

# US 20 at Shales Parkway Phase I Engineering Study

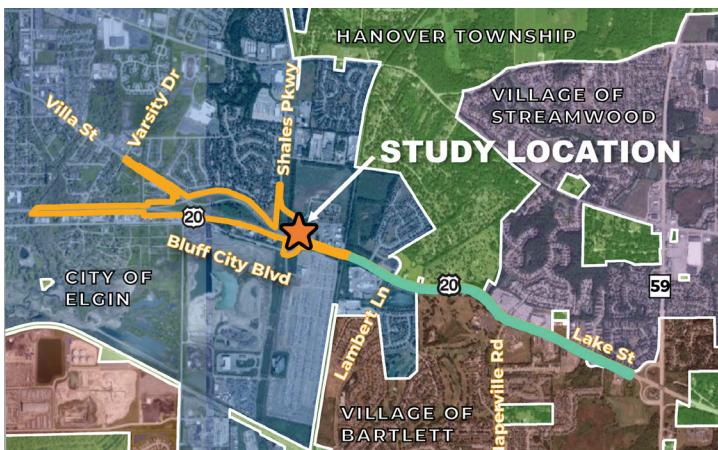
NEWSLETTER #2

April 2023

The Illinois Department of Transportation (Department) is conducting a preliminary engineering and environmental study for improvements at the US 20 and Shales Parkway intersection, including the interchange at Villa Street located in the City of Elgin. The goals of the study include improving safety at US 20 and Shales Parkway, increasing mobility and improving multimodal connections along US 20, and supporting the City of Elgin's Comprehensive Plan goals.

The project's second Public Information Meeting was held on November 16, 2022, at the Centre of Elgin. The study's updates and progress, interchange alternatives, and Purpose and Need statement were presented. The meeting provided an opportunity for the public to provide feedback and input on the alternatives developed. Interchange alternatives, public and stakeholder input received, and the study's next steps are summarized in this newsletter.

## Study Area



The study area extends from Poplar Creek east to IL 59 to evaluate potential impacts related to interchange improvements.

## Project's Goals

(Referred to as the Project's Purpose and Need)

- Improve safety at US 20 and Shales Parkway
- Improve mobility along US 20
- Accommodate multimodal connections along US 20
- Support City of Elgin's Comprehensive Plan goals

## Public Information Meeting #2

The Department is thankful for everyone who participated in the meeting, either by attending the event in person or sharing feedback during the public comment period.

Meeting outreach included:

- 3,100 postcard invitations
- 32 written comments
- 1,620 website visits

## Community Advisory Group (CAG) Meeting #2

The study's second CAG meeting was held in June 2022, with attendees joining both in-person and virtually. A total of 13 attendees participated: three residents and 10 representatives from local organizations and businesses. Public agencies represented included: Bartlett Park District, City of Elgin, Cook County Department of Transportation and Highways, and Hanover Township.

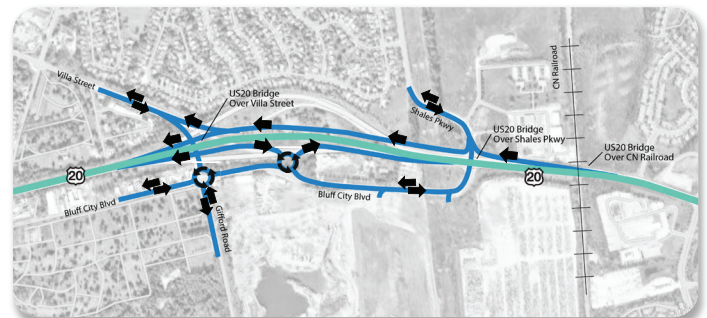
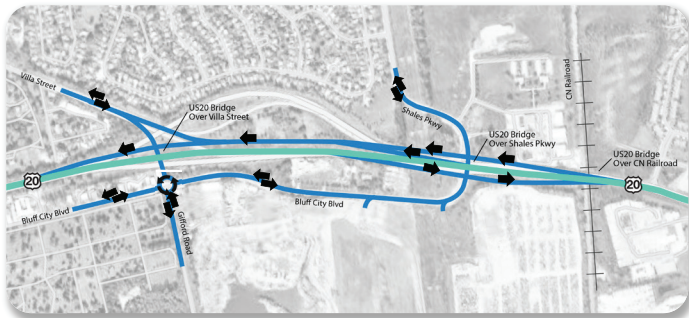
Attendees shared their concerns regarding existing transportation, environmental, and community-related issues within the study area and provided feedback on draft alternatives. A summary of the CAG #2 meeting and member comments can be viewed on the project website.

### Interchange Alternatives

Based on the study's Purpose and Need, the study team developed several alternatives for public discussion and feedback during the meeting. All public feedback received will be evaluated and considered when selecting the study's Preferred Alternative later in 2023.

#### All proposed alternatives:

- Increased or maintained the existing level of access to and from US 20, Shales Parkway, and Villa Street
- Elevate US 20 over Shales Parkway, Villa Street, and other proposed connector roadways

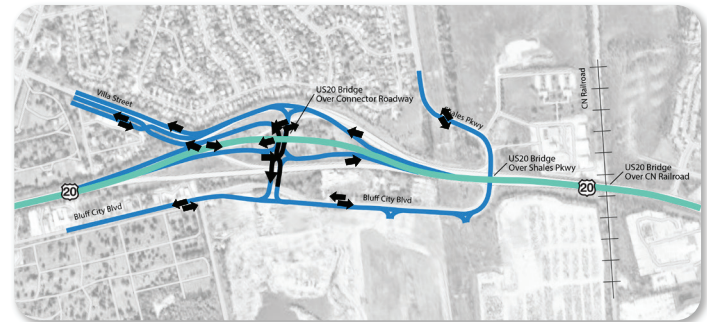
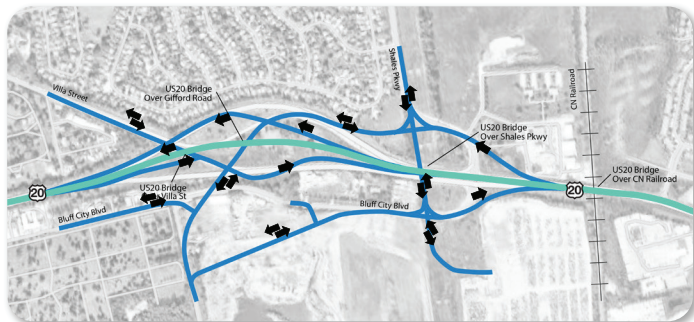


#### Single Point Urban Interchange (SPUI)

- A SPUI configuration reduces the number of intersections as compared to a standard interchange, reducing the opportunity for crashes
- Includes a new, north-south connector roadway linking Villa Street to Bluff City Boulevard with a roundabout
  - *Roundabouts improve safety by slowing traffic speeds and lowering the risk of vehicle-to-vehicle and vehicle-to-pedestrian crashes*
- Public comments were **in support** of this interchange alternative because of the following:
  - Limited number of intersections
  - Additional roadway medians/barriers
  - Minimal impact to Summerhill Park

#### Roundabout West of Shales Parkway

- Roundabouts are designed to lower speeds, maintain traffic moving in the same direction, eliminate left turns across traffic, and reduce stress points that can cause crashes
- Proposes a new roundabout at the US 20 eastbound ramps, as well as new interchange ramps on both Bluff City Boulevard and Shales Parkway
- Includes a new, north-south connector roadway linking Villa Street to Bluff City Boulevard with a second roundabout
- Public comments were **in support** of this interchange alternative because of the following:
  - Reduced number of stoplights
  - Minimal impact to Summerhill Park



#### Feasibility Study – US 20 w/IL 390 Extension (2017)

- Developed in 2017 as part of a feasibility study for the Department
- Proposes a split interchange with local access to Shales Parkway and an updated Villa Street alignment
- Includes a new roadway to connect Shales Parkway directly to Gifford Road
- Public comments **did not support** this interchange alternative because of the following:
  - Complexity
  - Higher impacts to Summerhill Park

#### Diverging Diamond Interchange (DDI)

- A DDI configuration improves safety by lowering travel speeds and eliminating left turns across traffic
- Proposes a new, north-south connector roadway linking Villa Street and Bluff City Boulevard
- Public comments **did not support** this interchange alternative because of the following:
  - Complexity
  - Reduced open space potential

### Interchange Alternatives Comparison

As part of the study, each interchange alternative was evaluated against the project's identified needs:

- Reduce potential for severe and fatal crashes on US 20
- Improve operational efficiency and reliability at US 20 and Shales Parkway
- Accommodate multimodal connections in the study area
- Support goals of the City of Elgin's Comprehensive Plan

In addition, alternatives were evaluated for their impact on the environment and adjacent properties. Some of the major impact evaluation criteria included alternative footprint, wetland impacts, potential new right-of-way and property displacement, Summerhill Park impacts, ease of construction, and overall cost. The full list of impact evaluation categories and how each alternative conceptually measured to the others can be found on the project website.

### Public Engagement

Informational materials for Public Information Meeting #2 were posted on the study's website beginning October 19, 2022. In addition to providing in-person feedback during the meeting, over 3,000 residents, property owners, and businesses were encouraged to share comments through December 14, 2022. Outreach efforts provided the study team with valuable insights to help move the project forward. The following provides a summary of feedback received by subject matter.

### Safety

**Comments related to existing conditions and study improvement impacts were received. These safety concerns focused on the US 20 intersections east of Shales Parkway and overall traveling speed of vehicles along US 20. Several public comments expressed support for raised medians, greater sight visibility, speed reduction and enforcement, better signage, and improved turn lanes.**

The intersections of US 20 at Shales Parkway, Lambert Lane, and Naperville Road are identified as Safety Tier Critical by the Department. Safety Tiers provide a rating to categorize roadway segments and intersections in Illinois based on their level of safety performance and opportunity for improvements relative to other locations. At the US 20 and Shales Parkway intersection, **all four developed alternatives may reduce crashes at this intersection by 42% with the conversion into a grade-separated interchange.** A proposed grade separation of US 20 over Shales Parkway will help to provide increased sight distance for vehicles traveling east over the existing Canadian National Railway bridge.

SAFETY TIERS	
<b>Critical</b>	
High	
Medium	
Low	
Minimal	

In addition, all four alternatives were designed to improve congestion and back-ups at the US 20 at Shales Parkway intersection. If no roadway improvements are made, traffic volumes and congestion will continue to increase. Existing intersection conditions are currently acceptable by Department standards; however, excessive traffic backups occur. By 2050, this intersection is projected to operate over capacity, which is not acceptable. **All four interchange alternatives would result in an improved Level of Service meeting the Department's standards.**

As presented during Public Information Meeting #2, safety improvements along US 20 between Lambert Lane and IL 59 are also being incorporated into this project. The study proposes replacing the existing painted and mountable roadway medians with a raised median between approximately Lambert Lane to just west of the existing Squeaky G's Car Wash (1255 W Lake St, Bartlett, IL 60103). A raised median is intended to help indicate a change in the type of roadway, reduce head-on crashes, and provide channelization at intersections.

At Lambert Lane, proposed improvements include a left turn on green arrow only for left turn movements from US 20 to Lambert Lane. This eliminates conflicts between left-turning vehicles and the high volume of vehicles traveling from the opposite direction. At Naperville Road, dual left turn lanes with a left turn on green arrow only are proposed on the US 20 approaches. In addition to the benefits of new turn restrictions, the dual left turn lanes improve queue management on US 20, reducing the potential for vehicles to back up into the adjacent through lane.



### Truck Traffic

Public comments indicated concerns regarding increasing truck and bus traffic on US 20 and at side street approaches, which inhibit efficient US 20 access. One public comment specifically noted the potential impact of future commercial development upon traffic congestion.

In the study area, US 20 and IL 59 are State-maintained Class II truck routes. The increase in truck traffic is a study area concern, especially throughout residential neighborhoods. As part of this study, traffic data was collected and analyzed to understand existing travel patterns and operation on US 20 from the Villa Street interchange through the Naperville Road intersection. Traffic data was first collected in July 2021 and again in December 2022 based on Public Information Meeting #2 feedback.

The Department is reviewing traffic signal timings within the US 20 study area based on public feedback to better meet current traffic patterns and volumes.

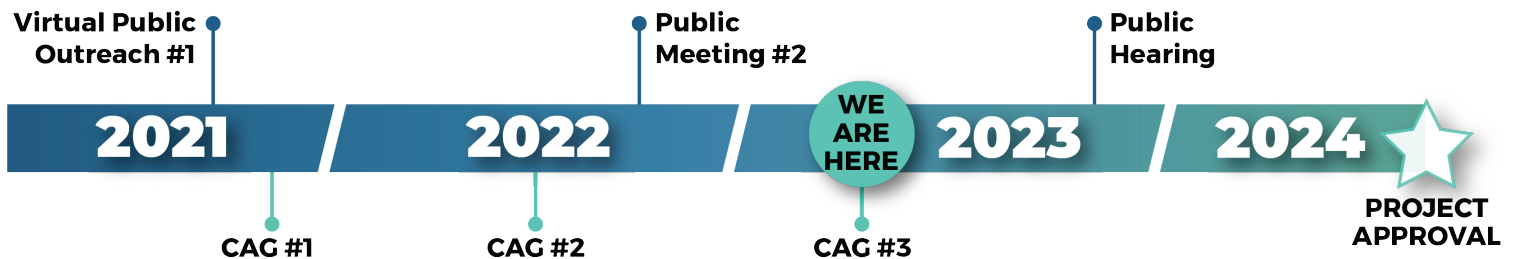
### Summerhill Park Impacts

Several public comments expressed concern about potential impacts to Summerhill Park.

The Department seeks to minimize impacts to open lands and park spaces where possible in accordance with FHWA regulations as part of the Phase I process. Anticipated impacts are listed as part of the alternative evaluation criteria available on the project website.

### Next Steps

The study team is in the process of reviewing all input received and evaluating the developed alternatives' potential impacts. A Preferred Alternative will be developed based on these comments and recommended in 2023. A public hearing will be held later this year to present the Preferred Alternative and obtain additional feedback from the community.



### Noise

One public comment inquired about proposed noise walls at the interchange. Existing sound is disruptive to residents, who are concerned that noise will increase with a raised US 20 alignment.

When evaluating traffic noise, noise impacts, and noise abatement, the Department follows Federal Highway Administration (FHWA) regulations, policies, and procedures. Noise walls or sound barriers abate traffic noise are being considered as part of this study's Phase I environmental impact evaluation.

The Department recently completed the US 20, Randall Road to Shales Parkway study in Elgin that proposed sound barriers north and south of the US 20 and Shales Parkway intersection. Changes to wall locations are not anticipated as part of Phase I improvements.

### Stay Involved

Questions and comments can be submitted to the study team via the following methods:



Email us at [info@US20atShalesStudy.org](mailto:info@US20atShalesStudy.org)



Mail a letter to: Illinois Department of Transportation  
Bureau of Programming, Attn: Lori Brown  
201 West Center Court  
Schaumburg, IL 60196-1096



Sign up for updates or send comments via the study website at [www.US20atShalesStudy.org](http://www.US20atShalesStudy.org)