



# Illinois Department of Transportation

Office of Highways Project Implementation / Bureau of Local Roads & Streets  
2300 South Dirksen Parkway / Room 205 / Springfield, Illinois / 62764

April 22, 2024

## **CIRCULAR LETTER 2024-13**

### **CATEGORY: NOTICE OF FUNDING OPPORTUNITY**

### **FY 2026 LOCAL HIGHWAY SAFETY IMPROVEMENT PROGRAM (HSIP) CALL FOR CANDIDATE PROJECTS**

COUNTY ENGINEERS / SUPERINTENDENTS OF HIGHWAYS / MUNICIPAL ENGINEERS / DIRECTORS OF PUBLIC WORKS / MAYORS / METROPOLITAN PLANNING ORGANIZATIONS - DIRECTORS / TOWNSHIP HIGHWAY COMMISSIONERS / CONSULTING ENGINEERS

#### **PURPOSE & INTRODUCTION:**

The Illinois Department of Transportation (IDOT) intends to add a FY 2026 local increment to the Highway Safety Improvement Program (HSIP) when we develop the overall proposed FY2026-2031 Multi-Year Highway Improvement Program. Recognizing that approximately 50% of the fatal and serious crashes occur on the local highway system, and the critical role that funding for this part of the overall system plays in meeting safety goals, IDOT intends to commit \$32 million for the FY 2026 cycle.

Applications for this funding program will be received through **Friday, June 14, 2024, at 5:00 PM CT**, with the announcement of the selected projects for funding made in late summer. In addition to the information contained within this Circular Letter, applicants are directed to visit and explore the [HSIP website](#) which contains information on the IDOT HSIP Policy and analysis tools that may be used to guide the applicant through the application process. Additional tools are also provided in the "Submission Requirements" and "Resources" sections of this Circular Letter.

As a reminder of accompanying opportunities that also focus on safety, IDOT encourages LPA's to consider reviewing the federal discretionary grant programs that are currently accepting applications. Please see [CL2024-10](#) for the Safe Streets and Roads for All solicitation.

#### **PROGRAM PURPOSE, DETAILS, AND IMPORTANT CRITERIA:**

With the passage of the Infrastructure Investment and Jobs Act (IIJA), also known as the Bipartisan Infrastructure Law (BIL), the Highway Safety Improvement Program's eligibility has been expanded to address the growth in fatalities and meet the "moving toward zero" initiative. Achieving a significant reduction in traffic fatalities and serious injuries is paramount to IDOT. With each application, a strong consideration must be articulated that should focus upon specific safety strategies that offer significant benefit to the reduction of fatal and serious injury crashes. A principal component of the HSIP is to identify the issue(s) contributing to the fatal and serious injury crashes, and how the safety strategy will address and resolve these issues.

Applicants should be aware of these critical items:

- **IDOT will prioritize High Risk Rural Road (HRRR) projects** – The BIL/IIJA continued the HRRR Special Rule, which requires states in which the fatality rate on rural roads increased over the most recent two-year period, to obligate a specified amount of funds toward HRRR safety projects in the next fiscal year. HRRR projects are located on rural major collector, rural minor collector, or rural local roads. The Department is currently under the HRRR penalty.
- **IDOT also encourages projects that protect Vulnerable Road Users** - The term Vulnerable Road User (VRU) is used to describe bicyclists and pedestrians, as they sustain a greater risk of injury in any collision with a vehicle and are therefore highly in need of protection against such collisions. The BIL/IIJA introduced the VRU Special Rule, which requires states to obligate no less than 15 percent of its HSIP on VRU projects if the total annual fatalities of vulnerable road users in the State represents no less than 15 percent of the total annual crash fatalities in the State. The Department is currently under the VRU penalty.

IDOT will also prioritize the selection of projects that address the 2022 Illinois Strategic Highway Safety Plan emphasis areas, such as roadway departures, hazardous intersections, and pedestrians' conflicts. To meet the legislative intent of the broadened eligibility requirements under BIL/IIJA, IDOT will also consider system-wide, systemic, safety improvements. These may include items such as signage, high friction surface treatment, new pavement markings and projects to maintain minimum level retro reflectivity, rumble strips, chevrons, guardrail improvements / upgrades, guardrail end terminal upgrades, etc. The FHWA provides guidance on systemic approaches, which can be found via the following link [FHWA – A Systemic Approach to Safety](#).

There is a funding limitation on systemic guardrail improvements / upgrades and guardrail end treatments of \$1,000,000 of federal HSIP funds (plus the ten [10] percent local match) per Local Public Agency. The \$1,000,000 limitation does not apply to other systemic safety improvement projects. A Local Public Agency can also receive HSIP funds for location specific guardrail and non-guardrail systemic projects if previously awarded HSIP funding towards a systemic guardrail project.

HSIP funds may be used for a total reconstruction when required for a safety improvement or also to address safety issues without completely reconstructing entire roadway segments or intersections to the latest policies and standards. Projects where other sources of funding are included for non-safety components are favorable and should also be submitted.

The federal funding level per project is a maximum 90 percent of the total eligible improvement cost for the project with the local public agency responsible for the ten (10) percent matching funds and any non-participating items. All phases of a safety improvement project are eligible for this program, including preliminary engineering, design, construction, and construction engineering. Right-of-way costs are typically not eligible to be covered by this funding program. Projects requesting multiple phases may initially only have the preliminary phases funded. Local public agencies shall obligate these funds within two (2) years of the Fiscal Year for which they are announced, or funds will be rescinded.

**SUBMISSION REQUIREMENTS:**

Application materials can be accessed on the [HSIP website](#) under Local HSIP. Each candidate project must have a cover letter, completed LRS Grant application, HSIP candidate form, benefit to cost ratio form, raw crash data in an Excel spreadsheet, project location map, photographs of the project location, estimated project cost breakdown (including contingencies and non-participating items), estimated project timeline, a project narrative, LRS Risk Assessment, and a Conflict of Interest Form.

The project narrative should be a brief one to two pages summary of the project history, crash locations, and desired safety improvements. The project narrative should not include information on every aspect of every crash on the project, every aspect of the desired improvement, or letters of support from other entities concerned about the project.

The application form should be completed with as much information as possible about the subject project. The crash table should be completely filled-in with crash totals, or zeros counts if no crash types were present. Data should be used from the most current 5-year period. This includes any application that is a resubmittal from a prior year. The estimated project cost should be the total cost for the completed project. If a lesser amount should be used to calculate the HSIP funding (due to contingencies and non-participating items), please indicate this reduced amount on the application form.

The project location map should include information as to where all crashes occurred within the project limits during the crash evaluation period. The estimated project timeline should include information on time requirements for Phase I engineering, Phase II design, a target letting date, and an estimated construction completion date.

To aid in the application process, an example of a successfully completed application is attached. Please refer to this example as you complete the paperwork required for the FY 2026 HSIP application.

In summary, each candidate application submittal should contain the following information:

1. Cover Letter
2. LRS Grant Application
3. BSPE HS1 – HSIP Candidate form
4. Benefit to Cost Ratio form
5. Raw crash data in Excel spreadsheet
6. Project location map
7. Project photographs
8. Estimated project cost breakdown
9. Project timeline
10. Project narrative
11. BLR 04101 – LRS Risk Assessment
12. BoBS 2831 – Disclosure of Conflicts of Interest

**RESOURCES:**

Several resources have been developed to aid Local Public Agencies in identifying locations and emphasis areas. These include county emphasis area tables, heat maps, data trees, pedestrian corridors, top 50 curves, and the 2023 Local Safety Tier List. These resources are available to be used to develop your HSIP application. The Safety Tiers are broken out in different categories such as High, Medium, Low for both intersection and segment locations. Safety Tiers allow transportation officials to understand relative performance of a location compared to similar types of roadways or intersections. The Safety Tiers allow more locations to be identified and analyzed for similar roadway features and potential crash trends.

IDOT also encourages candidates with projects on two lane rural roads with run off the road crashes to utilize the Run-Off the Road Initiative (RORI) tool. This tool assists with the selection of the proper safety treatment needed to improve the hazardous location.

The RORI tool and the 2023 local Safety Tiers are available in the Tools section of the **Safety Portal** in the area for Heat Maps and 5% reports. Attached, please find information on how to access and use the portal.

There are additional resources available in the Safety Portal and we strongly encourage potential applicants to attend the webinar (information below) and explore the resources available.

The FHWA also has a dedicated website with [Proven Safety Countermeasures](#) that we encourage reviewing.

**2024 LOCAL HSIP INFORMATIONAL WEBINAR:**

Please note that the Bureau of Local Roads & Streets and the Bureau of Safety Programs & Engineering will be hosting a revamped webinar on **Tuesday, May 7, 2024, at 2:00 PM** to discuss the priorities of HSIP and how to submit a quality application. The webinar can be accessed at the following link: [FY26 Local HSIP Webinar](#). The webinar number is 2633 197 7041 and the webinar password is Safety4ALL (72338942 for phones).

**Again, completed applications should be sent electronically to the appropriate District Local Roads and Streets Engineer no later than 5:00 PM on Friday, June 14, 2024.**

Questions concerning the safety data and project eligibility for the Local HSIP may be directed to Tim Peters at [Tim.Peters@illinois.gov](mailto:Tim.Peters@illinois.gov). Questions about the Local HSIP application may be directed to Melinda Kos at [Melinda.Kos@illinois.gov](mailto:Melinda.Kos@illinois.gov).

Sincerely,



George A. Tapas, P.E., S.E  
Engineer of Local Roads and Streets

CL 2024-13  
Page 5  
April 22, 2024

cc: Vershun Tolliver, FHWA Illinois Division Administrator  
Aaron Metzger, Illinois Association of County Engineers  
Molly Rockford, Illinois Association of County Engineers  
Brad Cole, Illinois Municipal League  
Jerry Crabtree, Township Officials of Illinois  
Craig Smith, Township Highway Commissioners of Illinois



**Illinois Department  
of Transportation**

# IDOT Safety Portal

## Getting Started & Overview Guide

Document Last Saved:

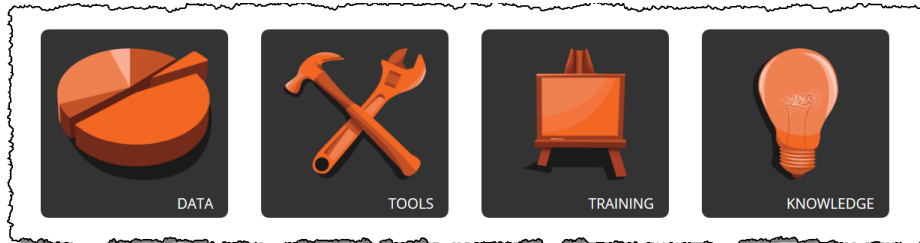
8/25/2014

Version: 0.9

# 1 Overview

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The IDOT Safety Portal is a new secure website where IDOT can share current and past crash reports as well as crash data with the community of safety partners. The IDOT Safety Portal is also designed to be easily expanded and enhanced in the future. The Safety Portal is grouped into four areas: Data, Tools, Training, and Knowledge.



At the present time, the Safety Portal offers valuable functionality including the ability to:

- search and retrieve individual crash reports as soon as IDOT receives them
- view the location of a crash on a map and click a link to view the crash report image
- access the full 10-year retention period for historical and trend analysis purposes
- generate standardized summary reports of crash data based on input parameters
- allow MCR agencies to retrieve their past MCR reports so they can shut down their MCR implementation
- collaborate with other similar safety partner organizations to improve roadway safety
- receive announcements from IDOT targeted to the safety partner community
- do much more – not only now, but also in the future

Since the IDOT Safety Portal is a secure site, it requires that all the users be registered and also vetted (sponsored) by a safety partner organization. With this initial release, the Safety Portal is being opened up to the following organization types:

- Law Enforcement (LE) Agencies – key partners who keep the roads safe and generate the crash reports
- County Engineers (CE) – key partners on the local road system
- State agencies – IDOT districts, SOS, DNR
- Federal agencies

The registration contains the following basic steps:

- 1) Obtain a State of Illinois Public Account login from the State of Illinois Central Management Services department using this link: <https://www2.illinois.gov/sites/accounts/Pages/default.aspx>. Select Create a new Account and enter the required information.
- 2) This login can be used for other state systems now and in the future. Most State users will be able to use their state network logins.
- 3) Request access to the IDOT Safety Portal. At this point you will identify/request your access based on your organization.

- 4) Your access request will be routed to a designated vetter for your organization. That vetter will login to the Safety Portal and vet (sponsor) you as being a valid member of that organization and thereby grant you access to all the items that organization has access to.
- 5) IDOT administrators will then approve and grant you final access to the Safety Portal.

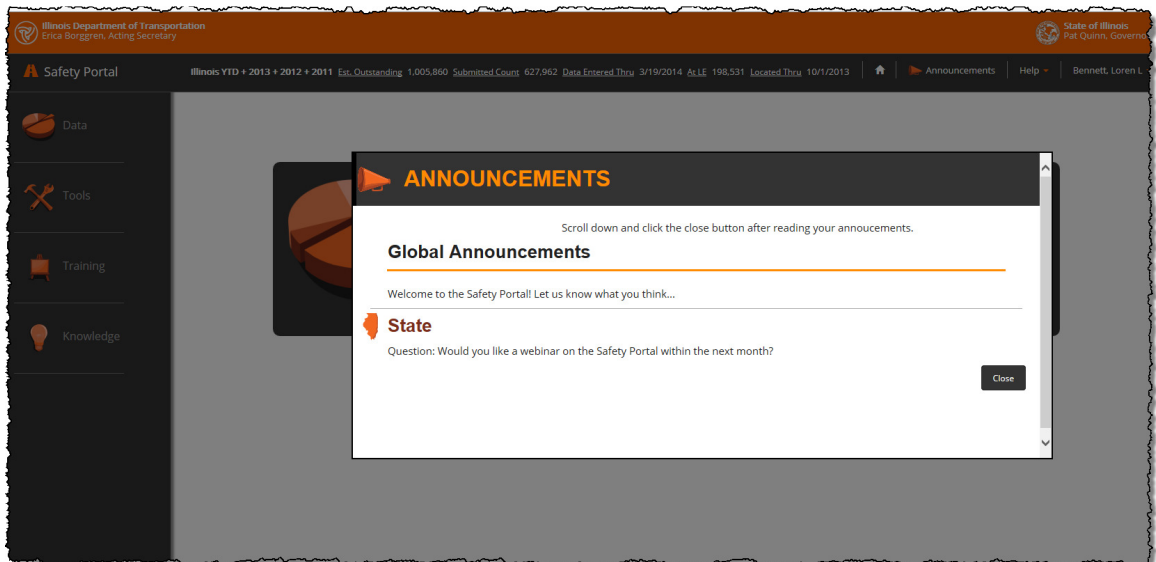
These steps are necessary to make sure the crash data is and remains secure. Since these steps involve several different people, the registration process is not immediate and can take several days to complete. But once the registration process is complete, you can quickly, easily and securely access the data in the Safety Portal. More information, including URLs and step by step instructions, are included in the registration section of this document.

The goal of the IDOT Safety Portal is to empower the community of safety partners with actionable information not only now, but also in the future. If you have any questions or problems, feel free to contact us at [DOT.SafetyPortalHelpDesk@illinois.gov](mailto:DOT.SafetyPortalHelpDesk@illinois.gov) or through the Safety Portal itself.

## 2 Safety Portal Location

The IDOT Safety Portal is located at <https://webapps.dot.illinois.gov/SafetyPortal/>

When you connect to this site the first time, you will be redirected to log in. If you don't have a State of Illinois Public Account login, you can easily create one (described below in Section 3). Once you have logged in, you will be redirected back to the IDOT Safety Portal and should see the home page with announcements displayed as shown below.



If you bookmark this page, you can quickly get back to the Safety Portal.



### 3 Registering for the IDOT Safety Portal

There are several steps to register for the IDOT Safety Portal. Once completed, you can quickly access the Safety Portal. Briefly these steps include:

- 1) Obtain/Use an Illinois.gov Public Account
- 2) Request Access to the Safety Portal as a member of a partner organization
- 3) Vetting of your access request
- 4) IDOT approval of your access request

Each of these will be discussed below.

#### 3.1 Illinois.gov Login Page

The first time you try to log onto the Safety Portal, you will be redirected to an Illinois.gov login page.

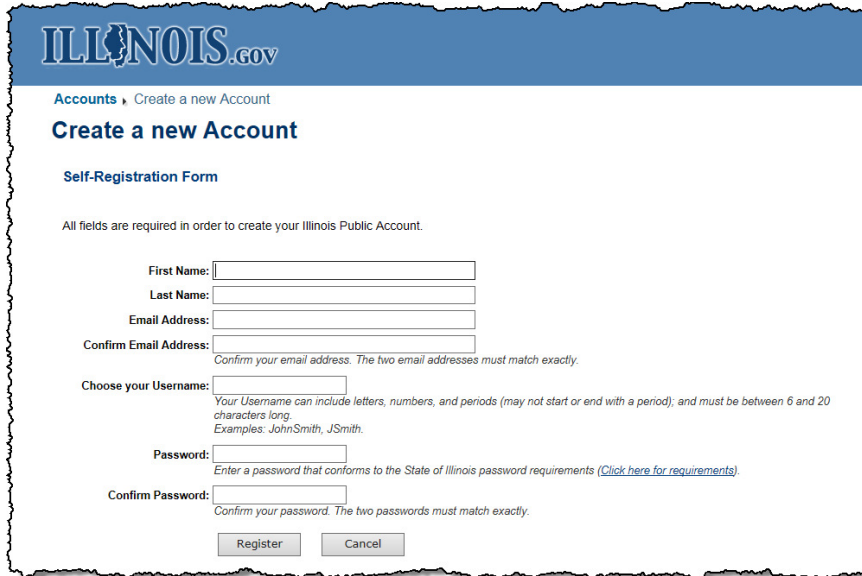


<https://cmspublic.illinois.gov/CookieAuth.dll?GetLogon?curl=Z2Feben&reason=0&formdir=4>

NOTE: State employees can log in with their network login, their domain name and their password. Some state employees outside of the CMS network may not be able to log in and will have to create an Illinois Public Account.

### 3.1.1 Creating an Illinois Public Account ID

If you need to create an Illinois Public Account, click on the SIGN UP button and the following screen will be displayed. All fields are required. After clicking the Register button, you will receive an email confirmation with your Illinois.gov public ID.



The screenshot shows the 'Create a new Account' page on Illinois.gov. At the top, there is a blue header with the Illinois.gov logo. Below the header, the page title is 'Create a new Account' and the sub-section is 'Self-Registration Form'. A note states: 'All fields are required in order to create your Illinois Public Account.' The form contains the following fields and instructions:

- First Name:** [Text input field]
- Last Name:** [Text input field]
- Email Address:** [Text input field]
- Confirm Email Address:** [Text input field] with the instruction: 'Confirm your email address. The two email addresses must match exactly.'
- Choose your Username:** [Text input field] with the instruction: 'Your Username can include letters, numbers, and periods (may not start or end with a period); and must be between 6 and 20 characters long. Examples: JohnSmith, JSmith.'
- Password:** [Text input field] with the instruction: 'Enter a password that conforms to the State of Illinois password requirements (Click here for requirements).'
- Confirm Password:** [Text input field] with the instruction: 'Confirm your password. The two passwords must match exactly.'

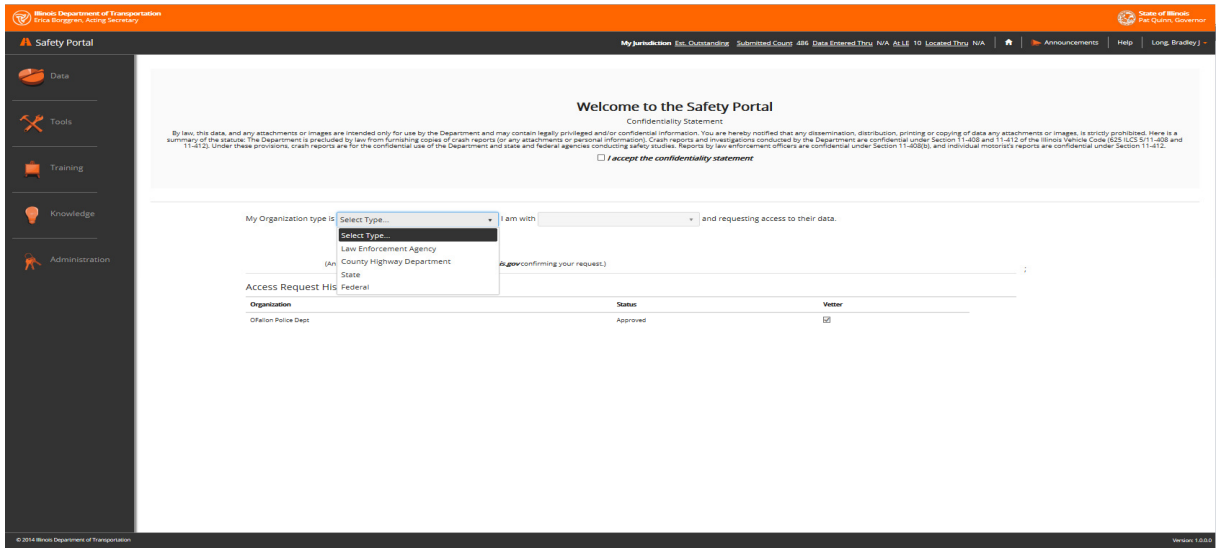
At the bottom of the form, there are two buttons: 'Register' and 'Cancel'.

<https://www.illinois.gov/sites/accounts/Pages/CreateanewID.aspx?Source=https%3A//cmspublic.illinois.gov/CookieAuth.dll%3FGetLogon%3Fcurl%3DZ2Feben%26reason%3D0%26formdir%3D4>

NOTE: You get to create your username which must be unique within Illinois.gov. If a username you create is not unique, you will be prompted to create a different username. Enter a username that you will easily remember. If you have any issues with your Illinois.gov public ID, please contact the CMS help desk.

### 3.2 Initial sign on to IDOT Safety Portal

Once you have logged in with your Illinois.gov Public ID, you will be redirected back to the following page for your initial login to the IDOT Safety Portal.



1) Select an organization type based on the following table:

Select . . .	If you . . .
Law Enforcement Agency	belong to a law enforcement agency (excluding Illinois State Police Headquarters)
County Highway Department	are an engineer with one of the 102 Illinois counties
State	work for any State of Illinois office including Illinois State Police Headquarters
Federal	Work for any Federal office

- 2) With your organization type selected, you will be provided with a listing of appropriate organization names. Please select the correct organization
- 3) Lastly, please review and accept the confidentiality agreement

Click the SEND REQUEST button. This will trigger emails to be sent to the designated vetter for that organization. You will also receive a confirmation email.

### 3.3 Vetting User Access Requests

Once your IDOT Safety Portal access request has been submitted, it is routed to the designated vetter(s) for your organization. That person will log into the Safety Portal and vet your access request. The steps to vet users for the organization are listed in the IDOT Safety Portal Organization Vettors Guide. Once you have been vetted, you will receive an email. If you have not been vetted in a few days, please contact your organization's vetter.

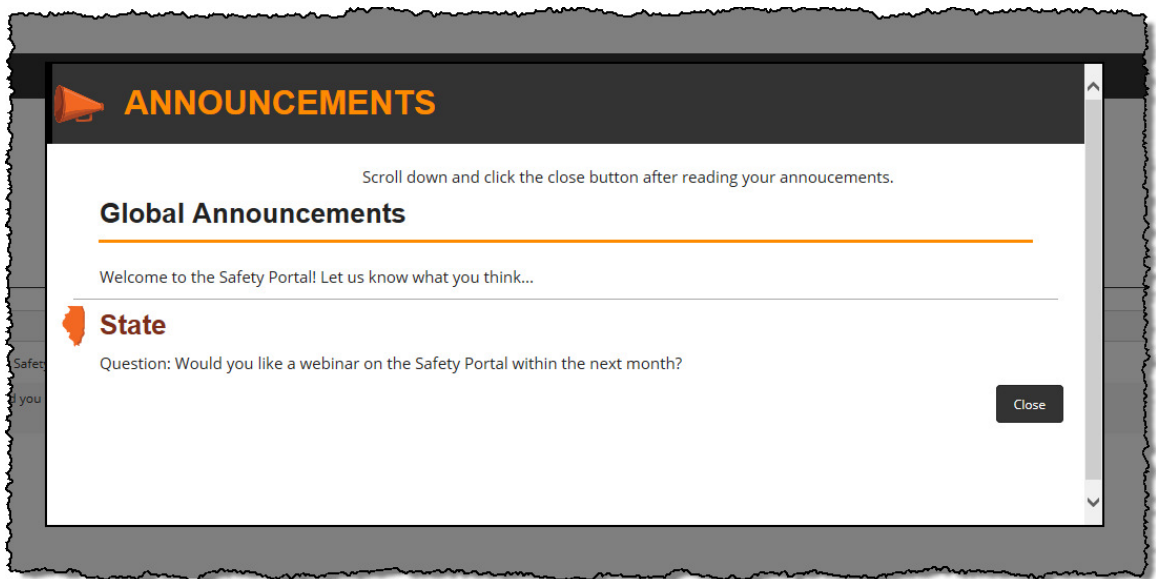
In the initial case where you are the vetter and the first person to sign up for your organization, IDOT will approve your access request and set you up as the vetter. If you have any questions or problems, contact [DOT.SafetyPortalHelpDesk@illinois.gov](mailto:DOT.SafetyPortalHelpDesk@illinois.gov).

### 3.4 Final IDOT Approval

Once you have been vetted, IDOT will quickly review your access request and approve it. You will receive an email notice and can then log into the IDOT Safety Portal. If you have any questions or problems, contact [DOT.SafetyPortalHelpDesk@illinois.gov](mailto:DOT.SafetyPortalHelpDesk@illinois.gov).

## 4 Navigating the IDOT Safety Portal

Once you log into the Safety Portal, you will see the announcements. These announcements are targeted to the organizations to which you belong. Please review these announcements, scrolling down if necessary until you see the CLOSE button.



These announcements will pop up every time you log into the Safety Portal with any new announcements at the top of the list.

The IDOT Safety Portal is divided into several sections described below:

## 4.1 Top Banner

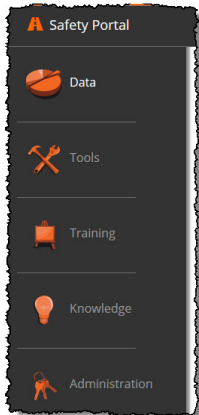
The top banner will remain visible as you use the Safety Portal and contains the following information:



- Key Processing statistics and dates related to your jurisdictions/organizations. These statistics and dates provide helpful information about IDOT's progress in processing the crash reports it receives. These stats are discussed in more depth in the Crash Manager Guide.
- Announcements – you can display the announcements at any time by clicking the Announcements link in the Top Banner.
- Help – you can quickly access the documentation or email the Safety Portal Help Desk
- <Your Name> - You can return to the registration page to see the status of any access requests you have submitted. You can also request access to additional organizations if you work for multiple organizations.

## 4.2 Side Navigation Bar

The side navigation bar (shown below) will also remain visible as you use the Safety Portal. The image and text below show and describe all possible sections in the navigation bar. What you will see will depend on the type of organization you are registered with and if you are designated as a vetter. Clicking the icons expands and collapses the various sections

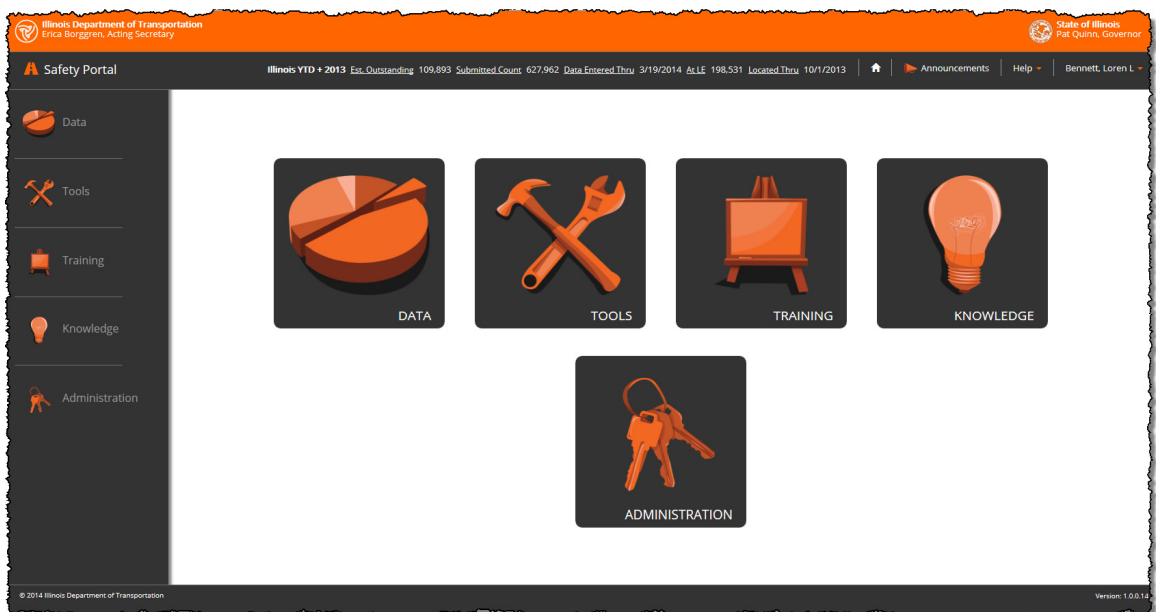


The following provides a brief description of the functions available within each section.

- **DATA** – access to raw data about individual crashes
  - Crash Manager – a robust search screen to search for individual crashes. The Crash Manager is further discussed in the Crash Manager Guide
  - Dashboard – a graphical view of the Law Enforcement Agency’s reporting levels (Law Enforcement Only)
- **TOOLS** – access to additional utilities
  - Crash Forms Request – (Law Enforcement Only) request additional paper crash forms
  - Preferred Truck Routes – For county engineers to maintain their preferred truck routes – requires a separate login
  - Heat Maps & 5% Reports – additional analysis on crash data
- **TRAINING**
  - SR 1050 Instructions
- **KNOWLEDGE**
  - Collaboration – a monitored discussion area for law enforcement and a separate area for county engineers to collaborate on safety issues
  - Reports – access pre-defined summary reports based on input parameters you specify
- **ADMINISTRATION (Vetters only)**
  - User Manager – the administration screen where users are vetted. More information available in the Organization Vetters Guide.

### 4.3 Main Window

By default, the main window (shown below) shows tiles for all the items to which you have access. For example not all people will have or need access to the administration modules. You can click on these tiles or on the side navigation bar to get around the IDOT Safety Portal. The main window will display additional details based on whatever module you are viewing.



## 5 Additional Documentation

More information on the IDOT Safety Portal can be found in the following guides:

- IDOT Safety Portal Organization Veters Guide – the steps required to vet a user’s access request for your organization (veters only)
- IDOT Safety Portal Data – Crash Manager Guide – details on how to use and leverage the Crash Manager module which includes retrieving an individual crash report as well as mapping resulting crashes
- IDOT Safety Portal Tools & Training Guide – additional details on those sections of the Safety Portal
- IDOT Safety Portal Knowledge Guide – additional details on those sections of the Safety Portal
- IDOT Safety Portal Administrators Guide – (IDOT Admins Only) – behind the scenes details on administering the Safety Portal
- IDOT Safety Portal MCR Agency Transition Guide – detailed steps on how to leverage the Safety Portal to retrieve your agency’s historical crash reports so that you can safely and confidently sunset your MCR implementation

# EXAMPLE APPLICATION

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## FY 2025 HIGHWAY SAFETY IMPROVEMENT PROGRAM GRANT APPLICATION

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HSIP Roadway Segment Improvements

City of Springfield, Carpenter Street Intersection Improvements at 5<sup>th</sup>  
and 6<sup>th</sup> Streets







June 30, 2023

Illinois Department of Transportation  
Local Roads and Streets / Region 4/ District 6  
Brian Wright  
126 East Ash Street  
Springfield, IL 62704  
(217) 782-4690  
Brian.Wright@illinois.gov

Re: FY 2025 Local Highway Safety Improvement Program  
Carpenter Street Intersection Improvements at 5<sup>th</sup> Street and 6<sup>th</sup> Streets  
City of Springfield

Dear Mr. Wright,

Carpenter Street is a local, minor arterial that runs east-west just north of Downtown Springfield. It extends from N Walnut Street on the west and to 19<sup>th</sup> Street approximately two miles to the east. The eastern section is bounded by residential neighborhoods. The western and middle sections are surrounded by residential areas, businesses, and also two large medical campuses which are major employment centers within the City. Accordingly, Carpenter Street services exceptionally heavy traffic at the start and conclusion of the typical business day.

Over the five-year study period, there have been 78 total crashes at the intersection of Carpenter Street at 5th Street, and 38 total crashes at the intersection of Carpenter Street at 6th Street. Each intersection has experienced 1 pedal cyclist and 1 pedestrian crash resulting in A, B, and C injuries.

The crashes at the intersection of Carpenter at 5th Street include 48 angle crashes, 16 turning crashes, 7 front to rear crashes, 5 sideswipe same direction crashes, along with the 1 pedestrian and pedal cyclist crash. Of these crashes, five resulted in A-injuries crashes, eleven were B-injury crashes, ten were C-injuries crashes, and 52 resulted in property damage only.

The intersection of Carpenter Street at 6th Street experienced 38 total crashes, made up of 22 angle crashes, 6 turning and front to rear crashes, and 1 each of sideswipe same direction, front to side, pedestrian, and pedal cyclist. These crashes resulted in two A-injury crashes, 5 B-injury crashes, 8 C-injury crashes, and 23 property damage only crashes.

It is evident why the two intersections landed on the Safety Tier listing and intersection initiative.

Mr. Brian Wright

June 28, 2023

Page 2

To reduce the number of crashes, in particular the significant number of angle crashes, the proposed project will reconstruct the N 5th Street and N 6th Street intersections with Carpenter Street and incorporate improvements including dedicated left turn lanes, mast arms for all approaches to replace existing pole mounted signals, pedestrian countdown timer signal heads, adjusting all red and yellow clearance intervals, retroreflective back plates on signal heads, and fiber optic installation to facilitate signal interconnectivity.

The benefit-cost ratio for the five-year analysis period was calculated to be 3.07.

The total estimated cost for this project is \$2,229,101.00 and the City of Springfield is prepared to provide the local match of 10% (\$222,910.10) for these improvements. The City of Springfield is requesting \$2,006,190.90, 90% of the improvement cost, in funding from the Highway Safety Improvement Program. In response to Circular Letter 2023-14 requesting project applications for the FY 2025 Highway Safety Improvement Program (HSIP) Program, please reference the following safety improvement funding application from Springfield, Illinois for Carpenter Street at 5<sup>th</sup> and 6<sup>th</sup> Streets.

Sincerely,

Lochmueller Group

Prepared on the behalf of:  
City of Springfield, Office of Public Works

## **Table of Contents:**

2. LRS Grant Application
3. BSPE HS1- HSIP Candidate form
4. Benefit to Cost Ratio form
5. Raw crash data in Excel spreadsheet
6. Project location map
7. Project photographs
8. Estimated project cost breakdown
9. Project timeline
10. Project narrative
11. BLR 04101 – LRS Risk Assessment
12. BoBS 2831 – Disclosure of Conflict of Interest

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SECTION 2  
LRS GRANT APPLICATION

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# Illinois Department of Transportation

Office of Highways Project Implementation / Bureau of Local Roads & Streets  
2300 South Dirksen Parkway / Room 205 / Springfield, Illinois / 62764

Local Roads & Streets Grant Application		
Program Information		
1.	IDOT Grant Program	Local Highway Safety Improvement Program
2.	Solicitation Cycle	Fiscal Year 2025
Applicant Information		
3.	Lead Applicant Name (Local Public Agency)	City of Springfield
4.	Partners/Co-Applicants	
5.	Employer / Taxpayer Identification Number (EIN, TIN) for Lead Applicant	██████████
6.	Organizational UEI Number (SAM.GOV) for Lead Applicant	██████████
7.	Business Address for Lead Applicant	Street address: 300 S 7 <sup>th</sup> Street, Municipal Center West City: Springfield State: IL County: Sangamon Zip + 4: 62701-1681
Applicant's Name and Contact Information for Person to be involving this Application		
8.	First Name	Nathan
9.	Last Name	Bottom
10.	Suffix	
11.	Title	City Engineer
12.	Organizational Affiliation	City of Springfield – Office of Public Works
13.	Telephone Number	217-789-2255
14.	Fax Number	
15.	Email address	Nathan.bottom@springfield.il.us
Applicant's Project		
16.	Description of Applicant's Project	Traffic Signal Improvements/Modernization on Carpenter Street at 5 <sup>th</sup> and 6 <sup>th</sup> Streets – Including widening for turn lanes

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SECTION 3  
BSPE HS1 – HSIP CANDIDATE FORM

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FY 2025

ID: Contract: Award Date: Completion Date:

District: 6 County: Sangamon City: Springfield

Key route: Marked route: FAU 7975

Road Name: Carpenter Street Intersecting Roadway: 5th Street and 6th Street N/A

Length: 0.2 miles Mile station: to

Location Description: Carpenter Street at 5th Street and 6th Street

Rural Urban Lanes: 4

AADT(Segment): 8628 Total Entering AADT (Intersection): 15600 Speed Limit: 30 mph

Friction Test Results: N/A Lighting Present: Y N

CHSP Emphasis Area(s): Intersections District Documentation Systematic Improvements N/A

Peer Group: 7 - Urban Signalized Intersection N/A

Other:

Crashes Details

Table with 13 columns: Year, Total Crashes, Fatal Crashes, Fatalities, A-Injury Crashes, A-Injuries, B-Injury Crashes, B-Injuries, C-Injury Crashes, C-Injuries, PDO, Wet-Weather Crashes, Darkness (Not lighted) Crashes. Rows for years 2016-2020 and a Total row.

Location Description: 2 adjacent suburban intersections with 2 lanes in each direction on the main road and one-way minor cross roads.

Problem Description: Angle crashes due to turning vehicles from major route, low visibility of post mounted signal heads.

Previous Safety Improvements: None known

Collision Diagram: Y N Images: Y N

Predominant Crash Types: Angle and turning crashes at each intersection

Proposed Improvement(s): Adding dedicated left turn lanes and new mast arm mounted signal heads with retroreflective backplates.

Estimated Project Cost (\$000's): \$2229 Benefit-Cost Ratio: 3.07

Local Projects:

Annual Fatal Crash Rate (Fatal Crashes/100 Miles): 0 Annual A-Injury Crash Rate (A-Injury Crashes/100 Miles): 700

Local Roads Rural Functional Class: Minor Arterial

Approved: Central HSIP Approval Date:

Signed: State Safety Engineer Funding: HSIP HRRR RAIL

Comment:

Distribution: OPP District BSPE LRS BDE

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SECTION 4  
BENEFIT TO COST RATIO FORM

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**PROJECT DESCRIPTION - PROJECT DATA INPUT (LOCAL INTERSECTIONS)**

<b>Project:</b>	Springfield Carpenter Street Reconstruction	<b>Prepared by:</b>	Lochmuller Group
<b>District:</b>	6	<b>County:</b>	Sangamon
<b>City:</b>	Springfield	<b>Date:</b>	6/19/2023
<b>Key Route:</b>	FAU7975	<b>Marked Route:</b>	Carpenter Street
<b>Location:</b>	Carpenter Street at 5th and 6th Streets	<b>Current AADT:</b>	Major Street Minor Street 4200
<b>Crash date:</b>	5 Years From 2016 to 2020	<b>Traffic Growth factor:</b>	1.0%
<b>Peer Group:</b>	Peer Group 7 - Urban Signalized Intersection	<b>Interest rate:</b>	4.0%

**Messages**

Please provide a detailed cost estimation for all countermeasures along with this summary sheet.  
 3.4.4.7.17.1 - Signalization - Convert signal from pedestal-mounted to mast arm does not fully match HSM Setting/Facility Type Criteria  
 3.2.1.17.1 - Pavement - Add Left Turn Lane (Existing Signalized, Four-Leg Intersection) AADT is not within HSM limits

**LOCAL INTERSECTION CRASH SEVERITY DISTRIBUTION BY CRASH TYPE FOR ANALYSIS PERIOD**

Crash Severity	CRASH TYPE																	SPECIAL CASE	Total			
	ALL	AG	AN	FO	HO	LT	Other/NC	Other/O	OVT	PD	PDC	PKV	RE	RT	SSD	SOD	T			TR	NGT	WP
All Crashes (Aggregated crash input only)	ALL	AG	AN	FO	HO	LT	Other/NC	Other/O	OVT	PD	PDC	PKV	RE	RT	SSD	SOD	T	TR	NGT	WP	TOT	
Fatal Crashes	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Any Injury Crashes	6	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	7
Bi-Injury Crashes	11	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	3	0	0	0	0	16
C-Injury Crashes	10	0	0	0	0	0	0	0	0	0	2	0	2	0	1	0	3	0	0	0	0	18
PDO Crashes	43	0	0	0	0	0	0	0	0	0	0	0	11	0	5	0	16	0	0	0	0	75

**LOCAL INTERSECTION BENEFIT COST ANALYSIS**

BENEFIT CALCULATIONS				COUNTERMEASURE COST CALCULATIONS							
COUNTERMEASURE	Crash Type affected by this improvement	CMF *	Crash Type affected by this improvement	Unit Cost	Quantity	Units	Total Cost	Service Life	Present Worth	EUAC **	
				3.4.4.7.17.1 - Signalization - Convert signal from pedestal-mounted to mast arm	All	0.71	All	\$45,000	6	Unit Only	\$270,000
<b>TOTAL BENEFIT</b>										<b>\$24,300</b>	
<b>BENEFIT COST</b>											
<b>ANNUAL NUMBER OF FATALITIES POTENTIALY PREVENTED</b>										<b>0.00</b>	
<b>TOTAL FATALITIES PREVENTED</b>										<b>0.00</b>	

**\*\*\*NOTE: IF THE NUMBER OF LEGS AFFECTED VARIES BY COUNTERMEASURES SELECTED, THEN CALCULATE THE BENEFIT-COST RATIO FOR EACH COUNTERMEASURE SEPARATELY (Use separate spreadsheets for each countermeasure applied).**

\* CMF = Crash Modification Factor

\*\* EUAC = Estimated Uniform Annual Cost

**PROJECT DESCRIPTION - PROJECT DATA INPUT (LOCAL INTERSECTIONS)**

<b>Project:</b>	Springfield Carpenter Street Reconstruction	<b>County:</b>	Sangamon	<b>City:</b>	Springfield	<b>Prepared by:</b>	Lochmuller Group
<b>District:</b>	6	<b>Marked Route:</b>	Carpenter Street	<b>Major Street:</b>	Major Street	<b>Date:</b>	6/21/2023
<b>Key Route:</b>	FAU7975	<b>Current AADT:</b>	Minor Street	<b>Minor Street:</b>	Minor Street	<b>Current AADT:</b>	8628
<b>Location:</b>	Carpenter Street at 5th and 6th Streets			<b>Traffic Growth factor:</b>	1.0%	<b>Interest rate:</b>	4.0%
<b>Crash data:</b>	5	<b>Years</b>	2016	<b>to</b>	2020	<b>Peer Group:</b>	Peer Group 7 - Urban Signalized Intersection

**Messages**

Please provide a detailed cost estimation for all countermeasures along with this summary sheet.

3.4.47.17.1 - Signalization - Convert signal from pedestal-mounted to mast arm does not fully match HSM Setting/Facility Type Criteria

3.2.11.17.1 - Pavement - Add Left Turn Lane (Existing Signalized, Four-Leg Intersection) AADT is not within HSM limits

The analysis contains a User Defined Countermeasure (please provide supporting documentation)

**LOCAL INTERSECTION CRASH SEVERITY DISTRIBUTION BY CRASH TYPE FOR ANALYSIS PERIOD**

Crash Type	CRASH TYPE																SPECIAL CASE		Total		
	ALL	AG	AN	FO	HO	LT	Other/NC	Other/O	OVT	PD	PDC	PKV	RE	RT	SSD	SOD	T	TR		NGT	WP
All Crashes (Aggregated crash input only)	ALL	AG	AN	FO	HO	LT	Other/NC	Other/O	OVT	PD	PDC	PKV	RE	RT	SSD	SOD	T	TR	NGT	WP	TOT
Fatal Crashes	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Auto Injury Crashes	6	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	7
Bio Injury Crashes	11	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	3	0	0	0	16
C-Injury Crashes	10	0	0	0	0	0	0	0	0	0	2	0	2	0	1	0	3	0	0	0	18
PDO Crashes	43	0	0	0	0	0	0	0	0	0	0	0	11	0	5	0	16	0	0	0	75

**LOCAL INTERSECTION BENEFIT COST ANALYSIS**

BENEFIT CALCULATIONS										COUNTERMEASURE COST CALCULATIONS									
COUNTERMEASURE	Crash Type affected by this improvement	CMF *	Unit Cost	Quantity	Units	Total Cost	Service Life	Present Worth	EUAC **	ANNUAL NUMBER OF FATALITIES POTENTIALLY PREVENTED	TOTAL BENEFIT	ANNUAL COST	TOTAL FATALITIES PREVENTED	TOTAL COST					
															1.62	0.00	0.00		
3.5.101.U.D.1 - User Defined - Install left-turn lane	All	0.75	\$979,551	2	Unit Only	\$1,959,101	15	\$1,959,101	\$176,250	0.00 <td>\$285,500</td> <td>0.00</td> <td>0.00</td> <td>\$176,250</td>	\$285,500	0.00	0.00	\$176,250					
<b>TOTAL BENEFIT</b>											<b>\$285,500</b>			<b>\$176,250</b>					
<b>BENEFIT COST</b>										<b>1.62</b>			<b>0.00</b>						

**\*\*\*NOTE: IF THE NUMBER OF LEGS AFFECTED VARIES BY COUNTERMEASURES SELECTED, THEN CALCULATE THE BENEFIT-COST RATIO FOR EACH COUNTERMEASURE SEPARATELY (Use separate spreadsheets for each countermeasure applied).**

\* CMF = Crash Modification Factor  
 \*\* EUAC = Estimated Uniform Annual Cost



# CRASH MODIFICATION FACTORS CLEARINGHOUSE

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## CMF / CRF DETAILS

CMF ID: 7996

### INSTALL LEFT-TURN LANE

**DESCRIPTION:**

PRIOR CONDITION: INTERSECTIONS WITHOUT LEFT TURN LANES

CATEGORY: INTERSECTION GEOMETRY

STUDY: [SAFETY EVALUATION OF SIGNAL INSTALLATION WITH AND WITHOUT LEFT TURN LANES ON TWO LANE ROADS IN RURAL AND SUBURBAN AREAS, SRINIVASAN ET AL., 2](#)

Star Quality Rating: [\[VIEW SCORE DETAILS\]](#)

Rating Points Total: 115

#### Crash Modification Factor (CMF)

Value: 0.748

Adjusted Standard Error:

Unadjusted Standard Error: 0.095

#### Crash Reduction Factor (CRF)

Value: 25.2 (This value indicates a *decrease* in crashes)

Adjusted Standard Error:

Unadjusted Standard Error: 9.5

#### Applicability

Crash Type: All

Crash Severity: All

Roadway Types: Not specified

Street Type:

Minimum Number of Lanes: 2

Maximum Number of Lanes: 2

Number of Lanes Direction:

Number of Lanes Comment:

<b>Crash Weather:</b>	Not specified
<b>Road Division Type:</b>	
<b>Minimum Speed Limit:</b>	
<b>Maximum Speed Limit:</b>	
<b>Speed Unit:</b>	
<b>Speed Limit Comment:</b>	
<b>Area Type:</b>	All
<b>Traffic Volume:</b>	
<b>Average Traffic Volume:</b>	
<b>Time of Day:</b>	All
<i>If countermeasure is intersection-based</i>	
<b>Intersection Type:</b>	Not specified
<b>Intersection Geometry:</b>	3-leg
<b>Traffic Control:</b>	Signalized
<b>Major Road Traffic Volume:</b>	Minimum of 2981 to Maximum of 18248 Annual Average Daily Traffic (AADT)
<b>Minor Road Traffic Volume:</b>	Minimum of 972 to Maximum of 13880 Annual Average Daily Traffic (AADT)
<b>Average Major Road Volume :</b>	9199 Annual Average Daily Traffic (AADT)
<b>Average Minor Road Volume :</b>	4847 Annual Average Daily Traffic (AADT)
<b>Development Details</b>	
<b>Date Range of Data Used:</b>	1992 to 2012
<b>Municipality:</b>	
<b>State:</b>	NC
<b>Country:</b>	
<b>Type of Methodology Used:</b>	Before/after using empirical Bayes or full Bayes
<b>Sample Size (crashes):</b>	576 crashes before, 388 crashes after
<b>Sample Size (sites):</b>	36 sites before, 36 sites after
<b>Sample Size (site-years):</b>	180 site-years before, 174 site-years after
<b>Other Details</b>	
<b>Included in Highway Safety Manual?</b>	No
<b>Date Added to Clearinghouse:</b>	Nov 10, 2016
<b>Comments:</b>	The CMF was developed for both rural and suburban areas. The number of crashes in the after period were not reported, however, they have been recorded as 300 to give 10 points as a benefit of doubt for one or more of the following: (1) number of miles/sites in the reference/treatment group, (2) number of crashes in the reference/treatment group, (3) AADTs for the aggregate dataset but not for the disaggregate dataset used for CMF development.

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This site is funded by the U.S. Department of Transportation Federal Highway Administration and maintained by the University of North Carolina Highway Safety Center.

For more information, contact Matt Hinshaw at [matthew.hinshaw@unc.edu](mailto:matthew.hinshaw@unc.edu)

The information contained in the Crash Modification Factors (CMF) Clearinghouse is disseminated under the sponsorship of the U.S. Department of Transportation in the interest of information exchange. The U.S. Government assumes no liability for the information contained in the CMF Clearinghouse. The information contained in the CMF Clearinghouse does not constitute a standard, specification, or regulation, nor is it a substitute for sound engineering judgment.

**FY 2025 Highway Safety Improvement Program**  
**Carpenter Street Intersection Improvements at 5<sup>th</sup> and 6<sup>th</sup> Streets**  
**City of Springfield, IL**

CMF	Benefit	Cost
<i>Convert Signal from Pedestal-Mounted to Mast Arm</i>	\$331,200	\$24,300
<i>Install Left Turn Lane</i>	\$285,500	\$176,250
<b>Total</b>	\$616,700	\$200,550
<b>Total B/C</b>	3.07	

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SECTION 5  
RAW CRASH DATA

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**Carpenter Street & 5<sup>th</sup> Street Crashes & Injuries by year (2016-2020)**

Year	Total	Fatal Crashes	Fatal Injuries	A-Injury Crashes	A-Injuries	B-Injury Crashes	B-Injuries	C-Injury Crashes	C-Injuries	Property Damage
2016	10	0	0	0	0	0	0	1	1	9
2017	14	0	0	3	6	1	3	1	2	9
2018	16	0	0	1	2	2	4	3	5	10
2019	21	0	0	0	0	5	7	2	3	14
2020	17	0	0	1	1	3	4	3	3	10
Total=	78	0	0	5	9	11	18	10	14	52

**Carpenter Street & 5<sup>th</sup> Street Raw Crash Data (2016-2020)**

Case ID	# Veh	Year	Month	Day	Hour	K	A	B	C	O	Collision Type
201601225558	2	16	9	26	23					1	Angle
201601362030	2	16	3	26	11					1	Turning
201601382201	2	16	4	20	13					1	Angle
201601430575	2	16	7	18	18					1	Angle
201601431496	2	16	7	11	14					1	Sideswipe Same direction
201601463967	2	16	9	8	10					1	Angle
201601467862	2	16	10	2	20					1	Front to Rear
201601488128	2	16	11	9	23					1	Angle
201601496901	2	16	12	6	12					1	Front to Rear
201601500738	2	16	12	22	11				1		Turning
201701365181	2	17	1	10	15					1	Angle
201701378457	2	17	3	1	9		3				Angle
201701388277	2	17	3	7	16		1				Angle
201701390548	2	17	3	24	13					1	Angle
201701435155	2	17	6	20	7			3			Angle
201701439939	2	17	4	27	12					1	Front to Rear
201701444886	2	17	7	19	16					1	Angle
201701451816	2	17	8	10	14					1	Angle
201701453249	2	17	8	15	15		2				Angle
201701454188	2	17	8	18	7				1		Angle
201701455937	2	17	8	24	17					1	Turning
201701462232	2	17	9	15	17					1	Turning
201701470159	2	17	10	16	14					1	Turning
201701485510	2	17	12	17	13					1	Angle
201801415554	2	18	1	25	8					1	Sideswipe Same direction
201801426836	2	18	3	12	23					1	Angle
201801427221	2	18	3	15	17			3			Angle
201801428428	2	18	3	21	8					1	Angle
201801429910	2	18	3	28	13					1	Angle
201801432114	2	18	4	7	9					1	Sideswipe Same direction
201801434963	2	18	4	19	13		2				Angle
201801436014	2	18	4	24	11					1	Angle
201801437521	2	18	5	1	11					1	Turning
201801451537	2	18	7	1	11					1	Angle
201801451850	2	18	6	29	20			1			Angle
201801462873	2	18	8	22	1					1	Angle



**Carpenter Street & 5<sup>th</sup> Street Raw Crash Data (2016-2020)**

Case ID	# Veh	Year	Month	Day	Hour	K	A	B	C	O	Collision Type
201801474768	2	18	10	8	11				1		Turning
201801489857	2	18	12	3	15				2		Angle
201801491993	2	18	12	11	12					1	Turning
201801493091	2	18	12	15	17				2		Turning
201901152293	2	19	1	11	10					1	Angle
201901175127	2	19	1	25	7					1	Turning
201901204749	2	19	2	27	13			1			Turning
201901244994	2	19	3	30	12				1		Angle
201901286385	2	19	5	23	4					1	Angle
201901290877	2	19	5	29	10			1			Angle
201901303298	2	19	6	19	8					1	Angle
201901313311	2	19	7	14	12					1	Angle
201901343496	2	19	8	15	20					1	Angle
201901392601	2	19	9	25	11			1			Turning
201901435268	2	19	9	10	9				2		Angle
201901456876	2	19	9	28	11			3			Angle
201901476885	2	19	10	26	12					1	Angle
201901479609	2	19	11	7	13					1	Front to Rear
201901480340	2	19	11	12	10			1			Angle
201901480417	2	19	11	12	15					1	Front to Rear
201901484233	2	19	12	7	11					1	Turning
201901485879	2	19	12	15	11					1	Angle
201901486927	2	19	12	20	19					1	Turning
202001095551	2	20	3	31	15			2			Angle
202001102892	2	20	1	2	7				1		Sideswipe Same direction
202001103616	2	20	4	21	8					1	Angle
202001103746	2	20	4	14	3					1	Angle
202001137237	2	20	6	4	8					1	Angle
202001155287	2	20	6	23	6			1			Angle
202001159949	1	20	6	28	9		1				Pedestrian
202001160707	2	20	2	22	16					1	Angle
202001199765	2	20	7	14	8					1	Angle
202001249281	2	20	9	21	12				1		Front to Rear
202001261264	2	20	10	6	6			1			Turning
202001267330	1	20	10	5	4				1		Pedalcyclist
202001270467	2	20	10	15	2					1	Angle
202001280573	2	20	10	26	1					1	Angle
202001297654	2	20	5	27	17					1	Turning
202001316282	2	20	11	28	10					1	Angle
202001316718	2	20	11	28	3					1	Angle
201901126992	2	19	3	19	7					1	Sideswipe Same Direction
201901389566	2	19	9	24	8					1	Front to Rear

**Carpenter Street & 6<sup>th</sup> Street Crashes & Injuries by year (2016-2020)**

Year	Total	Fatal Crashes	Fatal Injuries	A-Injury Crashes	A-Injuries	B-Injury Crashes	B-Injuries	C-Injury Crashes	C-Injuries	Property Damage
2016	6	0	0	1	2	0	0	1	2	4
2017	10	0	0	1	1	0	0	1	1	8
2018	8	0	0	0	0	2	2	2	2	4
2019	10	0	0	0	0	2	2	3	4	5
2020	4	0	0	0	0	1	1	1	1	2
Total=	38	0	0	2	3	5	5	8	10	23

**Carpenter Street & 6<sup>th</sup> Street Raw Crash Data (2016-2020)**

Case ID	# Veh	Year	Month	Day	Hour	K	A	B	C	O	Collision Type
201601359259	2	16	3	2	23					1	Turning
201601405205	2	16	6	7	11		2				Angle
201601440370	2	16	8	11	12				2		Angle
201601488796	2	16	11	19	14					1	Turning
201601498852	2	16	12	15	12					1	Front to Rear
201601502244	2	16	12	25	12					1	Angle
201701380648	2	17	2	26	10					1	Angle
201701387737	2	17	3	4	10					1	Angle
201701391079	2	17	3	30	14					1	Angle
201701406354	2	17	4	17	10					1	Turning
201701439647	2	17	7	3	10		1				Angle
201701445248	2	17	7	18	11				1		Angle
201701449699	2	17	8	3	15					1	Angle
201701452454	2	17	8	12	12					1	Angle
201701464620	2	17	9	22	11					1	Sideswipe Same Direction
201801340189	2	18	10	31	10				1		Angle
201801409860	2	18	1	8	19					1	Angle
201801439301	2	18	5	8	14					1	Front to Rear
201801439744	2	18	5	10	14				1		Angle
201801457254	2	18	7	26	10			1			Angle
201801494904	2	18	12	22	12					1	Angle
201901170806	2	19	1	21	14					1	Turning
201901198919	2	19	2	21	21			1			Angle
201901236327	1	19	3	21	16			1			Pedestrian
201901285223	2	19	5	20	13				2		Angle
201901303305	2	19	6	19	16					1	Angle
201901309239	2	19	6	28	13					1	Angle
201901452167	2	19	9	22	20					1	Angle
201901456376	2	19	9	27	11					1	Turning
201901474623	2	19	10	10	13				1		Rear to Side
202001142904	2	20	2	10	8				1		Angle
202001176584	2	20	7	14	1			1			Angle
202001239766	2	20	9	16	8					1	Front to Rear
202001308353	2	20	11	17	4					1	Front to Rear

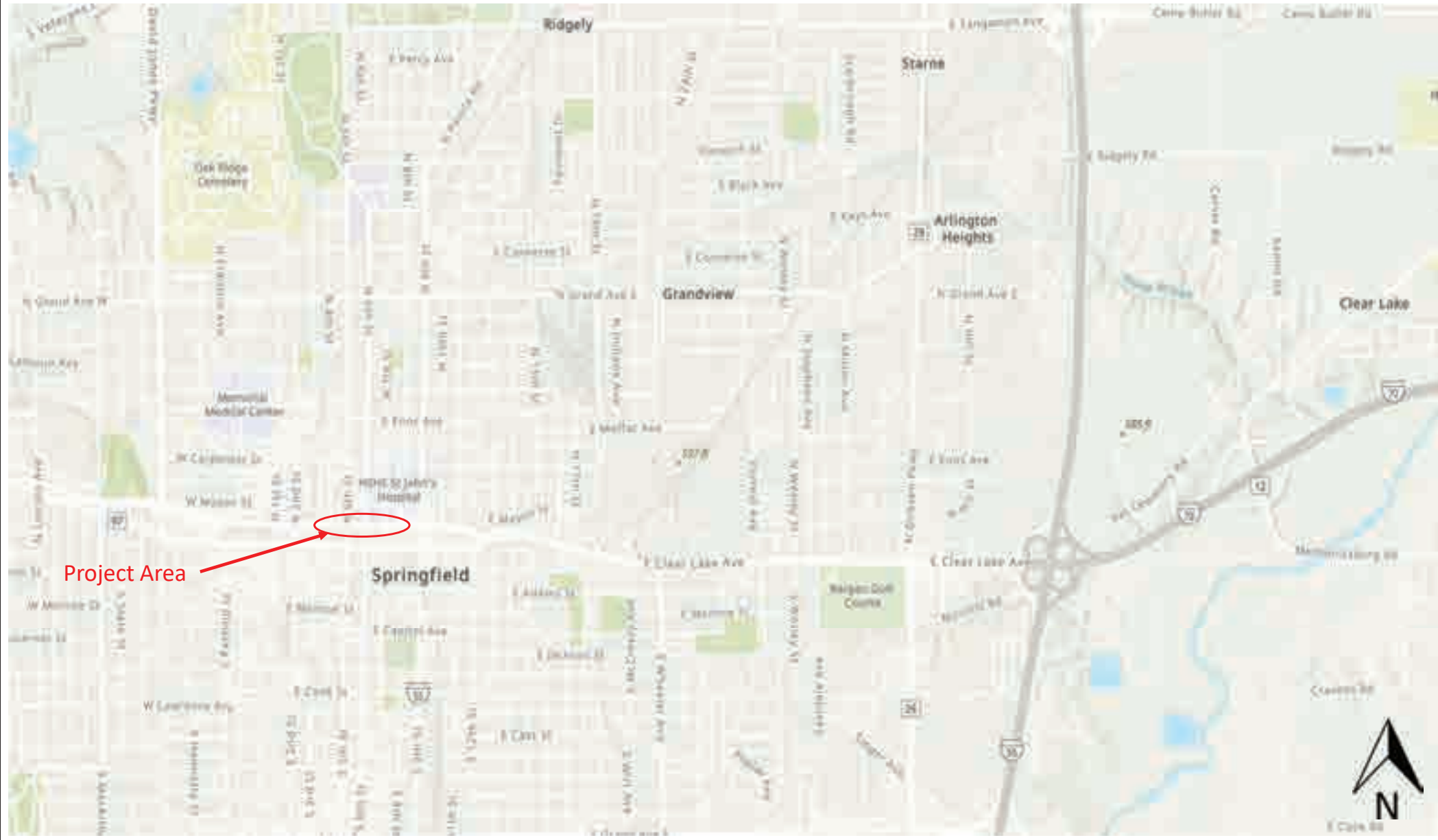
<b>Carpenter Street &amp; 6<sup>th</sup> Street Raw Crash Data (2016-2020)</b>											
<b>Case ID</b>	<b># Veh</b>	<b>Year</b>	<b>Month</b>	<b>Day</b>	<b>Hour</b>	<b>K</b>	<b>A</b>	<b>B</b>	<b>C</b>	<b>O</b>	<b>Collision Type</b>
201701454623	2	17	8	19	14					1	Turning
201801431697	2	18	4	5	11			1			Front to Rear
201901162113	1	19	1	12	14				1		Pedalcyclist
201801490184	2	18	12	4	15					1	Front to Rear

<b>COMBINED Carpenter Street &amp; 5<sup>th</sup> &amp; 6<sup>th</sup> Street Crashes &amp; Injuries by year (2016-2020)</b>										
<b>Year</b>	<b>Total</b>	<b>Fatal Crashes</b>	<b>Fatalities</b>	<b>A-Injury Crashes</b>	<b>A-Injuries</b>	<b>B-Injury Crashes</b>	<b>B-Injuries</b>	<b>C-Injury Crashes</b>	<b>C-Injuries</b>	<b>Property Damage</b>
2016	16	0	0	1	2	0	0	2	3	13
2017	24	0	0	4	7	1	3	2	2	17
2018	24	0	0	1	2	4	6	5	7	14
2019	31	0	0	0	0	7	9	5	7	19
2020	21	0	0	1	1	4	5	4	4	12
<b>Total</b>	<b>116</b>	<b>0</b>	<b>0</b>	<b>7</b>	<b>12</b>	<b>16</b>	<b>23</b>	<b>18</b>	<b>23</b>	<b>75</b>

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SECTION 6  
PROJECT LOCATION MAP

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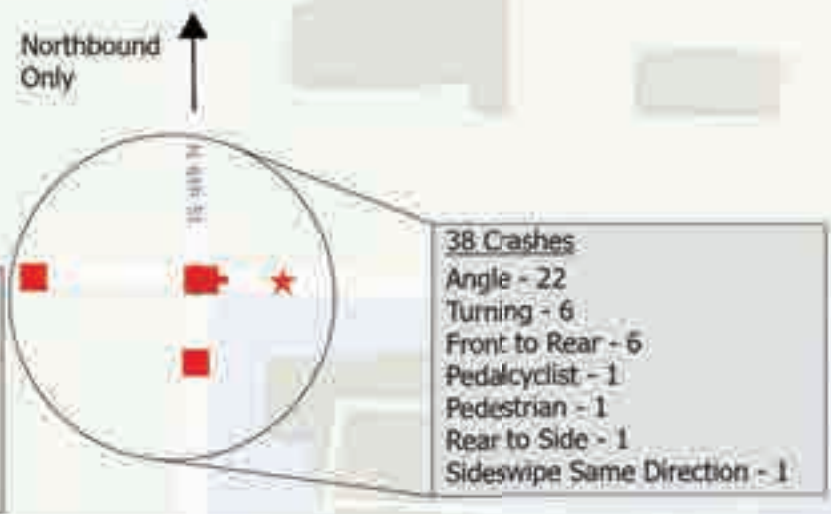
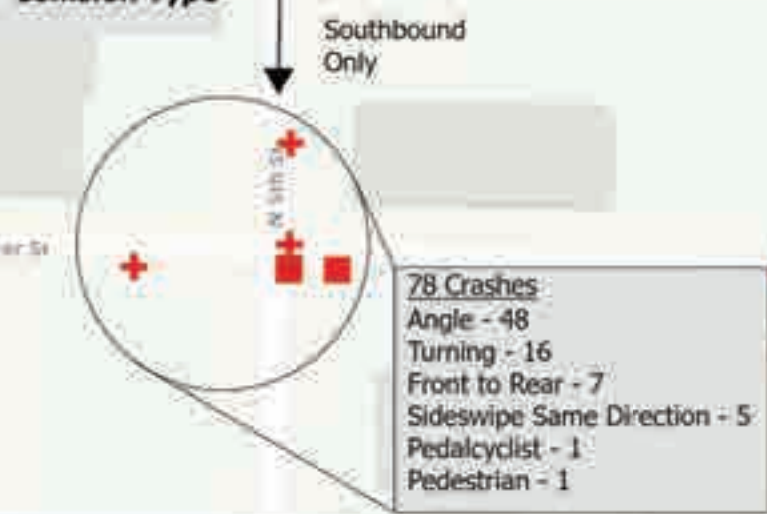


Project Area

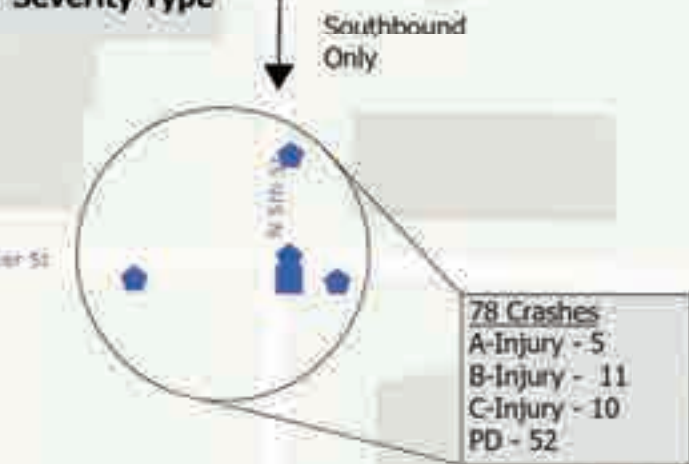




## Collision Type



## Severity Type



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0 0.01 0.03 0.05 Miles



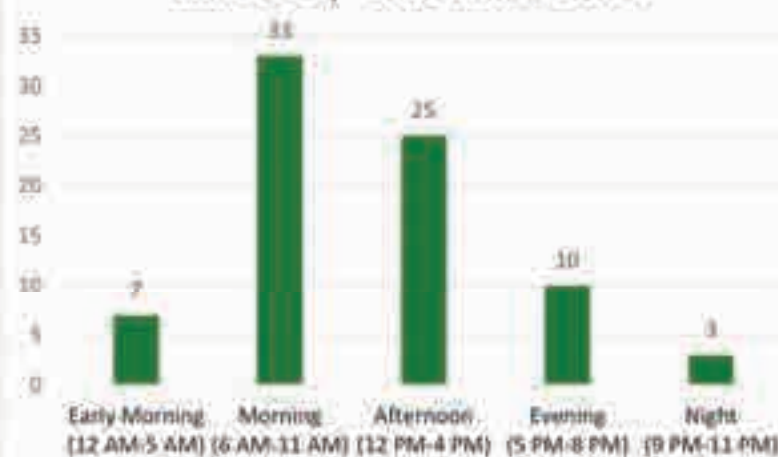
### Collision Type

- Angle
- Front to Rear
- ▲ Pedalcyclist
- ◆ Pedestrian
- ◊ Rear to Side
- + Sideswipe Same Direction
- ★ Turning

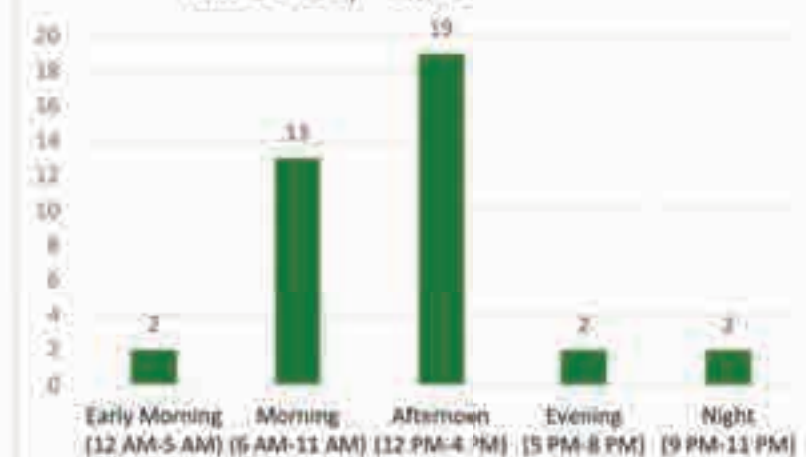
### Severity Type

- A-Injury
- B-Injury
- ▲ C-Injury
- ◆ PD

### Time of Day - 5th St Intersection



### Time of Day - 6th St Intersection



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SECTION 7  
PROJECT PHOTOGRAPHS

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Eastbound view of 5<sup>th</sup> Street at Carpenter Street. The westbound Carpenter Street queue extends the distance between 5<sup>th</sup> Street and 6<sup>th</sup> Street. In order to utilize the green time, it is not uncommon for the northbound 6<sup>th</sup> Street left turning vehicles (to westbound Carpenter) enter the queue and block the intersection during peak hours.



Westbound view of westbound Carpenter Street queue.



Carpenter Street at 6<sup>th</sup> Street with queuing in the eastbound and westbound approaches.

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SECTION 8  
ESTIMATED PROJECT COST BREAKDOWN

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**SPRINGFIELD, ILLINOIS - CARPENTER STREET INTERSECTION IMPROVEMENTS AT 5TH AND 6TH STREETS PROJECT**  
**PRELIMINARY OPINION OF PROBABLE CONSTRUCTION COSTS**

**DATE:** 6/14/2023

**Lochmueller Group**  
421-2002-PRJ01

PAY ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	TOTAL PRICE
20200100	EARTH EXCAVATION	1,963	CU YD	\$30.00	\$58,890.00
20201200	REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL	62	CU YD	\$30.00	\$1,863.00
25000110	SEEDING, CLASS 1A	0.305	ACRE	\$3,000.00	\$914.03
25000400	NITROGEN FERTILIZER NUTRIENT	27	POUND	\$5.00	\$137.10
25000500	PHOSPHORUS FERTILIZER NUTRIENT	27	POUND	\$5.00	\$137.10
25000600	POTASSIUM FERTILIZER NUTRIENT	27	POUND	\$5.00	\$137.10
25100115	MULCH, METHOD 2	0.61	ACRE	\$3,300.00	\$2,010.86
28000250	TEMPORARY EROSION CONTROL SEEDING	30	POUND	\$18.00	\$548.42
28000500	INLET AND PIPE PROTECTION	36	EACH	\$180.00	\$6,480.00
30300001	AGGREGATE SUBGRADE IMPROVEMENT	80	CU YD	\$150.00	\$12,000.00
31102500	SUBBASE GRANULAR MATERIAL, TYPE C 8"	2,204	SQ YD	\$45.00	\$99,180.00
35100300	AGGREGATE BASE COURSE, TYPE A 4"	2,777	SQ YD	\$9.00	\$24,988.50
35100700	AGGREGATE BASE COURSE, TYPE A 8"	318.7	SQ YD	\$12.00	\$3,824.40
35300300	PORTLAND CEMENT CONCRETE BASE COURSE 8"	1,415.0	SQ YD	\$89.00	\$125,935.00
35650600	BASE COURSE WIDENING (VARIABLE DEPTH)	1,415.0	SQ YD	\$55.00	\$77,825.00
40201000	AGGREGATE FOR TEMPORARY ACCESS	100	TON	\$33.00	\$3,300.00
40603085	HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N70	1,896	TON	\$186.00	\$352,607.64
40604012	HOT-MIX ASPHALT SURFACE COURSE, IL-9.5FG, MIX "D", N70	626	TON	\$188.00	\$117,611.71
40700100	BITUMINOUS MATERIALS (TACK COAT)	10,155	POUND	\$7.50	\$76,165.65
42300400	PORTLAND CEMENT CONCRETE DRIVEWAY PAVEMENT, 8 INCH	115.2	SQ YD	\$125.00	\$14,400.00
42400200	PORTLAND CEMENT CONCRETE SIDEWALK 5 INCH	3,156.0	SQ FT	\$8.00	\$25,248.00
42400800	DETECTABLE WARNINGS	240.0	SQ FT	\$55.00	\$13,200.00
44000100	PAVEMENT REMOVAL	438.0	SQ YD	\$11.00	\$4,818.00
44000200	DRIVEWAY PAVEMENT REMOVAL	350.2	SQ YD	\$12.00	\$4,202.40
44000500	COMBINATION CURB AND GUTTER REMOVAL	337.4	FOOT	\$19.00	\$6,410.60
44000600	SIDEWALK REMOVAL	3,608	SQ FT	\$3.00	\$10,824.00
44	HOT-MIX ASPHALT SURFACE REMOVAL, VARIABLE DEPTH	6,107.5	SQ YD	\$12.00	\$73,290.40
44201039	CLASS B PATCHES, TYPE I, 16 INCH	10	SQ YD	\$380.00	\$3,800.00
44201043	CLASS B PATCHES, TYPE II, 16 INCH	127	SQ YD	\$380.00	\$48,260.00
44201047	CLASS B PATCHES, TYPE III, 16 INCH	29	SQ YD	\$380.00	\$11,020.00
44201048	CLASS B PATCHES, TYPE IV, 16 INCH	179	SQ YD	\$380.00	\$68,020.00
44213200	SAW CUTS	700	FOOT	\$7.00	\$4,900.00
54248510	CONCRETE COLLAR	2.4	CU YD	\$850.00	\$2,040.00
550A0340	STORM SEWERS, CLASS A, TYPE 2 12"	134.0	FOOT	\$70.00	\$9,380.00
550A2520	STORM SEWERS, RUBBER GASKET, CLASS A, TYPE 2 12"	8.0	FOOT	\$95.00	\$760.00
60236800	INLETS, TYPE A, TYPE 11 FRAME AND GRATE	10	EACH	\$2,200.00	\$22,000.00
60237000	INLETS, TYPE B, TYPE 15 FRAME AND LID	12	EACH	\$1,850.00	\$22,200.00
60240215	INLETS, TYPE B, TYPE 1 FRAME, CLOSED LID	7	EACH	\$2,600.00	\$18,200.00
60240310	INLETS, TYPE B, TYPE 11 FRAME AND GRATE	12	EACH	\$2,800.00	\$33,600.00
60255600	MANHOLES TO BE ADJUSTED WITH NEW TYPE 1 FRAME, CLOSED LID	2	EACH	\$2,500.00	\$5,000.00
60266600	VALVE BOXES TO BE ADJUSTED	11	EACH	\$300.00	\$3,300.00
60500040	REMOVING MANHOLES	1	EACH	\$600.00	\$600.00
60500060	REMOVING INLETS	16	EACH	\$500.00	\$8,000.00
60603800	COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.12	2,293.4	FOOT	\$49.00	\$112,376.60
67100100	MOBILIZATION	1	L SUM	\$15,000.00	\$15,000.00
70300100	SHORT TERM PAVEMENT MARKING	347	FOOT	\$2.00	\$693.76
70300150	SHORT TERM PAVEMENT MARKING REMOVAL	116	SQ FT	\$8.00	\$925.01
70300221	TEMPORARY PAVEMENT MARKING - LINE 4"- PAINT	4,451	FOOT	\$1.50	\$6,677.10
72000100	SIGN PANEL - TYPE 1	281.0	SQ FT	\$50	\$14,050.00
72400310	REMOVE SIGN PANEL - TYPE 1	90.0	SQ FT	\$12	\$1,080.00
72900100	METAL POST - TYPE A	56.0	FOOT	\$17.00	\$952.00
78009000	MODIFIED URETHANE PAVEMENT MARKING - LETTERS AND SYMBOLS	103.0	SQ FT	\$23.00	\$2,369.00
78009004	MODIFIED URETHANE PAVEMENT MARKING - LINE 4"	3,236	FOOT	\$3.65	\$11,811.40
78009012	MODIFIED URETHANE PAVEMENT MARKING - LINE 12"	1021	FOOT	\$11.00	\$11,235.40
78009024	MODIFIED URETHANE PAVEMENT MARKING - LINE 24"	194	FOOT	\$35.00	\$6,790.00
78300202	PAVEMENT MARKING REMOVAL - WATER BLASTING	2,084	SQ FT	\$1.00	\$2,083.80
81028350	UNDERGROUND CONDUIT, PVC, 2" DIA.	620	FOOT	\$28.00	\$17,360.00
81028370	UNDERGROUND CONDUIT, PVC, 3" DIA.	750	FOOT	\$32.00	\$24,000.00
81400730	HANDHOLE, COMPOSITE CONCRETE	11	EACH	\$1,500.00	\$16,500.00
81400740	DOUBLE HANDHOLE, COMPOSITE CONCRETE	2	EACH	\$2,500.00	\$5,000.00
81702130	ELECTRIC CABLE IN CONDUIT, 600V (XLP-TYPE USE) 1/C NO. 6	1,300	FOOT	\$4.00	\$5,200.00
83600352	LIGHT POLE FOUNDATION, METAL, 11 1/2" BOLT CIRCLE, 8 5/8" X 6'	5	EACH	\$1,500.00	\$7,500.00
84200804	REMOVAL OF POLE FOUNDATION	5	EACH	\$500.00	\$2,500.00
87301215	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C	2,600	FOOT	\$1.50	\$3,900.00
87301225	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	2,600	FOOT	\$2.00	\$5,200.00
87301245	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	4,580	FOOT	\$2.50	\$11,450.00
87301255	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C	1,700	FOOT	\$3.00	\$5,100.00
87301705	ELECTRIC CABLE IN CONDUIT, COMMUNICATION NO. 18 3 PAIR	340	FOOT	\$5.00	\$1,700.00
87301805	ELECTRIC CABLE IN CONDUIT, SERVICE, NO. 6 2 C	500	FOOT	\$3.50	\$1,750.00
87301900	ELECTRIC CABLE IN CONDUIT, EQUIPMENT GROUNDING CONDUCTOR, NO. 6 1C	1,000	FOOT	\$3.00	\$3,000.00
87502640	TRAFFIC SIGNAL POST, ALUMINUM 10 FT.	6	EACH	\$2,000.00	\$12,000.00
87502690	TRAFFIC SIGNAL POST, ALUMINUM 15 FT.	6	EACH	\$2,500.00	\$15,000.00
87700240	STEEL MAST ARM ASSEMBLY AND POLE, 40 FT.	1	EACH	\$16,000.00	\$16,000.00
87700250	STEEL MAST ARM ASSEMBLY AND POLE, 42 FT.	1	EACH	\$17,000.00	\$17,000.00
87700260	STEEL MAST ARM ASSEMBLY AND POLE, 44 FT.	1	EACH	\$19,000.00	\$19,000.00
87700270	STEEL MAST ARM ASSEMBLY AND POLE, 46 FT.	1	EACH	\$21,000.00	\$21,000.00
87700310	STEEL MAST ARM ASSEMBLY AND POLE, 54 FT.	1	EACH	\$28,000.00	\$28,000.00
87700404	STEEL MAST ARM ASSEMBLY AND POLE, 62 FT.	1	EACH	\$35,000.00	\$35,000.00
87800100	CONCRETE FOUNDATION, TYPE A	36	FOOT	\$300.00	\$10,800.00
87800415	CONCRETE FOUNDATION, TYPE E 36-INCH DIAMETER	67	FOOT	\$350.00	\$23,450.00



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SECTION 9  
PROJECT TIMELINE

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**FY 2025 Highway Safety Improvement Program**  
**Carpenter Street Intersection Improvements at 5<sup>th</sup> and 6<sup>th</sup> Streets**  
**City of Springfield, IL**

<b>Stage</b>	<b>Start Date</b>	<b>Completion Date</b>
<b><i>NTP</i></b>	December 2022	December 2022
<b><i>Traffic Data Collection and Survey</i></b>	January 2023	March 2023
<b><i>Phase I &amp; II Engineering</i></b>	March 2023	July 2024
<b><i>Proposed Letting</i></b>	November 2024	November 2024
<b><i>Construction</i></b>	May 2025	October 2025

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SECTION 10  
PROJECT NARRATIVE

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## City of Springfield FY 2025 Highway Safety Improvement Project Narrative Carpenter Street Intersection Improvements at N 5<sup>th</sup> and N 6<sup>th</sup> Streets Project

### History

Carpenter Street is a local, minor arterial that runs east-west just north of Downtown Springfield. It extends from N Walnut Street on the west to 19<sup>th</sup> Street approximately two miles to the east carrying between two and four lanes. The eastern section is bounded by residential neighborhoods. The western and middle sections are surrounded by residential areas, businesses, and also two large medical campuses which are major employment centers within the City. Accordingly, Carpenter Street services exceptionally heavy traffic at the start and conclusion of the typical business day.

Between the medical campuses, N 5<sup>th</sup> Street and N 6<sup>th</sup> Street intersect with Carpenter Street with one block (approximately 0.1 mile) between them. In combination they serve as a one-way coupler throughout Springfield. N 5<sup>th</sup> Street is a southbound-only minor arterial, and N 6<sup>th</sup> Street is a northbound-only minor arterial.

The Carpenter Street 2022 average annual daily traffic (AADT) ranges from 4,750 to 8,500 vehicles per day (vpd), and the section from 4<sup>th</sup> Street to 9<sup>th</sup> street services the highest AADT throughout the corridor. Furthermore, this section is heavily traveled by vulnerable road users (VRU) and services multiple mass transit routes.

According to the 2022 Local Safety Tiers (released in 2023), the N 5<sup>th</sup> Street intersection was rated High and the N 6<sup>th</sup> Street intersection was rated Medium. Both were flagged at 95% for Angle crashes. Furthermore, both intersections were identified for their angle crash representations as part of the Sangamon County Intersection Initiative.

### Crashes

In reviewing crash data for the years 2016-2020, it is evident why the two intersections landed on the Safety Tier and intersection initiative lists. Over the five-year study period, there have been 78 total crashes at the intersection of Carpenter Street at 5<sup>th</sup> Street, and 38 total crashes at the intersection of Carpenter Street at 6<sup>th</sup> Street. Both intersections experienced 1 pedal cyclist and 1 pedestrian crash during the analysis period.

The 78 crashes at the intersection of Carpenter at 5<sup>th</sup> Street include 48 angle crashes, 16 turning crashes, 7 front to rear crashes, 5 sideswipe same direction crashes, along with the 1 pedestrian and pedal cyclist crash. Of these crashes, 5 were A-injury crashes, 11 were B-injury crashes, 10 were C-injury crashes, and 52 resulted in property damage only. 74% of the crashes occurred between 6am and 4pm, and the majority also occurred during clear weather, indicating a need for geometric, conspicuity, and operational improvements.

The intersection of Carpenter Street at 6<sup>th</sup> Street experienced 38 total crashes, made up of 22 angle crashes, 6 turning and front to rear crashes, and 1 each of sideswipe same direction, front to side, pedestrian, and pedal cyclist. Of these crashes, 2 were A-injury crashes, 5 were B-injury crashes, 8 were C-injury crashes, and 23 were property damage only crashes. 84% of the crashes occurred between 6am

and 4pm, and, as was documented at the adjacent intersection, the vast majority occurred during clear weather again indicating a need for geometric, conspicuity, and operational improvements.

## Safety Improvements

To reduce the number of crashes, in particular the significant number of angle crashes, the proposed project will reconstruct the N 5<sup>th</sup> Street and N 6<sup>th</sup> Street intersections with Carpenter Street and incorporate the following improvements:

- Install a dedicated left turn lane for west to south left turning traffic at Carpenter Street & N 5<sup>th</sup> Street,
- Install a dedicated left turn lane for east to north left turning traffic at Carpenter Street & N 6<sup>th</sup> Street,
- Install signal mast arms with signal heads for each movement on all approaches to replace the existing pedestal mounted signals,
- Install pedestrian countdown timer pedestrian signal heads across all legs of the intersection of Carpenter Street & N 5<sup>th</sup> Street and the intersection of Carpenter Street & N 6<sup>th</sup> Street,
- Adjust signal timings such that all red and yellow clearance intervals satisfy current standards,
- Provide retroreflective back plates on all vehicle signal heads, and
- Implement crosswalk markings and Americans with Disabilities Act (ADA) accessibility updates as required. Pedestrian signals will also be fully ADA compliant.
- Either protected only turn phasing or flashing yellow arrow permissive/protected turn phasing will be provided for westbound left turns at Carpenter Street & N 5<sup>th</sup> Street, and eastbound left turns at Carpenter Street & N 6<sup>th</sup> Street, as determined by the capacity analysis results.
- Additionally, fiber optic installation connecting at 4<sup>th</sup> Street/7<sup>th</sup> Street along Carpenter Avenue will facilitate signal interconnectivity and improve traffic signal management and operations into the future.

The benefit-cost ratio for the 5-year analysis period was calculated to be 3.07.

The total estimated cost for this project is \$2,229,101.00, and the City of Springfield is prepared to provide the local match of 10% (\$222,910.10) for these improvements. The City of Springfield is requesting \$2,006,190.90, 90% of the improvement cost, in funding from the Highway Safety Improvement Program.

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SECTION 11  
BLR 04101 – LRS RISK ASSESSMENT

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**Local Roads & Streets Federal Funds Application  
Risk Assessment**

Local Public Agency

City of Springfield

Risk Factor	Description	Definition of Scale (time frames are based on LPA fiscal year)	Points
General History of Performance	Have there been any changes in key organizational staff or leadership, such as Fiscal and Administrative Management, Transportation Related Program/Project Management, and/or Elected Officials?	<b>0 points</b> - No significant changes in the last 4 or more years; <b>1 point</b> - Minor changes, but majority of key staff and officials have not changed in the last 4 years; <b>2 points</b> - Significant key staff or elected leadership changes within the last 3 years; <b>3 points</b> - Significant key staff and elected leadership changes within the last 3 years.	■
	What is the LPA's history with federal-aid funded transportation projects?	<b>0 points</b> - One or more federal-aid funded transportation projects per year; <b>1 point</b> - At least one project within the past three years; <b>2 points</b> - At least one project within the past 5 years; <b>3 points</b> - None or more than 5 years	■
	Does LPA have qualified technical staff with experience managing federal-aid funded transportations through IDOT?	<b>0 points</b> - Full-time employee with experience designated as being in "responsible charge"; <b>1 point</b> - LPA has qualified technical staff, but will be utilizing an engineering consultant to manage day-to-day with LPA technical staff oversight; <b>2 points</b> - LPA has no technical staff and all technical work will be completed by consultant, but LPA staff has prior experience with federal-aid projects; <b>3 points</b> - LPA staff have no prior experience or technical expertise and relying solely on consultant.	■
	Has the LPA been untimely in submitting invoicing, reporting on federal-aid projects as required in <a href="#">2 CFR 200</a> , and or audits as required?	<b>0 points</b> - No; <b>1 point</b> - Delays of 6 or more months; <b>2 points</b> - Delays of up to 1 year; <b>3 points</b> - 1 year or more years of delay.	■
Financial Controls	Are the annual financial statements prepared in accordance with Generally Accepted Accounting Principles or on a basis acceptable by the regulatory agency?	<b>0 points</b> - Yes; <b>3 points</b> - no	■
	What is the LPA's accounting system?	<b>0 points</b> -Automated accounting software; <b>1 point</b> - Spreadsheets; <b>2 points</b> - Paper only; <b>3 points</b> - None.	■
	Does the organization have written policies and procedures regarding proper segregation of duties for fiscal activities that include but are not limited to: a) authorization of transactions; b) record keeping for receipts and payments; and c) cash management?	<b>0 points</b> - Yes; <b>3 points</b> - no	■
Audits	When was the last time a financial statement audit was conducted?	<b>0 points</b> - In the past year; <b>1 point</b> - In the past 2 years; <b>2 points</b> - In the past three years; <b>3 points</b> - 4 years or more or never.	■
	What type of financial statement audit has the organization had conducted?	<b>0 points</b> - Single Audit/Program Specific Audit in accordance with <a href="#">2 CFR 200.501</a> or Financial audit conducted in accordance with Generally Accepted Auditing Standards or Generally Accepted Government Auditing Standards; <b>1 point</b> -Financial review; <b>3 points</b> - Other type or none	■
	Did the most recent audit disclose findings considered to be significant deficiencies or material weaknesses?	<b>0 points</b> - No; <b>3 points</b> - yes, or no audits required	■
	Have the findings been resolved?	<b>0 points</b> - Yes or no findings; <b>1 point</b> - In progress; <b>3 points</b> - No	■

Summary of Risk	
General History of Performance	■
Financial Controls	■
Audits	■
Total	■

Completed By

Ramona Metzger

Title/Role

Director- Office of Budget & Management

Signature & Date

[Redacted Signature and Date]

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SECTION 12  
BoBS 2831 – DISCLOSURE OF CONFLICT OF  
INTEREST

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Uniform Grant Agreement Affidavit of Disclosure of Conflicts of Interest-Grantee



00.000 0148

Agreement No.

[Empty text box]

Employee Name

Misty Buscher

Position of Employee

Mayor

Grantee's disclosure of the information contained in this Form is required by the Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards published in Title 2, Part 200 of the Code of Federal Regulations, 2 CFR 200.112, and 44 Ill. Admin Code 7000.40(b)(3). As an Employee or Officer of Grantee, I will remain bias-free before, during and after the award process of the Grant Agreement. Pursuant to the above referenced Uniform Guidance and Administrative Rules, I have identified below any relationship I have, or have had, of a family, political, financial, or social nature with any of Grantor's employees related to this Grant Agreement, and wait for direction from the Grants Unit Manager and the Department's Ethics Officer before proceeding to participate with Grantor in the award process. After submittal of this Disclosure to the Department's Bureau of Business Services, the Bureau of Business Services will provide this form to the Ethics Officer if a conflict is noted.

Check statement 1 or 2. If you check statement 1, please sign and date the form. If you check statement 2, please complete the information and then sign and date the form.

- 1. I do not have, nor have I had, any relationship described above nor any other conflict of interest with any of Grantor's employees for this Grant Agreement.
- 2. I have, or have had, a relationship described above or other conflict of interest with the following employees of Grantor for this Grant Agreement

Name of Grantor's employee or officer

[Empty text box]

Nature of Potential Conflict

[Empty text box]

By checking this box and typing my name below, I verify this document has been reviewed and approved by the owner and myself.

[Redacted signature area]