

GRANTS STRATEGY FINAL REPORT

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Introduction

Building on the Will County Community Friendly Freight Mobility Plan (Freight Plan) completed in 2017 and the Will County Joliet Intermodal Transportation Master Plan (TMP), a spinoff of the Freight Plan, the Grants Strategy will provide infrastructure owners and potential project sponsors with the tools needed to prepare competitive Federal grant applications. With the passage of the Infrastructure Investment and Jobs Act (IIJA) in 2021 and the Inflation Reduction Act (IRA) in 2022, there are over 39 new Federal competitive grant opportunities available for state and various local agencies to address infrastructure needs and to modernize their part of the nation's transportation system.

The final deliverable of the TMP was an unconstrained Transportation Improvement Program, or TIP, which included projects to address safety and mobility challenges in the area around the Intermodal Freight Cluster identified in the Freight Plan. The Grants Strategy will build on prior work done locally, regionally, and at the state level. Based on the regional and local context of the projects in the TIP, this study will update the technical and financial status of the 59 projects prioritized in the TIP, identify any unfunded stages of those projects, align those stages with the IIJA, Inflation Reduction Act, and related transportation funding opportunities, and recommend funding strategies to ultimately implement the projects. The study will align the merit criteria of the corresponding IIJA competitive funding opportunity with each project. Deliverables will include a summary of the plan, including next steps, and project documentation that can be used to support grant writing for competitive public sector funding opportunities.

The TMP Grants Strategy includes a review of prior studies, project technical and financial updates for the 59 projects, identification of the most relevant grant programs, data collection of metrics needed to compile competitive applications, alignment of individual projects with grant programs, and the compilation of detailed project reports including documentable data to serve as the foundation for future grant applications for project sponsors. Additionally, the Grants Strategy will result in detailed grant summaries that outline eligibility, merit criteria used to score projects, the scoring process, and historical timelines.



Prior Study Review

The TMP Grants Strategy is an outgrowth of prior planning efforts undertaken by Will County that viewed the multimodal, multijurisdictional transportation system through a single lens, recognizing that the system works together to move people and goods from, to, within and through the County. As shown in Figure 1, each plan is tied back to the Long-Range Transportation Plan that the Will County Board Adopted in 2017.



Figure 1 Will County Suite of Plans

The Will County Joliet Intermodal

Transportation Master Plan (TMP) was completed in 2021 and builds on the Will County Community Friendly Freight Mobility Plan (Freight Plan). The grants strategy study is intended as a next step in the progression of moving from planning to implementation to realize the desired outcomes outlined in each planning effort.

Will Connects 2040

The LRTP Vision and Goals established the strategic direction for the County's transportation investments. The goals focus on six priorities for the County to consider in identifying future investments in planning and improvements to the system. The six goals include:

- Support economic vitality
- Improve freight movement
- Perform asset stewardship
- Expand local and regional transportation choices
- Improve safety
- Create quality places

As demonstrated in the goals, freight movement and economic vitality are key considerations for network improvements. The significant presence and growth of the freight-based economy led to a



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Will Connects 2040 Vision

A thriving County with a regionally and nationally significant transportation network that connects all users, places and products through a balanced multimodal transportation network that facilitates economic vitality, is coordinated with land use, enhances quality of life, and recognizes our diversity, from urban and suburban lifestyles to our agricultural roots.

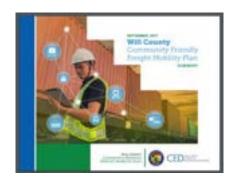


recommendation that the County conduct a freight study. The LRTP identified needs for the County to address including:

- creating more travel choices beyond the roadway network,
- addressing the lack of east / west mobility in the County,
- aging infrastructure assets, reducing congestion,
- increasing safety for all system users,
- expanding access to transit and well-connected bicycle / pedestrian accommodations,
 and
- addressing the impacts of freight by prioritizing grade crossing improvements and freight movement issues on the roadway system.

Freight Plan

The Freight Plan reviewed current conditions of the multimodal freight system including freight roadway corridors, rail infrastructure, the inland waterways serving Will County based shippers, pipelines, and connections to air cargo facilities in neighboring Cook County. Like the LRTP, the freight plan identified goals to evaluate and rank projects for inclusion in the recommended projects list. The Freight Plan also included policy recommendations that would balance the needs of a growing freight economy with the need to maintain the quality



of life for County residents and visitors. The goal areas are presented in Figure 2. The goals developed in the Freight Plan were consistent with the goals of the LRTP and included specific objectives or actions and metrics to measure outputs and outcomes.

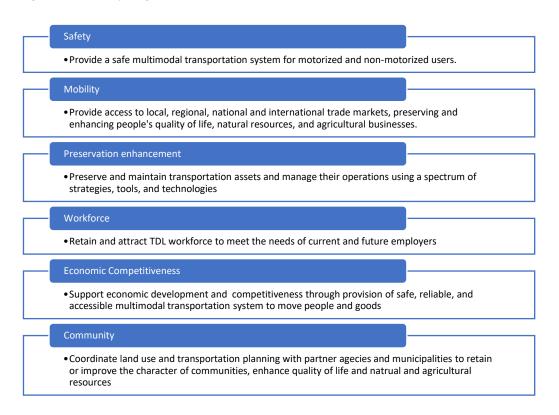
The metrics associated with each goal were weighted based on stakeholder input and calculated for a list of projects compiled from the regional Transportation Improvement Program (TIP), Illinois Department of Transportation's multi-year highway improvement plan, the County's LRTP and TIP, and other local jurisdictions plans.

The data-driven approach resulted in a prioritized list of projects in four ranking tiers.

The Freight Plan also identified key freight clusters in the region as an effort to prioritize infrastructure investment that will better equip the transportation system to handle the increased freight traffic. These clusters represent concentrations of freight-related land use combined with concentrations of Industrial Rentable Building Area (RBA).



Figure 2: Will County Freight Plan Goals



The plan highlighted three distinct existing freight superclusters supporting activity in the County—the Romeoville/Bolingbrook cluster, the Elwood/Joliet cluster, and the cluster in Eastern Will County around I-57 and Monee. These three clusters support the largest industrial RBA in the County and supporting infrastructure around each of these clusters will be critical to increasing the efficient movement of freight.

The largest and fastest growing of the three freight superclusters was the Elwood/Joliet cluster.

Will County Joliet Intermodal Transportation Master Plan

The Will County Joliet Intermodal Transportation Master Plan (TMP) completed in early 2022

focused on the fastest growing freight cluster identified in the Freight Plan to take a data informed approach to develop a list of projects grounded in prior studies and stakeholder outreach using a subarea travel demand model. Travel demand modeling allows for future-year conditions to be estimated based on socioeconomic growth and the capacity of the roadway network. Additionally, key intersections in the study area were identified for a more detailed intersection analysis using congestion and safety data along with a geometric review by





engineers. The TMP resulted in a Transportation Improvement Program for the study area as shown in Figure 3. The TIP included 51 projects, of which 17 were ranked in Tier 1 using the ranking tool developed in the Freight Plan with updated metrics.

The intersection analysis resulted in two (2) additional projects beyond those identified in prior studies and the TDM resulted in an additional four (4) projects. The study also included an emerging technology scan to explore technologies that could be incorporated into projects for greater impact or that could be used to supplant the need for additional infrastructure.

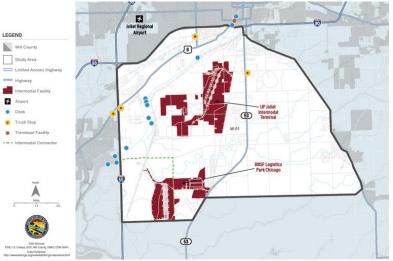


Figure 3: TMP Study Area

The TMP is the basis for the Grants Strategy presented in this document.

Other Studies

Joliet Arsenal Area Long-Range Transportation Plan (2004)

The overall purpose of the 2004 plan was to identify, evaluate and recommend the transportation strategies required to serve the existing and planned development in Joliet Arsenal area; and to recommend an implementation plan for these strategies. The plan reviewed data on existing conditions with future developments and forecasts expected to have implications on the future transportation system. This study presented the recommended long-range

TMP Travel Demand Model Details

A subarea was extracted from the larger CMAP ON TO 2050 regional travel demand model. The subarea covers the study area and extends beyond it to capture significant movements outside of the immediate study area. The base model (2018) was calibrated using observed traffic volumes and speed data. Two future land-use scenarios (2030) were used to stress test the transportation system through the model to identify projects that will be needed to meet the goals of reduced congestion and improved safety. The forecast used differs from the regional CMAP ON TO 2050 forecast for households or employment in the study area. The independent forecast is based on a more detailed understanding of the real estate market dynamics within the study area, such as planned new developments and the capacity of the local market to absorb additional logistics-related development. The 2030 base scenario carried recent development trends forward based on an assessment of local real estate conditions. The alternate scenario was designed to evaluate the impact of substantial new industrial development located east of Illinois 53.



transportation plan for the year 2020. Specific projects or actions were recommended for consideration with a focus on correcting operational and capacity deficiencies, roadway continuity, accommodating new growth, and effectively serving new development. Policy recommendations included creating a transportation management association for the intermodal area, which to date has not occurred. Below are the priorities identified in the TMP, projects highlighted in burgundy have been completed or are in progress:

• Complete IDOT programmed projects at I-55 and Arsenal Road

- Complete IDOT and local programmed projects on Drummond Road, Mississippi Avenue and Manhattan Road
- Complete Will County programmed projects on Arsenal Road, Baseline Road, South Arsenal Road, and Cedar Road.
- Complete Metra Southwest Service Line extension to Manhattan
- Construct I-355 between I-55 and I-80
- Widen IL 53 between Arsenal Road and Wilmington-Peotone Road
- Widen US 52 between I-80 and Wilmington-Peotone Road
- Implement SRA-related improvements on Wilmington-Peotone Road between IL 53 and US 45.
- Designate Arsenal/Manhattan Road from I-55 to US 45 as an SRA
- Widen Laraway Road between I-80 and Cedar Road and add new Des Plaines River crossing at Houbolt Road
- Designate Gougar Road from Wilmington-Peotone Road to the proposed I-355 extension as an SRA
- Widen Cedar Road between Francis and Manhattan-Monee Road
- Widen Brandon Road between US 6 and Schweitzer Road
- Explore feasibility of a Transportation Management Association
- Add lanes on I-55 from just south of Naperville Road to US 6¹
- Metra Projects: Construct STAR Line; extend Southwest Service line from Manhattan to Midewin
- Outer Circumferential sections in the 2030 Regional Transportation Plan: Begin required feasibility studies and preserve right-of-way. (Illiana Expressway on indefinite hold)
- Begin required feasibility studies and preserve right-of-way for Heritage Line extension to Wilmington so it can be included in the 2030 Regional Transportation Plan Update.
- Preserve rights-of-way for all future highway and transit projects that are identified in the 2030 RTP and the Will County Transportation Framework Plan Update.

¹¹ I-55 add lanes have been completed to just south of I-80, the last one and half miles between the add lanes and US 6 are yet to be done.



Joliet Arsenal Transportation Plan Update (2010)

The 2010 Update documented changes in area development and cataloged transportation plans

and programs of the various state, regional, and local entities with transportation planning and implementation responsibilities for the defined study area. These plans were assimilated into a specific set of transportation recommendations for the area to address the current and future needs in the study area, which is illustrated in Figure 2. A key objective of the Update was to identify a subset of these planned transportation investments that could be used as a starting point in a consensus-building exercise among area stakeholders that would lead to the timely

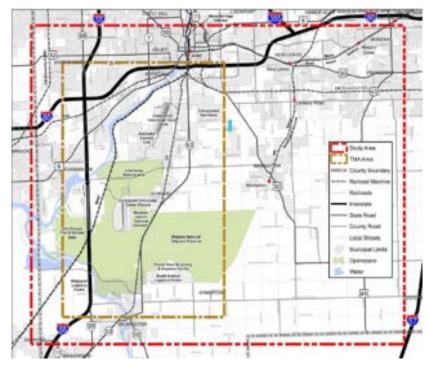


Figure 4: Joliet Arsenal Transportation Plan Update Study Area

implementation of transportation projects important to the future of southwest Will County.

The short list of recommended higher priority freeway and arterial projects included:

Category	Priority 1 Projects	
	I-80 add lanes from US 45 to Grundy County line	Still aspirational, interim
		I-80 project under way
>	Illiana Expressway I-65 to I-57 to I-55	Indefinite Hold
N S	I-55 widen to six lanes from current 6-lane segment to IL	On TMP TIP
Freeway	129	
Ū.	I-55 – reconstruct and improve US 6 interchange	Project completed
	I-55 – interchange improvements in the Wilmington	On TMP TIP
	area	
	Laraway Road – extend west to an extended	Not on TMP TIP
_	Baseline/Vetter Road	
Arterial	IL53 widen to four lanes South Arsenal Road to New	Not on TMP TIP (IDOT)
۱rte	River Road	
	Baseline/Vetter – extend north over Des Plaines River,	Project completed
	link to Empress/Houbolt Road	



CMAP ONTO 2050

CMAP, as the MPO for Northeastern Illinois, developed its first regional comprehensive plan with its Go To 2040 plan which was adopted in October 2010 and updated in 2014. The Go To 2040 plan focused on four main goal areas, livable communities, human capital, efficient governance, and regional mobility. The long-range transportation plan for the region fell under the regional mobility goal and included four specific objectives. 1) Invest strategically in transportation, 2) increase commitment to public transit, 3) create a more efficient freight network, and 4) present a list of capital projects for the region.

The capital projects list included its requisite fiscally constrained projects that could be completed during the plan period within projected available resources. CMAP included a list of fiscally unconstrained projects that were regional priorities but beyond the projected resources available for transportation improvements. Projects in the TMP study area on the capital projects list are shown in Table 1:

Table 1 Go To 2040 Major Capital Projects in TMP Study Area

Fiscally Constrained	Fiscally Unconstrained
Illiana Expressway from I-65 in Indiana to I-55	I-55 Add Lanes and Reconstruction I-80 to
	Coal City Road
	I-80 Add Lanes Ridge Road to US 30
	Illiana Extension from I-55 to I-80

Adopted by CMAP in 2018, On To 2050 was developed as the successor regional comprehensive plan using the Go To 2040 plan as its foundation. On To 2050 is premised on three overarching principles of inclusive growth, resilience, and prioritized investment. The principles inform every recommendation in the Plan's five goal areas of Community, Prosperity, Environment, Governance, and Mobility. As in the earlier Plan, the Mobility portion of the On To 2050 plan contains the region's long-range transportation plan that is rooted in seven recommendations as listed below in Figure 5:

"METROPOLITAN CHICAGO IS ONE OF THE WORLD'S GREAT ECONOMIC CENTERS, BUT WE CANNOT AFFORD TO TAKE OUR QUALITY OF LIFE FOR GRANTED. GO TO 2040 IS THE COMPREHENSIVE REGIONAL PLAN TO HELP THE SEVEN COUNTIES AND 284 COMMUNITIES PLAN TOGETHER FOR SUSTAINABLE PROSPERITY THROUGH MID-CENTURY AND BEYOND".

Go To 2040, CMAP



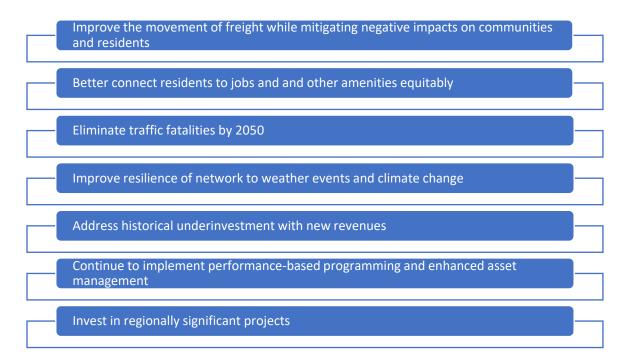


Figure 5: Recommendations in Go To 2050 Plan

The major capital projects list in the On To 2050 plan are referred to as Regionally Significant Projects including expressway, arterial roadways, and transit projects. There is also a fiscally unconstrained list. Table 2 is the list of projects in and around the TMP study area.

Table 2: On To 2050 Regionally Significant Projects in TMP Study Area

Fiscally Constrained	Fiscally Unconstrained
I-55 Add Lanes and Reconstruction I-80 to Coal City Road	Illiana Expressway from I-65 in Indiana to I-55
I-80 Reconstruction and Mobility Improvements from Ridge Road to US 30	Illiana Extension from I-55 to I-80
Laraway Road from US 52 to Harlem Ave. upgrades to improve mobility	
Wilmington Peotone Road	

The fiscally constrained projects are included on the Grants Strategy projects list. The I-80 reconstruction and mobility improvements are programmed and funded in the current IDOT multiyear highway program. Within the I-55 Add Lanes project is the Lorenzo Road interchange to the Illinois 129 interchange, which is also currently programmed and funded by IDOT in the current multiyear highway program. Portions of the Laraway Road project are also programmed



and funded in the Will County Transportation Improvement Program. Will County has started a Planning and Environmental Linkage Study (PEL) for the Wilmington Peotone Road project and has funds programmed for Phase I.

CMAP Regional Greenhouse Gase Emissions Inventory

To understand Greenhouse Gas Emissions (GHGs) in Northeastern Illinois, CMAP conducts a GHG inventory for the region and most recently updated the inventory using 2019 data. The On To 2050 Comprehensive plan set a regional goal reduction of GHGs of 80% by 2050 from 2005 levels. Between 2010 and 2019, GHGs decreased by 9% or just less than 1% per year on average, however, to meet the 2050 target, emissions would have to decrease by 5% per year on average.

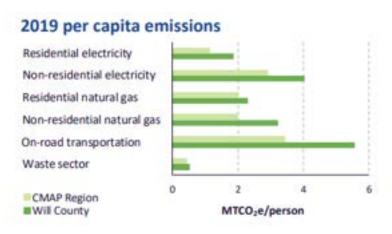


Figure 6: Will County 2019 per capita Emissions v. CMAP Region (Source CMAP Greenhouse Gas Emissions Inventory)

According to CMAP, "the inventory reflects emissions from the three most common human made GHG pollutants: carbon dioxide, methane, and nitrous oxide. The report includes newly developed emission estimates for 2019 and updated emission estimates for 2010 and 2015 for the following three sectors:

- Stationary energy
- Transportation
- Waste

Give the emphasis on sustainability and climate change at Federal, State, and regional levels, it is important for project sponsors to be aware of emissions particularly from the transportation sector in the study area and to understand how their projects will ultimately impact emissions. Being able to quantify emissions and changes to transportation generated pollutants with documented data is one key to having a competitive grant application. The CMAP Inventory provides data that can be useful to grant applicants.

CMAP provides greenhouse gas emission summaries for each of the region's seven counties, 284 municipalities, and 77 Chicago neighborhoods in 2019. Information can be found at Greenhouse gas emissions in northeastern Illinois - CMAP. Will County significantly exceeds the CMAP region in on-road transportation emissions as shown in Figure 6. Typically projects that increase roadway capacity, including adding lanes or new roadways, are considered projects



that potentially increase GHGs even with reductions in congestion by grant reviewers. Project owners should consider incorporating proven strategies in reducing GHGs when designing and delivering projects.

The data and methodology used to create the inventory is available through the CMAP website.

IDOT Multiyear Highway Program

Each year the Illinois Department of Transportation develops a fiscally constrained six-year program that details how it will invest in the state and local highway system. The annual updates to the multiyear program (MYP) reflect changes to the forecast of available resources and project readiness. The multiyear highway program is built on the foundation established in IDOT's Long Range Transportation Plan.

IDOT's Long-Range Transportation Plan establishes a set of overarching goals and objectives to guide the future development of the transportation system. These are translated to specific improvements included in the MYP. The goals of the long-range plan – economy, livability, mobility, resiliency, and stewardship – also provide the broad framework for decision-making and analysis tools, like the Transportation Asset Management Plan. The Long-Range Transportation Plan is updated every 5 years.

Figure 7 illustrates how the MYP is developed. As illustrated, the forecast of available resources is updated to reflect current trends, changes in federal and state statutes, and evolving technological advances (e.g., EV adoption).



Figure 7: IDOT Multiyear Program Annual Development Process (Source: IDOT FY 24 - 29 MYP, p. 10)



Each of IDOT's nine highway districts develop a list of system needs using a data driven assessment and informed by issues identified by staff involved in day-to-day operations of the system. Based on available resources, specific revenue restrictions (e.g., Federal formula limitations), overarching goals and objectives, and appropriations splits among the nine districts, funding targets are determined for each district. Projects are prioritized at the district level using performance metrics through IDOT's Data Driven Decision Tool for highway capacity projects and the Asset Management Plan for capital maintenance projects. Local projects that will be let through the IDOT letting process and/or that include Federal funds are determined by local agencies for inclusion in the MYP.

The TMP included projects in the FY 22 – FY 27 MYP for the study area. Subsequent programs were used to determine project status in consultation with IDOT District 1 staff. The FY 24 – FY 29 MYP includes the following projects for the TMP study area. These projects are funded.

- I-80 from Ridge Road to U.S. 30: Total \$1.1 billion investment to rebuild critical freight corridor and improve safety in high-growth area. Multiple bridge replacements, including aging, obsolete structures over the Des Plaines River. Capacity enhancements include auxiliary lanes and shoulders in Joliet, New Lenox, and Minooka.
- I-55: \$143.7 million for interchange reconstruction and bridge replacement at Lorenzo Road and at Illinois 129. Auxiliary lanes and resurfacing from Illinois 129 to Lorenzo and reconstruction of the frontage roads between Kavanaugh and Lorenzo roads.
- U.S. 52: \$90.4 million for reconstruction and construction of additional lanes from River Road to Houbolt Road in Joliet and Shorewood.
- Illinois 53/U.S. 52: \$45.5 million for intersection improvements from Patterson Road to Arsenal Road in Joliet, Elwood, and Wilmington



Project Status Update

The Map below in Figure 8 shows the location of the 55 projects identified in the TMP. Appendix A illustrates details on the complete list of projects included in this study.

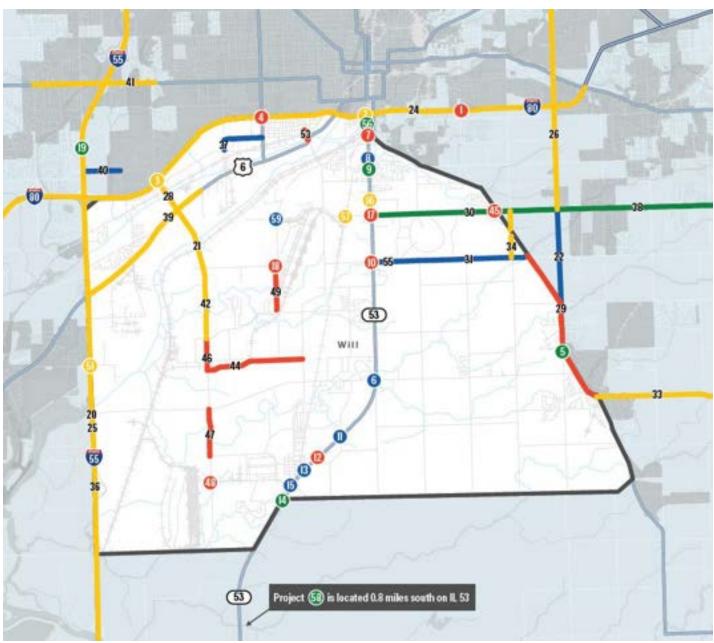


Figure 8: Map of TMP Projects (Source: TMP)



TMP TIP Project List (shown in tables by Tier)

Table 3: Tier 1 Projects in TMP TIP, (Source TMP)

Roadway	Location	Jurisdiction	Туре	Source	Map ID#
I-55	I-80 to Coal City Road	IDOT	Expansion	CMAP TIP	25
I-55	I-355 to Coal City Road	IDOT	Expansion	WCCFFMP	36
I-55	At Bluff Road	IDOT	Interchange Modernizatio n	Model	51
I-55	Bridge over the Des Plaines River	IDOT	Bridge	WC 2040 LRTP	20
I-80	Ridge Road to US 30 Lincoln Highway	IDOT	Expansion	CMAP TIP	24
I-80	Houbolt Road Interchange	IDOT/ Joliet	Interchange	WCCFFMP, CMAP TIP	3
I-80	Chicago Street (US 52/IL53)	IDOT	Interchange	WCLRTP, WCCFFMP	2
US 52	River Road East to Houbolt Road	IDOT	Expansion	Joliet, CMAP TIP	41
US 6	Hollywood Blvd. to I-55	IDOT	Expansion	WCLRTP, WCCFFMP	39
IL 53	At Emerald Drive	IDOT/ Joliet	Intersection	CMAP TIP	16
Cherry Hill Road	US 52 to Laraway Rd.	WC/ 2 Twps	Expansion	Model	34
Gougar Road	Laraway Rd. to US 6	WC	Expansion	WC LRTP, CMAP TIP	26
Houbolt Bridge	US 6 to Schweitzer Rd/South Vetter Rd.	Private	Bridge	WCCFFMP	21
Houbolt Rd.	I-80 to US 6	Joliet	Expansion	WC LRTP, CMAP TIP	28
Laraway Rd.	At Union Pacific RR crossing	Joliet	Grade Separation	CMAP Priority Crossings	57
Manhattan - Monee Rd	US 52 to US 45	IDOT	Expansion	WCLRTP, WCCFFMP	33



Vetter Rd	Schweitzer Rd. to North of CenterPoint Way	Joliet, Channaho n Twp	Expansion	CMAP Moving Will Truck Routing Study	46	
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Table 4: Tier 2 TMP Projects (Source: TMP)

		ction			# <u></u>
Roadway	Location	Jurisdiction	Туре	Source	Map ID#
I-80	At IL 7 / Larkin Ave.	IDOT	Interchange	WCCFFMP	4
I-80	At Briggs St.	IDOT	Interchange	WCLRTP	1
US 52	Manhattan – Monee Rd. to Laraway Rd.	IDOT	Expansion	WCLRTP	29
IL 53	At Laraway Rd.	IDOT	Intersection	WCLRTP, WCCFFMP, Intersectio n Analysis, CMAP TIP	17
IL 53	At US 52/Doris Ave.	IDOT	Intersection	CMAP TIP, Intersectio n Analysis	7
IL 53	At Schweitzer Rd.	IDOT	Intersection	CMAP TIP	10
IL 53	At Mississippi St.	IDOT	Intersection	CMAP TIP	12
Baseline Rd.	Noel Rd. to CenterPoint Way	Private/ Elwood	Expansion	Model	46
Elwood Interntl. Port Rd.	Mississippi St. to Arsenal Rd.	Elwood	Expansion	Model, Intersectio n Analysis	47
Brandon Rd	US 6 to Meadow Ave.	Rockdale	Intersection	Model	53
CenterPoint Way	At Schweitzer Rd.	Private	Expansion	WCCFFMP	18
CenterPoint Way	Millsdale to Schweitzer Rd.	Private	Expansion	Model, Intersectio n Analysis	49
Elwood Interntl. Port Rd.	At Walter Strawn Dr.	Elwood	Intersection	Intersectio n Analysis	48



Laraway Rd.	At US 52	IDOT/ WC/ Joliet	Intersection	Intersectio n Analysis	45
Noel Rd.	Baseline Rd. to Brandon Rd.	Elwood/ US Army	Expansion	CMAP Moving Will Truck Routing Study	44

Table 5: TMP Tier 3 Projects (Source: TMP)

Roadway	Location	Jurisdiction	Туре	Source	Map ID#
I-55	IL 59 Interchange	IDOT	Interchange	Joliet, CMAP TIP	19
US 52	At Gougar Rd. and Smith Rd.	IDOT	Intersection	CMAP TIP	5
IL 53	At Patterson Rd.	IDOT	Intersection relocation	Intersecti on Analysis	56
IL 53	At Zarley Rd.	IDOT	Intersection	CMAP TIP	9
IL 53	At Hoff Rd.	IDOT	Intersection	CMAP TIP	14
IL 53	At South Arsenal Rd.	IDOT	Intersection	CMAP TIP	58
Laraway Rd.	IL 53 to US 52	Joliet	Expansion	WCLRTP	30
Laraway Rd.	US 52 to IL 43 (Harlem Ave.)	WC	Expansion	WCCFFM P, Intersection Analysis	38



Table 6: TMP Tier 4 Projects (Source: TMP)

Roadway	Location	Jurisdiction	Туре	Source	Map ID#
IL 53	At Old Elm Rd.	IDOT	Intersection	CMAP TIP	8
IL 53	At. St. Louis St.	IDOT	Intersection	CMAP TIP	13
IL 53	At. Tehle Rd.	IDOT	Intersection	CMAP TIP	11
IL 53	At Walter Strawn Dr.	IDOT	Intersection	CMAP TIP	15
IL 53	At Manhattan/South Arsenal Rd.	IDOT	Intersection	CMAP TIP	6
Gougar Rd.	US 52 to Laraway Rd.	WC	New Road	WCLRTP	22
Laraway Rd.	At CenterPoint Way	Joliet, private	Intersection		59
Moen Ave.	Mound Road to IL 7 / Larkin Ave.	Rockdal e / 2 Twps	Expansion	WCCFFMP, CMAP TIP	37
Olympic Blvd.	Extension from Houbolt Rd to I- 55	IDOT, Joliet	New Road	Joliet	40
Schweitzer Rd.	IL 53 to Rowell Ave.	Joliet	Add Lanes	Model	55
Schweitzer Rd.	Rowell Ave. to US 52	Joliet / 3 Twps	Expansion	WCLRTP	31

As can be seen in Figure 8, many of the projects are along the same corridor or somehow interconnected. For example, the projects on Illinois 53 are part of a single IDOT project for intersection and safety improvements that are funded in the FY 24 – 29 MYP. Similarly, on I-55 projects 20, 25, and 36 overlap and include the project at Lorenzo Road and IL 129 that is likewise funded in the current MYP.

Project Phase and Funding Update

Several of the projects included in the TMP have been completed, are under construction, or will be let in the near future. These projects are listed in Table 7. There are seven projects that are new based on the results of the travel demand model and/or the intersection analysis. The roadway owners will need to be made aware of the results of the model and the need for these projects listed below.

- I-55 interchange modernization at Bluff Road (IDOT)
- Cherry Hill Road add lanes US 52 to Laraway (WCDOT)
- Baseline Road from Noel Road to CenterPoint Way (Private) add lanes
- Brandon Road US 6 and Meadow Avenue intersection project (Rockdale)



- CenterPoint Way from Millsdale Road to Schweitzer Road add lanes (Private)*
- Elwood International Port Road at Mississippi Street to Arsenal Road signalization (Elwood)*
- Schweitzer Road IL 53 to Rowell Avenue add lanes (Joliet)

The two * projects were also identified by the intersection analysis completed as part of the TMP. The intersection analysis identified four additional projects including:

- IL 53 at Laraway Road, signal modernization in Phase 1, construction expected in 2026 (IDOT)
- IL 53 at US 52/Doris Ave., in Phase 1 with Phase 1 approval expected in 2024
- Elwood International Port Road at Walter Strawn Drive signalization (Elwood)
- IL 53 at Patterson Road relocation, included in I-80 corridor improvements project (IDOT)

Table 7: Projects Completed, Under construction, or soon to be let

Roadway	Location	Jurisdiction	Туре	Status
I-55	IL 59 Interchange	IDOT	Interchange	Under construction expected completion 2024
I-80	Houbolt Road Interchange	Joliet, IDOT	Interchange	Complete
I-80	Projects 1, 2, 4, 24	IDOT	Corridor	Funded by Rebuild Illinois, to be let in segments between 2023 and 2028
Houbolt Bridge	US 6 to Schweitzer Rd./South Vetter Rd.	Private	Bridge	Opened 4/27/23
Vetter Rd.	Schweitzer to north of CenterPoint Way	Private	New roadway	Completed 2022
Laraway	At US 52	WC, IDOT	Intersection	WC share funded and programmed, waiting on IDOT funding



Laraway Rd.	US 52 to Harlem Ave. (IL 43)	WC	Corridor	There are 3 segments, 2 are funded
Moen Ave.	Mound Road to IL 7 / Larkin Ave.	Rockdale / 2 Twps	Expansion	Compete
Olympic Blvd.	Extension from Houbolt Rd to I-55	IDOT, Joliet	New Road	Let 2023

The breakdown of the TMP projects by jurisdiction are shown in Table 9:

IDOT	Joliet	Private	Will County	Elwood	Rockdale
31 Projects	8 Projects	5 Projects	4 Projects	4 Projects	2 Projects
• 6 on I55 • 4 on I80 • 1 on US 6 • 3 on US 52 • 15 on IL 53 • 1 at US 52/Laraway Road • 1 on Manhattan- Monee Road • 1 Olympic Blvd extension	• 3 underway • 5 not planned	2 complete or underway3 not planned	• 2 underway • 2 not planned	 One complete 2 not planned / identified by analysis One not underway (planned access removal of St. Louis Street to IL 53) 	One complete One not planned identified by analysi

Figure 9 TMP Projects by Jurisdiction

Project Groupings

Projects in the TMP were identified through a review of existing plans and program, the results of the Travel Demand Model, and the results of the Intersection Analysis completed as part of the Transportation Master Plan for the intermodal area. In some instances, the list of projects in the TIP overlap or can be grouped into larger corridor level projects. To facilitate a rational approach to analyzing merit criteria related to each project, projects were grouped into corridor level projects. Figure 10 10 illustrates the resulting list of fourteen projects. These projects will be the subject of the detailed project summaries included in Appendix D.



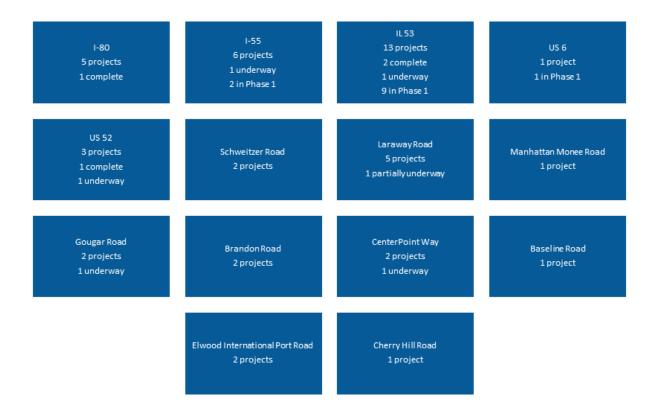


Figure 10: List of 14 Summarized Projects



Competitive Grant Programs

Grant Programs Applicable to Study Area and Projects

The following grants were identified as the most applicable Federally funded competitive grant programs. Appendix B contains a Grants Program Matrix that includes additional details on each program including the funding amount in IIJA and any additional funds appropriated, eligibility and match requirements, the availability of planning and/or capital grants, and whether a benefit cost analysis is required. Appendix E contains more detailed grant summaries based on the latest Notice of Funding Opportunity (NOFO) available at the time of the study.

FHWA Bridge Improvement Program (BIP)

The Bridge Investment Program is a competitive, discretionary program that focuses on existing bridges to reduce the overall number of bridges in poor condition, or in fair condition at risk of falling into poor condition. Included in IIJA, there is \$12.5 billion available over the 5 years to public agencies. The program is split into 3 categories: large bridge (over \$100 million), bridge (under \$100 million), and planning grants. Construction projects must be ready to move to construction within 18 months of obligation and the bridges must be rated "poor" or "fair" at risk of falling to poor within 3 years.

FRA Consolidated Railroad Infrastructure and Safety Improvement Program (CRISI)

The purpose of the CRISI Program is to invest in a wide range of projects within the United States to improve railroad safety, efficiency, and reliability; mitigate congestion at both intercity passenger and freight rail chokepoints to support more efficient travel and goods movement; enhance multi-modal connections; and lead to new or substantially improved Intercity Passenger Rail Transportation corridors.

The CRISI grant program prioritizes smaller Class II and Class III railroads, but also invests in grade crossing improvements to increase safety and reduce railroad right of way trespassing. In the most recent round of 69 awards, eight cities and one county were among the recipients.

FRA Rail Crossing Elimination Program (RCE)

According to the most recent NOFO, the RCE Program provides a Federal funding opportunity to improve American rail infrastructure to enhance rail safety, improve the health and safety of communities, eliminate highway-rail and pathway-rail grade crossings that are frequently blocked by trains, and reduce the impacts that freight movement and railroad operations may have on underserved communities. To be competitive projects in this program have to demonstrate strong project readiness, be listed in a state planning document, and include innovative technologies and materials.



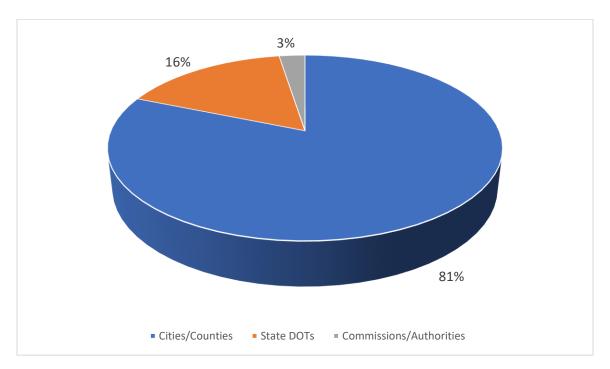


Figure 11: Number of FY 22 RCE Awards by Recipient Type

In the FY 22 round of grants, FRA received 209 applications of which only 153 were deemed eligible. Of the 153 eligible applications, 63 (41.1%) were awarded. Sixty percent of winning applications were for grade separations, 27% were for safety studies, 10% were for corridor safety improvement projects, and three percent were for crossing eliminations. This program is specifically designed to eliminate at-grade crossings and communities score well.

FHWA Charging and Fueling Infrastructure Program (CFI)

The Charging and Fueling Infrastructure Discretionary Grant Program (CFI Program) is a new competitive grant program created by IIJA to strategically deploy publicly accessible electric vehicle charging and alternative fueling infrastructure in communities and along designated Alternative Fuel Corridors (AFCs). CFI Program investments aims to make modern and sustainable infrastructure accessible to all drivers of electric, hydrogen, propane, and natural gas vehicles.

This program provides two funding categories of grants: (1) Community Charging and Fueling Grants (Community Program); and (2) Alternative Fuel Corridor (AFC) Grants (Corridor Program). Will County is home to 3 AFCs on I-55, I-57, and I-80. AFC investments must be for alternative fueling infrastructure within 1 mile of the designated corridor.

The first round of awards was announced January 11, 2024. There were 47 recipients located across 22 States and Puerto Rico and include two Tribes.



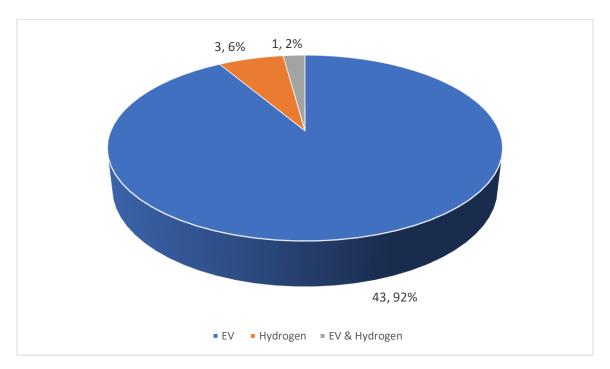


Figure 12: CFI FY 22 and 23 Awards by Type of Alternative Fuel

USDOT Multimodal Project Discretionary Grant Opportunity (MPDG)

The MPDG opportunity contains three grant programs: the National Infrastructure Project Assistance grants program (Mega), the Nationally Significant Multimodal Freight and Highways Projects grants program (INFRA), and the Rural Surface Transportation Grant program (Rural). The funding opportunities are awarded on a competitive basis for surface transportation infrastructure projects—including highway and bridge, intercity passenger rail, railway-highway grade crossing or separation, wildlife crossing, public transportation, marine highway, and freight projects, or groups of such projects—with significant national or regional impact, or to improve and expand the surface transportation infrastructure in rural areas.

FHWA Mega

The Mega Program (the National Infrastructure Project Assistance program) supports large, complex projects that are difficult to fund by other means and likely to generate national or regional economic, mobility, or safety benefits. Funding available under the Mega program requires 50% of funds be available to large projects over \$500 million and 50% for projects between \$100 million and \$500 million.

In the first round of Mega, only nine projects were awarded funding. All nine of the projects were for projects between the \$100 million and \$500 million threshold. Thirteen projects qualified for technical assistance where the sponsors will receive technical support for future applications, six of those projects exceeded the \$500 million threshold. To be competitive, project NEPA requirements and right-of-way acquisition should be complete or near complete.



FHWA INFRA

INFRA (the Nationally Significant Multimodal Freight & Highway Projects program) awards competitive grants for multimodal freight and highway projects of national or regional significance to improve the safety, efficiency, and reliability of the movement of freight and people in and across rural and urban areas. Over the last two grant cycles, INFRA, Mega, and Rural programs have been combined into one NOFO.

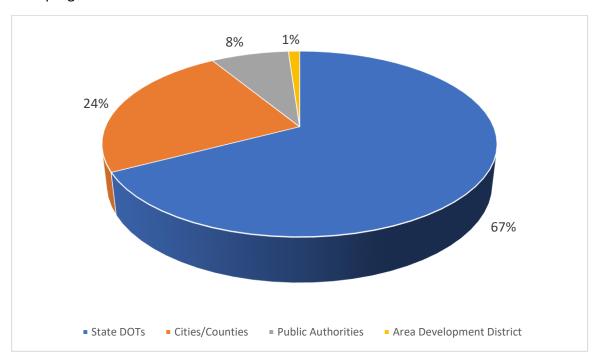


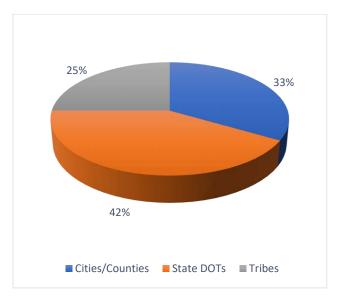
Figure 13: Share of INFRA Awards by Recipient Type

The types of projects funded by FY 22 INFRA include truck parking, port electrification, mobility, community connectivity, shared use facilities, infrastructure hardening to climate effects, and several bridge projects.

USDOT Rural

The Rural Surface Transportation Grant Program supports projects that improve and expand surface transportation infrastructure in rural areas to increase connectivity, improve the safety and reliability of the movement of people and freight, and generate regional economic growth and improve quality of life. Rural Surface Transportation grant program funding is made available under the MPDG combined Notice of Funding Opportunity (NOFO).





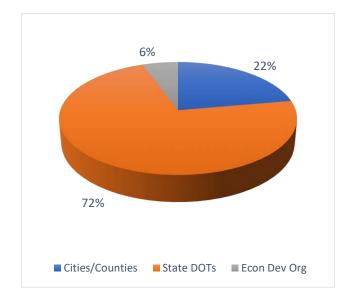


Figure 1414: FY 22 Share of Rural Award by Recipient Type

Figure 15: FY 23 & 24 Share of Rural Award by Recipient Type

FHWA PROTECT

The Bipartisan Infrastructure Law (BIL) established the Promoting Resilient Operations for Transformative, Efficient, and Cost-Saving Transportation (PROTECT) Program to help make surface transportation more resilient to natural hazards, including climate change, sea level rise, flooding, extreme weather events, and other natural disasters.

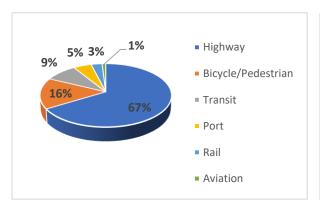
The Program is divided into four categories including planning activities, resilience improvements, community resilience and evacuation routes, and at-risk costal infrastructure. While projects in Will County will not qualify for at-risk coastal infrastructure, the other categories will be important considerations to harden infrastructure against extreme weather events and aid in disaster readiness, response, and recovery.

Awards for the first 2 years of the program have not yet been announced as of January 31, 2024.



USDOT RAISE

The Rebuilding American Infrastructure with Sustainability and Equity, or RAISE Discretionary Grant program, provides a unique opportunity for USDOT to invest in road, rail, transit, and port projects that promise to achieve national objectives. Previously known as the Better Utilizing Investments to Leverage Development (BUILD) and Transportation Investment Generating Economic Recovery (TIGER) Discretionary Grants, Congress has dedicated nearly \$14.3 billion for fifteen rounds of National Infrastructure Investments to fund projects that have a significant local or regional impact.



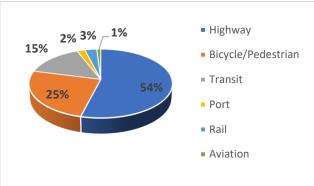


Figure 15: Modal Split of FY 23 RAISE Applications

Figure 16: Modal Split of FY 23 RAISE Awards

Federal statute establishes the national objectives of the program that includes safety; environmental sustainability; quality of life; mobility and community connectivity; economic competitiveness and opportunity including tourism; state of good repair; partnership and collaboration; and innovation.

The FY 2023 RAISE program generated over 1,100 applications totaling \$15 billion for the \$2.26 billion in available funding. Of the 1,100 applications, 162 were selected or just under 15%. The modal distribution of applications and awards are illustrated in Figures 6 and 7.

FHWA Reduction of Truck Emissions at Port Facilities (RTEPF)

The RTEPF Grant Program is a new program that will 1) study how ports and intermodal port transfer facilities would benefit from increased opportunities to reduce emissions at ports, including through the electrification of port operations, 2) study emerging technologies and strategies that may help reduce port-related emissions from idling trucks, and 3) coordinate and provide funding to test, evaluate, and deploy projects that reduce port-related emissions from idling trucks, including through the advancement of port electrification and improvements in efficiency, focusing on port operations, including heavy-duty commercial vehicles, and other related projects.

The program goal can be achieved through, though is not restricted to, one or more of the



following means:

- Promoting development of port-related infrastructure that reduces emissions from port related truck idling, including the electrification of port operations, which can include truck parking electrification;
- Promoting development of on-truck technologies that reduce emissions from portrelated truck idling;
- Promoting use of zero or low emissions powertrains or fuels on trucks;
- Reducing truck congestion within or adjacent to ports, which can include promoting enhanced rail intermodal connections at ports; and
- Other improvements that reduce port-related emissions from idling trucks, including through the advancement of port electrification and improvements in efficiency focusing on port operations, including heavy-duty commercial vehicles, and other related projects.

The first round of awards had not been announced by January 31, 2024.

FHWA Safe Streets for All (SS4A)

The SS4A program supports the development of a comprehensive safety action plan (Action Plan) that identifies the most significant roadway safety concerns in a community and the implementation of projects and strategies to address roadway safety issues. Action Plans are the foundation of the SS4A grant program. SS4A requires an eligible Action Plan to be in place before applying to implement projects and strategies. The SS4A program provides funding for two types of grants:

- Planning and Demonstration Grants provide Federal funds to develop, complete, or supplement a comprehensive safety action plan. The goal of an Action Plan is to develop a holistic, well-defined strategy to prevent roadway fatalities and serious injuries in a locality, Tribe, or region. Planning and Demonstration Grants also fund supplemental planning and/or demonstration activities that inform the development of a new or existing Action Plan, which applicants are encouraged to include.
- Implementation Grants provide Federal funds to implement projects and strategies identified in an Action Plan to address a roadway safety problem. Projects and strategies can be infrastructure, behavioral, and/or operational activities. Implementation Grants may also include demonstration activities, supplemental planning, and project-level planning, design, and development. Applicants must have an eligible Action Plan to apply for Implementation Grants. The Department encourages including demonstration activities in an application.

FY 23 planning grants were announced October 27, 2023, followed by the implementation grants on December 13, 2023. The FY 24 NOFO is expected to be published February 2024.



CMAP was awarded a FY 22 planning grant (February 2023) in the first round for the Safe Travel for All: County Action Plans, which includes an action plan for Will County that will identify projects and strategies that will be eligible for implementation grants in future rounds. Note that this program is directly geared towards local agencies. States are not eligible applicants.

FHWA Reconnecting Communities and Neighborhoods (RCN)

The RCN program has two purposes:

- To advance community-centered transportation connection projects, with a priority for projects that benefit disadvantaged communities, that improve access to daily needs such as jobs, education, healthcare, food, nature, and recreation, and foster equitable development and restoration
- 2. Provide technical assistance to further these goals

The RCN is the first-ever Federal program dedicated to reconnecting communities that were previously cut off from economic opportunities by transportation infrastructure. Funding supports planning grants and capital construction grants, as well as technical assistance, to restore community connectivity through the removal, retrofit, mitigation, or replacement of eligible transportation infrastructure facilities. There are two classifications of transportation infrastructure facilities, dividing facilities and burdening facilities.

A dividing facility is a surface transportation facility that creates an obstacle to community connectivity by high speeds, grade separation, or other design factors. A burdening facility is a surface transportation facility that is a source of air pollution, noise, stormwater, heat, or other burden to a disadvantaged community.

Communities or infrastructure owners will be better positioned to compete for these programs if they have developed a holistic restoration plan that includes extensive community engagement. Community members should have a role in developing and directing projects to include in the plan.

There were only 6 capital grants awarded in the FY 22 round, 3 of which went to cities, 2 went to state DOTs, and the other one was awarded to a transit agency. There were 39 planning grants including 28 cities, four state DOTs, two tribes, one MPO and four to other organizations. The FY 23 round application period closed September 28, 2023, and as of January 31, 2024, the awards had not been announced.

FHWA SMART

IIJA established the Strengthening Mobility and Revolutionizing Transportation (SMART) discretionary grant program with \$100 million appropriated annually for fiscal years (FY) 2022-2026.



The SMART program was established to provide grants to eligible public sector agencies to conduct demonstration projects focused on advanced smart community technologies and systems in order to improve transportation efficiency and safety.

To be eligible, projects must fall into at least one of the following eight categories:

- Coordinated automation
- Connected vehicles
- Sensors
- Systems integration
- Delivery/logistics
- Innovative aviation
- Smart grid
- Traffic signals

In the first round (FY 22), 392 applications were submitted with 59 projects awarded totaling \$94 million. The FY 23 round closed October 10, 2023.

MARAD Port Infrastructure Development Program (PIDP)

PIDP grants support efforts by ports and industry stakeholders to improve port and related freight infrastructure to meet the nation's freight transportation needs and ensure port infrastructure can meet anticipated growth in freight volumes. The PIDP provides funding to ports in both urban and rural areas for planning and capital projects. It also includes a statutory set-aside for small ports to continue to improve and expand their capacity to move freight reliably and efficiently and support local and regional economies.

The NOFO specifically define eligible projects as "Projects that improve facilities within, or outside of and directly related to operations of or an intermodal connection to, coastal seaports, inland river ports, and Great Lakes ports." In other words, port and intermodal access projects are eligible.

FY 23 awards were announced November 3, 2023. There were 41 projects awarded funding totaling \$653 million, including \$172.8 million in funding awarded to small ports. In FY 22, there were 41 awards in 22 states. More than 60 percent of the awards benefited ports in historically disadvantaged communities and several of the projects reduced emissions at the ports through electrification. Additionally, more than \$150 million in awards included a focus on electrification of port equipment to reduce emissions and improve air quality. The awards also included nearly \$100 million for port projects that will advance offshore wind deployment.

Detailed Grant Summaries

Each of the above grant programs are summarized in greater detail in Appendix E. Eligibility requirements for applicants and projects are detailed as well as the merit criteria and the process used to evaluate projects. Application checklists are provided as part of the summary to



assist project sponsors prepare for developing an application, meeting submission requirements, and constructing a competitive grant application.



Grants – Project Alignment (matrix)

Included in Appendix C: Grant - Project Alignment Matrix is a matrix aligning TIP projects with various grant programs. Figure 18 illustrates the content of the matrix.

	ant Programs	BIP	OR	CRISI	HOPP	INFRA	Meca	PIDP	PROTECT	RCE	RAISE	RCN	RTEP	Bural	SSAA	SMART		
Roadway	Location	Project Description	Project Source	100	441	Contract Con		Herrios	- maga	*****	THOUSE.	70.0	Toese		Terret.	222.50	1000	
1-55	I-80 to Coal City Road - RSP 34	This project would reconstruct i-55, add a lane in each direction, and improve interchanges through western Will County, from the i-80 interchange south to Coal City Road	CMAPTIP															
1-55	Bridge Over the Des Plaines River (component of RSP 34)	Reconstruction I-55 bridges over the Des Plaines River. Bridges currently rated in fair condition with a rating of 5 in all key categories.	Will Connects 2040															
1-55	I-355 to Coal Oty Road (overlaps with RSP 34) (from I-355 to IL 53 roadway expansion is in the CMAP TIP.	Overlaps with items 7 and 8.	Freight Plan, CMAP TIP															
1-55	Interchange at Bluff Road	Recently completed improvements included expanded ramps, additional turn lanes to Bluff Road and new traffic signals. The model identified interchange modernization.	Model															
1-80	Ridge Road To US 30/ Lincoln Hwy - RSP 36	The overall I-80 project will redesign and rebuild 16 miles from Ridge Road, in Minooka, to U.S. 30, in joilet and New Lenox, while adding or extending auxiliary lanes to improve safety and reduce congestion, interchanges will be rebuilt or improved at interstate 55, illinois 7, Center Street, Chicago Street, Richards Street and Briggs Street, with a new flyover ramp linking southbound I-35 to earthound I-80 to improve traffic flow and safety. More than 30 bridges will be rehabilitated or replaced, including those over the Des Plaines River.	CMAPTIP															

Figure 17: Project - Grant Alignment Matrix Example



Metrics and Data

Metrics and Merit Criteria

Each Grant Program and Notice of Funding Opportunity (NOFO) lists the Merit Criteria to be addressed in the grant application. Under the Biden Administration, there are clear focus areas in the merit criteria that are consistent among the programs. Figure 19 provides detail on merit criteria for the grant programs reviewed.

Grant Program	BIP	CFI	CRISI	INFRA	MEGA	PIDP	PROTECT	RAISE	RCE	RCN	RTEP	Rural	SMART	SS4A
Criteria	DIF	Cri	CNISI	INFINA	IVILOA	FIDE	PROTECT	MAIJL	NCL	KCN	KILF	Nulai	SIVIAILI	334A
BCA Ratio	Х		Χ	Х	Х	Х	Х	Х		Χ	Χ	Χ		
But/For Funding Provision	Χ	Χ		Χ	Χ	Х	Χ					Χ		
Climate Change / EJ	Χ	Χ		Χ	Χ	Х	Χ	Χ		Χ	Χ	Χ	Х	
Community Engagement	Χ	Χ	Χ			Χ	Χ	Χ	Χ	Χ	Χ		Χ	Χ
DBE/MBE/WBE/8(a)		Χ	Χ	Χ	Χ	Х	X	Χ		Χ	Χ	Χ		Χ
Economic Impact/Benefits				Χ	Χ	Х	Χ	Χ	Χ	Χ	Χ	Χ	Х	Χ
Environment / Pollution Reduction	Χ	Χ		Χ	Χ	Х	X	Χ	Χ	Χ	Χ	Χ	Х	Χ
Equity: APP, HDC - benefits	Χ	Χ		Χ	Χ	Х	X	Χ		Χ	Χ	Χ	Х	Χ
Freight Movement	Χ	Χ		Χ	Χ	Х	Χ	Χ	Χ	Χ	Χ	Χ	Х	
Hiring Preferences			Χ	Χ	Χ	Χ	Χ	Χ	Χ	Χ	Χ	Χ		
Innovation	Χ		Χ	Χ	Χ		X	Χ	Χ		Χ	Χ	Х	Χ
Job Creation	Χ		Χ	Χ	Χ	Χ	Χ	Χ		Χ	Χ	Χ	Х	
Multimodal Options / Connectivity	Χ	Χ	Χ	Χ	Χ	Х	X	Χ	Χ	Χ		Χ		Χ
PLA/registered apprenticeships		Χ	Χ	Χ	Χ	Х	Χ	Χ		Χ	Χ	Χ		Χ
Project Readiness	Χ		Χ	Χ	Χ	Х	X	Χ		Χ	Χ	Χ	Х	Χ
Reliability	Χ	Χ	Х		Х	Х		Χ				Х		
Resiliency	Χ	Χ	Х	Χ	Χ	Х	X	Χ	Χ	Χ		Х	Х	
Safety	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х
State of Good Repair	Χ		X	Х	X			Χ	Χ		Х	X		

Figure 18: Common Merit Criteria Across Grant Programs



As of the last two rounds the NOFO's released by USDOT, the agencies have become more transparent in describing how each Merit Criteria individually and the application as a whole will be scored. Below is an example of the scoring rubric that USDOT shared in their INFRA FY23 NOFO.

Project Outcome Criteria and Scoring

Requirement	USDOT Guidance
The project is likely to generate national or regional economic, mobility, or safety benefits The project will be cost-effective	Summarize the economic, mobility and safety benefits of the project and independent project components, describing the scale of their impact in national or regional terms. Highlight the results of the BCA. A project is cost effective if the benefit-cost ration is > 1.
The project will contribute to 1 or more of the national goals described under Section 150	Specify the Goal(s) and summarize how the project and independent project components contribute to that goal(s). 23 USC 150: National goals and performance management measures (house.gov)
The project is based on the results of preliminary engineering	For a project to be based on the results of preliminary engineering, applicants have to indicate which of the following activities have been completed as of the date of application: • Environmental Assessments • Topographic Surveys • Metes and Bounds Surveys • Geotechnical Analysis • Utility Engineering • Traffic Studies • Financial Plans • Revenue Estimates • Hazardous Materials Assessments • General estimation of types and quantities of materials • Other work needed to establish parameters for final design If part of a larger plan or document, it must be explicitly stated with references to the document
For non-Federal financial commitments, 1 or more stable and dependable sources of	Applicants must indicate the funding source(s) and amounts that will account for



funding and financing are available to construct, maintain, and operate the project and contingency amounts are available to cover unanticipated cost increases	all project costs and demonstrate that the funding is stable, dependable, and dedicated to the project by referencing the STIP/TIP, a letter of commitment, a local government resolution, MOU, or similar documentation. Applicants must state the contingency amount available for the project.
The project cannot be easily and efficiently completed without other Federal funding or financing available to the project sponsor	Describe negative impacts on the project if the INFRA grant was not awarded. Respond to the following questions: 1. How would the project scope be affected? 2. How would the project schedule be affected? 3. How would the project cost be affected? If none are affected, it must be stated.
The project is reasonable expected to begin construction not later than 18 months after the date of obligation of Federal funds	Applicants are to provide the expected obligation date and construction start date, referencing the budget and schedule as needed.



Safety

Score	Criterion	Example
0	The project negatively affects safety.	The project is likely to result in increased number of fatalities and injuries on a per-user basis due to unsafe design.
1	The application does not contain enough information to assess whether the project results in safety benefits	The application does not describe safety impacts of the project; or whether the project results in safety benefits is ambiguous
2	 The project results in safety benefits matching one or more of the descriptions below, BUT safety is not a primary project purpose, or the project does not otherwise meet the description of a "3" rating: Reduces fatalities and/or serious injuries Protects non-motorized travelers, motorized travelers, or communities/local residents from safety risks Implements actions and activities identified in the National Roadway Safety Strategy (NRSS) Targets the shortage of long-term parking for commercial vehicles on the NHS Promotes safer speeds in all roadway environments through a combination of thoughtful, equitable, context appropriate roadway design, targeted education, outreach campaigns, and enforcement. 	The project results in measurable reductions in crashes, fatalities, or serious injuries to the traveling public, including vulnerable roadway users, by adopting actions and activities identified in the NRSS.
3	Safety is a primary purpose of the project AND the project results in clear and direct safety benefits matching one or more of the descriptions below: • Significantly reduces fatalities and/or serious injuries bringing them below the state-wide avg. • Significantly protects vulnerable or nonmotorized users from health and safety risks.	The project targets a well-known safety problem, resulting in a significant reduction in fatalities or serious injuries to motorized and non-motorized users. The project incorporates innovative roadway design or technology aimed at protecting vulnerable users.



State of Good Repair

Score	Criterion	Example
1	The project negatively affects state of good repair. The application does not contain enough information	The project ignores pre-existing maintenance liabilities and increases ongoing maintenance costs without a clear plan to manage or maintain the expanded infrastructure. The project is identified in the
	to assess whether the project results in state of good repair benefits	sponsor's Asset Management Plan, but it is difficult to verify that the infrastructure asset will operate at a full level of performance after project improvements.
2	The project results in state of good repair benefits matching one or more of the descriptions below, BUT state of good repair is not a primary project purpose, or the project does not otherwise meet the description of a "3" rating: • Restores existing core infrastructure at the end of its useful life to a state of good repair • Creates new infrastructure in remote communities that will be maintained in a state of good repair as evidenced by the project's inclusion in an Asset Management Plan	The project is identified in the sponsor's Asset Management Plan and will repair or rebuild an infrastructure asset so that it will at a full level of performance.
3	State of good repair is a primary purpose of the project AND the project results in clear and direct state of good repair benefits matching one or more of the descriptions below: • Restores and modernizes existing core infrastructure (such as through road diets complete streets, or other design improvements) that will result in lower long-term maintenance costs • Addresses current and projected vulnerabilities that if left unaddressed will threaten future transportation network efficiency, mobility of goods or people, or economic growth	The project is identified in the sponsor's Asset Management Plan and will repair or rebuild an infrastructure asset so that it will at a full level of performance and is designed to significantly reduces future operation and maintenance costs throughout the asset life, beyond the costs saved from the initial project expenditures and /or that will significantly lengthen the standard useful life of the asset.



Economic Impacts, Freight Movement, and Job Creation

Score	Criterion	Example
0	The project negatively affects economic impacts, freight movement, and job creation.	The project will detract from local economic activity by demolishing existing homes, businesses, or rendering future development impossible, while failing to generate any appreciable benefits to freight mobility or job accessibility.
1	The application does not contain enough information to assess whether the project results in economic impacts, freight movement, and job creation benefits	The project sponsor provides some justification, but with minimal evidence that the project will help to positively impact regional economic development in the area or help to offset job losses in the area The project sponsor provides minimal evidence that the project will create high quality jobs with a free choice to join a union or the incorporation of strong labor standards and practices, such as project labor agreements (PLAs), use of registered apprenticeships or other joint labor-management training programs, and the use of an appropriately credentialed workforces.



Score	Criterion	Example
2	The project results economic impacts, freight movement, and job creation benefits matching one or more of the descriptions below, BUT economic impacts, freight movement, and job creation is not a primary project purpose, or the project does not otherwise meet the description of a "3" rating: Economic Impacts Improves multimodal transportation systems that incorporate affordable transportation option to improve mobility of people and goods Decreases transportation costs and improves access to employment centers and job opportunities Enhance recreational and tourism opportunities by providing access to Federal land, national parks, national forests, national recreation areas, national wildlife refuges, wilderness areas, or State parks. Help the U.S. compete in a global economy by encouraging the location of important industries and future innovations and technology in the U.S. and facilitating efficient and reliable freight movement. Freight Movement Improve intermodal and/or multimodal freight mobility, especially for bottlenecks. Job Creation Results in high quality job creation by supporting good-paying jobs with a free and fair choice to join a union, in project construction and in on-going operations and maintenance Results in workforce opportunities for historically underrepresented groups, such as through the use of local hire provisions or other workforce strategies targeted at or jointly develop with historically underrepresented groups, to support project development.	The project sponsor demonstrates some or limited new short-term or long-term job creation as a result of the project and it is documented by a signed letter from a business(es) stating the amount of new jobs to be created, and how the project is vital to the creation of those jobs The project opens additional new tourism or recreational access and is aligned with a plan that demonstrates that intention The project sponsor demonstrates some evidence that the project will create high quality jobs with a free choice to join a union or the incorporation of strong labor standard and practice, such as project labor agreements, use of registered apprenticeships or other joint labor-management training programs, and the use of an appropriately credentialed workforce.



Score	Criterion	Example
Score 3	Economic impacts, freight movement, and job creation is a primary purpose of the project AND the project results in clear and direct economic impacts, freight movement, and job creation benefits matching one or more of the descriptions below: Economic Impact Demonstrates that the project will directly, and in the near-term, result in greater public and private investments in land-use productivity, including rural main street revitalization, equitable commercial and	The project expands direct access to a national park, with demonstrable benefits to the recreational and tourism economic activity in a rural area. The project sponsor demonstrates that the project addresses a national supply chain bottleneck (identified in the top 100 nationwide), the main goal of the
	 mixed income residential development. Enhances recreational and tourism opportunities by providing direct access to Federal land, national parks, national forests, national recreation areas, national wildlife refuges wilderness areas, or State parks Freight Movement Improve intermodal and/or multimodal freight mobility along corridors identified as 	project is to positively impact that bottleneck, and ample evidence is provided that shows significant national supply chin benefits from the project. The project sponsor provided a letter from a labor union or worker organization that describes the
	major freight highway bottlenecks or congested corridors ranked in the top 100 of FHWAs Freight Mobility Trends Report 2019. Job Creation Result in high quality job creation by	number and characteristics of the high-quality jobs on the project and indicating that the project sponsor intends to utilize a PLA.
	supporting good-paying jobs with a free and fair choice to join a union, in project construction and in on-going operations and maintenance, and incorporate strong labor standards, such as through the use of PLAs. Invests in high-quality workforce training programs such as registered apprenticeship programs and joint labor-management training programs to recruit, train, and retain skilled workers, and implement policies such as targeted hiring preferences that will promote the entry and retention of local underrepresented populations into those jobs including women, people of color, and people with convictions.	



Climate Change, Resiliency, and the Environment

Score	Criterion	Example
0	The project negatively impacts climate change resiliency and the environment.	The project will increase GHG and harmful pollutant emissions while failing to contribute to increased resiliency or addressing other environmental harms.
1	The application does not contain enough information to assess whether the project results in climate change, resiliency, and the environment benefits	The project will add capacity to a roadway segment which may induce additional VMT increasing emissions, however, potential congestion reduction may reduce some emissions leaving the overall emissions picture ambiguous, particularly when combined with other resiliency and environmental benefits
2	The project results in state of climate change, resiliency and the environment benefits matching one or more of the descriptions below, BUT climate change, resiliency and the environment is not a primary project purpose, or the project does not otherwise meet the description of a "3" rating: • Reduces air pollution and GHGs rom transportation • Incorporates lower-embodied carbon pavement and construction materials • Explicitly considers climate change and environmental justice in the planning and design stage, particularly in communities that disproportionately experience climate change consequences • Incorporates electrification or zero emission vehicle infrastructure • Incorporates nature-based solutions • Reduces air or water pollution, recycles, or redevelops brownfield sites • Results in a modal shift that reduces emissions • Promotes energy efficiencies • Serves the renewable energy supply chain • Improves the resilience of at-risk infrastructure, including upgrade of projects in floodplains	The project is identified in the sponsor's Asset Management Plan and will repair or rebuild an infrastructure asset so that it will at a full level of performance.



Score	Criterion	Example
3	Climate change, resiliency and the environment is a primary purpose of the project AND the project results in clear and direct climate change, resiliency and the environment benefits matching one or more of the descriptions below: • Significantly reduces air pollution and GHGs from transportation as a result of modal shift or electrification • Explicitly considers climate change and environmental justice in the planning and design stage, particularly in communities that disproportionally experience climate change consequences as captured by the CEJST tool. • Improves resiliency of at-risk infrastructure, including upgrades to projects in floodplains, while NOT increasing air pollution and GHGs through increased capacity and induced demand.	The project's goal is to incentivize carpooling and eliminate a major roadway bottleneck. The project will provide free flow travel by adding a HOV lane for 3+ passengers and gateless toll gantry thereby encouraging carpooling and reducing traffic and vehicular idling reducing CO2 tailpipe emissions. The project will install public EV charges at existing park and ride facilities.

Equity, Multimodal Options, and Quality of Life

Score	Criterion	Example
0	The project negatively impacts equity, multimodal options, and quality of life.	The project exacerbates existing inequitable outcomes by constructing new barriers to walking and biking and burdening a disadvantaged community with high costs
1	The application does not contain enough information to assess whether the project results in equity, multimodal options, and quality of life benefits	The project sponsor has developed and published a general equity policy statement for their agency but has not demonstrated any other equity considerations for the actual project. The project sponsor has created additional multimodal access in conjunction with the project, but only as a minimum project requirement, and not as a result of intentional planning efforts



2	The project results in equity, multimodal options, and quality of life benefits matching one or more of the descriptions below, BUT equity, multimodal options, and quality of life is not a primary project purpose, or the project does not otherwise meet the description of a "3" rating: • Increases affordable and accessible transportation choices • Improves access to emergency care, essential services, healthcare providers, or drug and alcohol treatment and rehab centers • Results in lower transportation and housing cost burdens, including through public and private investments to support greater commercial and mixed income residential development near public transportation, along rural main streets or in walkable neighborhoods • Increases the walkability, accessibility for pedestrians and encourage thriving communities for individuals to work, live, and play by creating transportation choices for individuals to move freely with or without a car in a healthy environment	The project is transforming roadway conditions or adding functionality that improves access to emergency care and essential services in a rural area. The project sponsor is supporting workforce development programs, including labor-management programs, local hire provisions and incorporating workforce strategy into project development in a manner that produces non-trivial benefits.
3	Equity, multimodal options, and quality of life is a	The project sponsor includes new
	primary purpose of the project AND the project results in clear and direct equity, multimodal options,	and/or greatly improved multimodal access across previously bifurcated
	and quality of life benefits matching one or more of	disadvantaged neighborhoods and
	the descriptions below:	demonstrates how specifically the
	 The project is located in an Area of Persistent 	disadvantaged neighborhoods will
	Poverty or Historically Disadvantaged	be positively impacted, and how
	Community AND the project directly benefits	those improvements were as a
	the population in that area	result of intentional planning and public input.
	 The project sponsor has adopted an equity 	
	, , , , , , , , , , , , , , , , , , , ,	public iliput.
	and inclusion program plan, or has otherwise	public ilipat.
	, , , , , , , , , , , , , , , , , , , ,	public ilipat.
	and inclusion program plan, or has otherwise instituted equity focused policies related to project procurement, material sourcing, construction, inspection, hiring, or other	public ilipat.
	and inclusion program plan, or has otherwise instituted equity focused policies related to project procurement, material sourcing, construction, inspection, hiring, or other activities designed to ensure equity in the	
	and inclusion program plan, or has otherwise instituted equity focused policies related to project procurement, material sourcing, construction, inspection, hiring, or other activities designed to ensure equity in the overall project delivery and implementation	
	 and inclusion program plan, or has otherwise instituted equity focused policies related to project procurement, material sourcing, construction, inspection, hiring, or other activities designed to ensure equity in the overall project delivery and implementation The project includes comprehensive planning 	
	 and inclusion program plan, or has otherwise instituted equity focused policies related to project procurement, material sourcing, construction, inspection, hiring, or other activities designed to ensure equity in the overall project delivery and implementation The project includes comprehensive planning and policies to promote hiring of 	
	 and inclusion program plan, or has otherwise instituted equity focused policies related to project procurement, material sourcing, construction, inspection, hiring, or other activities designed to ensure equity in the overall project delivery and implementation The project includes comprehensive planning and policies to promote hiring of underrepresented populations including local 	
	 and inclusion program plan, or has otherwise instituted equity focused policies related to project procurement, material sourcing, construction, inspection, hiring, or other activities designed to ensure equity in the overall project delivery and implementation The project includes comprehensive planning and policies to promote hiring of 	



- services, including labor-management programs, to help train, place, and retain people in good-paying jobs or registered apprenticeships
- The project includes physical-barriermitigating land bridges, caps, lids, linear parks, and multimodal mobility investments that either redress past barriers to opportunity or that proactively create new connections and opportunities for underserved communities that are underserved by transportation
- The project includes new or improved walking and bicycling infrastructure, reduces automobile dependence, and improves access for people with disabilities and proactively incorporates Universal Design
- The project includes new or improved freight access to underserved communities to increase access to goods and job opportunities for those underserved communities



Innovation Areas: Technology, Project Delivery, and Financing

Score	Criterion	Example
0	The project negatively impact innovation.	The project removes previously installed innovative technology.
1	The application does not contain enough information to assess whether the project results in innovation benefits	The project references the incorporation of innovative technologies but does not elaborate on the benefits of those technologies or demonstrate how those technologies align with USDOT's innovation principles.
2	The project results in innovation benefits matching one or more of the descriptions below, BUT innovation is not a primary project purpose, or the project does not otherwise meet the description of a "3" rating: • Deploy technologies, project delivery, or financing methods that are new or innovative to the applicant or community.	The project incorporates some or limited amount of materials or construction processes that reduce GHGs. The project incorporates innovative technology that advances USDOT innovation goals and employs innovative project delivery methods that will accelerate delivery and achieve improved outcomes.
3	Innovation is a primary purpose of the project AND the project results in clear and direct innovation benefits matching two or more of the descriptions below (benefits can be within the same area): Innovative Technologies • Enhance the environment for electric, connected, and automated vehicles to improve the detection, mitigation, and documentation of safety risks • Use low-carbon materials • Use caps, land bridges, or underdecks Innovative Project Delivery • Use practices that facilitate accelerated project delivery such as single contractor design-build arrangements, congestion management, asset management or longterm operations and maintenance Innovative Financing • Secure TIFIA, RRIF, or private activity bond financing • Use congestion pricing or other demand management strategies	The project incorporates a significant amount of materials or construction processes that reduce GHGs and will use practices to facilitate accelerated project delivery.



Economic Analysis Rating

Rating	Description
High	The project's benefits will exceed its costs, with a benefit-cost ratio of at least 1.5
Medium-High	The project's benefits will exceed its costs
Medium	The project's benefits are likely to exceed its costs
Medium-Low	The project's costs are likely to exceed its benefits
Low	The project's costs will exceed its benefits

The Department will rely on quantitative, evidence-based, and data supported analysis presented in the application. It is a good idea to include the detailed analysis as an Appendix to the application for easy reference by the reviewers.

Project Readiness Rating

Project Readiness Component Ratings

Rating	1	2	3	
Technical Capacity	Uncertain: The team	Somewhat	Certain: The Team is	
Assessment	is not confident in	certain/unknown: The	confident in the	
	the applicant's	team is moderately	applicant's capacity	
	capacity to deliver	confident in the	to deliver the project	
	the project in a	applicant's capacity	in a manner that	
	manner that satisfies	to deliver the project	satisfies Federal	
	Federal	in a manner that	requirements	
	requirements	satisfies Federal		
		requirements		
Financial	Incomplete Funding:	Partially	Complete, stable,	
Completeness	The project lacks full	complete/Appear	and committed:	
	funding, or one or	Stable and Highly	The Project's Federal	
	more Federal or non-	Likely to be Available:	and non-Federal	
	Federal match	Project funding is not	sources are fully	
	sources are still	fully committed but	committed and there	
	uncertain as to	appears highly likely	is demonstrated	
	whether they will be	to be secured in time	funding available to	
	secured in tie to	to meet the project's	cover contingency	
	meet the projects	construction schedule	/cost increases.	
	construction			
	schedule			



Environmental	High Risk:	Moderate Risk:	Low Risk:	
Review and	The project has not	The project has not	The project has	
Permitting Risk	completed or begun	completed NEPA or	completed NEPA or it	
	NEPA and there are	secured necessary	is highly likely that	
	known	Federal permits, and	NEPA can be	
	environmental, or	it is uncertain	completed and other	
	litigation concerns	whether they will be	environmental	
	associated with the	able to complete	reviews in the time	
	project.	NEPA or secure	necessary to meet	
		necessary Federal	the project schedule.	
		permits in the time		
		necessary to meet the		
		project schedule.		

Overall Rating for Project Readiness

Score	Overall Rating		
All 3s	High		
Two 3s, one 2	Medium-High		
One 3, two 2s	Medium		
All 2s	Medium-Low		
Any 1s	Low		

Using the rubrics for the scoring of each of these criteria, the next section of this report will provide example data sources that a Project Sponsor can use to collect data for the United States as a whole, their State, Project Area, and specific Project.



Data Sources

This section provides example data sources and illustrative maps that can be used to support the different Merit Criteria in the Application. Additional data sources can be found in Appendix F: List of data sources and links.

Safety

Crash Data- It is important to collect as much data as possible on the History of Crashes within the Project Area. This data will be used in the Benefit Costs Analysis (BCA) and stated within the Safety Merit Criteria Section. It is best to have a five-year history to present if possible.



Example Table to include in the Benefit Cost Analysis (BCA). A summary of the results should be included in the Safety Section of the Merit Criteria as shown below the chart.

Annual Crashes at Nelson Rd and Laraway Rd						
	К	А	В	С	0	Total Crashes
Total # of Crashes (2011-2015)	0	1	1	1	11	14
Average Annual # of Crashes (Total / 5)	0.00	0.20	0.20	0.20	2.20	2.80
Add RT Lanes CMF (applies to all crashes)	0.92	0.92	0.92	0.92	0.92	-
Annual Crashes Eliminated	0.00	0.02	0.02	0.02	0.18	0.22

Adding right turn lanes to Laraway Rd is the only improvement considered at this intersection.

	К	А	В	С	0	Total Crashes
Total # of Crashes (2008-2011)	0	1	10	2	58	71
Average Annual # of Crashes (Total / 4)	0.00	0.25	2.50	0.50	14.50	17.75
Total # of LT Crashes (2008- 2011)	0.00	0.15	1.54	0.31	1.00	3.00
Average Annual # of LT Crashes (Total / 4)	0.00	0.04	0.38	0.08	0.25	0.75
Add RT Lanes CMF (applies to all crashes)	0.92	0.92	0.92	0.92	0.92	-
EB/WB Protected LT CMF (applies to left turn crashes only)	0.01	0.01	0.01	0.01	0.01	-
Annual Crashes Eliminated	0.00	0.17	1.72	0.34	2.15	4.39

Improvements considered adding right-turn lanes to Laraway Rd and changing left turns on Laraway Rd to protected-only operation. Three EB/WB left turn crashes were observed in the crash history, but severity was not listed. Severity for left turn crashes was estimated using the frequency of injury crashes of turning crashes compared to other crashes.



Explanatory Narrative from the Will County IL Laraway Road Project FY23 RAISE Application.

"Improving safety along Nelson Road and will be achieved by constructing a raised median with the addition of auxiliary turn lanes, include pedestrian accommodations, add transitional street lighting at Laraway Road and Nelson Road, and provide for access modifications consistent with the Will County design standards. Additionally, channelization of the turn lanes will help manage traffic patterns and increase the safety and efficiency of intersections. Signal timing will also be updated.

A crash analysis was completed for the period from 2011 – 2015 for the corridor. During this period, no fatal crashes occurred; however, 86.9% of all crashes occurred at the intersections along Laraway Road.

The intersection at Nelson Road represented the second largest number of crashes (14 crashes) comprised 16.7% of all crashes. The single pedestrian crash occurred in the segment between Heatherway Lane and Nelson Road near the Nelson Road intersection. Several subdivisions north of Laraway Road at Nelson Road are within the attendance boundary of Nelson Prairie and Nelson Ridge Elementary Schools. This makes the intersection of Laraway and Nelson Roads of particular concern for providing safe crossings for both pedestrians/cyclists and motorized traffic.

The intersection at Laraway Road and Foxwood Drive experienced four intersection related accidents. Two of these incidents resulted in B-type injuries and one was a C-type injury.

Cardinal Drive cited two accidents with only one being characterized as a B-type injury.

According to the most recent crash data the intersection of Laraway and Cedar Roads experienced 71 crashes over a three-year period. While there were no fatalities, there were a total of 21 injuries recorded. "

Sources of Data

Local Law Enforcement Records are the best to capture accident history. With this information, analysis and summarization will be required to generate a chart that can be used in the narrative.

<u>Data Visualization - Fatality Analysis Reporting System (FARS) (dot.gov)-NCSA | Tools, Publications, and Data (dot.gov)</u>

https://www-fars.nhtsa.dot.gov/Main/index.aspx



https://cdan.dot.gov/query

FARS Encyclopedia: States - Crashes and All Victims (dot.gov) for Illinois

Crash Modification Factors (CMF)

Crash Modification Factors are used to calculate the reduction of accidents due to a design improvement. The link below goes to the Crash Modification Clearinghouse that provides directions on how to use the site and select CMFs that are appropriate to the specific road improvements that the Project Sponsor intends to implement in the construction of the project.

CMF Clearinghouse

State of Good Repair

Data for State of Good Repair can be pulled from the BCA and the Asset Management Plan. In the BCA, the analyst will calculate the No-Build versus Build cost of Maintenance for the Project. This calculation will be informed by the Jurisdiction's Asset Management Plan that details the maintenance schedule policy. Working with the Project's design engineer, a schedule of maintenance should be developed for the 20-year period post construction for the project. This Build schedule will be compared to the No-Build schedule and enable the grant writer to discuss the change in maintenance costs between the No-Build and the Build scenarios. If the project is a rail project and can demonstrate that the project will remove trucks off the road, a calculation can be used to estimate the road maintenance savings by removing trucks on a specific route.

Economic Impacts, Freight Movement, and Job Creation

Data for this section can be collected from the local MPO or the Economic Development Departments at the City, County and State.

Economic Impacts can also be described as travel time savings, vehicle operating cost savings, and emissions reductions. These figures can be pulled from the BCA and supplemented with a narrative on how the proposed improvement will reduce congestion (i.e., time savings), reduce idling (time saving, operating cost and emissions) or induce a modal shift from truck to rail (operating savings).

This section of the Merit Criteria narrative should also discuss current employers that use the Project Area and any new development / potential development that will bring new jobs into the area that is supported by the Project.

Climate Change, Resiliency, and the Environment

The USDOT offered examples in its rubric for each of the scoring levels. To achieve the highest score (3) in this criterion, the USDOT offers this example:

Example 1: The project will provide alternative transportation modes to access the technology park by adding a separated bicycle lane and dedicating one of the roadway



lanes to new bus service. These added travel options to the technology park will offer lower carbon travel modes to workers getting to work in the park.

Suggested Data sources:

Data needs to be collected on the current and projected AADT and future road use, bicycle lane and transit usage current and projected.

- Traffic Studies
- State Bicycle Association
- Transit Agencies

Example 2: The project is aimed at reconstructing a vulnerable transportation facility with a design specifically addressing resilience—flood mitigation measures and stormwater infrastructure, including nature- based elements, that will help keep the roadway operable consistently in spite of increased frequency of climate- related flood events.

Suggested Approach:

- Collect data on past flooding events that impacted the roadway- local Emergency
 Management Department, County Emergency Management Department and State
 Emergency Management Department.
- 2. Check CMF for any element that describes an approvement that reduces crashes such as improvements to stormwater infrastructure that reduces water on the roads, etc.

Equity, Multimodal Options, and Quality of Life

Equity/ Justice40 data sources- each NOFO lists specific tools that are recommended for that application.

For example: Guidance in the INFRA FY 23 NOFO² states "In addition to the Climate and Economic Justice Screening Tool (CEJST), (https://screeningtool.geoplatform.gov/en/#3/33.47/-97.5) which is the tool to use to identify disadvantaged communities, as discussed in the INFRA FY23 eligibility section, applicants are also encouraged to use USDOT's Equitable Transportation Community (ETC) Explorer to understand how their community or project area is experiencing disadvantage related to lack of transportation investments or opportunities. Through understanding how a community or project area is experiencing transportation-related disadvantage, applicants are able to address how the benefits of a project will reverse or

 $^{^2}$ The INFRA FY23 grant program funding was made available under the MPDG FY23 combined Notice of Funding Opportunity (NOFO).

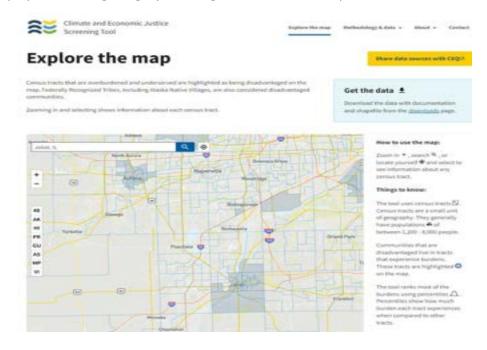


mitigate the burdens of disadvantage and demonstrate how the project will address challenges and accrued benefits."

The Justice40 initiative, created by the Biden-Harris Administration through Executive Order 14008 Tackling the Climate Crises at Home and Abroad, is a key component in USDOT's efforts to confront and address decades of underinvestment. When decision makers at all levels have the tools to understand how a community is experiencing disadvantage and can identify projects that create benefits that will reverse or mitigate those causes, the result is a higher quality of life and economic prosperity in communities across the country.

The <u>US DOT Equitable Transportation Community</u> (ETC) Explorer is an interactive web application that uses 2020 census tracts and data, to explore the cumulative burden communities experience, as a result of underinvestment in transportation, in the following five components: Transportation Insecurity, Climate and Disaster Risk Burden, Environmental Burden, Health Vulnerability, and Social Vulnerability. It is designed to complement CEQ's <u>Climate & Economic Justice Screening Tool</u> (CEJST) by providing users deeper insight into the Transportation disadvantage component of CEJST, and the ETC Explorer's Transportation Insecurity component, which will help ensure the benefits of DOT's investments are addressing the transportation related causes of disadvantage. Applicants to USDOT's Justice40 covered program NOFOs should use CEJST as the primary tool to identify disadvantaged communities, as USDOT's ETC Explorer is not a binary tool indicating whether a census tract is considered disadvantaged; it is a dynamic tool that allows every community in the country to understand how it is experiencing burden that transportation investments can mitigate or reverse.

Climate and Economic Justice Screening Tool (CEJST), (https://screeningtool.geoplatform.gov/en/#3/33.47/-97.5)

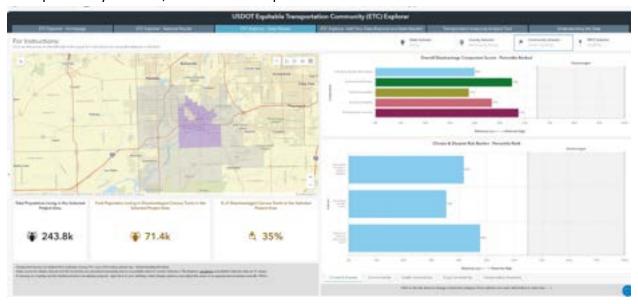




USDOT's Equitable Transportation Community (ETC) Explorer

<u>USDOT Equitable Transportation Community (ETC) Explorer (arcgis.com)</u>

Example of City of Joliet, IL on the ETC Explorer – State Results



Innovation Areas: Technology, Project Delivery, and Financing

Excerpt for MPDG NOFO 2023-2024:

"Consistent with the Department's Innovation Principles³ to support workers, to allow for experimentation and learn from failure, to provide opportunities to collaborate, and to be flexible and adapt as technology changes, the Department will assess the extent to which the applicant uses innovative and secure-by-design strategies, including: (1) innovative technologies, (2) innovative project delivery, or (3) innovative financing.

Innovative Technology: Consistent with the Department's Innovation Principles, the Department will assess innovative and secure-by-design technological approaches to transportation, particularly in relation to automated, connected, and electric vehicles and the detection, mitigation, and documentation of safety risks. When making grant award decisions, the Department will consider any innovative technological approaches proposed by the applicant, particularly projects that incorporate innovative technological design solutions, enhance the environment for connected, electric, and automated vehicles, or use technology to improve the detection, mitigation, and documentation of safety risks.

Innovative technological approaches may include, but are not limited to:

³ https://www.transportation.gov/priorities/innovation/us-dot-innovation-principles



- Conflict detection and mitigation technologies (e.g., intersection alerts and signal prioritization);
- Dynamic signaling, smart traffic signals, or pricing systems to reduce congestion;
- Traveler information systems, to include work zone data exchanges;
- Signage and design features that facilitate autonomous or semi-autonomous vehicle technologies;
- Applications to automatically capture and report safety-related issues (e.g., identifying and documenting near-miss incidents);
- Vehicle-to-Everything (V2X) Technologies (e.g., technology that facilitates
 passing of information between a vehicle and any entity that may affect the
 vehicle);
- Vehicle-to-Infrastructure (V2I) Technologies (e.g., digital, physical, coordination, and other infrastructure technologies and systems that allow vehicles to interact with transportation infrastructure in ways that improve their mutual performance);
- Vehicle-to-Grid Technologies (V2G) (e.g., technologies and infrastructure that encourage electric vehicle charging, and broader sustainability of the power grid);
- Cybersecurity elements to protect safety-critical systems;
- Broadband deployment and the installation of high-speed networks concurrent with the transportation project construction;
- Technology at land and seaports of entry that reduces congestion, wait times, and delays, while maintaining or enhancing the integrity of our border;
- Work Zone data exchanges or related data exchanges; or
- Other Intelligent Transportation Systems (ITS) that directly benefit the project's users or workers, such as a project to develop, establish, or maintain an integrated mobility management system, a transportation demand management system, or on-demand mobility services.

For innovative safety proposals, the USDOT will evaluate safety benefits that those approaches could produce and the broader applicability of the potential results. The Department will also assess the extent to which the project uses innovative technology that supports surface transportation to significantly enhance the operational performance of the transportation system. Please note that all innovative technology must be in compliance with 2 CFR §200.216.

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⁴ https://ecfr.federalregister.gov/current/title-2/subtitle-A/chapter-II/part-200/subpart-C/section-200.216



Innovative Project Delivery: The Department will consider the extent to which the project utilizes innovative practices in contracting (such as public-private partnerships and single contractor design-build arrangements), congestion management, asset management, or long-term operations and maintenance.

The Department also seeks projects that employ innovative approaches to improve the efficiency and effectiveness of the environmental permitting and review to accelerate project delivery and achieve improved outcomes for communities and the environment. The Department's objective is to achieve timely and consistent environmental review and permit decisions. Participation in innovative project delivery approaches will not remove any statutory requirements affecting project delivery.

FHWA has added advanced digital construction management systems, accelerated bridge construction, digital as-builts, and up to date programmatic agreements between environmental resource agencies and a state DOT or other NEPA lead agency to the list of innovative project delivery practices that will help achieve high scores in innovation. (See FY 24 RAISE NOFO)

Innovative Financing: The Department will assess the extent to which the project incorporates innovations in transportation funding and finance through both traditional and innovative means, including by using private sector funding or financing or using congestion pricing or other demand management strategies to address congestion. This includes the use of non-traditional sources of transportation funding to leverage traditional federal sources of funding to expand the overall investment in transportation infrastructure.

To achieve a high rating in this Criteria, a Project application must state that Innovation is a primary purpose of the project AND the project results in clear and Innovation benefits matching **two or more** of the descriptions below. (Benefits can be within the same area)

- Innovative Technologies
 - Enhance the environment for electric, connected, and automated vehicles to improve the detection, mitigation, and documentation of safety risks; or
 - Use low-carbon materials; or
 - Use caps, land bridges, or underdecks
- Innovative Project Delivery
 - Use practices that facilitate accelerated project delivery such as single contractor design- build arrangements, congestion management, asset management, or long- term operations and maintenance
- Innovative Financing
 - Secure TIFIA, RRIF, or private activity bond financing; or
 - Use congestion pricing
 - o or other demand management strategies"



There are not any specific data sources for this criterion

Appendices

Appendix A: Project Status Matrix

Appendix B: Grant Programs Matrix

Appendix C: Grant – Project Alignment Matrix

Appendix D: Detailed Project Summaries

Appendix E: Detailed Grant Program Summaries

Appendix F: Data Sources and Links

JADA Grants Strategy II: https://www.facebook.com/groups/633838952904930