



# LESSONS LEARNED FROM DATA DRIVEN DECISIONS TOOL OUTREACH

The Data-Driven Decision (DDD) Tool was developed to analyze and compare potential transportation construction projects – more specifically, “state jurisdiction added capacity projects”. These are projects that will add a lane to an existing roadway or build a new bypass, roadway, or elements to increase capacity. The DDD Tool was developed using current industry standards, input from national experts, other state DOT practices, as well as the requirements in [PA 102-0573](#). Through the outreach effort conducted by IDOT via interactive survey, email, and additional meetings with key stakeholders, IDOT has gathered some lessons learned that can be considered as the DDD Tool moves forward. Those lessons are outlined below.

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## 1. Definitions

Many of the comments and suggestions identified the need to provide clearer definitions of the metrics being used within each goal area. For example, safety is a key aspect to project selection and in turn, the metrics identifying how the proposed capacity project can improve safety. One of the metrics to weigh projects is crash frequency. Commenters noted that frequency should not be used, as they thought severity of crashes to be a more important metric to weigh the projects. However, crash frequency does account for crash severity within the calculation, which was not clear in the definitions and information provided within the tool. Providing additional information on the factors in defining the goals would make the tool more effective and understandable to what is being used to determine project rating.

## 2. Messaging

The scope of the DDD tool is limited to highway capacity projects, meaning those projects that add capacity to the existing system either through add-lanes to an existing roadway, new bypass, or new roadway. It is specifically designed to weigh these capacity projects against each other for funding consideration and prioritization. This tool does not rate other modes of transportation or other types of highway improvements such as resurfacing or maintenance projects. Better messaging and education of the scope of the tool as it moves forward will be necessary to ensure that proper understanding of the scope of the DDD tool be explicitly stated to avoid confusion as to what improvement types and transportation projects are or are not considered for evaluation.

### 3. Criteria Rating across the State

As part of the outreach for the DDD tool, IDOT asked for respondents to identify their location within the State. This was to determine if different parts of the state, and especially rural vs urbanized areas around Chicago might have different goals and metrics that were important to them. Based on the responses and the comments received, the comparison between District 1 and Districts 2-9 did not have different weight considerations. The priorities and ranking of the metrics and criteria being used to rate and weigh projects was relatively the same across the Districts, showing that they share the same priorities. This will allow the DDD tool to be used across the state for project consideration and selection.

### 4. Priority Goals and other Criteria

There were five goal areas for evaluation of a project within the DDD tool. These goal areas are traffic operations/ congestion, safety needs, economic development, livability/ environment, and regional ranking. Based on the feedback received, all respondents felt that safety was the top priority in terms of weighing projects for funding selection. Safety was unanimously selected as the main component that should drive capacity improvements and funding of those projects.

Comments received also highlighted additional criteria and goals that could be used and should be considered to select highway capacity projects. These additional criteria and goals could provide additional metrics that can provide better direction and selection for funding of capacity highway projects.

### 5. Statewide Ranking

Part of the outreach efforts were to determine whether there are different needs, metrics, or goals that would better serve different parts of the state or different communities. For example, should rankings be different for urbanized areas vs their rural counterparts.



## 6. District Form

In order for a project to be considered and run through the criteria and weighting of the DDD tool, the District must fill out a form that provides basic project information related to each of the goals. There were suggestions that this form should be updated and enhanced to request additional detail on the project in order to gather additional project details. These details would then be used to ensure accuracy of the DDD tool and the review and ratings of the projects. Using some of the information here and lessons learned, there is the opportunity to provide additional definition and explanation of the goals and information requests on the project being submitted.

## 7. Future Considerations

IDOT is currently considering other ways to improve the tool, taking into account comments and recommendations received. Many of the considerations are focused on the existing goals and criteria, looking at ways to ensure they provide appropriate inputs to properly weigh projects against each other for selection. Some of the topics that IDOT plans to continue to review and research include:

### SAFETY

- Review potential safety measures that can be used beyond crash frequency to provide more balance within the tool
- Consider the effects to safety of bicycle and pedestrian facilities as part of the capacity project and whether they address safety issues or create them

### ALTERNATIVE TRANSPORTATION

- Consider how alternative transportation availability and improvements can influence the need for a capacity project

### REGIONAL RANKING

- Review the importance of a project based on its location and linkage as part of a regional network

## ENVIRONMENTAL IMPACTS

- Consider alternate ways of determining a projects value that is unrelated to the environmental processing and analysis
- Additional criteria for determining the effects of the capacity project on low-income areas

## TRAFFIC OPERATIONS/ CONGESTION

- Continue to research methods to determine how to evaluate and compare operations and congestion, considering Travel Time Index and/or Travel Time Reliability
- Evaluate if induced demand is something that can be quantified in a way to include as a measure for project eligibility and evaluation

These future considerations are items that IDOT will continue to research, refine, and adjust the DDD tool as the process continues to ensure that the projects are being weighted fairly and that the projects recommended for funding meet the necessary goals and criteria identified.

## 8. Summary

The outreach effort has provided insight from stakeholders on how the DDD tool can be better implemented and refined to provide support to leverage funding for highway capacity projects. Using the lessons learned, the tool can continue to evolve to ensure that the review and ratings of the projects being considered are being weighted appropriately and meet the necessary goals and criteria.