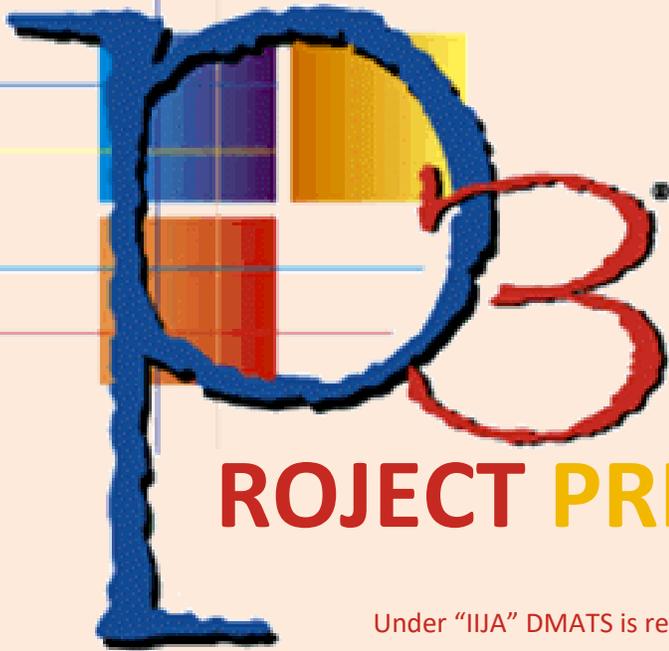


DMATS 2055 LRTP



PROJECT 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.



Project Prioritization

Under the Infrastructure Investment and Jobs Act (IIJA), the Dubuque Metropolitan Transportation Study (DMATS) must develop financially constrained transportation plans. DMATS is required to identify priority projects for federal funding that are reasonably expected to be available within the 30-year planning period. Projects are categorized as either real or illustrative. The Policy Board considers real projects to be the highest priority and financially feasible within the Long-Range Transportation Plan (LRTP) timeframe. Illustrative projects address future transportation needs but currently lack identified funding sources.

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

The DMATS Technical Advisory Committee (TAC) will recommend rankings for the subjective categories based on each project's merits. DMATS staff will supply project information and data analysis to support this evaluation. After the ranking process, the TAC will submit official recommendations to the Policy Board for final approval.

Safety (125)

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

Required data sets include total lifetime project cost, crash reduction factor, traffic volume, fatalities, major injuries, minor injuries, and property damage. Points are assigned according to 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 the local and regional impact of the proposed project. This component of the ranking process consists of two parts, each valued at 62.5 points. The first part assesses the project's long-term economic effects, while the second measures the economic impact of jobs created.

Economic Impact I (62.5)

Ranking committee members will assign points based on the project's long-term effects on the regional economy and tourism. Staff will supply relevant project data for reference during scoring. Points are awarded according to 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)

The Economic Impact II analysis will use data from the Travel Demand Forecast Model to assess long-term job changes from 2025 to 2055. Projects will earn points based on the total number of jobs served during this period. The chart displays the allocation of 62.5 points.

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 assigned based on current surface type, pavement condition, current average annual daily traffic (AADT), and projected AADT. These factors are entered into a formula, and the resulting value determines the point allocation. The following example illustrates how the system preservation formula applies to 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: $[(\text{Existing AADT} + 30 \text{ Year AADT})/1000/2]$

Formula 2: $[(\text{Formula 1 Answer}/2) * (\text{Surface Type}) * (\text{Facility Condition})]$

Formula 1: $[(5,800 + 6,400)/1,000/2] = 6.1$

Formula 2: $[(6.1/2) * (1) * (2)] = 6.1 = \text{Project awarded 9 Points as shown in System Preservation table below.}$

System Preservation Table

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 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 according to 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 improvements in land use accessibility and mobility for transportation system users resulting from the project. Points are awarded based on estimated reductions in congestion.

The analysis requires existing and future AADT and capacity data. The model calculates current and projected Volume/Capacity (V/C) ratios and determines the percentage change. Points are assigned according to 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 the project addresses complete streets, which prioritize safe access for motorists, pedestrians, bicyclists, and transit users. DMATS TAC members will 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 awarded based on analyses conducted in accordance with the Iowa Department of Transportation (IADOT) Iowa Clean Air Attainment Program (ICAAP) cost-effectiveness guidelines, which aim 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 benefit of reduced travel time. This is calculated by estimating the opportunity cost to road users for alternative uses of their time. For freight, the reduction in daily transportation cost is determined by multiplying the hourly transportation cost by the daily change in travel time or delay. A rate of \$30 per hour is used for truck travel. For business-related travel, savings are calculated by multiplying hourly wages by changes in vehicle hours traveled (VHT), then annualized over 260 working days. The daily value of travel time savings is the product of the traveler's hourly wage and daily travel time saved.

Savings in value of Transportation = Hourly cost to utilize truck X Change in VHT X 260 days