TOWN OF ZIONSVILLE TOWN COUNCIL

ORDINANCE NO. 2023-23

AN ORDINANCE ADOPTING A ROAD IMPACT FEE

WHEREAS, Ind. Code §36-7-4-1300 *et seq.* allows legislative bodies of local governments to adopt ordinances imposing an impact fee on new development in the geographical area over which the local government exercises planning and zoning jurisdiction; and

WHEREAS, Indiana law requires that prior to adopting such an ordinance, the Town must (1) appoint an Impact Fee Advisory Committee, (2) prepare a Zone Improvement Plan, (3) adopt the Plan as a formal part of its Comprehensive Plan, and (4) receive from its Plan Commission a recommendation on the proposed ordinance imposing the fee, a proposal which is treated as a text amendment to the Town's Unified Development Ordinance; and

WHEREAS, the Mayor appointed an Impact Fee Advisory Committee; and

WHEREAS, the Town caused a Zone Improvement Plan to be prepared by A&F Engineering. This Plan is attached hereto as Exhibit A and is incorporated into this Ordinance; and

WHEREAS, on October 2, 2023, the Town Council approved the Zone Improvement Plan as an amendment to the Town's Comprehensive Plan; and

WHEREAS, on October 16, 2023, the Town Plan Commission certified to the Town Council a favorable recommendation for the adoption of the proposed Road Impact Fee Ordinance; and

WHEREAS, under Ind. Code §36-7-4-1340, this proposed road impact fee may be imposed for a period of five (5) years; and

WHEREAS, the Town Council has determined that it is reasonable and necessary to adopt a road impact fee in the amount of Two Hundred Seventy-Eight Dollars and thirty-five cents ($278.35) per 24-Hour Generated Trip, as provided for in the Zone Improvement Plan, in order to promote and accommodate orderly growth and development and to promote the general public health, safety, and general welfare of the citizens of the Town of Zionsville ("the Town") by providing for an equitable program to fund the capital costs of new intersection and roadway infrastructure necessary to serve newly developing areas of the Town; and

WHEREAS, the Town Council has further determined that it is reasonable and necessary to promote the orderly development of the Town by establishing standards by which the Town may require that new development shall pay an Impact Fee representing the development's proportionate share of the capital costs of new intersection and roadway infrastructure necessary to serve the new development; and

WHEREAS, the Town Council determined that new development should not be required to pay a fee for the capital costs of such intersection and roadway infrastructure greater than the development's proportionate share of the capital costs of such infrastructure which is needed to serve such development; and

WHEREAS, the cost of implementing the intersection and roadway recommendations of the Plan in their entirety exceeds:

(1) the income capacity of the Town through its ad valorem property tax receipts or other tax distributions allocated to intersections and roadways improvements relative to the chronological needs of the Town for said improvements;

(2) the general obligation bond capacity of the Town based upon net assessed valuation; and

(3) the revenue bond potential of the Town based upon any existing means of acquiring revenue related to such improvements; and

WHEREAS, because of the size of the Town, considering both its population and geographic area, as well as the distribution of public and private institutions, services, and other facilities through the Town, any intersection and roadway improvement benefits all citizens of the Town equally; and

WHEREAS, it has been the objective of the Town that the Plan should result in the determination of an impact fee which meets the rational nexus test as that test is understood by current applicable statutory law and case law; and

WHEREAS, the Town has adopted a Comprehensive Plan under Ind. Code §36-7-4-500 series for the geographic area over which the Town exercises planning and zoning jurisdiction; and

WHEREAS, the purpose of this Ordinance is not to deter growth, remedy existing infrastructure deficiencies, or pay for maintenance or other "non-capital costs."

NOW, THEREFORE, IT IS HEREBY ORDAINED BY THE TOWN COUNCIL OF THE TOWN OF ZIONSVILLE, INDIANA, THAT:

SECTION 1. Repeal and Replace. The current provisions in Chapter 53, Sec. 35: Road Impact Fee are repealed and replaced with the following provisions.

SECTION 2. Title of Chapter. The Title of the Chapter shall be "Road Impact Fee."

SECTION 3. Department in Charge. The Department of Public Works shall have authority for implementing, supervising and issuing citations in violation of this chapter. The Department of Finance and Records shall have the authority for establishing and maintain all Road Impact Fee funds, depositing fines and fees and providing for financial review and reporting of the funds.

SECTION 4. Limitation on Imposition of Impact Fee. This Ordinance shall expire and

become void five (5) years after its effective date as required by Ind. Code § 36-7-4-1340, unless action is undertaken to adopt a replacement impact fee consistent with Indiana law.

SECTION 5. Establishment of Impact Zone. There is hereby established one Road Infrastructure Impact Zone (the "Impact Zone"), the boundaries of which are co-terminus with the existing corporate boundaries of the Town, as such boundaries may be extended from time to time through annexation, and over which boundaries the Town exercises planning and zoning jurisdiction. In this regard, the Town Council specifically finds that there is a functional relationship between the components of the infrastructure types in the Impact Zone, as described in the Plan, and that the infrastructure type, as detailed in the Plan, provides a reasonably uniform benefit to all citizens throughout the Impact Zone as of the adoption of this Ordinance. The Town Council further finds that all areas within the Impact Zone are contiguous as required by Ind. Code § 36-7-4-1316. Except as provided herein, this Ordinance shall apply uniformly to all new development within the Impact Zone. This Ordinance shall not apply to:

5.1 Development meeting the requirements set forth in Ind. Code § 36-7-4-1322(g);

5.2 Improvements which do not require a building permit;

5.3 Improvements which do not create a need for new and additional infrastructure, including the erection of a sign, construction of accessory buildings, structures or fences, or the alteration, renovation or expansion of an improvement where the use, or intensity thereof, has not changed;

5.4 The replacement of a destroyed or partially destroyed improvement provided that the replacement improvement does not create a need for new and additional infrastructure over and above the infrastructure needed by the original improvement prior to the destruction or partial destruction thereof;

5.5 Qualified Property, as defined in Ind. Code §36-1-8-18, unless the owner requests that an impact fee be imposed on the property.

SECTION 6. Zone Improvement Plan. As a precondition to the adoption of this Ordinance, the Town Council undertook a comprehensive and detailed road impact analysis through the engagement for that purpose of A&F Engineering, an engineering firm of qualified engineers licensed to perform engineering services in Indiana. The Town Council now finds that the resulting study and data base constitute a sufficient study to constitute a "Zone Improvement Plan" as contemplated by Ind. Code § 36-7-4-1318. The Town Council does hereby adopt and approve the Plan as its Zone Improvement Plan, for purposes of this ordinance and specifically finds that the Zone Improvement Plan contains the following elements:

a. A description of the nature and location of existing infrastructure in the Impact Zone.

b. A reasonable determination of the current level of service provided within the Impact Zone.

c. A reasonable determination of the community level of service for the Impact Zone.

d. Reasonable estimates relating to the nature and location of development that is expected to occur within the Impact Zone during the following ten (10) year

period.

e. A reasonable estimate of the nature, location, costs, sequencing, and timing of the intersection and roadway infrastructure necessary to provide the community level of service for the developments contemplated in sub-paragraph (d).

f. A general description of the sources and amounts of money used to pay for infrastructure during the previous five years.

g. Reasonable provisions for the completion of the infrastructure necessary to raise the current level of service to the community level of service within the following ten (10) year period.

h. Reasonable provisions for the nature, location, and cost of infrastructure that is necessary to raise the current level of service to the community level of service.

i. Reasonable provisions concerning the revenue sources and estimated amounts of revenue that the Town intends to use to raise the current level of service to the community level of service for existing development.

j. A reasonable estimate of the share of the intersection and roadway costs identified in sub-paragraph (e) hereof that will be used to raise the current level of service for existing development or provide service to existing development, or to provide service to new development.

k. A reasonable estimate of revenues that are from sources other than impact fees and will be used to finance the cost of raising the current level of service for existing development or providing service to existing development.

SECTION 7. Establishment of Road Impact Fee. Based on the Plan, it is determined that each parcel of real property in all new development hereafter constructed in the Town of Zionsville, not specifically excepted hereunder, shall pay a road impact fee in the amount of $278.35 per 24-Hour Generate Trip. The calculation of this fee and the formula therefor are contained in Table 10 of the Zone Improvement Plan adopted by the Town Council and made a part of the Town's Comprehensive Plan.

7.1 Supporting Data. The Town Council hereby makes as part of the record of these proceedings all the data collected, calculations made, and conclusions reached by the Town's consultant, A&F Engineering, in the process of developing the Zone Improvement Plan, and specifically instructs the employees of the Town to make such data available to the public for review during regular business hours, along with any other information that is part of the public record created as a result of the process involved in enacting this Ordinance.

7.2 Change in Use. In the event any parcel of real estate which is excepted from the fee and not subject to the fee undergoes a change in use from a use for which the impact fee is imposed, an impact fee will be assessed against said real estate.

7.3 Destruction of Property. Any person or entity otherwise obligated to pay the fee established by this Ordinance whose property was totally or partially destroyed by fire, storm, or other casualty beyond his/her/its control, shall be exempt from said fee if he/she/it repairs or replaces the destroyed structure without creating a burden on infrastructure great than the burden imposed by the destroyed infrastructure. In the event of such additional burden, the fee shall be calculated based only on the increased burden created by the structure.

7.4 Designation of Responsible Agency. The Town Council hereby designates the Town Public Works Department as the infrastructure agency that is responsible for acquiring, constructing, and providing each infrastructure improvement type identified in the Zone Improvement Plan.

SECTION 8. Credit in Lieu of Payment. A fee payer is entitled to a credit against an impact fee if the owners or developer of the development constructs or provides infrastructure that is an infrastructure type for which the Town imposed an impact fee in the impact zone or constructs or provides an improvement as defined by Ind. Code §36-7-4-1335(a). Such infrastructure or improvement will be public property or furnished or constructed under the requirements of the Town (including but not limited to the Plan) and available for use by other development in the area. Such infrastructure, for which is credit is allowed, does not include interior streets, roads, rights-of-way, or other public ways which serve the development. The amount of a credit will be determined at the date the impact fee is assessed. If an assessment is not requested, the amount of the credit will be determined at the time the structural building permit is issued. The amount of the credit shall be determined by the person constructing or providing the infrastructure or improvement and the Public Works Department. The amount of the credit will be equal to the sum of the cost of constructing or providing the infrastructure or improvement and the fair market value of land, real property interests, and site improvements provided. Provided, however, the credit will not include amounts for land or improvements required by the Town to be dedicated to the Town for right-of-way pursuant to the Town's Transportation Plan or any planning or zoning approval.

8.1 Adjustment of Credit. The amount of the credit may be increased or decreased after the date the impact fee is assessed if, between the date the impact fee is assessed and the date the structural building permit is issued, there is a substantial and material change in the cost or value of the infrastructure or improvement that is constructed or furnished from the cost or value determined on the date the impact fee is assessed. Provided however, at the time the amount of the credit is determined on the date the impact fee is assessed, the person providing the infrastructure or improvement and the Director of the Department of Public Works, or the Director's designee, may agree that the amount of the credit may not be subsequently increased or decreased.

8.2 Voluntary Waiver of Credit. The person providing the infrastructure or improvement may waive the person's right to a credit against an impact fee by executing a written waiver and filing such waiver with the Department of Public Work.

8.3 Partial Credit. If the actual cost of constructing or providing the infrastructure or improvement and the fair market value of land, real property interests, and site improvements provided is less than the amount of the impact fee assessed, the difference shall be due from the owner as otherwise provided. If the amount of the credit exceeds the impact fee provided for by this ordinance, no fee will be due to the Town and no refund will be due to the fee payer.

8.4 Disputed Credit Amount. If the parties cannot agree on the cost or fair market value used in calculating the credit, the fee payer or the person constructing or providing the

infrastructure or improvement may file with the Town's Impact Review Board a petition for determination of the amount of the credit. This petition must be filed not later than 30 days after the structural building permit is issued for the development on which the impact fee is imposed. Immediately after receiving a timely filed petition for determination of a credit amount, the Review Board shall provide a copy of the petition to the Department of Public Works. Not later than 30 days after receiving a copy of the petition, the Department of Public Works shall provide to the Board a response on the form prescribed by the Board. The Board shall immediately provide the petitioner a copy of the Department of Public Works' response. The Review Board shall review the petition and the response and hold a public hearing to determine the amount of the credit not later than 30 days after the response is provided to the Board. At the hearing, each party may appear and present evidence in person, by agent, or by attorney. A person may not communicate with a member of the Board before the hearing with intent to influence the member's action regarding the appeal. The Board may reverse, affirm, modify, or otherwise establish the amount of the credit. Within 5 days after making its decision, the Board shall provide to the petitioner and the Town Council a copy of its written findings and decision.

8.5 Appeal of Board Decision. A fee payer aggrieved by the board's final determination of the amount of the credit may, within 30 days of the determination, appeal the determination to the Circuit or Superior Courts of Boone County. This appeal shall be determined by a trial de novo.

8.6 Allocation of Credit to Successors in Interest. In addition, a fee payer or other person or entity responsible for installing infrastructure or improvements may designate in writing a method of allocating its credits to future fee payers who may be successors in interest to the credits earned by the fee payer or others, as part of the certification provided for above.

SECTION 9. Impact Fee Due Upon Issuance of a Building Permit. The Fee imposed pursuant to the terms of this Ordinance shall be due and payable upon the issuance of a building permit by the Town. It is understood that the term "building permit" is synonymous with the term "structural building permit" as that term is used in Ind. Code § 36-7-4-1323, in that the issuance of a building permit authorizes the applicant to commence construction activities, structural or otherwise. The Fee which is calculated pursuant to the terms of this Ordinance, shall be due at said time unless the amount of the fee upon calculation is greater than Five Thousand Dollars ($5,000.00), in which case an installment plan may be requested by the applicant in accordance with the terms set forth in Ind. Code § 36-7-4-1324.

9.1 Installment Plans. In an installment plan, a maximum of $5,000 or 5% of the impact fee, whichever is greater, shall become due and payable on the date the building permit is issued for the development on which the fee is imposed. The first installment is due and payable one year after the building permit is issued, and the last installment is due and payable two years after the building permit is issued. When an impact fee is paid through an installment plan, interest shall accrue at the rate of 5% per annum on the portion of the impact fee that is outstanding and does not begin to accrue until the date the structural building permit is issued for the development or part of the development on which the impact fee is imposed. If all or part of an impact fee is not paid when due and payable, the amount of the installment shall be increased on the first day after the installment is due and payable by a penalty equal to 10% of the installment amount that is overdue. Interest, as identified above, shall also be charged on the penalty amount.

9.2 Request for Assessment. If a fee payer requests, the amount of the Fee shall be assessed upon the voluntary submission of a development plan or upon the issuance of the building permit whichever is earlier. For purposes of this section, assessment means the act of calculating the amount of the Fee which shall be due. The Town shall make such assessment within thirty (30) days of the earlier of the date the fee payer obtains an improvement location permit or the date the fee payer voluntarily submits to the Town a development plan, if a development plan review is required by the Town Unified Development Ordinance, and evidence that the property is zoned for the proposed development. If the development does not require a development plan review, the date of assessment is within thirty (30) days of the fee payer obtains an improvement location permit.

9.3 Unique Development Requiring Revision of Zone Improvement Plan. If a request for assessment is made and the Department of Public Works determines that the development is of a magnitude that will require the revision of the zone improvement plan in order to appropriately serve the new development, the Town will revise the zone improvement plan and will assess an impact fee on the development not later than 180 days after the earlier of the following:

1. The date on which the fee payer obtains an improvement location permit;
2. The date on which the fee payer submits to the Town a development plan for the development and evidence that the property is properly zones, as provided for in Section 6.2 of this Ordinance.

9.4 Increase of Assessment. Once assessed, an impact fee may be increased only if the structural building permit has been issued and the permit is changed so that the amount of impact on infrastructure the development creates in the impact zone is significantly increased.

9.5 Decrease of Assessment. Once assessed, an impact fee will be decreased only of a structural building permit has been issued and the permit is changed so that the amount of impact on infrastructure the development creates in the impact zone is significantly decreased. If a decrease in assessment is required and the originally assessed fee has been paid, the Town will refund to the fee payer the amount of overpayment.

SECTION 10. Lien Rights Established. Pursuant to Ind. Code § 36-7-4-1325, the Town acquires a lien against the real estate which is the subject of the Fee on the date a building permit is issued. Upon adoption, this Ordinance shall be recorded, and thereafter, it shall constitute constructive notice of the lien rights of the Town with respect to a parcel of real estate which is the subject of an installment payment of the Fee. The Town may, in its discretion, file a specific instrument setting forth its lien rights with respect to a parcel of real estate which is the subject of an installment payment of the Fee, and such instrument shall constitute actual notice in addition to the constructive notice provided for by the recording of this Ordinance.

SECTION 11. Form of Receipt. The Zionsville Fiscal Officer shall issue a receipt for all Fees collected, in substantially the following form:

Received of _____(fee payer) this ____ day of _____ the sum of $ _____in (full) (partial) satisfaction of Road Impact Fees due pursuant to Zionsville Town Council Ordinance No. 2023- _____ relating to improvements to

be constructed on the real estate located at _____ and described on Exhibit A attached hereto and made part hereof, and subject to lien rights in favor of the Town of Zionsville in the event of partial payment with payments remaining due. The remaining balance due (if any) is in the following amount: $_____.

_____
Zionsville Fiscal Officer

SECTION 12. Re-establishment of Zionsville Impact Fee Review Board. The Town Council hereby re-establishes, pursuant to Ind. Code § 36-7-4-1338, an Impact Fee Review Board ("Board"), and this Board will exist and will have the same authority as provided for by Indiana Law. This Board shall consist of three (3) citizen members appointed by the Mayor and who shall qualify as follows:

One (1) member shall be a real estate broker licensed in Indiana;
One (1) member shall be an engineer licensed in Indiana; and
One (1) member shall be a certified public accountant.

The Mayor shall provide the Town Council with a copy of the Certificates of Appointment of each member of the Board.

12.1 Eligibility. A Board member shall not be a member of the Zionsville Plan Commission.

12.2 Terms. The initial term for the real estate broker shall be one (1) year. The initial terms of the engineer and the certified public account shall be two (2) years. At the expiration of the terms of each Board member, successors shall be appointed in the same manner as the original appointees, and each such succeeding member shall serve for a term of two (2) years. Each member shall continue to serve until his/her successor is appointed and qualified.

12.3 Vacancies. If any person appointed as a Board member shall fail to qualify as provided within ten (10) days after the mailing to him/her of notice of his/her appointment, or if any member after qualifying shall die, resign, or vacate office, the Mayor shall fill such vacancy with a new member meeting the qualifications of the member being replaced. A new member shall serve out the remainder of the vacated term.

12.4 Temporary Members. If a Review Board member is unable to hear a petition due to a conflict of interest, the Mayor shall appoint a temporary member to serve for the period necessary to dispose of the petition giving rise to the conflict. The temporary member shall qualify in the same manner as the member in whose place he/she is serving.

12.5 Officers. The Board shall elect one of its members as President and one as Vice-President, each of whom shall serve from the day of his/her election until the following January 31st and until his/her successor is elected and qualified.

12.6 Rules of Procedure. The Board is authorized to adopt by-laws, rules, regulations, and procedures as it may deem necessary for the proper conduct of its proceedings and the carrying out of its duties. Meetings and hearings shall be held at such time as the Board may determine and upon such notice as it may fix, in accordance with the provisions of the by-laws, rules, and regulations adopted and Indiana law. The Board may use the Town Electronic Meeting Policy or if such Policy does not exist adopt an Electronic Meeting Policy to facilitate Board attendance.

12.7 Quorum and Official Action. A majority of the Board shall constitute a quorum and the concurrence of a majority shall be necessary to authorize any action.

12.8 Duties. The Board shall conduct its review of the amount of an impact fee assessed, the amount of a refund, and the amount of a credit using the procedures established in Ind. Code §§ 36-7-4-136 and 36-7-4-1338(c).

12.9 Governing Law. The Board shall be governed by Ind. Code § 36-7-4-1338 and all other applicable provisions of the Impact Fee Statute.

SECTION 13. Appeal of Fee Assessment. Any fee payer who believes itself to be aggrieved by the calculation of the Fee may appeal the fee assessment to Board, and the Board shall conduct a hearing with regard thereto. At such hearing, the fee payer shall bear the burden of going forward with the evidence and shall present evidence addressing either of the following propositions:

a. A fact assumption used in determining the amount of the Fee is incorrect; or
b. The amount of the Fee is greater than the amount allowed under Ind. Code §§ 36-7-4-1320, 1321, and 1322.

13.1 Action By Board. Upon conclusion of the hearing at which the matter is first presented, or at the conclusion of the hearing if the matter is continued, the Board shall determine the appropriate amount of the fee based upon the facts presented and may reverse, affirm, modify, or make such adjustments in the Fee, as it believes are appropriate under the circumstances, if any, including establishing the amount of an impact fee, a credit, a refund, or any combination of fees, credit, or refunds.

13.2 Written Findings. The Impact Fee Review Board shall make written findings of fact supporting its decision and shall provide a copy of its decision to the Director of the Department of Public Works and the fee payer involved in the appeal within five (5) days after making its decision.

13.3 Time for Appeals and Filing Fee. An appeal under this Section must be filed no later than thirty (30) days after the issuance of the building permit. The appeal shall be initiated with the filing of a Petition for Review with the Director of the Department of Finance and Records together with a filing fee in the amount of One Hundred Dollars ($100.00). The filing fee shall be refunded in full if:

1. The Petition for Review is granted and the Fee is eliminated, reduced, or adjusted by the Impact Fee Review Board, by independent action of the Town, or by a court having jurisdiction; and
2. The reviewing body determines that the amount of the Fee, reductions, or credits were arbitrary or capricious or contrary to Indiana law.

13.4 Petitions For Appeal. The Petition for Review shall be in a form calculated to inform the Impact Fee Review Board of the nature of complaint, the parties to the action, and the relief requested. In addition, the Petition shall describe the new development on which the Fee has been assessed, all facts related to the assessment of the Fee, and the reasons the petitioner believes that the amount of the Fee assessed is erroneous or is greater than the amount allowed by the Fee limitation set forth in this ordinance and the enabling statute.

13.5 Appeal of Board Decision. A fee payer aggrieved by a final determination of the Board regarding the assessment of an impact fee may appeal the Board's determination to the Circuit or Superior Courts of Boone County and is entitled to a trial de novo. If the assessment of the fee is vacated by the Court, the assessment of the impact fee shall be corrected by the Board.

13.6 Stay of Payment of Fee During Appeal. If a petition for review or an appeal of an impact fee assessment is pending, the impact fee is not due and payable until after the petition or appeal is finally adjudicated and the amount of the fee is determined.

13.7 Issuance of Permit During Appeal. If a person against whom an impact fee has been assessed appeals the amount of the impact fee, the Town shall not deny the issuance of a building permit on the basis that the Fee has not been paid or condition issuance of the permit on the payment of the Fee. However, if the impact is $1,000 or less, the fee payer must either pay the impact fee or initiate an appeal in order be eligible for issuance of the permit.

SECTION 14. Refunds. A fee payer is entitled to a refund of an impact fee if the conditions provided for in Ind. Code § 36-7-4-1332(a) exist. An application for a refund must be filed with the Director of the Department of Finance and Records not later than two (2) years after the right to a refund accrues. The Town shall issue a refund in part or in full or shall reject the application not later than 30 days after receiving an application for a refund. If the Town approves a refund in whole or in part, the Town shall pay the amount approved, plus interest from the date on which the impact fee was paid to the date the refund is issued. The interest rate for refunds shall be 5% per year. The Public Works Manager is responsible for accepting or rejecting a refund.

14.1 Appeals. If the Town rejects the application for a refund or approves a partial refund, the fee payer may appeal that rejection to the Board not later than 60 days after the rejection or partial approval. The appeal shall be on a form prescribed by the Board. Upon receipt of an application for appeal, the Board shall immediately provide to the Director Department of Public Works notice of the appeal. The Board shall hold a hearing on all appeals for a refund. This hearing shall be held not later than 45 days after the application for appeal is filed with the Board. After the hearing, the Board shall determine the amount of refund that shall be made to the fee payer from the account established herein. A refund ordered by the Board must include interest from the date the impact fee was paid to the date the refund is issued, at the

rate of 5% per annum.

14.2 Appeal of Board Decision. A party aggrieved by a final decision of the Board regarding a refund may appeal the decision to the Circuit or Superior Courts of Boone County and is entitled to a trial de novo.

SECTION 15. Re-establishment of Road Infrastructure Improvement Fund. There is hereby re-established Town of Zionsville Road Infrastructure Improvement Fund ("the Fund") of the Town. The Fund shall be a non-reverting fund and shall receive any and all sums collected pursuant to this Ordinance to be utilized in connection with the purposes set forth herein. The Fund shall consist initially of one (1) account based upon the current existence of one (1) impact zone. If, and only if, an additional impact zone is created hereafter, a separate account shall be maintained for each separate impact zone established within the Town. Interest earned on the Fund or on any account with the Fund, shall be deposited and maintained within the Fund or the separate account. The Director of the Department of Finance and Records shall maintain records of the status of the Fund or any account which may be established therein, and shall make an annual report of the Fund and accounts to the Plan Commission and Department of Public Works on or before March 31 each year. This annual report shall be available to the public in general and fee payers, upon request. Pursuant to Ind. Code § 36-7-4-1332, the Director of the Department of Finance and Records is designated as the Town official responsible for paying refunds and interest. No funds shall be expended from the Fund without approval from the Town Council.

SECTION 16. Use of Impact Fees Collected Pursuant to this Ordinance. Any and all Fees collected pursuant to the provisions of this Ordinance may be utilized only for the following purposes by the Town, acting by and through its Town Council, which for the purposes of this Ordinance is identified as the infrastructure agency contemplated by Ind. Code § 36-7-4-1317:

a. Providing funds to be utilized by the Department of Public Works for the provision of new infrastructure that is necessary to serve new development in the impact zone from which the fee is collected and that is identified in the Zone Improvement Plan;
b. An amount not to exceed Five Percent (5%) of the annual collections of the Fee to be utilized for expenses incurred by the Town for the consulting services used to establish this Ordinance;
c. To pay any refund due pursuant to the terms of this Ordinance; and
d. To pay the debt service cost of an obligation issued to provide new intersection and roadway infrastructure described in sub-paragraph (a) above.

SECTION 17. Collections. The Town may use any legal remedy to collect and impact fee, interest thereon, penalties, costs, and collection expenses, including but not limited to reasonable attorney's fees, filing fees and litigation expenses, imposed by this Ordinance. Any action to collect the fee, interest, penalties, costs, and collections expenses must be filed not more than ten (10) years after the fee becomes first due and payable. The Town Judge may prosecute any such violations.

SECTION 18. Indiana Impact Fee Law. The Town Council specifically acknowledges the existence of Ind. Code § 36-7-4-1300 *et seq.* ("the 1300 Series – Impact Fees") which

regulates the imposition of impact fees by municipal corporations within the State of Indiana. The substantive and procedural requirements of Ind. Code § 36-7-4-1300 *et seq.* shall control in the events of conflicts with this Ordinance which are unintended by the Council.

SECTION 19. Amendment and Review. The Fee provided for herein is based upon data which, in large part, is subject to inflation and other economic and market forces over which the Town has no control. The Council may cause a review to be made by Town staff or consultants as may be required to determine the continuing validity of the impact fee, the Impact Zone, and the Plan. The Council shall consider and adopt such amendments as are necessary to cause a substantive compliance with all constitutional and statutory requirements. To the extent required by the facts and circumstances, this process shall include the steps necessary to update the Plan and the Comprehensive Plan.

SECTION 20. Effective Date. This Ordinance shall be effective April 23, 2024, or not earlier than six (6) months after its adoption by the Council in accordance with Ind. Code § 36-7-4-1340.

SECTION 21. Construction of Clause Headings. The clause headings appearing herein have been provided for convenience and reference and do not purport and shall not be deemed to define, limit, or extend the scope or intent of the clauses to which they pertain.

SECTION 22. Severability. If any part of this Ordinance shall be held invalid, such part shall be deemed severable and the invalidity thereof shall not affect the remainder of this Ordinance.

NOW, THEREFORE, BE IT ORDAINED AND ENACTED by the Town Council of the Town of Zionsville, Indiana as follows:

Introduced and filed on the 23rd day of October 2023. A motion to consider on First Reading was properly made and seconded and approved by a vote of _____ in favor and _____ opposed, pursuant to Indiana Code § 36-5-2-9.4 and § 36-5-2-9.6.

A motion to consider on Second reading was properly made and seconded and approved by a vote of _____ in favor and _____ opposed, pursuant to Indiana Code § 36-5-2-9.4, § 36-5-2-9.6 or § 36-5-2-9.8 (*as applicable*).

DULY PASSED AND ADOPTED this 6th day of November, 2023, by the Town Council of the Town of Zionsville, Boone County, Indiana, having been passed by a vote of 6 in favor and 0 opposed.

TOWN COUNCIL OF THE TOWN OF ZIONSVILLE,
BOONE COUNTY, INDIANA

	YEA **Signature**	**NAY** **Signature**
Jason Plunkett President		
Brad Burk, Vice-President		
Alex Choi, Member		
Joe Culp, Member		
Josh Garrett, Member		
Craig Melton, Member		
Bryan Traylor, Member		

Ordinance 2023-23

I hereby certify that the foregoing Ordinance was delivered to Town of Zionsville Mayor Emily Styron on the 8th day of November 2023 at 8:30 a.m./p.m.

ATTEST: _____
Amelia Anne Lacy,
Municipal Relations Coordinator

MAYOR'S APPROVAL

_____ 11/8/2023
Emily Styron, Mayor **DATE**

MAYOR'S VETO

_____
Emily Styron, Mayor **DATE**

I AFFIRM, UNDER THE PENALTIES FOR PERJURY, THAT I HAVE TAKEN REASONABLE CARE TO REDACT EACH SOCIAL SECURITY NUMBER IN THIS DOCUMENT, UNLESS REQUIRED BY LAW.

_____
Daniel L. Taylor

This document was prepared by: Daniel L. Taylor, Indiana Supreme Court No. 11337-54
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EXHIBIT "A"

ROAD IMPACT FEE ZONE IMPROVEMENT PLAN

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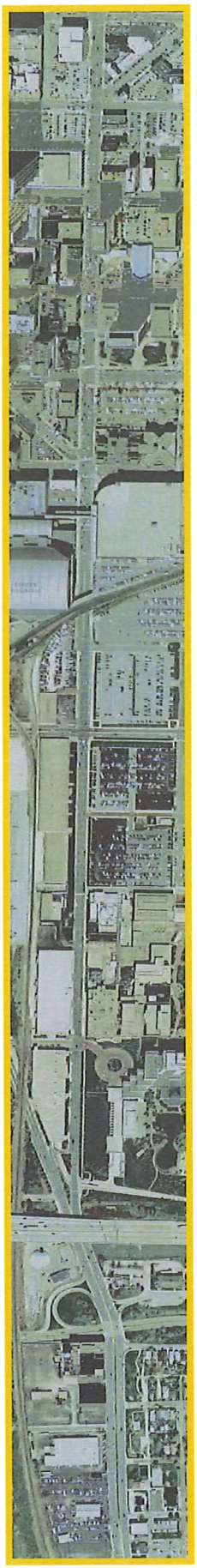

ZIONSVILLE ROAD IMPACT FEE ZONE IMPROVEMENT PLAN

TOWN OF ZIONSVILLE

APRIL 2023

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ZIONSVILLE

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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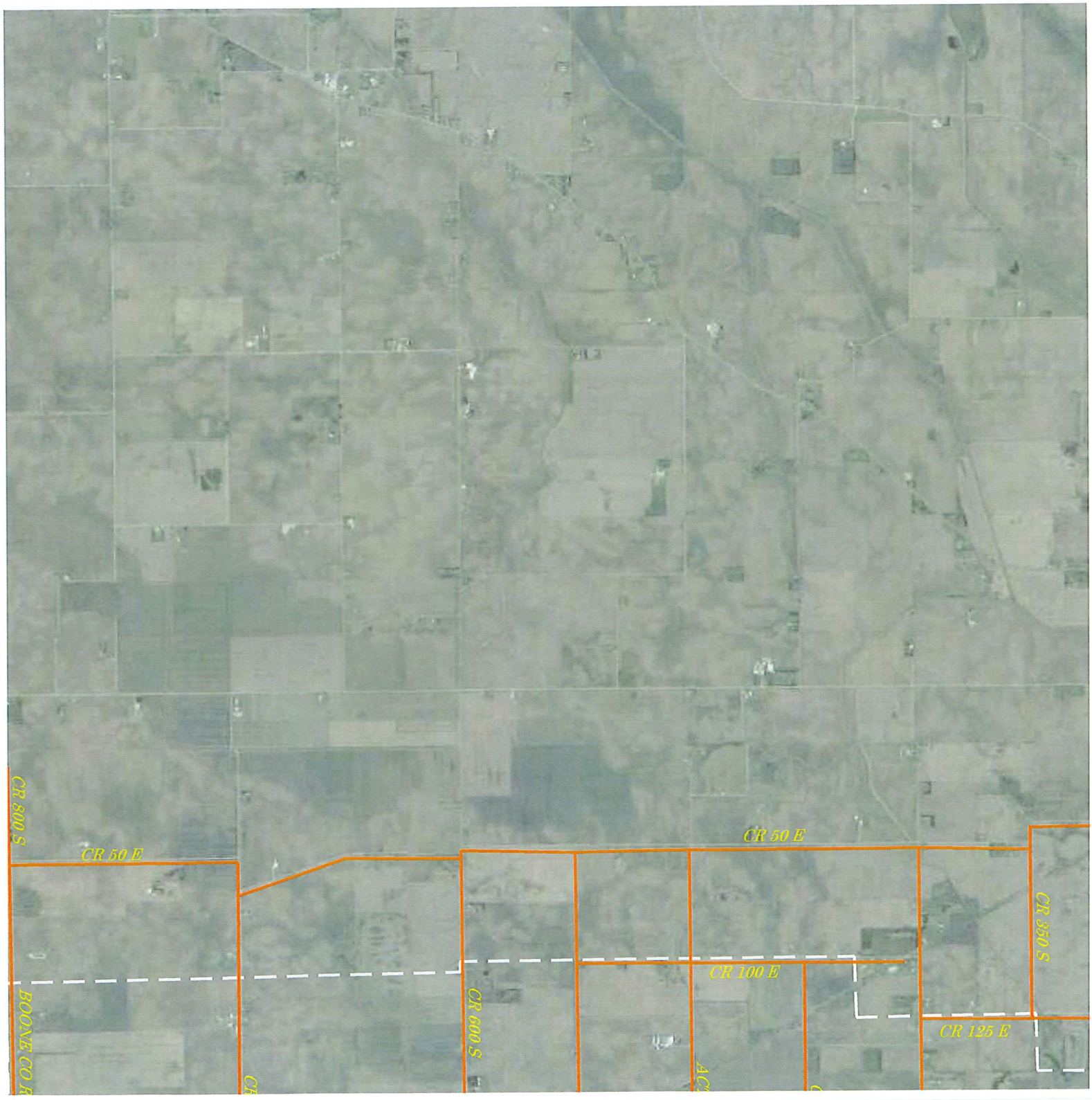
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INTRODUCTION

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.

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[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:

Level of Service	Control Delay (seconds/vehicle)	
	UNSIGNALIZED/ROUNDABOUT	SIGNALIZED
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 ≥ 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	---	---	---
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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^	96th 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.

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

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

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.

ZIONSVILLE

CERTIFICATION TO THE TOWN COUNCIL
OF THE TOWN OF ZIONSVILLE, BOONE COUNTY, INDIANA

October 17, 2023

To the Town Council of the Town of Zionsville, Indiana:

Be advised that, pursuant to Indiana Code 36-7-4, on October 16, 2023, the Town of Zionsville Advisory Plan Commission (the "Commission"), by a vote of five (5) in favor and zero (0) opposed, Approved proposal #2023-53-OA to approve the Road Impact Fee Ordinance with three text amendments and that it recommends the amended ordinance be approved by the Council.

The Town of Zionsville Advisory Plan Commission hereby certifies proposal #2023-53-OA, a Road Impact Fee Ordinance (a copy of which, incorporating the three text amendments, is attached and incorporated here by this reference), to the Town Council of Zionsville, Indiana.

TOWN OF ZIONSVILLE ADVISORY PLAN COMMISSION

David L. Franz
President

Mike Dale, AICP
Secretary