Illinois Department of Transportation

Office of Planning & Programming
2300 South Dirksen Parkway / Springfield, Illinois 62764

September 16, 2022

Dear Interested Parties:

Thank you for your letter regarding IDOT's Data-Driven Decisions Tool (DDD). Starting in 2015, IDOT (Illinois Department of Transportation) began researching a better way to prioritize added capacity highway projects for funding. The goal of this process was to develop a data driven methodology that could be used to evaluate requests for added capacity road projects throughout the state. These projects represent a small fraction of IDOT's overall transportation project portfolio. IDOT has one of the largest systems of roads and bridges in the nation and most of our highway funding requirements goes towards the maintenance and preservation of the existing system as required by the FHWA's (Federal Highways Administration) asset management initiative. Projects for maintenance and preservation of the existing roadway system are evaluated and prioritized based on conditions and needs by each IDOT district.

Early in the process of developing the tool, IDOT asked the organization, Transportation for America, to assist in facilitating the discussion of using data to help make these decisions. Virginia DOT (VDOT) had just been successful in passing state legislation relating to this and we were able to have several of their staff as well as their Governor participated in the workshop held at IDOT.

During this workshop we found that the overall methodology used by VDOT to allocate, program and fund projects is very different from the process used by IDOT. As a result, while the VDOT Smart Scale was a helpful example as IDOT worked to develop its tool, many pieces of it were not immediately transferrable to the Illinois context.

Several of the data elements used by VDOT were not available to IDOT at this early stage so we began work to develop some of these desired data elements as well as improve the ones we did have. IDOT held a webinar in 2021 to introduce the DDD tool and seek feedback from the public, MPOs and other interested groups. We tried to incorporate some of the suggested changes into the tool but, due to the time constraints related to meeting legislative deadlines and using it for the upcoming MYP (Multi Year Program) we had a very limited amount of time to develop these measures. We continue to develop and improve the measures and criteria being used by the DDD tool.

To address some of the detailed comments provided in the letter to IDOT:

1. The Data-Driven Decisions Tool is in its early stages. It was created to utilize the existing data sources that are available to IDOT. As we continue to refine the DDD Tool, we'll look to incorporate other inputs and data into the process. In response to the suggestions of an annual review and an oversight committee, we plan to review and improve upon the criteria used in the DDD Tool with

additional stakeholder input. Thank you for the input provided, it will be taken into consideration as we formalize our outreach strategy.

2. The current DDD tool was developed for evaluating state-jurisdiction capacity projects. In the future, IDOT may consider expanding the scope of its project evaluation process to cover other types of projects. However, the current set of criteria and weights are tailored to evaluate state-jurisdiction capacity projects in a way that isn't directly applicable to other types of projects. The measures and criteria used are specific for determining if additional capacity will help to alleviate congestion, safety, or other issues on the existing roadway, or whether other types of work can be done to address the issue. As indicated in the lessons learned document, alternative transportation will be considered moving forward on how it can influence the need for a capacity project.

3. At this stage, the DDD Tool relies on current conditions and, in the case of AVMT (Annual Vehicle Miles Traveled), trends to determine the relative need for proposed projects. IDOT will work on incorporating predictive measures in the coming years, as well as explore options for incorporating induced demand, prioritizing commercial and local traffic, and measuring access to alternative transportation.

4. IDOT appreciates your feedback on the proposed equity and environmental measures. The first iteration of the DDD tool contains basic environmental justice and environmental impact measures but, improving and expanding these measures is a priority for future iterations of the tool. Thank you for the references to other examples of transportation prioritization methods, we will review those as we work towards refining the equity and environment measures. Additionally, we appreciate any potential criteria that would fulfill the suggestions indicated in the comments provided.

In response to some of your more detailed comments on specific metrics and technical considerations:

- Weighting - The DDD tool currently gives Safety the highest weight (30%), with Environmental Impact/Livability, Traffic/Congestion and Economic Development equally weighted at 20%. The final 10% of a project's score comes from its regional ranking, which provides an opportunity for Districts to put additional weight on factors that are important in their local contexts. The weights for goal areas and criteria may be adjusted in the future iterations of the tool as measures (including the equity measure) are further developed and refined.

- Average Annual Daily Traffic (AADT) - IDOT is currently utilizing its existing data sources to measure the volume of traffic on a roadway. The roadway projects being evaluated are overwhelmingly interstates and major highways. Furthermore, it is important that the DDD tool can compare projects in different parts of the state, including in rural areas where biking,

walking, and public transit are less feasible. However, IDOT will consider options for incorporating walking, biking, and public transit traffic into its traffic volume calculation for future iterations of the tool.

- While projected change in AVMT does not assess the likely impact of a project, IDOT still believes that it is necessary to include because, as major investments of the state's resources, it is important to consider regional traffic trends and anticipate long-term traffic demand for the area around a project. As with other measures, IDOT considers this an early stage of the DDD Tool. IDOT plans to look at incorporating more robust, predictive methods for determining the impact of projects as we continue to develop and refine the DDD Tool process. A measure that determines a project's impact on statewide AVMT would be useful and worth keeping in mind as we develop new criteria.

- Travel Time Index – Measuring congestion is an important component of understanding transportation system performance. The Federal Highway Administration uses Travel Time Index, along with other congestion measures, in its Urban Congestion Trends publication. Virginia's 'Smart Scale' Program uses a measure Person Hours of Delay that includes peak versus 'free-flow' calculations. Going forward we may consider alternative congestion measures and incorporating induced demand.

- Safety - Crash severity is included in the crash frequency measure IDOT is using. Crash frequency only measures crashes resulting in injury. Crashes are weighted based on the severity of injury. Any crashes involving a pedestrian or bicyclist are included.

- National Highway Freight Network and Intermodal Accessibility - This measure is intended to give extra weight to freight traffic. IDOT gives freight traffic additional weight because it provides an essential service and is vital to the state's economy, and increased ease of goods movement is an important benefit of transportation investment. If a project is on a freight network, then that roadway is already a major shipping route. Delaware's DOT also gives projects on freight corridors additional priority in its project prioritization system. However, this doesn't mean that the economic benefits of goods movement take precedence over all other factors. As part of further developing the tool and the equity measure IDOT will work with stakeholders on considerations related to freight traffic and equity impacts.

- Major Development – This measure uses recent or upcoming development as a means of determining whether some traffic was missed by the AADT numbers. It is not meant to reward development, but rather to capture changes that have happened or are about to happen in the traffic volume since the last recorded AADT number.

- Environmental Justice –The Environmental Justice score in the DDD tool's first iteration is an initial approach to identifying projects that may provide

local benefits if constructed in consultation with residents. However, IDOT understands this approach does not consider the harms that can come from roadway expansions, and the history of highway expansion projects disproportionately harming environmental justice communities. Updating environmental justice and equity measures is a high priority in future iterations of the tool and as suggested will involve outreach with impacted communities.

- Environmental Impact - The Level of Environmental Impact Analysis Required measure is a broad approach to determining the environmental impact of a construction project. Going forward, IDOT will explore more nuanced methods of measuring a project's environmental impact. Additionally, IDOT will be using an emissions criterion soon.

- Regional Input - Regional Rating provides the opportunity for the IDOT District to give input on which projects within the district should be given higher priority. IDOT District offices can give an on-the-ground assessment of the relative need for their projects in ways that the DDD Tool might miss. The Delaware DOT uses Metropolitan Planning Organization rankings in determining project scores.

- Resiliency/ Emissions - The emissions measure is still being developed. IDOT will consider your suggestions as it determines how emissions will be measured and scored.

We appreciate the input provided and look forward to working together in the future to enhance the Data Driven Decisions Tool. Please do not hesitate to reach out with other suggestions for the tool. I can be reached at Holly.Bieneman@Illinois.gov or 217-557-4145.

Sincerely,

Holly Bieneman
Director, Planning and Programming