

DeIDOT Project Prioritization Criteria

The Delaware Department of Transportation (DeIDOT) began the process to enhance the prioritization process to provide greater transparency and accountability to the public for projects included in the 6-year Capital Transportation Program (CTP) and to ensure that all projects are consistent with the mission, vision and goals of the department.

There were several shortcomings with the existing prioritization process adopted in 1998. They include, but are not limited to, the inability to weight criteria and score projects in an objective manner, the inability to document the project selection process, and the inability to easily compare all projects using different underlying assumptions.

Based on the fiscal constraints that began back in 2006, DeIDOT eliminated most of the pooled funds that allowed projects to move forward within a specific program. Many of the projects that were funded through those specific pools were never prioritized against the rest of the program. The enhanced prioritization process will allow those projects to be prioritized with the rest of the program.

The criteria selected for the enhanced prioritization process were based on the following documents:

- Provisions from TITLE 29 CHAPTER 84 § 8419 of the Delaware Code
- DeIDOT's Mission Statement, Vision, and Goals
- DeIDOT's current prioritization Process (2013)
- Delaware's Long Rang Transportation Plan (2019)
- Provisions from the latest Federal Authorization Bill – Fixing America's Surface Transportation Act or FAST Act

To develop the priority weights of each criterion, DeIDOT leadership performed a comparison of each of the criteria based on how those criteria met the mission, vision and goals of the department in May 2019. This process allowed the complex decision-making process to be broken down into a series of paired comparisons ranking the importance of two criteria at a time. This process created a level of importance for each of the criteria based on the mission, vision and goals of the department and the percentages are found below:

- Safety – 35.0%
- System Operating Effectiveness – 19.1%
- Multi-Modal Mobility/Flexibility/Access – 11.9%
- Revenue Generation/Economic Development/Jobs & Commerce – 13.1%
- Impact on the Public/Social Disruption/Economic Justice – 8.3%
- Environmental Impact/Stewardship – 6.6%
- State and Local Priority – 6.1%

These weights are more fully described in the prioritization criteria towards the back of the document.

Provisions from TITLE 29 CHAPTER 84 § 8419 of the Delaware Code

The Department of Transportation, with Council approval, shall:

(2)a. Establish a formula-based process which shall be used for setting priorities on all Department transportation projects and which shall consider, but not be limited to the following: Safety, service and condition factors; social, economic and environmental factors; long range transportation plans and comprehensive land use plans; and continuity of improvement.

b. The formula based process shall not be utilized for setting priorities for dirt roads, suburban street aid projects, municipal street aid projects or system preservation projects. System preservation projects will be prioritized based upon performance measures established in the Department for pavement management, bridge management and safety management projects.

DelDOT's Mission, Vision and Goals

Mission:

To deliver Excellence in Transportation for Every Trip, Every Mode, Every Dollar, and Everyone.

Vision:

- ▶ Every Trip
 - We strive to make every trip taken in Delaware safe, reliable and convenient for people and commerce.

- ▶ Every Mode
 - We provide safe choices for travelers in Delaware to access roads, rails, buses, airways, waterways, bike trails, and walking paths.

- ▶ Every Dollar
 - We seek the best value for every dollar spent for the benefit of all.

- ▶ Everyone
 - We engage and communicate with our customers and employees openly and respectfully as we deliver our services.

Goals:

- ▶ Minimize the number of fatalities and injuries on our system
- ▶ Build and maintain a nationally recognized system benefiting travelers and commerce
- ▶ Provide every traveler with access and choices to our transportation system
- ▶ Provide every customer with the best service possible
- ▶ Minimize the environmental impact of the state's transportation system
- ▶ Achieve financial sustainability through accuracy, transparency and accountability
- ▶ Develop and maintain a place where talented and motivated employees love to work and can be national leaders in transportation

Delaware's Long Range Transportation Plan (*Innovation in Motion*) 2019

The latest Statewide Long-Range Transportation plan ([Innovation in Motion](#)) which is approved in December of 2019 provides a 20-year view of the principles, policies, actions and performance measures that will shape future transportation investments in the state. The full document can be found at:

<https://deldot.gov/Publications/reports/plan/index.shtml>

Innovation in Motion's Long Range Goals

DelDOT will implement Innovation in Motion by aligning plans, policies, activities, and measuring progress towards the following long range goals:

1. Safety and Security - Ensure the safe and secure movement of people and goods while limiting the potential for incidents that may cause harm or disrupt the network operations.
2. Economic Vitality - Promote and strengthen the economic vitality of Delaware with an excellent transportation network that meets the needs of a diverse and growing economy.
3. Connectivity - Improve accessibility, mobility and increase options for the movement of people and freight; enhance the integration of a multi-modal transportation system throughout the state; provide people with a choice of safe, attractive and reliable options.
4. Quality of Life - Maintain and enhance vibrant and appealing communities and support planned growth and development through a transportation network that serves the mobility needs of all Delawareans.
5. System Preservation - Preserve the transportation network to support travelers and commerce, while adapting to the future's changing needs.
6. System Management and Operations - Enhance system management and operations through innovative strategies and technology that increase the efficiency of the transportation system.
7. Resiliency and Reliability - Provide resilient and reliable transportation system that offers predictable travel times under normal conditions as well as efficient and safe use during emergency situations.
8. Environmental Stewardship - Protect and enhance the environment through sustainable best practices, integration of environmental considerations into planning and design, and responsible energy consumption.
9. Travel and Tourism - Facilitate efficient mobility options for tourist destinations that support Delaware residents, businesses, and visitors.
10. Customer Service and Communication - Conduct the highest level of customer service possible to proactively provide information and to learn from and address our customers'

Provisions from the latest Federal Authorization Bill – FAST

The Moving Ahead for Progress in the 21st Century Act (MAP-21), enacted in 2012, included provisions to make the Federal surface transportation more streamlined, performance-based, and multimodal, and to address challenges facing the U.S. transportation system, including improving safety, maintaining infrastructure condition, reducing traffic congestion, improving efficiency of the system and freight movement, protecting the environment, and reducing delays in project delivery. The FAST Act builds on the changes made by MAP-21. A key feature of MAP-21 is the establishment of a performance- and outcome-based program. The objective of this performance- and outcome-based program is for states to invest resources in projects that collectively will make progress toward the achievement of the national goals.

Setting the course for transportation investment in highways, the FAST Act—

- *Improves mobility on America's highways*

The FAST Act establishes and funds new programs to support critical transportation projects to ease congestion and facilitate the movement of freight on the Interstate System and other major roads. Examples include developing a new National Multimodal Freight Policy, apportioning funding through a new National Highway Freight Program, and authorizing a new discretionary grant program for Nationally Significant Freight and Highway Projects (FASTLANE Grants).

- *Creates jobs and supports economic growth*

The FAST Act authorizes \$226.3 billion in Federal funding for FY 2016 through 2020 for road, bridge, bicycling, and walking improvements. In addition, the FAST Act includes a number of provisions designed to improve freight movement in support of national goals.

- *Accelerates project delivery and promotes innovation*

Building on the reforms of MAP-21 and FHWA's Every Day Counts initiative, the FAST Act incorporates changes aimed at ensuring the timely delivery of transportation projects. These changes will improve innovation and efficiency in the development of projects, through the planning and environmental review process, to project delivery.

National Policy in Support of Performance Management

“Performance management will transform the Federal-aid highway program and provide a means to the most efficient investment of Federal transportation funds by refocusing on national transportation goals, increasing the accountability and transparency of the Federal-aid highway program, and improving project decision-making through ”[§1203; 23 USC 150(a)]

National Performance Goals

Establishes national performance goals for the Federal-aid highway program in seven areas:

Goal area	National goal
Safety	To achieve a significant reduction in traffic fatalities and serious injuries on all public roads
Infrastructure condition	To maintain the highway infrastructure asset system in a state of good repair
Congestion reduction	To achieve a significant reduction in congestion on the National Highway System
System reliability	To improve the efficiency of the surface transportation system
Freight movement and economic vitality	To improve the national freight network, strengthen the ability of rural communities to access national and international trade markets, and support regional economic development
Environmental sustainability	To enhance the performance of the transportation system while protecting and enhancing the natural environment
Reduced project delivery delays	To reduce project costs, promote jobs and the economy, and expedite the movement of people and goods by accelerating project completion through eliminating delays in the project development and delivery process, including reducing regulatory burdens and improving agencies’ work practices

Safety (35.0%) - *The ability of the transportation system to allow people and goods to move freely and without harm.*

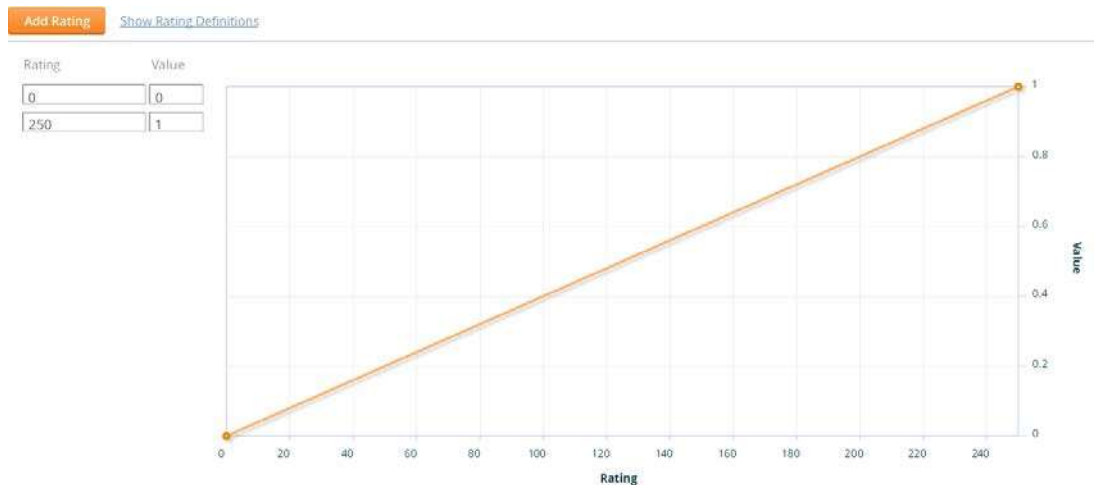
This criterion assesses the extent to which a project addresses identified safety issues and improves safety.

Crash Index (16.2%)

The Crash Index of location is based on three (3) most recent calendar years of crash data. This information is provided by DelDOT's Traffic Section.

Rating Scale

*The crash index value $CI = (\text{Number of Fatal Crashes} * 40) + (\text{Number of Injury Crashes} * 4.5) + (\text{Number of Property Damage Only Crashes} * 1)$*

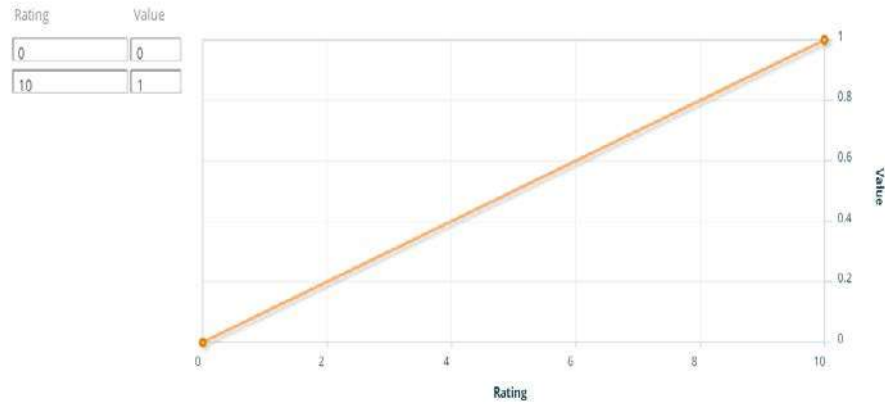


Critical Crash Ratio (12.7%)

The critical crash ratio is a site selection methodology calculated by including three (3) years of fatal and injury crash data and comparing crash rates along each roadway against statewide averages of similar roadway types. This site selection process will consider all injury crashes due to complexities associated with identifying a crash based on injury severity and further aligning with Delaware's Strategic Highway Safety Plan. This information is provided by DelDOT's Traffic Section.

Rating Scale

The critical crash ratio value is entered and the score value is determined utilizing the linear scale below. The project critical crash ratio value may be zero.



Addresses strategies in the Strategic Highway Safety Plan (6.1%)

The project may address one or more of the strategies identified in the current Strategic Highway Safety Plan, which may include, but are not limited to:

- Reducing the frequency and severity of roadway departure crashes
- Improving the design and operation of highway intersections
- Making walking and street crossing safer

Rating Scale

A project may address none, one, or one or more strategies in the Strategic Highway Safety Plan. This information is entered and a score value between zero and one is assigned.



System Operating Effectiveness (19.1%) - *The ability of the transportation system to efficiently move people, goods and services without excessive delay or inconvenience.*

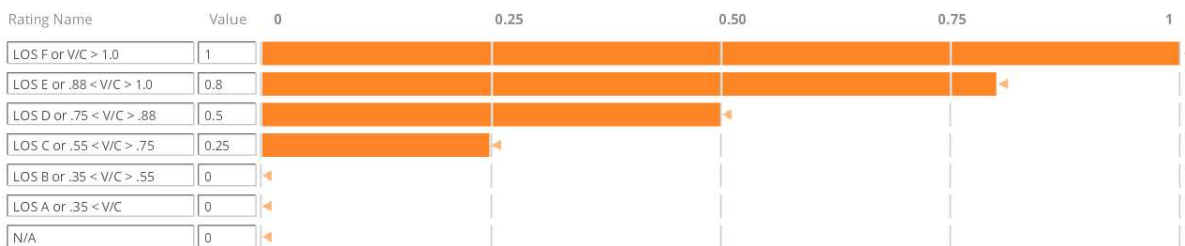
This criterion is used to assess the extent to which the Project meets operating objectives as described in the State Strategy and in regional or local community plans.

Existing Congestion Level (12.4%)

The existing congestion level is calculated for the intersection or roadway segment. LOS is determined by data no more than 3 years old from Traffic Impact Studies, Traffic Management Center, Traffic Volume Count, Travel Demand Model, or other plans and studies done throughout the state.

Rating Scale

The intersection/roadway congestion level is selected and the score value is determined using the table below.



Congestion Management (6.7%)

Existing congestion is identified by a project’s location along a congested corridor or within a congested area. Congested corridors are identified and adopted by the local MPOs and/or County Comprehensive Plans. The Locally Congested Areas are not identified by local MPOs or county plans but are still operating at LOS D or worse.

Rating Scale

A project can be along a congested corridor, in a locally congested area, or in an area without significant congestion. Project areas are classified and the score value is determined using the table below.



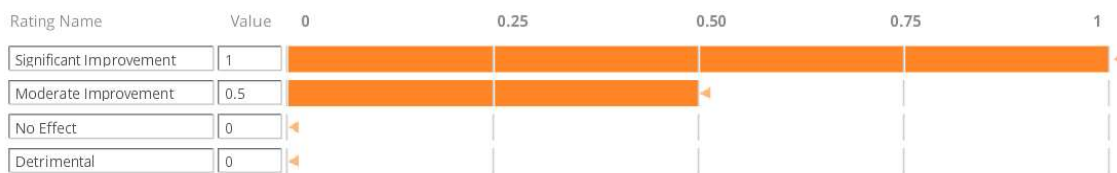
Multi-Modal Mobility/Flexibility/Access (11.9%) - *The ability of a project to provide efficient movement of people and goods between destinations by motor vehicle, pedestrian, bicycle and transit modes (including land side access to airports and marine terminals.)*

This criterion is used to assess the extent to which the Project addresses transportation choices and allows additional connectivity to the existing system.

Rating Scale

A project is evaluated to determine whether it will:

- *Create a significant improvement by positively impacting multiple groups or locations*
- *Create a moderate improvement by positively impacting a single user group or location*
- *Neither improve nor degrade the existing access and mobility within the project limits*
- *Negatively impact the transportation choices or access/connectivity*



Revenue Generation/Economic Development/Jobs & Commerce (13.1%) - *The ability of a project to facilitate or support business development and employment.*

This criterion is used to assess the extent to which the Project has the potential to generate revenue or will support economic development and benefit commerce.

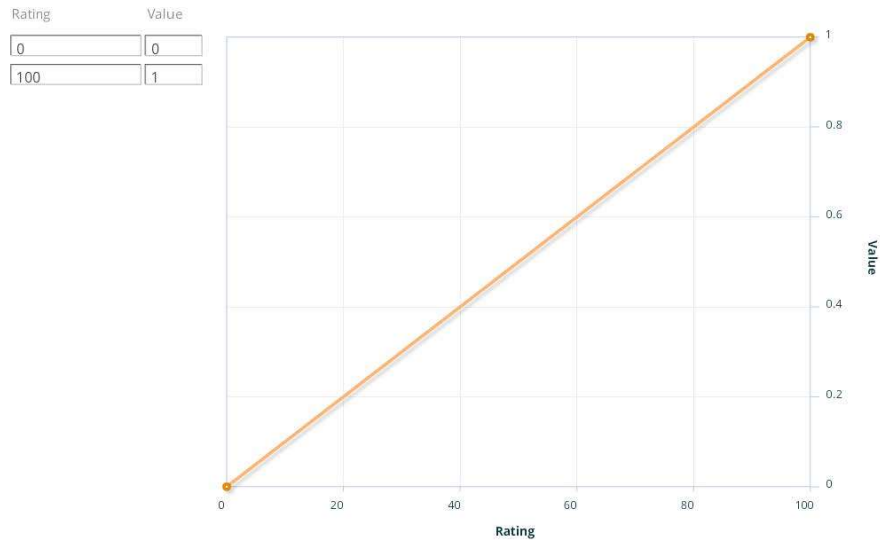
Economic Impact (Competitiveness) (5.7%)

A program called TREDIS will be used to assess a project's economic impact. Based on the Delaware statewide travel demand model's project outputs of VMT and VHT, TREDIS will estimate the future year percentage change in employment and economy of the project within the county.

Percentage Change in Employment (2.85%) & Percentage Change in GDP (2.85%)

Rating Scale

A project is ranked by comparing the percentage change in employment and economy of each project within the county/area. Their percentages will be scaled accordingly. The top project with the most percentage change in employment/economy from each county/area will be scored with a maximum score of 100 and the project with the least percentage change in employment in county will receive a score of 0. Every program year, three projects are expected to receive a full score of 100 as for one for each county.

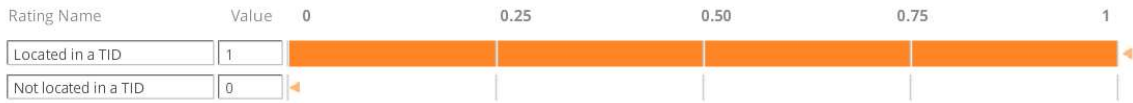


Identified in a Transportation Improvement District (TID) (3.2%)

A TID is a geographic area identified in a local jurisdictions comprehensive plan where growth is planned and there is a desire for a comprehensive approach to adequate facilities. These are areas where the State has partnered with the local jurisdictions to provide the necessary infrastructure to keep pace with the development within the TID.

Rating Scale

A project is either in or not in a Transportation Improvement District. This information is entered and a score value of either zero or one is assigned

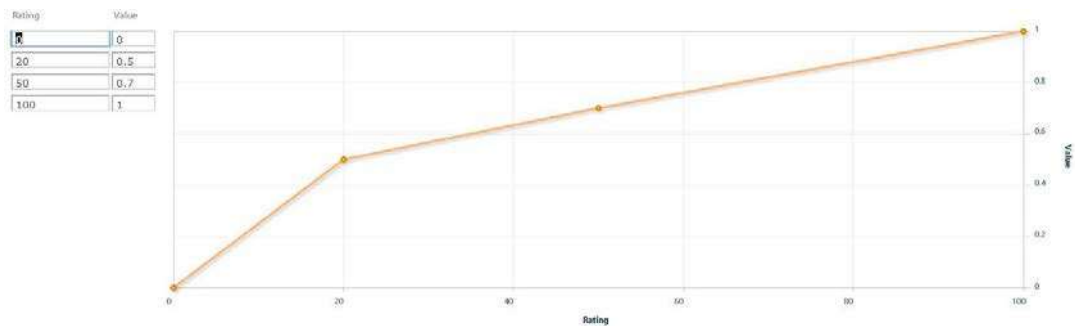


Cost-sharing Support (1.6%)

This criterion supports the active development that has been approved by the local land use agencies. Projects are identified that will support the proposed development and where there is a cost sharing percentage identified as part of the approval.

Rating Scale

The percentage of private contributions to a project is entered and the score value is determined utilizing the linear scale below. If a project does not have any outside funding source then the value is zero.

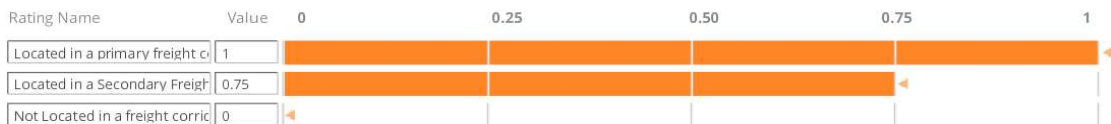


Freight Corridor (2.6%)

The Freight Plan has identified primary and secondary freight corridors throughout the state. It is critical that these corridors allow the efficient movement of goods and services so that Delaware can remain competitive in attracting business to the State

Rating Scale

The project is evaluated to determine if it resides on either a primary or secondary freight corridor. If it is not located on a freight corridor then it receives a value of zero.



Impact on the Public/Social Disruption/Economic Justice (8.3%) - *The effect of the transportation system on existing population and community.*

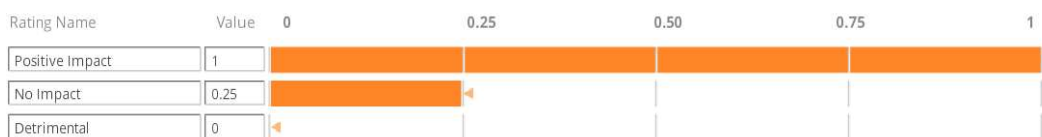
This criterion assesses the project’s community impacts as it relates to existing communities and population centers.

Impact on the Public/Social Disruption (4.3%)

This criterion will assess the extent to which the project supports investment in existing communities and provides community enhancements such as sidewalks.

Rating Scale

The project provides a positive impact if it provides improvements in access/mobility OR physical environment of community. A project is detrimental if there is an adverse impact on access/mobility OR physical environment of community

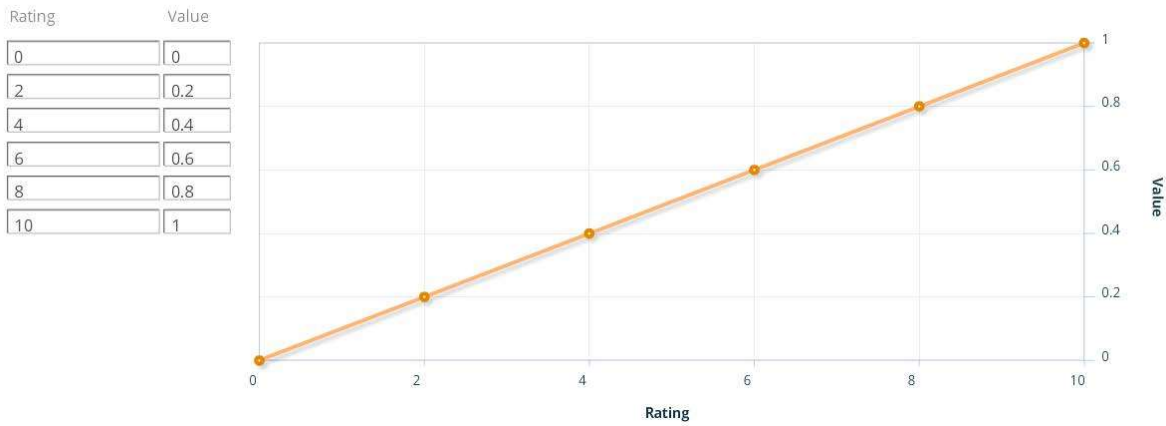


Social and Health Related Elements (4.0%)

This criterion will assess where low income and/or minority populations concentrations are located. The percentages of low income and/or minority populations is a proxy value to account for social determinant of health. The percentile of the census block is estimated to state average where 50 percentile is the state average. This percentile is based on data from the American Community Survey. This information is available from the EPA’s EJScreen with the maximum points of 10 for each project.

Rating Scale

- *5 pts: if project is located where the percentile of low income/minority population is between 90 and 100.*
- *4 pts: if project is located where the percentile of low income/minority population is between 80 and 90.*
- *3 pts: if project is located where the percentile of low income/minority population is between 70 and 80.*
- *2 pts: if project is located where the percentile of low income/minority population is between 60 and 70.*
- *1 pts: if project is located where the percentile of low income/minority population is between 50 and 60.*
- *0 pts: if project is located where percentile of the low income/minority population is below 50.*

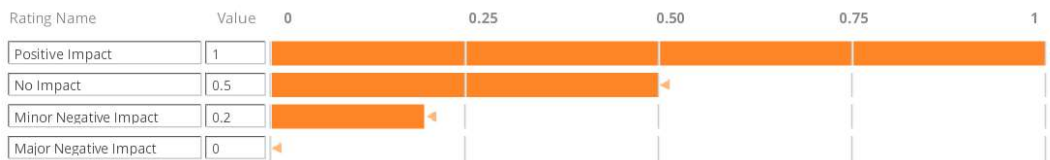


Environmental Impact/Stewardship (6.6%) - *The effect of the transportation system on energy use and the natural environment.*

This criterion is used to assess the extent to which the Project mitigates the threat or damage to the environment, including Air Quality.

Rating Scale

The project is considered to have a positive impact if it completely resolves existing outstanding environmental impact or issue that was not created by the current transportation project. The project is considered to have a minor negative impact if the project creates minor environmental impact that are resolved as part of the project. A major negative impact is selected if the project creates a major environmental impact.



State and Local Priority (6.1%) – *The ability of a project to meet state and local needs.*

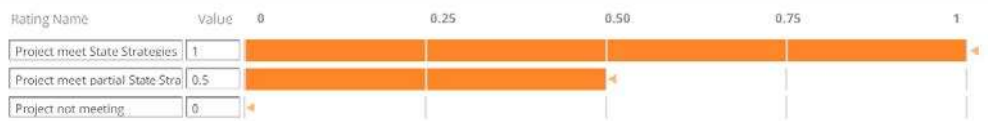
This criterion will assess the extent to which a project contributes towards statewide/regional growth management and the project is identified through an existing MPOs and Sussex County project prioritization program

Delaware Strategies for State Policies and Spending (3.9%)

This criterion supports the active development that has been approved by the local land use agencies. Projects are identified that will support the proposed development and where there is a cost sharing percentage identified as part of the approval.

Rating Scale

The project is evaluated to determine if it addresses criteria identified in the Delaware Strategies for State Policies and Spending program. If the project meets more than half of the 2015 Delaware State Strategies needs based on the level it is located (1, 2, 3 or 4) then it receives a value of one. The project receives a .5 score if it meets some but less than half of the 2015 State Strategies needs. The project receives a 0 score if it does not meet any State Strategies needs.



Local Priority (2.2%)

This criterion supports project that have already been identified as a priority by the MPOs and Sussex County.

Rating Scale

The top fifteen projects identified by the Delaware MPOs and Sussex County for the program year will be scored linearly with a maximum score of 1, all other projects not identified in the top fifteen will receive a score of 0. Since each MPO and Sussex County will rank their respective projects independently, so it is possible to have three projects to receive a score of 1.

