



Illinois Department
of Transportation

Statewide Planning and Research Funds

Call for Projects SFY25



Illinois Department of Transportation
Bureau of Planning, March 13, 2024

Source of Funding

- SPR funds are a set-a-side from federal transportation funds
- Federal funds require 20% match
 - State match can be provided in some instances
- Approximately \$7 million is available
- No project size limit
- Multiple years of funding can be awarded

Eligibility of Funds

Eligible

- Planning studies
- Data purchase, collection, and/or analysis
- Program development activities
- Performance management activities
- Coordination/outreach activities
- Software



Eligibility of Funds

- Multi-Modal Planning

- Highways

- Active Transportation

- Rail (Passenger & Freight)

- Transit

- Air & Water

- As it relates to surface transportation and/or freight

- Possible reduced federal amount

Who Can Apply?

Government Agencies

- ✓ IDOT
- ✓ Other State Agencies
- ✓ Counties
- ✓ Municipalities
- ✓ Metropolitan Planning Organizations
- ✓ Governmental Councils
- ✓ Park Districts
- ✓ Forest Preserve Districts
- ✓ Universities

Private Entities and Not-for-Profits must have a public sponsor.

What can you do with the funds?

- Support Internal Agency Staff
- Hire a Consultant for Assistance*
- Purchase Data*
- Purchase Equipment*
- Purchase Software*

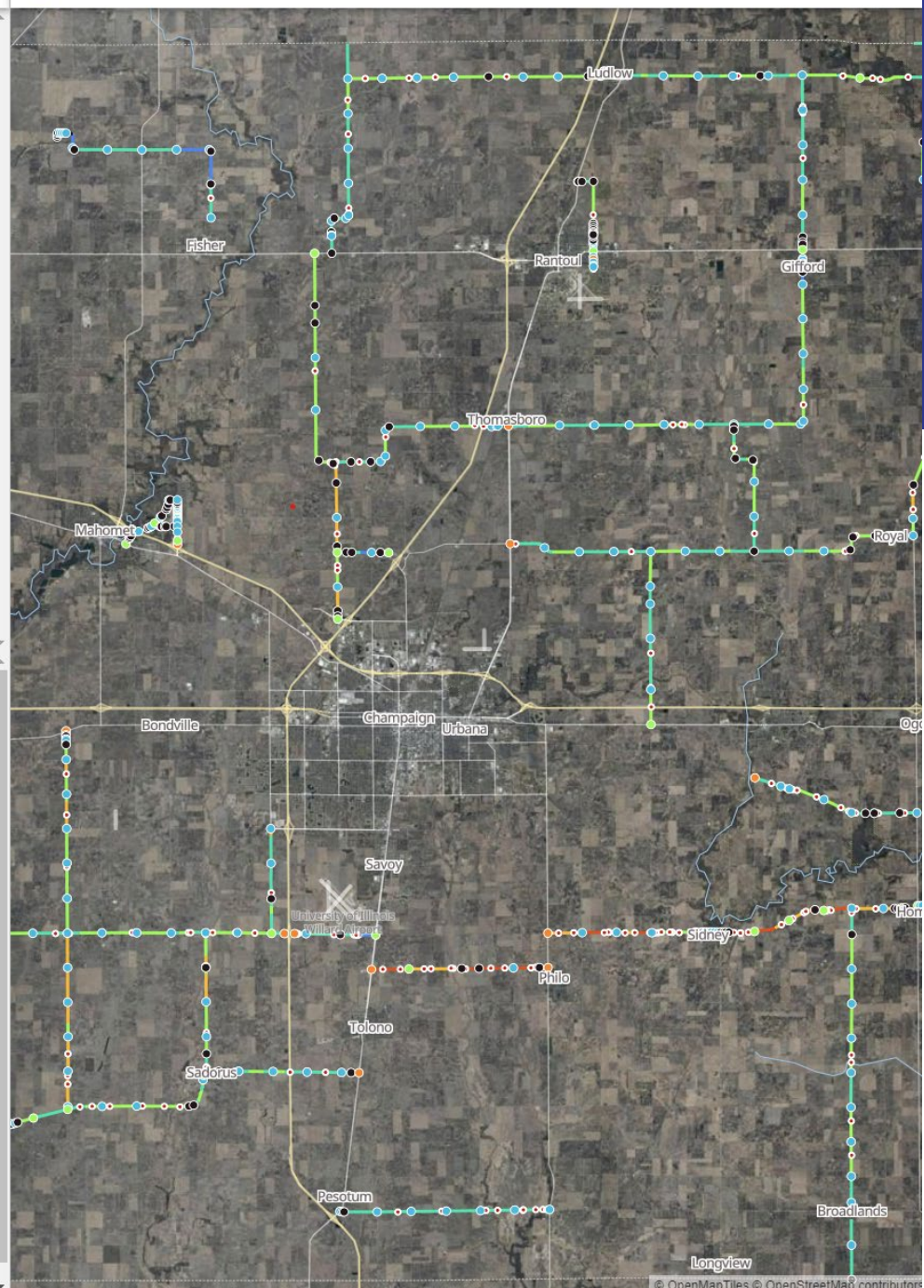
Not for standard agency operation/administration

*Must follow federal and state procurement rules.

- Intersections
- Segments
- Selected Countermeasures

Study Area Overview

Total Project Benefit	\$0.00
Total Project Cost	\$0.00
Benefit-Cost Ratio	NaN
Roadway Length (miles)	0.00
Number of Intersections	0
Risk Factors Present	0
Five-year crashes	0
Animal Crashes	0
Wet Pavement Crashes	0
Darkness Crashes	0
Five-year Fatalities	0
Five-year A-injuries	0
Five-year B-injuries	0
Five-year C-injuries	0



Champaign County Systemic Safety Evaluation Tool (SSET)

Rita Morocoima-Black
Champaign County
Regional Planning Commission

FY25 IDOT SPR Grants Webinar
March 13, 2024



PEOPLE.
POSSIBILITIES.

SSET Funding

- Funding: FY21 IDOT Statewide Planning & Research Funds (SPR)
- Total Cost: \$380,093.75
 - Federal: \$284,071.87
 - State: \$71,017.97
 - Local: \$25,003.91
- CCRPC in collaboration with the Champaign County Highway Department

SSET Timeline

- Original Agreement 's Term: Sept. 2020 – Aug. 2022
- Agreement signed: December 2020
- Project Started: January 2021
- Agreement Amended: May 2022
- Amended Agreement 's Term: Sept. 2020 – Aug. 2023
- Project Ended: July 2023

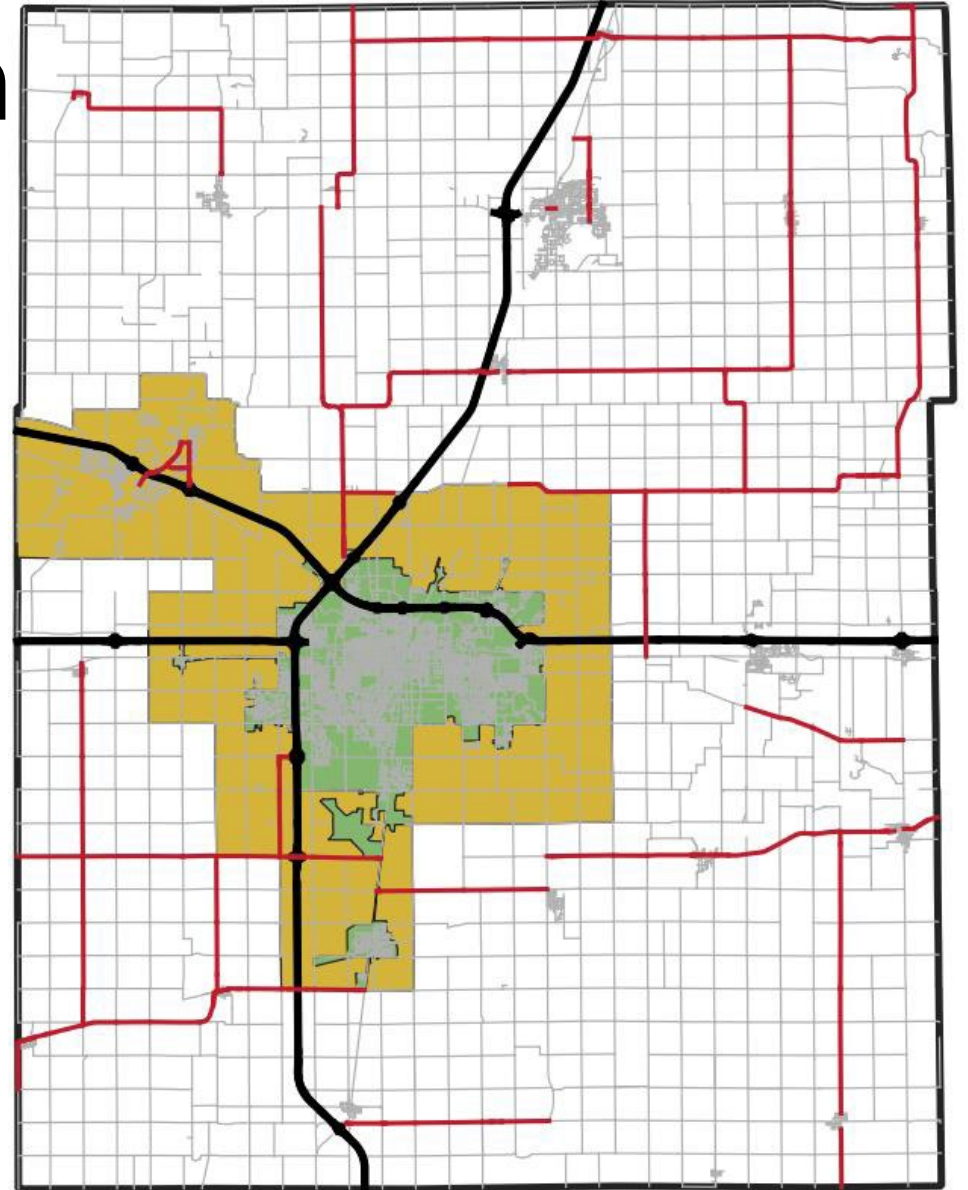
SSET Project Scope

- **Project Description**
- **Motivation or Need for the Project**
- **Project Tasks:**
 1. Crash and highway geometry data preparation
 2. Risk assessment development
 3. IDOT B/C analysis tool conversion
 4. Web application development
 5. Web app deployment
- **Potential Applicability**

SSET Project Description

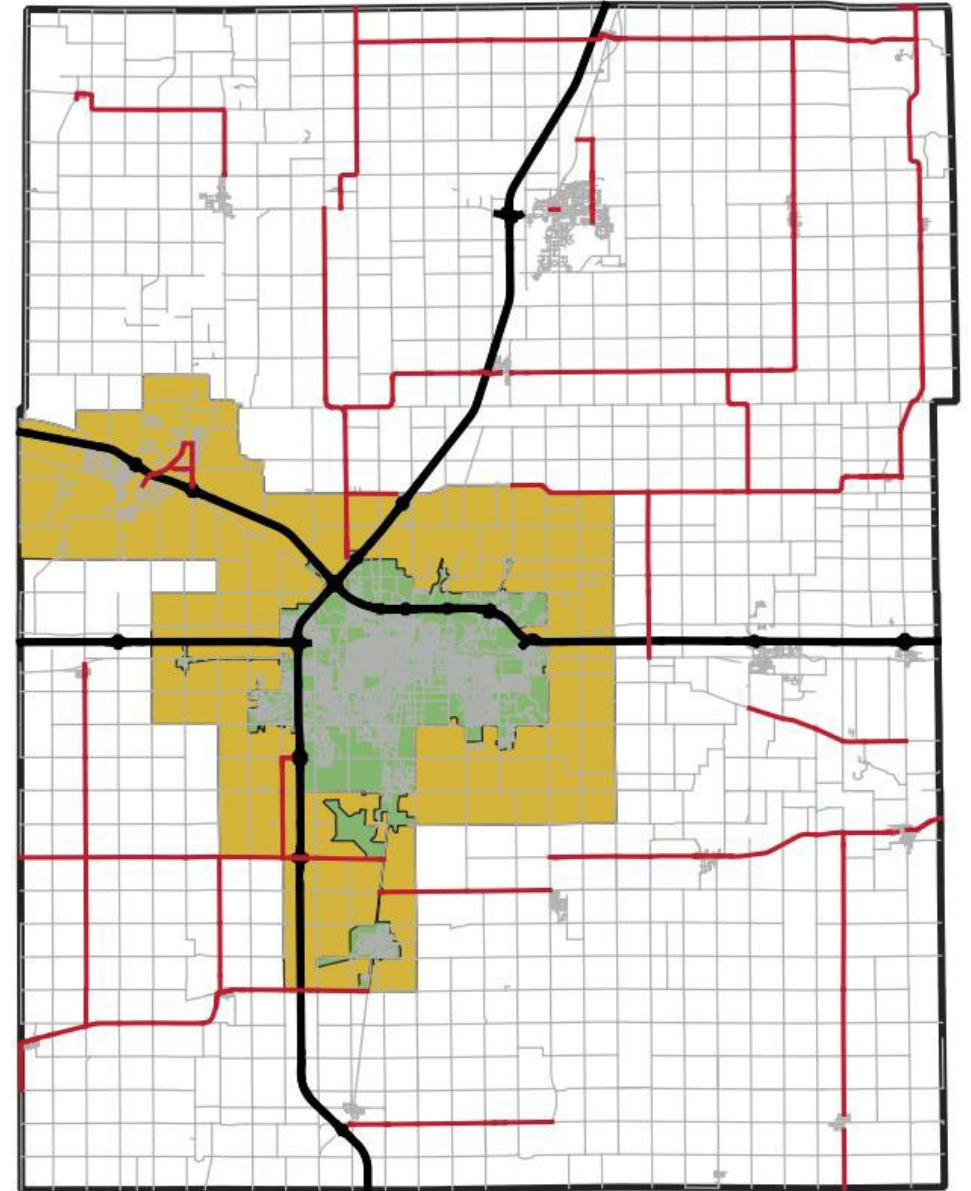
A web application that allows engineers and planners to:

- Visualize systemic crash risks
- Select corridors for analysis
- Explore potential countermeasures
- Estimate the benefit/cost ratio of safety improvement projects →
Develop automatic HSIP applications



SSET Project Description

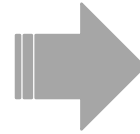
- Generate reports for HSIP applications
 - Application form
 - Benefit to Cost summary table
 - Raw crash data table
 - Project location map
 - Project timeline template
 - Project narrative (tables and charts)
- Using the Champaign County Highway Department roadway network as a demonstration project



SSET Motivation



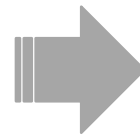
Site-specific roadway safety analysis



Systemic safety approach



Fragmented crash and roadway geometry data analysis and HSIP grant preparation process



Streamlined risk assessment, project selection, B/C analysis, and report generation process

SSET Motivation



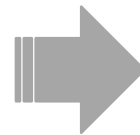
Site-specific roadway safety analysis



Systemic safety approach



Fragmented crash and roadway geometry data analysis and HSIP grant preparation process



Streamlined risk assessment, project selection, B/C analysis, and report generation process

SSET Motivation



Site-specific roadway safety analysis

- Locations with a history of severe crashes.
- Very few locations in rural areas experience a high number of sustained occurrences of severe crashes.
- Limited in its ability to identify safety issues on rural roadways with low density crashes, **where most of the crashes happen.**



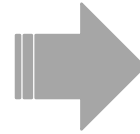
Systemic safety approach (crash history and crash risk)



SSET Motivation



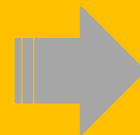
Site-specific roadway safety analysis



Systemic safety approach



Fragmented crash and roadway geometry data analysis and HSIP grant preparation process



Streamlined risk assessment, project selection, B/C analysis, and report generation process

SSET Motivation



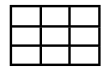
- Fragmented crash and roadway geometry data analysis and HSIP grant preparation process



- Collect crash and roadway geometry data



- Analyze data stored in various formats using multiple tools



- Use B/C tool such as the IDOT B/C spreadsheet to calculate project feasibility



- Compile all the information and develop an HSIP grant application



Requires substantial time and technical capability from staff to prepare a well-researched application to compete for local HSIP grant funds



- Streamlined risk assessment, project selection, B/C analysis and report generation



- Visualize systemic crash risks



Select corridors for



analysis



- Explore potential countermeasures



Estimate the benefit/cost ratio of safety

- improvement projects

- Generate reports for HSIP applications

SSET Project Tasks

1. Crash and highway geometry data preparation
2. Risk assessment development
3. IDOT B/C analysis tool conversion
4. Web application development
5. Web app deployment

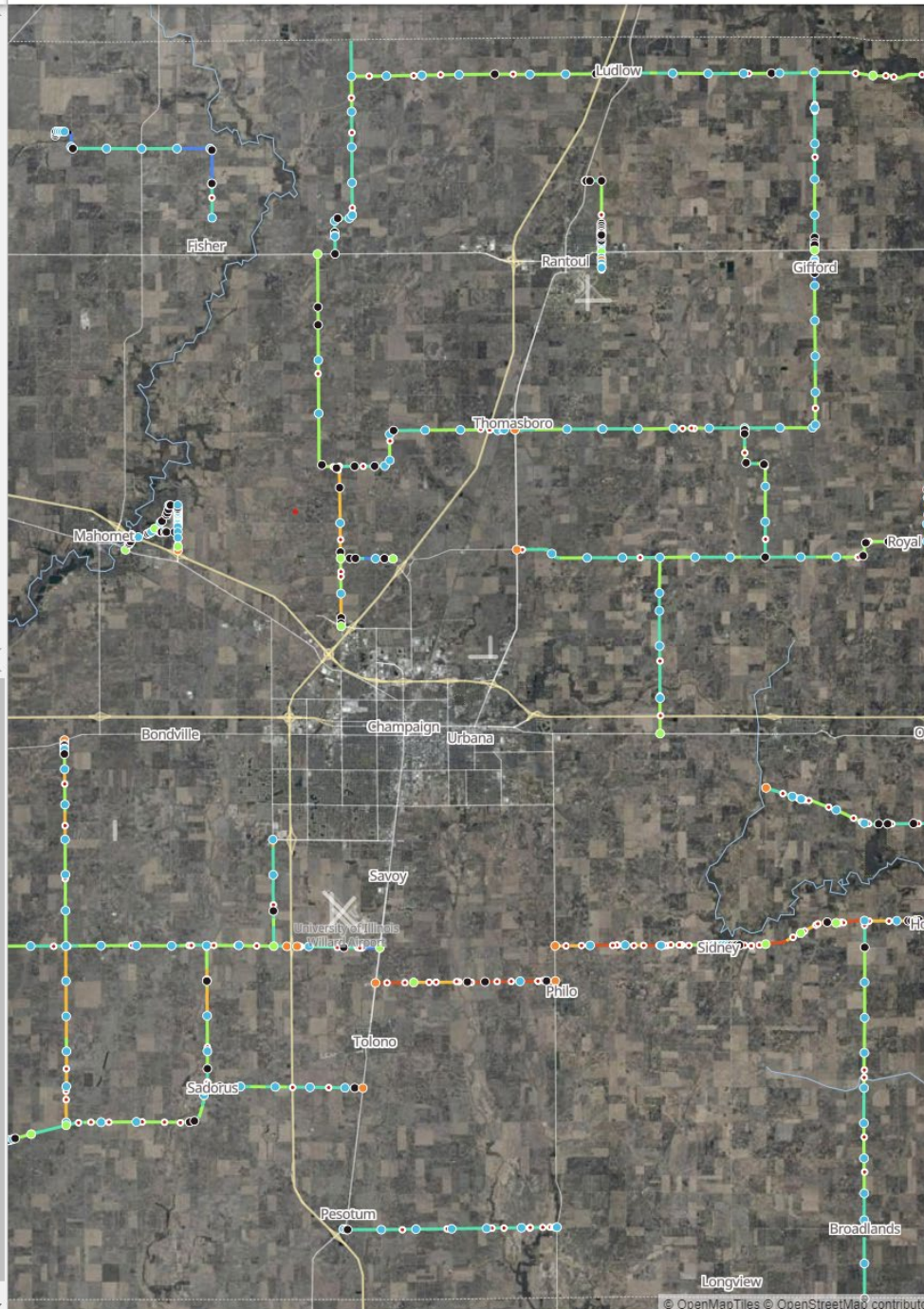
SSET Project Deliverables

1. Risk Assessment
2. Corridor Selection
3. Countermeasure Selection and Cost-Benefit Analysis
4. Report Generation
5. User Documentation

- Intersections
- Segments
- Selected Countermeasures

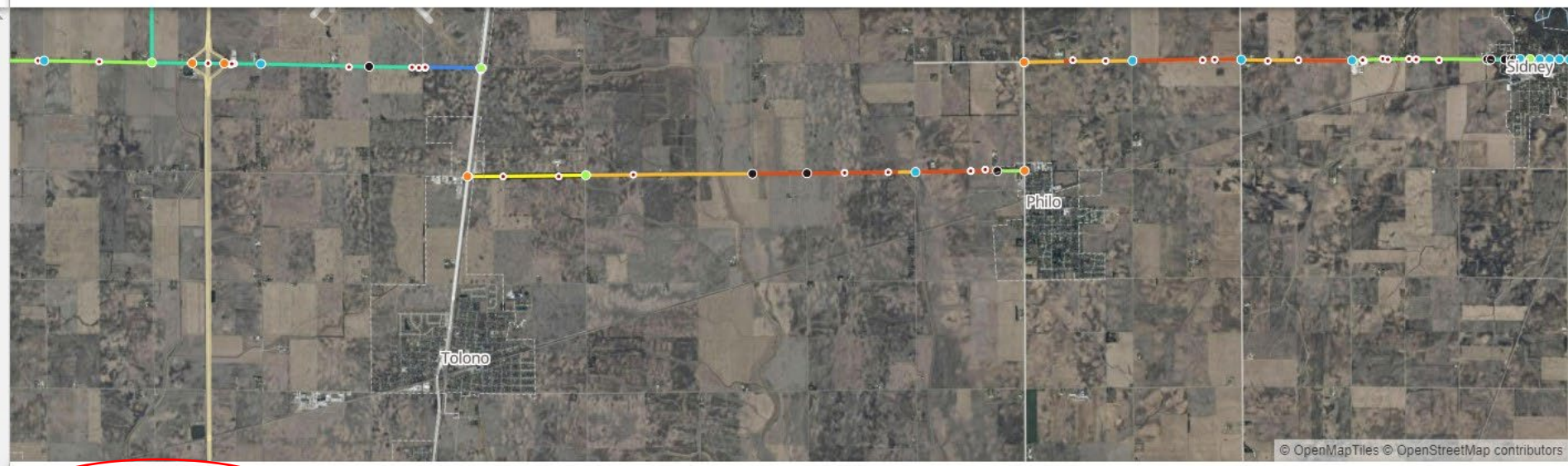
Study Area Overview

Total Project Benefit	\$0.00
Total Project Cost	\$0.00
Benefit-Cost Ratio	NaN
Roadway Length (miles)	0.00
Number of Intersections	0
Risk Factors Present	0
Five-year crashes	0
Animal Crashes	0
Wet Pavement Crashes	0
Darkness Crashes	0
Five-year Fatalities	0
Five-year A-injuries	0
Five-year B-injuries	0
Five-year C-injuries	0



Study Area Elements

- Intersections
- Segments
- Selected Countermeasures



Selected Roadway Info

ADD FEATURE ✕

[Roadway Info](#)

[Risk Factors](#)

[Injuries](#)

[Crashes](#)

Study Area Overview

Total Project Benefit	\$0.00
Total Project Cost	\$0.00
Benefit-Cost Ratio	NaN
Roadway Length (miles)	0.00
Number of Intersections	0
Risk Factors Present	0
Five-year crashes	0
Animal Crashes	0
Wet Pavement Crashes	0
Darkness Crashes	0
Five-year Fatalities	0
Five-year A-injuries	0

id	162
name	900N
Setting	Rural
Peer Group	5
County Highway	18
Total Number of Lanes	2
Lane Width (ft)	12
Speed Limit (mph)	55
Median Type	11
Paved Shoulder Width (ft)	0
Unpaved Shoulder Width (ft)	3
Outside Shoulder 1 Type	3
Outside Shoulder 1 Width (ft)	3
Outside Shoulder 2 Type	0
Outside Shoulder 2 Width (ft)	0
Shoulder Rumble Strips	0
Curvature	1
Vertical Alignment Variation	1
Access Point Density	1
Overtaking Demand	3

Selected Roadway Info ADD FEATURE X				
	Roadway Info	Risk Factors	Injuries	Crashes
	Value	Critical Range	Risk Factor Present	
Functional Classification	Major Collector	Major Collector	1	
AADT	550	>5,000		
Paved and unpaved shoulder width	0, 4	0, 3		
Roadway access point density	1	1	1	
Overtaking demand	2	3		
Speed limit (mph)	55	>45	1	
Total number of risk factors present			1 1 1	

Risk Factors

Selected Roadway Info

ADD FEATURE X

 Roadway Info





 Risk Factors

 Injuries

 Crashes

	Total Fatalities	Total Injuries	A-Injuries	B-Injuries	C-Injuries	Non-Injuries	
2017		0	0	0	0	0	0
2018		0	0	0	0	0	0
2019		0	1	0	1	0	1
2020		0	0	0	0	0	0
2021		0	0	0	0	0	0
Total		0	1	0	1	0	1

Injuries

Selected Roadway Info							ADD FEATURE	×
	 Roadway Info	 Risk Factors	 Injuries	 Crashes				
	Total Crashes	A Injury Crash Crashes	B Injury Crash Crashes	C Injury Crash Crashes	Fatal Crash Crashes	No Injuries Crashes		
Front to Rear	1	0	1	0	0	0		
Wet Pavement	0	0	0	0	0	0		
Darkness	0	0	0	0	0	0		
Total	1	0	1	0	0	0		

Crashes

Study Area Elements

Intersections

+ Add Countermeasure for Intersections

✕ 900N & 1200E-6880

✕ 900N & 1400E-6877

Segments

+ Add Countermeasure for Segments

✕ 900N-162

✕ 900N-168001

Study Area Overview

Total Project Benefit	\$0.00
Total Project Cost	\$0.00
Benefit-Cost Ratio	NaN
Roadway Length (miles)	2.27
Number of Intersections	2
Risk Factors Present	11
Five-year crashes	11
Animal Crashes	0
Wet Pavement Crashes	3
Darkness Crashes	4
Five-year Fatalities	0
Five-year A-injuries	3



Selected Roadway Info

© OpenMapTiles © OpenStreetMap contributors

ADD FEATURE ✕

<p> Roadway Info Risk Factors Injuries Crashes </p>	
id	6877
name	900N & 1400E
Setting	Rural
Peer Group	1
AADT on Major Approaches	2900
AADT on Minor Approaches	75
Skew Angle	1
Number of Approaches with a Left Turn Lane	0
Lighting	0
Intersection Type	31ST



© OpenMapTiles © OpenStreetMap contributors

Study Area Elements

Intersections

+ Add Countermeasure for Intersections

✕ 900N & 1200E-6880

✕ 900N & 1400E-6877

Segments

+ Add Countermeasure for Segments

✕ 900N-162

✕ 900N-168001

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Selected Roadway Info

ADD FEATURE ✕

[Roadway Info](#)

[Risk Factors](#)

[Injuries](#)

[Crashes](#)

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Peer Group	1
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AADT on Minor Approaches	75
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Number of Approaches with a Left Turn Lane	0
Lighting	0
Intersection Type	31ST

Countermeasure

3.2.9.I3.2 - Add Left Turn Lane (Four-Leg Inter... ▲

Service Life
15

Total Cost
\$0.00

3.1.6.I2.1 - Improve Sight Distance To Intersection (non-signalized)

3.1.6.I5.1 - Improve Sight Distance To Intersection (non-signalized)

3.1.6.I6.1 - Improve Sight Distance To Intersection (non-signalized)

3.2 - Pavement

3.2.1.I1.1 - Widening and Resurfacing or Widening alone

3.2.1.I2.1 - Widening and Resurfacing or Widening alone

3.2.2.AL.1 - Resurfacing alone

3.2.3.I1.1 - Improve pavement friction (Chip Seal)

3.2.3.I2.1 - Improve pavement friction (Chip Seal)

3.2.3.I3.1 - Improve pavement friction (Chip Seal)

3.2.3.I5.1 - Improve pavement friction (Chip Seal)

3.2.3.I6.1 - Improve pavement friction (Chip Seal)

3.2.3.I7.1 - Improve pavement friction (Chip Seal)

3.2.4.I3.1 - Improve pavement friction (Thin HMA overlay)

3.2.4.I7.1 - Improve pavement friction (Thin HMA overlay)

3.2.8.AL.1 - Lane Addition

3.2.9.I3.1 - Add Left Turn Lane (Three-Leg Intersection)

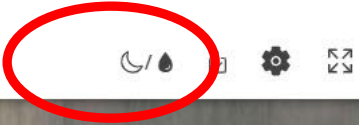
Countermeasure

3.2.9.I3.2 - Add Left Turn Lane (Four-Leg Inter... ▼

Service Life
15

Unit Cost \$	Quantity	Units	Total Cost
0 ▲▼	0 ▲▼	Unit Qty	\$0.00
Crash Type Affected		CMF	
Angle		0.82	
Crash Type Affected		CMF	
Animal		0.82	
Crash Type Affected		CMF	
Fixed Object		0.82	
Crash Type Affected		CMF	
Head On		0.82	
Crash Type Affected		CMF	
Left Turn		0.82	
Crash Type Affected		CMF	
Other Non-Collision		0.82	
Crash Type Affected		CMF	

UPDATE



Study Area Elements

Intersections

+ Add Countermeasure for Intersections

X 900N & 1200E-6880

X 900N & 1400E-6877

Segments

+ Add Countermeasure for Segments

X 900N-162

X 900N-168001

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Five-year A-injuries	3



Selected Roadway Info

ADD FEATURE X

Roadway Info

Risk Factors

Injuries

Crashes

id	6877
name	900N & 1400E
Setting	Rural
Peer Group	1
AADT on Major Approaches	2900
AADT on Minor Approaches	75
Skew Angle	1
Number of Approaches with a Left Turn Lane	0
Lighting	0
Intersection Type	31ST

Report for HSIP Application

- Application form
- Benefit to Cost summary table
- Raw crash data table
- Project location map
- Project timeline template
- Project narrative (tables and charts)

User Documentation

User documentation for the Systemic Safety Evaluation Tool

Contents:

- 1. Goal of the project
- 2. Components
 - Section 1: Map
 - Section 2: Clickable intersection and segment
 - Section 3: Roadway Info
 - Section 4: Risk Factors
 - Section 5: Injuries
 - Section 6: Crashes
 - Section 7: Intersections and Segments
 - Section 8: Study Area Overview
 - Section 9: Night time and wet pavement
 - Section 10: Report Download and Expand Button
- 3. Functionalities
 - Section 1: How to Add Countermeasures
- 4. Editable DOCK report
 - Section 1: Crash type data in dock file
 - Section 2: Crash Severity distribution
 - Section 3: Benefit-cost Calculation
 - Section 4: Raw crash data
 - Section 5: Images of the selected roadways
 - Section 6: Example of a graph representation
 - Section 7: Project Timeline

HSIP Grant Application FY2024

- County Highway 18 from US 45 to IL 130
- Proposed Improvements:
 - Four-foot paved shoulders
 - Shoulder rumble strips and centerline rumble strips
 - Warning signs
 - Side slope flattening
- Funding awarded: \$1,660,682

rmorocoi@ccrpc.org

Applying for Funding

- Online Application
- Basic Project Information:
 - Costs
 - Scope
 - Source of Matching Funds (20%)
 - Timeframe
- How the Project Implements/Supports:
 - IDOT Long Range Transportation Plan
 - Asset Management
 - Performance Based Project Selection
 - Benefits a Disadvantaged/Economically Distressed Community

GATA Exempt vs Not Exempt Grantees

- Local Public Agencies (LPA) are exempt from GATA Requirements.
- Universities / State Agencies are NOT exempt from GATA Requirements

Grantee Not Exempt From GATA Requirement

- [GATA Application](#)
- [GATA Budget Template](#)
- [GATA Programmatic Risk Assessment](#)
- [BoBS 2831](#) – Conflict of Interest form

Grantee Exempt From GATA Requirement

- IDOT Uniform Grant Application
- IDOT GATA Exempt Budget
- BoBS 2835 – GATA Exempt Risk Assessment
- BoBS 2831 – Conflict of Interest Form

Project Prioritization Criteria

- Long Range Transportation Plan
 - Asset Management
 - Performance Based Program Development
 - Regional Focus
 - Disadvantaged/Economically Distressed Community
- 

Disadvantaged/Economically Distressed Community

- Projects that benefit disadvantaged/economically distressed community(ies) will receive prioritization
- No specific definition
 - DCEO Underserved Areas
 - IEPA Environmental Justice Areas
- Multi-Jurisdictional
- Eligible for 100% funding

Asset Management

- Develops analytical tools or data collection
- Use to prioritize future improvements
- Model future asset condition
- Identify different improvement strategies
- Slow the rate of asset deterioration so assets last as long as possible

This could also be used to assist in developing...

Performance Based Program Development Process

Does the proposed project:

Work towards creating a performance based program development process?

- Using data and metrics to evaluate projects to ensure they meet the goals and objectives outlined in planning and policy documents.
- Could include purchasing data, technology tools, or coordination efforts.

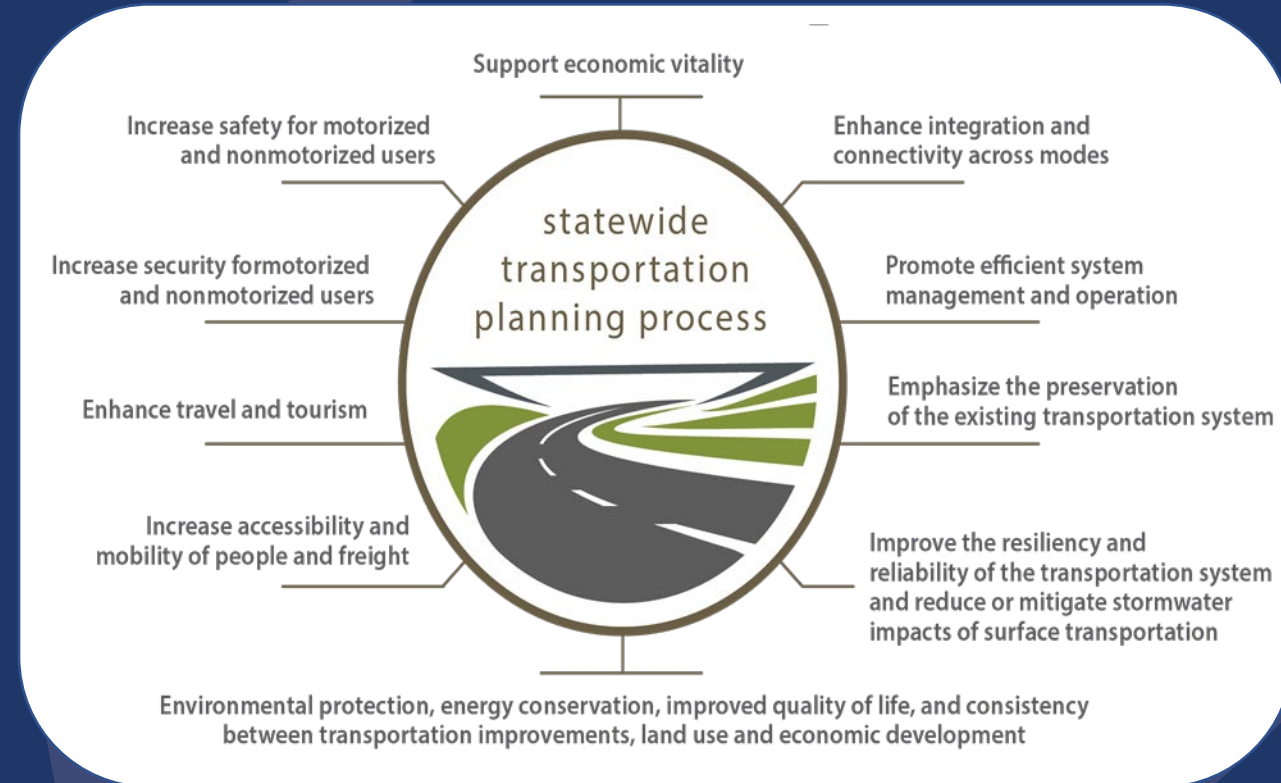
Long Range Transportation Plan – State and Federal Requirements



- State requirements include developing and maintaining a continuing, comprehensive and integrated planning process for the development of a statewide master plan for transportation.

every five years

- Federal requirements call for the statewide transportation planning process to include ten primary goals.



L RTP and Multi-Year Program (MYP) Relationship



- **L RTP** establishes a set of policies to guide future system development, rather than specific improvements
- Specific improvements are programmed separately and released annually as part of IDOT's **MYP**
- Annual **MYP** development should incorporate goals, objectives and performance measures identified in the **L RTP**



IDOT Long Range Transportation Plan

How does the project help implement the goals/objectives outlined in the LRTP?



L RTP Performance Measures

- A plan is only as good as its **implementation**.
- **Objectives** and **strategies** have been developed for each goal.
- Performance measures were identified to **track** performance.

These are the items we are looking to implement with the SPR call for projects.



For Example...

Objective:

Support projects that improve connectivity and coordination of services to enhance continuity and accommodate the efficient movement of people, goods and services across all modes to address intermodal efficiency.

Strategies:

- Review and evaluate intermodal connections across the state.
- Improve efficiency of transfers of freight and passengers between modes.
- Work collaboratively with ports and waterways stakeholders to identify and address issues related to transporting commerce via navigable waterways.
- Advocate for the success of Illinois' passenger rail program.
- Identify shifts in population and employment centers and ensure that there are adequate airport services provided to those population and employment centers.



For Example...

Performance Measures:

- Prepare regular assessment of performance of designated National Highway System (NHS) intermodal connectors
- Number of aviation, highway, & rail program investments that support improved use, safety & ease of access to intermodal facilities
- Prepare regular waterborne commerce report assessing the utilization of port districts & other port terminals
- Increased education and marketing of passenger rail options & transfer options between modes
- Percent of population and employment with drive access to a commercial airport

Implementation:

- Develop regular report on Illinois National Highway System Intermodal Connectors
- Develop regular report on Illinois Waterborne Transportation
- Develop new marketing campaign for intercity passenger rail



Program Management

You've been funded, what next?

- Award Letters – Summer 2024
- Submit Budget, Risk Assessment, and other forms after receiving an Award Letter
- Agreement Execution (9 to 12 weeks)
- Not required to execute CBLRS Engineering agreement
- Invoice within 3 months of fully executed agreement

NO WORK CAN BE INVOICED IF FULLY EXECUTED AGREEMENT IS NOT IN PLACE

Questions?

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