0		0.0					
Turn Type		NA	Prot	NA					
Protected Phases		2	4	Free				6	8
Permitted Phases									



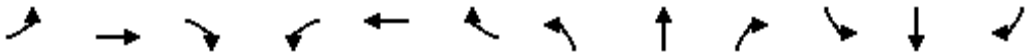
Lane Group	EBL	EBT	WBU	WBT	WBR	SBL	SBR	Ø6	Ø8
Detector Phase		2	4						
Switch Phase									
Minimum Initial (s)		10.0	10.0					10.0	10.0
Minimum Split (s)		24.0	24.0					24.0	24.0
Total Split (s)		79.0	35.0					79.0	35.0
Total Split (%)		69.3%	30.7%					69%	31%
Maximum Green (s)		73.0	29.0					73.0	29.0
Yellow Time (s)		4.0	4.0					4.0	4.0
All-Red Time (s)		2.0	2.0					2.0	2.0
Lost Time Adjust (s)		0.0	0.0						
Total Lost Time (s)		6.0	6.0						
Lead/Lag									
Lead-Lag Optimize?									
Vehicle Extension (s)		3.0	3.0					3.0	3.0
Recall Mode		C-Max	None					None	None
Walk Time (s)		7.0	7.0					7.0	7.0
Flash Dont Walk (s)		11.0	11.0					11.0	11.0
Pedestrian Calls (#/hr)		0	0					0	0
Act Effct Green (s)		82.8	19.2	114.0					
Actuated g/C Ratio		0.73	0.17	1.00					
v/c Ratio		0.43	0.37	0.32					
Control Delay		7.6	45.7	0.2					
Queue Delay		0.0	0.0	0.0					
Total Delay		7.6	45.7	0.2					
LOS		A	D	A					
Approach Delay		7.6		7.3					
Approach LOS		A		A					
Queue Length 50th (ft)		148	75	0					
Queue Length 95th (ft)		246	113	0					
Internal Link Dist (ft)		712		561		64			
Turn Bay Length (ft)			250						
Base Capacity (vph)		2571	873	3539					
Starvation Cap Reductn		0	0	0					
Spillback Cap Reductn		0	0	0					
Storage Cap Reductn		0	0	0					
Reduced v/c Ratio		0.43	0.24	0.32					

Intersection Summary			
Area Type:	Other		
Cycle Length: 114			
Actuated Cycle Length: 114			
Offset: 0 (0%), Referenced to phase 2:EBT, Start of 1st Green			
Natural Cycle: 60			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.77			
Intersection Signal Delay: 7.4		Intersection LOS: A	
Intersection Capacity Utilization 47.7%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 7: SR 62 & Schutte West MUT



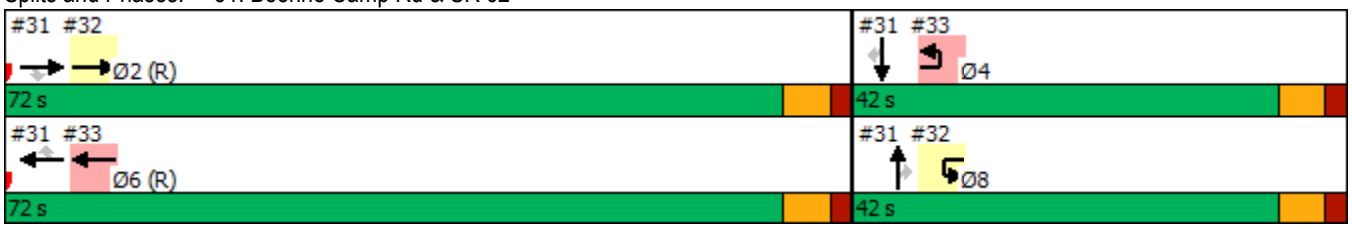
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	1347	189	0	1232	101	0	58	174	0	76	220
Future Volume (vph)	0	1347	189	0	1232	101	0	58	174	0	76	220
Ideal Flow (vphpl)	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000
Storage Length (ft)	0		350	0		350	300		150	150		150
Storage Lanes	0		1	0		1	0		2	0		2
Taper Length (ft)	25			25			100			100		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00	0.88	1.00	1.00	0.88
Frt			0.850			0.850			0.850			0.850
Flt Protected												
Satd. Flow (prot)	0	3689	1650	0	3619	1619	0	1961	2933	0	1942	2905
Flt Permitted												
Satd. Flow (perm)	0	3689	1650	0	3619	1619	0	1961	2933	0	1942	2905
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			208			120			61			63
Link Speed (mph)		45			50			40			40	
Link Distance (ft)		523			548			603			510	
Travel Time (s)		7.9			7.5			10.3			8.7	
Peak Hour Factor	0.91	0.91	0.91	0.84	0.84	0.84	0.94	0.94	0.94	0.66	0.66	0.66
Heavy Vehicles (%)	3%	3%	3%	5%	5%	5%	2%	2%	2%	3%	3%	3%
Adj. Flow (vph)	0	1480	208	0	1467	120	0	62	185	0	115	333
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	1480	208	0	1467	120	0	62	185	0	115	333
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24			24			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors		2	1		2	1		2	1		2	1
Detector Template		Thru	Right		Thru	Right		Thru	Right		Thru	Right
Leading Detector (ft)		100	20		100	20		100	20		100	20
Trailing Detector (ft)		0	0		0	0		0	0		0	0
Detector 1 Position(ft)		0	0		0	0		0	0		0	0
Detector 1 Size(ft)		6	20		6	20		6	20		6	20
Detector 1 Type		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)		0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0
Detector 1 Queue (s)		0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0
Detector 1 Delay (s)		0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type		NA	Perm		NA	Perm		NA	Perm		NA	Perm
Protected Phases		2			6			8			4	

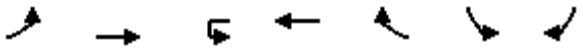


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases			2			6			8			4
Detector Phase		2	2		6	6		8	8		4	4
Switch Phase												
Minimum Initial (s)		10.0	10.0		10.0	10.0		10.0	10.0		10.0	10.0
Minimum Split (s)		24.0	24.0		24.0	24.0		24.0	24.0		24.0	24.0
Total Split (s)		72.0	72.0		72.0	72.0		42.0	42.0		42.0	42.0
Total Split (%)		63.2%	63.2%		63.2%	63.2%		36.8%	36.8%		36.8%	36.8%
Maximum Green (s)		66.0	66.0		66.0	66.0		36.0	36.0		36.0	36.0
Yellow Time (s)		4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0
All-Red Time (s)		2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0
Lost Time Adjust (s)		0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0
Total Lost Time (s)		6.0	6.0		6.0	6.0		6.0	6.0		6.0	6.0
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)		3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0
Recall Mode		C-Max	C-Max		C-Max	C-Max		None	None		None	None
Walk Time (s)		7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0
Flash Dont Walk (s)		11.0	11.0		11.0	11.0		11.0	11.0		11.0	11.0
Pedestrian Calls (#/hr)		0	0		0	0		0	0		0	0
Act Effct Green (s)		84.8	84.8		84.8	84.8		17.2	17.2		17.2	17.2
Actuated g/C Ratio		0.74	0.74		0.74	0.74		0.15	0.15		0.15	0.15
v/c Ratio		0.54	0.16		0.55	0.10		0.21	0.37		0.39	0.68
Control Delay		5.9	0.9		5.2	0.8		42.1	29.8		46.2	43.3
Queue Delay		0.1	0.0		0.0	0.0		0.0	0.0		0.0	0.0
Total Delay		6.0	0.9		5.2	0.8		42.1	29.8		46.2	43.3
LOS		A	A		A	A		D	C		D	D
Approach Delay		5.4			4.9			32.9			44.1	
Approach LOS		A			A			C			D	
Queue Length 50th (ft)		159	2		117	0		40	46		77	107
Queue Length 95th (ft)		98	5		126	3		76	78		89	98
Internal Link Dist (ft)		443			468			523			430	
Turn Bay Length (ft)			350			350			150			150
Base Capacity (vph)		2742	1280		2690	1234		619	967		613	960
Starvation Cap Reductn		226	0		139	0		0	0		0	0
Spillback Cap Reductn		0	0		0	0		0	0		0	0
Storage Cap Reductn		0	0		0	0		0	0		0	0
Reduced v/c Ratio		0.59	0.16		0.58	0.10		0.10	0.19		0.19	0.35

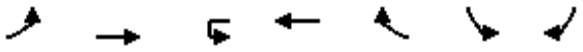
Intersection Summary			
Area Type:	Other		
Cycle Length: 114			
Actuated Cycle Length: 114			
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of 1st Green			
Natural Cycle: 60			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.68			
Intersection Signal Delay: 11.3		Intersection LOS: B	
Intersection Capacity Utilization 53.7%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 31: Boehne Camp Rd & SR 62





Lane Group	EBL	EBT	WBU	WBT	WBR	SBL	SBR	Ø4	Ø6
Lane Configurations		↑↑	↑↑	↑↑					
Traffic Volume (vph)	0	1338	198	1254	0	0	0		
Future Volume (vph)	0	1338	198	1254	0	0	0		
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900		
Storage Length (ft)	0		250		0	0	0		
Storage Lanes	0		2		0	0	0		
Taper Length (ft)	100		25			75			
Lane Util. Factor	1.00	0.95	0.97	0.95	1.00	1.00	1.00		
Frt									
Flt Protected			0.950						
Satd. Flow (prot)	0	3539	3433	3539	0	0	0		
Flt Permitted			0.950						
Satd. Flow (perm)	0	3539	3433	3539	0	0	0		
Right Turn on Red					Yes		Yes		
Satd. Flow (RTOR)									
Link Speed (mph)		50		50		30			
Link Distance (ft)		4430		523		123			
Travel Time (s)		60.4		7.1		2.8			
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95		
Adj. Flow (vph)	0	1408	208	1320	0	0	0		
Shared Lane Traffic (%)									
Lane Group Flow (vph)	0	1408	208	1320	0	0	0		
Enter Blocked Intersection	No	No	No	No	No	No	No		
Lane Alignment	Left	Left	R NA	Left	Right	Left	Right		
Median Width(ft)		24		24		0			
Link Offset(ft)		0		0		0			
Crosswalk Width(ft)		16		16		16			
Two way Left Turn Lane									
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00		
Turning Speed (mph)	15		9		9	15	9		
Number of Detectors		2	1	2					
Detector Template		Thru	Left	Thru					
Leading Detector (ft)		100	20	100					
Trailing Detector (ft)		0	0	0					
Detector 1 Position(ft)		0	0	0					
Detector 1 Size(ft)		6	20	6					
Detector 1 Type		Cl+Ex	Cl+Ex	Cl+Ex					
Detector 1 Channel									
Detector 1 Extend (s)		0.0	0.0	0.0					
Detector 1 Queue (s)		0.0	0.0	0.0					
Detector 1 Delay (s)		0.0	0.0	0.0					
Detector 2 Position(ft)		94		94					
Detector 2 Size(ft)		6		6					
Detector 2 Type		Cl+Ex		Cl+Ex					
Detector 2 Channel									
Detector 2 Extend (s)		0.0		0.0					
Turn Type		NA	Prot	NA					
Protected Phases		2	8	Free				4	6
Permitted Phases									



Lane Group	EBL	EBT	WBU	WBT	WBR	SBL	SBR	Ø4	Ø6
Detector Phase		2	8						
Switch Phase									
Minimum Initial (s)		10.0	10.0					10.0	10.0
Minimum Split (s)		24.0	24.0					24.0	24.0
Total Split (s)		72.0	42.0					42.0	72.0
Total Split (%)		63.2%	36.8%					37%	63%
Maximum Green (s)		66.0	36.0					36.0	66.0
Yellow Time (s)		4.0	4.0					4.0	4.0
All-Red Time (s)		2.0	2.0					2.0	2.0
Lost Time Adjust (s)		0.0	0.0						
Total Lost Time (s)		6.0	6.0						
Lead/Lag									
Lead-Lag Optimize?									
Vehicle Extension (s)		3.0	3.0					3.0	3.0
Recall Mode		C-Max	None					None	C-Max
Walk Time (s)		7.0	7.0					7.0	7.0
Flash Dont Walk (s)		11.0	11.0					11.0	11.0
Pedestrian Calls (#/hr)		0	0					0	0
Act Effct Green (s)		84.8	17.2	114.0					
Actuated g/C Ratio		0.74	0.15	1.00					
v/c Ratio		0.54	0.40	0.37					
Control Delay		17.2	43.2	0.3					
Queue Delay		0.0	0.0	0.0					
Total Delay		17.2	43.2	0.3					
LOS		B	D	A					
Approach Delay		17.2		6.1					
Approach LOS		B		A					
Queue Length 50th (ft)		358	72	0					
Queue Length 95th (ft)		611	106	0					
Internal Link Dist (ft)		4350		443		43			
Turn Bay Length (ft)			250						
Base Capacity (vph)		2631	1084	3539					
Starvation Cap Reductn		0	0	0					
Spillback Cap Reductn		10	0	0					
Storage Cap Reductn		0	0	0					
Reduced v/c Ratio		0.54	0.19	0.37					

Intersection Summary			
Area Type:	Other		
Cycle Length: 114			
Actuated Cycle Length: 114			
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of 1st Green			
Natural Cycle: 60			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.68			
Intersection Signal Delay: 11.4		Intersection LOS: B	
Intersection Capacity Utilization 42.0%		ICU Level of Service A	
Analysis Period (min) 15			

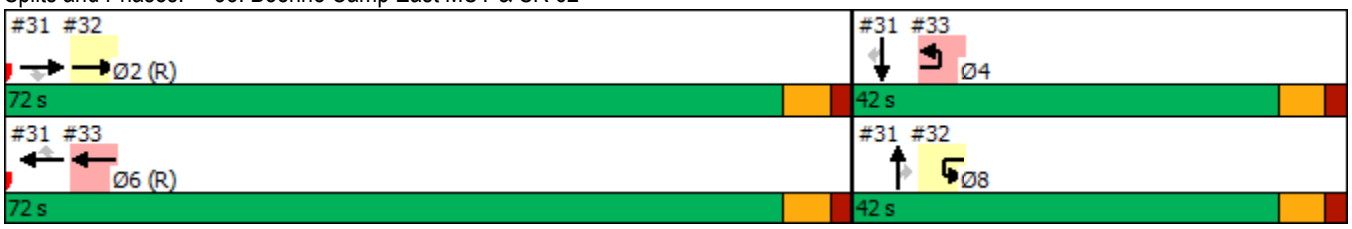
Splits and Phases: 32: SR 62 & Boehne Camp West MUT

Lane Group	EBU	EBT	EBR	WBL	WBT	NBL	NBR	Ø2	Ø8
Lane Configurations									
Traffic Volume (vph)	168	1353	0	0	1165	0	0		
Future Volume (vph)	168	1353	0	0	1165	0	0		
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900		
Storage Length (ft)	250		0	0		0	0		
Storage Lanes	2		0	0		0	0		
Taper Length (ft)	25			100		75			
Lane Util. Factor	0.97	0.95	1.00	1.00	0.95	1.00	1.00		
Frt									
Flt Protected	0.950								
Satd. Flow (prot)	3433	3539	0	0	3539	0	0		
Flt Permitted	0.950								
Satd. Flow (perm)	3433	3539	0	0	3539	0	0		
Right Turn on Red			Yes				Yes		
Satd. Flow (RTOR)									
Link Speed (mph)		45			50	30			
Link Distance (ft)		548			1629	114			
Travel Time (s)		8.3			22.2	2.6			
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95		
Adj. Flow (vph)	177	1424	0	0	1226	0	0		
Shared Lane Traffic (%)									
Lane Group Flow (vph)	177	1424	0	0	1226	0	0		
Enter Blocked Intersection	No	No	No	No	No	No	No		
Lane Alignment	R NA	Left	Right	Left	Left	Left	Right		
Median Width(ft)		24			24	0			
Link Offset(ft)		0			0	0			
Crosswalk Width(ft)		16			16	16			
Two way Left Turn Lane									
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00		
Turning Speed (mph)	9		9	15		15	9		
Number of Detectors	1	2			2				
Detector Template	Left	Thru			Thru				
Leading Detector (ft)	20	100			100				
Trailing Detector (ft)	0	0			0				
Detector 1 Position(ft)	0	0			0				
Detector 1 Size(ft)	20	6			6				
Detector 1 Type	Cl+Ex	Cl+Ex			Cl+Ex				
Detector 1 Channel									
Detector 1 Extend (s)	0.0	0.0			0.0				
Detector 1 Queue (s)	0.0	0.0			0.0				
Detector 1 Delay (s)	0.0	0.0			0.0				
Detector 2 Position(ft)		94			94				
Detector 2 Size(ft)		6			6				
Detector 2 Type		Cl+Ex			Cl+Ex				
Detector 2 Channel									
Detector 2 Extend (s)		0.0			0.0				
Turn Type	Prot	NA			NA				
Protected Phases	4	Free			6			2	8
Permitted Phases									

Lane Group	EBU	EBT	EBR	WBL	WBT	NBL	NBR	Ø2	Ø8
Detector Phase	4				6				
Switch Phase									
Minimum Initial (s)	10.0				10.0			10.0	10.0
Minimum Split (s)	24.0				24.0			24.0	24.0
Total Split (s)	42.0				72.0			72.0	42.0
Total Split (%)	36.8%				63.2%			63%	37%
Maximum Green (s)	36.0				66.0			66.0	36.0
Yellow Time (s)	4.0				4.0			4.0	4.0
All-Red Time (s)	2.0				2.0			2.0	2.0
Lost Time Adjust (s)	0.0				0.0				
Total Lost Time (s)	6.0				6.0				
Lead/Lag									
Lead-Lag Optimize?									
Vehicle Extension (s)	3.0				3.0			3.0	3.0
Recall Mode	None				C-Max			C-Max	None
Walk Time (s)	7.0				7.0			7.0	7.0
Flash Dont Walk (s)	11.0				11.0			11.0	11.0
Pedestrian Calls (#/hr)	0				0			0	0
Act Effct Green (s)	17.2	114.0			84.8				
Actuated g/C Ratio	0.15	1.00			0.74				
v/c Ratio	0.34	0.40			0.47				
Control Delay	53.2	0.3			5.8				
Queue Delay	0.0	0.0			0.0				
Total Delay	53.2	0.3			5.8				
LOS	D	A			A				
Approach Delay		6.2			5.8				
Approach LOS		A			A				
Queue Length 50th (ft)	67	0			131				
Queue Length 95th (ft)	100	0			158				
Internal Link Dist (ft)		468			1549	34			
Turn Bay Length (ft)	250								
Base Capacity (vph)	1084	3539			2631				
Starvation Cap Reductn	0	0			0				
Spillback Cap Reductn	0	0			0				
Storage Cap Reductn	0	0			0				
Reduced v/c Ratio	0.16	0.40			0.47				

Intersection Summary			
Area Type:	Other		
Cycle Length: 114			
Actuated Cycle Length: 114			
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of 1st Green			
Natural Cycle: 60			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.68			
Intersection Signal Delay: 6.0		Intersection LOS: A	
Intersection Capacity Utilization 50.5%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 33: Boehne Camp East MUT & SR 62

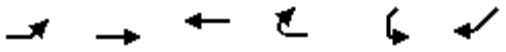


Lane Group	EBT	EBR2	WBT	WBR2	NBL2	NBT	NBR2	SBL2	SBT	SBR2	SEL2	NWL2
Lane Configurations												
Traffic Volume (vph)	1328	47	934	63	76	103	194	155	127	107	74	119
Future Volume (vph)	1328	47	934	63	76	103	194	155	127	107	74	119
Ideal Flow (vphpl)	2000	1900	2000	2000	2000	2000	2000	2000	2000	2000	2000	1900
Storage Length (ft)												
Storage Lanes												
Taper Length (ft)												
Lane Util. Factor	0.95	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00
Frt		0.850		0.850			0.850			0.850		
Flt Protected					0.950			0.950			0.950	0.950
Satd. Flow (prot)	3725	1583	3585	1604	1827	3654	1635	1863	3725	1667	1863	1703
Flt Permitted					0.665			0.677			0.950	0.950
Satd. Flow (perm)	3725	1583	3585	1604	1279	3654	1635	1327	3725	1667	1863	1703
Right Turn on Red		Yes		Yes			Yes			Yes		
Satd. Flow (RTOR)		53		68			223			144		
Link Speed (mph)	45		50			40			40			
Link Distance (ft)	523		548			544			471			
Travel Time (s)	7.9		7.5			9.3			8.0			
Peak Hour Factor	0.88	0.88	0.93	0.93	0.87	0.87	0.87	0.93	0.93	0.93	0.88	0.93
Heavy Vehicles (%)	2%	2%	6%	6%	4%	4%	4%	2%	2%	2%	2%	6%
Adj. Flow (vph)	1509	53	1004	68	87	118	223	167	137	115	84	128
Shared Lane Traffic (%)												
Lane Group Flow (vph)	1509	53	1004	68	87	118	223	167	137	115	84	128
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left
Median Width(ft)	12		12			12			12			
Link Offset(ft)	0		0			0			0			
Crosswalk Width(ft)	16		16			16			16			
Two way Left Turn Lane												
Headway Factor	0.94	1.00	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	1.00
Turning Speed (mph)		9		9	15		9	15		9	15	15
Number of Detectors	2	1	2	1	1	2	1	1	2	1	1	1
Detector Template	Thru	Right	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Left
Leading Detector (ft)	100	20	100	20	20	100	20	20	100	20	20	20
Trailing Detector (ft)	0	0	0	0	0	0	0	0	0	0	0	0
Detector 1 Position(ft)	0	0	0	0	0	0	0	0	0	0	0	0
Detector 1 Size(ft)	6	20	6	20	20	6	20	20	6	20	20	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)	94		94			94			94			
Detector 2 Size(ft)	6		6			6			6			
Detector 2 Type	Cl+Ex		Cl+Ex			Cl+Ex			Cl+Ex			
Detector 2 Channel												
Detector 2 Extend (s)	0.0		0.0			0.0			0.0			
Turn Type	NA	pm+ov	NA	pm+ov	pm+pt	NA	Free	pm+pt	NA	Free	Prot	Prot
Protected Phases	2	3	2	7	3	8		7	4		5	5

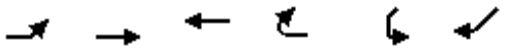
Lane Group	EBT	EBR2	WBT	WBR2	NBL2	NBT	NBR2	SBL2	SBT	SBR2	SEL2	NWL2
Permitted Phases		2		2	8		Free	4		Free		
Detector Phase	2	3	2	7	3	8		7	4		5	5
Switch Phase												
Minimum Initial (s)	10.0	7.0	10.0	7.0	7.0	10.0		7.0	10.0		7.0	7.0
Minimum Split (s)	24.0	13.0	24.0	13.0	13.0	24.0		13.0	24.0		13.0	13.0
Total Split (s)	74.0	15.0	74.0	15.0	15.0	25.0		15.0	25.0		74.0	74.0
Total Split (%)	64.9%	13.2%	64.9%	13.2%	13.2%	21.9%		13.2%	21.9%		64.9%	64.9%
Maximum Green (s)	68.0	9.0	68.0	9.0	9.0	19.0		9.0	19.0		68.0	68.0
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0		4.0	4.0		4.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0		2.0	2.0		2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0	6.0	6.0	6.0		6.0	6.0		6.0	6.0
Lead/Lag		Lead		Lead	Lead	Lag		Lead	Lag			
Lead-Lag Optimize?						Yes			Yes			
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0		3.0	3.0
Recall Mode	C-Max	None	C-Max	None	None	None		None	None		C-Max	C-Max
Walk Time (s)	7.0		7.0			7.0			7.0			
Flash Dont Walk (s)	11.0		11.0			11.0			11.0			
Pedestrian Calls (#/hr)	0		0			0			0			
Act Effct Green (s)	71.5	86.5	71.5	86.5	24.5	15.5	114.0	24.5	15.5	114.0	71.5	71.5
Actuated g/C Ratio	0.63	0.76	0.63	0.76	0.21	0.14	1.00	0.21	0.14	1.00	0.63	0.63
v/c Ratio	0.65	0.04	0.45	0.06	0.27	0.24	0.14	0.51	0.27	0.07	0.07	0.12
Control Delay	10.8	0.6	12.2	1.1	33.5	44.0	0.2	39.5	44.5	0.1	11.6	11.4
Queue Delay	0.2	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	11.0	0.6	12.4	1.1	33.5	44.0	0.2	39.5	44.5	0.1	11.6	11.4
LOS	B	A	B	A	C	D	A	D	D	A	B	B
Approach Delay	10.7		11.7			19.0			30.3			
Approach LOS	B		B			B			C			
Queue Length 50th (ft)	223	0	190	0	49	41	0	98	47	0	64	99
Queue Length 95th (ft)	250	4	253	11	85	65	0	153	76	0	115	167
Internal Link Dist (ft)	443		468			464			391			
Turn Bay Length (ft)		250		350	350		350	150		150		
Base Capacity (vph)	2334	1213	2247	1232	318	609	1635	328	620	1667	1167	1067
Starvation Cap Reductn	227	0	463	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.72	0.04	0.56	0.06	0.27	0.19	0.14	0.51	0.22	0.07	0.07	0.12

Intersection Summary			
Area Type:	Other		
Cycle Length: 114			
Actuated Cycle Length: 114			
Offset: 0 (0%), Referenced to phase 2:EBWB and 5:NWSEL, Start of 1st Green, Master Intersection			
Natural Cycle: 75			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.77			
Intersection Signal Delay: 14.2		Intersection LOS: B	
Intersection Capacity Utilization 75.9%		ICU Level of Service D	
Analysis Period (min) 15			

Splits and Phases: 10: Red Bank Rd & SR 62



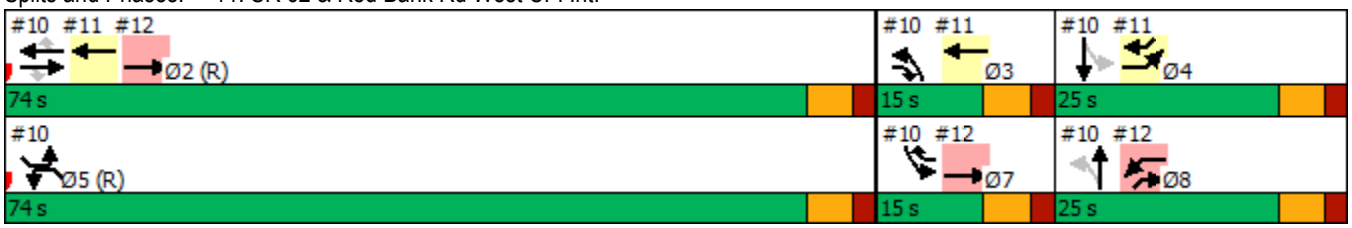
Lane Group	EBL	EBT	WBT	WBR	SWL	SWR	Ø2	Ø3	Ø5	Ø7	Ø8
Lane Configurations											
Traffic Volume (vph)	74	1375	1010	0	0	107					
Future Volume (vph)	74	1375	1010	0	0	107					
Ideal Flow (vphpl)	2000	2000	2000	2000	2000	1900					
Storage Length (ft)	200			0	0	0					
Storage Lanes	1			0	0	1					
Taper Length (ft)	100				25						
Lane Util. Factor	1.00	0.95	0.95	1.00	1.00	1.00					
Frt						0.865					
Flt Protected	0.950										
Satd. Flow (prot)	1863	3725	3585	0	0	1611					
Flt Permitted	0.950										
Satd. Flow (perm)	1863	3725	3585	0	0	1611					
Right Turn on Red				No		Yes					
Satd. Flow (RTOR)						153					
Link Speed (mph)		50	50		50						
Link Distance (ft)		1629	523		346						
Travel Time (s)		22.2	7.1		4.7						
Peak Hour Factor	0.88	0.88	0.93	0.93	0.93	0.93					
Heavy Vehicles (%)	2%	2%	6%	6%	2%	2%					
Adj. Flow (vph)	84	1563	1086	0	0	115					
Shared Lane Traffic (%)											
Lane Group Flow (vph)	84	1563	1086	0	0	115					
Enter Blocked Intersection	No	No	No	No	No	No					
Lane Alignment	Left	Left	Left	Right	Left	Right					
Median Width(ft)		12	12		0						
Link Offset(ft)		0	0		50						
Crosswalk Width(ft)		16	16		16						
Two way Left Turn Lane											
Headway Factor	0.94	0.94	0.94	0.94	0.94	1.00					
Turning Speed (mph)	15			9	15	9					
Number of Detectors	1	2	2			1					
Detector Template	Left	Thru	Thru			Right					
Leading Detector (ft)	20	100	100			20					
Trailing Detector (ft)	0	0	0			0					
Detector 1 Position(ft)	0	0	0			0					
Detector 1 Size(ft)	20	6	6			20					
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex			Cl+Ex					
Detector 1 Channel											
Detector 1 Extend (s)	0.0	0.0	0.0			0.0					
Detector 1 Queue (s)	0.0	0.0	0.0			0.0					
Detector 1 Delay (s)	0.0	0.0	0.0			0.0					
Detector 2 Position(ft)		94	94								
Detector 2 Size(ft)		6	6								
Detector 2 Type		Cl+Ex	Cl+Ex								
Detector 2 Channel											
Detector 2 Extend (s)		0.0	0.0								
Turn Type	Prot	NA	NA			Over					
Protected Phases	4	Free	2 3			4	2	3	5	7	8



Lane Group	EBL	EBT	WBT	WBR	SWL	SWR	Ø2	Ø3	Ø5	Ø7	Ø8
Permitted Phases											
Detector Phase	4		2 3			4					
Switch Phase											
Minimum Initial (s)	10.0					10.0	10.0	7.0	7.0	7.0	10.0
Minimum Split (s)	24.0					24.0	24.0	13.0	13.0	13.0	24.0
Total Split (s)	25.0					25.0	74.0	15.0	74.0	15.0	25.0
Total Split (%)	21.9%					21.9%	65%	13%	65%	13%	22%
Maximum Green (s)	19.0					19.0	68.0	9.0	68.0	9.0	19.0
Yellow Time (s)	4.0					4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	2.0					2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0					0.0					
Total Lost Time (s)	6.0					6.0					
Lead/Lag	Lag					Lag		Lead		Lead	Lag
Lead-Lag Optimize?	Yes					Yes					Yes
Vehicle Extension (s)	3.0					3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None					None	C-Max	None	C-Max	None	None
Walk Time (s)	7.0					7.0	7.0				7.0
Flash Dont Walk (s)	11.0					11.0	11.0				11.0
Pedestrian Calls (#/hr)	0					0	0				0
Act Effct Green (s)	15.5	114.0	86.5			15.5					
Actuated g/C Ratio	0.14	1.00	0.76			0.14					
v/c Ratio	0.33	0.42	0.40			0.33					
Control Delay	48.8	0.3	1.5			5.2					
Queue Delay	0.0	0.0	0.1			0.0					
Total Delay	48.8	0.3	1.6			5.2					
LOS	D	A	A			A					
Approach Delay		2.8	1.6		5.2						
Approach LOS		A	A		A						
Queue Length 50th (ft)	58	0	21			0					
Queue Length 95th (ft)	106	0	31			25					
Internal Link Dist (ft)		1549	443		266						
Turn Bay Length (ft)	200										
Base Capacity (vph)	310	3725	2719			396					
Starvation Cap Reductn	0	0	357			0					
Spillback Cap Reductn	0	0	0			0					
Storage Cap Reductn	0	0	0			0					
Reduced v/c Ratio	0.27	0.42	0.46			0.29					

Intersection Summary			
Area Type:	Other		
Cycle Length: 114			
Actuated Cycle Length: 114			
Offset: 0 (0%), Referenced to phase 2:EBWB and 5:NWSEL, Start of 1st Green, Master Intersection			
Natural Cycle: 75			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.77			
Intersection Signal Delay: 2.4		Intersection LOS: A	
Intersection Capacity Utilization 44.9%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 11: SR 62 & Red Bank Rd West CFI Int.

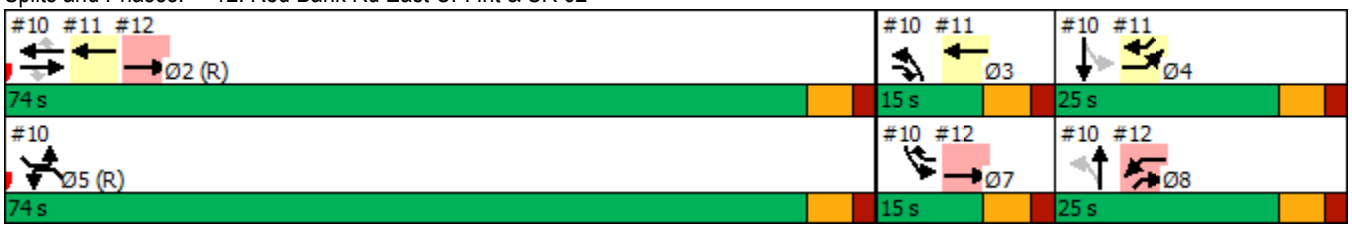


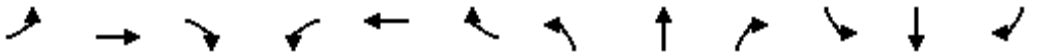
Lane Group	EBT	EBR	WBL	WBT	NEL	NER	Ø2	Ø3	Ø4	Ø5	Ø7
Lane Configurations											
Traffic Volume (vph)	1483	0	119	997	0	194					
Future Volume (vph)	1483	0	119	997	0	194					
Ideal Flow (vphpl)	2000	2000	2000	2000	2000	2000					
Storage Length (ft)		0	100		0	0					
Storage Lanes		0	1		0	1					
Taper Length (ft)			100		25						
Lane Util. Factor	0.95	1.00	1.00	0.95	1.00	1.00					
Frt						0.865					
Flt Protected			0.950								
Satd. Flow (prot)	3725	0	1792	3585	0	1696					
Flt Permitted			0.950								
Satd. Flow (perm)	3725	0	1792	3585	0	1696					
Right Turn on Red		No				Yes					
Satd. Flow (RTOR)						49					
Link Speed (mph)	45			50	45						
Link Distance (ft)	548			820	408						
Travel Time (s)	8.3			11.2	6.2						
Peak Hour Factor	0.88	0.88	0.93	0.93	0.93	0.93					
Heavy Vehicles (%)	2%	2%	6%	6%	2%	2%					
Adj. Flow (vph)	1685	0	128	1072	0	209					
Shared Lane Traffic (%)											
Lane Group Flow (vph)	1685	0	128	1072	0	209					
Enter Blocked Intersection	No	No	No	No	No	No					
Lane Alignment	Left	Right	Left	Left	Left	Right					
Median Width(ft)	12			12	0						
Link Offset(ft)	0			0	50						
Crosswalk Width(ft)	16			16	16						
Two way Left Turn Lane											
Headway Factor	0.94	0.94	0.94	0.94	0.94	0.94					
Turning Speed (mph)		9	15		15	9					
Number of Detectors	2		1	2		1					
Detector Template	Thru		Left	Thru		Right					
Leading Detector (ft)	100		20	100		20					
Trailing Detector (ft)	0		0	0		0					
Detector 1 Position(ft)	0		0	0		0					
Detector 1 Size(ft)	6		20	6		20					
Detector 1 Type	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex					
Detector 1 Channel											
Detector 1 Extend (s)	0.0		0.0	0.0		0.0					
Detector 1 Queue (s)	0.0		0.0	0.0		0.0					
Detector 1 Delay (s)	0.0		0.0	0.0		0.0					
Detector 2 Position(ft)	94			94							
Detector 2 Size(ft)	6			6							
Detector 2 Type	Cl+Ex			Cl+Ex							
Detector 2 Channel											
Detector 2 Extend (s)	0.0			0.0							
Turn Type	NA		Prot	NA		Over					
Protected Phases	2 7		8	Free		8	2	3	4	5	7

Lane Group	EBT	EBR	WBL	WBT	NEL	NER	Ø2	Ø3	Ø4	Ø5	Ø7
Permitted Phases											
Detector Phase	2 7		8			8					
Switch Phase											
Minimum Initial (s)			10.0			10.0	10.0	7.0	10.0	7.0	7.0
Minimum Split (s)			24.0			24.0	24.0	13.0	24.0	13.0	13.0
Total Split (s)			25.0			25.0	74.0	15.0	25.0	74.0	15.0
Total Split (%)			21.9%			21.9%	65%	13%	22%	65%	13%
Maximum Green (s)			19.0			19.0	68.0	9.0	19.0	68.0	9.0
Yellow Time (s)			4.0			4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)			2.0			2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)			0.0			0.0					
Total Lost Time (s)			6.0			6.0					
Lead/Lag			Lag			Lag		Lead	Lag		Lead
Lead-Lag Optimize?			Yes			Yes			Yes		
Vehicle Extension (s)			3.0			3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode			None			None	C-Max	None	None	C-Max	None
Walk Time (s)			7.0			7.0	7.0		7.0		
Flash Dont Walk (s)			11.0			11.0	11.0		11.0		
Pedestrian Calls (#/hr)			0			0	0		0		
Act Effct Green (s)	86.5		15.5	114.0		15.5					
Actuated g/C Ratio	0.76		0.14	1.00		0.14					
v/c Ratio	0.60		0.52	0.30		0.77					
Control Delay	2.8		53.0	0.2		54.0					
Queue Delay	0.1		0.0	0.0		0.0					
Total Delay	2.9		53.0	0.2		54.0					
LOS	A		D	A		D					
Approach Delay	2.9			5.8	54.0						
Approach LOS	A			A	D						
Queue Length 50th (ft)	63		88	0		114					
Queue Length 95th (ft)	71		147	0		194					
Internal Link Dist (ft)	468			740	328						
Turn Bay Length (ft)			100								
Base Capacity (vph)	2825		298	3585		323					
Starvation Cap Reductn	210		0	0		0					
Spillback Cap Reductn	0		0	0		0					
Storage Cap Reductn	0		0	0		0					
Reduced v/c Ratio	0.64		0.43	0.30		0.65					

Intersection Summary			
Area Type:	Other		
Cycle Length: 114			
Actuated Cycle Length: 114			
Offset: 0 (0%), Referenced to phase 2:EBWB and 5:NWSEL, Start of 1st Green, Master Intersection			
Natural Cycle: 75			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.77			
Intersection Signal Delay: 7.5		Intersection LOS: A	
Intersection Capacity Utilization 60.4%		ICU Level of Service B	
Analysis Period (min) 15			

Splits and Phases: 12: Red Bank Rd East CFI Int & SR 62





Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	1444	162	0	1406	41	0	20	224	0	18	75
Future Volume (vph)	0	1444	162	0	1406	41	0	20	224	0	18	75
Ideal Flow (vphpl)	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000
Storage Length (ft)	0		250	0		350	150		150	150		150
Storage Lanes	0		0	0		1	0		1	0		0
Taper Length (ft)	25			25			100			100		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.985				0.850			0.850		0.891	
Flt Protected												
Satd. Flow (prot)	0	3670	0	0	3725	1667	0	1961	1667	0	1747	0
Flt Permitted												
Satd. Flow (perm)	0	3670	0	0	3725	1667	0	1961	1667	0	1747	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		17				43			48		56	
Link Speed (mph)		45			50			40			40	
Link Distance (ft)		601			548			584			515	
Travel Time (s)		9.1			7.5			10.0			8.8	
Peak Hour Factor	0.94	0.94	0.94	0.96	0.96	0.96	0.91	0.91	0.91	0.73	0.73	0.73
Adj. Flow (vph)	0	1536	172	0	1465	43	0	22	246	0	25	103
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	1708	0	0	1465	43	0	22	246	0	128	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24			24			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type		NA			NA	Perm		NA	Perm		NA	
Protected Phases		2			6			8			4	
Permitted Phases						6			8			
Detector Phase		2			6	6		8	8		4	
Switch Phase												
Minimum Initial (s)		10.0			10.0	10.0		10.0	10.0		10.0	
Minimum Split (s)		24.0			24.0	24.0		24.0	24.0		24.0	
Total Split (s)		105.0			105.0	105.0		45.0	45.0		45.0	
Total Split (%)		70.0%			70.0%	70.0%		30.0%	30.0%		30.0%	
Maximum Green (s)		99.0			99.0	99.0		39.0	39.0		39.0	
Yellow Time (s)		4.0			4.0	4.0		4.0	4.0		4.0	
All-Red Time (s)		2.0			2.0	2.0		2.0	2.0		2.0	
Lost Time Adjust (s)		0.0			0.0	0.0		0.0	0.0		0.0	
Total Lost Time (s)		6.0			6.0	6.0		6.0	6.0		6.0	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)		3.0			3.0	3.0		3.0	3.0		3.0	
Recall Mode		C-Max			None	None		None	None		None	
Walk Time (s)		7.0			7.0	7.0		7.0	7.0		7.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Flash Dont Walk (s)		11.0			11.0	11.0		11.0	11.0		11.0	
Pedestrian Calls (#/hr)		0			0	0		0	0		0	
Act Effct Green (s)		113.8			113.8	113.8		24.2	24.2		24.2	
Actuated g/C Ratio		0.76			0.76	0.76		0.16	0.16		0.16	
v/c Ratio		0.61			0.52	0.03		0.07	0.80		0.39	
Control Delay		7.7			3.9	0.5		50.0	66.5		32.9	
Queue Delay		0.0			0.0	0.0		0.0	0.0		0.0	
Total Delay		7.8			3.9	0.5		50.0	66.5		32.9	
LOS		A			A	A		D	E		C	
Approach Delay		7.8			3.8			65.1			32.9	
Approach LOS		A			A			E			C	
Queue Length 50th (ft)		178			84	1		19	192		63	
Queue Length 95th (ft)		192			92	m1		42	271		85	
Internal Link Dist (ft)		521			468			504			435	
Turn Bay Length (ft)						350			150			
Base Capacity (vph)		2789			2827	1275		509	468		495	
Starvation Cap Reductn		59			162	0		0	0		0	
Spillback Cap Reductn		0			0	0		0	0		0	
Storage Cap Reductn		0			0	0		0	0		0	
Reduced v/c Ratio		0.63			0.55	0.03		0.04	0.53		0.26	

Intersection Summary			
Area Type:	Other		
Cycle Length: 150			
Actuated Cycle Length: 150			
Offset: 0 (0%), Referenced to phase 2:EBT, Start of 1st Green			
Natural Cycle: 60			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.80			
Intersection Signal Delay: 11.3		Intersection LOS: B	
Intersection Capacity Utilization 66.0%		ICU Level of Service C	
Analysis Period (min) 15			

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

Splits and Phases: 1: Schutte Rd & SR 62

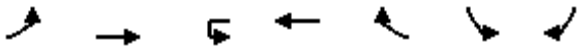
Lane Group	EBU	EBT	EBR	WBL	WBT	NBL	NBR	Ø2	Ø8
Lane Configurations									
Traffic Volume (vph)	43	1625	0	0	1404	0	0		
Future Volume (vph)	43	1625	0	0	1404	0	0		
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900		
Storage Length (ft)	250		0	0		0	0		
Storage Lanes	1		0	0		0	0		
Taper Length (ft)	25			100		75			
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00		
Frt									
Flt Protected	0.950								
Satd. Flow (prot)	1770	3539	0	0	3539	0	0		
Flt Permitted	0.950								
Satd. Flow (perm)	1770	3539	0	0	3539	0	0		
Right Turn on Red			Yes				Yes		
Satd. Flow (RTOR)									
Link Speed (mph)		45			50	30			
Link Distance (ft)		548			4430	176			
Travel Time (s)		8.3			60.4	4.0			
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95		
Adj. Flow (vph)	45	1711	0	0	1478	0	0		
Shared Lane Traffic (%)									
Lane Group Flow (vph)	45	1711	0	0	1478	0	0		
Enter Blocked Intersection	No	No	No	No	No	No	No		
Lane Alignment	R NA	Left	Right	Left	Left	Left	Right		
Median Width(ft)		12			12	0			
Link Offset(ft)		0			0	0			
Crosswalk Width(ft)		16			16	16			
Two way Left Turn Lane									
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00		
Turning Speed (mph)	9		9	15		15	9		
Turn Type	Prot	NA			NA				
Protected Phases	4	Free			6			2	8
Permitted Phases									
Detector Phase	4				6				
Switch Phase									
Minimum Initial (s)	10.0				10.0			10.0	10.0
Minimum Split (s)	24.0				24.0			24.0	24.0
Total Split (s)	45.0				105.0			105.0	45.0
Total Split (%)	30.0%				70.0%			70%	30%
Maximum Green (s)	39.0				99.0			99.0	39.0
Yellow Time (s)	4.0				4.0			4.0	4.0
All-Red Time (s)	2.0				2.0			2.0	2.0
Lost Time Adjust (s)	0.0				0.0				
Total Lost Time (s)	6.0				6.0				
Lead/Lag									
Lead-Lag Optimize?									
Vehicle Extension (s)	3.0				3.0			3.0	3.0
Recall Mode	None				None			C-Max	None
Walk Time (s)	7.0				7.0			7.0	7.0

Lane Group	EBU	EBT	EBR	WBL	WBT	NBL	NBR	Ø2	Ø8
Flash Dont Walk (s)	11.0				11.0			11.0	11.0
Pedestrian Calls (#/hr)	0				0			0	0
Act Effct Green (s)	24.2	150.0			113.8				
Actuated g/C Ratio	0.16	1.00			0.76				
v/c Ratio	0.16	0.48			0.55				
Control Delay	61.0	0.4			11.0				
Queue Delay	0.0	0.0			0.0				
Total Delay	61.0	0.4			11.0				
LOS	E	A			B				
Approach Delay		1.9			11.0				
Approach LOS		A			B				
Queue Length 50th (ft)	40	0			254				
Queue Length 95th (ft)	m68	0			552				
Internal Link Dist (ft)		468			4350	96			
Turn Bay Length (ft)	250								
Base Capacity (vph)	460	3539			2685				
Starvation Cap Reductn	0	0			0				
Spillback Cap Reductn	0	0			0				
Storage Cap Reductn	0	0			0				
Reduced v/c Ratio	0.10	0.48			0.55				

Intersection Summary			
Area Type:	Other		
Cycle Length: 150			
Actuated Cycle Length: 150			
Offset: 0 (0%), Referenced to phase 2:EBT, Start of 1st Green			
Natural Cycle: 60			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.80			
Intersection Signal Delay: 6.1		Intersection LOS: A	
Intersection Capacity Utilization 48.3%		ICU Level of Service A	
Analysis Period (min) 15			

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

Splits and Phases: 4: Schutte East MUT & SR 62

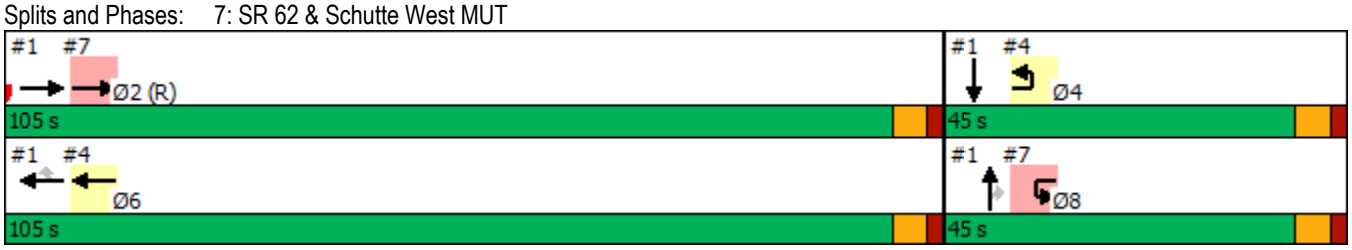


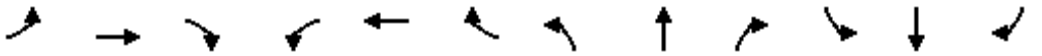
Lane Group	EBL	EBT	WBU	WBT	WBR	SBL	SBR	Ø4	Ø6
Lane Configurations		↑↑	⇈	↑↑					
Traffic Volume (vph)	0	1382	224	1257	0	0	0		
Future Volume (vph)	0	1382	224	1257	0	0	0		
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900		
Storage Length (ft)	0		250		0	0	0		
Storage Lanes	0		2		0	0	0		
Taper Length (ft)	75		75			75			
Lane Util. Factor	1.00	0.95	0.97	0.95	1.00	1.00	1.00		
Frt									
Flt Protected			0.950						
Satd. Flow (prot)	0	3539	3433	3539	0	0	0		
Flt Permitted			0.950						
Satd. Flow (perm)	0	3539	3433	3539	0	0	0		
Right Turn on Red					Yes		Yes		
Satd. Flow (RTOR)									
Link Speed (mph)		45		50		30			
Link Distance (ft)		819		601		156			
Travel Time (s)		12.4		8.2		3.5			
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95		
Adj. Flow (vph)	0	1455	236	1323	0	0	0		
Shared Lane Traffic (%)									
Lane Group Flow (vph)	0	1455	236	1323	0	0	0		
Enter Blocked Intersection	No	No	No	No	No	No	No		
Lane Alignment	Left	Left	R NA	Left	Right	Left	Right		
Median Width(ft)		24		24		0			
Link Offset(ft)		0		0		0			
Crosswalk Width(ft)		16		16		16			
Two way Left Turn Lane									
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00		
Turning Speed (mph)	15		9		9	15	9		
Turn Type		NA	Prot	NA					
Protected Phases		2	8	Free				4	6
Permitted Phases									
Detector Phase		2	8						
Switch Phase									
Minimum Initial (s)		10.0	10.0					10.0	10.0
Minimum Split (s)		24.0	24.0					24.0	24.0
Total Split (s)		105.0	45.0					45.0	105.0
Total Split (%)		70.0%	30.0%					30%	70%
Maximum Green (s)		99.0	39.0					39.0	99.0
Yellow Time (s)		4.0	4.0					4.0	4.0
All-Red Time (s)		2.0	2.0					2.0	2.0
Lost Time Adjust (s)		0.0	0.0						
Total Lost Time (s)		6.0	6.0						
Lead/Lag									
Lead-Lag Optimize?									
Vehicle Extension (s)		3.0	3.0					3.0	3.0
Recall Mode		C-Max	None					None	None
Walk Time (s)		7.0	7.0					7.0	7.0

Lane Group	EBL	EBT	WBU	WBT	WBR	SBL	SBR	Ø4	Ø6
Flash Dont Walk (s)		11.0	11.0					11.0	11.0
Pedestrian Calls (#/hr)		0	0					0	0
Act Effct Green (s)		113.8	24.2	150.0					
Actuated g/C Ratio		0.76	0.16	1.00					
v/c Ratio		0.54	0.43	0.37					
Control Delay		9.1	64.9	0.3					
Queue Delay		0.0	0.0	0.0					
Total Delay		9.1	64.9	0.3					
LOS		A	E	A					
Approach Delay		9.1		10.1					
Approach LOS		A		B					
Queue Length 50th (ft)		268	122	0					
Queue Length 95th (ft)		423	165	0					
Internal Link Dist (ft)		739		521		76			
Turn Bay Length (ft)			250						
Base Capacity (vph)		2685	892	3539					
Starvation Cap Reductn		0	0	0					
Spillback Cap Reductn		53	0	0					
Storage Cap Reductn		0	0	0					
Reduced v/c Ratio		0.55	0.26	0.37					

Intersection Summary			
Area Type:	Other		
Cycle Length: 150			
Actuated Cycle Length: 150			
Offset: 0 (0%), Referenced to phase 2:EBT, Start of 1st Green			
Natural Cycle: 60			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.80			
Intersection Signal Delay: 9.6		Intersection LOS: A	
Intersection Capacity Utilization 56.5%		ICU Level of Service B	
Analysis Period (min) 15			

Splits and Phases: 7: SR 62 & Schutte West MUT



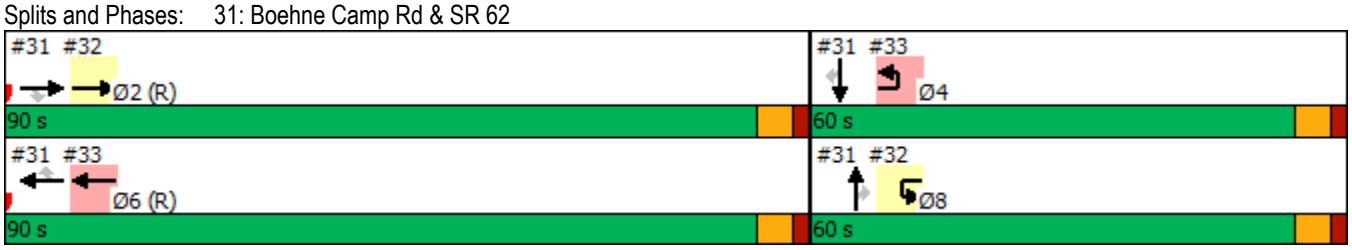


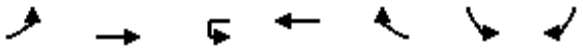
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	1506	498	0	1579	245	0	291	586	0	399	398
Future Volume (vph)	0	1506	498	0	1579	245	0	291	586	0	399	398
Ideal Flow (vphpl)	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000
Storage Length (ft)	0		350	0		350	300		150	150		150
Storage Lanes	0		1	0		1	0		2	0		2
Taper Length (ft)	25			25			100			100		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00	0.88	1.00	1.00	0.88
Frt			0.850			0.850			0.850			0.850
Flt Protected												
Satd. Flow (prot)	0	3725	1667	0	3725	1667	0	1961	2933	0	1961	2933
Flt Permitted												
Satd. Flow (perm)	0	3725	1667	0	3725	1667	0	1961	2933	0	1961	2933
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			201			241			31			38
Link Speed (mph)		45			50			40			40	
Link Distance (ft)		523			548			603			510	
Travel Time (s)		7.9			7.5			10.3			8.7	
Peak Hour Factor	0.89	0.89	0.89	0.98	0.98	0.98	0.95	0.95	0.95	0.86	0.86	0.86
Adj. Flow (vph)	0	1692	560	0	1611	250	0	306	617	0	464	463
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	1692	560	0	1611	250	0	306	617	0	464	463
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24			24			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type		NA	Perm		NA	Perm		NA	Perm		NA	Perm
Protected Phases		2			6			8			4	
Permitted Phases			2			6			8			4
Detector Phase		2	2		6	6		8	8		4	4
Switch Phase												
Minimum Initial (s)		10.0	10.0		10.0	10.0		10.0	10.0		10.0	10.0
Minimum Split (s)		24.0	24.0		24.0	24.0		24.0	24.0		24.0	24.0
Total Split (s)		90.0	90.0		90.0	90.0		60.0	60.0		60.0	60.0
Total Split (%)		60.0%	60.0%		60.0%	60.0%		40.0%	40.0%		40.0%	40.0%
Maximum Green (s)		84.0	84.0		84.0	84.0		54.0	54.0		54.0	54.0
Yellow Time (s)		4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0
All-Red Time (s)		2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0
Lost Time Adjust (s)		0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0
Total Lost Time (s)		6.0	6.0		6.0	6.0		6.0	6.0		6.0	6.0
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)		3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0
Recall Mode		C-Max	C-Max		C-Max	C-Max		None	None		None	None
Walk Time (s)		7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Flash Dont Walk (s)		11.0	11.0		11.0	11.0		11.0	11.0		11.0	11.0
Pedestrian Calls (#/hr)		0	0		0	0		0	0		0	0
Act Effct Green (s)		93.6	93.6		93.6	93.6		44.4	44.4		44.4	44.4
Actuated g/C Ratio		0.62	0.62		0.62	0.62		0.30	0.30		0.30	0.30
v/c Ratio		0.73	0.50		0.69	0.22		0.53	0.69		0.80	0.52
Control Delay		22.8	11.1		9.7	1.0		46.4	47.9		59.0	41.2
Queue Delay		1.1	0.7		0.4	0.0		0.0	0.0		0.0	0.0
Total Delay		23.9	11.8		10.1	1.0		46.4	47.9		59.0	41.2
LOS		C	B		B	A		D	D		E	D
Approach Delay		20.9			8.9			47.4			50.1	
Approach LOS		C			A			D			D	
Queue Length 50th (ft)		671	151		158	7		249	289		418	196
Queue Length 95th (ft)		725	178		187	14		316	332		477	221
Internal Link Dist (ft)		443			468			523			430	
Turn Bay Length (ft)			350			350			150			150
Base Capacity (vph)		2323	1115		2323	1130		705	1075		705	1080
Starvation Cap Reductn		365	264		278	0		0	0		0	0
Spillback Cap Reductn		0	0		0	0		0	0		0	0
Storage Cap Reductn		0	0		0	0		0	0		0	0
Reduced v/c Ratio		0.86	0.66		0.79	0.22		0.43	0.57		0.66	0.43

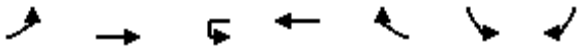
Intersection Summary			
Area Type:	Other		
Cycle Length: 150			
Actuated Cycle Length: 150			
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of 1st Green			
Natural Cycle: 60			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.80			
Intersection Signal Delay: 25.8		Intersection LOS: C	
Intersection Capacity Utilization 71.4%		ICU Level of Service C	
Analysis Period (min) 15			

Splits and Phases: 31: Boehne Camp Rd & SR 62





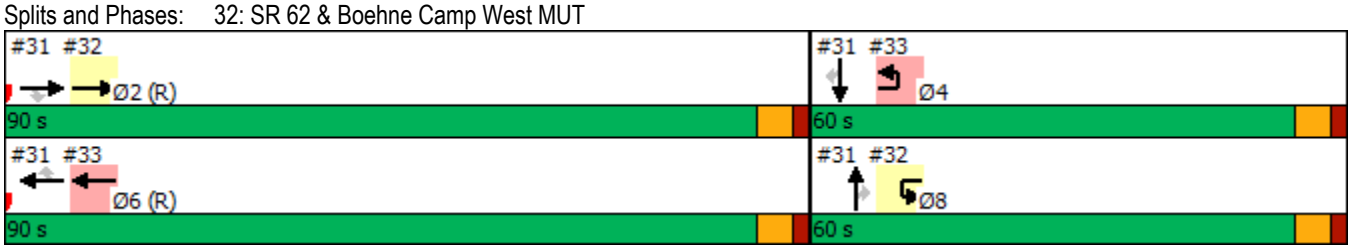
Lane Group	EBL	EBT	WBU	WBT	WBR	SBL	SBR	Ø4	Ø6
Lane Configurations		↑↑	⇈	↑↑					
Traffic Volume (vph)	0	1417	587	1390	0	0	0		
Future Volume (vph)	0	1417	587	1390	0	0	0		
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900		
Storage Length (ft)	0		250		0	0	0		
Storage Lanes	0		2		0	0	0		
Taper Length (ft)	100		25			75			
Lane Util. Factor	1.00	0.95	0.97	0.95	1.00	1.00	1.00		
Frt									
Flt Protected			0.950						
Satd. Flow (prot)	0	3539	3433	3539	0	0	0		
Flt Permitted			0.950						
Satd. Flow (perm)	0	3539	3433	3539	0	0	0		
Right Turn on Red					Yes		Yes		
Satd. Flow (RTOR)									
Link Speed (mph)		50		50		30			
Link Distance (ft)		4430		523		163			
Travel Time (s)		60.4		7.1		3.7			
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95		
Adj. Flow (vph)	0	1492	618	1463	0	0	0		
Shared Lane Traffic (%)									
Lane Group Flow (vph)	0	1492	618	1463	0	0	0		
Enter Blocked Intersection	No	No	No	No	No	No	No		
Lane Alignment	Left	Left	R NA	Left	Right	Left	Right		
Median Width(ft)		24		24		0			
Link Offset(ft)		0		0		0			
Crosswalk Width(ft)		16		16		16			
Two way Left Turn Lane									
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00		
Turning Speed (mph)	15		9		9	15	9		
Turn Type		NA	Prot	NA					
Protected Phases		2	8	Free				4	6
Permitted Phases									
Detector Phase		2	8						
Switch Phase									
Minimum Initial (s)		10.0	10.0					10.0	10.0
Minimum Split (s)		24.0	24.0					24.0	24.0
Total Split (s)		90.0	60.0					60.0	90.0
Total Split (%)		60.0%	40.0%					40%	60%
Maximum Green (s)		84.0	54.0					54.0	84.0
Yellow Time (s)		4.0	4.0					4.0	4.0
All-Red Time (s)		2.0	2.0					2.0	2.0
Lost Time Adjust (s)		0.0	0.0						
Total Lost Time (s)		6.0	6.0						
Lead/Lag									
Lead-Lag Optimize?									
Vehicle Extension (s)		3.0	3.0					3.0	3.0
Recall Mode		C-Max	None					None	C-Max
Walk Time (s)		7.0	7.0					7.0	7.0



Lane Group	EBL	EBT	WBU	WBT	WBR	SBL	SBR	Ø4	Ø6
Flash Dont Walk (s)		11.0	11.0					11.0	11.0
Pedestrian Calls (#/hr)		0	0					0	0
Act Effct Green (s)		93.6	44.4	150.0					
Actuated g/C Ratio		0.62	0.30	1.00					
v/c Ratio		0.68	0.61	0.41					
Control Delay		23.1	56.0	0.3					
Queue Delay		0.8	0.4	0.0					
Total Delay		23.8	56.4	0.3					
LOS		C	E	A					
Approach Delay		23.8		16.9					
Approach LOS		C		B					
Queue Length 50th (ft)		399	301	0					
Queue Length 95th (ft)		675	362	0					
Internal Link Dist (ft)		4350		443		83			
Turn Bay Length (ft)			250						
Base Capacity (vph)		2207	1235	3539					
Starvation Cap Reductn		0	215	0					
Spillback Cap Reductn		375	0	0					
Storage Cap Reductn		0	0	0					
Reduced v/c Ratio		0.81	0.61	0.41					

Intersection Summary			
Area Type:	Other		
Cycle Length: 150			
Actuated Cycle Length: 150			
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of 1st Green			
Natural Cycle: 60			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.80			
Intersection Signal Delay: 19.8		Intersection LOS: B	
Intersection Capacity Utilization 48.3%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 32: SR 62 & Boehne Camp West MUT

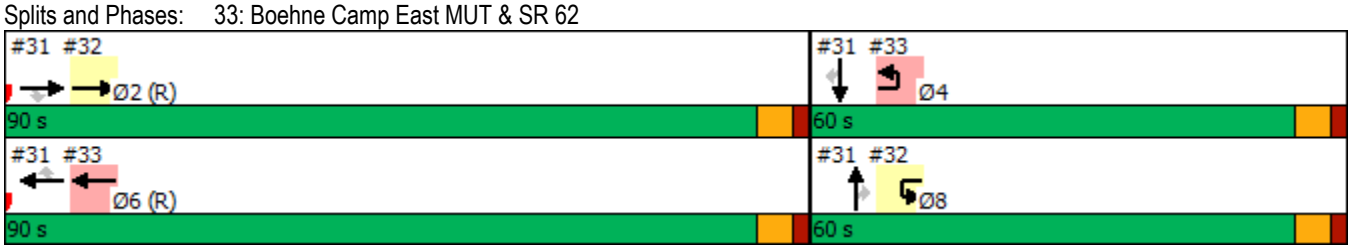


Lane Group	EBU	EBT	EBR	WBL	WBT	NBL	NBR	Ø2	Ø8
Lane Configurations									
Traffic Volume (vph)	292	1800	0	0	1532	0	0		
Future Volume (vph)	292	1800	0	0	1532	0	0		
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900		
Storage Length (ft)	250		0	0		0	0		
Storage Lanes	2		0	0		0	0		
Taper Length (ft)	25			100		75			
Lane Util. Factor	0.97	0.95	1.00	1.00	0.95	1.00	1.00		
Frt									
Flt Protected	0.950								
Satd. Flow (prot)	3433	3539	0	0	3539	0	0		
Flt Permitted	0.950								
Satd. Flow (perm)	3433	3539	0	0	3539	0	0		
Right Turn on Red			Yes				Yes		
Satd. Flow (RTOR)									
Link Speed (mph)		45			50	30			
Link Distance (ft)		548			1629	168			
Travel Time (s)		8.3			22.2	3.8			
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95		
Adj. Flow (vph)	307	1895	0	0	1613	0	0		
Shared Lane Traffic (%)									
Lane Group Flow (vph)	307	1895	0	0	1613	0	0		
Enter Blocked Intersection	No	No	No	No	No	No	No		
Lane Alignment	R NA	Left	Right	Left	Left	Left	Right		
Median Width(ft)		24			24	0			
Link Offset(ft)		0			0	0			
Crosswalk Width(ft)		16			16	16			
Two way Left Turn Lane									
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00		
Turning Speed (mph)	9		9	15		15	9		
Turn Type	Prot	NA			NA				
Protected Phases	4	Free			6			2	8
Permitted Phases									
Detector Phase	4				6				
Switch Phase									
Minimum Initial (s)	10.0				10.0			10.0	10.0
Minimum Split (s)	24.0				24.0			24.0	24.0
Total Split (s)	60.0				90.0			90.0	60.0
Total Split (%)	40.0%				60.0%			60%	40%
Maximum Green (s)	54.0				84.0			84.0	54.0
Yellow Time (s)	4.0				4.0			4.0	4.0
All-Red Time (s)	2.0				2.0			2.0	2.0
Lost Time Adjust (s)	0.0				0.0				
Total Lost Time (s)	6.0				6.0				
Lead/Lag									
Lead-Lag Optimize?									
Vehicle Extension (s)	3.0				3.0			3.0	3.0
Recall Mode	None				C-Max			C-Max	None
Walk Time (s)	7.0				7.0			7.0	7.0

Lane Group	EBU	EBT	EBR	WBL	WBT	NBL	NBR	Ø2	Ø8
Flash Dont Walk (s)	11.0				11.0			11.0	11.0
Pedestrian Calls (#/hr)	0				0			0	0
Act Effct Green (s)	44.4	150.0			93.6				
Actuated g/C Ratio	0.30	1.00			0.62				
v/c Ratio	0.30	0.54			0.73				
Control Delay	43.8	0.4			23.8				
Queue Delay	0.0	0.0			0.0				
Total Delay	43.8	0.4			23.9				
LOS	D	A			C				
Approach Delay		6.5			23.9				
Approach LOS		A			C				
Queue Length 50th (ft)	124	0			726				
Queue Length 95th (ft)	163	0			860				
Internal Link Dist (ft)		468			1549	88			
Turn Bay Length (ft)	250								
Base Capacity (vph)	1235	3539			2207				
Starvation Cap Reductn	0	0			0				
Spillback Cap Reductn	0	0			14				
Storage Cap Reductn	0	0			0				
Reduced v/c Ratio	0.25	0.54			0.74				

Intersection Summary			
Area Type:	Other		
Cycle Length: 150			
Actuated Cycle Length: 150			
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of 1st Green			
Natural Cycle: 60			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.80			
Intersection Signal Delay: 13.8		Intersection LOS: B	
Intersection Capacity Utilization 60.7%		ICU Level of Service B	
Analysis Period (min) 15			

Splits and Phases: 33: Boehne Camp East MUT & SR 62

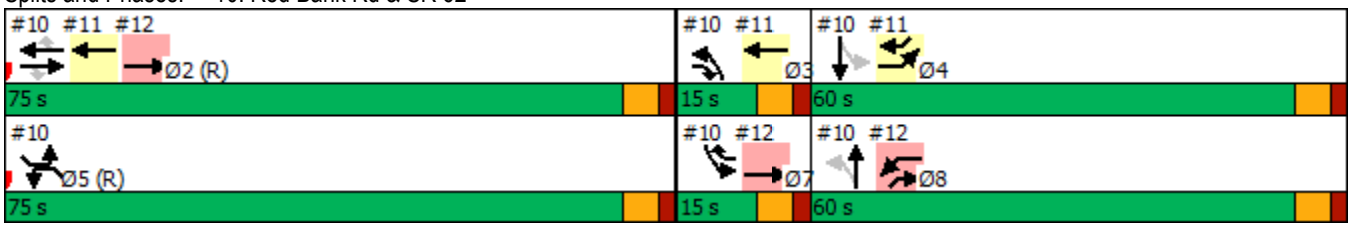


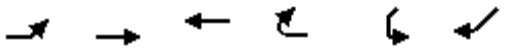
Lane Group	EBT	EBR2	WBT	WBR2	NBL2	NBT	NBR2	SBL2	SBT	SBR2	SEL2	NWL2
Lane Configurations												
Traffic Volume (vph)	1210	90	996	128	175	291	411	179	399	219	117	408
Future Volume (vph)	1210	90	996	128	175	291	411	179	399	219	117	408
Ideal Flow (vphpl)	2000	1900	2000	2000	2000	2000	2000	2000	2000	2000	2000	1900
Storage Length (ft)												
Storage Lanes												
Taper Length (ft)												
Lane Util. Factor	0.95	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00
Frt		0.850		0.850			0.850			0.850		
Flt Protected					0.950			0.950			0.950	0.950
Satd. Flow (prot)	3689	1568	3725	1667	1863	3725	1667	1863	3725	1667	1845	1770
Flt Permitted					0.406			0.499			0.950	0.950
Satd. Flow (perm)	3689	1568	3725	1667	796	3725	1667	978	3725	1667	1845	1770
Right Turn on Red		Yes		Yes			Yes			Yes		
Satd. Flow (RTOR)		85		139			457			235		
Link Speed (mph)	45		50			40			40			
Link Distance (ft)	523		548			544			471			
Travel Time (s)	7.9		7.5			9.3			8.0			
Peak Hour Factor	0.90	0.90	0.92	0.92	0.90	0.90	0.90	0.93	0.93	0.93	0.90	0.92
Heavy Vehicles (%)	3%	3%	2%	2%	2%	2%	2%	2%	2%	2%	3%	2%
Adj. Flow (vph)	1344	100	1083	139	194	323	457	192	429	235	130	443
Shared Lane Traffic (%)												
Lane Group Flow (vph)	1344	100	1083	139	194	323	457	192	429	235	130	443
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left
Median Width(ft)	12		12			12			12			
Link Offset(ft)	0		0			0			0			
Crosswalk Width(ft)	16		16			16			16			
Two way Left Turn Lane												
Headway Factor	0.94	1.00	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	1.00
Turning Speed (mph)		9		9	15		9	15		9	15	15
Turn Type	NA	pm+ov	NA	pm+ov	pm+pt	NA	Free	pm+pt	NA	Free	Prot	Prot
Protected Phases	2	3	2	7	3	8		7	4		5	5
Permitted Phases		2		2	8		Free	4		Free		
Detector Phase	2	3	2	7	3	8		7	4		5	5
Switch Phase												
Minimum Initial (s)	10.0	7.0	10.0	7.0	7.0	10.0		7.0	10.0		7.0	7.0
Minimum Split (s)	24.0	13.0	24.0	13.0	13.0	24.0		13.0	24.0		13.0	13.0
Total Split (s)	75.0	15.0	75.0	15.0	15.0	60.0		15.0	60.0		75.0	75.0
Total Split (%)	50.0%	10.0%	50.0%	10.0%	10.0%	40.0%		10.0%	40.0%		50.0%	50.0%
Maximum Green (s)	69.0	9.0	69.0	9.0	9.0	54.0		9.0	54.0		69.0	69.0
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0		4.0	4.0		4.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0		2.0	2.0		2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0	6.0	6.0	6.0		6.0	6.0		6.0	6.0
Lead/Lag		Lead		Lead	Lead	Lag		Lead	Lag			
Lead-Lag Optimize?						Yes			Yes			
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0		3.0	3.0
Recall Mode	C-Max	None	C-Max	None	None	None		None	None		C-Max	C-Max

Lane Group	EBT	EBR2	WBT	WBR2	NBL2	NBT	NBR2	SBL2	SBT	SBR2	SEL2	NWL2
Walk Time (s)	7.0		7.0			7.0			7.0			
Flash Dont Walk (s)	11.0		11.0			11.0			11.0			
Pedestrian Calls (#/hr)	0		0			0			0			
Act Effct Green (s)	76.6	91.6	76.6	91.6	55.4	46.4	150.0	55.4	46.4	150.0	76.6	76.6
Actuated g/C Ratio	0.51	0.61	0.51	0.61	0.37	0.31	1.00	0.37	0.31	1.00	0.51	0.51
v/c Ratio	0.71	0.10	0.57	0.13	0.54	0.28	0.27	0.46	0.37	0.14	0.14	0.49
Control Delay	40.4	10.4	27.9	2.5	35.4	38.8	0.4	33.0	40.5	0.2	38.0	43.9
Queue Delay	0.9	0.0	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.8
Total Delay	41.3	10.4	28.4	2.5	35.4	38.8	0.4	33.0	40.5	0.2	38.0	48.7
LOS	D	B	C	A	D	D	A	C	D	A	D	D
Approach Delay	39.2		25.5			20.1			27.7			
Approach LOS	D		C			C			C			
Queue Length 50th (ft)	586	24	384	0	122	124	0	121	170	0	136	462
Queue Length 95th (ft)	742	65	493	31	168	156	0	167	205	0	209	576
Internal Link Dist (ft)	443		468			464			391			
Turn Bay Length (ft)		250		350	350		350	150		150		
Base Capacity (vph)	1883	990	1901	1071	358	1341	1667	414	1341	1667	941	903
Starvation Cap Reductn	265	0	396	0	0	0	0	0	0	0	0	381
Spillback Cap Reductn	4	0	8	0	0	0	45	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.83	0.10	0.72	0.13	0.54	0.24	0.28	0.46	0.32	0.14	0.14	0.85

Intersection Summary			
Area Type:	Other		
Cycle Length: 150			
Actuated Cycle Length: 150			
Offset: 103 (69%), Referenced to phase 2:EBWB and 5:NWSEL, Start of 1st Green			
Natural Cycle: 80			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.84			
Intersection Signal Delay: 31.1		Intersection LOS: C	
Intersection Capacity Utilization 91.0%		ICU Level of Service E	
Analysis Period (min) 15			

Splits and Phases: 10: Red Bank Rd & SR 62



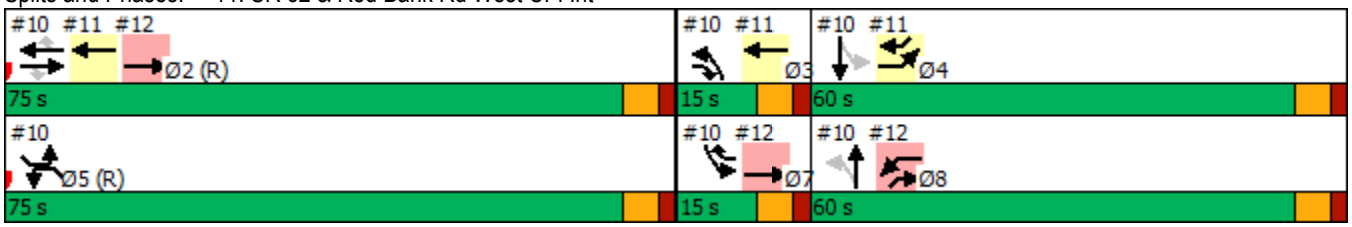


Lane Group	EBL	EBT	WBT	WBR	SWL	SWR	Ø2	Ø3	Ø5	Ø7	Ø8
Lane Configurations											
Traffic Volume (vph)	117	1300	1171	0	0	219					
Future Volume (vph)	117	1300	1171	0	0	219					
Ideal Flow (vphpl)	2000	2000	2000	2000	2000	1900					
Storage Length (ft)	200			0	0	0					
Storage Lanes	1			0	0	1					
Taper Length (ft)	100				25						
Lane Util. Factor	1.00	0.95	0.95	1.00	1.00	1.00					
Frt						0.865					
Flt Protected	0.950										
Satd. Flow (prot)	1845	3689	3725	0	0	1611					
Flt Permitted	0.950										
Satd. Flow (perm)	1845	3689	3725	0	0	1611					
Right Turn on Red				No		Yes					
Satd. Flow (RTOR)						52					
Link Speed (mph)		50	50		50						
Link Distance (ft)		1629	523		346						
Travel Time (s)		22.2	7.1		4.7						
Peak Hour Factor	0.90	0.90	0.92	0.92	0.93	0.93					
Heavy Vehicles (%)	3%	3%	2%	2%	2%	2%					
Adj. Flow (vph)	130	1444	1273	0	0	235					
Shared Lane Traffic (%)											
Lane Group Flow (vph)	130	1444	1273	0	0	235					
Enter Blocked Intersection	No	No	No	No	No	No					
Lane Alignment	Left	Left	Left	Right	Left	Right					
Median Width(ft)		12	12		0						
Link Offset(ft)		0	0		50						
Crosswalk Width(ft)		16	16		16						
Two way Left Turn Lane											
Headway Factor	0.94	0.94	0.94	0.94	0.94	1.00					
Turning Speed (mph)	15			9	15	9					
Turn Type	Prot	NA	NA			Over					
Protected Phases	4	Free	2 3			4	2	3	5	7	8
Permitted Phases											
Detector Phase	4		2 3			4					
Switch Phase											
Minimum Initial (s)	10.0					10.0	10.0	7.0	7.0	7.0	10.0
Minimum Split (s)	24.0					24.0	24.0	13.0	13.0	13.0	24.0
Total Split (s)	60.0					60.0	75.0	15.0	75.0	15.0	60.0
Total Split (%)	40.0%					40.0%	50%	10%	50%	10%	40%
Maximum Green (s)	54.0					54.0	69.0	9.0	69.0	9.0	54.0
Yellow Time (s)	4.0					4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	2.0					2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0					0.0					
Total Lost Time (s)	6.0					6.0					
Lead/Lag	Lag					Lag		Lead		Lead	Lag
Lead-Lag Optimize?	Yes					Yes					Yes
Vehicle Extension (s)	3.0					3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None					None	C-Max	None	C-Max	None	None

Lane Group	EBL	EBT	WBT	WBR	SWL	SWR	Ø2	Ø3	Ø5	Ø7	Ø8
Walk Time (s)	7.0					7.0	7.0				7.0
Flash Dont Walk (s)	11.0					11.0	11.0				11.0
Pedestrian Calls (#/hr)	0					0	0				0
Act Effct Green (s)	46.4	150.0	91.6			46.4					
Actuated g/C Ratio	0.31	1.00	0.61			0.31					
v/c Ratio	0.23	0.39	0.56			0.44					
Control Delay	28.5	0.3	7.0			33.2					
Queue Delay	0.0	0.1	0.1			0.0					
Total Delay	28.5	0.4	7.1			33.2					
LOS	C	A	A			C					
Approach Delay		2.7	7.1		33.2						
Approach LOS		A	A		C						
Queue Length 50th (ft)	79	0	93			140					
Queue Length 95th (ft)	107	0	107			209					
Internal Link Dist (ft)		1549	443		266						
Turn Bay Length (ft)	200										
Base Capacity (vph)	664	3689	2274			613					
Starvation Cap Reductn	0	0	182			0					
Spillback Cap Reductn	0	942	0			0					
Storage Cap Reductn	0	0	0			0					
Reduced v/c Ratio	0.20	0.53	0.61			0.38					

Intersection Summary			
Area Type:	Other		
Cycle Length: 150			
Actuated Cycle Length: 150			
Offset: 103 (69%), Referenced to phase 2:EBWB and 5:NWSEL, Start of 1st Green			
Natural Cycle: 80			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.84			
Intersection Signal Delay: 6.9		Intersection LOS: A	
Intersection Capacity Utilization 54.3%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 11: SR 62 & Red Bank Rd West CFI Int

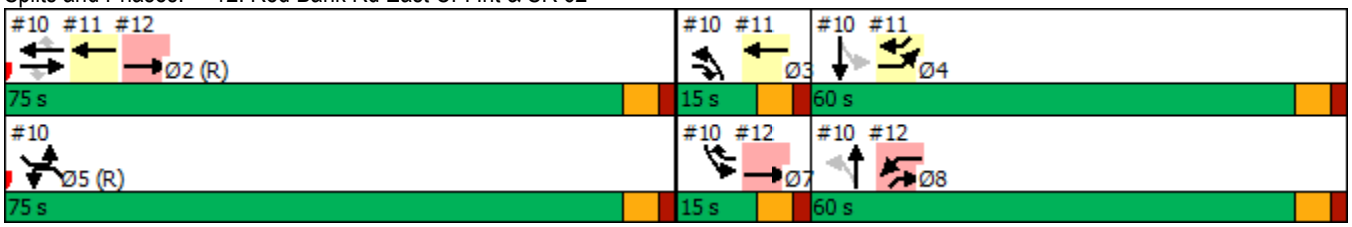


Lane Group	EBT	EBR	WBL	WBT	NEL	NER	Ø2	Ø3	Ø4	Ø5	Ø7
Lane Configurations											
Traffic Volume (vph)	1389	0	408	1124	0	411					
Future Volume (vph)	1389	0	408	1124	0	411					
Ideal Flow (vphpl)	2000	2000	2000	2000	2000	2000					
Storage Length (ft)		0	100		0	0					
Storage Lanes		0	1		0	1					
Taper Length (ft)			100		25						
Lane Util. Factor	0.95	1.00	1.00	0.95	1.00	1.00					
Frt						0.865					
Flt Protected			0.950								
Satd. Flow (prot)	3689	0	1863	3725	0	1696					
Flt Permitted			0.950								
Satd. Flow (perm)	3689	0	1863	3725	0	1696					
Right Turn on Red		No				Yes					
Satd. Flow (RTOR)						26					
Link Speed (mph)	45			50	45						
Link Distance (ft)	548			820	408						
Travel Time (s)	8.3			11.2	6.2						
Peak Hour Factor	0.90	0.90	0.92	0.92	0.90	0.90					
Heavy Vehicles (%)	3%	3%	2%	2%	2%	2%					
Adj. Flow (vph)	1543	0	443	1222	0	457					
Shared Lane Traffic (%)											
Lane Group Flow (vph)	1543	0	443	1222	0	457					
Enter Blocked Intersection	No	No	No	No	No	No					
Lane Alignment	Left	Right	Left	Left	Left	Right					
Median Width(ft)	12			12	0						
Link Offset(ft)	0			0	50						
Crosswalk Width(ft)	16			16	16						
Two way Left Turn Lane											
Headway Factor	0.94	0.94	0.94	0.94	0.94	0.94					
Turning Speed (mph)		9	15		15	9					
Turn Type	NA		Prot	NA		Over					
Protected Phases	2 7		8	Free		8	2	3	4	5	7
Permitted Phases											
Detector Phase	2 7		8			8					
Switch Phase											
Minimum Initial (s)			10.0			10.0	10.0	7.0	10.0	7.0	7.0
Minimum Split (s)			24.0			24.0	24.0	13.0	24.0	13.0	13.0
Total Split (s)			60.0			60.0	75.0	15.0	60.0	75.0	15.0
Total Split (%)			40.0%			40.0%	50%	10%	40%	50%	10%
Maximum Green (s)			54.0			54.0	69.0	9.0	54.0	69.0	9.0
Yellow Time (s)			4.0			4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)			2.0			2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)			0.0			0.0					
Total Lost Time (s)			6.0			6.0					
Lead/Lag			Lag			Lag		Lead	Lag		Lead
Lead-Lag Optimize?			Yes			Yes			Yes		
Vehicle Extension (s)			3.0			3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode			None			None	C-Max	None	None	C-Max	None

Lane Group	EBT	EBR	WBL	WBT	NEL	NER	Ø2	Ø3	Ø4	Ø5	Ø7
Walk Time (s)			7.0			7.0	7.0		7.0		
Flash Dont Walk (s)			11.0			11.0	11.0		11.0		
Pedestrian Calls (#/hr)			0			0	0		0		
Act Effct Green (s)	91.6		46.4	150.0		46.4					
Actuated g/C Ratio	0.61		0.31	1.00		0.31					
v/c Ratio	0.69		0.77	0.33		0.84					
Control Delay	6.9		55.8	0.2		59.3					
Queue Delay	0.2		0.8	0.0		0.8					
Total Delay	7.1		56.6	0.2		60.1					
LOS	A		E	A		E					
Approach Delay	7.1			15.2	60.1						
Approach LOS	A			B	E						
Queue Length 50th (ft)	102		388	0		392					
Queue Length 95th (ft)	113		491	0		505					
Internal Link Dist (ft)	468			740	328						
Turn Bay Length (ft)			100								
Base Capacity (vph)	2252		670	3725		627					
Starvation Cap Reductn	159		0	0		38					
Spillback Cap Reductn	0		63	126		0					
Storage Cap Reductn	0		0	0		0					
Reduced v/c Ratio	0.74		0.73	0.34		0.78					

Intersection Summary			
Area Type:	Other		
Cycle Length: 150			
Actuated Cycle Length: 150			
Offset: 103 (69%), Referenced to phase 2:EBWB and 5:NWSEL, Start of 1st Green			
Natural Cycle: 80			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.84			
Intersection Signal Delay: 17.4		Intersection LOS: B	
Intersection Capacity Utilization 70.7%		ICU Level of Service C	
Analysis Period (min) 15			

Splits and Phases: 12: Red Bank Rd East CFI Int & SR 62



Appendix H: Reduced Cycle Length (90 Second) Operational Analysis Tables

Table H1. AM Adjusted Signal Cycle Length Timings

AM Peak Hour	LOS (Delay, sec) [Queue Length*, feet] <v/c ratio>					
	CFI 2040			MUT 2040		
	Main Intersection	West Intersection	East Intersection	Main Intersection	West Intersection	East Intersection
SR 62 & Schutte Road						
Eastbound SR 62						
Left Turn						
Through	B (12.0) [265] <0.55>		A (2.4) [58] <0.48>	A (6.1) [138] <0.58>	A (7.2) [192] <0.45>	A (0.3) [0] <0.38>
Right Turn						
U-Turn			D (42.0) [m13] <0.06>			D (35.1) [m28] <0.09>
Overall Approach	***B (12.0)***		***A (2.78)***	***A (6.1)***	***A (7.2)***	***A (1.0)***
Westbound SR 62						
Left Turn			D (37.4) [57] <0.33>			
Through	A (3.4) [53] <0.57>		A (9.5) [252] <0.45>	A (2.0) [42] <0.53>	A (0.2) [0] <0.32>	A (10.0) [222] <0.48>
Right Turn	A (0.3) [m0] <0.03>			A (0.1) [m1] <0.04>		
U-Turn					D (36.8) [96] <0.37>	
Overall Approach	***A (3.3)***		***B (10.9)***	***A (2.0)***	***A (5.9)***	***A (10.0)***
Northbound Schutte Rd						
Left Turn	C (24.2) [22] <0.08>					
Through	D (37.9) [44] <0.19>			C (30.9) [40] <0.13>		
Right Turn	A (0.1) [0] <0.05>		B (18.8) [40] <0.35>	B (18.3) [50] <0.33>		
Overall Approach	***B (14.4)***		***B (18.8)***	***C (21.9)***		
Southbound Schutte Rd						
Left Turn	D (38.6) [116] <0.65>					
Through	C (31.9) [27] <0.06>			D (38.9) [130] <0.75>		
Right Turn	A (0.5) [0] <0.10>					
Overall Approach	***C (32.1)***			***D (38.9)***		
Westbound Schutte Rd CFI Left Turn						
Left Turn	A (4.6) [65] <0.06>					
Overall Approach	***A (4.6)***					
Overall Intersection	**B (10.0)**		**A (7.1)**	**A (7.7)**	**A (6.5)**	**A (5.2)**
SR 62 & Boehne Camp Road						
Eastbound SR 62						
Left Turn		C (31.7) [m38] <0.20>				
Through	B (16.4) [444] <0.60>	A (0.3) [0] <0.39>	A (2.6) [71] <0.49>	A (2.8) [81] <0.56>	B (14.3) [457] <0.56>	A (0.3) [0] <0.40>
Right Turn	A (3.4) [41] <0.12>			A (0.6) [2] <0.17>		
U-Turn						D (38.0) [84] <0.33>
Overall Approach	***B (15.1)***	***A (1.3)***	***A (2.6)***	***A (2.5)***	***B (14.3)***	***A (4.5)***

AM Peak Hour	LOS (Delay, sec) [Queue Length*, feet] <v/c ratio>					
	CFI 2040			MUT 2040		
	Main Intersection	West Intersection	East Intersection	Main Intersection	West Intersection	East Intersection
SR 62 & Boehne Camp Road (continued)						
Westbound SR 62						
Left Turn			C (31.3) [68] <0.28>			
Through	B (19.1) [325] <0.61>	A (2.0) [37] <0.52>	A (0.3) [0] <0.37>	A (5.3) [134] <0.57>	A (0.3) [0] <0.37>	A (4.6) [96] <0.49>
Right Turn	A (1.3) [9] <0.05>			A (1.1) [3] <0.10>		
U-Turn					C (32.0) [88] <0.39>	
Overall Approach	***B (18.2)***	***A (2.0)***	***A (1.8)***	***A (5.0)***	***A (4.6)***	***A (4.6)***
Northbound Boehne Camp Rd						
Left Turn	C (28.6) [98] <0.41>					
Through	D (37.2) [67] <0.25>			C (33.1) [63] <0.20>		
Right Turn	A (0.0) [0] <0.03>		B (15.8) [24] <0.28>	B (18.1) [55] <0.35>		
Overall Approach	***C (24.8)***		***B (15.8)***	***C (21.9)***		
Southbound Boehne Camp Rd						
Left Turn	C (34.1) [107] <0.61>					
Through	D (42.3) [78] <0.46>			D (36.7) [73] <0.38>		
Right Turn	A (0.1) [0] <0.07>	C (23.6) [44] <0.45>		C (29.8) [69] <0.62>		
Overall Approach	***C (27.5)***	***C (23.6)***		***C (31.6)***		
Eastbound Boehne Camp Rd CFI Left Turn						
Left Turn	A (6.5) [56] <0.04>					
Overall Approach	***A (6.5)***					
Westbound Boehne Camp Rd CFI Left Turn						
Left Turn	A (6.8) [76] <0.06>					
Overall Approach	***A (6.8)***					
Overall Intersection	**B (18.2)**	**A (2.5)**	**A (2.6)**	**A (8.0)**	**A (9.3)**	**A (4.5)**
SR 62 & Red Bank Road						
Eastbound SR 62						
Left Turn		C (32.1) [94] <0.27>			C (29.0) [80] <0.27>	
Through	C (21.2) [364] <0.76>	A (0.3) [0] <0.42>	A (3.0) [55] <0.64>	C (25.3) [483] <0.76>	A (0.3) [0] <0.42>	A (3.1) [55] <0.64>
Right Turn	A (1.8) [10] <0.05>			A (2.9) [17] <0.05>		
Overall Approach	***C (20.5)***	***A (1.9)***	***A (3.0)***	***C (25.3)***	***A (1.8)***	***A (3.1)***
Westbound SR 62						
Left Turn			D (37.6) [114] <0.44>			D (37.6) [114] <0.44>
Through	B (15.3) [264] <0.52>	A (1.4) [23] <0.43>	A (0.2) [0] <0.30>	B (15.3) [264] <0.52>	A (1.4) [23] <0.43>	A (0.2) [0] <0.30>
Right Turn	A (1.6) [13] <0.06>			A (1.6) [13] <0.06>		
Overall Approach	***B (14.4)***	***A (1.4)***	***A (4.2)***	***B (14.4)***	***A (1.4)***	***A (4.2)***

AM Peak Hour	LOS (Delay, sec) [Queue Length*, feet] <v/c ratio>					
	CFI 2040			MUT 2040		
	Main Intersection	West Intersection	East Intersection	Main Intersection	West Intersection	East Intersection
SR 62 & Red Bank Road (continued)						
Northbound Red Bank Rd						
Left Turn	C (21.7) [61] <0.22>			C (21.7) [61] <0.22>		
Through	C (32.0) [50] <0.20>			C (32.0) [50] <0.20>		
Right Turn	A (0.2) [0] <0.14>		D (40.6) [159] <0.68>	A (0.2) [0] <0.14>		D (40.6) [159] <0.68>
Overall Approach	***B (13.3)***		***D (40.6)***	***B (13.3)***		***D (40.6)***
Southbound Red Bank Rd						
Left Turn	C (24.9) [110] <0.41>			C (24.9) [110] <0.41>		
Through	C (32.4) [58] <0.22>			C (32.4) [58] <0.22>		
Right Turn	A (0.1) [0] <0.07>	A (7.8) [39] <0.31>		A (0.1) [0] <0.07>	A (7.8) [39] <0.31>	
Overall Approach	***C (20.5)***	***A (7.8)***		***C (20.5)***	***A (7.8)***	
Eastbound Red Bank Rd CFI Left Turn						
Left Turn	B (11.4) [98] <0.08>			B (11.0) [95] <0.08>		
Overall Approach	***B (11.4)***			***B (11.0)***		
Westbound Red Bank Rd CFI Left Turn						
Left Turn	B (10.6) [138] <0.14>			B (10.6) [138] <0.14>		
Overall Approach	***B (10.6)***			***B (10.6)***		
Overall Intersection	**B (17.4)**	**A (2.0)**	**A (6.0)**	**B (19.4)**	**A (1.9)**	**A (6.0)**

*95th Percentile Queue

m – Queue is metered by upstream signal

- Calculated queue after two cycle lengths

Table H2. PM Adjusted Signal Cycle Length Timings

PM Peak Hour	LOS (Delay, sec) [Queue Length*, feet] <v/c ratio>					
	CFI 2040			MUT 2040		
	Main Intersection	West Intersection	East Intersection	Main Intersection	West Intersection	East Intersection
SR 62 & Schutte Road						
Eastbound SR 62						
Left Turn						
Through	B (17.0) [415] <0.56>		A (1.9) [m13] <0.58>	A (5.9) [141] <0.67>	A (8.9) [288] <0.59>	A (0.4) [0] <0.48>
Right Turn						
U-Turn			D (38.4) [m13] <0.04>			C (34.3) [m37] <0.15>
Overall Approach	***B (17.0)***		***A (2.2)***	***A (5.9)***	***A (8.9)***	***A (1.2)***
Westbound SR 62						
Left Turn			C (32.8) [114] <0.58>			
Through	A (5.2) [46] <0.60>		B (13.0) [422] <0.49>	A (1.8) [39] <0.57>	A (0.3) [0] <0.37>	A (9.8) [382] <0.60>
Right Turn	A (0.6) [0] <0.04>			A (0.1) [m1] <0.04>		
U-Turn					D (35.6) [109] <0.40>	
Overall Approach	***A (5.1)***		***B (15.3)***	***A (1.8)***	***A (5.6)***	***A (9.8)***
Northbound Schutte Rd						
Left Turn	C (21.6) [33] <0.09>					
Through	C (30.9) [30] <0.07>			C (29.6) [30] <0.07>		
Right Turn	A (0.2) [0] <0.13>		D (38.1) [154] <0.68>	D (43.0) [183] <0.75>		
Overall Approach	***A (5.4)***		***D (38.1)***	***D (41.9)***		
Southbound Schutte Rd						
Left Turn	C (23.6) [52] <0.23>					
Through	C (30.2) [26] <0.06>			C (21.6) [61] <0.37>		
Right Turn	A (0.2) [0] <0.04>					
Overall Approach	***C (21.6)***			***C (21.6)***		
Westbound Schutte Rd CFI Left Turn						
Left Turn	A (9.4) [172] <0.16>					
Overall Approach	***A (9.4)***					
Overall Intersection	**B (11.2)**		**B (10.6)**	**A (7.4)**	**A (7.2)**	**A (5.1)**
SR 62 & Boehne Camp Road						
Eastbound SR 62						
Left Turn		D (43.7) [m51] <0.27>				
Through	B (17.3) [606] <0.77>	A (1.3) [0] <0.56>	A (0.9) [4] <0.58>	B (12.0) [265] <0.75>	B (17.9) [492] <0.70>	A (0.4) [0] <0.54>
Right Turn	A (1.0) [13] <0.28			A (7.3) [125] <0.53>		
U-Turn						C (29.2) [m109] <0.34>
Overall Approach	***B (14.2)***	***A (2.4)***	***A (0.9)***	***B (10.8)***	***B (17.9)***	***A (4.4)***

PM Peak Hour	LOS (Delay, sec) [Queue Length*, feet] <v/c ratio>					
	CFI 2040			MUT 2040		
	Main Intersection	West Intersection	East Intersection	Main Intersection	West Intersection	East Intersection
SR 62 & Boehne Camp Road (continued)						
Westbound SR 62						
Left Turn			D (36.7) [m60] <0.26>			
Through	B (20.0) [321] <0.55>	A (2.4) [79] <0.50>	A (0.2) [0] <0.35>	B (10.6) [173] <0.72>	A (0.3) [0] <0.41>	A (9.7) [192] <0.75>
Right Turn	A (0.6) [8] <0.06>			A (1.5) [m7] <0.23>		
U-Turn					C (32.4) [219] <0.69>	
Overall Approach	***B (18.7)***	***A (2.4)***	***A (1.7)***	***A (9.4)***	***A (9.8)***	***A (9.7)***
Northbound Boehne Camp Rd						
Left Turn	D (42.1) [206] <0.77>					
Through	D (40.7) [81] <0.33>			C (34.5) [236] <0.60>		
Right Turn	A (0.0) [0] <0.04>		C (23.3) [52] <0.29>	D (36.0) [240] <0.77>		
Overall Approach	***D (35.5)***		***C (23.3)***	***D (35.5)***		
Southbound Boehne Camp Rd						
Left Turn	C (22.8) [46] <0.15>					
Through	D (40.0) [70] <0.30>			E (55.2) [#395] <0.90>		
Right Turn	A (0.0) [0] <0.03>	A (8.3) [20] <0.19>		C (28.6) [158] <0.57>		
Overall Approach	***C (23.6)***	***A (8.3)***		***D (41.9)***		
Eastbound Boehne Camp Rd CFI Left Turn						
Left Turn	A (5.2) [67] <0.05>					
Overall Approach	***A (5.2)***					
Westbound Boehne Camp Rd CFI Left Turn						
Left Turn	A (5.0) 75 <0.05>					
Overall Approach	***A (5.0)***					
Overall Intersection	**B (18.0)**	**A (2.5)**	**A (1.7)**	**B (19.0)**	**B (13.2)**	**A (6.6)**
SR 62 & Red Bank Road						
Eastbound SR 62						
Left Turn		B (15.7) [m87] <0.24>			B (20.7) [93] <0.24>	
Through	D (41.8) [474] <0.84>	A (0.3) [0] <0.39>	A (5.5) [70] <0.74>	D (38.7) [505] <0.84>	A (0.3) [0] <0.39>	A (5.5) [70] <0.74>
Right Turn	A (7.8) [48] <0.11>			A (5.4) [36] <0.11>		
Overall Approach	***D (39.5)***	***A (1.6)***	***A (5.5)***	***D (36.4)***	***A (2.0)***	***A (5.5)***
Westbound SR 62						
Left Turn			D (41.1) [#366] <0.80>			D (41.1) [#366] <0.80>
Through	C (20.6) [329] <0.67>	A (5.6) [72] <0.60>	A (0.2) [0] <0.33>	C (20.6) [329] <0.67>	A (5.6) [72] <0.60>	A (0.2) [0] <0.33>
Right Turn	A (2.1) [24] <0.14>			A (2.1) [24] <0.14>		
Overall Approach	***C (20.6)***	***A (5.6)***	***B (11.1)***	***C (20.6)***	***A (5.6)***	***B (11.1)***

PM Peak Hour	LOS (Delay, sec) [Queue Length*, feet] <v/c ratio>					
	CFI 2040			MUT 2040		
	Main Intersection	West Intersection	East Intersection	Main Intersection	West Intersection	East Intersection
SR 62 & Red Bank Road (continued)						
Northbound Red Bank Rd						
Left Turn	C (22.2) [112] <0.51>			C (22.2) [112] <0.51>		
Through	C (24.8) [107] <0.29>			C (24.8) [107] <0.29>		
Right Turn	A (0.4) [0] <0.27>		D (47.1) [#396] <0.88>	A (0.4) [0] <0.27>		D (47.1) [#396] <0.88>
Overall Approach	***B (17.6)***		***D (47.1)***	***B (12.8)***		***D (47.1)***
Southbound Red Bank Rd						
Left Turn	C (20.3) [110] <0.43>			C (20.3) [110] <0.43>		
Through	C (26.0) [140] <0.39>			C (26.0) [140] <0.39>		
Right Turn	A (0.2) [0] <0.14>	C (22.8) [149] <0.46>		A (0.2) [0] <0.14>	C (22.8) [149] <0.46>	
Overall Approach	***B (17.6)***	***C (22.8)***		***B (17.6)***	***C (22.8)***	
Eastbound Red Bank Rd CFI Left Turn						
Left Turn	C (21.5) [140] <0.16>			C (21.2) [140] <0.16>		
Overall Approach	***C (21.5)***			***C (21.2)***		
Westbound Red Bank Rd CFI Left Turn						
Left Turn	C (23.9) [m363] <0.58>			C (23.9) [m363] <0.58>		
Overall Approach	***C (23.9)***			***C (23.9)***		
Overall Intersection	**C (24.3)**	**A (4.9)**	**B (13.2)**	**C (24.3)**	**A (5.0)**	**B (13.2)**

*95th Percentile Queue

m – Queue is metered by upstream signal

- Calculated queue after two cycle lengths

Appendix I: Itemized Construction Estimates

SR 62/Schutte Intersection Cost Estimate
North/South Approach Lane Modifications

ITEM	QUANTITY	UNIT		UNIT PRICE	EXTENSION
PAVEMENT					
HMA For Approaches Type D	11,100	SFT			
110 #/SYS HMA Surface	68	TON	$	150.00	$10,200
330 #/SYS HMA Intermediate	204	TON	$	150.00	$30,600
880 #/SYS HMA Base	543	TON	$	150.00	$81,450
Subgrade Treatment, Type IC (12" Compacted Aggregate)	1,357	SYS	$	40.00	$54,280
Mill & Overlay	52,500	SFT			
1.5" Milling	5,833	SYS	$	4.00	$23,333
165 #/SYS HMA Surface	481	TON	$	130.00	$62,530
Driveways					
HMA for Approaches, Type B	1,800	SFT			
165 #/SYS HMA Surface, Type B	17	TON	$	150.00	$2,550
275 #/SYS HMA Intermediate, Type B	28	TON	$	150.00	$4,200
Subgrade Treatment, Type II (6" Compacted Aggregate)	220	SYS	$	30.00	$6,600
SUBTOTAL, PAVEMENT					**$275,743**
EARTHWORK					
Common Excavation	500	CYS	$	50.00	$25,000
Borrow	800	CYS	$	30.00	$24,000
SUBTOTAL, EARTHWORK					**$49,000**
DRAINAGE					
Type 1 Pipe, 24"	170	LFT	$	75.00	$12,750
Type 3 Pipe, 18"	294	LFT	$	65.00	$19,110
Inlet	2	Each	$	2,800.00	$5,600
Curb & Gutter	280	LFT	$	25.00	$7,000
SUBTOTAL, DRAINAGE					**$44,460**
MISCELLANEOUS					
Retaining Wall	960	SFT	$	25.00	$24,000
Clearing R/W	1	LSUM	$	10,000.00	$10,000
Pavement Marking/Signs	1	LSUM	$	10,000.00	$10,000
Maintenance of Traffic	1	LSUM	$	75,000.00	$75,000
Traffic Signal Modifications	1	LSUM	$	50,000.00	$50,000
Lighting	1	LSUM	$	75,000.00	$75,000
SUBTOTAL, MISCELLANEOUS					**$244,000**
SUBTOTAL, PAVEMENT + EARTHWORK + DRAINAGE + MISCELLANEOUS					**$613,203**
PERCENTAGE COSTS				**PERCENT OF PROJECT**	
Mobilization/Demobilization				5%	$30,660.17
Construction Engineering				2%	$12,264.07
Contingency				25%	$153,300.83
SUBTOTAL, PERCENTAGE COSTS					**$196,225**
TOTAL CONSTRUCTION COST (2020)					**$809,428**
TOTAL CONSTRUCTION COST, 2025 (3% ANNUAL INFLATION)					**$938,349**
ANTICIPATED REIMBURSABLE UTILITY RELOCATIONS					
Overhead Electric	1	LSUM	$	50,000.00	$50,000
Misc	1	LSUM	$	25,000.00	$25,000
SUBTOTAL, REIMBURSABLE UTILITY RELOCATIONS					**$75,000**
RIGHT-OF-WAY ACQUISITION					
Land, Improvements & Damages	1	LSUM	$	10,000.00	$10,000
SOFT COSTS					
Preliminary Engineering	1	LSUM	$	200,000.00	$200,000
Right-of-Way Engineering	1	LSUM	$	15,000.00	$15,000
Right-of-Way Services	1	LSUM	$	35,000.00	$35,000
Construction Inspection (12.5%)	1	LSUM	$	117,294.00	$117,294
SUBTOTAL, SOFT COSTS					**$367,294**
TOTAL PROJECT COST					**$1,390,643**

Made By: NAW **Checked By: JAW** **5/28/2020**

SR 62/Boehne Camp Intersection Cost Estimate
North/South Approach Lane Modifications

ITEM	QUANTITY	UNIT		UNIT PRICE	EXTENSION
PAVEMENT					
HMA For Approaches Type D	8,400	SFT			
110 #/SYS HMA Surface	51	TON	$	150.00	$7,650
330 #/SYS HMA Intermediate	154	TON	$	150.00	$23,100
880 #/SYS HMA Base	411	TON	$	150.00	$61,650
Subgrade Treatment, Type IC (12" Compacted Aggregate)	1,027	SYS	$	40.00	$41,080
Mill & Overlay	10,900	SFT			
1.5" Milling	1,211	SYS	$	4.00	$4,844
165 #/SYS HMA Surface	100	TON	$	130.00	$13,000
Driveways					
HMA for Approaches, Type B	1,200	SFT			
165 #/SYS HMA Surface, Type B	11	TON	$	150.00	$1,650
275 #/SYS HMA Intermediate, Type B	18	TON	$	150.00	$2,700
Subgrade Treatment, Type II (6" Compacted Aggregate)	147	SYS	$	30.00	$4,410
SUBTOTAL, PAVEMENT					**$160,084**
EARTHWORK					
Common Excavation	500	CYS	$	50.00	$25,000
Borrow	500	CYS	$	30.00	$15,000
SUBTOTAL, EARTHWORK					**$40,000**
DRAINAGE					
Type 2 Pipe, 18"	180	LFT	$	75.00	$13,500
Inlet	2	Each	$	2,800.00	$5,600
Curb & Gutter	100	LFT	$	25.00	$2,500
SUBTOTAL, DRAINAGE					**$21,600**
MISCELLANEOUS					
Clearing R/W	1	LSUM	$	10,000.00	$10,000
Pavement Marking/Signs	1	LSUM	$	5,000.00	$5,000
Maintenance of Traffic	1	LSUM	$	50,000.00	$50,000
Traffic Signal Modifications	1	LSUM	$	50,000.00	$50,000
Lighting	1	LSUM	$	75,000.00	$75,000
SUBTOTAL, MISCELLANEOUS					**$190,000**
SUBTOTAL, PAVEMENT + EARTHWORK + DRAINAGE + MISCELLANEOUS					**$411,684**
PERCENTAGE COSTS				**PERCENT OF PROJECT**	
Mobilization/Demobilization				5%	$20,584.22
Construction Engineering				2%	$8,233.69
Contingency				25%	$102,921.11
SUBTOTAL, PERCENTAGE COSTS					**$131,739**
TOTAL CONSTRUCTION COST (2020)					**$543,423**
TOTAL CONSTRUCTION COST, 2025 (3% ANNUAL INFLATION)					**$629,977**
ANTICIPATED REIMBURSABLE UTILITY RELOCATIONS					
Misc	1	LSUM	$	25,000.00	$25,000
SUBTOTAL, REIMBURSABLE UTILITY RELOCATIONS					**$25,000**
RIGHT-OF-WAY ACQUISITION					
Land, Improvements & Damages	0	LSUM	$	-	$0
SOFT COSTS					
Preliminary Engineering	1	LSUM	$	150,000.00	$150,000
Right-of-Way Engineering	0	LSUM	$	-	$0
Right-of-Way Services	0	LSUM	$	-	$0
Construction Inspection (12.5%)	1	LSUM	$	78,747.00	$78,747
SUBTOTAL, SOFT COSTS					**$228,747**
TOTAL PROJECT COST					**$883,724**

Made By: NAW **Checked By: JAW** **5/28/2020**

LOCHMUELLER GROUP

SR 62/Schutte Intersection Cost Estimate
Continuous Flow Intersection/Median U-Turn

ITEM	QUANTITY	UNIT		UNIT PRICE	EXTENSION
PAVEMENT					
HMA For Approaches Type D	49,000	SFT			
110 #/SYS HMA Surface	299	TON	$	150.00	$44,850
330 #/SYS HMA Intermediate	898	TON	$	150.00	$134,700
880 #/SYS HMA Base	2,396	TON	$	150.00	$359,400
Subgrade Treatment, Type IC (12" Compacted Aggregate)	5,989	SYS	$	40.00	$239,560
Mill & Overlay	95,500	SFT			
1.5" Milling	10,611	SYS	$	4.00	$42,444
165 #/SYS HMA Surface	875	TON	$	130.00	$113,750
Driveways					
HMA for Approaches, Type B	1,750	SFT			
165 #/SYS HMA Surface, Type B	16	TON	$	150.00	$2,400
275 #/SYS HMA Intermediate, Type B	27	TON	$	150.00	$4,050
Subgrade Treatment, Type II (6" Compacted Aggregate)	214	SYS	$	30.00	$6,420
SUBTOTAL, PAVEMENT					**$947,574**
EARTHWORK					
Common Excavation	5,000	CYS	$	50.00	$250,000
Borrow	1,000	CYS	$	30.00	$30,000
SUBTOTAL, EARTHWORK					**$280,000**
DRAINAGE					
Pipe Under Roadway (Type 1, 24")	375	LFT	$	75.00	$28,125
Storm Sewer (Type 2, 18")	775	LFT	$	60.00	$46,500
Pipe Under Drives (Type 3, 18")	100	LFT	$	65.00	$6,500
Inlets	20	EACH	$	2,800.00	$56,000
Curb and Gutter	980	LFT	$	25.00	$24,500
SUBTOTAL, DRAINAGE					**$161,625**
MISCELLANEOUS					
Concrete Center Curb	1,300	SYS	$	40.00	$52,000
Retaining Wall	4,890	SFT	$	25.00	$122,250
Sodding	1,600	SYS	$	5.00	$8,000
Clearing R/W	1	LSUM	$	50,000.00	$50,000
Pavement Marking/Signs	1	LSUM	$	40,000.00	$40,000
Maintenance of Traffic	1	LSUM	$	150,000.00	$150,000
Traffic Signal	3	EACH	$	200,000.00	$600,000
Lighting	1	LSUM	$	90,000.00	$90,000
SUBTOTAL, MISCELLANEOUS					**$938,000**
SUBTOTAL, PAVEMENT + EARTHWORK + DRAINAGE + MISCELLANEOUS					**$2,327,199**
PERCENTAGE COSTS				**PERCENT OF PROJECT**	
Mobilization/Demobilization				5%	$116,359.97
Construction Engineering				2%	$46,543.99
Contingency				25%	$581,799.86
SUBTOTAL, PERCENTAGE COSTS					**$744,704**
TOTAL CONSTRUCTION COST (2020)					**$3,071,903**
TOTAL CONSTRUCTION COST, 2025 (3% ANNUAL INFLATION)					**$3,561,178**
ANTICIPATED REIMBURSABLE UTILITY RELOCATIONS					
Overhead Electric	1	LSUM	$	50,000.00	$50,000
Misc	1	LSUM	$	25,000.00	$25,000
SUBTOTAL, REIMBURSABLE UTILITY RELOCATIONS					**$75,000**
RIGHT-OF-WAY ACQUISITION					
Land, Improvements & Damages	1	LSUM	$	10,000.00	$10,000
SOFT COSTS					
Preliminary Engineering	1	LSUM	$	750,000.00	$750,000
Right-of-Way Engineering	1	LSUM	$	15,000.00	$15,000
Right-of-Way Services	1	LSUM	$	35,000.00	$35,000
Construction Inspection (12.5%)	1	LSUM	$	445,147.00	$445,147
SUBTOTAL, SOFT COSTS					**$1,245,147**
TOTAL PROJECT COST					**$4,891,325**

Made By: NAW **Checked By: JAW** **5/28/2020**

SR 62/Boehne Camp Intersection Cost Estimate
Continuous Flow Intersection

ITEM	QUANTITY	UNIT		UNIT PRICE	EXTENSION
PAVEMENT					
HMA For Approaches Type D	46,000	SFT			
110 #/SYS HMA Surface	281	TON	$	150.00	$42,150
330 #/SYS HMA Intermediate	843	TON	$	150.00	$126,450
880 #/SYS HMA Base	2,249	TON	$	150.00	$337,350
Subgrade Treatment, Type IC (12" Compacted Aggregate)	5,622	SYS	$	40.00	$224,880
Mill & Overlay	110,000	SFT			
1.5" Milling	12,222	SYS	$	4.00	$48,889
165 #/SYS HMA Surface	1,008	TON	$	130.00	$131,040
SUBTOTAL, PAVEMENT					**$910,759**
EARTHWORK					
Common Excavation	2,000	CYS	$	50.00	$100,000
Borrow	500	CYS	$	30.00	$15,000
SUBTOTAL, EARTHWORK					**$115,000**
DRAINAGE					
Pipe Under Roadway (Type 1, 24")	150	LFT	$	70.00	$10,500
Pipe Under Roadway (Type 2, 24")	150	LFT	$	66.00	$9,900
Pipe Under Roadway (Type 2, 18")	300	LFT	$	55.00	$16,500
Curb Inlet	14	EA	$	2,800.00	$39,200
Median Inlet	3	EA	$	2,800.00	$8,400
SUBTOTAL, DRAINAGE					**$84,500**
MISCELLANEOUS					
Center Curb	1,300	SYS	$	30.00	$39,000
Curb & Gutter	600	LFT	$	25.00	$15,000
Retaining Wall	3,120	SFT	$	25.00	$78,000
Sodding	750	SYS	$	9.00	$6,750
Clearing R/W	1	LSUM	$	10,000.00	$10,000
Pavement Marking/Signs	1	LSUM	$	50,000.00	$50,000
Maintenance of Traffic	1	LSUM	$	150,000.00	$150,000
Traffic Signal	2	EACH	$	150,000.00	$300,000
Traffic Signal Modified	1	EACH	$	200,000.00	$200,000
Lighting	1	LSUM	$	110,000.00	$110,000
SUBTOTAL, MISCELLANEOUS					**$958,750**
SUBTOTAL, PAVEMENT + EARTHWORK + DRAINAGE + MISCELLANEOUS					**$2,069,009**
PERCENTAGE COSTS				**PERCENT OF PROJECT**	
Mobilization/Demobilization				5%	$103,450.44
Construction Engineering				2%	$41,380.18
Contingency				25%	$517,252.22
SUBTOTAL, PERCENTAGE COSTS					**$662,083**
TOTAL CONSTRUCTION COST (2020)					**$2,731,092**
TOTAL CONSTRUCTION COST, 2025 (3% ANNUAL INFLATION)					**$3,166,084**
ANTICIPATED REIMBURSABLE UTILITY RELOCATIONS					
Misc	1	LSUM	$	75,000.00	$75,000
SUBTOTAL, REIMBURSABLE UTILITY RELOCATIONS					**$75,000**
RIGHT-OF-WAY ACQUISITION					
Land, Improvements & Damages	1	LSUM	$	10,000.00	$10,000
SOFT COSTS					
Preliminary Engineering	1	LSUM	$	650,000.00	$650,000
Right-of-Way Engineering	1	LSUM	$	9,000.00	$9,000
Right-of-Way Services	1	LSUM	$	21,000.00	$21,000
Construction Inspection (12.5%)	1	LSUM			$395,761
SUBTOTAL, SOFT COSTS					**$1,075,761**
TOTAL PROJECT COST					**$4,326,845**

Made By: NAW **Checked By: JAW** **5/28/2020**

SR 62/Red Bank Intersection Cost Estimate
Continuous Flow Intersection

ITEM	QUANTITY	UNIT		UNIT PRICE	EXTENSION
PAVEMENT					
HMA For Approaches Type D	58,000	SFT			
110 #/SYS HMA Surface	354	TON	$	150.00	$53,100
330 #/SYS HMA Intermediate	1,063	TON	$	150.00	$159,450
880 #/SYS HMA Base	2,836	TON	$	150.00	$425,400
Subgrade Treatment, Type IC (12" Compacted Aggregate)	7,089	SYS	$	40.00	$283,560
Mill & Overlay	170,500	SFT			
1.5" Milling	18,944	SYS	$	4.00	$75,778
165 #/SYS HMA Surface	1,563	TON	$	130.00	$203,190
SUBTOTAL, PAVEMENT					**$1,200,478**
EARTHWORK					
Common Excavation	5,000	CYS	$	50.00	$250,000
Borrow	1,000	CYS	$	30.00	$30,000
SUBTOTAL, EARTHWORK					**$280,000**
DRAINAGE					
Pipe Under Roadway (Type 2, 12")	475	LFT	$	60.00	$28,500
Pipe Under Roadway (Type 2, 15")	1,050	LFT	$	65.00	$68,250
Pipe Under Roadway (Type 2, 18")	600	LFT	$	70.00	$42,000
Pipe Under Roadway (Type 2, 24")	250	LFT	$	75.00	$18,750
Curb Inlet	20	EA	$	2,800.00	$56,000
Median Inlet	4	EA	$	2,800.00	$11,200
SUBTOTAL, DRAINAGE					**$224,700**
MISCELLANEOUS					
Center Curb	1,670	SYS	$	30.00	$50,100
Curb & Gutter	1,500	LFT	$	25.00	$37,500
Retaining Wall	4,200	SFT	$	25.00	$105,000
Sodding	1,000	SYS	$	5.00	$5,000
Clearing R/W	1	LSUM	$	10,000.00	$10,000
Pavement Marking/Signs	1	LSUM	$	50,000.00	$50,000
Lighting	1	LSUM	$	50,000.00	$50,000
Maintenance of Traffic	1	LSUM	$	150,000.00	$150,000
Traffic Signal	2	EACH	$	150,000.00	$300,000
Traffic Signal Modified	1	EACH	$	200,000.00	$200,000
Lighting	1	LSUM	$	130,000.00	$200,000
SUBTOTAL, MISCELLANEOUS					**$1,157,600**
SUBTOTAL, PAVEMENT + EARTHWORK + DRAINAGE + MISCELLANEOUS					**$2,862,778**
PERCENTAGE COSTS				**PERCENT OF PROJECT**	
Mobilization/Demobilization				5%	$143,138.89
Construction Engineering				2%	$57,255.56
Contingency				25%	$715,694.44
SUBTOTAL, PERCENTAGE COSTS					**$916,089**
TOTAL CONSTRUCTION COST (2020)					**$3,778,867**
TOTAL CONSTRUCTION COST, 2025 (3% ANNUAL INFLATION)					**$4,380,742**
ANTICIPATED REIMBURSABLE UTILITY RELOCATIONS					
Misc	1	LSUM	$	25,000.00	$25,000
SUBTOTAL, REIMBURSABLE UTILITY RELOCATIONS					**$25,000**
RIGHT-OF-WAY ACQUISITION					
Land, Improvements & Damages	1	LSUM	$	5,000.00	$5,000
SOFT COSTS					
Preliminary Engineering	1	LSUM	$	900,000.00	$900,000
Right-of-Way Engineering	1	LSUM	$	3,000.00	$3,000
Right-of-Way Services	1	LSUM	$	7,000.00	$7,000
Construction Inspection (12.5%)	1	LSUM			$547,593
SUBTOTAL, SOFT COSTS					**$1,457,593**
TOTAL PROJECT COST					**$5,868,335**

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SR 62/Schutte Intersection Cost Estimate
Median U-Turn

ITEM	QUANTITY	UNIT		UNIT PRICE	EXTENSION
PAVEMENT					
HMA For Approaches Type D	22,000	SFT			
110 #/SYS HMA Surface	134	TON	$	150.00	$20,100
330 #/SYS HMA Intermediate	403	TON	$	150.00	$60,450
880 #/SYS HMA Base	1,076	TON	$	150.00	$161,400
Subgrade Treatment, Type IC (12" Compacted Aggregate)	2,689	SYS	$	40.00	$107,560
Mill & Overlay	90,000	SFT			
1.5" Milling	10,000	SYS	$	4.00	$40,000
165 #/SYS HMA Surface	825	TON	$	130.00	$107,250
SUBTOTAL, PAVEMENT					**$496,760**
EARTHWORK					
Common Excavation	1,500	CYS	$	50.00	$75,000
Borrow	1,500	CYS	$	30.00	$45,000
SUBTOTAL, EARTHWORK					**$120,000**
DRAINAGE					
Pipe Under Roadway (Type 1, 24")	400	LFT	$	75.00	$30,000
Pipe Under Median and Roadway (Type 2, 15")	300	LFT	$	65.00	$19,500
Inlets	2	Each	$	2,800.00	$5,600
SUBTOTAL, DRAINAGE					**$55,100**
MISCELLANEOUS					
Sodding	2,000	SYS	$	5.00	$10,000
Clearing R/W	1	LSUM	$	10,000.00	$10,000
Pavement Marking/Signs	1	LSUM	$	20,000.00	$20,000
Maintenance of Traffic	1	LSUM	$	100,000.00	$100,000
Modify Signal	1	EACH	$	180,000.00	$180,000
Traffic Signal	2	EACH	$	200,000.00	$400,000
Lighting	1	LSUM	$	90,000.00	$90,000
SUBTOTAL, MISCELLANEOUS					**$810,000**
SUBTOTAL, PAVEMENT + EARTHWORK + DRAINAGE + MISCELLANEOUS					**$1,481,860**
PERCENTAGE COSTS				**PERCENT OF PROJECT**	
Mobilization/Demobilization				5%	$74,093.00
Construction Engineering				2%	$29,637.20
Contingency				25%	$370,465.00
SUBTOTAL, PERCENTAGE COSTS					**$474,195**
TOTAL CONSTRUCTION COST (2020)					**$1,956,055**
TOTAL CONSTRUCTION COST, 2025 (3% ANNUAL INFLATION)					**$2,267,604**
ANTICIPATED REIMBURSABLE UTILITY RELOCATIONS					
Misc	1	LSUM	$	25,000.00	$25,000
SUBTOTAL, REIMBURSABLE UTILITY RELOCATIONS					**$25,000**
RIGHT-OF-WAY ACQUISITION					
Land, Improvements & Damages	1	LSUM	$	-	$0
SOFT COSTS					
Preliminary Engineering	1	LSUM	$	500,000.00	$500,000
Right-of-Way Engineering	1	LSUM	$	-	$0
Right-of-Way Services	1	LSUM	$	-	$0
Construction Inspection (12.5%)	1	LSUM	$	283,451.00	$283,451
SUBTOTAL, SOFT COSTS					**$783,451**
TOTAL PROJECT COST					**$3,076,055**

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SR 62/Boehne Camp Intersection Cost Estimate
Median U-Turn

ITEM	QUANTITY	UNIT		UNIT PRICE	EXTENSION
PAVEMENT					
HMA For Approaches Type D	45,000	SFT			
110 #/SYS HMA Surface	275	TON	$	150.00	$41,250
330 #/SYS HMA Intermediate	825	TON	$	150.00	$123,750
880 #/SYS HMA Base	2,200	TON	$	150.00	$330,000
Subgrade Treatment, Type IC (12" Compacted Aggregate)	5,500	SYS	$	40.00	$220,000
Mill & Overlay	130,000	SFT			
1.5" Milling	14,444	SYS	$	4.00	$57,778
165 #/SYS HMA Surface	1,192	TON	$	130.00	$154,960
Driveways					
HMA for Approaches, Type B	1,200	SFT			
165 #/SYS HMA Surface, Type B	11	TON	$	150.00	$1,650
275 #/SYS HMA Intermediate, Type B	18	TON	$	150.00	$2,700
Subgrade Treatment, Type II (6" Compacted Aggregate)	59	SYS	$	30.00	$1,770
SUBTOTAL, PAVEMENT					**$933,858**
EARTHWORK					
Common Excavation	1,500	CYS	$	50.00	$75,000
Borrow	500	CYS	$	30.00	$15,000
SUBTOTAL, EARTHWORK					**$90,000**
DRAINAGE					
Pipe Under Roadway (Type 1, 24")	220	LFT	$	70.00	$15,400
Pipe Under Roadway (Type 2, 24")	132	LFT	$	66.00	$8,712
Pipe Under Roadway (Type 2, 15")	300	LFT	$	55.00	$16,500
Inlets	6	EA	$	2,800.00	$16,800
SUBTOTAL, DRAINAGE					**$57,412**
MISCELLANEOUS					
Curb & Gutter	380	LFT	$	25.00	$9,500
Sodding	2,000	SYS	$	9.00	$18,000
Clearing R/W	1	LSUM	$	15,000.00	$15,000
Pavement Marking/Signs	1	LSUM	$	15,000.00	$15,000
Maintenance of Traffic	1	LSUM	$	150,000.00	$150,000
Traffic Signal	2	EACH	$	150,000.00	$300,000
Traffic Signal Modified	1	EACH	$	200,000.00	$200,000
Lighting	1	LSUM	$	110,000.00	$110,000
SUBTOTAL, MISCELLANEOUS					**$817,500**
SUBTOTAL, PAVEMENT + EARTHWORK + DRAINAGE + MISCELLANEOUS					**$1,898,770**
PERCENTAGE COSTS				**PERCENT OF PROJECT**	
Mobilization/Demobilization				5%	$94,938.49
Construction Engineering				2%	$37,975.40
Contingency				25%	$474,692.44
SUBTOTAL, PERCENTAGE COSTS					**$607,606**
TOTAL CONSTRUCTION COST (2020)					**$2,506,376**
TOTAL CONSTRUCTION COST, 2025 (3% ANNUAL INFLATION)					**$2,905,577**
ANTICIPATED REIMBURSABLE UTILITY RELOCATIONS					
Misc	1	LSUM	$	10,000.00	$10,000
SUBTOTAL, REIMBURSABLE UTILITY RELOCATIONS					**$10,000**
RIGHT-OF-WAY ACQUISITION					
Land, Improvements & Damages	1	LSUM	$	-	$0
SOFT COSTS					
Preliminary Engineering	1	LSUM	$	600,000.00	$600,000
Right-of-Way Engineering	1	LSUM	$	-	$0
Right-of-Way Services	1	LSUM	$	-	$0
Construction Inspection (12.5%)	1	LSUM	$	363,197.00	$363,197
SUBTOTAL, SOFT COSTS					**$963,197**
TOTAL PROJECT COST					**$3,878,774**

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