



Working for you
Grant resources for communities



Wisconsin Federal Discretionary Grant Awards Dashboard

State: Wisconsin

Agency: Wisconsin Department of Transportation

Award Category: Data Management, Analytics & Visualization

Project Title: Wisconsin Federal Discretionary Grant Awards Dashboard:

Helping communities maximize the historic federal investment in transportation

Project dates: Launched January 2024

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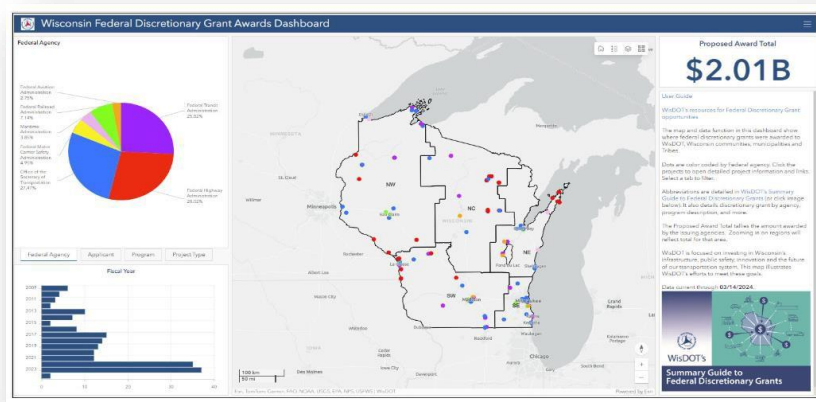
EXECUTIVE SUMMARY

Transportation is vital to the mobility, safety, and economic outcomes for Wisconsin residents and businesses. Wisconsin Department of Transportation’s (WisDOT) committed goal is to improve Wisconsin’s infrastructure, public safety, and the future of our transportation system. Federal support to enhance these efforts has accelerated with the Bipartisan Infrastructure Law (BIL), a historic investment in states’ transportation systems.

Applying for federal grants can be daunting and WisDOT wants Wisconsin’s communities, municipalities, and Tribes to be successful. The mission we share with these stakeholders is to make our streets and roads safer for all. Collaboration is key to success so, together, we can build Wisconsin’s infrastructure for the next generation.

WisDOT created valuable resources for our stakeholders, including a summary of open and future grants, links to request a Letter of Support, and more. We encourage them to review our resources to understand the grant criteria, form local partnerships around their proposal, and build support, including a WisDOT Letter of Support. But we knew we could do more.

In late 2023, WisDOT’s Federal grant team reached out to WisDOT’s Geographic Information Systems (GIS) Core Unit. They wanted an interactive map to illustrate the state's efforts to meet Wisconsin’s transportation goals and show where federal funding opportunities are maximized to improve the quality of life for everyone in Wisconsin.



Clearly seeing where other communities and Tribes have successfully applied for these resources and, as importantly, seeing which areas may be underrepresented would be an asset to our stakeholders to help them identify needs and apply for available grants. We needed to simplify data and easily show different federal discretionary grant capital, planning, or implementation projects.

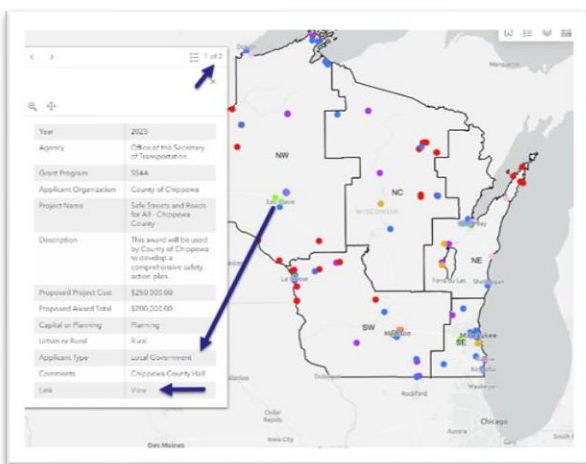
WisDOT was the first state to harness GIS technology at this scale and focus on creating a dashboard that integrates grant information and shows spatial patterns, relationships, and trends to help communities access available federal funds for local transportation improvements.

IDEA

To show how the efforts of Wisconsin's communities, municipalities, and Tribes are maximizing federal discretionary funding opportunities and improving the quality of life for everyone in Wisconsin, WisDOT's team created a new interactive map and dashboard. Using innovative Geographic Information System (GIS) tools can show where federal discretionary grants were awarded to communities, municipalities, and Tribes across the state. With more than \$888 million coming into Wisconsin for transportation infrastructure projects in the last few years, the impact of federal investments can be seen in all corners of the state.

GIS technology enables data to be incorporated into a map and be interactive. WisDOT is one of the first states to incorporate this technology in this way. Users can zoom in and out on locations across the state, select a dot on the map to view a federal discretionary grant program (color-coded by Federal agency), and see detailed project information and links to project fact sheets.

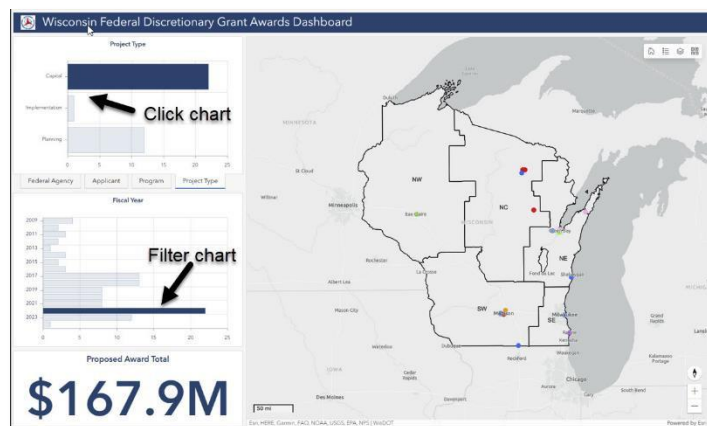
Stakeholder users, such as community planners and grant developers, can easily navigate the map, filter the charts by visible projects, and fine-tune the map to open detailed project information and links to fact sheets.



Various tabs display customized information, with data from discretionary grant funding opportunities since 2009, including applicant type, federal agency grant program, type of grant, and federal agency.

The charts are also interactive. Users can easily filter projects in the map view by selecting a bar or pie piece. The charts reflect attribute information from the projects visible in the map view. The Proposed Award Total tallies the amount awarded by the issuing agencies.

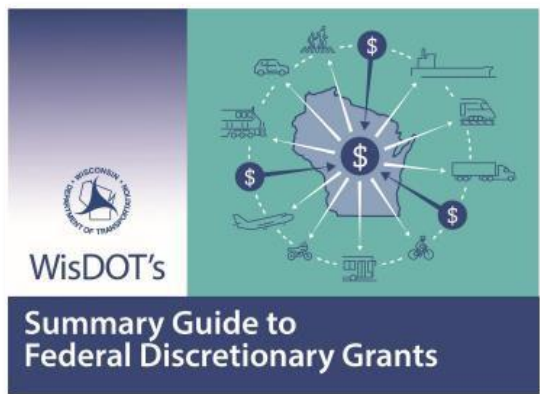
WisDOT's tool puts vital information at their fingertips. It helps them review past sources of funding, identifying opportunities, and even show funding voids in their community.



Until WisDOT created this map, stakeholders were either in the dark or had to pour through multiple sources to piece together parts of the information. Without it, missed opportunities left valuable financial resources on the table and a community without the development they deserve. No other one-stop resource is currently available within Wisconsin.

This tool is also available for other states to model. Seeing how important pieces of information are brought together and blended with GIS technology will give innovative teams in other states an easy roadmap to serve their communities.

WisDOT's Discretionary Guide map and dashboard are the gateway tools to several resources. Users can also access WisDOT's Summary Guide to Federal Discretionary Grants for specifics on abbreviations used. It also includes detailed information on the discretionary grant by agency, program description,



helpful links, and more. The summary information covers the Bipartisan Infrastructure Law (BIL), Inflation Reduction Act (IRA), and Appropriations Act (AA) discretionary grant opportunities.

Additional companion resources include Notice of Funding Opportunities summaries, calendars, and webinars detailing the application process.

IMPLEMENTATION

The vision for WisDOT is to provide resources for communities, municipalities, and Tribes. By supporting a strong partnership, we want to ensure Wisconsin's transportation system is safe and efficient for everyone on our roads.

WisDOT kept an internal, interdisciplinary team small and nimble to quickly identify opportunities and solutions. The core team included the Federal Program Officer, a Communications Manager, and a GIS Infrastructure Specialist. Once the map was completed, it was presented to the WisDOT Board of Directors for approval. Since the benefit of supporting Wisconsin's stakeholders was evident, the map was approved. It was then published on an updated webpage tailored for Bipartisan Infrastructure Law funding.

The application was developed using an emerging cloud solution called ArcGIS Online Dashboards over the course of 10 months. This software-as-a-service (SaaS) solution was chosen for its ease of use, quick development turnaround, advanced functionality, and ability to be consumed across all devices. Initial concepts and storyboarding began in March of 2023 and continued through May of that year. The small project team reviewed other state DOT websites for insight on how to communicate similar grant awards and used them as a launching pad for their designs. Only a couple of other states, Florida and Alaska, were doing similar engagements for their respective citizens. Although the team liked those examples, it was clear a fresh design would make it more relevant for WisDOT's purposes.

In August of 2023, the GIS team worked closely with the Federal Program Officer to curate and develop the base data for the application. The Federal Program Officer collected the records for all discretionary grants awarded to Wisconsin into a spreadsheet. From there the GIS team and Federal Program Officer added location attributes for the awards. A final georeferenced dataset was published to represent the award sites.

Application design began in September of 2023 and took around four weeks. Throughout that time, decisions were made on the overall layout, function, and user experience. GIS staff assisted in translating GIS application functionality to meet business requirements.

The GIS application includes a centralized map to bring the award grant sites to the center of attention. Additional dashboard charts and panels rounded out the overall design to help the user extract useful grant information, such as award amount, award type, and award jurisdiction.

The final few months included additional enhancements like the development of a user guide and the addition of more contextual information to help the audience digest the grant material. The team also worked to incorporate the application into public-facing websites and worked to develop a plan for future promotional opportunities.

IMPACT

WisDOT's active approach is helping communities identify federal funding available through the highly competitive discretionary grant process. A list of Notice of Funding Opportunities (NOFO), a calendar showing grant openings, tips on how to apply, and a simple tool to request a letter of support is available at wisconsin.gov/BIL.

This Discretionary Grant dashboard is a powerful tool that integrates business data with spatial data. Users can see where federal resources are and are not dispersed throughout the state. GIS technology enables users to make informed decisions and see information in a new light. Community officials and grant writers use WisDOT's map to integrate and analyze data layers, such as grants to reveal spatial patterns, relationships, and trends that are normally too difficult to recognize in other formats.

WisDOT's innovative Discretionary Grant dashboard and map averaged about 14 views each day over the past six months.

This map of discretionary grants will be maintained by the WisDOT GIS Unit and updated as new data becomes available. This effort between the WisDOT's Federal Program Office and the Bureau of Information Technology Services (BITS) GIS Unit opens the doors for better communication and collaboration. It allows the GIS Unit to expand its use of this fundamental technology into an area that it never thought it could have before. The team hopes to continue this collaboration in the future to add new functionality and adjust the application to user feedback.

Additional opportunities exist in the future to promote individual grant awards and tell the history of certain infrastructure projects using other tools within the ArcGIS Online platform like ArcGIS StoryMaps. This dashboard allows WisDOT to highlight grants that are performing exceptional work.

Testimonials

The data presented in WisDOT's Wisconsin Federal Discretionary Grant Awards Dashboard is the first time awards across the state have been inventoried to tell the public the story of the wide-ranging impact of this historic federal investment. Along with this dashboard, WisDOT's efforts to maximize federal funding throughout the state helps accelerate the state's goals for achieving a more safe and efficient transportation system that can better respond to existing and future needs. This tool aligns perfectly with WisDOT's vision of "dedicated people creating transportation solutions through innovation and exceptional service."

- Ashley Booth, Senior Vice President, HNTB Corporation

WisDOT Discretionary Grant BIL Map has been a tremendous help to highlight the successes throughout Wisconsin as well as connecting agencies together. Local agencies are able to look to see who else had successful proposals and can contact them to gain insight and support. This tool is able to communicate, educate, and emphasize the great work Wisconsin government is doing for their residents.

- Andi Bill, Director of Wisconsin Local Technical Assistance Program

WisDOT's Federal Discretionary Grant Award Dashboard is a one-stop shop bookmark that I utilize several times per week in my position as the Funding and Grants Manager. The WisDOT team has carefully and systematically laid out applicable federal grant data in an easy-to-use dashboard that helps me quickly see trends in where applicants are applying, which federal grants applicants have pursued and secured funds, as well as pertinent information about their projects.

To me, it is especially helpful to see how Wisconsin is performing across other states when utilizing program information, fiscal year detail, and WisDOT Region.

Another feature I like, is that the dashboard provides direct links to additional Federal Discretionary Grant opportunities and one I use a lot is the Summary Guide. The Dashboard and Summary Guide are always up to date and provides perhaps the most comprehensive data for each grant that can be found anywhere on the web. Kudos to WisDOT's Grants, GIS, and Web team for compiling an awesome product!

- Paul Chellevoid, AICP – Funding and Grants Manager, SRF Consulting