



## 2021 Awards & Achievements

### **Mid America Association of State Transportation Officials (MAASTO) America's Transportation Awards**

Recipient: Grand Valley Boulevard Bridge

The competition recognizes Midwestern transportation projects in three categories: Quality of Life/Community Development, Best Use of Technology and Innovation, and Operations Excellence.

The Grand Valley Boulevard Bridge Project in Morgan County won the Quality of Life/Community Development award in the small projects division, which is defined as projects costing less than \$25 million. The 3-span bridge, which was a component of the I-69 Finish Line project, provides a safe, new east-west connection for both drivers and pedestrians in the city of Martinsville. The Grand Valley Boulevard project replaced the four-way traffic signal with an overpass bridge, safely connecting residential neighborhoods, education facilities, and commercial areas, and improving traffic flow. Opened in June 2020, the Grand Valley Boulevard bridge has already become a community treasure because of its immediate safety, aesthetic, and community mobility benefits.

### **American Association of State Highway Transportation Officials (AASHTO) Sweet Sixteen Award**

Recipient: RoadHAT 4D

The AASHTO Value of Research Task Force honors 16 high-value state research projects nationwide.

RoadHAT 4D is a software tool used to identify road safety needs and provide for adequate scoping of road design projects. RoadHAT was originally developed in 2007 by the Purdue University Center for Road Safety, under the direction of the INDOT Office of Traffic Safety, and has been updated three times. RoadHAT 4D, the latest version of the program, helps INDOT determine locations for potential safety improvements by identifying highway locations that are not performing as well as expected when first designed: INDOT uses RoadHAT 4D to rate every INDOT road segment and intersection based on their safety risk. The tool also supports scoping of safety projects for existing roads by generating detailed design alternatives before the preliminary design stage

### **Intelligent Transportation Society of the Midwest (ITS Midwest) 2021 ITS Midwest Project of the Year**

Recipient: Queue Warning Trucks

Each year one or more ITS projects are chosen to receive the ITS Midwest Project of the Year Award. The Project of the Year Award is based on merit and significance of the project to the ITS Community.

In 2020, Indiana DOT began deploying queue warning trucks with message boards, flashers, and digital alerts that could be transmitted to navigation systems such as Waze. A novel analysis of queue warning trucks equipped with digital alerts was conducted during the months of May-July in 2021 using connected vehicle data. Hard-braking events were tabulated for when queueing occurred with and without the presence of a queue warning truck. Approximately 370 hours of queueing with queue trucks present and 58 hours of queueing without queue trucks present were evaluated. Hard-braking events were found to decrease approximately 80% when queue warning trucks were used to alert motorists of impending queues. As of Summer 2021, INDOT has deployed approximately 26 queue trucks.