Ordinance 077 **- 2025**

Authorizing The Mayor, Finance Director, And Director Of Public Service To Enter Into An Agreement With Tetra Tech, Inc., 420 Madison Avenue, Suite 1001, Toledo, Ohio 43604 To Provide Preliminary Design Services For The Wynn Road Roundabout Feasibility Study In An Amount Not To Exceed One Hundred Thousand And 00/100 Dollars ($100,000.00); ~~**And Declaring An Emergency**~~

Summary And Background

The Department of Public Service advertised and requested qualification statements from qualified professional architectural and engineering firms to provide preliminary design services for the Wynn Road Roundabout Feasibility Study.

Letters of Interest were received from Kleinfelder, Inc., DGL Consulting Engineers, LLC, DLZ, Tetra Tech, Inc. and Colliers Engineering & Design.

Tetra Tech, Inc. has been determined by the Department of Public Service to be most qualified for the request for providing preliminary design services for the Wynn Road Roundabout Feasibility Study.

The attached "Exhibit A" has been reviewed by the Department of Public Service and is determined to be fair and reasonable for the work required.

Oregon City Council has provided funding in the approved 2025 C.I.P. Municipal Budget in Account 260.1500.57733 for the said professional services. **Now, Therefore,**

Be It Ordained By The Council Of The City Of Oregon, Ohio, That:

Section 1. The Mayor, Finance Director and Director of Public Service are hereby authorized to enter into an agreement with Tetra Tech, Inc., 420 Madison Avenue, Suite 1001, Toledo, Ohio 43604 to provide preliminary design services for the Wynn Road Roundabout Feasibility Study in an amount not to exceed One Hundred Thousand and 00/100 ($100,000.00) in accordance with "Exhibit A", attached hereto and made a part hereof.

Section 2. It is hereby found and determined that all formal actions of this Council concerning and relating to the passage of this Ordinance were adopted in an open meeting of this Council and that all deliberations of this Council and any of its committees that resulted in such formal actions were in meetings open to the public in compliance with all legal requirements, including Section 121.22 of the Revised Code of

Ohio and that the reading and adoption of this Ordinance complies with the provisions of Article III, Section 9 of the city Charter as amended.

~~**Section 3.** This Ordinance is hereby declared to be an emergency measure and shall take effect and be in force from and after its passage and signature by the Mayor. The reason for the emergency lies in the fact that this Ordinance is necessary in order to hire the consultant, secure grant funding and proceed with the project in a timely manner.~~

Vote on ~~passage as an emergency~~: Yeas 4 Nays 2 Abs 0

Passed ~~as an emergency measure on~~: April 14, 2025

President of Council

Attest:

Clerk of Council

Approved:

Mayor

TETRA TECH

April 3, 2025

Paul Roman, P.E.
Director of Public Service
City of Oregon
5330 Seaman Road
Oregon, Ohio 43616

Re: Proposal for LUC-Wynn Road Roundabouts Project

Dear Mr. Roman:

Thank you for selecting our team for the LUC-Wynn Road project! We are looking forward to working with the City on this important project. Our team includes DGL Consulting Engineers for traffic and safety engineering, surveying, funding application assistance and stakeholder coordination assistance and West Erie Realty for Right of Way acquisition cost estimating.

Below is a breakdown of our project understanding, project scope, project schedule, and compensation.

PROJECT UNDERSTANDING

This project involves assisting the City of Oregon with preliminary project development for roundabouts at three intersections along Wynn Road (Brown Road, Pickle Road, and Corduroy Road). This evaluation will help the City plan for these potential projects, lay the foundation for obtaining outside funding assistance, and determine a project footprint and Right of Way (ROW) needs to guide potential future development of adjacent properties.

The following scope is based on our understanding:

PROJECT SCOPE

Site Assessment and Data Collection

We will visit and assess each site to help determine which site features will need to be considered in the preliminary design of the roundabouts. We will utilize the drone aerial images provided by the City as the background in CAD for the preliminary roundabout designs.

Preliminary Layouts

Tetra Tech previously assisted the City with conceptual layouts of roundabouts at the Brown and Pickle Road intersections. We will use these as a starting point and will collaborate with the City on further development of roundabout layouts at these intersections, and at the Corduroy Road intersection.

Tetra Tech
420 Madison Avenue, Suite 1001, Toledo, OH 43604
Tel 419.255.9500 www.tetratech.com

We will prepare turning movement graphics of various vehicle types for the report.

Right of Way Evaluation

DGL will complete a boundary survey for an estimated 12 parcels. No title work will be completed.

The key to determining adequate future ROW needs will be to complete a conceptual drainage layout for each roundabout. We will review the Digital Elevation Model (DEM) information, old plans, and site assessment information to determine drainage patterns. We will layout preliminary ditches due to their significant impact on the footprint of the roundabout improvement. Existing enclosed drainage will also be considered where needed. We understand that the goal is to establish a preliminary ROW footprint that will ensure that the area needed for the future roundabout improvement is set aside if an adjacent parcel is developed.

Preliminary Cost Estimate

We will develop overall project cost estimates for each location including costs for design, ROW acquisition, utility relocation, construction, and construction engineering. After determining a ROW footprint, West Erie Realty will assist with estimating the cost of ROW acquisition.

Stakeholder Coordination

We have assumed that we will attend up to two City Council meetings and present the findings of the preliminary report, and/or to answer questions regarding the funding applications. DGL will prepare a TransModeler simulation for one intersection. No additional effort is included for other stakeholder meetings.

Preliminary Design Report

A Preliminary Design Report will be prepared that summarizes the work completed. This will include the preliminary roundabout layouts, ROW assessment findings, project cost estimates, narratives outlining potential funding sources, and recommendations on the next steps to take in the development of the projects.

DGL will review crash data at the intersections and provide a summary of the data for each intersection. Traffic analysis will also be included for each intersection for the existing and proposed conditions.

Grant Application Support

We will assist the City with determining the best funding sources for each intersection, and with providing information for City preparation of funding applications. Anticipated funding sources include Highway Safety Improvement Program (HSIP) funds administered by ODOT, TMACOG

TIP and OPWC funding. We have included effort for DGL to complete a Safety Study at one intersection to support a HSIP application.

PROJECT SCHEDULE

We can begin work immediately upon authorization and will provide a draft Preliminary Design Report within 10 weeks of authorization.

COMPENSATION

Compensation for our personnel directly engaged in the work of this proposal will be based on a time and materials basis, for a total not to exceed amount of $100,000. If Tt anticipates that additional effort is required during the project beyond the scope of services outlined above, Tt will submit a written request to the City of Oregon for authorization prior to performing any additional work. The agreement for this project is comprised of this proposal, attachments, and the Tt Standard Terms and Conditions (Tt ST&C).

Task	Fee
Site Assessment and Data Collection	$2,500
Preliminary Layouts	$12,000
Right of Way Evaluation	$25,500
Preliminary Cost Estimate	$10,000
Stakeholder Coordination	$9,000
Preliminary Design Report	$27,000
Grant Application Support	$14,000
Total	***$100,000***

We are looking forward to working with the City of Oregon on this important project! Thank you again for giving us this opportunity!

Sincerely,

David T. Charville, P.E.
Senior Project Manager

Attachments: DGL Price Proposal
Tt Standard Terms and Conditions
Tetra Tech Price Proposal

Tetra Tech
420 Madison Avenue, Suite 1001, Toledo, OH 43604
Tel 419.255 9500 www.tetratech.com

TETRA TECH

PROPOSAL ACCEPTED BY_____

TITLE_____

DATE_____

Tetra Tech
420 Madison Avenue, Suite 1001, Toledo, OH 43604
Tel 419.255 9500 www.tetratech.com

DGL
CONSULTING ENGINEERS

PROVIDING CIVIL ENGINEERING SOLUTIONS SINCE 1926

TRANSPORTATION

TRAFFIC / SAFETY

FACILITY / SITE DEVELOPMENT

SURVEY

CONSTRUCTION SERVICES

April 2, 2025

Dave Charville, PE
Senior Project Manager
Tetra Tech
420 Madison Avenue, Suite 1001
Toledo, Ohio 43604

Re: PROPOSAL – City of Oregon – Wynn Road Roundabouts

Dear Mr. Charville:

Congratulations on winning this project! This letter presents the DGL portion of the fee proposal, as requested. DGL will provide the following services for the subject project:

Boundary Survey: Boundary survey will include property lines, boundaries. It is estimated that 12 parcels would be affected.

Crash Data and Traffic Analysis: DGL will review crash data at the intersections and provide a summary of the data for each intersection. Traffic analysis will also be included for each intersection for the existing and proposed conditions.

Prepare HSIP Safety Study Report: If it is determined that the city would like to pursue a Safety Study DGL can prepare the study and the application per the ODOT HSIP procedures.

Public Involvement: DGL can assist with public involvement for each location including TransModeler simulation of each roundabout and attend any associated meetings.

A breakdown for each task is shown in the table below. Tasks are broken down so they can be performed independently of one another.

Boundary Survey (per intersection)	$5,950.00
Crash Data and Traffic Analysis (all 3 locations)	$13,000.00
Prepare HSIP Safety Report (per intersection)	$10,000.00
Public Involvement (per intersection)	$4,200.00

Thank you for the opportunity to work with your team for this project. Please contact me directly should you have any questions related to the material included herein.

Sincerely,

DGL Consulting Engineers, LLC

Corrinne Lochtefeld

Corrinne Lochtefeld, PE, PTOE, PTP, RSP_1
Principal | Project Manager
T: 419.535.1015 | C: 330.203.9293 | E: clochtefeld@dgl-ltd.com
3455 Briarfield Blvd, Suite E | Maumee, Ohio 43537

25078
Cc: Laurie Adams, Amy Zimmerman, RJ Lumbrezer - DGL

Maumee, Ohio
419.535.1015

Dublin, Ohio
614.356.7150

Independence, Ohio
440.387.4113

Port Clinton, Ohio
419.635.7541

Wauseon, Ohio
419.330.1360

dgl.ltd.com

TETRA TECH

Tetra Tech, Inc.

Engineering Services Standard Terms & Conditions

1. **Services** Consultant will perform services for the Project as set forth in the provisions for Scope of Work/ Compensation/Schedule in the Proposal and/or Attachment A and in accordance with these Terms & Conditions. Consultant has developed the Project scope of service, schedule, and compensation based on available information and various assumptions. The Client acknowledges that adjustments to the schedule and compensation may be necessary based on the actual circumstances encountered by Consultant in performing their services. Consultant is authorized to proceed with services upon receipt of an executed Agreement.
2. **Compensation** In consideration of the services performed by Consultant, the Client shall pay Consultant in the manner set forth in the Proposal and/or Attachment A. The parties acknowledge that terms of compensation are based on an orderly and continuous progress of the Project. Compensation shall be equitably adjusted for delays or extensions of time beyond the control of Consultant. Where total project compensation has been separately identified for various tasks, Consultant may adjust the amounts allocated between tasks as the work progresses so long as the total compensation amount for the project is not exceeded.
3. **Fee Definitions** The following fee types shall apply to methods of payment:
   - **Salary Cost** is defined as the individual's base salary plus customary and statutory benefits. Statutory benefits shall be as prescribed by law, and customary benefits shall be as established by Consultant employment policy.
   - **Cost Plus** is defined as the individual's base salary plus actual overhead plus professional fee. Overhead shall include customary and statutory benefits, administrative expense, and non-project operating costs.
   - **Lump Sum** is defined as a fixed price amount for the scope of services described.
   - **Standard Rates** is defined as individual time multiplied by standard billing rates for that individual.
   - **Subcontracted Services** are defined as Project-related services provided by other parties to Consultant.
   - **Reimbursable Expenses** are defined as actual expenses incurred in connection with the Project.
4. **Payment Terms** Consultant shall submit invoices at least once per month for services performed and Client shall pay the full invoice amount within 30 days of the invoice date. Invoices will be considered correct if not questioned in writing within 10 days of the invoice date. Client payment to Consultant is not contingent on arrangement of project financing or receipt of funds from a third party. In the event the Client disputes the invoice or any portion thereof, the undisputed portion shall be paid to Consultant based on terms of this Agreement. Invoices not in dispute and unpaid after 30 days shall accrue interest at the rate of one and one-half percent per month (or the maximum percentage allowed by law, whichever is the lesser). Invoice payment delayed beyond 60 days shall give Consultant the right to stop work until payments are current. Non-payment beyond 70 days shall be just cause for termination by Consultant.
5. **Additional Services** The Client and Consultant acknowledge that additional services may be necessary for the Project to address issues that may not be known at Project initiation or that may be required to address circumstances that were not foreseen. In that event, Consultant shall notify the Client of the need for additional services, the Consultant and Client agree to negotiate the additional compensation and related time extensions, if required, in accordance with the scope of services to be determined prior to start of the additional services, and the Client shall pay for such additional services in the amount and manner agreed upon.
6. **Site Access** The Client shall obtain all necessary approvals for Consultant to access the Project site(s).
7. **Underground Facilities** Consultant and/or its authorized subcontractor will conduct research and perform site reconnaissance in an effort to discover the location of existing underground facilities prior to developing boring plans, conducting borings, or undertaking invasive subsurface investigations. Client recognizes that accurate drawings or knowledge of the location of such facilities may not exist, or that research may reveal as-built drawings or other documents that may inaccurately show, or not show, the location of existing underground facilities. In such events, except for the sole negligence, willful misconduct, or practice not conforming to the Standard of Care cited in this Agreement, Client agrees to indemnify and hold Consultant and/or its Subcontractor harmless from any and all property damage, injury, or economic loss arising or allegedly arising from borings or other subsurface penetrations.
8. **Hazardous Materials** The Client warrants that they have disclosed all potential hazardous materials that may be encountered on the Project and acknowledges that Consultant is not and shall not be required to be in any way an arranger, generator, operator, or transporter of hazardous materials present at or near the Project Site. In the event unknown hazardous materials are encountered, Consultant shall be entitled to additional compensation for appropriate actions to protect the health and safety of its personnel, and for additional services required to comply with applicable laws. Client is responsible for the disposal of all regulated wastes generated as a result of services provided under this Agreement. Consultant and Client mutually agree that Consultant assumes no responsibility for the waste or disposal thereof and Client shall indemnify Consultant from any claim related to hazardous materials encountered on the Project except for those events caused by negligent acts of Consultant.
9. **Contractor Selection** Consultant may make recommendations concerning award of construction contracts and products. The Client acknowledges that the final selection of construction contractors and products is the Client's sole responsibility.

10. **Ownership of Documents** Drawings, specifications, reports, programs, manuals, or other documents, including all documents on electronic media, prepared under this Agreement are instruments of service and are, and shall remain, the property of Consultant. Record documents of service shall be based on the printed copy. Consultant will retain all common law, statutory, and other reserved rights, including the copyright thereto, and ownership of any Background Intellectual Property with a limited license granted to the Client for the use of same. Consultant will furnish documents electronically; however, the Client releases Consultant from any liability that may result from documents used in this form. Consultant shall not be held liable for reuse of documents or modifications thereof by the Client or its representatives for any purpose other than the original intent of this Agreement, without written authorization of and appropriate compensation to Consultant.
11. **Standard of Care** Services provided by Consultant under this Agreement will be performed in a manner consistent with that degree of care and skill ordinarily exercised by members of the same profession rendering similar services under similar circumstances and in a similar vicinity. Consultant makes no other warranty or guaranty, either express or implied. Consultant will not be liable for the cost of any omission that adds value to the Project.
12. **Period of Service** This Agreement shall remain in force until completion and acceptance of the services or until terminated by mutual agreement. Consultant shall perform the services for the Project in a timely manner consistent with sound professional practice. Consultant will strive to perform its services according to the Project schedule set forth in the provisions for Scope of Work/ Compensation/Schedule above. The services of each task shall be considered complete when deliverables for the task have been presented to the Client. Consultant shall be entitled to an extension of time and compensation adjustment for any delay beyond Consultant's control.
13. **Insurance and Liability** Consultant shall maintain the following insurance and coverage limits during the period of service. The Client will be named as an additional insured on the Commercial General Liability and Automobile Liability insurance policies.

    Worker's Compensation – as required by applicable state statute
    Commercial General Liability - $1,000,000 per occurrence for bodily injury, including death and property damage, and $2,000,000 in the aggregate
    Automobile Liability –$1,000,000 combined single limit for bodily injury and property damage
    Professional Liability (E&O) - $1,000,000 each claim and in the aggregate

    The Client shall make arrangements for Builder's Risk, Protective Liability, Pollution Prevention, and other specific insurance coverage warranted for the Project in amounts appropriate to the Project value and risks. Consultant shall be a named insured on those policies where Consultant may be at risk. The Client shall obtain the counsel of others in setting insurance limits for construction contracts.
14. **Indemnification** Each Party ("Indemnifying Party") shall indemnify and hold harmless the other Party, its officers, directors, and employees ("Indemnified Party") from and against any and all liabilities, settlements, losses, or costs (including reasonable attorneys' fees and costs of defense) to the extent caused solely by the negligent act, error, or omission of the Indemnifying Party in the performance of its obligations under this Agreement. If such damage, liability, or loss results in part from the negligence of both Parties or any third party, each Party shall be liable only to the extent of its proportional negligence.
15. **Dispute Resolution** The Client and Consultant agree that they shall diligently pursue resolution of all disagreements within 45 days of either party's written notice using a mutually acceptable form of mediated dispute resolution prior to exercising their rights under law. Consultant shall continue to perform services for the Project and the Client shall pay for such services during the dispute resolution process unless the Client issues a written notice to suspend work. Causes of action between the parties to this Agreement shall be deemed to have accrued and the applicable statutes of repose and/or limitation shall commence not later than the date of substantial completion.
16. **Suspension of Work** The Client may suspend services performed by Consultant with cause upon fourteen (14) days written notice. Consultant shall submit an invoice for services performed up to the effective date of the work suspension and for reasonable demobilization expenses and the Client shall pay Consultant all outstanding invoices within fourteen (14) days. If the work suspension exceeds thirty (30) days from the effective work suspension date, Consultant shall be entitled to renegotiate the Project schedule and the compensation terms for the Project.
17. **Termination** The Client or Consultant (defaulting party) may terminate services on the Project upon seven (7) days written notice without cause or in the event of substantial failure by the other party to fulfill its obligations of the terms hereunder (for cause). Termination for cause shall not take effect if the defaulting party cures the failure within 30 days. If either party fails to perform any obligation under this Agreement and does not cure that failure within thirty (30) days after receiving written notice from the other party describing the nonperformance, that party will be in default. If the nature of the failure is such that it cannot reasonably be cured within thirty (30) days, the defaulting party may have up to an additional sixty (60) days (for a total cure period of no more than ninety (90) days from the date of the original notice) to cure the failure, provided that the defaulting party: (a) gives written notice to the non-defaulting party within the initial 30-day period stating that more time is required, (b) promptly commences efforts to cure the failure, and (c) diligently continues those efforts to completion. In the event of any termination, the Consultant shall be entitled to compensation for all services performed up to the effective date of termination, including payment for any work completed and reimbursable expenses incurred. The Consultant shall submit a final invoice to the Client for the services performed through the termination date. The Client

shall pay all outstanding undisputed amounts due — including the final invoice and any previously unpaid invoices, plus all reasonable costs directly arising from the termination (including reasonable demobilization expenses) — within fourteen (14) days of receiving the Consultant's invoice. The Client may withhold a reasonable amount from the final payment for any services that are in dispute, provided that the Client gives written notice to the Consultant specifying the basis of the dispute and that the amount withheld is a reasonable estimate of the value of the disputed services.

18. **Authorized Representative** The Project Manager assigned to the Project by Consultant is authorized to make decisions or commitments related to the project on behalf of Consultant. Only authorized representatives of Consultant are authorized to execute contracts and/or work orders on behalf of Consultant. The Client shall designate a representative with similar authority. Email messages and verbal communication between Client and members of the project team shall not be construed as an actual or proposed contractual amendment of the services, compensation, or payment terms of the Agreement.
19. **Project Requirements** The Client shall confirm the objectives, requirements, constraints, and criteria for the Project at its inception. If the Client has established design standards, they shall be furnished to Consultant at Project inception. Consultant will review the Client design standards and may recommend alternate standards considering the Standard of Care.
20. **Independent Consultant** Consultant is and shall be at all times during the term of this Agreement an independent consultant and not an employee or agent of the Client. Consultant shall retain control over the means and methods used in performing Consultant's services and may retain subconsultants to perform certain services as determined by Consultant.
21. **Compliance with Laws** Consultant shall perform its services consistent with sound professional practice and endeavor to incorporate applicable laws, regulations, codes, and standards applicable at the time the work is performed. In the event that standards of practice change during the Project, Consultant shall be entitled to additional compensation where additional services are needed to conform to the standard of practice. Both parties shall abide by all local, state, and federal regulations and laws, as well as the U.S. Foreign Corrupt Practices Act, UK Bribery Act, or other laws as they may apply.
22. **Permits and Approvals** Consultant will assist the Client in preparing applications and supporting documents for the Client to secure permits and approvals from agencies having jurisdiction over the Project. The Client agrees to pay all application and review fees.
23. **Limitation of Liability** In recognition of the relative risks and benefits of the project to both the Client and Consultant, the risks have been allocated such that the Client agrees, to the fullest extent permitted by law, to limit the liability of Consultant and its subconsultants to the Client and to all construction contractors and subcontractors on the project for any and all claims, losses, costs, damages of any nature whatsoever or claims expenses from any cause or causes, so that the total aggregate liability of Consultant and its subconsultants to all those named shall not exceed $50,000 or the amount of Consultant's total fee paid by the Client for services under this Agreement, whichever is the greater. Such claims and causes include, but are not limited to negligence, professional errors or omissions, strict liability, breach of contract or warranty.
24. **Consequential Damages** Notwithstanding any other provision of this Agreement, and to the fullest extent permitted by law, neither the Client nor Consultant, their respective officers, directors, partners, employees, contractors or subconsultants shall be liable to the other or shall make any claim for any incidental, indirect, or consequential damages arising out of or connected in any way to the project or to this Agreement. This mutual waiver of consequential damages shall include, but is not limited to, loss of use, loss of profit, loss of business, loss of income, loss of reputation or any other incidental, indirect, or consequential damages that either party may have incurred from any cause or action including negligence, strict liability, breach of contract, and breach of strict or implied warranty. Both the Client and Consultant shall require similar waivers of consequential damages protecting all the entities or persons named herein in all contracts and subcontracts with others involved in this project or with this Agreement.
25. **Waiver of Subrogation** Consultant shall endeavor to obtain a waiver of subrogation against the Client, if requested in writing by the Client, provided that Consultant will not increase its exposure to risk and Client will pay the cost associated with any premium increase or special fees.
26. **Cost Opinions** Consultant shall prepare cost opinions for the Project based on historical data, industry standards, and professional judgment, applying reasonable care and skill expected of a qualified professional in the field. These cost opinions are intended to provide an estimate for planning purposes and shall not be interpreted as a definitive or guaranteed projection of actual costs. The Client acknowledges and agrees that numerous factors beyond the Consultant's control—including, but not limited to, market fluctuations, material availability, labor costs, and unforeseen site conditions—may cause actual project costs to differ from the cost opinions provided. Consultant makes no warranty, express or implied, regarding the accuracy of these cost opinions and shall not be held liable for any variances between estimated and actual project costs.
27. **Contingency Fund** The Client acknowledges the potential for changes in the work during construction and the Client agrees to include a contingency fund in the Project budget appropriate to the potential risks and uncertainties associated with the Project. Consultant may offer advice concerning the value of the contingency fund; however, Consultant shall not be liable for additional costs that the Client may incur beyond the contingency fund they select unless such additional cost results from a negligent act, error, or omission related to services performed by Consultant.
28. **Safety** Consultant shall be responsible solely for the safety precautions or programs of its employees and no other party.

29. **Information from Other Parties** In performing the Services, Consultant shall be entitled to rely on any information, data, and documentation concerning the Project provided to it by the Client or other parties or that is generally available, as well as any statements and representations made by the Client concerning the Project or the Services. In relying on such information, Consultant shall have no obligation to investigate or independently verify the accuracy or completeness of such information. Consultant shall not be liable for any damages that may be incurred by the Client in the use of third-party information.
30. **Force Majeure** Consultant shall not be liable for any damages caused by any delay that is beyond Consultant's reasonable control, including but not limited to unavoidable delays that may result from any acts of God, strikes, lockouts, wars, acts of terrorism, riots, acts of governmental authorities, extraordinary weather conditions or other natural catastrophes, or any other cause beyond the reasonable control or contemplation of either party.
31. **Waiver of Rights** The failure of either party to enforce any provision of these terms and conditions shall not constitute a waiver of such provision nor diminish the right of either party to the remedies of such provision.
32. **Warranty** Consultant warrants that it will deliver services under the Agreement within the standard of care. No other expressed or implied warranty is provided by Consultant.
33. **Severability** Any provision of these terms later held to be unenforceable shall be deemed void and all remaining provisions shall continue in full force and effect. In such event, the Client and Consultant will work in good faith to replace an invalid provision with one that is valid and as close to the original meaning as possible.
34. **Survival** All obligations arising prior to the termination of this Agreement and all provisions of these terms that allocate responsibility or liability between the Client and Consultant shall survive the completion or termination of services for the Project.
35. **Assignments** Neither party shall assign its rights, interests, or obligations under the Agreement without the express written consent of the other party.
36. **Governing Law** The terms of Agreement shall be governed by the laws of the state where the services are performed provided that nothing contained herein shall be interpreted in such a manner as to render it unenforceable under the laws of the state in which the Project resides.
37. **Collection Costs** In the event that legal action is necessary to enforce the payment provisions of this Agreement if Client fails to make payment within sixty (60) days of the invoice date, Consultant shall be entitled to collect from the Client any judgment or settlement sums due, reasonable attorneys' fees, court costs, and expenses incurred by Consultant in connection therewith and, in addition, the reasonable value of Consultant's time and expenses spent in connection with such collection action, computed at Consultant's prevailing fee schedule and expense policies.
38. **Equal Employment Opportunity** Consultant will comply with federal regulations pertaining to Equal Employment Opportunity. Consultant is in compliance with applicable local, state, and federal regulations concerning minority hiring. It is Consultant's policy to ensure that applicants and employees are treated equally without regard to race, creed, sex, color, religion, veteran status, ancestry, citizenship status, national origin, marital status, sexual orientation, or disability. Consultant expressly assures all employees, applicants for employment, and the community of its continuous commitment to equal opportunity and fair employment practices.
39. **Attorney Fees** Should there be any suit or action instituted to enforce any right granted in this contract, the substantially prevailing party shall be entitled to recover its costs, disbursements, and reasonable attorney fees from the other party. The party that is awarded a net recovery against the other party shall be deemed the substantially prevailing party unless such other party has previously made a bona fide offer of payment in settlement and the amount of recovery is the same or less than the amount offered in settlement. Reasonable attorney fees may be recovered regardless of the forum in which the dispute is heard, including an appeal.
40. **Third Party Beneficiaries** Nothing in this Agreement shall create a contractual relationship with or a cause of action in favor of a third party against either the Client or the Consultant. The Consultant's services under this Agreement are performed solely for the Client's benefit and no other entity shall have any claim against the Consultant because of this Agreement or the performance or nonperformance of services hereunder. The Client agrees to include a provision in all contracts with contractors and other entities involved in this project to carry out the intent of this paragraph.
41. **Ethics and Business Practices** Both parties shall abide by all local, state, and federal regulations and laws, as well as the U.S. Foreign Corrupt Practices Act, UK Bribery Act, or other laws as they may apply.
42. **Lien Rights** Consultant may file a lien against the Client's property in the event that the Client does not make payment within the time prescribed in this Agreement. The Client agrees that services by Consultant are considered property improvements, and the Client waives the right to any legal defense to the contrary.
43. **Captions** The captions herein are for convenience only and are not to be construed as part of this Agreement, nor shall the same be construed as defining or limiting in any way the scope or intent of the provisions hereof.
44. **Personal Data** Each party shall comply with all applicable laws and regulations relating to the processing, protection, or privacy of personal data, including where applicable, the guidance and codes of practice issued by regulatory bodies in any relevant jurisdiction. Each party agrees that it shall keep such personal data in a secure technological environment.

Scope of Services
for
Preliminary Design of Roundabouts

City of Oregon, Ohio – Wynn Road Corridor
(Wynn Rd / Brown Rd, Wynn Rd / Pickle Rd, and Wynn Rd / Corduroy Rd)

1. PROJECT UNDERSTANDING

The City of Oregon, Ohio is seeking a qualified consultant to perform preliminary design services for the development of three roundabouts at the following intersections along Wynn Rd:

Wynn Rd / Brown Rd

Wynn Rd / Pickle Rd

Wynn Rd / Corduroy Rd

The scope of this project includes developing a preliminary design to assess the feasibility of the roundabouts, determine right-of-way (ROW) requirements, provide cost estimates, and support the effort to secure potential grant funding through submissions to relevant agencies.

2. SCOPE OF SERVICES

2.1 Preliminary Design and Layout

Task 1.1: Site Assessment and Data Collection

1. Perform site visits and field evaluations to assess existing conditions, including traffic flow patterns, vehicle types, pedestrian movements, and any environmental constraints.
2. The City will provide the consultant with current drone aerial images of each intersection, along with digital elevation models (DEMs) to use for preliminary design.
3. The City will provide the consultant with traffic volume data for each intersection.
4. Review utility locations, existing infrastructure, and other relevant data, such as topography and existing right-of-way (ROW) boundaries.

Task 1.2: Preliminary Layouts

1. Develop conceptual layouts for each of the three roundabouts, ensuring compliance with Ohio Department of Transportation (ODOT) and Federal Highway Administration (FHWA) guidelines.
2. Design alternative layouts (if applicable) to address any potential challenges such as existing utilities, pedestrian accessibility, and environmental impacts.
3. Present draft layouts to the City of Oregon and adjust designs based on feedback.

Task 1.3: Right of Way Evaluation

1. Evaluate and determine the necessary extent of ROW to be acquired for the roundabouts. This includes preliminary ROW impact analysis and mapping.

2. Assess potential landowner concerns and identify areas where easements or property acquisition may be required.

2.2 Cost Estimation

Task 2.1: Preliminary Cost Estimate

1. Provide an initial construction cost estimate for the three roundabouts, including materials, labor, and potential mitigation measures (e.g., relocation of utilities).
2. The estimate should provide a breakdown for each roundabout individually and account for project contingencies and inflation rates
3. Develop a project schedule and provide a timeline for the design, permitting, and construction phases

2.3 Stakeholder Engagement and Public Outreach

Task 3.1: Stakeholder Identification and Coordination

1. Identify key stakeholders such as adjacent property owners, local residents, businesses, and other relevant parties who may be impacted by the proposed roundabouts.
2. Coordinate meetings, presentations, and communications to inform stakeholders of the proposed design, expected impacts, and timelines.
3. Incorporate public feedback into the final preliminary designs as appropriate.

2.4 Reporting and Deliverables

Task 4.1: Preliminary Design Report

1. Prepare and submit a comprehensive Preliminary Design that includes:
    a) The final preliminary roundabout layouts for each intersection.
    b) Right-of-way impact analysis and recommendations.
    c) Preliminary construction cost estimates and schedules.

Task 4.2: Grant Application Support

1. Assist the City of Oregon in the preparation of grant applications to secure funding for the project. This may include compiling necessary documentation, justifying the need for roundabouts based on traffic studies, safety improvements, and environmental benefits.
2. Provide support documentation as needed for each grant application.
3. Present the preliminary design and supporting grant data to the relevant authorities for approval, if necessary, during the grant review process.

3. CONSULTANT DELIVERABLES

1. Preliminary design layouts for the three roundabouts.
2. Right of way impact assessment and recommendations.
3. Preliminary project cost estimate and construction timeline.
4. Support documents for grant applications and related documentation.
5. Presentation materials for City Council meetings and other stakeholders.

March 17, 2025

Paul Roman, P.E.
Director of Public Service
City of Oregon
5330 Seaman Road
Oregon, Ohio 43616

Re: Letter of Interest for LUC-Wynn Road

Dear Mr. Roman:

Thank you for reviewing our Letter of Interest for the Wynn Road roundabout project. We have enjoyed working with the City of Oregon on previous transportation projects and look forward to this new opportunity to work with you again. Since 2009, we have led the design of over 45 roundabouts – many of these in NW Ohio. We've worked with municipalities, counties, and ODOT on many of these roundabouts. Our local staff are the national roundabout experts within Tetra Tech. We encourage you to contact Dan Kaseman, P.E. at ODOT District 2 regarding the roundabout projects that we have recently designed for the District. On the following pages we describe our project team, ODOT pre-qualifications, key staff, a sample of similar projects, and our project approach.

Thank you for considering us for the LUC-Wynn Road project! Please call if you have any questions or need any additional information on our team's qualifications.

Sincerely,

David T. Charville, PE
Senior Project Manager
Mobile 419.779.7744; Email
Dave.Charville@tetratech.com

TETRA TECH TEAM DIFFERENTIATORS

Unmatched Local Roundabout Experience

Tetra Tech has designed over 45 roundabouts out of our Toledo office since 2009, with many of these located in Northwest Ohio. Many of the projects have included assisting clients during the planning phase.

Local Team

Our team includes DGL Consulting Engineers who will support us with roundabout design, traffic and safety analyses, and right of way assessment.

No Learning Curve for Our Team

Having prepared conceptual roundabout layouts at two of the intersections (Brown Road and Pickle Road) for the City back in 2020, we will be ready to hit the ground running immediately upon authorization.

Funding Assistance

Jeff Lohse, PE, former Chief Deputy Engineer at Lucas County, will lead the funding strategy effort utilizing his experience with funding similar roundabout projects for the County.

1. ODOT PRE-QUALIFICATIONS

Tetra Tech has extensive experience with local agencies and ODOT on similar projects. We have designed over 25 roundabouts in NW Ohio to-date, and over 45 total. Our team has staff who are pre-qualified with ODOT in all areas required for this project as shown in the table below.

PREQUALIFICATION CATEGORIES	TETRA TECH	DGL
Bicycle Facilities & Enhancement Design	✓	✓
Non-Complex Roadway Design	✓	✓
Safety Study	✓	✓
Limited Right of Way Plan Development		✓
Limited Highway Lighting Design	✓	✓
Financial Management System Evaluation	✓	✓

2. Sub-Consultants

ROUNDABOUT DESIGN, TRAFFIC ANALYSIS, RIGHT OF WAY (20%)

DGL Consulting Engineers, LLC (DGL) is a full-service civil engineering firm based out of Northwest Ohio, offering an extensive range of engineering, planning, and design services. DGL specializes in transportation; traffic and safety; facility and site development; parks and recreation; residential; surveying; and construction services. DGL will support Tetra Tech with roundabout design, traffic and safety analyses, and right of way assessment.

3. Project Manager/Key Staff/Similar Project Experience

PROJECT MANAGER

David Charville, PE | Tetra Tech | 27 Years of Experience

Mr. Charville will lead the team as the Project Manager. He has 27 years of experience in the management and design of transportation projects including bridge, culvert, roadway, safety, and slope repair design services. He has led numerous roundabout projects including OTT-269-1.78, OTT-163-33.85, SR 206 and Rosemark Rd. for Town of Atoka, TN, LUC-20A-5.56 (Eber Rd.) and the Home Road/SR 257 and S. Section Line Roundabouts project and has been involved in the design of numerous others, including OTT-53-11.67 (2 roundabouts), the Dorr Street Interchange and Dorr/McCord projects (four roundabouts) and the roundabout at US-20 and E. South Boundary Street in Perrysburg.

ROUNDABOUT GEOMETRICS

Andrew Langenderfer, PE | Tetra Tech | 34 Years of Experience

Mr. Langenderfer will support the team by assisting with roundabout geometric development. He specializes in design, plan production, specification development, and project management. Mr. Langenderfer's experience includes roadway and traffic design for ODOT and numerous municipalities and counties throughout Ohio. He has led or assisted in the design and management of roadway widening and rehabilitations, reconstructions, major and minor arterials, complex interchanges, and traffic control systems. Mr. Langenderfer is Tetra Tech's national leader in roundabouts. He has led the design of 45 roundabouts since 2009, including ten roundabouts for the Lucas County Engineer (LCE), five multilane roundabouts (LUC-Phillips Willys) for the City of Toledo, two for the City of Rossford, one for the Wood County Engineer, and three for ODOT District 2 – including the OTT-53-11.67 interchange and corridor project that included 2 roundabouts. He was the Project Manager on the I-475/Dorr Street Interchange and Dorr/McCord projects (LCTID) that included four multilane roundabouts.

PROJECT FUNDING

Jeff Lohse, PE | Tetra Tech | 46 Years of Experience

Mr. Lohse has experience in planning, design and maintenance of roadway systems, plus project management. He is the former Chief Deputy Engineer and Chief Design Engineer for the Lucas County Engineer and is knowledgeable with state and federal funded projects. His duties included supervision, funding management and coordination of design engineers, construction engineers, the chief surveyor, right of way coordinator and other support staff engaged in activities related to the construction, repair, and inspection of roads, bridges, drainage systems, and traffic control. He developed and managed the pavement management system used by the County for its 300± mile system since 1985. Jeff has been working with Tetra Tech since February of 2020 and has provided QA/QC, construction engineering support, and has performed site reviews.

PROJECT ENGINEER

Robert Slovak, PE | Tetra Tech | 30 Years of Experience

Mr. Slovak specializes in roadway reconstruction/rehabilitation, plan production, & R/W planning; and has worked on over 30 roundabouts since 2009, including as project engineer on eight Lucas County roundabouts: including the Hill/McCord Roundabout, the LUC-Angola/King Roundabout, the LUC-475-7.53 Dorr Street Interchange, the Dorr/McCord Roundabout, the Nebraska/King Roundabout, the Brint/Mitchaw Roundabout, the Brint/King Roundabout, and the Sylvania-Metamora/Mitchaw Roundabout. He also has led designs of roundabouts for ODOT, the Wood County Engineer and other agencies across the region. Mr. Slovak is an expert in AutoCAD and MicroStation CADD software, and experienced with various culvert design/analysis, design and quantity spreadsheets, and word processing programs.

PROJECT ENGINEER

Jeff Hoeft, PE | Tetra Tech | 27 Years of Experience

Mr. Hoeft is experienced in roadway, maintenance of traffic, highway signing, pavement markings, sewer, geometrics, roundabouts, interchanges, and signal designs in Ohio, Michigan, and Indiana. He has completed the roadway design including 3-D modeling in OpenRoads Designer CONNECT software for the OTT-269-1.78 roundabout, OTT-163-33.85 roundabout, OTT-53-11.67 (two roundabouts), roadway widening and interchange ramps, proposed roundabout at US-20 and E. South Boundary St. for the WOO-25-2.55 DDI interchange modification, WOO-TR 110-5.4 (Glenwood/Bergin/Superior) Roundabout, WOO/LUC-280-6.20/0.00 Median Reconstruction and Resurfacing, WOO-75-7.07 slope repair and LUC-20-16.45 Heatherdowns Blvd. widening.

TRAFFIC ENGINEER

Corrinne Lochtefeld, PE, PTOE, PTP, RSP | DGL | 11 Years of Experience

Ms. Lochtefeld joined DGL in 2013 and has significant experience with signal timing analyses; traffic impact studies with an emphasis on access management; traffic control and signal designs; as well as select roadway design. She specializes in traffic and safety projects; including HSIP Studies and Safe Routes to School, downtown corridors and access management. Relevant Experience includes: Village of Archbold - Traffic Safety Studies (SR 2/CR 24), City of Rossford Crossroads at Sportsman's Drive Roundabout, and SR 582 / Project Accordion Roundabout.

PROJECT ENGINEER

Amy Zimmerman, PE | DGL | 21 Years of Experience

Ms. Zimmerman is a senior project manager, with 22 years of transportation engineering experience. She has extensive expertise in design and plan preparation of urban and rural roadways; innovative intersections and interchanges; open and closed drainage system design and analysis, BMP design and analysis; maintenance of traffic and traffic control plans; utility relocations; with a focus on complex roadway design and management. She is highly qualified in multimodal design, feasibility and safety studies and is knowledgeable in all ODOT, AASHTO and ADA standards and procedures. Amy has been the lead design engineer and project manager on various ODOT, ODOT/LPA, and municipal projects.

SURVEYOR

RJ Lumbrezer, PS | DGL | 40 Years of Experience

Mr. Lumbrezer is Survey Manager overseeing survey operations for each of DGL's five offices throughout Ohio. His background includes both field and management experience for private companies and public agencies. RJ has led major projects of all types, including construction layout, numerous boundary surveys and ROW retracements, as well as topographic surveys. His responsibilities at DGL include all survey and right of way activities, specifically: scheduling survey crews and technicians, project management, developing budgets, preparing and reviewing right of way plans and easement descriptions.

Cassy Rawson

From: Paul Roman
Sent: Friday, April 11, 2025 1:42 PM
To: 1100 Council; Cassy Rawson; Josette Snyder
Cc: Joel Mazur; Brandon Begin; Clayton O'Brien; Ryan Spangler; Mark Mullins; Mike Seferian; Kelly Wolfe; Rodney Shultz
Subject: City of Oregon Ordinance Item #77 -2025 - Preliminary Design Services for Wynn Road Roundabouts
Attachments: Countermeasures-Roundabouts.pdf; Roundabouts - ODOT.pdf; Pages from 2024.04.09 HSIP Overview.pdf; Oregon Police & Fire Roundabout Endorsement.pdf

All,

Thank you for your input regarding the above ordinance. I do want to clarify some statements I made last week at the Committee of the Whole Meeting, and answer some common questions.

Is this a preliminary design or is it a study? The scope of work listed in exhibit A is mainly for a preliminary design. However, grant submittals for safety grants need to include a data analysis that justifies the improvement, which is really the study portion of any design. We also need to know if there's any physical constraints that would prevent the improvement from being built.

Why can't you just add two stop signs and make it a four way stop, or add a traffic light? Last week I used the word "warrant" a lot. What I meant by that is that every municipality is required to meet the criteria (or warrants) of the Ohio Manual of Uniform Traffic Control Devices (OMUTCD), in order to make a change in traffic control.

According to the Ohio Manual of Uniform Traffic Control Devices (OMUTCD), a change in traffic control may be warranted if five or more correctable crashes occur within a 12-month period. (It's important to note that crashes resulting from medical events or impaired driving are not classified as "correctable" and do not count toward this threshold.) The three intersections in question currently average about 3 to 4 correctable accidents per year, and do not meet the five accident warrant. There are other warrants or criteria that can be used to make a traffic change, but almost all of them do not apply since there is not a high enough traffic or pedestrian volume at the these intersections.

Again if we make a traffic change without meeting the criteria of OMUTCD, the City can be held liable for the changes.

The difference with roundabouts is that you're not really stopping traffic, and therefore there are no warrants to meet per the OMUTCD. At the same time the roundabouts have a proven track record of being safer, especially in reducing severe accidents or fatalities. Please see the attached literature.

Is this project really a safety improvement? 100 % YES. Please see Oregon Police and Fire Department endorsement attached.

Please keep in mind that we have been analyzing accidents at these intersections for a long time and we've made a lot of improvements with the flashing lights and trimming back bushes. The roundabouts are ideal at these intersections because there is more space, due to having one or two properties at each intersection that either have no home or the home is further away from the intersection. We have talked to several property owners at the intersections and we will continue to reach out. We will also reach out to 100% of the property owners before we submit any grant applications.

Please let me know if you have any questions or need additional information.

Paul Roman
Director of Public Service
City of Oregon, Ohio
5330 Seaman Road
Oregon, Ohio 43616
419-698-7046

OREGON
OPPORTUNITY ON THE BAY

OREGON
OPPORTUNITY ON THE BAY
Brandon H. Begin
Chief of Police
Ryan K. Spangler
Assistant Chief of Police

OREGON POLICE DIVISION
5330 SEAMAN ROAD · OREGON, OHIO 43616-2608
www.oregonpolice.org
419.698.7062
Fax: 419.698.7006

April 10, 2025

TO: Mayor Michael J. Seferian
& Members of City Council
Terry Reeves, President
Paul Drake
Kathleen Pollauf
Dennis Walendzak
Beth Ackerman
Steve Hornyak
Steve Salander

THRU: Joel Mazur, City Administrator JM 4/10

FROM: Brandon H. Begin, Chief of Police
Clayton O'Brien. Chief of Fire
Ryan Spangler,. Assistant Chief of Police
Mark Mullins, Assistant Chief of Fire

The leadership of the Oregon Police Division and the Oregon Fire and Rescue Division would like to jointly express our strong support for implementation of roundabouts at three key intersections that have been identified within the City of Oregon. National traffic safety data analysis shows that roundabouts offer significant safety advantages over traditional intersections controlled by traffic signals or stop signs. With community safety being the top priority of both the Police and Fire Divisions, it is pertinent that we come together to support this measure as we believe that it will greatly improve public safety on the roadways within the City of Oregon.

Although the City of Oregon currently has limited exposure to roundabouts, we can look to data from other communities throughout the nation where roundabouts have already been implemented. This data clearly shows that from a public safety perspective, roundabouts have proven to be remarkably effective in reducing the severity of traffic collisions. The three intersections within the City of Oregon that have been identified for implementation of roundabouts currently are two-way stop intersections (Brown Rd./Wynn Rd., Pickle Rd./Wynn Rd., and Corduroy Rd./Wynn Rd.). The circular design inherently forces vehicles to slow down, minimizing the potential for high-speed, head-on or T-bone collisions, which are often the most dangerous and can lead to serious injuries and fatalities. Instead, traffic collisions at roundabouts primarily result in sideswipe or angle crashes, which typically lead to reductions in fatalities, severe injuries and property damage.

Data from studies conducted by the Federal Highway Administration (FHWA) show a reduction in:

- **Fatalities and severe injuries:** Studies consistently show a substantial decrease in fatal and serious injury crashes when roundabouts replace traditional intersections. Data shows

that roundabouts reduce serious injury and fatal collisions by nearly 90%, compared to two-way stop intersections.

- **Conflict points:** Roundabouts significantly reduce the number of potential collision points compared to traditional intersections, thereby decreasing the likelihood of crashes. Traditional intersections have a total of thirty-two potential conflict points, while roundabouts only have eight potential conflict points.
- **Speeding:** The design of roundabouts naturally encourages drivers to reduce their speed, improving overall safety.

When a traffic collision occurs on the public roadways within the City of Oregon, the Oregon Police Division responds, investigates, and documents each collision. The data gathered from each collision is logged, monitored, and regularly reviewed jointly by members of the Police Division, Public Service, and Engineering Departments. The joint review of collisions is done to monitor traffic safety and to identify areas of improvement to enhance public safety. This process has led to vast improvements in traffic safety and traffic flow. The trafficway improvements made over the last few years have led to a great reduction in collisions, going from 648 documented collisions in 2018, down to 437 in 2024. Through the constant monitoring and regular reviewing of traffic collision data, the named intersections stand out as locations where roundabouts would improve the safety of the intersection.

While some drivers may initially find roundabouts unfamiliar, public education and clear signage can quickly address any concerns. It is our belief that once drivers become accustomed to navigating these intersections as roundabouts, they will generally appreciate the improved safety and efficiency.

In conclusion, we strongly advocate for the implementation of roundabouts at these intersections as a valuable tool for enhancing traffic safety.

Brandon H. Begin
Chief of Police

Clayton O'Brien
Chief of Fire

Ryan Spangler
Assistant Chief of Police

Mark Mullins
Assistant Chief of Fire

ROUNDABOUTS

MAKING INTERSECTIONS SAFER AND MORE EFFICIENT

odot

Roundabouts are growing in popularity as more and more transportation agencies recognize the increased safety and traffic-moving efficiency they bring to intersections.

Safety

The most common justification for a roundabout is safety. This is because roundabouts only have 8 potential conflict points vs. 32 at a traditional intersection. Studies by the Federal Highway Administration (FHWA) show that roundabouts achieve a 44% reduction in crashes and reduce serious injury and deadly crashes by nearly 90% at two-way stop intersections. When roundabouts replace a traffic signal, FHWA found a 48% reduction in crashes and nearly 80% drop in serious injury and deadly crashes.

Efficiency

Roundabouts can move traffic more efficiently which reduces delays and fuel consumption. This is because traffic generally doesn't need to come to a full stop at the intersection. A study by the Insurance Institute for Highway Safety (IIHS) estimated that the conversion of 10 percent of the signalized intersections in the United States to roundabouts would have reduced vehicle delays by more than 981 million hours and fuel consumption by more than 654 million gallons in 2018.

Larger Vehicles

Ohio is a state that grows things and moves things. There are often concerns about how large farm machinery or semi-trucks will navigate roundabouts. One way this is accomplished is with truck aprons - an area between the central island and the traveled way that is mountable by larger vehicles but not used by passenger vehicles.

Public Opinion

Roundabouts typically aren't the most popular solution with the public. Much of that is due to a lack of education about their benefits and them being a relatively new traffic pattern for many areas of Ohio. Public reaction usually flips to positive within a year or two of them being installed and open to traffic. An IIHS study of three communities where single-lane roundabouts replaced stop sign-controlled intersections found that only 31% of drivers supported the change before construction. However, after more than a year support soared to 70%.

Learn more at **transportation.ohio.gov/roundabouts**

U.S. Department of Transportation
Federal Highway Administration

OFFICE OF SAFETY
Proven Safety Countermeasures

Roundabouts

The modern roundabout is an intersection with a circular configuration that safely and efficiently moves traffic. Roundabouts feature channelized, curved approaches that reduce vehicle speed, entry yield control that gives right-of-way to circulating traffic, and counterclockwise flow around a central island that minimizes conflict points. The net result of lower speeds and reduced conflicts at roundabouts is an environment where crashes that cause injury or fatality are substantially reduced.

Roundabouts are not only a safer type of intersection; they are also efficient in terms of keeping people moving. Even while calming traffic, they can reduce delay and queuing when compared to other intersection alternatives. Furthermore, the lower vehicular speeds and reduced conflict environment can create a more suitable environment for walking and bicycling.

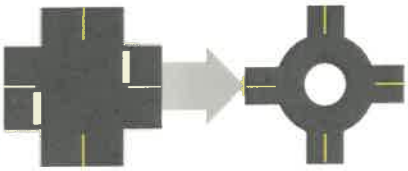
Roundabouts can be implemented in both urban and rural areas under a wide range of traffic conditions. They can replace signals, two-way stop controls, and all-way stop controls. Roundabouts are an effective option for managing speed and transitioning traffic from high-speed to low-speed environments, such as freeway interchange ramp terminals, and rural intersections along high-speed roads.

Illustration of a multilane roundabout. Source: FHWA

Example of a single-lane roundabout. Source: FHWA

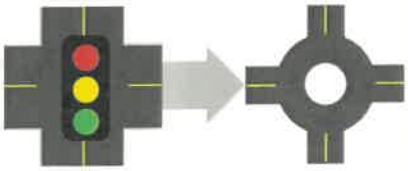
Safety Benefits:

Two-Way Stop-Controlled Intersection to a Roundabout



82%
reduction in fatal and injury crashes.[1]

Signalized Intersection to a Roundabout



78%
reduction in fatal and injury crashes.[1]

For more information on this and other FHWA Proven Safety Countermeasures, please visit https://highways.dot.gov/safety/proven-safety-countermeasures and https://highways.dot.gov/safety/intersection-safety/intersection-types/roundabouts.

FHWA-SA-21-042

1 (CMF ID: 211,226) AASHTO. The Highway Safety Manual, American Association of State Highway Transportation Professionals, Washington, D.C., (2010).

ZERO IS OUR GOAL
A SAFE SYSTEM IS HOW WE GET THERE

Safety Investments are evolving

Shifting our focus to safely
moving people not just traffic

Safe System Approach

- Focused on **fatalities** and **serious injuries**
- **Proactive**, **equitable** safety investments
- More resources for **VRUs**
- Reducing **speeds**

OHIO DEPARTMENT OF TRANSPORTATION

EVERY MOVE YOU MAKE
TOWARD ZERO DEATHS

Safety Funding - $185M Annually

- Modified scoring to focus on **severity**
- Encouraging project sponsors to incorporate bicycle and pedestrian infrastructure
- At least **15%** of funds spent on VRUs

EVERY MOVE YOU MAKE
TOWARD ZERO DEATHS

SAFETY INVESTMENTS INCREASING

Formal Safety Applications

Maximum award
$5M

Minimum crash frequency
3 crashes/year

Minimum crash severity
30% fatal/injury

OHIO DEPARTMENT OF TRANSPORTATION

EVERY MOVE YOU MAKE
TOWARD ZERO DEATHS