



State of Minnesota

Department of Administration
Office of State Procurement

2019 George Cronin Awards for Procurement Excellence

**Innovation Begets Innovation:
How Challenge-Based RFPs
Have Been a Winning Solution
for Minnesota**

Executive Summary

The Minnesota Connected and Automated Vehicle Challenge (CAV Challenge) is a new and flexible procurement process that fosters innovation as the Minnesota Department of Transportation (MnDOT) procures connected and automated vehicle (CAV) technology. MnDOT approached our Office of State Procurement (OSP) with a problem—how could they harness the rapidly-evolving technologies associated with CAV through the procurement process? OSP and MnDOT met, and MnDOT was concerned that the typical narrowly defined requirements in a request for proposal (RFP) would inhibit vendors from submitting real technological innovation with CAV. OSP was wary of making statutory changes specifically for MnDOT and wanted to preserve the values of fair and open competition in the procurement process. Could we work within the statute? Could we preserve fair and open competition while helping MnDOT lead in CAV technology? Through collaboration we determined that answer is yes and the CAV Challenge was born. The CAV Challenge is open for vendors to apply to at any time. Proposals are reviewed every other month. Rather than narrowly defined requirements, MnDOT lists broad goals in the RFP, and vendors are scored to the extent their project aligns with those goals.

Innovation—This is a challenge-based procurement. Vendors are responding to broadly defined goals rather than specific requirements.

Transferability—There are basic criteria, applicable to any state government, which make a project suitable for a challenge-based RFP.

Service—A challenge-based RFP puts cutting-edge technology into MnDOT's hands much faster, allowing them to lead in the CAV industry.

Cost Reduction—OSP and MnDOT developed the challenge-based RFP within three months and have made six awards since the RFP's publication in October 2018, resulting in savings on staff time researching, drafting and managing active RFPs.

Innovation

When MnDOT approached OSP asking for help procuring CAV technology—they brought up many challenges they were experiencing. Vendors would approach MnDOT with an idea, and if MnDOT liked the idea, then they would proceed to an RFP. Further, the RFP was challenging to write as MnDOT did not always have the expertise. Finally, by the time the RFP was released, sometimes the technology had already evolved. Vendors felt discouraged going to MnDOT with their idea, as they would have to compete with others in order to have a chance at the work. This presented yet another challenge, as MnDOT did not always know what kind of technology was out there, and vendor interaction was helpful in that way.

MnDOT wanted a process that would encourage any CAV vendor to come to them, but without the limitation of a specific time frame, as an arbitrary window would not be useful in procuring the most cutting-edge technology. The process also needed to maintain focus on the challenge. MnDOT did not want it to be a free-for-all, as they are tasked with advancing specific goals, and they did not want to waste theirs, or the vendors, time.

OSP saw immediate challenges. Specifically, statutes require that state agencies must include an evaluation of price, can include other considerations, and must state the relative importance of price and other factors. How can an agency evaluate price when vendors may not necessarily be offering the same thing? How can an agency include any factors at all for evaluation when vendors are offering different things? On a more practical level, how does an agency form an evaluation team when there is so much potential for variation in submissions? How does the agency decide on an evaluation timeframe when the solicitation is open indefinitely?

After many dual agency collaboration and brainstorming sessions, OSP and MnDOT developed a framework which turned into the CAV Challenge RFP. Here is what is unique about this challenge based RFP:

- 1) Rather than narrowly-defined specific criteria, the RFP lists broad goals such as leveraging public and private partnerships to advance CAV applications and to build public trust in CAV. Responders are scored based on how they align with these priorities. MnDOT also lists the specific kinds of projects they are more likely to pursue, such as projects that advance CAV in winter weather conditions, and that utilize CAV technology to increase mobility and improve traffic safety.
- 2) The RFP is open for an undetermined amount of time. There is a review date for submitted proposals listed approximately every other month. All proposals received by this date are reviewed and evaluated.
- 3) Vendors interested in responding to the CAV Challenge, can request a “Stage 1” meeting. This meeting occurs before they submit a proposal, and is an opportunity to receive feedback on its potential. This meeting can help vendors determine whether it is worth responding.
- 4) Price is considered in relation to the amount of funding available. Other price related factors scored include cost effectiveness and the value of any partnership contribution.
- 5) The evaluation team remains the same for each cycle and consists of representatives from the CAV office and a MnDOT district engineer. For each proposal, subject matter experts are assigned to review, and come to each proposal de-brief. They each offer brief commentary and the evaluation team asks questions of them.
- 6) There is low barrier to entry. The lack of rigid requirements invite more vendors into the process.
- 7) OSP is involved in every step of the process. Because of the unique nature of this procurement, OSP provides more oversight and customer service than usual in order to protect the integrity of the process and ensure it is working.

MnDOT is the only transportation agency using a challenge-based RFP to procure CAV technology. The State of Minnesota is one of the first states to experiment with challenge-based procurement.

Transferability

Transferability was *the* goal of the CAV Challenge RFP structure and process. When OSP started working with MnDOT to address their needs, one concern was not re-inventing the wheel just for MnDOT. We wanted to create a process that could be used by any agency that needed a particular problem solved, or wanted to solicit a number of projects to meet broader goals. In the future, OSP will offer information on challenge-based RFPs and if an agency expresses interest, OSP will meet with them to determine if their project is suitable. If so, OSP will work closely with them to develop an appropriate solicitation that meets statutory requirements and preserves fair and open competition.

Can your state do challenge based procurement? A challenge based RFP like CAV is particularly suited to areas in which a state is searching for innovation, especially in areas of rapidly evolving technology. It also may be appropriate when the state is searching for an innovative solution to solve a specific problem. Here are criteria to use when considering a challenge based RFP:

- Are the requirements unknown, hard to define, or are they rapidly evolving?
- Is it possible to pose a problem for vendors to solve? Or to list broad goals the state is trying to advance?
- Is the state need somewhat flexible?
- Is there relatively low-risk to not awarding a contract?

If the answer to those questions is yes, a challenge-based RFP may be appropriate. A challenge based RFP that is open for an undetermined amount of time is particularly suited for a state with broad goals

to advance. Particularly appropriate would be a state in need of replacement of a large legacy information technology system, or general information technology updates.

Service Improvement

One of the most significant service improvements is getting cutting-edge innovation directly into MnDOT’s hands through a fair and open procurement process. Typically the technology would be in wide use in order for MnDOT to write an RFP. A great example is the automated truck mounted attenuator vehicle (TMA) that MnDOT purchased through the CAV challenge. A TMA truck, otherwise known as “the crash truck” is human-driven and deployed in a high-crash potential work zone. MnDOT, through the CAV Challenge, is only the second state in the country to buy an automated TMA truck. Since only one state has tested this technology, it is unlikely MnDOT would be able to easily write an RFP for it.

OSP and MnDOT’s close collaboration has resulted in better service to MnDOT as we have a thorough understanding of the proposals and contracting needs. OSP is able to identify contracting challenges early in the process, and can address them faster. The close working partnership between MnDOT and OSP has allowed us to modify and improve the process as we learn.

Also notable is the level of service provided to vendors. Vendors can submit their idea directly to MnDOT as part of a competitive process, at less risk to them. There is low barrier to entry, as there are not highly technical requirements and specific levels of experiences, typically associated with public sector procurement. They also can request a pre-proposal meeting to determine if their project is a good fit, saving them time and effort. Because proposals are evaluated every two months, vendors get more immediate feedback on their ideas.

Cost Reduction

The CAV Challenge debuted in October 2018. Since then, six awards have been made from the CAV Challenge RFP and the project is not even one-year-old. The CAV team estimates they save \$30,000 per award based on the following:

- Emerging technology projects using the traditional process typically take around 300-400 person hours for RFP development and 12-24 months from conception to award.
- The challenge-based RFP allows the CAV team to solicit multiple emerging technology projects through one RFP, calling on subject matter experts as needed for specific proposals
- Reduces evaluation time per award

| | Number of Awards in a Year | Staff hours (RFP Development) | Time from RFP Development to Contract | Staff time (Evaluation) |
|---------------|----------------------------|-------------------------------|---------------------------------------|-------------------------|
| CAV Challenge | 6+ | 40 hours | Less than 12 months | 100 hours (6+ awards) |
| Typical RFP | 1-2 | 300-400 hours | 12-24 months | 100 hours (per award) |

Conclusion

The flexible, challenge-based RFP is *an excellent* tool to address the innovative needs of a state efficiently and effectively. Its broad applicability can apply to almost any hard-to-define challenge facing states. It will save states, agencies, procurement offices and vendors time and save taxpayers money.