



ZIONSVILLE ROAD IMPACT FEE ZONE IMPROVEMENT PLAN

TOWN OF ZIONSVILLE



APRIL 2023

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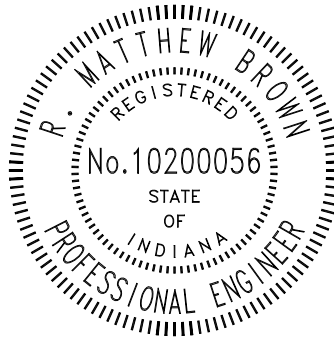
CERTIFICATION

I certify that this **ROAD IMPACT FEE ANALYSIS** has been prepared by me and under my immediate supervision and that I have experience and training in the field of traffic and transportation engineering.

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LEGEND

ZONE IMPROVEMENT PLAN AREA

EXISTING STUDY ROADWAY SEGMENT

PROPOSED ROADWAY

SINGLE FAMILY RESIDENTIAL

RESEARCH TECHNOLOGY

RETAIL

INDUSTRIAL

BUSINESS PARK

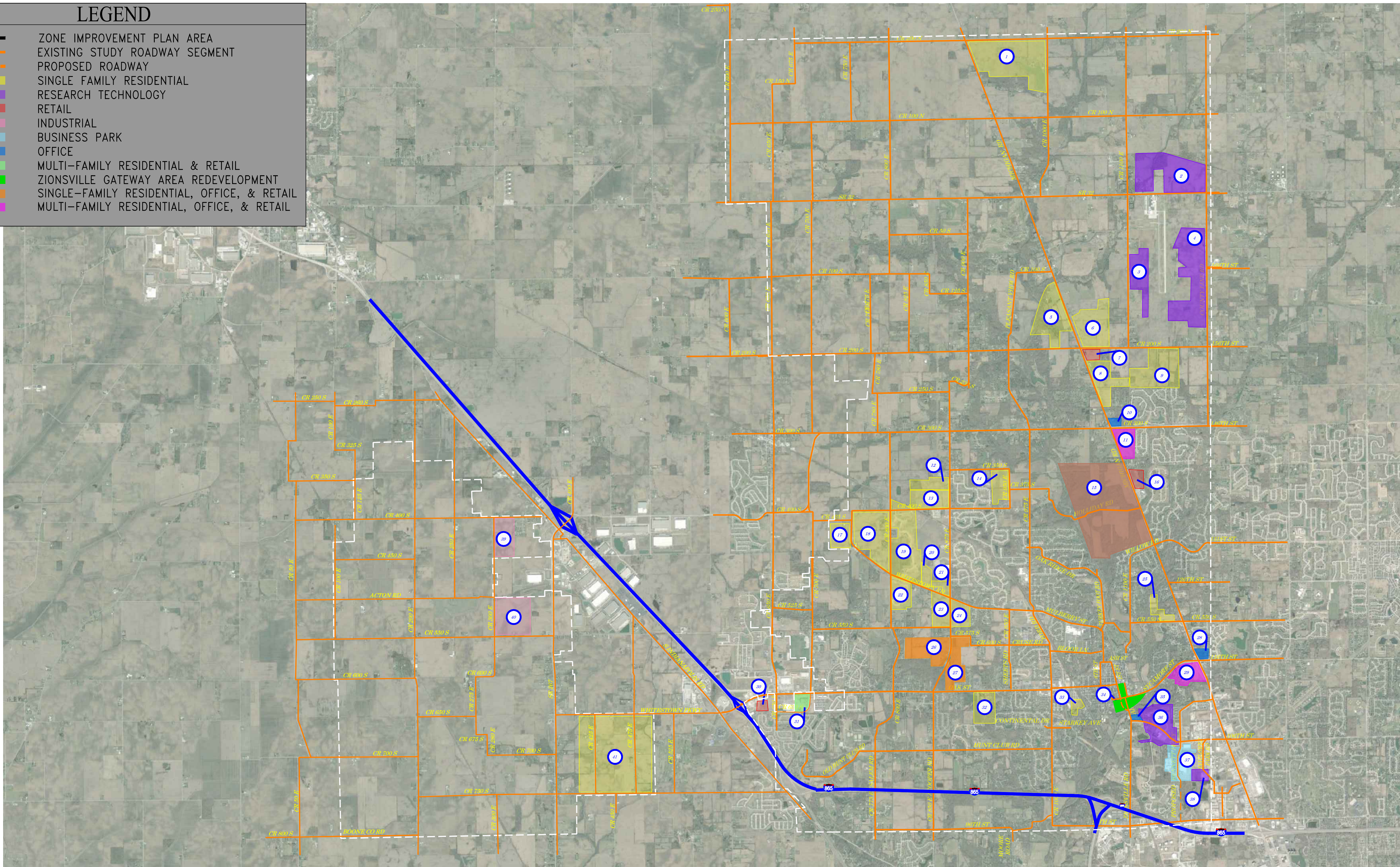
OFFICE

MULTI-FAMILY RESIDENTIAL & RETAIL

ZIONSVILLE GATEWAY AREA REDEVELOPMENT

SINGLE-FAMILY RESIDENTIAL, OFFICE, & RETAIL

MULTI-FAMILY RESIDENTIAL, OFFICE, & RETAIL



INTRODUCTION

The Town of Zionsville has undertaken a project to determine the amount of Road Impact Fee that can be assessed against future developments that will be constructed within the town limits. This analysis will project and evaluate the future impact of these developments on the roadway system. This report will serve as a Zone Improvement Plan for the study area.

In order to develop a meaningful road impact fee study, the Rational Nexus Theory was implemented. The Rational Nexus Theory states that new developments cannot be held responsible for the existing inadequacy of the street system. Therefore, this Zone Improvement Plan was developed in two separate parts. The first part determined the existing functionality of the intersections and roadways in the study area. Costs were then assigned to all intersection and roadway improvements that were needed to allow these intersections and roadways to function at the baseline levels of service with the existing traffic volumes. The second part of the analysis determined the traffic volumes that would be generated by the vacant parcels of land within the study area that could be developed over a 10-year period. The generated traffic volumes were assigned to the street system in the study area. The projected future traffic volumes were used to analyze the roadway system to determine the intersection and roadway improvements that would be necessary to accommodate the added traffic volumes. Cost estimates were then conducted for the recommended improvements. The resulting road impact fee was then calculated by dividing the estimated cost to mitigate 10-year traffic volumes by the number of 24-hour weekday trips generated by the 10-year proposed developments identified by the Town of Zionsville Planning Department. This amount is the cost the development community will be required to fund to meet the future intersection and roadway needs of the Town.

In determining the results of this analysis, A&F Engineering has followed acceptable traffic and transportation engineering methodologies and has completed this Zone Improvement Plan by following the Rational Nexus Theory to its complete understanding.

PURPOSE

The purpose of this project is as follows:

Existing Conditions – Review the major street network as it presently exists within the study area. If necessary, intersection and roadway improvements will be recommended based on the existing traffic volumes. Estimated construction costs will be determined for the corresponding intersection and roadway improvements.

Projected 10-Year Conditions – Estimate the trips that could be generated by the vacant parcels of land and partially vacant parcels of land as identified by the Town of Zionsville planning staff within the study area. These trips will then be added to the existing traffic volumes to estimate the 10-year traffic volumes that will utilize the Town’s roadway system. Intersection and roadway improvements will then be recommended based on these future traffic volumes. Estimated construction costs will be determined for the corresponding intersection and roadway improvements.

Road Impact Fee – Calculate the road impact fee based on the estimated construction costs to mitigate existing conditions, projected 10-year conditions, and the projected 24-hour weekday trips that will be generated by the 10-year vacant land parcels.

STUDY AREA

The study area for this Zone Improvement Plan has been determined based on guidelines set by the Town of Zionsville. **Figure 1**, located at the front of this report, shows the Zone Improvement Plan boundary and the intersections and roadway segments that are included in the study area.

In order to create the 10-year traffic volumes, trips must be generated from vacant parcels within the study area. The Town of Zionsville planning staff identified vacant land parcels that would be developed within the next ten years and how they would develop. **Figure 2** shows the location of the vacant land parcels in reference to the study area roadway network.

HISTORICAL ROADWAY FUNDING SOURCES

Historically, the Town of Zionsville has used various sources to fund road expenditures. These include Local Road & Street Distributions, the Motor Vehicle Highway Distributions, Local Street & Bridge Match Grants, General Obligation Bonds, Cumulative Capital Development Funds, Cumulative Capital Improvement Funds, and Special Local Income Tax Funds. **Table 1** is a summary of the funds received from each source over the past five years.

TABLE 1 – HISTORICAL ROADWAY FUNDING SOURCES

Year	LR&S Distribution	MVH Distribution	MVH Restricted Distribution	LR&B Match Grant	2018 GO Bonds	Cum Cap Dev	Cum Cap Improv	Special LIT
2017	\$437,315	\$567,138	---	\$1,000,000	---	\$161,039	\$183,511	---
2018	\$49,999	\$470,263	---	\$482,223	---	---	---	\$136,769
2019	\$50,000	\$2,279,587	---	---	\$552,798	\$200,000	---	---
2020	\$493,521	\$2,563,539	---	\$468,794	\$5,555,974	---	---	---
2021	\$499,410	\$844,461	\$500,000	\$116,951	\$1,895,458	\$177,666	---	\$500,000
Total	\$1,530,245	\$6,724,988	\$500,000	\$2,067,968	\$8,004,230	\$538,705	\$183,511	\$636,769

SCOPE OF WORK

The scope of work for this analysis is as follows:

Existing Conditions

1. Determine the existing traffic volumes at all intersections and along all roadway segments.
 - a. Perform manual turning movement traffic counts at the existing study area intersections.
 - b. Perform 24-hour traffic counts (Annual Daily Traffic Volumes [ADT]) along the existing study area roadway segments.
2. Inventory all existing study area intersections to determine traffic control and intersection geometrics.
3. Inventory all existing roadway segments to determine number of lanes, lane widths, shoulder widths and speed limits.
4. Prepare a capacity analysis for each intersection and each roadway segment using existing geometrics, existing traffic controls and existing traffic volumes. The capacity analysis will provide levels of service for each of the intersections and roadway segments which can be compared to the acceptable baseline level of service standards.
5. Make recommendations to improve the intersections and roadway segments that are below acceptable baseline levels of service.
6. Estimate construction costs based on the corresponding intersection and roadway improvements needed to provide the baseline level of service for the existing traffic volumes.

Projected 10-Year Conditions

1. Based on input from the Town of Zionsville planning staff, identify all vacant and partially vacant parcels of land within the study area and confirm the potential future land uses and densities for those parcels.
2. Estimate the number of AM peak hour and PM peak hour trips that will be generated by the potential use of each of these parcels.
3. Assign and distribute the generated trips for the AM and PM peak hour periods throughout the street system.
4. Determine the total AM and PM peak hour generated trips from the vacant parcels at each intersection and along each roadway segment within the study area roadway network.

5. Add the generated trips to the existing traffic volumes to develop 10-year traffic volume estimates.
6. Prepare a capacity analysis for each intersection and each roadway segment using the projected 10-year traffic volumes. The capacity analysis will provide levels of service for the roadway segments and intersections which can be compared to the acceptable baseline level of service standards.
7. Make recommendations to improve the intersections and roadway segments that are below the acceptable baseline levels of service.
8. Estimate construction costs based on the corresponding roadway and intersection improvements needed to accommodate the projected 10-year traffic volumes.

Road Impact Fee Calculation

1. Estimate the 24-hour weekday trips that will be generated by the potential use of each vacant parcel.
2. Determine the construction costs associated with bringing the intersections and roadway segments to acceptable baseline levels of service for existing and 10-year traffic scenarios. The total road impact fee cost is then calculated from the difference in the 10-year construction costs and existing constructions costs and then adding the cost to perform the road impact fee study.
3. Divide the total road impact fee cost by the total 24-hour weekday trips to yield the road impact fee per 24-hour weekday trip.

EXISTING TRAFFIC DATA

Peak hour turning movement traffic volume counts were conducted at the study intersections by A&F Engineering Co., LLC. The counts include an hourly total of all "through" traffic and all "turning" traffic at the intersection. The counts were made during the hours of 6:30 AM to 8:30 AM and 4:30 PM to 6:30 PM in year 2021. The "Intersection Volumes" tables shown in **Exhibit A** summarize the existing traffic volumes for the peak hours obtained from the manual counts. The raw data sheets for the intersection traffic counts are included in **Appendix A**.

Directional, classified traffic volume counts were conducted along all major existing roadway segments in the study area by A&F Engineering Co., LLC in year 2021. These counts were conducted over 24-hours during a typical weekday to yield the roadway segment “Average Daily Traffic” (ADT). The “Segment Volumes” tables in **Exhibit B** summarize the existing traffic volumes for the peak hours and the ADT obtained from the roadway segment traffic counts. The raw data sheets for the roadway segment traffic counts are included in **Appendix B**.

EXISTING INTERSECTION INVENTORY

The following characteristics were identified for each study intersection within the study area:

- Traffic Controls
- Intersection Geometrics

EXISTING ROADWAY SEGMENT INVENTORY

Each study roadway within the study area was identified by dividing the roadway into segments to be analyzed. In general, each segment was chosen based on a major change in traffic conditions or roadway characteristics. The characteristics that were included in the roadway segment analyses are:

- Number of Lanes
- Segment Length
- Speed Limits
- Percent No-Passing Zones
- Presence of Median or Passing Lanes

VACANT LAND PARCELS – PROPOSED USES

The vacant parcels of land included in this analysis and identified by the Town of Zionsville Planning Department are illustrated on **Figure 2**. In addition, the individual land uses and densities that could be built out in the next 10 years on these parcels were determined based on the information provided by the Town of Zionsville Planning Department.

GENERATED TRIPS

An estimate of generated traffic from each of the 10-year vacant parcel developments is a function of the size and character of each land use. The *ITE Trip Generation Manual (11th Edition)*¹ was used to calculate the total number of trips expected to be generated by each land use during the AM peak hour, PM peak hour, and 24-hour weekday period. The *ITE Trip Generation Manual* is a compilation of trip data for various land uses as collected by transportation professionals throughout the United States in order to establish the average number of trips generated by those land uses. Based on the information provided by the Town of Zionsville' Planning Department as well as data taken from *ITE Trip Generation Manual (11th Edition)*, the classifications and descriptions for each of the vacant parcel developments applicable to this study are as follows:

- Single Family:** Single family land uses are defined as all single family detached homes on individual lots. A typical example of this land use is a suburban subdivision.
- Multi-Family:** Multi-family housing generally includes apartments and condominiums located within the same building with at least three other dwelling units and that have two or three levels (floors).
- Senior**
- Apartments:** Senior apartment land uses include independent living developments such as retirement communities, age-restricted housing, and active adult communities.
- General Retail:** The general retail land use includes neighborhood center, regional shopping centers, and area service nodes that are planned, developed, owned and managed as a shopping center.
- Super Market:** A super market is a free-standing store that sells a complete assortment of food, beverage, food preparation materials, and household products and can include additional facilities such as a bakery, dry cleaners, florist, bank, or pharmacy.
- General Office:** General office land uses typically have multiple tenants and are locations where affairs of businesses, commercial or industrial organizations, or professional persons or firms are conducted.
- Office Park:** An office park typically contains general office building and support services, such as banks, restaurants, and service stations, arranged in a park or campus-like atmosphere.

¹ *Trip Generation Manual*, Institute of Transportation Engineers, Eleventh Edition, 2021.

Medical Office: A medical-dental office building provides diagnoses and outpatient care on a routine basis but is unable to provide prolonged in-house medical and surgical care. These offices are typically operated by private physicians or dentists.

Business Park: A business park typically consists of flex-type or incubator one- or two-story buildings served by a common roadway system. The tenant space is flexible and lends itself to a variety of uses. The rear side of the building is often served by a garage door. Tenants may be start-up companies or small mature companies that require a variety of space including offices, retail and wholesale store, restaurants, recreational areas and warehousing, manufacturing, light industrial, or scientific research functions.

Research &

Development: The typical businesses within the research and development land use varies. However, the land use typically includes facilities devoted almost exclusively to research and development activities.

General Light

Industrial: A general light industrial facility is typically devoted to a single use with an emphasis on activities other than manufacturing such as printing, material testing, and assembly of data processing equipment and typically has minimal office space.

INTERNAL TRIPS

Mixed-use developments, typically generate internal trips that are made between individual land uses within the development. These internal trips do not access the public street system; therefore, they are not included in the capacity calculations. For the mixed-use developments considered in this report, the internal trip reduction rates outlined in the *ITE Trip Generation Handbook* were applied.

PASS-BY TRIPS

The retail uses considered in this analysis will attract pass-by trips. Pass-by trips are trips already on the roadway system that enter each development and then return the roadway system. *ITE Trip Generation Handbook*² provides procedures and data that can be used to estimate the reduction in trips for the retail land uses.

² *Trip Generation Handbook*, Institute of Transportation Engineers, Eleventh Edition, 2021.

ASSIGNMENT & DISTRIBUTION OF GENERATED TRIPS

To determine the volume of traffic that will be added to the study area roadway and intersection network, the generated traffic must be assigned and distributed by direction to the public roadway at its intersection with the development access points, and then to each of the intersections throughout the study area. For each of the vacant parcels within the study area, the assignment and distribution were based on the existing traffic patterns, the location of population and employment centers in relation to the individual parcels, and the proposed street system within the study area. The assignment and distribution of the generated traffic for each parcel was expedited by using *PTV VISUM 22*³, a state-of-the-art transportation planning software package that utilizes origin-destination pairs and allows for changes in the roadway system and driver behavior to be considered when future traffic flows are to be determined.

PROJECTED 10-YEAR TRAFFIC VOLUMES

Information provided by the Town of Zionsville Planning Department was used to develop land use and density determinations for each parcel of vacant land. The generated traffic volumes from each parcel were totaled for both the AM peak hour and the PM peak hour at each of the study intersections and roadway segments. These generated volumes were then added to the existing traffic volumes at each intersection and roadway segment to obtain the 10-year traffic volumes. The projected 10-year traffic volumes are summarized for the AM peak hour and PM peak hour for each intersection on the “Intersection Volumes” tables in **Exhibit A** and for each roadway segment on the “Segment Volumes” tables in **Exhibit B**.

TRAFFIC SIGNAL WARRANT ANALYSIS

Peak Hour Traffic Signal Warrant analyses were conducted at two-way stop and all-way stop controlled intersections where the minor streets have shown to operate below acceptable baseline levels of service to determine if the installation of a traffic signal or construction of a roundabout should be considered under existing and/or 10-year conditions.

³ *PTV VISUM 2022.01-12*, PTV Group, 2022.

CAPACITY ANALYSIS

The "efficiency" of an intersection or roadway segment is based on its ability to accommodate the traffic volumes that approach the intersection or that travel along the roadway segment. It is defined by the Level-of-Service (LOS) of the intersection or roadway segment. The LOS is determined by a series of calculations commonly called a "capacity analysis". Input data into a capacity analysis include traffic volumes, intersection geometry, number and use of lanes, and, in the case of signalized intersections, traffic signal timing. To determine the LOS at each of the study intersections, a capacity analysis has been made using the recognized computer program *Synchro 11*⁴. This program allows multiple intersections to be analyzed and optimized using the capacity calculation methods outlined within the *Highway Capacity Manual (HCM 6th Edition)*⁵. To determine the LOS at each of the roadway segments, a capacity analysis has been performed using the computer program *HIGHPLAN*, which uses the capacity calculation methods outlined within the *Highway Capacity Manual (HCM)* for two-lane and multi-lane roadway segments.

DESCRIPTION OF LEVEL OF SERVICE – INTERSECTIONS

The Level of Service (LOS) for an intersection is based on the control delay (in seconds) that a vehicle would typically experience at the intersection. The following data obtained from the *Highway Capacity Manual (HCM)* describes the delay thresholds related to the levels of service for signalized intersections:

- Level of Service A** - describes operations with a very low delay, less than or equal to 10.0 seconds per vehicle. This occurs when progression is extremely favorable, and most vehicles arrive during the green phase. Most vehicles do not stop at all.
- Level of Service B** - describes operations with delay in the range of 10.1 to 20.0 seconds per vehicle. This generally occurs with good progression. More vehicles stop than LOS A, causing higher levels of average delay.
- Level of Service C** - describes operation with delay in the range of 20.1 seconds to 35.0 seconds per vehicle. These higher delays may result from failed progression. The number of vehicles stopping is significant at this level, although many still pass through the intersection without stopping.

⁴ *Synchro/SimTraffic 11.1.0.8*, Trafficware, 2021.

⁵ *Highway Capacity Manual Sixth Edition (HCM)* Transportation Research Board, National Research Council, Washington, DC, 2017.

- Level of Service D** - describes operations with delay in the range of 35.1 to 55.0 seconds per vehicle. At level of service D, the influence of congestion becomes more noticeable. Longer delays may result from some combinations of unfavorable progression. Many vehicles stop, and the proportion of vehicles not stopping declines. This is the limit of acceptable delay.
- Level of Service E** - describes operations with delay in the range of 55.1 to 80.0 seconds per vehicle. These high delay values generally indicate poor progression and long cycle lengths.
- Level of Service F** - describes operations with delay in excess of 80.0 seconds per vehicle. This is considered to be unacceptable to most drivers. This condition often occurs with oversaturation, i.e., when arrival flow rates exceed the capacity of the intersection. Poor progression and long cycle lengths may also be major contributing causes to such delay levels.

The following *Highway Capacity Manual (HCM)* tables, show the delays related to the levels of service for unsignalized, signalized, and roundabout intersections:

<u>Level of Service</u>	<u>Control Delay (seconds/vehicle)</u>	
	<u>UNSIGNALIZED/ROUNDBOUT</u>	<u>SIGNALIZED</u>
A	Less than or equal to 10	Less than or equal to 10
B	Between 10.1 and 15	Between 10.1 and 20
C	Between 15.1 and 25	Between 20.1 and 35
D	Between 25.1 and 35	Between 35.1 and 55
E	Between 35.1 and 50	Between 55.1 and 80
F	greater than 50	greater than 80

DESCRIPTION OF LEVEL OF SERVICE – ROADWAYS

HIGHPLAN computer software was used to determine the Level of Service (LOS) for the two-lane roadway segments (one travel lane in each direction) and multilane roadway segments (more than one travel lane in each direction) in this study. In the *HIGHPLAN* software, the LOS for the two-lane roadway segments for urban/developed areas is based on the percentage free flow speed (the percentage of speed traveled in relation to the posted speed limit) that can be obtained over the segment. For multilane roadway segments, the LOS is based on the density (passenger cars per mile per lane) of the segment.

HIGHPLAN utilizes the following roadway variables in the determination of the LOS for two-lane and multilane roadway segments:

- Number of Lanes
- Segment Length
- Speed Limit
- Percent No-Passing
- Presence of Median or Passing Lanes
- Average Daily Traffic (ADT)
- Directional Split of traffic
- Peak Hour Factor (PHF)
- % Heavy Vehicle

The following tables show the criteria used by *HIGHPLAN* in determining the level of service for two-lane roadway segments and multilane roadway segments.

LOS Thresholds for Two-Lane Roadway Segments		
Level of Service	Percentage of Free Flow Speed (%)	Minimum Speed (mph)
A	≥ 92	45
B	83-91.9	35
C	75-82.9	35
D	67-74.9	35
E	≤ 67	35
F	$v/c \geq 1.0$	35

LOS Thresholds for Multilane Roadway Segments		
Level of Service	Density (pc/mi/ln)	Speed (mph)
A	≤ 11	ALL
B	11.1-18	ALL
C	18.1-26	ALL
D	26.1-35	ALL
E	35.1-45	45-60
F	> 45	45-60

ACCEPTABLE BASELINE LEVEL OF SERVICE STANDARDS

The Town of Zionsville has established a minimum acceptable baseline level of service (LOS) standard that was used when performing the capacity analyses for the study intersections and roadway segments. Level of service ‘D’ has been selected as the minimum acceptable baseline LOS for intersections and level of service ‘E’ as the minimum acceptable baseline LOS for roadway segments in this Zone Improvement Plan. This standard is used for both existing conditions and projected 10-year conditions.

In some cases, it was not feasible to achieve a LOS D. For those intersections that operate below acceptable baseline levels of service (LOS E and F), maximum efforts have been made to improve the level of service to a minimum of D. However, due to the fact that reasonable design is not sufficient to achieve acceptable baseline levels of service, no further mitigations were considered.

In addition to the LOS standards for roadway segments, a maximum width standard is considered. In this standard, a 20-foot-wide roadway with a 2-foot shoulder was considered to be the minimum acceptable cross-section of a roadway segment. However, the costs associated with widening any deficient segments were not considered as it was assumed that the segments will be widened as development occurs along the frontage of these roadways.

RECOMMENDED IMPROVEMENT CRITERIA

Improvements were recommended for both the existing traffic volumes and the projected 10-year traffic volumes so that each study intersection/segment will meet the minimum acceptable baseline level of service (LOS D/E). The recommended improvements are subject only to include those regarding the capacity of each study intersection/segment. Road Impact Fees are calculated based on the improvements needed to enhance the capacity of each intersection/segment, and the recommendations found in this report are based on improving said capacity. Typical improvements include: the addition of travel lanes, turn lanes, and changes in intersection control.

SUMMARY TABLES FOR INTERSECTIONS

A tabular summary of the analysis considering each study intersection is shown in the following pages. The existing level of service (LOS) results are shown in **Table 1** under the heading “Existing LOS”. The existing LOS results are based on the existing traffic control, existing intersection geometrics and the existing AM peak hour and PM peak hour traffic volumes. The existing intersection traffic volumes for the peak hours can be found in the intersection volume tables in **Exhibit A**.

Level of service “E” has been selected for this study by the Town of Zionsville as the minimum acceptable baseline LOS for intersections. If necessary, mitigated conditions for the existing traffic volumes have been recommended for intersections that currently operate below the minimum acceptable baseline LOS. The resulting levels of service and recommended mitigations are shown in the **Table 2** under the headings “Existing Mitigated LOS” and “Existing Mitigation”, respectively.

The projected 10-year traffic volumes for the AM peak hour and PM peak hour have been determined for each intersection and can be found on the intersection volume tables in **Exhibit A**. The planned/proposed intersection improvements as determined by the Town of Zionsville to be constructed over the next 10-years and the resulting levels of service are shown in **Table 3** under the headings “10-Year Mitigated LOS” and “10-Year Mitigation”.

If necessary, mitigated conditions have been recommended so that the intersection will operate at acceptable baseline levels of service (LOS D) during the peak hours with the projected 10-year traffic volumes. The LOS results for the projected 10-year traffic volumes along with the corresponding mitigations are shown in **Table 3** under the headings “10-Year Mitigated LOS” and “10-Year Mitigation”, respectively.

TABLE 2 – EXISTING INTERSECTION LEVEL OF SERVICE RESULTS

Int. ID	Intersection	Existing LOS		Existing Mitigated LOS		Existing Mitigation
		AM	PM	AM	PM	
1-1	CR 350 S & CR 125 E	A	A	---	---	---
1-2	CR 400 S & CR 125 E	A	A	---	---	---
1-3	CR 400 S & CR 200 E	A	A	---	---	---
1-4	CR 400 S & CR 250 E	A	A	---	---	---
1-5	CR 400 S & CR 300 E	A	A	---	---	---
1-6	CR 450 S & CR 100 E	A	A	---	---	---
1-7	CR 450 S & CR 200 E	A	A	---	---	---
1-8	Acton Road & CR 100 E	A	A	---	---	---
1-9	Acton Road & CR 200 E	A	A	---	---	---
1-10	Acton Road & CR 250 E	A	A	---	---	---
1-11	Acton Road & CR 300 E	A	A	---	---	---
1-12	CR 550 S & CR 100 E	A	A	---	---	---
1-13	CR 550 S & CR 200 E	A	A	---	---	---
1-14	CR 550 S & CR 300 E	A	A	---	---	---
1-15	CR 550 S & SR 267	B	B	---	---	---
1-16	CR 600 S & CR 200 E	A	A	---	---	---
1-17	CR 650 S & CR 200 E	A	A	---	---	---
1-18	CR 650 S & CR 275 E	A	A	---	---	---
1-19	Whitestown Pkwy & SR 267	C	E	A	A	Add Signal; Add SB Left-Turn Lane
1-20	Whitestown Pkwy & CR 425 E	B	A	---	---	---
1-21	Whitestown Pkwy & CR 475 E	B	B	---	---	---
1-22	CR 700 S & CR 200 E	A	A	---	---	---
1-23	CR 700 S & SR 267	C	B	---	---	---
1-24	CR 750 S & CR 200 E	A	A	---	---	---
1-25	CR 750 S & CR 300 E	A	A	---	---	---
1-26	CR 750 S & SR 267	C	C	---	---	---
1-27	CR 750 S & CR 425 E	A	A	---	---	---
1-28	CR 750 S & CR 450 E	A	A	---	---	---
1-29	CR 750 S & CR 475 E	A	A	---	---	---
1-30	Boone County Rd & CR 200 E	A	A	---	---	---
2-1	CR 200 N & CR 675 E	A	A	---	---	---
2-2	CR 200 N & CR 750 E	A	A	---	---	---
2-3	CR 200 N & CR 800 E	A	A	---	---	---

Int. ID	Intersection	Existing LOS		Existing Mitigated LOS		Existing Mitigation
		AM	PM	AM	PM	
2-4	CR 200 N & Michigan Road/US 421	B	B	---	---	---
2-5	CR 200 N & CR 1000 E	A	A	---	---	---
2-6	CR 200 N & CR 1100 E	A	A	---	---	---
2-7	CR 200 N & County Line Road	A	A	---	---	---
2-8	CR 100 N & County Line Road	A	A	---	---	---
2-9	CR 100 N & CR 1100 E	A	A	---	---	---
2-10	CR 100 N & CR 1000 E	A	A	---	---	---
2-11	CR 100 N & Michigan Road	B	B	---	---	---
2-12	CR 100 N & CR 800 E	A	A	---	---	---
2-13	CR 100 N & CR 750 E	A	A	---	---	---
2-14	CR 100 N & CR 700 E	A	A	---	---	---
2-15	CR 100 N & CR 650 E	A	A	---	---	---
2-16	CR 100 N & CR 600 E	A	A	---	---	---
2-17	SR 32 & CR 600 E	B	B	---	---	---
2-18	SR 32 & CR 650 E	C	C	---	---	---
2-19	SR 32 & CR 700 E	B	C	---	---	---
2-20	SR 32 & CR 800 E	B	C	---	---	---
2-21	SR 32 & CR 900 E	B	B	---	---	---
2-22	SR 32 & Michigan Road/US 421	A	A	---	---	---
2-23	SR 32 & CR 1000 E	B	B	---	---	---
2-24	SR 32 & CR 1100 E	C	C	---	---	---
2-25	SR 32 & County Line Road	C	D	---	---	---
2-26	CR 50 S & CR 800 E	A	A	---	---	---
2-27	CR 50 S & CR 900 E	A	A	---	---	---
2-28	CR 100 S & CR 650 E	A	B	---	---	---
2-29	CR 100 S & CR 700 E	A	A	---	---	---
2-30	CR 100 S & CR 775 E	A	A	---	---	---
2-31	CR 100 S & CR 800 E	A	A	---	---	---
2-32	CR 125 S & CR 900 E	A	A	---	---	---
2-33	CR 100 S & Michigan Road/US 421	B	B	---	---	---
2-34	CR 200 S & CR 650 E	A	A	---	---	---
2-35	CR 200 S & CR 700 E	A	A	---	---	---
2-36	CR 200 S & CR 775 E	A	A	---	---	---
2-37	CR 200 S & CR 780 E	A	A	---	---	---
2-38	CR 200 S & CR 825 E	A	A	---	---	---
2-39	CR 200 S & CR 900 E	A	A	---	---	---

Int. ID	Intersection	Existing LOS		Existing Mitigated LOS		Existing Mitigation
		AM	PM	AM	PM	
2-40	CR 200 S & Pleasant View Road	A	A	---	---	---
2-41	CR 200 S & Michigan Road/US 421	C	C	---	---	---
2-42	CR 200 S & CR 1100 E	A	A	---	---	---
2-43	CR 200 S & County Line Road	A	A	---	---	---
2-44	CR 250 S & CR 780 E	A	A	---	---	---
2-45	CR 250 S & CR 875 E	A	A	---	---	---
2-46	CR 300 S & CR 780 E	A	A	---	---	---
2-47	CR 300 S & CR 800 E	A	B	---	---	---
2-48	CR 300 S & CR 875 E	A	A	---	---	---
2-49	CR 300 S & CR 975 E	B	B	---	---	---
2-50	CR 300 S & Michigan Road	C	C	---	---	---
2-51	CR 300 S & County Line Rod	B	B	---	---	---
2-52	CR 350 S & CR 875 E	A	A	---	---	---
2-53	CR 375 S & CR 975 E	B	B	---	---	---
2-54	CR 400 S & CR 800 E	A	A	---	---	---
2-55	CR 400 S & CR 875 E	B	B	---	---	---
2-56	CR 425 S & Whitestown Road	A	A	---	---	---
2-57	Oak Ridge Drive & CR 975 E/Ford Rd	B	B	---	---	---
2-58	Willow Road & Michigan Road/US 421	C	D	---	---	---
2-59	Whitestown Road & CR 800 E	A	A	---	---	---
2-60	Oak Ridge Drive & Turkey Foot Road	A	A	---	---	---
2-61	126th Street & Michigan Road/US 421	D	D	---	---	---
2-62	Whitestown Road & CR 875 E	A	A	---	---	---
2-63	Whitestown Road/Mulberry Street & CR 950 E	B	C	---	---	---
2-64	Mulberry Street & Ford Road	C	B	---	---	---
2-65	Mulberry Street & Turkey Foot Road	B	B	---	---	---

Int. ID	Intersection	Existing LOS		Existing Mitigated LOS		Existing Mitigation
		AM	PM	AM	PM	
2-66	CR 550 S & Willow Road	B	C	---	---	---
2-67	CR 550 S/Greenfield Road & Michigan Road/US 421	A	A	---	---	---
2-68	CR 525 S & CR 650 E	B	B	---	---	---
2-69	CR 525 S & CR 700 E	A	A	---	---	---
2-70	CR 550 S & CR 700 E	A	C	---	---	---
2-71	CR 550 S & CR 800 E	A	B	---	---	---
2-72	CR 550 S & CR 875 E	A	B	---	---	---
2-73	CR 600 S/Cruse Road & CR 950/Sheets Road	A	A	---	---	---
2-74	CR 600 S/Cruse Road & Ford Road/CR 1000 E	B	C	---	---	---
2-75	Bloor Lane & Ford Road/CR 1000 E	A	A	---	---	---
2-76	Bloor Lane & Mulberry Street	B	B	---	---	---
2-77	Ash Street & Mulberry Street	A	A	---	---	---
2-78	Sycamore St & Michigan Rd/US 421	C	C	---	---	---
2-79	Whitestown Parkway & CR 650 E	B	C	---	---	---
2-80	Whitestown Parkway & CR 700 E	C	C	---	---	---
2-81	Oak Street & CR 800 E	A	B	---	---	---
2-82	Oak Street & CR 850 E/Cooper Rd	A	A	---	---	---
2-83	Oak Street & CR 950 E/Sheets Road	C	E	A	B	Convert to Single-Lane RAB
2-84	Oak Street & CR 1000 E/Ford Road	C	C	---	---	---
2-85	Oak Street & 6th Street	C	E	C	E*	Add NB and SB Left-Turn Lanes
2-86	Oak Street & 1st Street	C	F	B	C	Add Traffic Signal
2-87	Sycamore Street & 1st Street	D	F	C	C	Add WB Right-Turn Lane
2-88	Sycamore Street & Main Street	B	C	---	---	---
2-89	Starkey Ave/Continental Dr & CR 1000 E/Ford Rd	C	E	C	D	Add WB Left-Turn Lane

Int. ID	Intersection	Existing LOS		Existing Mitigated LOS		Existing Mitigation
		AM	PM	AM	PM	
2-90	106th Street & Main Street/Zionsville Road	B	C	---	---	---
2-91	106th Street & Bennett Parkway	B	D	---	---	---
2-92	Hunt Club Road & CR 775 E/Salem Road	A	B	---	---	---
2-93	Hunt Club Road & CR 850 E/Cooper Road	A	A	---	---	---
2-94	Hunt Club Road & CR 1000 E/Ford Rd	C	C	---	---	---
2-95	96th Street & CR 775 E/Salem Road	B	B	---	---	---
2-96	96th Street & CR 850 E/Cooper Road	A	A	---	---	---
2-97	96th Street & Zionsville Road	B	B	---	---	---
2-98	CR 875 E/Marysville Road & Cruise Road	A	B	---	---	---

TABLE 3 – 10-YEAR INTERSECTION LEVEL OF SERVICE RESULTS

Int. ID	Intersection	10-Year LOS		10-Year Mitigated LOS		10-Year Mitigation
		AM	PM	AM	PM	
1-1	CR 350 S & CR 125 E	A	A	---	---	---
1-2	CR 400 S & CR 125 E	A	A	---	---	---
1-3	CR 400 S & CR 200 E	A	A	---	---	---
1-4	CR 400 S & CR 250 E	A	A	---	---	---
1-5	CR 400 S & CR 300 E	A	A	---	---	---
1-6	CR 450 S & CR 100 E	A	A	---	---	---
1-7	CR 450 S & CR 200 E	A	A	---	---	---
1-8	Acton Road & CR 100 E	A	A	---	---	---
1-9	Acton Road & CR 200 E	A	A	---	---	---
1-10	Acton Road & CR 250 E	A	A	---	---	---
1-11	Acton Road & CR 300 E	A	A	---	---	---
1-12	CR 550 S & CR 100 E	A	A	---	---	---
1-13	CR 550 S & CR 200 E	A	A	---	---	---
1-14	CR 550 S & CR 300 E	B	B	---	---	---
1-15	CR 550 S & SR 267	F	E	B	A	Add Signal; Add NB & SB Left-Turn Lanes
1-16	CR 600 S & CR 200 E	A	A	---	---	---
1-17	CR 650 S & CR 200 E	A	A	---	---	---
1-18	CR 650 S & CR 275 E	A	A	---	---	---
1-19	Whitestown Pkwy & SR 267	C	B	---	---	---
1-20	Whitestown Pkwy & CR 425 E	C	C	---	---	---
1-21	Whitestown Pkwy & CR 475 E	F	F	D	C	Add Single-Lane RAB; Add NB Right-Turn Lane; Add full WB Left-Turn Lane from Segment
1-22	CR 700 S & CR 200 E	A	A	---	---	---
1-23	CR 700 S & SR 267	C	C	---	---	---
1-24	CR 750 S & CR 200 E	A	A	---	---	---
1-25	CR 750 S & CR 300 E	A	A	---	---	---
1-26	CR 750 S & SR 267	F	E	E*	E*	Add EB Left-Turn Lane
1-27	CR 750 S & CR 425 E	A	A	---	---	---
1-28	CR 750 S & CR 450 E	A	A	---	---	---
1-29	CR 750 S & CR 475 E	A	A	---	---	---
1-30	Boone County Rd & CR 200 E	A	A	---	---	---
2-1	CR 200 N & CR 675 E	A	A	---	---	---
2-2	CR 200 N & CR 750 E	A	A	---	---	---
2-3	CR 200 N & CR 800 E	A	A	---	---	---
2-4	CR 200 N & Michigan Road/US 421	C	C	---	---	---

Int. ID	Intersection	10-Year LOS		10-Year Mitigated LOS		10-Year Mitigation
		AM	PM	AM	PM	
2-5	CR 200 N & CR 1000 E	A	A	---	---	---
2-6	CR 200 N & CR 1100 E	A	A	---	---	---
2-7	CR 200 N & County Line Road	A	A	---	---	---
2-8	CR 100 N & County Line Road	A	A	---	---	---
2-9	CR 100 N & CR 1100 E	A	A	---	---	---
2-10	CR 100 N & CR 1000 E	A	A	---	---	---
2-11	CR 100 N & Michigan Road	D	E	D	E*	Add EB and WB Right-Turn Lanes
2-12	CR 100 N & CR 800 E	A	A	---	---	---
2-13	CR 100 N & CR 750 E	A	A	---	---	---
2-14	CR 100 N & CR 700 E	A	A	---	---	---
2-15	CR 100 N & CR 650 E	A	A	---	---	---
2-16	CR 100 N & CR 600 E	A	A	---	---	---
2-17	SR 32 & CR 600 E	C	C	---	---	---
2-18	SR 32 & CR 650 E	F	F	D	C	Add Signal, NB Right-Turn Lane, and WB Left-Turn Lane
2-19	SR 32 & CR 700 E	F	F	F*	F*	Add NB and SB Left-Turn Lanes
2-20	SR 32 & CR 800 E	F	F	F*	F*	Add NB Left-Turn Lane
2-21	SR 32 & CR 900 E	F	F	C	C	Add Traffic Signal, NB Right-Turn Lane, WB Left-Turn Lane, and WB Thru Lane from Segment
2-22	SR 32 & Michigan Road/US 421	---	---	---	---	Intersection of two State Roads, therefore, no analysis was completed at this intersection.
2-23	SR 32 & CR 1000 E	F	F	D	C	Add Signal; Add EB & WB Thru Lanes from Segment; Add EB Left-Turn Lane
2-24	SR 32 & CR 1100 E	F	F	D	C	Add Signal; Add EB & WB Thru Lanes from Segments; Add NB, SB, EB, and WB Left-Turn lanes
2-25	SR 32 & County Line Road	F	F	D	D	Add Signal; Add EB, WB, NB, & SB Left-Turn Lanes and SB Right-Turn Lane; Add EB & WB Thru Lanes from Segment
2-26	CR 50 S & CR 800 E	A	A	---	---	---
2-27	CR 50 S & CR 900 E	B	B	---	---	---
2-28	CR 100 S & CR 650 E	D	F	---	---	---
2-29	CR 100 S & CR 700 E	A	A	---	---	---
2-30	CR 100 S & CR 775 E	A	A	---	---	---
2-31	CR 100 S & CR 800 E	A	A	---	---	---
2-32	CR 125 S & CR 900 E	B	B	---	---	---

Int. ID	Intersection	10-Year LOS		10-Year Mitigated LOS		10-Year Mitigation
		AM	PM	AM	PM	
2-33	CR 100 S & Michigan Road/US 421	F	D	E*	C	Add NB & SB Thru Lanes
2-34	CR 200 S & CR 650 E	D	D	---	---	---
2-35	CR 200 S & CR 700 E	A	A	---	---	---
2-36	CR 200 S & CR 775 E	A	A	---	---	---
2-37	CR 200 S & CR 780 E	A	A	---	---	---
2-38	CR 200 S & CR 825 E	A	A	---	---	---
2-39	CR 200 S & CR 900 E	F	F	A	B	Add Single-Lane RAB
2-40	CR 200 S & Pleasant View Road	B	B	---	---	---
2-41	CR 200 S & Michigan Road/US 421	F	F	C	D	Add Signal; Add NB & SB Thru Lanes; Add NB and SB Left-Turn Lanes; Add Dual WB Left-Turn Lanes
2-42	CR 200 S & CR 1100 E	F	F	A	C	Add Single-Lane RAB; Add EB Left-Turn Lane; Add SB Right-Turn Lane
2-43	CR 200 S & County Line Road	F	F	D	C	Add Traffic Signal; Add NB & SB Left-Turn Lanes; Add Full SB Right-Turn Lane from Segment; Add Dual EB Left-Turn Lanes; Add WB Left-Turn Lane
2-44	CR 250 S & CR 780 E	A	A	---	---	---
2-45	CR 250 S & CR 875 E	B	C	---	---	---
2-46	CR 300 S & CR 780 E	B	B	---	---	---
2-47	CR 300 S & CR 800 E	B	C	---	---	---
2-48	CR 300 S & CR 875 E	F	F	B	F*	Add Multi-Lane RAB
2-49	CR 300 S & CR 975 E	F	F	A	B	Add Multi-Lane RAB
2-50	CR 300 S & Michigan Road	F	F	F*	F*	Add 2 NB & SB Thru lanes and EB & WB Thru lanes form Segment; Add SB Right-Turn Lane; Add 2 Additional WB Left-Turn Lane; Add EB Right-Turn Lane
2-51	CR 300 S & County Line Rod	F	F	D	A	Add Multi-Lane RAB with SB By-Pass Lane
2-52	CR 350 S & CR 875 E	F	F	F*	F*	Add NB Thru lane; Add SB Thru Lane from Segment
2-53	CR 375 S & CR 975 E	C	C	---	---	---
2-54	CR 400 S & CR 800 E	A	B	---	---	---
2-55	CR 400 S & CR 875 E	F	F	B	D	Add Single-Lane RAB with SB Right-Turn Lane
2-56	CR 425 S & Whitestown Road	A	B	---	---	---

Int. ID	Intersection	10-Year LOS		10-Year Mitigated LOS		10-Year Mitigation
		AM	PM	AM	PM	
2-57	Oak Ridge Drive & CR 975 E/Ford Rd	B	C	---	---	---
2-58	Willow Road & Michigan Road/US 421	F	F	B	C	Add 2 NB and SB Thru lanes; Add NB, SB, EB, and WB Left-Turn Lanes
2-59	Whitestown Road & CR 800 E	A	A	---	---	---
2-60	Oak Ridge Drive & Turkey Foot Road	A	A	---	---	---
2-61	126th Street & Michigan Road/US 421	F	F	F*	F*	Add 2 NB and SB Thru Lanes
2-62	Whitestown Road & CR 875 E	E	F	---	---	Further improvements at this location are unlikely.
2-63	Whitestown Road/Mulberry Street & CR 950 E	F	F	A	B	Add Single-Lane RAB
2-64	Mulberry Street & Ford Road	E	F	D	D	Add SB and WB Pass-by Lanes. However, due to field limitations, this improvement is not feasible.
2-65	Mulberry Street & Turkey Foot Road	B	D	---	---	---
2-66	CR 550 S & Willow Road	C	F	A	A	Add Single-Lane RAB
2-67	CR 550 S/Greenfield Road & Michigan Road/US 421	F	F	D	D	Add NB and SB Thru Lanes; Add Additional NB Left-Turn Lane
2-68	CR 525 S & CR 650 E	D	D	---	---	---
2-69	CR 525 S & CR 700 E	A	A	---	---	---
2-70	CR 550 S & CR 700 E	A	C	---	---	---
2-71	CR 550 S & CR 800 E	C	C	---	---	---
2-72	CR 550 S & CR 875 E	F	F	A	E*	Add Single-Lane RAB
2-73	CR 600 S/Cruse Road & CR 950/Sheets Road	A	B	---	---	---
2-74	CR 600 S/Cruse Road & Ford Road/CR 1000 E	B	C	---	---	---
2-75	Bloor Lane & Ford Road/CR 1000 E	A	B	---	---	---
2-76	Bloor Lane & Mulberry Street	B	B	---	---	---
2-77	Ash Street & Mulberry Street	A	B	---	---	---

Int. ID	Intersection	10-Year LOS		10-Year Mitigated LOS		10-Year Mitigation
		AM	PM	AM	PM	
2-78	Sycamore St & Michigan Rd/US 421	F	F	F*	F*	Add 2 Additional EB Left-Turn Lanes; Add Additional EB and WB Thru lanes; Add Additional SB Left-Turn Lane; Add Additional NB & SB Thru Lanes
2-79	Whitestown Parkway & CR 650 E	---	---	---	---	Outside the Town of Zionsville
2-80	Whitestown Parkway & CR 700 E	---	---	---	---	Outside the Town of Zionsville
2-81	Oak Street & CR 800 E	F	F	B	D	Add Multi-Lane RAB
2-82	Oak Street & CR 850 E/Cooper Rd	F	F	---	---	Further improvements at this location are unlikely.
2-83	Oak Street & CR 950 E/Sheets Road	D	D	---	---	---
2-84	Oak Street & CR 1000 E/Ford Road	F	F	D	D	Add WB Right-Turn Lane
2-85	Oak Street & 6th Street	F	F	F*	F*	Add Full EB Thru Lane from Segment; Add WB Thru Lane; Add NB and SB Left-Turn Lanes
2-86	Oak Street & 1st Street	F	F	B	C	Add Exclusive NB Left-Turn Lane from Segment; Add a Full Exclusive EB Right-Turn Lane
2-87	Sycamore Street & 1st Street	F	F	D	F*	Add SB Left-Turn Lane from segment; Additional SB Left-Turn Lane; Add Dual WB Left-Turn Lanes; Add Dual WB Right-Turn Lanes
2-88	Sycamore Street & Main Street	A	A	D	F*	Add additional NB Left-Turn Lane; Add NB Right-Turn Lane; Add SB receiving lane; Add additional EB Right-Turn Lane; Add additional WB Left-Turn Lane
2-89	Starkey Ave/Continental Dr & CR 1000 E/Ford Rd	C	D	---	---	---
2-90	106th Street & Main Street/Zionsville Road	F	F	C	C	Add Additional SB Left-Turn Lane; Add Additional WB Right-Turn Lane
2-91	106th Street & Bennett Parkway	F	F	D	D	Add Single-Lane RAB
2-92	Hunt Club Road & CR 775 E/Salem Road	B	B	---	---	---
2-93	Hunt Club Road & CR 850 E/Cooper Road	A	A	---	---	---

Int. ID	Intersection	10-Year LOS		10-Year Mitigated LOS		10-Year Mitigation
		AM	PM	AM	PM	
2-94	Hunt Club Road & CR 1000 E/Ford Rd	C	C	---	---	---
2-95	96th Street & CR 775 E/Salem Road	B	B	---	---	---
2-96	96th Street & CR 850 E/Cooper Road	A	A	---	---	---
2-97	96th Street & Zionsville Road	C	C	---	---	---
2-98	CR 875 E/Marysville Road & Cruise Road	C	F	C	F*	Add Single-Lane RAB
2-99^	96 th Street & Bennett Parkway	E	F	A	B	Add Traffic Signal

*REASONABLE DESIGN IS NOT SUFFICIENT TO ACHIEVE ACCEPTABLE BASELINE LEVELS OF SERVICE, THEREFORE FURTHER MITIGATIONS WERE NOT CONSIDERED

^PROPOSED INTERSECTION

SUMMARY TABLES FOR ROADWAY SEGMENTS

A tabular summary of each roadway segment analysis is shown in the following pages. The existing level of service (LOS) results are listed which are based on the existing geometric conditions and existing AM peak hour and PM peak hour traffic volumes along the roadway segment. The existing peak hour traffic volumes as well as the existing average daily traffic volumes (ADT) can be found on the “Roadway Segment Summary” tables in **Exhibit B**.

Level of service “E” has been selected for this study by the Town of Zionsville as the minimum acceptable baseline LOS for roadway segments. If necessary, mitigated conditions for the existing traffic volumes have been recommended for roadway segments that currently operate below the minimum acceptable baseline LOS. The existing mitigated level of service and recommended existing mitigations can be found in **Table 4**.

The projected 10-year traffic volumes for the AM peak hour and PM peak hour have been projected for each roadway segment and can be found on the “Roadway Segment Summary” tables in **Exhibit B**. The 10-year level of service results, 10-year mitigated level of service, and recommended 10-year mitigations can be found in **Table 5**.

TABLE 4 – EXISTING ROADWAY SEGMENT LEVEL OF SERVICE RESULTS

Seg. ID	Roadway	Segment	Existing LOS		Existing Mitigated LOS		Existing Mitigation
			AM	PM	AM	PM	
1-1	CR 125 E	CR 400 S - CR 350 S	A	A	---	---	---
1-2	CR 200 E	CR 400 S - CR 250 S	A	A	---	---	---
1-3	CR 250 E	CR 400 S - S Indianapolis Rd	A	A	---	---	---
1-4	CR 400 S	CR 300 E - S Indianapolis Rd	A	A	---	---	---
1-5	CR 400 S	CR 250 E - CR 300 E	A	A	---	---	---
1-6	CR 400 S	CR 250 E - CR 200 E	A	A	---	---	---
1-7	CR 400 S	CR 200 E - CR 125 E	A	A	---	---	---
1-8	CR 100 E	CR 450 S - CR 400 S	A	A	---	---	---
1-9	CR 200 E	CR 450 S - CR 400 S	A	A	---	---	---
1-10	CR 300 E	Action Rd - CR 400 S	A	A	---	---	---
1-11	CR 250 E	Action Rd - CR 400 S	A	A	---	---	---
1-12	CR 450 S	CR 100 E - CR 200 E	A	A	---	---	---
1-13	CR 100 E	Action Rd - CR 450 S	A	A	---	---	---
1-14	CR 200 E	Action Rd - CR 450 S	A	A	---	---	---
1-15	Action Rd	CR 250 E - CR 300 E	A	A	---	---	---
1-16	Action Rd	CR 250 E - CR 200 E	A	A	---	---	---
1-17	Action Rd	CR 200 E - CR 100 E	A	A	---	---	---
1-18	CR 100 E	CR 550 S - Action Rd	A	A	---	---	---
1-19	CR 200 E	CR 550 S - Action Rd	A	A	---	---	---
1-20	CR 300 E	CR 550 S - Action Rd	A	A	---	---	---
1-21	SR 267	CR 550 S - Perry Blvd	B	B	---	---	---
1-22	CR 550 S	CR 300 E - SR 267	A	A	---	---	---
1-23	CR 550 S	CR 200 E - CR 300 E	A	A	---	---	---
1-24	CR 550 S	CR 100 E - CR 200 E	A	A	---	---	---
1-25	CR 600 S	CR 50 E - CR 200 E	A	A	---	---	---
1-26	CR 200 E	CR 600 S - CR 550 S	A	A	---	---	---
1-27	CR 300 E	CR 600 S - CR 550 S	A	A	---	---	---
1-28	SR 267	Whitestown Pkwy - CR 550 S	C	B	---	---	---
1-29	CR 275 E	CR 650 S - CR 600 S	A	A	---	---	---
1-30	CR 200 E	CR 650 S - CR 600 S	A	A	---	---	---
1-31	CR 650 S	CR 200 E - CR 275 E	A	A	---	---	---
1-32	Whitestown Pkwy	SR 267 - CR 425 E	B	B	---	---	---
1-33	Whitestown Pkwy	CR 425 E - CR 475 E	B	B	---	---	---
1-34	Whitestown Pkwy	CR 475 E - CR 525 E	B	B	---	---	---
1-35	SR 267	CR 700 S - Whitestown Pkwy	C	C	---	---	---
1-36	CR 275 E	CR 675 S - CR 650 S	A	A	---	---	---

Seg. ID	Roadway	Segment	Existing LOS		Existing Mitigated LOS		Existing Mitigation
			AM	PM	AM	PM	
1-37	CR 200 E	CR 700 S - CR 650 S	A	A	---	---	---
1-38	CR 700 S	CR 50 E - CR 200 E	A	A	---	---	---
1-39	CR 700 S	CR 280 E - SR 267	A	A	---	---	---
1-40	CR 425 E	CR 750 S - Whitestown Pkwy	A	A	---	---	---
1-41	CR 475 E	CR 750 S - Whitestown Pkwy	A	A	---	---	---
1-42	SR 267	CR 750 S - CR 700 S	C	C	---	---	---
1-43	CR 200 E	CR 750 S - CR 700 S	A	A	---	---	---
1-44	CR 750 S	CR 200 E - CR 300 E	A	A	---	---	---
1-45	CR 750 S	CR 300 E - SR 267	A	A	---	---	---
1-46	CR 750 S	SR 267 - CR 425 E	A	A	---	---	---
1-47	CR 750 S	CR 425 E - CR 450 E	A	A	---	---	---
1-48	CR 750 S	CR 450 E - CR 475 E	A	A	---	---	---
1-49	CR 750 S	CR 475 E - Wolfe Rd	A	A	---	---	---
1-50	SR 267	CR 750 S - CR 1000 N	A	A	---	---	---
1-51	CR 300 E	CR 750 S - CR 1000 N	A	A	---	---	---
1-52	CR 200 E	Boone Co Rd - CR 750 S	A	A	---	---	---
1-53	Boone CO RD	CR 50 E - CR 200 E	A	A	---	---	---
2-1	CR 200 N	CR 675 E - CR 750 E	A	A	---	---	---
2-2	CR 200 N	CR 750 E - CR 800 E	A	A	---	---	---
2-3	CR 200 N	CR 800 E - Michigan Rd	A	A	---	---	---
2-4	CR 200 N	Michigan Rd - CR 1000 E	A	A	---	---	---
2-5	CR 200 N	CR 1000 E - CR 1100 E	A	A	---	---	---
2-6	CR 200 N	CR 1100 E - County Line Rd	A	A	---	---	---
2-7	CR 100 N	CR 1100 E - County Line Rd	A	A	---	---	---
2-8	CR 100 N	CR 1000 E - CR 1100 E	A	A	---	---	---
2-9	CR 100 N	Michigan Rd - CR 1000 E	A	A	---	---	---
2-10	CR 100 N	CR 800 E - Michigan Rd	A	A	---	---	---
2-11	CR 100 N	CR 750 E - CR 800 E	A	A	---	---	---
2-12	CR 100 N	CR 700 E - CR 750 E	A	A	---	---	---
2-13	CR 100 N	CR 650 E - CR 700 E	A	A	---	---	---

Seg. ID	Roadway	Segment	Existing LOS		Existing Mitigated LOS		Existing Mitigation
			AM	PM	AM	PM	
2-14	CR 100 N	CR 600 E - CR 650 E	A	A	---	---	---
2-15	CR 600 E	CR 100 N - CR 200 N	A	A	---	---	---
2-16	CR 150 N	CR 650 E - CR 675 E	A	A	---	---	---
2-17	CR 750 E	CR 100 N - CR 200 N	A	A	---	---	---
2-18	CR 800 E	CR 100 N - CR 200 N	A	A	---	---	---
2-19	CR 1000 E	CR 100 N - CR 200 N	A	A	---	---	---
2-20	CR 1100 E	CR 100 N - CR 200 N	A	A	---	---	---
2-21	County Line Rd	CR 100 N - CR 200 N	A	A	---	---	---
2-22	County Line Rd	SR 32 - CR 100 N	A	A	---	---	---
2-23	CR 1100 E	SR 32 - CR 100 N	A	A	---	---	---
2-24	CR 1000 E	SR 32 - CR 100 N	A	A	---	---	---
2-25	CR 800 E	SR 32 - CR 100 N	A	A	---	---	---
2-26	CR 700 E	SR 32 - CR 100 N	A	A	---	---	---
2-27	CR 650 E	SR 32 - CR 100 N	A	A	---	---	---
2-28	CR 600 E	SR 32 - CR 100 N	A	A	---	---	---
2-29	SR 32	CR 600 E - CR 650 E	B	C	---	---	---
2-30	SR 32	CR 650 E - CR 700 E	B	C	---	---	---
2-31	SR 32	CR 700 E - CR 800 E	B	C	---	---	---
2-32	SR 32	CR 800 E - CR 900 E	A	A	---	---	---
2-33	SR 32	CR 900 E - Michigan Rd	C	C	---	---	---
2-34	SR 32	Michigan Rd - CR 1000 E	C	C	---	---	---
2-35	SR 32	CR 1000 E - CR 1100 E	C	C	---	---	---
2-36	SR 32	CR 1100 E - County Line Rd	C	C	---	---	---
2-37	County Line Rd	SR 32 - 166th St	A	A	---	---	---
2-38	CR 900 E	CR 50 S - SR 32	A	A	---	---	---
2-39	CR 800 E	CR 50 S - SR 32	A	A	---	---	---
2-40	CR 700 E	CR 100 S - SR 32	A	A	---	---	---
2-41	CR 600 E	CR 100 S - SR 32	A	A	---	---	---
2-42	CR 100 S	CR 650 E - CR 700 E	A	A	---	---	---
2-43	CR 100 S	CR 700 E - CR 775 E	A	A	---	---	---
2-44	CR 800 E	CR 100 S - CR 50 S	A	A	---	---	---
2-45	CR 50 S	CR 800 E - CR 900 E	A	A	---	---	---
2-46	CR 100 S	CR 800 E - CR 825 E	A	A	---	---	---

Seg. ID	Roadway	Segment	Existing LOS		Existing Mitigated LOS		Existing Mitigation
			AM	PM	AM	PM	
2-47	CR 900 E	CR 125 S - CR 50 S	A	A	---	---	---
2-48	CR 1100 E	SR 32 - CR 200 S	A	A	---	---	---
2-49	166th St	County Line Rd - W 41st St	A	A	---	---	---
2-50	CR 850 E	CR 125 S - CR 100 S	A	A	---	---	---
2-51	CR 650 E	CR 100 S - CR 200 S	A	A	---	---	---
2-52	CR 700 E	CR 100 S - CR 200 S	A	A	---	---	---
2-53	CR 775 E	CR 100 S - CR 200 S	A	A	---	---	---
2-54	CR 825 E	CR 100 S - CR 200 S	A	A	---	---	---
2-55	CR 900 E	CR 125 S - CR 200 S	A	A	---	---	---
2-56	Pleasant View Rd	CR 100 S - CR 200 S	A	A	---	---	---
2-57	County Line Rd	166th St - CR 200 S	A	A	---	---	---
2-58	CR 200 S	CR 1100 E - County Line Rd	A	A	---	---	---
2-59	CR 200 S	Michigan Rd - CR 1100 E	A	A	---	---	---
2-60	CR 200 S	Pleasant View Rd - Michigan Rd	A	A	---	---	---
2-61	CR 200 S	CR 900 E - Pleasant View Rd	A	A	---	---	---
2-62	CR 200 S	CR 825 E - CR 900 E	A	A	---	---	---
2-63	CR 200 S	CR 775 E - CR 825 E	A	A	---	---	---
2-64	CR 200 S	CR 700 E - CR 775 E	A	A	---	---	---
2-65	CR 200 S	CR 650 E - CR 700 E	A	A	---	---	---
2-66	CR 780 E	CR 200 S - CR 250 S	A	A	---	---	---
2-67	CR 900 E	CR 200 S - CR 230 S	A	A	---	---	---
2-68	County Line Rd	CR 200 S - CR 300 S	A	A	---	---	---
2-69	Pleasant View Rd	CR 200 S - CR 300 S	C	C	---	---	---
2-70	CR 250 S	CR 780 E - CR 875 E	A	A	---	---	---
2-71	CR 780 E	CR 250 S - CR 300 S	A	A	---	---	---
2-72	CR 875 E	CR 250 S - CR 300 S	A	A	---	---	---
2-73	CR 300 S	Michigan Rd - County Line Rd	C	C	---	---	---
2-74	CR 300 S	CR 975 E - Michigan Rd	C	C	---	---	---
2-75	CR 300 S	CR 875 E - CR 975 E	B	B	---	---	---
2-76	CR 300 S	CR 800 E - CR 875 E	B	B	---	---	---
2-77	CR 800 E	CR 300 S - CR 400 S	A	A	---	---	---
2-78	CR 875 E	CR 300 S - CR 350 S	A	A	---	---	---
2-79	CR 350 S	CR 875 E - CR 950 E	A	A	---	---	---
2-80	CR 975 E	CR 300 S - CR 375 S	C	C	---	---	---
2-81	CR 875 E	CR 350 S - CR 400 S	A	A	---	---	---
2-82	CR 400 S	CR 425 S - CR 800 E	A	A	---	---	---

Seg. ID	Roadway	Segment	Existing LOS		Existing Mitigated LOS		Existing Mitigation
			AM	PM	AM	PM	
2-83	CR 400 S	CR 800 E - CR 875 E	A	A	---	---	---
2-84	CR 400 S	CR 875 E - CR 950 E	A	A	---	---	---
2-86	CR 975 E	Oak Ridge Dr - Holliday Rd	C	C	---	---	---
2-87	CR 800 E	Whitestown Rd - CR 400 S	A	A	---	---	---
2-88	Whitestown Rd	CR 425 S - CR 800 E	A	A	---	---	---
2-89	CR 875 E	Whitestown Rd - CR 400 S	A	B	---	---	---
2-90	Oak Ridge Dr	CR 975 E - Turkey Foot Rd	A	A	---	---	---
2-91	Willow Rd	Michigan Rd - West Rd	C	C	---	---	---
2-92	126th St	Michigan Rd - West Rd	A	A	---	---	---
2-93	CR 1100 E	Willow Rd - CR 550 S	C	C	---	---	---
2-94	Turkey Foot Rd	Mulberry St - Oak Ridge Dr	A	A	---	---	---
2-95	CR 975 E	Oak Ridge Dr - Mulberry St	D	C	---	---	---
2-96	Whitestown Rd	CR 800 E - CR 875 E	A	A	---	---	---
2-97	CR 525 S	CR 650 E - CR 700 E	A	A	---	---	---
2-98	CR 700 E	CR 550 S - CR 525 S	A	A	---	---	---
2-99	CR 800 E	CR 550 S - Whitestown Rd	A	A	---	---	---
2-100	CR 550 S	CR 700 E - CR 800 E	C	C	---	---	---
2-101	CR 550 S	CR 800 E - CR 875 E	B	C	---	---	---
2-102	CR 875 E	CR 550 S - Whitestown Rd	B	B	---	---	---
2-103	Whitestown Rd	CR 875 E - CR 950 E	C	C	---	---	---
2-104	Whitestown Rd	CR 950 E - Ford Rd	C	C	---	---	---
2-105	CR 950 E	CR 600 S - Whitestown Rd	A	A	---	---	---
2-106	Ford Rd	CR 600 S - Whitestown Rd	C	C	---	---	---
2-107	Mulberry St	CR 975 E - Turkey Foot Rd	B	B	---	---	---
2-108	CR 550 S	CR 1100 E - Michigan Rd	B	B	---	---	---
2-109	Greenfield Rd	Michigan Rd - West Rd	B	B	---	---	---
2-110	CR 1100 E	South of CR 550 S	B	B	---	---	---

Seg. ID	Roadway	Segment	Existing LOS		Existing Mitigated LOS		Existing Mitigation
			AM	PM	AM	PM	
2-111	Turkey Foot Rd	Mulberry St - Bloor Ln	C	C	---	---	---
2-112	Bloor Ln	Ford Rd - Turkey Foot Rd	C	C	---	---	---
2-113	CR 600 S	CR 950 E - Ford Rd	B	B	---	---	---
2-114	CR 600 S	CR 900 E - CR 950 E	A	A	---	---	---
2-115	CR 700 E	Whitestown Pkwy - CR 550 S	B	C	---	---	---
2-116	CR 800 E	Oak St - CR 550 S	A	A	---	---	---
2-117	CR 950 E	Oak St - CR 600 S	A	A	---	---	---
2-118	CR 1000 E	Oak St - Bloor Ln	D	D	---	---	---
2-119	Mulberry St	E Ash St - Bloor Ln	C	C	---	---	---
2-120	N 6th St	E Ash St - Oak St	A	A	---	---	---
2-121	N 1st St	E Ash St - Oak St	B	B	---	---	---
2-122	Sycamore St	Main St - Michigan Rd	C	C	---	---	---
2-123	1st St	Sycamore St - Oak St	D	D	---	---	---
2-124	Main St	Sycamore St - 106th St	D	D	---	---	---
2-125	CR 1000 E	Starkey Avenue - Oak St	D	D	---	---	---
2-126	Cooper Rd	Oak St - Hunt Club Rd	A	A	---	---	---
2-127	Oak St	CR 950 E - CR 1000 E	B	B	---	---	---
2-128	Oak St	CR 850 E - CR 950 E	D	D	---	---	---
2-129	Oak St	CR 800 E - CR 850 E	D	D	---	---	---
2-130a	Oak St	CR 700 E - CR 800 E	D	E	---	---	---
2-130b	Oak St	CR 700 E - CR 800 E	D	D	---	---	---
2-131	Oak St	CR 650 E - CR 700 E	D	E	---	---	---
2-132	Whitestown Pkwy	I - 65 - CR 650 E	E	F	---	---	---
2-133	CR 775 E	Hunt Club Rd - Oak St	B	B	---	---	---
2-134	Hunt Club Rd	CR 775 E - CR 850 E	A	B	---	---	---
2-135	Hunt Club Rd	CR 850 E - CR 1000 E	B	B	---	---	---
2-136	CR 1000 E	Starkey Ave - Hunt Club Rd	D	D	---	---	---
2-137	Zionsville Rd	Nuttall Oak Rd - 106th St	D	D	---	---	---

Seg. ID	Roadway	Segment	Existing LOS		Existing Mitigated LOS		Existing Mitigation
			AM	PM	AM	PM	
2-138	106th St	Zionsville Rd - Bennet Pkwy	C	D	---	---	---
2-139	Bennet Pkwy	106th St - Michigan Rd	B	B	---	---	---
2-140	106th St	Bennet Pkwy - Michigan Rd	B	B	---	---	---
2-141	Zionsville Rd	Nuttall Oak Rd - 96th St	D	D	---	---	---
2-142	CR 1000 E	Hunt Club Rd - 96th St	D	D	---	---	---
2-143	CR 850 E	96th St - Hunt Club Rd	A	A	---	---	---
2-144	CR 775 E	96th St - Hunt Club Rd	B	B	---	---	---
2-145	96th St	CR 775 E - CR 850 E	B	B	---	---	---
2-146	96th St	Moore Road - CR 1000 E	B	B	---	---	---
2-147	96th St	Zionsville Road - CR 1000 E	D	D	---	---	---
2-148	96th St	Zionsville Road - Hoosier Village Dr	C	C	---	---	---
2-149	96th St	Michigan Road - Hoosier Village Dr	E	E	---	---	---
2-150	Oak St	CR 1000 E - 6th St	D	D	---	---	---
2-151	Marysville Rd	Oak St - CR 575 E	B	B	---	---	---

TABLE 5 – 10-YEAR ROADWAY SEGMENT LEVEL OF SERVICE RESULTS

Seg. ID	Roadway	Segment	10-Year LOS		10-Year Mitigated LOS		10-Year Mitigation
			AM	PM	AM	PM	
1-1	CR 125 E	CR 400 S - CR 350 S	A	A	---	---	---
1-2	CR 200 E	CR 400 S - CR 250 S	A	A	---	---	---
1-3	CR 250 E	CR 400 S - S Indianapolis Rd	A	A	---	---	---
1-4	CR 400 S	CR 300 E - S Indianapolis Rd	A	A	---	---	---
1-5	CR 400 S	CR 250 E - CR 300 E	A	A	---	---	---
1-6	CR 400 S	CR 250 E - CR 200 E	A	A	---	---	---
1-7	CR 400 S	CR 200 E - CR 125 E	A	A	---	---	---
1-8	CR 100 E	CR 450 S - CR 400 S	A	A	---	---	---
1-9	CR 200 E	CR 450 S - CR 400 S	A	A	---	---	---
1-10	CR 300 E	Action Rd - CR 400 S	A	A	---	---	---
1-11	CR 250 E	Action Rd - CR 400 S	A	A	---	---	---
1-12	CR 450 S	CR 100 E - CR 200 E	A	A	---	---	---
1-13	CR 100 E	Action Rd - CR 450 S	A	A	---	---	---
1-14	CR 200 E	Action Rd - CR 450 S	A	A	---	---	---
1-15	Action Rd	CR 250 E - CR 300 E	A	A	---	---	---
1-16	Action Rd	CR 250 E - CR 200 E	A	A	---	---	---
1-17	Action Rd	CR 200 E - CR 100 E	A	A	---	---	---
1-18	CR 100 E	CR 550 S - Action Rd	A	A	---	---	---
1-19	CR 200 E	CR 550 S - Action Rd	A	A	---	---	---
1-20	CR 300 E	CR 550 S - Action Rd	A	A	---	---	---
1-21	SR 267	CR 550 S - Perry Blvd	C	C	---	---	---
1-22	CR 550 S	CR 300 E - SR 267	B	B	---	---	---
1-23	CR 550 S	CR 200 E - CR 300 E	A	A	---	---	---
1-24	CR 550 S	CR 100 E - CR 200 E	A	A	---	---	---
1-25	CR 600 S	CR 50 E - CR 200 E	A	A	---	---	---
1-26	CR 200 E	CR 600 S - CR 550 S	A	A	---	---	---
1-27	CR 300 E	CR 600 S - CR 550 S	A	A	---	---	---
1-28	SR 267	Whitestown Pkwy - CR 550 S	C	C	---	---	---
1-29	CR 275 E	CR 650 S - CR 600 S	A	A	---	---	---
1-30	CR 200 E	CR 650 S - CR 600 S	A	A	---	---	---
1-31	CR 650 S	CR 200 E - CR 275 E	A	A	---	---	---
1-32	Whitestown Pkwy	SR 267 - CR 425 E	C	C	---	---	---
1-33	Whitestown Pkwy	CR 425 E - CR 475 E	D	D	---	---	---
1-34	Whitestown Pkwy	CR 475 E - CR 525 E	F	F	C	C	Increase from 2 to 4 Travel Lanes
1-35	SR 267	CR 700 S - Whitestown Pkwy	D	D	---	---	---

Seg. ID	Roadway	Segment	10-Year LOS		10-Year Mitigated LOS		10-Year Mitigation
			AM	PM	AM	PM	
1-36	CR 275 E	CR 675 S - CR 650 S	A	A	---	---	---
1-37	CR 200 E	CR 700 S - CR 650 S	A	A	---	---	---
1-38	CR 700 S	CR 50 E - CR 200 E	A	A	---	---	---
1-39	CR 700 S	CR 280 E - SR 267	A	A	---	---	---
1-40	CR 425 E	CR 750 S - Whitestown Pkwy	A	B	---	---	---
1-41	CR 475 E	CR 750 S - Whitestown Pkwy	A	B	---	---	---
1-42	SR 267	CR 750 S - CR 700 S	D	D	---	---	---
1-43	CR 200 E	CR 750 S - CR 700 S	A	A	---	---	---
1-44	CR 750 S	CR 200 E - CR 300 E	A	A	---	---	---
1-45	CR 750 S	CR 300 E - SR 267	A	A	---	---	---
1-46	CR 750 S	SR 267 - CR 425 E	A	A	---	---	---
1-47	CR 750 S	CR 425 E - CR 450 E	A	A	---	---	---
1-48	CR 750 S	CR 450 E - CR 475 E	A	A	---	---	---
1-49	CR 750 S	CR 475 E - Wolfe Rd	A	A	---	---	---
1-50	SR 267	CR 750 S - CR 1000 N	D	D	---	---	---
1-51	CR 300 E	CR 750 S - CR 1000 N	A	A	---	---	---
1-52	CR 200 E	Boone Co Rd - CR 750 S	A	A	---	---	---
1-53	Boone CO RD	CR 50 E - CR 200 E	A	A	---	---	---
2-1	CR 200 N	CR 675 E - CR 750 E	A	A	---	---	---
2-2	CR 200 N	CR 750 E - CR 800 E	A	A	---	---	---
2-3	CR 200 N	CR 800 E - Michigan Rd	A	A	---	---	---
2-4	CR 200 N	Michigan Rd - CR 1000 E	A	A	---	---	---
2-5	CR 200 N	CR 1000 E - CR 1100 E	A	A	---	---	---
2-6	CR 200 N	CR 1100 E - County Line Rd	A	A	---	---	---
2-7	CR 100 N	CR 1100 E - County Line Rd	A	A	---	---	---
2-8	CR 100 N	CR 1000 E - CR 1100 E	A	A	---	---	---
2-9	CR 100 N	Michigan Rd - CR 1000 E	A	A	---	---	---
2-10	CR 100 N	CR 800 E - Michigan Rd	A	A	---	---	---
2-11	CR 100 N	CR 750 E - CR 800 E	A	A	---	---	---
2-12	CR 100 N	CR 700 E - CR 750 E	A	A	---	---	---

Seg. ID	Roadway	Segment	10-Year LOS		10-Year Mitigated LOS		10-Year Mitigation
			AM	PM	AM	PM	
2-13	CR 100 N	CR 650 E - CR 700 E	A	A	---	---	---
2-14	CR 100 N	CR 600 E - CR 650 E	A	A	---	---	---
2-15	CR 600 E	CR 100 N - CR 200 N	A	A	---	---	---
2-16	CR 150 N	CR 650 E - CR 675 E	A	A	---	---	---
2-17	CR 750 E	CR 100 N - CR 200 N	A	A	---	---	---
2-18	CR 800 E	CR 100 N - CR 200 N	A	A	---	---	---
2-19	CR 1000 E	CR 100 N - CR 200 N	A	A	---	---	---
2-20	CR 1100 E	CR 100 N - CR 200 N	A	A	---	---	---
2-21	County Line Rd	CR 100 N - CR 200 N	A	A	---	---	---
2-22	County Line Rd	SR 32 - CR 100 N	C	C	---	---	---
2-23	CR 1100 E	SR 32 - CR 100 N	A	A	---	---	---
2-24	CR 1000 E	SR 32 - CR 100 N	A	A	---	---	---
2-25	CR 800 E	SR 32 - CR 100 N	A	A	---	---	---
2-26	CR 700 E	SR 32 - CR 100 N	A	A	---	---	---
2-27	CR 650 E	SR 32 - CR 100 N	A	A	---	---	---
2-28	CR 600 E	SR 32 - CR 100 N	A	A	---	---	---
2-29	SR 32	CR 600 E - CR 650 E	C	C	---	---	---
2-30	SR 32	CR 650 E - CR 700 E	D	D	---	---	---
2-31	SR 32	CR 700 E - CR 800 E	D	E	---	---	---
2-32	SR 32	CR 800 E - CR 900 E	D	D	---	---	---
2-33	SR 32	CR 900 E - Michigan Rd	F	F	C	C	Increase from 2 to 4 Travel Lanes
2-34	SR 32	Michigan Rd - CR 1000 E	F	F	E	D	Increase from 2 to 4 Travel Lanes
2-35	SR 32	CR 1000 E - CR 1100 E	F	F	E	E	Increase from 2 to 4 Travel Lanes
2-36	SR 32	CR 1100 E - County Line Rd	F	F	D	E	Increase from 2 to 4 Travel Lanes
2-37	County Line Rd	SR 32 - 166th St	C	D	---	---	---
2-38	CR 900 E	CR 50 S - SR 32	B	C	---	---	---
2-39	CR 800 E	CR 50 S - SR 32	A	A	---	---	---
2-40	CR 700 E	CR 100 S - SR 32	A	A	---	---	---
2-41	CR 600 E	CR 100 S - SR 32	D	C	---	---	---
2-42	CR 100 S	CR 650 E - CR 700 E	A	A	---	---	---
2-43	CR 100 S	CR 700 E - CR 775 E	A	A	---	---	---
2-44	CR 800 E	CR 100 S - CR 50 S	A	A	---	---	---
2-45	CR 50 S	CR 800 E - CR 900 E	A	A	---	---	---

Seg. ID	Roadway	Segment	10-Year LOS		10-Year Mitigated LOS		10-Year Mitigation
			AM	PM	AM	PM	
2-46	CR 100 S	CR 800 E - CR 825 E	A	A	---	---	---
2-47	CR 900 E	CR 125 S - CR 50 S	B	C	---	---	---
2-48	CR 1100 E	SR 32 - CR 200 S	C	C	---	---	---
2-49	166th St	County Line Rd - W 41st St	A	A	---	---	---
2-50	CR 850 E	CR 125 S - CR 100 S	A	A	---	---	---
2-51	CR 650 E	CR 100 S - CR 200 S	D	C	---	---	---
2-52	CR 700 E	CR 100 S - CR 200 S	A	A	---	---	---
2-53	CR 775 E	CR 100 S - CR 200 S	A	A	---	---	---
2-54	CR 825 E	CR 100 S - CR 200 S	A	A	---	---	---
2-55	CR 900 E	CR 125 S - CR 200 S	C	C	---	---	---
2-56	Pleasant View Rd	CR 100 S - CR 200 S	A	A	---	---	---
2-57	County Line Rd	166th St - CR 200 S	F	F	D	D	Increase from 2 to 4 Travel Lanes
2-58	CR 200 S	CR 1100 E - County Line Rd	C	C	---	---	---
2-59	CR 200 S	Michigan Rd - CR 1100 E	E	E	---	---	---
2-60	CR 200 S	Pleasant View Rd - Michigan Rd	C	C	---	---	---
2-61	CR 200 S	CR 900 E - Pleasant View Rd	C	C	---	---	---
2-62	CR 200 S	CR 825 E - CR 900 E	A	A	---	---	---
2-63	CR 200 S	CR 775 E - CR 825 E	A	A	---	---	---
2-64	CR 200 S	CR 700 E - CR 775 E	A	A	---	---	---
2-65	CR 200 S	CR 650 E - CR 700 E	A	A	---	---	---
2-66	CR 780 E	CR 200 S - CR 250 S	A	A	---	---	---
2-67	CR 900 E	CR 200 S - CR 230 S	D	D	---	---	---
2-68	County Line Rd	CR 200 S - CR 300 S	E	E	---	---	---
2-69	Pleasant View Rd	CR 200 S - CR 300 S	C	C	---	---	---
2-70	CR 250 S	CR 780 E - CR 875 E	A	A	---	---	---
2-71	CR 780 E	CR 250 S - CR 300 S	A	A	---	---	---
2-72	CR 875 E	CR 250 S - CR 300 S	D	E	---	---	---
2-73	CR 300 S	Michigan Rd - County Line Rd	E	F	C	D	Increase from 2 to 4 Travel Lanes
2-74	CR 300 S	CR 975 E - Michigan Rd	E	F	C	D	Increase from 2 to 4 Travel Lanes
2-75	CR 300 S	CR 875 E - CR 975 E	D	E	---	---	---
2-76	CR 300 S	CR 800 E - CR 875 E	C	D	---	---	---
2-77	CR 800 E	CR 300 S - CR 400 S	A	B	---	---	---
2-78	CR 875 E	CR 300 S - CR 350 S	E	F	B	C	Increase from 2 to 4 Travel Lanes
2-79	CR 350 S	CR 875 E - CR 950 E	A	A	---	---	---

Seg. ID	Roadway	Segment	10-Year LOS		10-Year Mitigated LOS		10-Year Mitigation
			AM	PM	AM	PM	
2-80	CR 975 E	CR 300 S - CR 375 S	C	B	---	---	---
2-81	CR 875 E	CR 350 S - CR 400 S	D	E	---	---	---
2-82	CR 400 S	CR 425 S - CR 800 E	A	B	---	---	---
2-83	CR 400 S	CR 800 E - CR 875 E	B	B	---	---	---
2-84	CR 400 S	CR 875 E - CR 950 E	A	A	---	---	---
2-86	CR 975 E	Oak Ridge Dr - Holliday Rd	C	C	---	---	---
2-87	CR 800 E	Whitestown Rd - CR 400 S	B	B	---	---	---
2-88	Whitestown Rd	CR 425 S - CR 800 E	A	A	---	---	---
2-89	CR 875 E	Whitestown Rd - CR 400 S	E	E	---	---	---
2-90	Oak Ridge Dr	CR 975 E - Turkey Foot Rd	A	A	---	---	---
2-91	Willow Rd	Michigan Rd - West Rd	C	C	---	---	---
2-92	126th St	Michigan Rd - West Rd	A	A	---	---	---
2-93	CR 1100 E	Willow Rd - CR 550 S	C	C	---	---	---
2-94	Turkey Foot Rd	Mulberry St - Oak Ridge Dr	A	A	---	---	---
2-95	CR 975 E	Oak Ridge Dr - Mulberry St	D	D	---	---	---
2-96	Whitestown Rd	CR 800 E - CR 875 E	B	C	---	---	---
2-97	CR 525 S	CR 650 E - CR 700 E	A	A	---	---	---
2-98	CR 700 E	CR 550 S - CR 525 S	B	B	---	---	---
2-99	CR 800 E	CR 550 S - Whitestown Rd	A	B	---	---	---
2-100	CR 550 S	CR 700 E - CR 800 E	C	C	---	---	---
2-101	CR 550 S	CR 800 E - CR 875 E	C	C	---	---	---
2-102	CR 875 E	CR 550 S - Whitestown Rd	D	E	---	---	---
2-103	Whitestown Rd	CR 875 E - CR 950 E	D	D	---	---	---
2-104	Whitestown Rd	CR 950 E - Ford Rd	D	E	---	---	---
2-105	CR 950 E	CR 600 S - Whitestown Rd	B	A	---	---	---
2-106	Ford Rd	CR 600 S - Whitestown Rd	C	D	---	---	---
2-107	Mulberry St	CR 975 E - Turkey Foot Rd	C	D	---	---	---
2-108	CR 550 S	CR 1100 E - Michigan Rd	C	D	---	---	---

Seg. ID	Roadway	Segment	10-Year LOS		10-Year Mitigated LOS		10-Year Mitigation
			AM	PM	AM	PM	
2-109	Greenfield Rd	Michigan Rd - West Rd	B	B	---	---	---
2-110	CR 1100 E	South of CR 550 S	B	B	---	---	---
2-111	Turkey Foot Rd	Mulberry St - Bloor Ln	C	C	---	---	---
2-112	Bloor Ln	Ford Rd - Turkey Foot Rd	C	C	---	---	---
2-113	CR 600 S	CR 950 E - Ford Rd	B	B	---	---	---
2-114	CR 600 S	CR 900 E - CR 950 E	A	A	---	---	---
2-115	CR 700 E	Whitestown Pkwy - CR 550 S	B	C	---	---	---
2-116	CR 800 E	Oak St - CR 550 S	A	A	---	---	---
2-117	CR 950 E	Oak St - CR 600 S	B	B	---	---	---
2-118	CR 1000 E	Oak St - Bloor Ln	D	E	---	---	---
2-119	Mulberry St	E Ash St - Bloor Ln	C	C	---	---	---
2-120	N 6th St	E Ash St - Oak St	A	A	---	---	---
2-121	N 1st St	E Ash St - Oak St	B	B	---	---	---
2-122	Sycamore St	Main St - Michigan Rd	E	E	---	---	---
2-123	1st St	Sycamore St - Oak St	F	F	C	C	Increase from 2 to 4 Travel Lanes
2-124	Main St	Sycamore St - 106th St	E	E	---	---	---
2-125	CR 1000 E	Starkey Avenue - Oak St	D	D	---	---	---
2-126	Cooper Rd	Oak St - Hunt Club Rd	B	B	---	---	---
2-127	Oak St	CR 950 E - CR 1000 E	E	E	---	---	---
2-128	Oak St	CR 850 E - CR 950 E	F	F	B	C	Increase from 2 to 4 Travel Lanes
2-129	Oak St	CR 800 E - CR 850 E	F	F	C	D	Increase from 2 to 4 Travel Lanes
2-130a	Oak St	CR 700 E - CR 800 E	D	D	---	---	---
2-130b	Oak St	CR 700 E - CR 800 E	F	F	C	D	Increase from 2 to 4 Travel Lanes
2-131	Oak St	CR 650 E - CR 700 E	C	D	---	---	---
2-132	Whitestown Pkwy	I - 65 - CR 650 E	D	F	C	D	Increase from 4 to 6 Travel Lanes
2-133	CR 775 E	Hunt Club Rd - Oak St	B	B	---	---	---
2-134	Hunt Club Rd	CR 775 E - CR 850 E	A	B	---	---	---

Seg. ID	Roadway	Segment	10-Year LOS		10-Year Mitigated LOS		10-Year Mitigation
			AM	PM	AM	PM	
2-135	Hunt Club Rd	CR 850 E - CR 1000 E	B	B	---	---	---
2-136	CR 1000 E	Starkey Ave - Hunt Club Rd	D	D	---	---	---
2-137	Zionsville Rd	Nuttall Oak Rd - 106th St	E	E	---	---	---
2-138	106th St	Zionsville Rd - Bennet Pkwy	E	E	---	---	---
2-139	Bennet Pkwy	106th St - Michigan Rd	B	B	---	---	---
2-140	106th St	Bennet Pkwy - Michigan Rd	E	E	---	---	---
2-141	Zionsville Rd	Nuttall Oak Rd - 96th St	E	E	---	---	---
2-142	CR 1000 E	Hunt Club Rd - 96th St	D	D	---	---	---
2-143	CR 850 E	96th St - Hunt Club Rd	B	B	---	---	---
2-144	CR 775 E	96th St - Hunt Club Rd	B	C	---	---	---
2-145	96th St	CR 775 E - CR 850 E	B	B	---	---	---
2-146	96th St	Moore Road - CR 1000 E	B	B	---	---	---
2-147	96th St	Zionsville Road - CR 1000 E	D	D	---	---	---
2-148	96th St	Zionsville Road - Hoosier Village Dr	D	D	---	---	---
2-149	96th St	Zionsville Road - Hoosier Village Dr	E	E	---	---	---
2-150	Oak St	CR 1000 E - 6th St	F	F	C	C	Increase from 2 to 4 Travel Lanes
2-151	Marysville Rd	Oak St - CR 575 E	E	E	---	---	---
2-152^	Bennet Pkwy	96th St - 106th St	C	C	---	---	---

^PROPOSED ROADWAY SEGMENT

SCHEDULE OF IMPROVEMENTS

The above recommended intersection and roadway improvements should be reviewed on yearly basis to determine an implementation schedule that addresses those areas that are most impacted by traffic generated from new development.

ESTIMATED CONSTRUCTION COSTS

Table 6 is a summary of the estimated construction costs that will be required to bring the intersections up to acceptable baseline level of service standards (LOS D) to accommodate either the existing traffic volumes or the projected 10-year traffic volumes. The table shows the estimated construction costs associated with the improvements recommended to mitigate the existing traffic conditions (Today's Cost) and the projected 10-year traffic conditions (10-Year Cost). All construction estimates are based on year 2022 costs.

Table 7 is a summary of the estimated construction costs that will be required to bring the roadways up to acceptable baseline level of service standards (LOS E) to accommodate either the existing traffic volumes or the projected 10-year traffic volumes. The table shows the estimated construction costs associated with the improvements recommended to mitigate the existing traffic conditions (Today's Cost) and the projected 10-year traffic conditions (10-Year Cost). All construction estimates are based on year 2022 costs.

TABLE 6 – ESTIMATED INTERSECTION CONSTRUCTION COSTS

Int. ID	Intersection	Today's Cost	Ten-year Cost
1-15	CR 550 S & SR 267	\$0	\$140,000
1-19	Whitestown Pkwy & SR 267	\$140,000	\$140,000
1-21	Whitestown Pkwy & CR 475 E	\$0	\$2,270,000
1-26	CR 750 S & SR 267	\$0	\$260,000
2-11	CR 100 N & Michigan Road	\$0	\$510,000
2-18	SR 32 & CR 650 E	\$0	\$375,000
2-19	SR 32 & CR 700 E	\$0	\$510,000
2-20	SR 32 & CR 800 E	\$0	\$260,000
2-21	SR 32 & CR 900 E	\$0	\$375,000
2-22	SR 32 & Michigan Road/US 421	\$0	\$0
2-23	SR 32 & CR 1000 E	\$0	\$140,000
2-24	SR 32 & CR 1100 E	\$0	\$645,000
2-25	SR 32 & County Line Road	\$0	\$885,000
2-33	CR 100 S & Michigan Road/US 421	\$0	\$0
2-39	CR 200 S & CR 900 E	\$0	\$2,020,000
2-41	CR 200 S & Michigan Road/US 421	\$0	\$645,000
2-42	CR 200 S & CR 1100 E	\$0	\$2,530,000
2-43	CR 200 S & County Line Road	\$0	\$1,550,000
2-48	CR 300 S & CR 875 E	\$0	\$2,950,000
2-49	CR 300 S & CR 975 E	\$0	\$2,950,000
2-50	CR 300 S & Michigan Road	\$0	\$750,000
2-51	CR 300 S & County Line Rod	\$0	\$2,270,000
2-52	CR 350 S & CR 875 E	\$0	\$260,000
2-55	CR 400 S & CR 875 E	\$0	\$2,270,000
2-58	Willow Road & Michigan Road/US 421	\$0	\$510,000
2-61	126th Street & Michigan Road/US 421	\$0	\$0
2-61	Whitestown Road & CR 875 E	\$0	\$0
2-63	Whitestown Road/Mulberry Street & CR 950 E	\$0	\$2,020,000
2-64*	Mulberry Street & Ford Road	\$0	\$0
2-66	CR 550 S & Willow Road	\$0	\$2,020,000
2-67	CR 550 S/Greenfield Road & US 421	\$0	\$0
2-72	CR 550 S & CR 875 E	\$0	\$2,950,000
2-78	Sycamore St & Michigan Rd/US 421	\$0	\$1,510,000
2-79**	Whitestown Parkway & CR 650 E	\$0	\$0
2-80**	Whitestown Parkway & CR 700 E	\$0	\$0
2-81^	Oak Street & CR 800 E	\$0	\$0
2-82	Oak Street & CR 850 E/Cooper Rd	\$0	\$0
2-83	Oak Street & CR 950 E/Sheets Road	\$2,020,000	\$2,020,000
2-84	Oak Street & CR 1000 E/Ford Road	\$0	\$260,000

Int. ID	Intersection	Today's Cost	Ten-year Cost
2-85*	Oak Street & 6th Street	\$0	\$0
2-86	Oak Street & 1st Street	\$280,000	\$760,000
2-87	Sycamore Street & 1st Street	\$260,000	\$1,270,000
2-88	Sycamore Street & Main Street	\$0	\$1,260,000
2-89	Starkey Ave/Continental Dr & CR 1000 E/Ford Rd	\$260,000	\$260,000
2-90	106th Street & Main Street/Zionsville Road	\$0	\$510,000
2-91	106th Street & Bennett Parkway	\$0	\$2,020,000
2-98	CR 875 E/Marysville Road & Cruise Road	\$0	\$260,000
2-99	96th Street & Bennett Parkway	\$140,000	\$280,000

*DUE TO EXISTING FIELD LIMITATIONS THIS IMPROVEMENT IS NOT FEASIBLE. THEREFORE, NO COST IS ASSOCIATED WITH THIS IMPROVEMENT.

**INTERSECTION IS OUTSIDE THE TOWN OF ZIONSVILLE; THEREFORE, NO COST IS ASSOCIATED WITH THIS IMPROVEMENT.

^PLANNED IMPROVEMENT TO BE FUNDED BY COLLECTED IMPACT FEES.

TABLE 7 – ESTIMATED ROADWAY CONSTRUCTION COSTS

Seg. ID	Street	Location	Today's Cost	Ten-year Cost
2-57	County Line Rd	166th St - CR 200 S	\$0	\$5,480,000
2-73	CR 300 S	Michigan Rd - County Line Rd	\$0	\$7,600,000
2-74	CR 300 S	CR 975 E - Michigan Rd	\$0	\$6,730,000
2-78*	CR 875 E	CR 300 S - CR 350 S	\$0	\$0
2-128	Oak St	CR 850 E - CR 950 E	\$0	\$4,290,000
2-129	Oak St	CR 800 E - CR 850 E	\$0	\$2,120,000
2-130b	Oak St	CR 700 E - CR 800 E	\$0	\$2,700,000
2-150**	Oak St	CR 1000 E - 6th St	\$0	\$0
2-152	Bennet Pkwy	96th St -106th St	\$2,005,000	\$4,010,000

*THE ROADWAY SEGMENT IS INCONSISTENT WITH THE REST OF THE CORRIDOR, THEREFORE FURTHER IMPROVEMENTS WERE NOT CONSIDERED

**DUE TO EXISTING FIELD LIMITATIONS THIS IMPROVEMENT IS NOT FEASIBLE.

TOTAL COSTS

Table 8 summarizes the total “Today’s Cost” and “10-Year Cost” for the study area intersections and roadways.

TABLE 8 – TOTAL COSTS

	Today's Cost	10-Year Cost	Applicable Road Impact Fee Cost
Intersections (Table 1)	\$3,100,000	\$42,615,000	\$39,515,000
Roadways (Table 2)	\$2,005,000	\$32,930,000	\$30,925,000
Total Cost	\$5,105,000	\$75,545,000	\$70,440,000

GENERATED 24-HOUR TRIPS

The total number of trips that will be generated during a 24-hour weekday period for each of the vacant parcel developments has been determined. **Table 9** identifies each of the vacant parcels, the assumed land use, and the 10-year build-out size.

TABLE 9 – SUMMARY OF VACANT LAND PARCELS

Parcel #	Land Use Distribution	ITE Code	Development Size
1	Multifamily	220	330 DU
	Attached Single Family	215	66 DU
2	Business Park	770	1,200,000 SF
3	Fulfillment Center	155	150,000 SF
4	Retail	820	284,000 SF
4	Multifamily	220	568 DU
5	Multifamily	220	130 DU
6	Business Hotel	312	115 Rooms
	Retail	822	30,320 SF
	Multifamily	220	250 DU
	Office	710	591,000 SF
7	Single Family	210	81 DU
8	Single Family	210	252 DU
9	Single Family	210	228 DU
10	Single Family	210	21 DU
11	Office Park	750	319,800 SF
12	Office Park	750	1,348,950 SF
13	Multifamily	220	250 DU
14	Multifamily	220	190 DU
15	Multifamily	220	62 DU
16	Retail	821	120,000 SF
17	Retail	822	28,000 SF
	Office	710	140,000 SF
18	Multifamily	220	255 DU
19	Office	710	70,000 SF
	Retail	822	10,000 SF
	Multifamily	220	50 DU
20	Multifamily	220	241 DU
	Attached Single Family	215	10 DU
	Retail	822	10,500 SF
21	Retail (35%)	822	66,720 SF
	Office (35%)	710	66,720 SF
	Multifamily (30%)	220	57 DU
22	Retail	820	348,480 SF
23	Office Park	750	408,900 SF

Parcel #	Land Use Distribution	ITE Code	Development Size
24	Single Family	210	25 DU
25	Retail	821	44,560 SF
26	Business Park	770	861,360 SF
27	Senior Apartments	252	119 DU
28	Business Park	770	756,000 SF
29	Multifamily	220	60 DU
30	Single Family	210	128 DU
31	Single Family	210	85 DU
32	Senior Apartments	252	123 DU
33	Single Family	210	14 DU
34	Single Family	210	51 DU
35	Single Family	210	63 DU
36	Single Family	210	92 DU
37	Single Family	210	78 DU
38	Single Family	210	27 DU
39	Attached Single Family	215	40 DU
40	Attached Single Family	215	100 DU
41	Retail (35%)	821	98,000 SF
	Office (35%)	710	98,000 SF
	Multifamily (30%)	220	84 DU
42	Retail	820	291,760 DU
43	Retail	822	32,000 DU
44	Business Park	770	1,282,680 SF
45	Single Family	210	228 DU
45	Multifamily	220	456 DU
46	Single Family	210	100 DU
47	Single Family	210	228 DU
48	Single Family	210	60 DU
49	Single Family	210	257 DU
50	Retail	821	80,000 SF
51	Single Family	210	51 DU
52	Single Family	210	70 DU
53	Single Family	210	33 DU
54	Single Family	210	84 DU
55	Retail (35%)	822	31,200 SF
	Office (35%)	710	31,200 SF
	Multifamily (30%)	220	53 DU
56	Retail	822	20,440 SF
57	Single Family	210	139 DU
58	Single Family	210	220 DU
59	Single Family	210	44 DU

Parcel #	Land Use Distribution	ITE Code	Development Size
60	Single Family	210	192 DU
61	Single Family	210	185 DU
62	Single Family	210	205 DU
63	Single Family	210	26 DU
64	Single Family	210	57 DU
65	Retail	821	80,000 SF
66	Single Family	210	22 DU
67	Single Family	210	13 DU
68	Single Family	210	23 DU
69	Single Family	210	21 DU
70	Single Family	210	19 DU
71	Single Family	210	37 DU
72	Single Family	210	7 DU
73	Single Family	210	7 DU
74	Single Family	210	25 DU
75	Single Family	210	35 DU
76	Single Family	210	20 DU
77	Single Family	210	68 DU
78	Single Family	210	95 DU
79	Single Family	210	143 DU
80	Single Family	210	117 DU
81	Single Family	210	63 DU

Notes: DU = Dwelling Unit; SF = Square Feet

The *ITE Trip Generation Manual (11th Edition)* was used to generate the number of 24-hour weekday trips generated by the land uses listed above. The 24-hour generated trips that will be used for the road impact fee calculation is 253,495 trips.

ROAD IMPACT FEE

The method used for determining the road impact fee is based on the sum of the road impact fee construction costs for all study intersections and roadways added to the cost of performing the road impact fee study. The total road impact fee cost is then divided by the total number of 24-hour trips that will be generated by the vacant land parcels. **Table 10** shows the calculation for the road impact fee.

$$\text{Impact Fee} = \frac{\text{Cost}^{10\text{-Year}} - \text{Cost}^{\text{Existing}} + \text{Cost}^{\text{Impact Fee Study}} - (\text{YTD IF Receipts})}{(\text{Generated 24 - Hour Trips})}$$

$$\$278.35/\text{trip} = \frac{\$75,545,000 - \$5,105,000 + \$294,500 - \$175,032}{253,495 \text{ trips}}$$

TABLE 10 – CALCULATION OF ROAD IMPACT FEE

Total Applicable Road Impact Fee Cost	\$70,440,000
Cost of Performing Road Impact Fee Study	\$294,500
YTD Road Impact Fee Receipts	\$175,032
Total Road Impact Fee Cost	\$70,559,468
24-Hour Trips from vacant Land Parcel Developments	253,495
Road Impact Fee per 24-Hour Generated Trip (Equals Total Road Impact Fee Cost divided by the 24-hour trips)	\$278.35

ANNUAL ROAD IMPACT FEE EVALUATION

The estimated construction costs that have been used to determine the road impact fee presented in this report are based on year 2022 construction costs. Therefore, it may be necessary to re-evaluate the road impact fee on an annual basis to reflect the annual inflation of construction costs or any major changes in the proposed land uses analyzed in this study.

EXAMPLES OF TYPICAL ROAD IMPACT FEES COLLECTED

For all land uses, the number of 24-hour weekday trips generated by each new would need to be determined on a case-by-case basis using the methods and procedures outlined in the most recent edition of the *ITE Trip Generation Manual* and the *ITE Trip Generation Handbook*. The generated 24-hour trip number for the new development is then multiplied by the road impact fee per trip to determine the collected fee. **Table 11** shows typical road impact fees that could be collected for a variety of land uses. For each land use, the table lists the ITE Code classification, a range of typical sizes, the 24-hour weekday trips generated and the resulting road impact fee. It should be noted that the land uses listed in the table are only a small sample of the different types of land uses classified by the *ITE Trip Generation* report.

TABLE 11 – EXAMPLES OF TYPICAL ROAD IMPACT FEES FOR VARIOUS LAND USES

Land Use	ITE Code	Size	24-Hour Trips	Road Impact Fee per 24-hour Trip	Road Impact Fee Collected
Single-Family	210	10 DU	100*	\$278.35	\$27,834.66
		20 DU	200*	\$278.35	\$55,669.32
		30 DU	300*	\$278.35	\$83,503.98
Multi-Family Apartments	220	100 DU	716	\$278.35	\$199,296.16
		200 DU	1357	\$278.35	\$377,716.32
		300 DU	1998	\$278.35	\$556,136.48
Business Park	770	200,000 SF	2,840	\$278.35	\$790,504.30
		300,000 SF	3,902	\$278.35	\$1,086,108.38
		400,000 SF	4,964	\$278.35	\$1,381,712.45
General Office	710	50,000 SF	635	\$278.35	\$176,750.08
		100,000SF	1,160	\$278.35	\$322,882.04
		200,000 SF	2,121	\$278.35	\$590,373.11
General Retail**	822	30,000 SF	980	\$278.35	\$272,779.65
	821	100,000SF	4,051	\$278.35	\$1,127,582.02
	820	200,000 SF	8,647	\$278.35	\$2,406,862.93

Notes

DU = Dwelling Unit, SF = Square Feet

*Based on the ITE data, Single-Family homes are assumed to generate approximately 10 trips per dwelling unit per day.

**Retail land uses attract pass-by trips. Therefore, the trips shown above represent the total number of non-pass-by 24-hour trips.