Highway Safety Improvement Program
Data Driven Decisions

HIGHWAY SAFETY IMPROVEMENT PROGRAM

Division of Transportation Investment Management

Bureau of State Highway Programs

HSIP General Information
SFY2026-2029 Program Cycle

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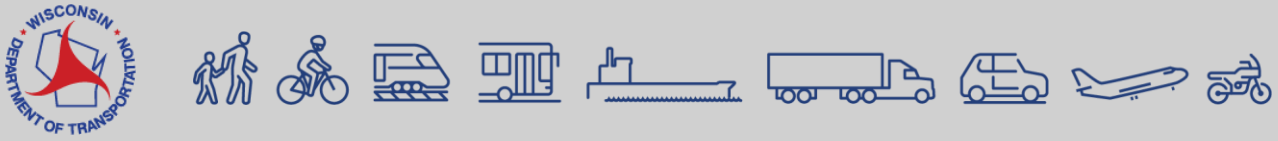
The Basics of HSIP

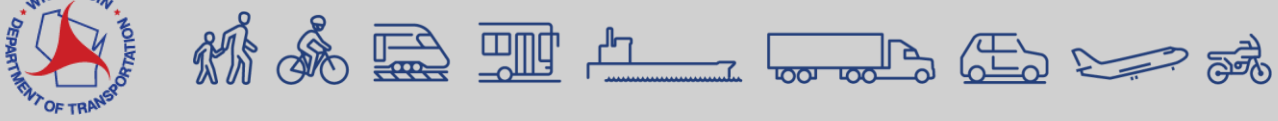
Program Areas, Funding, Typical Projects, Project Selection Process, Rail Crossing Highway Safety Program (RCHSP)



HSIP Program Areas

- **Highway Safety Improvement Program (HSIP)**
  - High Risk Rural Roads Program (HRRRP)
  - Statewide Initiatives

- **Rail Crossing Highway Safety Program (RCHSP)**
  - Warning Devices
  - Elimination of Hazards

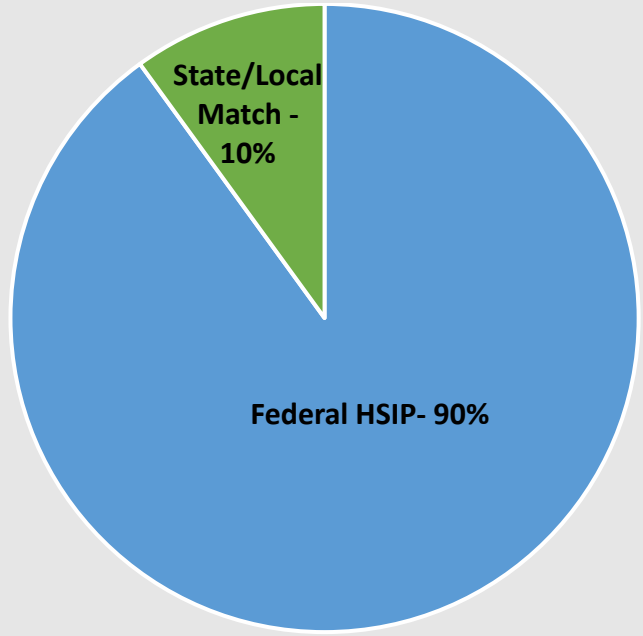


Highway Safety Improvement Program

- Projects that reduce the number and severity of crashes on all public roads
- Focused on infrastructure improvements identified and selected through a data-driven approach
- Lower-cost treatments are given first consideration
- Includes the High Risk Rural Roads Program (HRRRP), which funds projects for construction and operational improvements on county rural major and minor collector roads

Program Funding

- A federal reimbursement program and NOT a federal grant program
- 90% federal HSIP funds available for most projects
- 10% match required
  - State pays match for STN projects
  - Locals pay match for non-STN projects (local streets and highways)



Program Cycle & Application Deadlines

- Four-year program[1] of projects
- Program on annual cycle
- Current program is SFY2026-2029
  - Next application period for SFY2026-2029 is August 15th, 2025
  - Following application period for SFY2026-2029 is February 15th, 2026

[1]Projects with longer, more complicated delivery schedules (at least 4 years) will be considered for approval in Years 5 and 6; but will be given lower priority than projects that can be delivered quickly.

Typical Eligible Projects

- Intersection safety improvements (including roundabouts and channelization/turning radii improvements)
- Installing or modifying traffic signals; as allowed under state statutes
- Installing signs, delineators, flashing warning lights; as allowed under state statutes. New upgraded signs are eligible under the following situations:
  - There is no existing sign (not broken off/missing and never replaced).
  - The existing sign is poorly located. Sign would be more visible/effective if moved 20 feet.
  - There is an existing sign, but a larger sign would be more visible/effective
  - There is an existing sign, but a different sign (different message) would be more effective.

Typical Eligible Projects Continued

- Straightening isolated curves or hills
- Improving sight distance
- Access modifications
- Constructing turning, bypass, or other auxiliary lanes
- An improvement for pedestrian or bicyclist safety or safety of the disabled where there are crashes
- Constructing traffic calming feature
- Eliminating roadside obstacle

Typical Eligible Projects Continued

- Installing pedestrian countdown timers and signals
- Installing a priority control system for emergency vehicles at signalized intersections
- Installing guardrails, barriers, and crash attenuators

The previous slides were examples of typical eligible projects, not an exhaustive list. If you aren't sure of the eligibility of your project reach out to your regional HSIP Coordinator.

High Risk Rural Roads Program (HRRRP)

- Focuses on:
  - Local rural minor and major collector corridors
  - Run-off-the-road crashes
  - Fatal and serious injury crashes
  - Low complexity, low-cost treatments that can be implemented in less than 4 years
- Program development starts with annual review of crash data statewide by WisDOT

High Risk Rural Roads Program (HRRRP)

- After initial screening and more detailed review of crash information by regional WisDOT safety engineers, 20 corridors are selected for further review and analysis
- With local agency participation, WisDOT consultant reviews each corridor and develops a Corridor Safety Evaluation (CSE)
- CSE includes:
  - Summary of locations in the corridor with safety concerns
  - List of safety treatment within the corridor eligible for HRRRP funding
  - Cost estimates for design and construction if eligible treatments

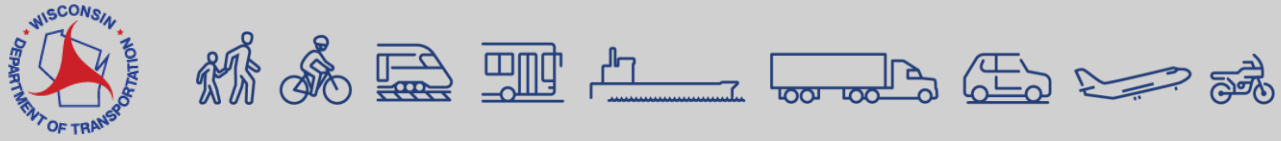
High Risk Rural Roads Program (HRRRP)

- Local agency has the option of using the CSE to develop an application for HRRRP funding
- A project that requires real estate acquisition is not eligible in the HRRRP
- After a CSE is completed, it can be used for an HRRRP for the duration of three application periods

High Risk Rural Roads Program (HRRRP) Eligible Treatments

- Edgeline and/or centerline pavement markings
- Shoulder rumble strips
- Centerline rumble strips
- Spot shoulder widening
- Chevrons and/or night arrows
- Post-mounted delineation
- Guide signs and/or advanced warning signs
- Obstacle removal for adequate clear zone

Larger, more complex projects may be submitted separately through the “standard” HSIP



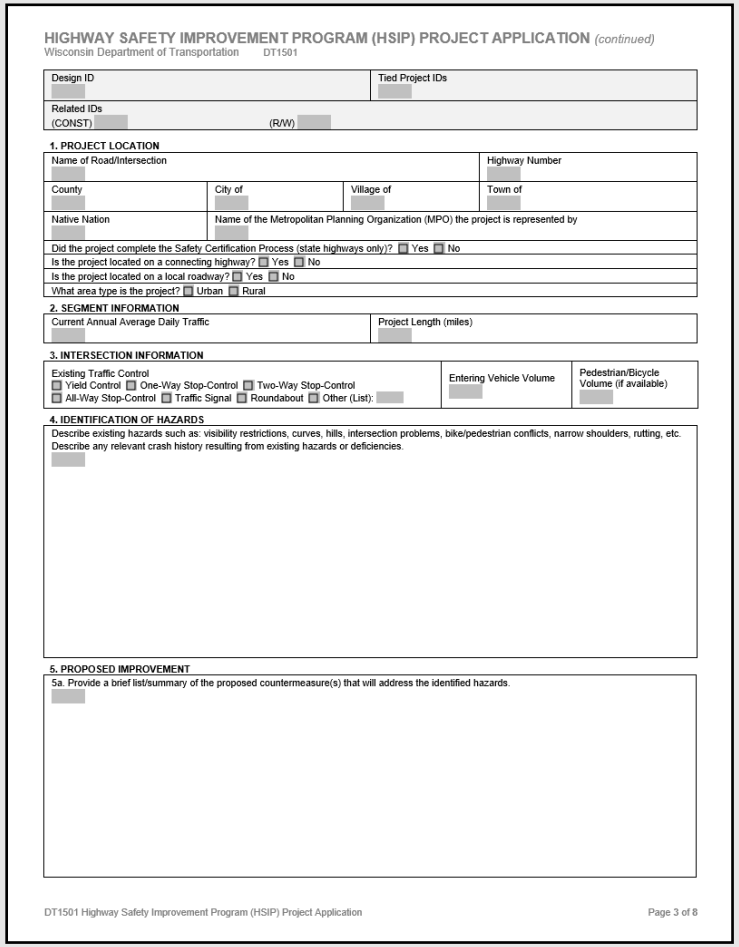
The HSIP Process

Applications, Approval, and Programming Details

Application Requirements

- Completed HSIP Project Application Form
- General sketch of the project proposal
- Collision diagrams
- Crash history (most current consecutive 5 years) and appropriate crash analysis
- Site photos
- Itemized cost estimate
- Project Evaluation Factor (PEF) analysis worksheet(s) – completed by Regional Safety Engineer

The HSIP Application Form



HIGHWAY SAFETY IMPROVEMENT PROGRAM (HSIP) PROJECT APPLICATION *(continued)*
Wisconsin Department of Transportation DT1501

Design ID	Tied Project IDs
Related IDs (CONST) (R/W)	

1. PROJECT LOCATION

Name of Road/Intersection			Highway Number
County	City of	Village of	Town of
Native Nation	Name of the Metropolitan Planning Organization (MPO) the project is represented by		

Did the project complete the Safety Certification Process (state highways only)? ☐ Yes ☐ No
Is the project located on a connecting highway? ☐ Yes ☐ No
Is the project located on a local roadway? ☐ Yes ☐ No
What area type is the project? ☐ Urban ☐ Rural

2. SEGMENT INFORMATION

Current Annual Average Daily Traffic	Project Length (miles)

3. INTERSECTION INFORMATION

Existing Traffic Control ☐ Yield Control ☐ One-Way Stop-Control ☐ Two-Way Stop-Control ☐ All-Way Stop-Control ☐ Traffic Signal ☐ Roundabout ☐ Other (List):	Entering Vehicle Volume	Pedestrian/Bicycle Volume (if available)

4. IDENTIFICATION OF HAZARDS

Describe existing hazards such as: visibility restrictions, curves, hills, intersection problems, bike/pedestrian conflicts, narrow shoulders, rutting, etc. Describe any relevant crash history resulting from existing hazards or deficiencies.

5. PROPOSED IMPROVEMENT

5a. Provide a brief list/summary of the proposed countermeasure(s) that will address the identified hazards.

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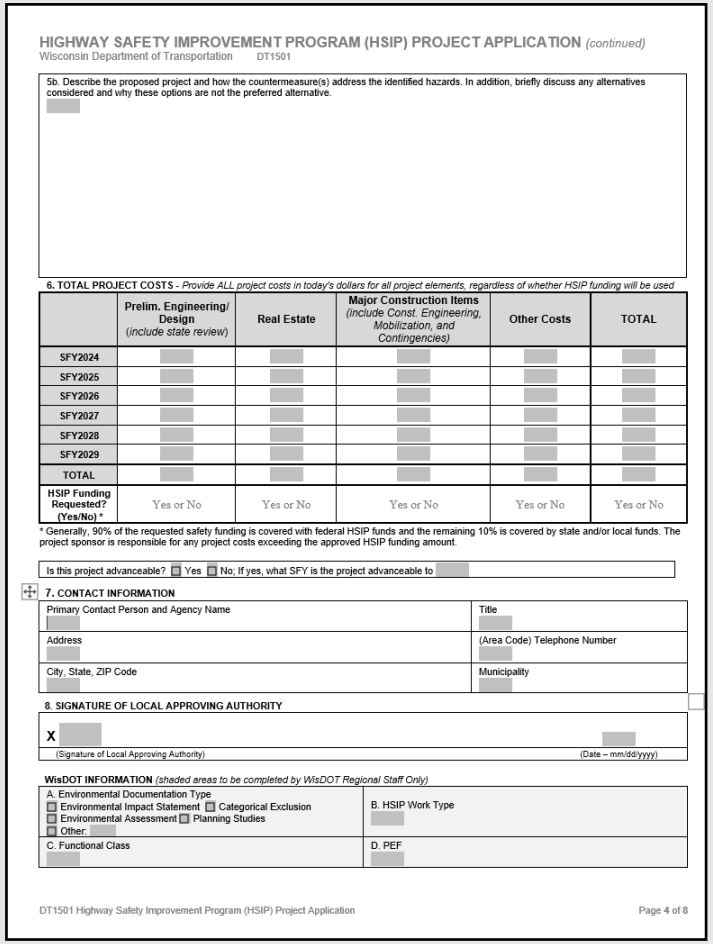

HIGHWAY SAFETY IMPROVEMENT PROGRAM (HSIP) PROJECT APPLICATION *(continued)*
Wisconsin Department of Transportation DT1501

5b. Describe the proposed project and how the countermeasure(s) address the identified hazards. In addition, briefly discuss any alternatives considered and why these options are not the preferred alternative.

6. TOTAL PROJECT COSTS - *Provide ALL project costs in today's dollars for all project elements, regardless of whether HSIP funding will be used*

	Prelim. Engineering/ Design *(include state review)*	Real Estate	Major Construction Items *(include Const. Engineering, Mobilization, and Contingencies)*	Other Costs	TOTAL
SFY2024					
SFY2025					
SFY2026					
SFY2027					
SFY2028					
SFY2029					
TOTAL					
HSIP Funding Requested? (Yes/No) *	Yes or No	Yes or No	Yes or No	Yes or No	Yes or No

* Generally, 90% of the requested safety funding is covered with federal HSIP funds and the remaining 10% is covered by state and/or local funds. The project sponsor is responsible for any project costs exceeding the approved HSIP funding amount.

Is this project advanceable? ☐ Yes ☐ No; If yes, what SFY is the project advanceable to

7. CONTACT INFORMATION

Primary Contact Person and Agency Name	Title
Address	(Area Code) Telephone Number
City, State, ZIP Code	Municipality

8. SIGNATURE OF LOCAL APPROVING AUTHORITY

X (Signature of Local Approving Authority) (Date – mm/dd/yyyy)

WisDOT INFORMATION *(shaded areas to be completed by WisDOT Regional Staff Only)*

A. Environmental Documentation Type ☐ Environmental Impact Statement ☐ Categorical Exclusion ☐ Environmental Assessment ☐ Planning Studies ☐ Other:	B. HSIP Work Type
C. Functional Class	D. PEF

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The form is available at the Programs for Local Government and WisDOT HSIP webpages and from Regional HSIP Coordinators and Safety Engineers

Other Application Materials

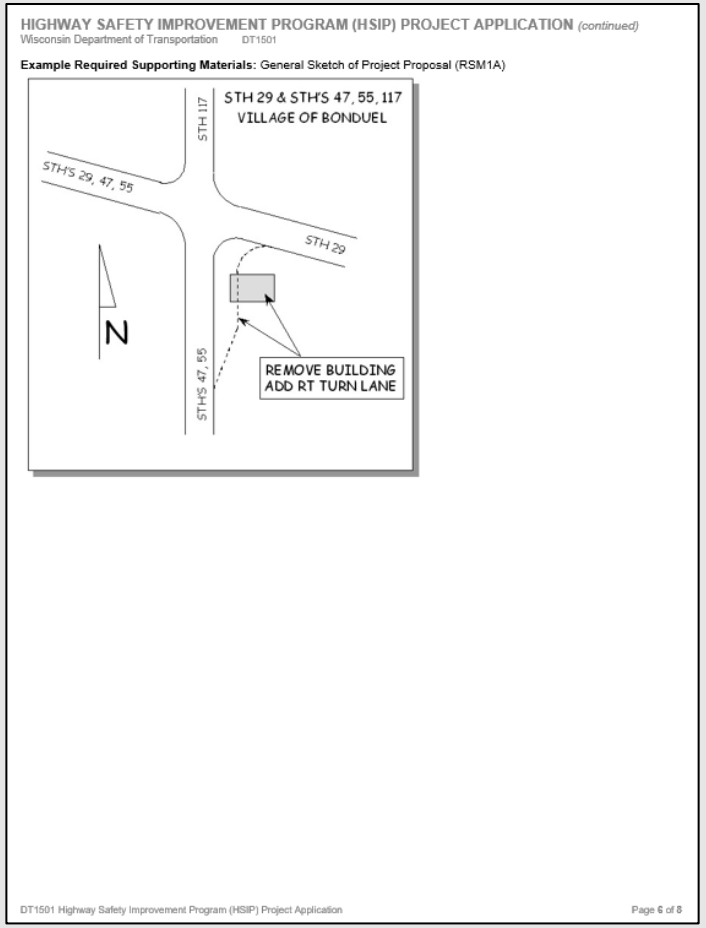
Looking West

Looking North

Looking East

Looking South

Site Photos

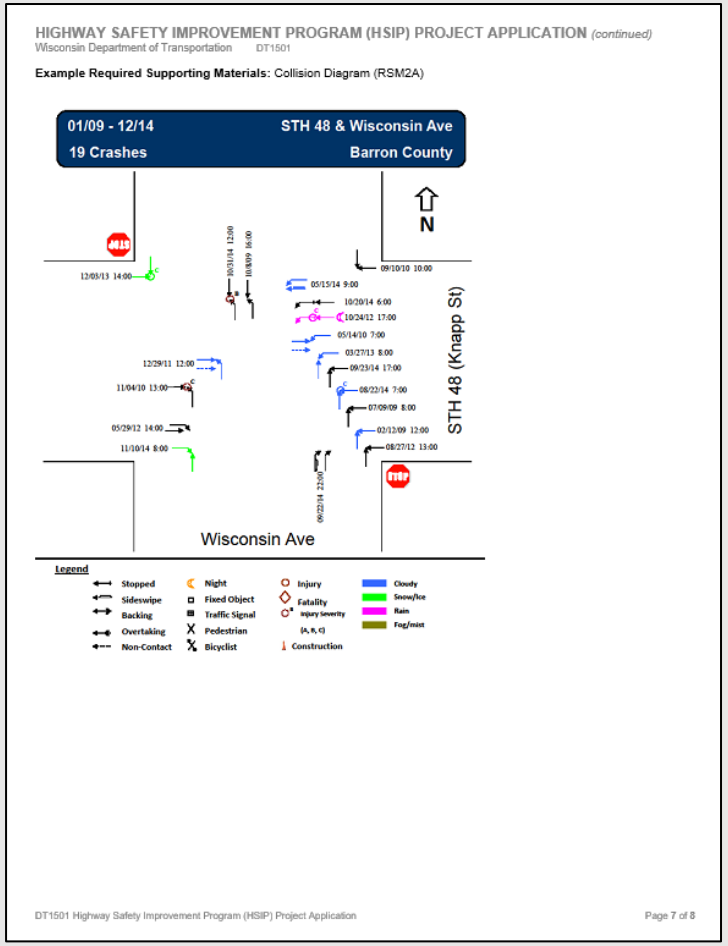


HIGHWAY SAFETY IMPROVEMENT PROGRAM (HSIP) PROJECT APPLICATION *(continued)*
Wisconsin Department of Transportation DT1501

Example Required Supporting Materials: General Sketch of Project Proposal (RSM1A)

Sketch of Project Proposal

Other Application Materials



HIGHWAY SAFETY IMPROVEMENT PROGRAM (HSIP) PROJECT APPLICATION *(continued)*
Wisconsin Department of Transportation DT1501

Example Required Supporting Materials: Collision Diagram (RSM2A)

01/09 - 12/14 | STH 48 & Wisconsin Ave
19 Crashes | Barron County

N

STH 48 (Knapp St)

Wisconsin Ave

Legend

Stopped, Sideswipe, Backing, Overtaking, Non-Contact
Night, Fixed Object, Traffic Signal, Pedestrian, Bicyclist
Injury, Fatality, Injury Severity (A, B, C), Construction
Cloudy, Snow/Ice, Rain, Fog/mist

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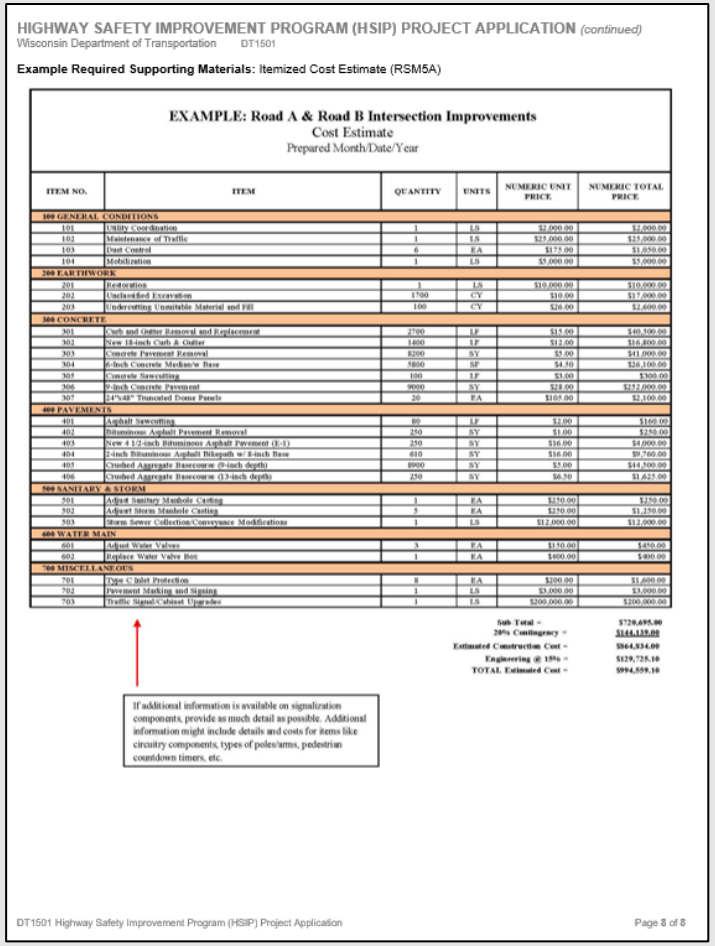
Collision Diagram(s)



HIGHWAY SAFETY IMPROVEMENT PROGRAM (HSIP) PROJECT APPLICATION *(continued)*
Wisconsin Department of Transportation DT1501

Example Required Supporting Materials: Itemized Cost Estimate (RSM5A)

EXAMPLE: Road A & Road B Intersection Improvements
Cost Estimate
Prepared Month/Date/Year

ITEM NO.	ITEM	QUANTITY	UNITS	NUMERIC UNIT PRICE	NUMERIC TOTAL PRICE
100 GENERAL CONDITIONS					
101	Utility Coordination	1	LS	$2,000.00	$2,000.00
102	Maintenance of Traffic	1	LS	$25,000.00	$25,000.00
103	Dust Control	6	EA	$175.00	$1,050.00
104	Mobilization	1	LS	$5,000.00	$5,000.00
200 EARTHWORK					
201	Restoration	1	LS	$10,000.00	$10,000.00
202	Unclassified Excavation	1700	CY	$10.00	$17,000.00
203	Undercutting Unsuitable Material and Fill	100	CY	$26.00	$2,600.00
300 CONCRETE					
301	Curb and Gutter Removal and Replacement	2700	LF	$15.00	$40,500.00
302	New 18-inch Curb & Gutter	1400	LF	$12.00	$16,800.00
303	Concrete Pavement Removal	8200	SY	$5.00	$41,000.00
304	6-Inch Concrete Median/w Base	5800	SF	$4.50	$26,100.00
305	Concrete Sawcutting	100	LF	$3.00	$300.00
306	9-Inch Concrete Pavement	9000	SY	$28.00	$252,000.00
307	24"x48" Truncated Dome Panels	20	EA	$105.00	$2,100.00
400 PAVEMENTS					
401	Asphalt Sawcutting	80	LF	$2.00	$160.00
402	Bituminous Asphalt Pavement Removal	250	SY	$1.00	$250.00
403	New 4 1/2-inch Bituminous Asphalt Pavement (E-1)	250	SY	$16.00	$4,000.00
404	2-inch Bituminous Asphalt Bikepath w/ 8-inch Base	610	SY	$16.00	$9,760.00
405	Crushed Aggregate Basecourse (9-inch depth)	8900	SY	$5.00	$44,500.00
406	Crushed Aggregate Basecourse (13-inch depth)	250	SY	$6.50	$1,625.00
500 SANITARY & STORM					
501	Adjust Sanitary Manhole Casting	3	EA	$250.00	$250.00
502	Adjust Storm Manhole Casting	5	EA	$250.00	$1,250.00
503	Storm Sewer Collection/Conveyance Modifications	1	LS	$12,000.00	$12,000.00
600 WATER MAIN					
601	Adjust Water Valves	3	EA	$150.00	$450.00
602	Replace Water Valve Box	1	EA	$400.00	$400.00
700 MISCELLANEOUS					
701	Type C Inlet Protection	8	EA	$200.00	$1,600.00
702	Pavement Marking and Signing	1	LS	$3,000.00	$3,000.00
703	Traffic Signal/Cabinet Upgrades	1	LS	$200,000.00	$200,000.00
				Sub-Total =	$720,695.00
				20% Contingency =	$144,139.00
				Estimated Construction Cost =	$864,834.00
				Engineering @ 15% =	$129,725.10
				TOTAL Estimated Cost =	$994,559.10

If additional information is available on signalization components, provide as much detail as possible. Additional information might include details and costs for items like circuitry components, types of poles/arms, pedestrian countdown timers, etc.

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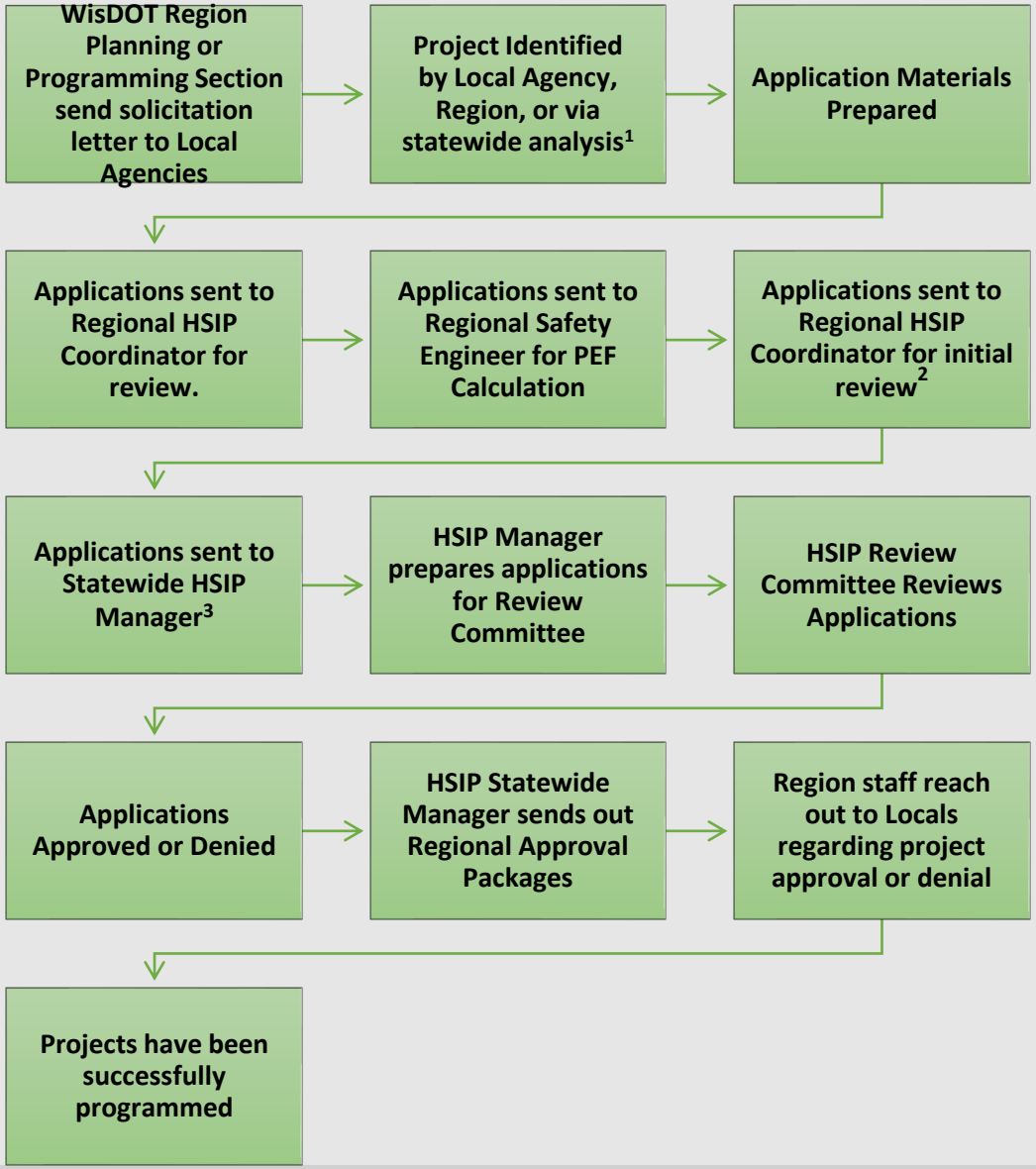
Itemized Cost Estimate



General HSIP Application Process

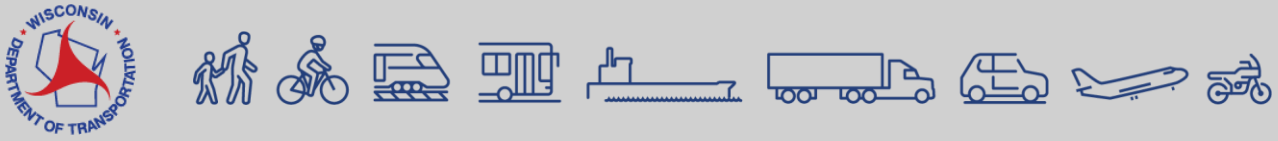
[1]See slides 7-9 for project type eligibility.

[2]Applications must be received by Region staff by August 15th for "Standard" HSIP Cycle or February 15th for Mid-Cycle. HRRRP application do not have to be sent in until September 15th.

[3]Applications must be received by Statewide HSIP Manager by September 15th for "Standard" HSIP Cycle or March15th for Mid-Cycle. HRRRP applications do not have to be sent to Statewide HSIP Manager until October 1st.

Spot Project Analysis

- WisDOT region staff calculate a Project Evaluation Factor (PEF) for each HSIP application
- The PEF is used to evaluation and compare proposed projects
- The PEF estimates crash reduction potential of proposed improvements and compares them to project costs
- The PEF calculation includes
  - Estimated costs of proposed project
  - Crash history at the project location
  - Identification of crashes that the proposed project would have reduced
  - Estimate crash reduction potential of proposed improvements, based on established research and studies



Corridor Project Analysis

- Individual PEFs must be calculated for each location in the corridor where a safety improvement is being proposed
- A cumulative PEF must be calculated covering all proposed safety improvements in the corridor
- The cumulative PEF for all locations in the corridor must be greater than or equal to 1.0 for the project to be considered
- At least 2/3 of the locations proposed must have a PEF greater than or equal to 1.0 for the project to be considered
- Any individual locations in the corridor with a PEF of less than 1.0 will be evaluated and determination will be made whether the locations should be approved

Tips for Successful HSIP Applications

- Follow general instructions on HSIP application
- Projects rooted in documented crash problems (crash reports)
- Be as specific as possible in “Proposed Improvements” box justifying the selected improvement and explaining why alternatives weren’t selected or list other safety countermeasures that have previously been deployed and crashes have persisted.
- Be **realistic** with the provided estimate and outlined SFY timeframe
  - Generally, design, R/E, and construction not be scheduled in the same FY. If R/E is required please allow more time when preparing the project schedule.

Project Funding Caps

- Applies to all HSIP-funded projects
- State Projects – overages charged to Region's allocation
- Local Projects – overages charged to Local sponsor
- Any funding cap increase must be approved by the HSIP Program Manager
- Any schedule change resulting in the project moving SFY must be approved by the HSIP Program Manager
- Any project scope change would require application resubmittal with an updated PEF (using the original submittal's crash history)

Co-Pay Requirement

For State-sponsored projects:

Projects over $2,300,000 trigger a co-pay requirement

1. First $2,300,000 → HSIP Program Funds (90% Fed)
2. Second $2,300,000 → Non-HSIP Funds
3. Balance of Project → Cost Shared equally between HSIP & Non-HSIP Sources

For Local-sponsored projects:

Projects over $4,600,000 trigger a co-pay requirement

1. First $4,600,000 → HSIP Program Funds (90% Fed)
2. Second $4,600,000 → Non-HSIP Funds
3. Balance of Project → Cost Shared equally between HSIP & Non-HSIP Sources

Sunset Provision

- Annual program review to check on status of previously approved projects
- A project may be removed from the program IF:
  - There is no design action within 2 years[1] of program approval, OR,
  - If its not LET to contract within 3 years[1] of program approval (4 years[1] if right of way is needed)
- Local officials will be notified by letter before a project is removed

This ensures safety resources are reserved only for viable projects and enables adding viable projects to replace no longer viable projects

[1]One year can be added to these timeframes for project approved in Year 5 and two years added for projects approved in Year 6

For More Information

- WisDOT Programs for Local Government
  - http://www.dot.wisconsin.gov/localgov/highways/hsip.htm
  - HSIP application materials are available for download at the website listed above
- WisDOT HSIP Staff
  - WisDOT Regional HSIP Coordinators and Safety Engineers
    - General program information
    - Questions about specific potential projects and application help
  - Statewide HSIP Manager
    - General program information

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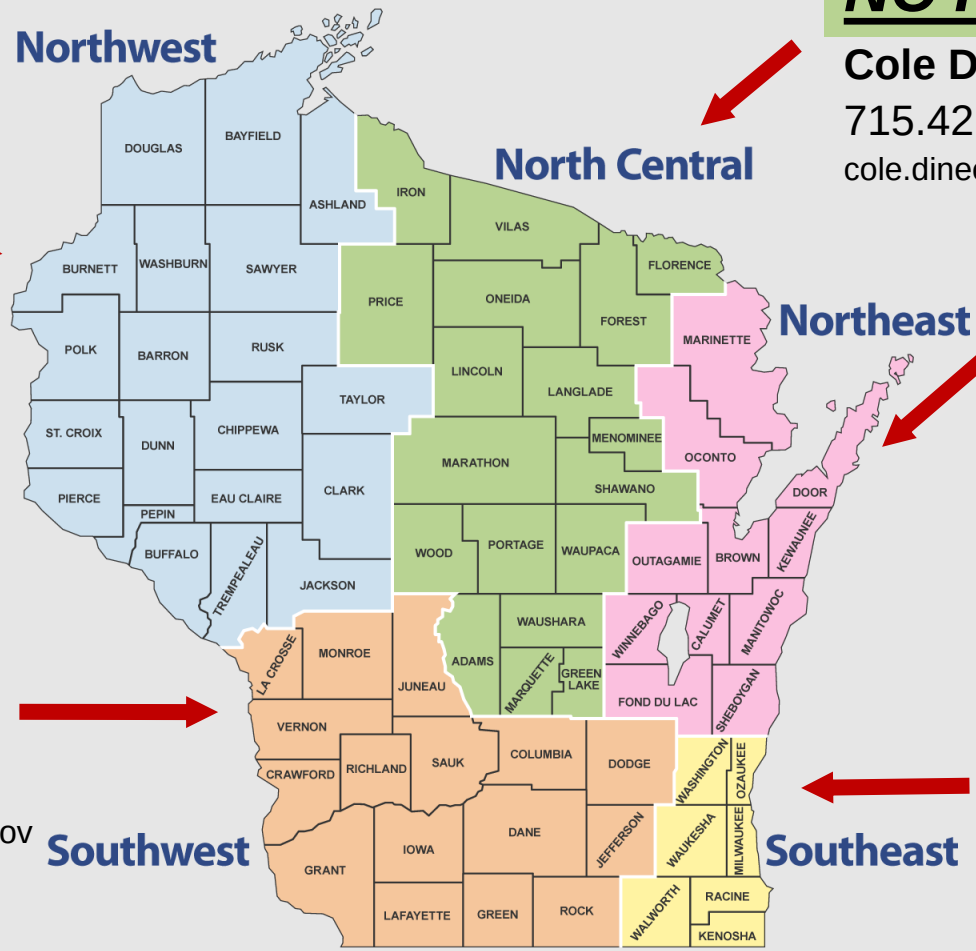

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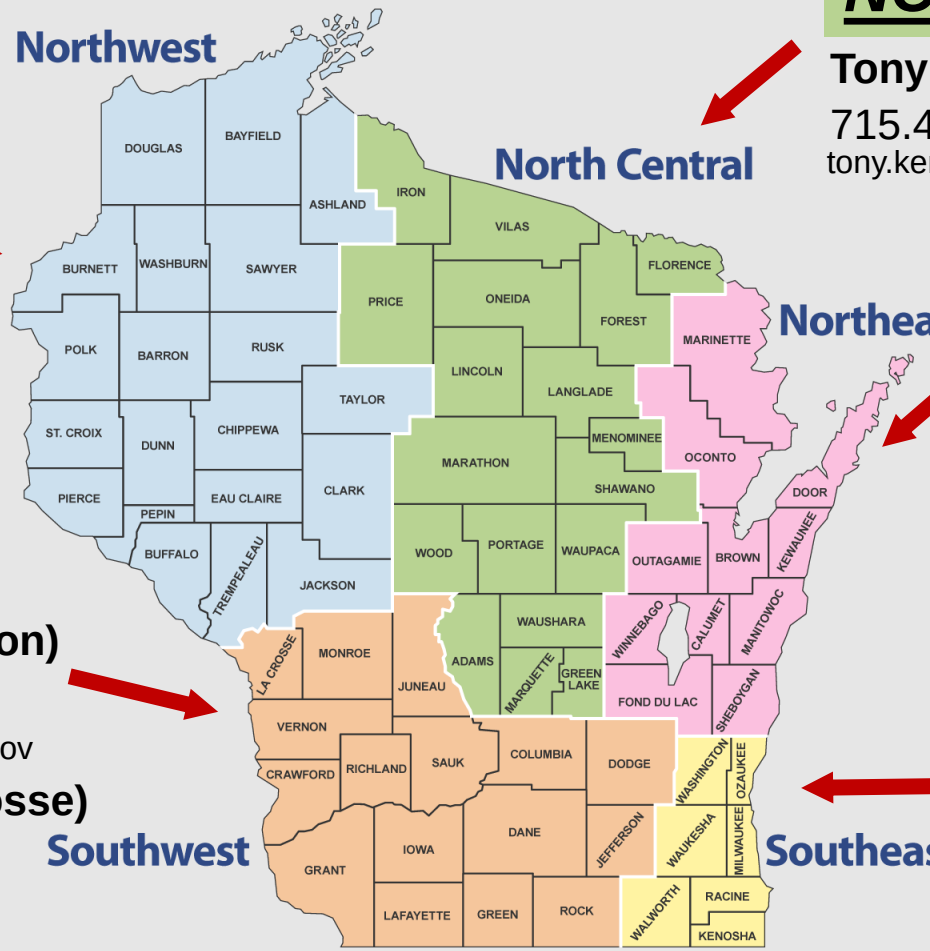

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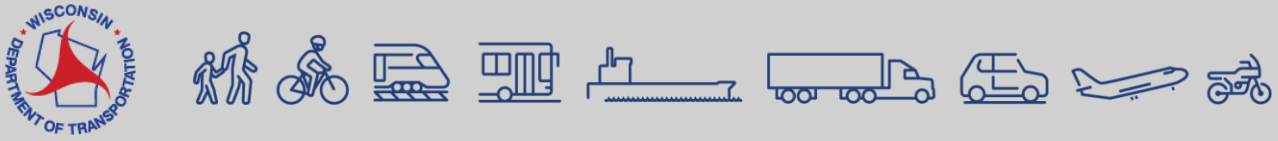
Railway-Highway Crossing Safety Program

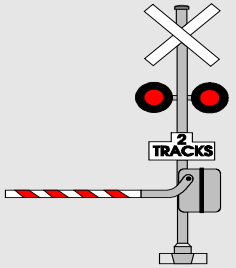
Warning Devices & Elimination of Hazards Programs

HSIP Program Areas

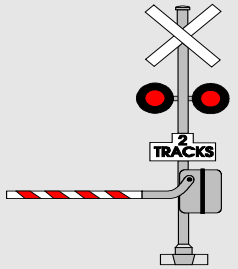
Highway Safety Improvement Program (HSIP)

- Railway-Highway Crossing: Warning Devices
  - Projects that primarily involve electronic signal installations and upgrades
- Railway-Highway Crossing: Elimination of Hazards
  - Projects that improve crossings geometrics or eliminate at-grade crossings with a separation structure





Warning Devices
WisDOT & OCR

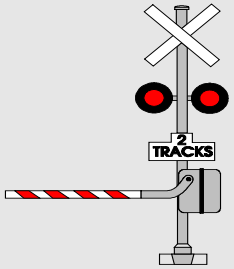


- Typical Eligible Projects:
  - Flashing lights
  - Flashing lights and gates
  - Enhanced flashing lights & gates
    - Examples: with barrier curb, 4-quad gates
  - Adding cantilevered lights, gates
  - Circuitry adjustments/improvements (such as constant warning time)

Elimination of Hazards
WisDOT

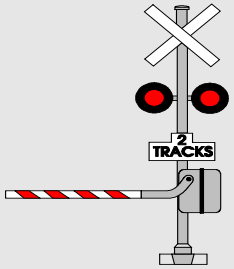
- Typical Eligible Projects
  - Geometric improvements (grades and horizontal alignments)
  - Modular crossings
  - Grade separations*
  - Crossing consolidations
  - Crossing closures
  - Incentive payments to encourage closures

*Limited to partial funding because of high cost of structures



Warning Devices

OCR



- Locals or railroads can petition the OCR for improvements
- OCR may furnish match to federal funds
  - If OCR provides match, there is no cost to locals or railroads
- Annual Program Level = $4.4 million
  - $2.7M in Federal Funds
  - $1.7M in State Funds

The Office of the Commissioner of Railroads (OCR) is the state agency with primary responsibility for making determinations of the adequacy of warning devices at railroad crossing, along with other railroad related regulations

Warning Devices & Elimination of Hazards

WisDOT

- An application package for each project must include – preferably in electronic form:
  - Completed Concept Definition Report
  - Rail Crossing Report (Form DT 1589)
  - Map showing the rail-highway crossing – and at least one alternative crossing, If possible
  - Any engineering diagrams needed to describe the proposed improvement
  - Digital photos of the crossing – from the standard WisDOT designated locations – as specified in WisDOT document: Digital Photographic Standards for Public Railroad Crossings
- Generally, a 10% local match is required
  - Railroad will pay match in certain situations
- Annual Program Level = $650,000

Program Cycle & Application Deadlines

- Four-year program of projects
- Program on annual cycle
- Current program is SFY2025-2028
- Next program is SFY2026-2029 (starts July 1, 2025)

Rail project applications may be submitted at any time

Project Analysis

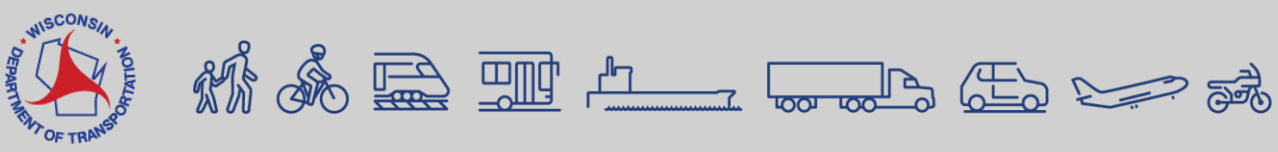
The Process:

- Rail Projects Review Committee evaluates proposed projects – reviews benefit-cost analysis and engineering assessment
- Crossing Evaluation Procedure used to rank relative merits for the following types of projects:
  - Flashing lights
  - Flashing lights & gates
  - Enhanced flashing lights & gates
  - Grade Separations
  - Crossing closures
- The committee applies collective assessment and judgement to evaluate all other projects such as the addition of cantilevers or constant warning time circuitry

Crossing Evaluation Procedure

Benefit-Cost Analysis

- Assesses economic viability of projects by comparing safety benefits to life-cycle project costs
- Calculates net benefit (benefits – costs) and B/C ratio
- Benefits calculated:
  - Reductions in the economic costs of crashes
  - Reductions in vehicle delay and operating cot (separations only)
- Costs taken into account:
  - Initial construction
  - Expected annual maintenance and operating costs
  - Crossing surface replacement – when grade separation is an alternative
  - Miscellaneous costs (e.g. R/W)



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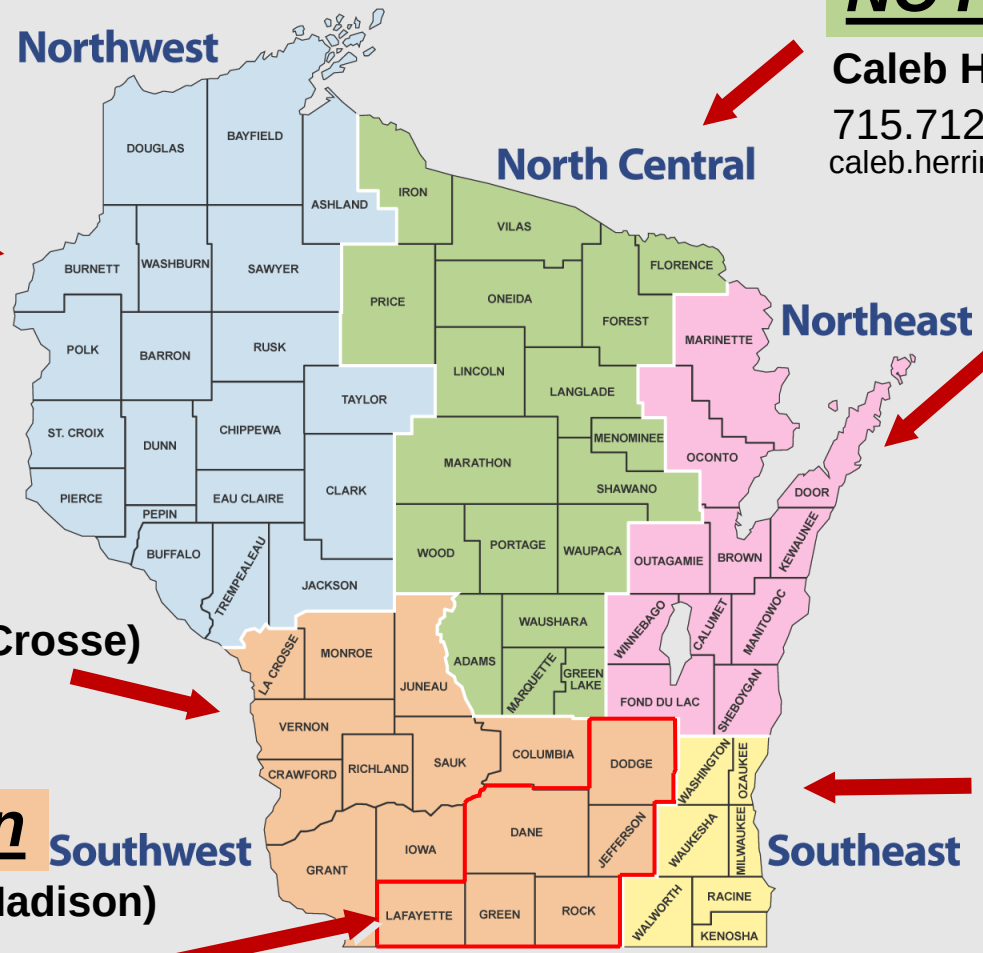

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