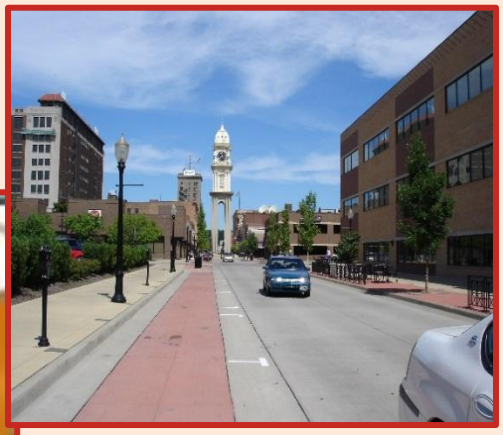
DMATS 2055 LRTP

ROJECT PRIORITIZATION

Under “IIJA” DMATS is required to produce financially constrained transportation plans. The MPO must identify its priorities for the expenditure of federal funds that it can reasonably be expected to have access to in the 30-year plan time frame.



ECIA

Project Prioritization

Under the Infrastructure Investment and Jobs Act (IIJA), the Dubuque Metropolitan Transportation Study (DMATS) must prepare financially constrained transportation plans. DMATS must identify priority projects for federal funding that can reasonably be expected to be available during the 30-year planning period. Projects are classified as either real or illustrative. The Policy Board considers real projects to be the highest-priority projects that are financially feasible within the Long-Range Transportation Plan (LRTP) period. Illustrative projects address future transportation needs but do not yet have identified funding sources.

DMATS staff developed a project ranking process with eight categories aligned with the plan's goals and objectives. Projects may receive up to 1,000 total points. Safety, Air Quality, Economic Impact II, Freight, and System Preservation are scored using data analysis. Economic Impact I, Accessibility and Mobility, Local and Regional Impact, and Complete Streets are scored subjectively, with points awarded up to the maximum assigned for each category.

The DMATS Technical Advisory Committee (TAC) recommends scores for the subjective categories based on each project's merits. DMATS staff provide project information and data analysis to support this review. After the ranking process is complete, the TAC submits its recommendations to the Policy Board for final approval.

Safety (125)

The safety analysis uses a benefit-cost ratio to compare each project's total cost with its safety benefits. Safety points are assigned using a formula that monetizes those benefits and divides them by the total project cost.

Required inputs include total lifetime project cost, crash reduction factor, traffic volume, fatalities, major injuries, minor injuries, and property damage. Points are assigned based on the safety scoring criteria. This analysis follows the standards and methodology of IADOT's Traffic Safety Improvement Program (TSIP) ranking process.

Safety Scoring Criteria	
Benefit - Cost Ratio	Points
<1.00	0
1.00-1.15	15
1.15-1.30	30
1.30-1.45	45
1.45-1.60	60
1.60-1.75	75
1.75-1.90	90
1.90-2.05	105
2.05+	125

Economic Impact (125)

The economic analysis evaluates each project's local and regional impact. This portion of the ranking process has two parts, each worth 62.5 points. The first measures long-term economic effects, and the second measures the impact of jobs served.

Economic Impact I (62.5)

Ranking committee members assign points based on a project's long-term effects on the regional economy and tourism. Staff provide relevant project data to support scoring. Points are awarded using the Economic Impact I Scoring Criteria.

Economic Impact I Scoring Criteria	
Q1	12.5 Points - Project promotes general economic development.
Q2	12.5 Points - Project specifically enhances or improves tourism.
Q3	12.5 Points - Project specifically improves or enhances movement of freight and
Q4	12.5 Points - Project improves or enhances movement of workers.
Q5	12.5 Points - Project improves access to jobs and business opportunities.

Economic Impact II (62.5)

Economic Impact II uses data from the Travel Demand Forecast Model to evaluate long-term job growth from 2025 to 2055. Projects receive points based on the total number of jobs served during this period, as shown in the scoring criteria.

Economic Impact II Scoring Criteria	
Number of Jobs served	Points
> 300	62.5
201 to 300	45
101 to 200	30
< 100	15

System Preservation (125)

System preservation points are based on surface type, pavement condition, current average annual daily traffic (AADT), and projected AADT. These factors are applied in a formula that determines the score. The following example shows how the formula is used for a proposed project.

1) Surface Type: Portland Concrete 1
2) Facility Condition: 2
3) Existing AADT: 5,800
4) 30-year projected AADT: 6,400

Formula 1: [(Existing AADT + 30 Year AADT)/1000/2]
Formula 2: [(Formula 1 Answer/2)*(Surface Type)*(Facility Condition)]

Formula 1: [(5,800 + 6,400)/1,000/2] = 6.1
Formula 2: [(6.1/2)*(1)*(2)]= 6.1 = Project awarded 9 Points as shown in System Preservation table below.

System Preservation Table

Range	Pts	Range	Pts	Range	Pts	Range	Pts	Range	Pts
<.2	2	20.00-22.00	26	38.00-40.00	48	58.00-60.00	72	78.00-80.00	96
2.00-4.00	4	22.00-24.00	28	40.00-42.00	50	60.00-62.00	74	80.00-82.00	98
4.00-6.00	7	24.00-26.00	31	42.00-44.00	52	62.00-64.00	76	82.00-84.00	100
6.00-8.00	9	26.00-28.00	33	44.00-46.00	55	64.00-66.00	79	84.00-86.00	103
8.00-10.00	12	28.00-30.00	36	46.00-48.00	57	66.00-68.00	81	86.00-88.00	105
10.00-12.00	14	30.00-32.00	38	48.00-50.00	60	68.00-70.00	84	88.00-90.00	108
12.00-14.00	16	32.00-34.00	40	50.00-52.00	62	70.00-72.00	86	90.00-92.00	110
14.00-16.00	19	34.00-36.00	43	52.00-54.00	64	72.00-74.00	88	92.00-94.00	112
16.00-18.00	21	36.00-38.00	45	54.00-56.00	67	74.00-76.00	91	94.00-96.00	115
18.00-20.00	24	38.00-40.00	48	56.00-58.00	69	76.00-78.00	93	96.00-98.00	117
								98+	125

Local and Regional Impact (125)

The Local and Regional Impact component evaluates a project's consistency with planning documents, effects on the transportation system, and the number of participating local governments. Relevant documents include long-range transportation plans, comprehensive plans, capital improvement plans, and other local, regional, or state planning documents. Points are awarded using the Local and Regional Scoring Criteria.

Local and Regional Scoring Criteria	
Q1	40 Points - Project will contribute to the local AND regional transportation system.
Q2	40 Points - Proposed project involves more than one jurisdiction.
Q3	45 Points - Project improves access to other transportation facilities such as air, water, rail, multimodal, etc.

Congestion Reduction (120)

The Accessibility and Mobility component measures how a project improves accessibility, mobility, and congestion conditions for transportation system users. Points are awarded based on estimated reductions in congestion.

The analysis uses existing and future AADT and capacity data to calculate current and projected volume-to-capacity (V/C) ratios and the percentage change between them. Points are assigned using the Accessibility and Mobility Scoring Criteria.

Accessibility and Mobility Scoring Criteria	
Percent	Points
<-10%	0
-10 to -20%	25
-20 to -30%	50
-30 to -40%	75
-40 to -50%	100
>-50+	120

Complete Streets (120)

This component evaluates how well a project supports complete streets by improving safe access for motorists, pedestrians, bicyclists, and transit users. DMATS TAC members assign points using the Complete Streets Scoring Criteria.

Complete Streets Scoring Criteria		
Q1	40 Points	Project improves connectivity to bicyclists
Q2	40 Points	Project improves connectivity to Pedestrians
Q3	40 Points	Project improves connectivity to Transit users

Air Quality (120)

Air quality points are based on analyses conducted under the Iowa Department of Transportation (IADOT) Iowa Clean Air Attainment Program (ICAAP) cost-effectiveness guidelines, which are intended to maximize reductions in vehicle emissions (VOC, NOx, CO, PM-2.5, and PM10) and traffic congestion.

Air Quality Scoring Criteria.

Air Quality Scoring Criteria	
Range	Points
< -5%	0
-5 to -10 %	25
-10 to -12 %	50
-12 to -13 %	75
-13 to -15 %	100
> - 15%	120

Freight (120)

Travel time cost savings represent the monetary value of reduced travel time. This benefit is estimated by assigning an opportunity cost to time that road users could otherwise spend on other activities. For freight, daily transportation cost savings are calculated by multiplying the hourly trucking cost by the daily change in travel time or delay. A rate of $30 per hour is used for truck travel. For business travel, savings are calculated by multiplying hourly wages by changes in vehicle hours traveled (VHT) and annualizing the result over 260 workdays. The daily value of travel time savings equals the traveler's hourly wage multiplied by daily travel time saved.

Transportation cost savings = hourly truck operating cost × change in VHT × 260 days

Project Prioritization Results

Figure 9.1 presents the results of the project prioritization analysis. Because DMATS LRTP is fiscally constrained, the project rankings and future funding schedule are used to determine which projects are included in the plan. These rankings apply only to the LRTP and do not carry over to programming in the DMATS Transportation Improvement Program (TIP). Projects already included in the 2026–2020 TIP were excluded from the ranking process because funding had already been committed. State DOT projects were also excluded because they are not funded by DMATS.

	Project Info				DMATS LRTP Ranking										
Rank	**Project Name**		**To & From**	**Estimated Cost**	**SAFETY** (125 points)	**ECONOMIC IMPACT I** (62.5 points)	**ECONOMIC IMPACT II** (62.5 points)	**SYSTEM PRESERVATION** (125 points)	**AIR QUALITY** (125 points)	**ACCESSIBILITY AND MOBILITY** (125 points)	**LOCAL AND REGIONAL IMPACT** (125 points)	**COMPLETE STREETS** (125 points)	**FREIGHT** (125 points)		**Total** (1000 Points)
FY 2026-2030 TIP Projects															
	STREETS Phase II Project Implementation	Dubuque Metro Region		$166,800											
	14th Street Overpass	16th St	Elm St	$9,156,598											
	US Highway 20 - Northwest Arterial Intersection	Old Highway	Crescent Ridge	$6,000,000											
	North Cascade Rd	0.7 MI North of Swiss Valley Rd NE	3.4 miles to Edval Ln,	$1,120,000											
	Skyline rd	Hwy 151 E	4.3 miles to Hwy 61	$1,760,000											
	South John Deere Rd and Peru Rd	0.4 Mi N of HWY 3 N 0.8 miles and on Peru Rd,	S John Deere SE 1.2 Mi	$800,000											
IOWA PROJECTS															
1	JFK Rd	US Highway 20	NW Arterial	$760,000	13	51	30	400	0	70	40	125	57		786
2	Seippel Rd	Middle Rd	Old Highway Rd	$6,440,000	13	51	63	400	0	30	80	125	0		761
3	Cedar Cross Rd	725' E of Starlite Dr	Lake Ridge Dr	$3,400,000	13	51	15	400	0	160	40	80	0		759
4	NW Arterial	US Highway 20	Iowa Highway 3	$8,860,000	13	63	63	400	0	0	40	125	0		703
5	Central Ave - White St	4th St	22nd St	$11,070,000	13	51	30	400	0	80	40	80	0		694
6	Heacock Rd Extension	Chavenelle Rd	Pennsylvania Ave	$9,840,000	13	51	63	400	0	60	80	0	0		666
7	NW Arterial Pedestrian Overpasses	At Pennsylvania Ave and Asbury Rd		$2,678,400	13	39	15	400	0	30	85	80	0		662
8	Asbury Rd West	City Limits	JFK	$2,725,445	13	39	63	400	0	0	40	80	20		654
9	7th St	Central Ave	Star Brewery Dr	$3,750,000	13	63	15	400	0	30	40	80	0		641
10	Rockdale Rd	Key West Dr	Old Mill Rd	$9,560,000	13	51	15	400	0	30	40	80	0		629
11	Pine St	7th St	Kerper Blvd	$1,868,000	13	39	15	400	0	30	85	45	0		627

12	Pennsylvania Ave	University Ave	Radford Rd	$52,490,000	13	39	63	288	0	80	40	80	23		625
13	Asbury Rd East	JFK Rd	University Ave	$31,468,262	13	39	15	400	0	30	40	80	0		617
14	University Ave	Asbury Rd	Delhi St	$15,160,000	13	39	15	400	0	20	40	80	0		607
15	32nd St	NW Arterial	Lemon St	$12,610,000	13	39	15	400	0	30	40	45	3		585
16	US Highway 61/151	Maquoketa Dr Intersection		$9,100,000	13	39	15	400	0	30	40	45	0		582
17	16th St	Kerper Blvd	Admiral Sheehy Dr	$1,420,000	13	15	15	400	0	60	0	45	2		549
18	Roosevelt St	Rhomberg Ave	Peru Rd	$13,340,000	13	39	15	400	0	30	40	0	2		539
19	Grandview Av	Kane St	32nd St	$1,170,000	13	51	15	288	0	60	40	45	0		512
20	Kaufmann Ave	JFK Rd	Central Ave	$80,000	13	39	15	288	0	50	40	45	18		508
21	Loras Blvd	University Ave	Alta Vista St	$120,000	13	39	15	288	0	0	40	80	0		475
22	North Cascade Rd	Cedar Cross Rd / Fremont Ave	SW Arterial	$6,410,000	13	51	15	192	0	60	40	80	0		451
23	Asbury Rd	Hales Mill Rd and Radford Rd Intersection		$2,600,000	13	51	15	192	0	0	80	45	3		399
24	Peosta	Frontage Roads	US Highway 20	$12,120,000											
City of East Dubuque															
1	Menominee Ave	2nd St	6th St	$643,486	0	51	30	60	0	0	85	0	0		226
Iowa DOT Projects															
	SW Arterial Trail & ITS	US Hwy 20/Seippel Rd	US Hwy 61/151 Old Davenport Rd	$3,770,000											
	US Highway 20 Bridge Replacement	Julian Dubuque Bridge		$535,804,992											
	US Highway 20 Improvements	Peosta Interchange	Julien Dubuque Bridge	$470,400,000											
	Heritage Trail Paving	Iowa Hwy 3	Dyersville	$9,000,000											
Illinois DOT Projects															
Passenger Rail in Illinois		Rockford	East Dubuque	$380,000,000											
	US Highway 20	Julien Dubuque Bridge	DMATS Boundary	$243,771,000											
	Wisconsin St/Illinois Hwy 35	Sinsinawa Ave	Cherry Ln	$260,400											

PROJECT FUNDING SCHEDULE DMATS

Staff used the project prioritization results and future funding projections detailed above to create a future funding schedule. The schedule allocates funding to projects based on priority ranking. Priority number one will receive funding, then priority two and so on down the list until all funds are allocated. The schedule assumes a constant 4% annual project cost increase. Future project costs calculations assume that the project will be constructed midway through the five-year period. The final project funding schedule is displayed in Figure 9.3. Based on these projections, DMATS will be able to fund projects ranked 1-25. DMATS includes these projects in is fiscally constrained plan and considers them to be the highest priority projects that have funds committed. DMATS considers any remaining projects to be illustrative. Illustrative projects will meet the needs of the region in the future but have no funding source committed.

BIKE AND PEDESTRIAN AND BRIDGE PROJECTS

The fiscally constrained plan includes Transportation Alternative Program (TAP) and Bridge Replacement Program (BR) projects. DMATS estimates $32.39 million in current-dollar costs for bicycle and pedestrian improvements and projects $9.79 million in TAP funding. DMATS also projects $23.72 million in BR funding. The project corridors include one new bridge and 12 existing bridges on federal-aid-eligible routes maintained by local jurisdictions. Figure 9.2 identifies the bridges located on LRTP project corridors. These include several major bridge projects, such as one on Rockdale Road, two on Northwest Arterial over existing railroads, and the City of Dubuque's new 14th Street bridge, which is estimated to cost $9.16 million in current dollars, excluding $25 million in BUILD grant funds. Although bridge costs are included within overall corridor reconstruction costs, the number and scale of these bridge projects support BR funding in the financial projections.

Figure 9.2 Bridges Included in the Fiscally Constrained Plan

Project Name	To & from	Number of Bridge Structures
Existing Bridges on projects listed as real		
Chavenelle Road	Seippel Rd to NW Arterial (IA 32)	1
NW Arterial	US 20 to US 52 N	4
Rockdale Rd	Key West Dr to Old Mill Road	1
Hales Mill Rd	Asbury Rd to Derby Grange Rd	2
Cedar Cross Rd	725' E of Starlight Dr to Lake Ridge Dr	1
Seippel Rd	Middle Rd to Old highway Rd	1
16th Street	Central Ave to Sycamore St	2
TOTAL		12
New Bridges on projects listed as real		
14th Street	Central Ave to Sycamore St	1

Rank	Project Name		To & From	Estimated Cost	2026-2030	2031-2035	2036-2040	2040-2045	2045-2050	2050-2055
FY 2026-2030 TIP Projects										
	STREETS Phase II Project Implementation	Dubuque Metro Region		$166,800	$166,800					
	14th Street Overpass	16th St	Elm St	$11,445,748	$11,445,748					
	US Highway 20 - Northwest Arterial Intersection	Old Highway	Crescent Ridge	$6,000,000	$6,000,000					
	North Cascade Rd	0.7 MI North of Swiss Valley Rd NE	3.4 miles to Edval Ln,	$1,120,000	$1,120,000					
	Skyline rd	Hwy 151 E	4.3 miles to Hwy 61	$1,760,000	$1,760,000					
	South John Deere Rd and Peru Rd	0.4 Mi N of HWY 3 N 0.8 miles and on Peru Rd,	S John Deere SE 1.2 Mi	$800,000	$800,000					
	IOWA PROJECTS									
1	JFK Rd	US Highway 20	NW Arterial	$760,000	$760,000					
2	Seippel Rd	Middle Rd	Old Highway Rd	$6,440,000	$6,440,000					
3	Cedar Cross Rd	725' E of Starlite Dr	Lake Ridge Dr	$3,400,000	$3,400,000					
4	NW Arterial	US Highway 20	Iowa Highway 3	$8,860,000	$8,860,000					
5	Central Ave - White St	4th St	22nd St	$11,070,000	$11,070,000					
6	Heacock Rd Extension	Chavenelle Rd	Pennsylvania Ave	$9,840,000	$9,840,000					
7	NW Arterial Pedestrian Overpasses	At Pennsylvania Ave and Asbury Rd		$2,678,400	$2,678,400					
8	Asbury Rd West	City Limits	JFK	$2,725,445	$2,725,445					
9	7th St	Central Ave	Star Brewery Dr	$3,750,000	$3,750,000					
10	Rockdale Rd	Key West Dr	Old Mill Rd	$9,560,000	$9,560,000					
11	Pine St	7th St	Kerper Blvd	$1,868,000	$1,868,000					
12	Pennsylvania Ave	University Ave	Radford Rd	$52,490,000	$50,430,610	$13,431,501				
13	Asbury Rd East	JFK Rd	University Ave	$31,468,262		$38,285,953				
14	University Ave	Asbury Rd	Delhi St	$15,160,000		$18,444,458				
15	32nd St	NW Arterial	Lemon St	$12,610,000		$15,341,993				
16	US Highway 61/151	Maquoketa Dr Intersection		$9,100,000		$11,071,541				
17	16th St	Kerper Blvd	Admiral Sheehy Dr	$1,420,000		$1,727,647				
18	Roosevelt St	Rhomberg Ave	Peru Rd	$13,340,000		$16,230,150				
19	Grandview Av	Kane St	32nd St	$1,170,000		$1,423,484				

20	Kaufmann Ave	JFK Rd	Central Ave	$80,000		$97,332				
21	Loras Blvd	University Ave	Alta Vista St	$120,000		$145,998				
22	North Cascade Rd	Cedar Cross Rd / Fremont Ave	SW Arterial	$6,410,000		$7,798,745				
23	Asbury Rd	Hales Mill Rd and Radford Rd Intersection		$2,600,000		$2,326,198	$1,522,437.59			
24	Peosta	Frontage Roads	US Highway 20	$12,120,000			$17,940,560.73			
	TOTAL				**$132,675,003**	**$126,325,000**	**$19,462,998**	**$0**	**$0**	**$0**
	Funding Available (Federal + Local)				**$132,675,000**	**$126,325,000**	**$119,975,000**	**$113,625,000**	**$107,275,000**	**$100,925,000**
	ILLINOIS PROJECTS									
1	Frentress Lake Rd Rail Overpass	Frentress Lake Dr t	Rail Crossing	$3,000,000						
2	Menominee Ave		2nd St to 6th St	$643,486			**TIP**			
							Real			
Iowa DOT Projects							**Illustrative**			
	SW Arterial Trail & ITS	US Hwy 20/Seippel Rd	US Hwy 61/151 Old Davenport Rd	$3,770,000						
	US Highway 20 Bridge Replacement	Julian Dubuque Bridge		$535,804,992						
	US Highway 20 Improvements	Peosta Interchange	Julien Dubuque Bridge	$470,400,000						
	Heritage Trail Paving	Iowa Hwy 3	Dyersville	$9,000,000						
Illinois DOT Projects										
	Passenger Rail in Illinois	Rockford	East Dubuque	$380,000,000						
	US Highway 20	Julien Dubuque Bridge	DMATS Boundary	$243,771,000						
	Wisconsin St/Illinois Hwy 35	Sinsinawa Ave	Cherry Ln	$260,400						