

# RESEARCH SPOTLIGHT

## Project Information

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## Innovative contracting provides flexibility to customize project results

Most of the projects funded by the Michigan Department of Transportation (MDOT) and other public transportation agencies are completed by a contractor who executes the plans developed by a separate design team. However, when circumstances call for a different approach, MDOT can choose to apply one or more alternative strategies to expedite project timelines, maximize efficiency and encourage creative problem-solving. To ensure its program aligns with national best practices, as well as to identify any potential enhancements, MDOT sought to compare its innovative contracting practices with those of other agencies.

### PROBLEM

The majority of MDOT's transportation projects are planned and constructed by separate entities according to a linear timeline, through a process known as design-bid-build. First, a designer develops the project's concept, and then MDOT issues a request for proposals and awards the construction work to the lowest bidder. Finally, the selected builder completes the project following the designer's plan.

While this process successfully achieves MDOT's goals much of the time, a project occasionally presents a unique set of challenges or opportunities that can be accomplished through alternative delivery methods.



Innovative contracting can help streamline complicated construction projects, such as the Jackson Street bridge replacement effort in Jackson, which requires close coordination with rail authorities.

Innovative contracting describes the broad spectrum of options MDOT can apply at its discretion to meet a variety of objectives: completing a project more quickly, increasing collaboration between designer and builder, or encouraging creative solu-

*“By periodically evaluating MDOT’s innovative contracting program, we can see what we’re doing well and where improvements could lead to even better outcomes.”*

**Ryan Mitchell**  
Project Manager

tions to specific challenges. Since it began piloting alternative delivery methods in the 1990s, MDOT has developed, refined and documented its strategies, routinely employing innovative contracting methods since 2008. However, as the transportation construction industry rapidly changes, there is a demand for a similarly cutting-edge and nimble innovative contracting program. To ensure its innovative contracting program is aligned with current best practices, MDOT sought an objective evaluation of its procedures, recommendations for potential enhancements and an update of its guidance documents.

## RESEARCH

To better understand MDOT’s program, researchers began by reviewing recently published literature on the innovative contracting strategies used across the industry and examining MDOT’s existing contracting guidance documents and manuals to learn the agency’s current state of practice. The team then distributed surveys and conducted interviews with local contractors and engineering professionals who have experienced MDOT’s innovative contracting process first-hand, gathering feedback and insight about what worked and where improvements could be made.

Next, researchers organized a virtual peer exchange event with MDOT and representatives from 10 other state departments of transportation (DOTs) to

facilitate discussion on a range of topics, including the delivery methods the agencies prefer and what criteria each agency uses to match appropriate methods and projects, the benefits of choosing a best-value approach versus low-bid, how to measure programmatic accomplishments, and how each DOT manages project risk. The meeting also allowed attendees to describe their agency’s innovative contracting successes and compare their strategies with those of other peer agencies.

## RESULTS

By learning more about MDOT’s innovative contracting program and practices, those of other transportation agencies and national best practices, the researchers were able to identify what MDOT already does well and where enhancements could be made. Among MDOT’s attributes, the team found that the agency’s organizational structure, formalized documentation practices and internal support from upper management give MDOT’s Innovative Contracting Unit a strong foundation for success.

The researchers also provided recommendations to help MDOT align with recognized best practices across the country, such as improved tracking of project costs and timelines, establishing discussion groups between MDOT and industry partners to increase communication and standardizing contract forms for greater consistency across projects. The team devised a phased implementation plan to help MDOT understand the costs and benefits of each recommendation, identify long-term priorities and establish realistic timelines for putting the proposed recommendations into practice.

## IMPLEMENTATION

The results of the research will be used to update MDOT’s 2015 Innovative Construction Contracting Guide, the go-to resource referenced by MDOT staff and MDOT’s industry and agency partners. The document outlines MDOT’s program and processes and provides the critical details

industry partners need to participate. Greater transparency and clarity about MDOT’s innovative contracting program will improve consistency and make it easier for contractors to understand and engage, leading to more involvement and opportunities for creative problem-solving.

For MDOT, the recommendations developed through this research will help the agency maximize efficiencies, increase consistency and continuity between projects, and encourage innovation from industry partners. With a stronger and more competitive program in place, MDOT will have the tools it needs to encourage innovation and reward the contractors who bring creative solutions to transportation challenges across the state.

## Research Administration

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**This final report is available online at**

[www.Michigan.gov/mdot/-/media/Project/Websites/MDOT/Programs/Research-Administration/Final-Reports/SPR-1694-Report.pdf](http://www.Michigan.gov/mdot/-/media/Project/Websites/MDOT/Programs/Research-Administration/Final-Reports/SPR-1694-Report.pdf)

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