

# Derr Rd Corridor Improvements Public Information Presentation

CLA-DERR RD-0.00, PID 104833



AMERICAN  
**STRUCTUREPOINT**  
INC.

Welcome to the public information presentation for the Derr Road Corridor Improvement project in the City of Springfield, Ohio.

# Derr Road Corridor



The Derr Road corridor starts on the south end at Home Road and travels north up to Villa Road, approximately one mile in length.

# Purpose and Need

## **Purpose Statement:**

**The purpose of the proposed project is to improve vehicle safety, pavement condition, and access to bicycle/pedestrian accommodations through the Derr Rd corridor in the City of Springfield, Clark County, Ohio.**

Every project has a purpose and need. For this project, the purpose statement is as follows: the purpose of the proposed project is to improve vehicle safety, pavement condition, and access to bicycle and pedestrian accommodations through the Derr Road corridor in the City of Springfield, Clark County, Ohio.

# Purpose and Need

## Vehicle Safety

Sheet Breakdown:

- 1) Villa Rd intersection
- 2) Vester Ave to Villa Rd
- 3) Vester Ave intersection
- 4) Providence Ave intersection
- 5) Home Rd to Providence Ave
- 6) Home Rd intersection

Type of Collision	%
Sideswipe	5.8%
Angle	29.0%
Rear End	31.9%
Head On	0.0%
Right Turn	7.2%
Left Turn	13.0%
Pedestrian or Animal	5.8%
Fixed Object	7.2%

COLLISION DIAGRAM SUMMARY																								
Location		Derr Road (Between Villa Rd and Home Rd)																						
Diagram	1-6								From	2016				To	2018									
Sheet No.	Time of Day				Pavement Condition				Type of Collision								Severity				Location			Total Crashes
	Dawn	Daylight	Dusk	Dark	Dry	Wet	Snow	Ice	Sideswipe	Angle	Rear End	Head On	Right Turn	Left Turn	Pedestrian or Animal	Fixed Object	Property Damage	Personal Injury	Fatal	Intersection	Driveway	Segment		
1	0	7	0	2	5	3	1	0	0	4	1	0	2	2	1	1	6	3	0	9	4	1	9	
2	0	7	0	3	6	3	0	0	1	7	0	0	1	1	0	0	7	3	0	4	4	1	10	
3	0	5	0	1	3	3	0	0	0	5	0	0	0	1	0	0	4	2	0	6	0	2	6	
4	0	3	0	3	3	2	0	1	0	0	3	0	0	2	0	1	5	1	0	5	1	0	6	
5	0	8	0	7	11	4	0	0	1	1	8	0	0	1	3	1	9	6	0	2	1	8	15	
6	0	13	0	8	13	8	0	0	2	3	10	0	2	2	0	2	14	7	0	22	2	4	21	
<b>Total</b>	<b>0</b>	<b>43</b>	<b>0</b>	<b>24</b>	<b>41</b>	<b>23</b>	<b>1</b>	<b>1</b>	<b>4</b>	<b>20</b>	<b>22</b>	<b>0</b>	<b>5</b>	<b>9</b>	<b>4</b>	<b>5</b>	<b>45</b>	<b>22</b>	<b>0</b>	<b>48</b>	<b>12</b>	<b>16</b>	<b>67</b>	

Location	%
Intersection	71.6%
Driveway	17.9%
Segment	23.9%

Severity	%
Property	67.2%
Personal Injury	32.8%
Fatal	0.0%

Time of Day	%
Dawn	0
Daylight	64.2%
Dusk	0.0%
Dark	35.8%

One of the needs identified in the purpose statement is to address vehicle safety. Here is a chart summarizing the crashes along the corridor from Home Road to Villa Road. There were a total of 67 crashes. The crashes are broken down into categories by type of collision, location, severity, and time of day. These charts are shown on the slide here.

# Purpose and Need

## Vehicle Safety / Driveways

54 driveways in the project corridor

- 19 Commercial
- 35 Residential

Left turning vehicles currently block interior lanes to access driveways causing unexpected stopping in the interior lanes.



A secondary component to the vehicle safety is the number of driveways along the corridor. There are 54 driveways from Home Road to Villa Road: 19 commercial and 35 residential. Currently left-turning vehicles block the interior lane to access the driveways causing unexpected stops in the interior lanes.

# Purpose and Need

## Pavement Conditions

The existing pavement is deteriorating, due to cracks and spalling pavement. Uneven pavement impacts vehicular safety when traveling along the corridor.



Another need identified in the purpose statement is the existing pavement condition. As you can see from the photos attached here, there's poor pavement condition with longitudinal cracking and traverse cracking, as well as pavement spalling and potholes. The uneven pavement surface impacts vehicle safety when vehicles travel along the corridor and have to swerve or maneuver around potholes or have rough bumps that they're driving over.

# Purpose and Need

## **Pedestrian/Bicycle Access**

The existing sidewalk is incomplete, and the curb ramps are not ADA compliant.

Bicyclist use the sidewalk to ride on along corridor



The final need identified in the purpose statement is to address the pedestrian and bicycle access in the corridor. In the existing condition, there are sections of sidewalk that are missing as you can see in the photo attached. There are also non-ADA-compliant curb ramps along the corridor. Additionally, there is bicyclists that use this corridor that are currently using the incomplete sidewalk for travel.

# Project History to Date

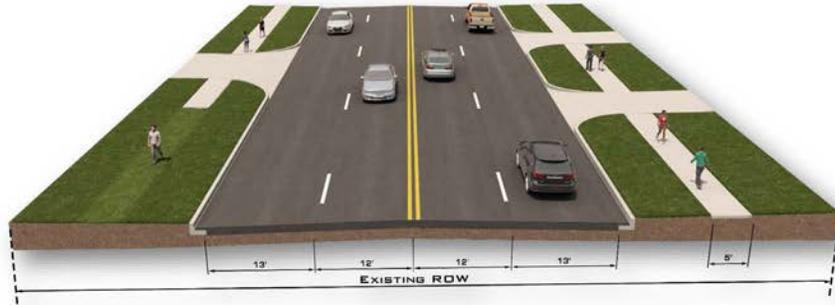
- **Public Meetings: Two public meetings held on 12/5/2018 & 12/6/2018 at Abundant Life Church, Springfield, Ohio**
- **Alternative Evaluation Report**
  - (Approved January 2020)
- **Preferred Alternative determined by:**
  - Meets the project Purpose and Need
  - Traffic Analysis
  - Safety
  - Public Input
- **Major Project Components:**
  - Full depth roadway replacement of Derr Rd from Home Rd to Villa Rd.
  - Replace missing sidewalk sections on east side of Derr Road.
  - New shared-use path on west side of Derr Rd.
  - ADA compliant curb ramps between Home Rd to Villa Rd on Derr Rd.
  - Addition of a Two-Way Left-Turn Lane from Home Rd to Providence Ave.
  - Signal removal at Providence Ave. (Not Warranted)
  - A marked pedestrian crossing at Providence Ave with Rapid Flashing beacons and pedestrian refuge island.

The project history to date is as follows. There have been two public meetings held on December 5th and December 6th of 2018 at the Abundant Life Church in Springfield, Ohio. An alternative evaluation report was completed and approved on January 2020. This report compared several alternatives to determine which would be the preferred alternative carried forward in design. The preferred alternative was determined by several factors including meeting the project purpose and need, traffic analysis, safety, and public input.

Major project components of the preferred alternative include as follows: full depth of roadway replacement of Derr Road from Home Road to Villa Road; replace missing sidewalk sections on the east side of Derr roadway; a new shared-use path will be completed on the west side of the roadway; ADA-compliant curb ramps between Home Road and Villa Road will be completed on Derr Road; the addition of a two-way, left-turn lane from Home Road to Providence Avenue will be added on the south side of the project; the removal of the Providence Avenue signal, which is not warranted in the traffic analysis meaning there are not enough vehicles warranting the signal. In lieu of this, a marked pedestrian crossing at Providence Avenue with a rapid flashing beacon and a pedestrian refuge island will be added to the project. A slide later on in the presentation will detail this.

# Existing Condition

## Derr Rd – South of Providence Ave



The existing typical section of Derr Road south of Providence Avenue is shown below. The roadway consisting of four lanes approximately 12 and 13 feet in length with a paved-over gutter pan, as well as existing sidewalk on the east and west side of the roadway. This existing sidewalk is approximately 5 feet in width, and there's sections missing on both the east side and the west side.

# Existing Condition

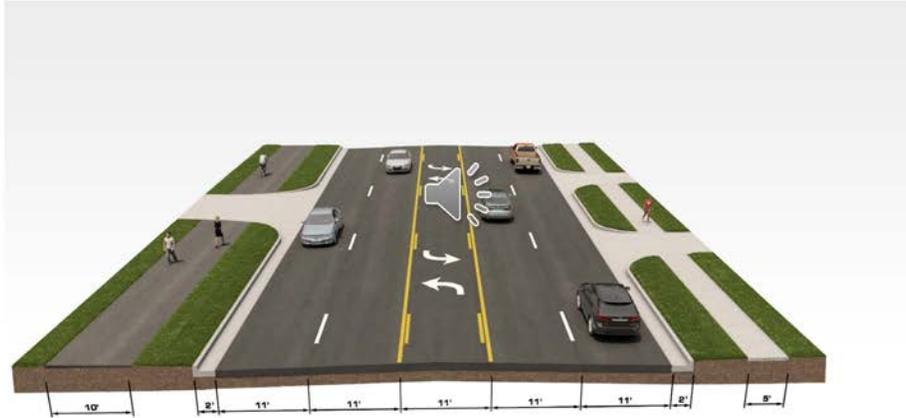
## Derr Rd – North of Providence Ave



The existing typical section north of Providence Avenue is a 5-lane roadway, which has three 12-foot lanes and two 11-foot lanes, as well as a paved over-gutter pan, an existing sidewalk on the east and west side of the roadway.

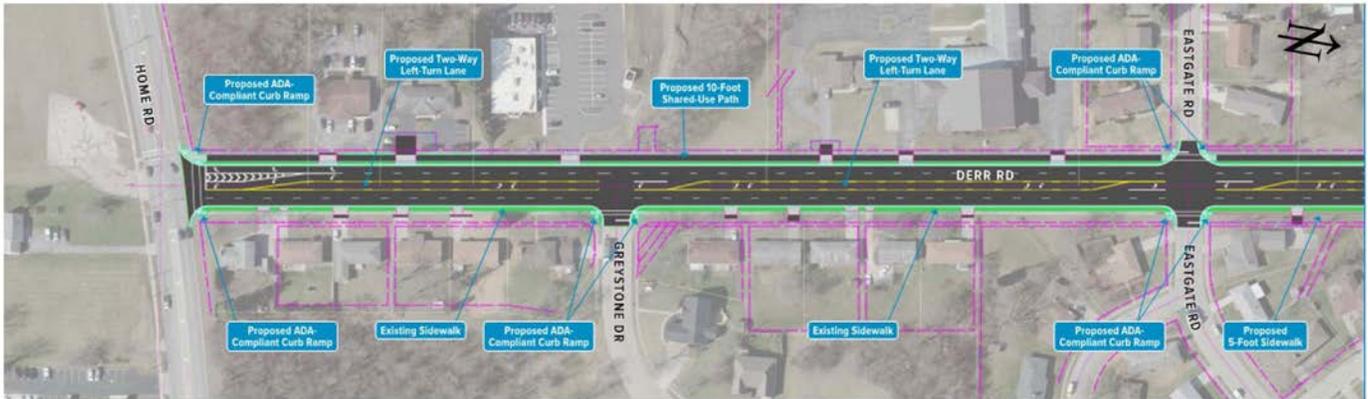
# Preferred Alternative

## 5 Lane Section – with separated Shared-Use Path and Sidewalk



The preferred alternative from the evaluation report was determined to be a five-lane section with a separated shared-use path and sidewalk. There will be five travel lanes 11-foot in width and a 2-foot curb and gutter, one and a half-foot of gutter pan, and 6 inches of curb, as well as a 5-foot sidewalk on the east side of the roadway and a 10-foot shared-use path on the west side of the roadway.

# Preferred Alternative



- **Full depth pavement replacement of Derr Rd along the project corridor.**
- **Vertical profile adjustment of Derr Rd near Greystone Dr. to improve stopping sight distance.**
- **New Two-Way Left-Turn Lane along the corridor.**
- **Replace missing sidewalk on the east side of the roadway**
- **New 10 ft shared-use path on the west side of the roadway**
- **ADA compliant curb ramps at the street intersections.**

The proposed improvements along the Derr Road corridor include the full-depth pavement replacement of Derr Road, as well as vertical profile adjustments along the corridor, particularly in the Greystone Drive area. To improve stopping site distance, a new two-way, left-turn lane is added in this section of roadway as well. We will be replacing any missing sidewalk on the east side of the roadway and providing a new 10-foot shared-use path along the west side of the roadway. ADA-compliant curb ramps will be included at the street intersections

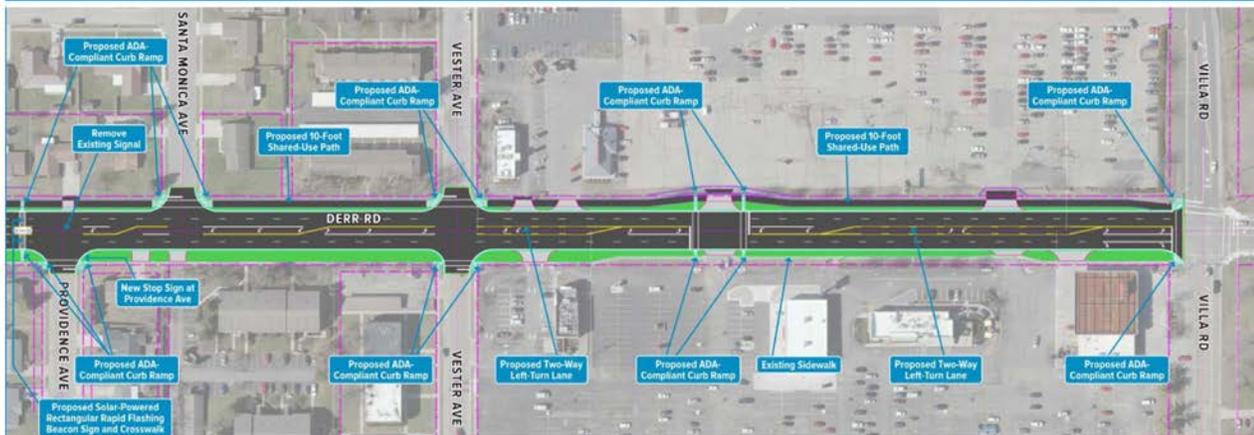
# Preferred Alternative



- **Full depth pavement replacement along corridor.**
- **New Two-Way Left-Turn Lane along corridor.**
- **Replace missing sidewalk on the east side of the roadway**
- **New 10 ft shared-use path on the west side of the roadway**
- **ADA compliant curb ramps at the street intersections.**

Continuing the project to the north, we're extending the full-depth pavement placement of Derr Road. We are also adding a new two-way, left-turn lane in this section of the corridor. We will be replacing missing sidewalk on the east side of the roadway, and a new 10-foot shared-use path will be added to the west side of the roadway. ADA-compliant curb ramps will be added at the street intersections.

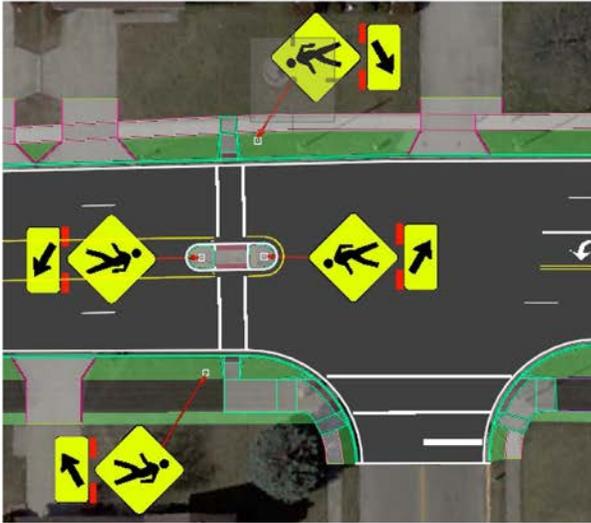
# Preferred Alternative



- **Full depth pavement replacement along corridor.**
- **Conversion of the existing signalized Providence Ave intersection to a stop controlled intersection along Providence Ave.**
- **Marked pedestrian crossing at Providence Ave with raised concrete median and solar powered LED rectangular rapid flashing beacon signs.**
- **Replace missing sidewalk on the east side of the roadway**
- **New 10 ft shared-use path on the west side of the roadway**
- **ADA compliant curb ramps at the street intersections.**

Continuing the project to the north, we will be extending the full-depth pavement replacement for this section of corridor. The existing Derr Road was five lanes in this section so we'll be retaining those five lanes as was in the existing condition. We will be converting the existing signalized intersection of Providence Avenue and Derr Road into a stop-controlled intersection on Providence Avenue with free-flowing traffic on Derr Road. A marked pedestrian crossing will be added to the south side of the Providence Avenue intersection with a raised median and solar powered LED rapid rectangular flashing beacon signs. We will be replacing missing sidewalk on the east side of the roadway, and we will be adding a 10-foot, shared-use path on the west side of the roadway. ADA-compliant curb ramps will be included at the street intersections.

# Pedestrian Crossing at Providence Ave



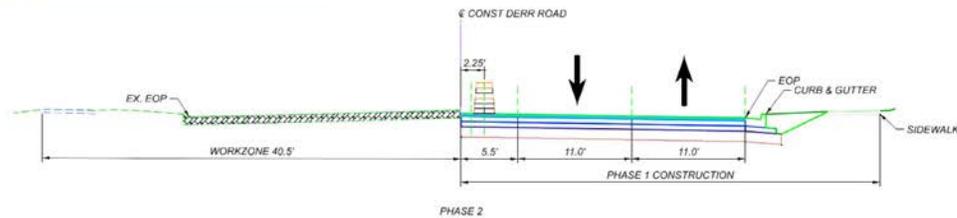
- **The existing and future projected traffic does not meet the requirements necessary for a traffic signal, therefore will be removed with this project.**
- **Installation of rectangular rapid flashing beacon pedestrian crossing signs at the intersection will provide additional safety measures for crossing Derr Rd.**
- **Installation of a refuge median in the Two-Way Left-Turn Lane**
  - **Flashing beacons alert drivers of pedestrians in crosswalk.**
  - **Median reduces the pedestrian exposure time to traffic**
  - **Median limits the direction of travel exposure per crossing movement.**

At the intersection of Providence Avenue and Derr Road, there is an existing traffic signal controlling traffic. The existing and future projected traffic does not meet the requirements necessary for a traffic signal; therefore, the existing signal will be removed as part of this project. Providence Avenue will be converted to a stop controlled, and Derr Road will be free-flowing traffic. Pedestrian crossings will be maintained on the south side of the road and will be aided by rectangular rapid flashing beacon signs and the proposed refuge median island in the two-way left-turn lane. An example of the signs and the meeting islands are shown in the picture above. The added safety features of this median island and rapid flash and beacon signs are as follows: the flashing beacons alert drivers of pedestrians in the crosswalk, the median island reduces the pedestrian exposure time to traffic, and the median island limits the direction of travel exposure per crossing movement.

# Maintenance of Traffic



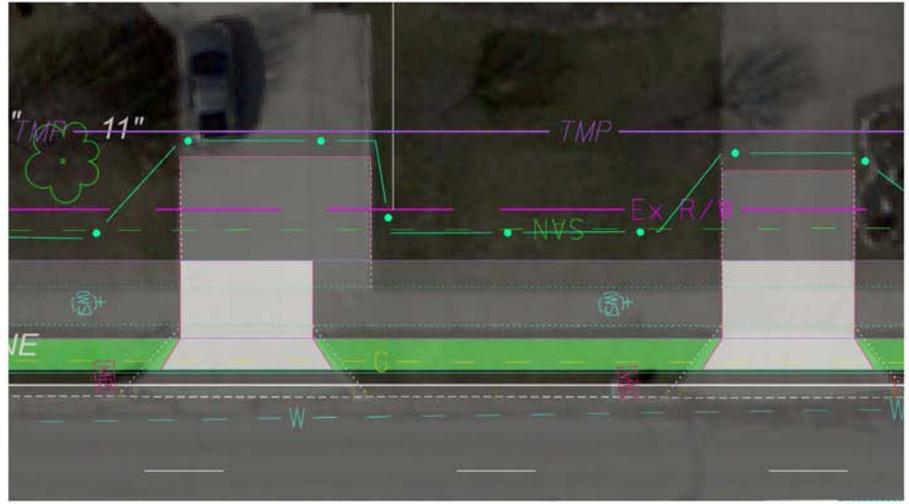
- **2 lanes of traffic (1 in each direction) to be maintained during construction.**
- **Short-term or overnight closures may be necessary to facilitate some construction activities.**
- **Impact will be temporary, and minimized as much as feasible.**
- **Contractor to maintain access to homes and businesses during construction**



Maintenance of traffic is an important part of the project and is part of the project that directly impacts the local residents for this project. We plan on maintaining two lanes of traffic, one in each direction, during construction. The project may require some short-term or overnight closures to facilitate some of the construction activities. Impacts will be temporary and minimized as much as feasible. The contractor is to maintain access to homes and businesses during construction. The phasing of the project is as follows. Phase One will be the construction of the east side of the roadway while traffic is maintained on the west side of the roadway. For Phase Two the west side of the roadway will be constructed and traffic will be maintained on the east side of the roadway. An example of a typical section of the maintenance traffic is shown below.

# Right-of-Way

- **Temporary Easements needed to rebuild some driveway aprons, grading behind proposed sidewalk or curb ramps.**
- **Contractor to maintain access to homes and businesses during construction.**



The existing right-of-way for the project is approximately 100 feet in width. In some areas, temporary easements will be needed to rebuild driveway aprons and construct curb ramps on the roadways. The contractor will maintain access to the residential properties and commercial properties during construction. More information on right-of-way can be found in the handouts.

# Environmental Studies

## **Impacts:**

- Impacts to an unnamed tributary of Buck Creek associated with the culvert replacement
- All necessary permits will be obtained prior to any work within this tributary
- No wetland impacts are proposed with this project
- Approximately 20 trees from within the public right-of-way will be removed
- No listed, or known to be eligible for, National Register of Historic Places are present within the corridor
- Noise levels are expected to remain the same within the corridor
- A Regulated Materials Plan Note may be required for one property (Speedway Gas Station)

Environmental impacts associated with the project are as follows: Impacts to an unnamed tributary Buck Creek associated with the culvert replacement. All necessary permits will be obtained prior to any work within this tributary. No wetland impacts are proposed with the project. Approximately 20 trees from within the public right-of-way will be removed. No listed, or known to be eligible for, national register of historic places are present within the corridor. Noise levels are expected to remain the same within the corridor. A regulated material plan note may be required for one property - the Speedway Gas Station.

# Constraints

- We have to operate consistent with the law
- We have to operate consistent with sound engineering and design standards
- We have to stay within the scope of the project
  - Addressing vehicle safety, pedestrian/bicycle access, pavement condition
- We need to stay within the budget, both in terms of dollars and time



As designers, we're held to some constraints and these are as follows: We have to operate consistent with the law. We have to operate consistent with sound engineering and design standards. We have to stay within the scope of the project, which in this project is addressing vehicle safety pedestrian bicycle access and pavement condition. We also need to stay within budget in both terms of dollars and time.

# Project Schedule

**October 4 – November 19, 2021**

Virtual Public Presentation / Public Comment Period

**January 2021 – July 2022**

Preliminary and Detailed Design

**Winter 2021**

Environmental Clearance

**Winter 2022**

Right-of-Way Acquisition

**Spring 2023**

Sale of Project

**June 2023 – October 2023**

Construction

This slide goes over the project schedule, which shows this public virtual presentation in the fall of 2021, preliminary and detailed design starting January 2021 through July of 2022, the winter of 2021 environmental clearances will be had, the winter of 2022 right-a-way acquisition will begin, the spring of 2023 the project will be completed and sold, and construction will begin approximately June 23 to October of 23.

# Next Steps

A public information meeting was held on December 5 and 6, 2018 that presented four alternatives. An Alternative Evaluation Report was completed, and it was determined that the five lane section with a shared-use path is the preferred alternative.

Preliminary design plans have been developed and the intent of this public presentation is to provide an update on the project, present preliminary design, and to seek your feedback to ensure the best possible decisions are made for our community.

We welcome your input and encourage you to provide comments. Individuals that provide feedback will be included on a project update detailing the final decision and the project team will respond to comments received shortly after the close of the comment period



The project next steps: A public information meeting was held on December 5th and 6th of 2018 that presented four alternatives. Additionally, several other alternatives were identified during the public comments. An Alternative Valuation Report was completed, and it was determined that the five-lane section with a shared-use path is the preferred alternative. Preliminarily designed plans have been developed, and the intent of this public presentation is to provide an update on the project, present preliminary design, and to seek your feedback to ensure the best possible decisions are made for our community. We welcome your input and encourage you to provide comments. Individuals that provide feedback will be included on a project update detailing the final decision, and the project team will respond to comments received shortly after the close of the comment period.

# How to get Involved

- **Submit comments by November 19, 2021**

- **How to submit comments**

- Website: <https://springfieldohio.gov/business-development/engineering>
- Phone: 937-324-7310
- Email: [lshanayda@springfieldohio.gov](mailto:lshanayda@springfieldohio.gov)
- Mail: Mr. Leo Shanayda, PE  
City Engineer  
2100 Lagonda Ave  
Springfield, Ohio 45503

How to get involved? Getting involved is simple. You can submit comments by the date shown on the slide.

How to submit your comments? Comments can be submitted on the website shown here, via the phone number shown here, email the city engineer, or mail the city engineer at the address shown below.

We thank you for attending this presentation, and please provide any comments if you have any. Thank you.