

A total of 33 comments were received regarding the proposed roundabout at the intersection of Lexington Springmill Road and Home Road. Below is a summary of the comments along with responses.

The project doesn't seem necessary. Why aren't issues at other intersections (e.g., Cook Road or Hanley Road) being addressed first?

A Safety Study was completed in 2021 for the approximately three-mile corridor of Lexington Springmill Road, from Cockley Road to Marion Avenue Road. While operations at some other intersections in the corridor are poor during peak hours, the Home Road intersection is the worst performing intersection in the corridor from a safety perspective, making it the highest priority. The intersection averages 5.3 crashes per year with a 31% injury rate. A copy of the Safety Study is available on the project website: <https://rcengineer.com/roundabout-information>

Roundabouts improve safety over that of a conventional intersection through the reduction of vehicular speeds through the roundabout, the reduction of crossing conflicts where the paths of opposing vehicles intersect, and a lower angle of impact in the event of a crash. The County will continue to monitor and seek opportunities to improve safety within the corridor. Like all public agencies, we have limited resources and must prioritize our improvements to provide the maximum benefit with the public tax dollars available.

Roundabouts don't work for 3-way intersections / don't work in this country / people don't know how to drive in a roundabout.

Roundabouts are seldom the most popular solution with the public initially, often because people may lack experience driving in roundabouts and don't understand the many benefits. Public reaction usually flips to positive within a year or two of them being installed and opened to traffic. An Insurance Institute for Highway Safety (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%.

The proposed roundabout is expected to reduce crashes by more than half and to nearly eliminate serious injury crashes. This is because roundabouts eliminate left-turns and crossing traffic movements, and reduce the number of potential conflict points when compared to a traditional intersection. The Richland County Regional Planning Commission (RCRPC) recently conducted a Before/After analysis for the roundabouts at Straub Road & Middle-Bellville Road and at E Cook Road & Mansfield-Lucas Road. The results indicate a substantial reduction in both total crashes and in injury-related crashes at both intersections. Exhibits of the RCRPC analysis are available on the project website: <https://rcengineer.com/roundabout-information>

The Ohio Department of Transportation (ODOT) offers additional information on roundabouts on their website:

<https://www.transportation.ohio.gov/about-us/basics/roundabouts>

Why not install a traffic signal instead of a roundabout?

Installation of a traffic signal was investigated as an alternative for this intersection as part of the 2021 Safety Study. Based on the analysis, a traffic signal, with the addition of both a northbound right turn lane and a southbound left turn lane, would provide a similar safety benefit to a roundabout and with a comparable estimated construction cost. However, the roundabout option was chosen as the preferred alternative as it has a smaller construction footprint, will calm traffic during non-peak hours, and will allow traffic from Home Road to enter safely without forcing vehicles on Lexington Springmill Road to stop.

Why not try other options first (e.g., restrict left turns during certain hours, clear vegetation for better line of sight, add more signage, install street lighting)?

Existing signage is compliant with Ohio Manual of Uniform Traffic Control Devices (OMUTCD) guidelines. Enhanced signage, including oversized dual stop signs and intersection/speed advisory signs, has been installed and has failed to reduce the crash rate at the intersection. Although vegetation to the north may at times partially obstruct views, the crash data detailed in the Safety Study indicates the majority of crashes are due to other circumstances. Prohibiting turn movements using signs, i.e., restricting left turns during certain hours, was dismissed as an option. Due to the rural nature of the project area, violations to the turn restriction may occur and enforcement would be difficult. Additionally, motorists wishing to turn left during restricted hours may choose unanticipated alternative routes through minor local streets to avoid the restriction. Based on the crash data from 2017 to 2019, all of the crashes occurred during daylight hours. Therefore, the addition of street lighting would not be expected to reduce the crash rate.

The 2021 Safety Study determined that 10 of the 16 crashes between 2017 and 2019 were the result of vehicles from Home Road failing to yield to vehicles on Lexington Springmill Road. Long delays and queue lengths lead to motorists on Home Road accepting insufficient gaps in traffic on Lexington Springmill Road when attempting to complete their turns. There were also 2 southbound rear end crashes into vehicles waiting to turn left onto Home Road. The lack of gaps in traffic during peak hours is related to the speed of vehicles traveling on Lexington Springmill Road. Field observations indicate that drivers generally drive over the speed limit on Lexington Springmill Road, gaining momentum when heading downhill from the north, or picking up speed as they approach the intersection from the south, knowing that the speed limit increases north of Home Road. The roundabout will force all traffic to slow, allowing more time for vehicles from Home Road to enter the flow of traffic safely.

How will the roundabout accommodate trucks and other large vehicles?

The roundabout proposed for this location will be designed to accommodate large vehicles, including semi-trucks and farm equipment. The roundabout will include a paved truck apron around the central island, which has a mountable curb, and is a different color and texture from the pavement. This allows the back end of large vehicles to mount the truck apron, while discouraging passenger vehicles from driving on it. Additionally, mountable curb is being provided on the outside of the approaches, and signs and light poles will be placed at adequate distances behind the curb to accommodate larger farm equipment.

Concern regarding northbound truck traffic needing to slow to navigate the roundabout before they have to climb the hill on Lexington Springmill Road.

The roundabout will be designed such that northbound vehicles, including trucks, will be exiting the roundabout at approximately 25 mph and will have approximately 0.4-mile (2,100') to gain speed before the steep grade change occurs. The grade of the constructed roundabout will be approximately 3-feet above the existing intersection grade, reducing the uphill slope angle for exiting traffic. A traffic count performed for the intersection established that trucks comprise only 2% of traffic on Lexington Springmill Road. Additionally, there is an existing passing zone (dashed center line) extending approximately 1,000-feet for northbound traffic between Home Road and the steep grade. Due to these factors, the roundabout is not expected to substantially alter traffic flow on Lexington Springmill Road north of the project.

Concern about noise from downhill (southbound) truck traffic using engine braking to slow before entering the roundabout.

The land use along Lexington Springmill Road north of the project area is agricultural. There are no residences or other noise sensitive land uses immediately adjacent to Lexington Springmill Road within 0.4 mile north of the proposed roundabout. Should noise become a concern in the future, No Engine Break signs could be added as a low-cost mitigation.

Concerns about southbound traffic having to slow while going downhill or northbound traffic getting up the hill in snow/ice.

The project is located approximately 0.4-mile (2,100') south of the steep grade change and will be clearly visible to approaching southbound traffic. This distance provides sufficient length for deceleration even considering the downhill slope. Additionally, pavement markings and traffic control signage will follow Ohio Manual of Uniform Traffic Control Devices (OMUTCD) guidelines. The roundabout will include street lighting to help motorists identify the roundabout at night. Due to these factors, southbound vehicles will have sufficient opportunity to slow before entering the roundabout. Northbound vehicles will be exiting the roundabout at approximately 25 mph and will have approximately 0.4-mile (2,100') to gain speed before the steep grade change occurs.

Concern for speed / visibility for traffic approaching the roundabout.

The visibility of the roundabout as vehicles approach the intersection, and the sight distance for viewing vehicles already operating within the roundabout, are key components for providing safe roundabout operations. Confirming these requirements is a standard part of the transportation design process. Safety at roundabouts is enhanced by reduced intersection approach speeds, because the curvature of the roundabout and the presence of center and splitter islands prompts drivers to slow down.

Will the project increase my taxes?

No, the project qualified for funding through ODOT's Highway Safety Improvement Program which utilizes federal funds to address safety concerns at intersections and corridors throughout Ohio.

Does the intersection have to be closed during construction?

Maintenance of traffic decisions must consider several variables, including physical/geographic constraints of the project area (i.e., culverts / bridges over waterways in the project area that must be replaced), potential construction costs, existing right-of-way restrictions, and potential impact to the construction schedule. Closing the intersection will allow construction to be completed in the shortest possible timeframe and at the lowest cost. The maximum time allowable for closure of the B&O trail is 90 days. While there is no specific allowable duration for the roadway closure, construction is currently anticipated to begin in spring of 2026 and last approximately 150 days.

Concern about the detour route (e.g., will cause added congestion at already busy areas / will cause safety concerns on other roads, township roads aren't built to handle heavy truck traffic).

The signed detour route is intended to redirect through traffic, i.e., motorists traveling north/south “through” Richland county, specifically commercial truck traffic and non-local travelers. However, local traffic will not have the same destination as through traffic, and will know of other alternative roadways to avoid the closure. Because truck traffic using local roads is a concern, the official detour route utilizes the state and county highway system, which can accommodate large and heavy vehicles. The route will be clearly signed and will follow the Ohio Manual of Uniform Traffic Control Devices (OMUTCD) guidelines. Closing the intersection and detouring traffic will allow the project to be constructed in the shortest possible timeframe.

How will the roundabout affect operations at the intersection of Cook Road and Lexington Springmill Road?

As discussed in the Safety Study, the Cook Road intersection with Lexington Springmill Road currently operates at a Level of Service F, meaning traffic on Cook Road waiting to enter Lexington Springmill Road experiences long delays. The roundabout is not anticipated to adversely impact the operation of the Cook Road intersection. The roundabout will likely benefit the operation of the Cook Road intersection as vehicles will be exiting the roundabout heading southbound on Lexington Springmill Road at lower speeds than in the current configuration.

Why not connect / combine Home Road and Cook Road?

Constructing a new road on a new alignment has a substantially greater cost, impact to private property, and environmental impact, and is beyond the scope of this project and the funds available.

Request that the B&O trail not be closed during construction. The roads that bicyclists will detour on are dangerous.

While temporary trail routes through the work zone were considered, it was determined that full closure is the safest option for trail users. As the intersection will be closed to motor vehicle traffic during construction, the presence of pedestrians within the project footprint will be unexpected for construction crews. Full closure is not only safer, but will expedite construction, allowing the trail to reopen as quickly as

possible. The maximum time allowable for trail closure will be limited to 90 days. No official detour is suggested for trail users.

Question the proposed location/design of the B&O Trail crossing (i.e., whether trail users will be visible to motorists in or approaching the roundabout, and whether trail users will have sufficient line of sight to judge gaps in traffic).

Confirming sightlines between vehicles and pedestrians is a standard part of the transportation design process. However, the roundabout design improves safety for pedestrians when compared to a traditional intersection. The splitter island (i.e., the median area) in the crosswalk allows pedestrians to cross a shorter distance of only one direction of traffic at a time, since the traffic entering and exiting the roundabout are separated. The setback (i.e., distance) of the crosswalk from the roundabout is designed to ensure that drivers have completed entering, circulating, and exiting maneuvers and can focus on pedestrians as they approach the crosswalk. Due to the layout of the roundabout, visibility from Home Road will be improved over the existing condition, and added signage, pavement markings, and street lighting for nighttime crossing will enhance visibility. Additionally, the geometry of a roundabout requires drivers to slow down. The roundabout will be designed such that all approaching vehicles will be entering/exiting the roundabout at approximately 25 mph, substantially slower than in the current crossing configuration. Lower speed is associated with reduced vehicle stopping distance and lower risk of collision.

Concern that the splitter island in the crossing isn't big enough for long bicycles or pedestrians to safely stop in the middle.

The length of the pedestrian refuge in the splitter island ranges from 7-feet to 9-feet. These dimensions meet design criteria as defined by Americans with Disabilities Act Accessibility Guidelines (ADAAG), Public Right-of-Way Accessibility Guidelines (PROWAG), and ODOT requirements.

Would like to see additional pavement marking or maybe flashing signals to alert approaching traffic of the crosswalk.

The roundabout will include signage, pavement markings, and street lighting to help motorists identify the B&O Trail crossing. Pavement markings and traffic control signage will follow Ohio Manual of Uniform Traffic Control Devices (OMUTCD) guidelines. Additionally, the roundabout will be designed such that all approaching vehicles will be entering/exiting the roundabout at approximately 25 mph, substantially slower than in the current crossing configuration. Lower speed is associated with reduced vehicle stopping distance and lower risk of collision.

Northbound truck traffic on Lexington Springmill Road will be forced to slow to navigate the roundabout and will then be slow to increase speed heading up the hill. This will create a bottleneck for the traffic following the trucks, making it difficult for trail users to cross.

The roundabout will be designed such that vehicles, including trucks, will be exiting the roundabout at approximately 25 mph and will have approximately 0.4-mile (2,100') to gain speed before the steep grade change occurs. Additionally, a traffic count performed for the intersection established that trucks comprise

only 2% of traffic on Lexington Springmill Road. Due to these factors, the effect of the grade change on truck speed is not expected to substantially impact the operation of the roundabout and/or the trail crossing.