

## Automated Truck Mounted Attenuator (ATMA) Project

Connected and automated vehicle (CAV) technology has the potential to significantly increase work zone safety. Each day, MnDOT maintenance employees and contractors are at risk of being involved in crashes when performing road work. To mitigate this risk, MnDOT uses truck mounted attenuators (ATMAs) – or crash cushions – to protect roadside workers.

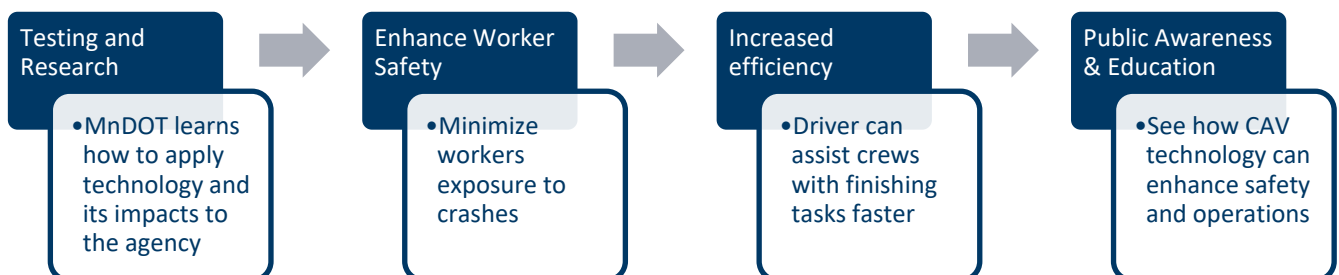
The *Minnesota CAV Challenge* is a unique contracting method which allows industry to propose CAV solutions to current transportation problems. Micro Systems, Inc. proposed an idea to build an automated TMA (ATMA) based on technology used for the Department of Defense with the goal to test and demonstrate this technology for work zone safety.

### Autonomous TMA Overview

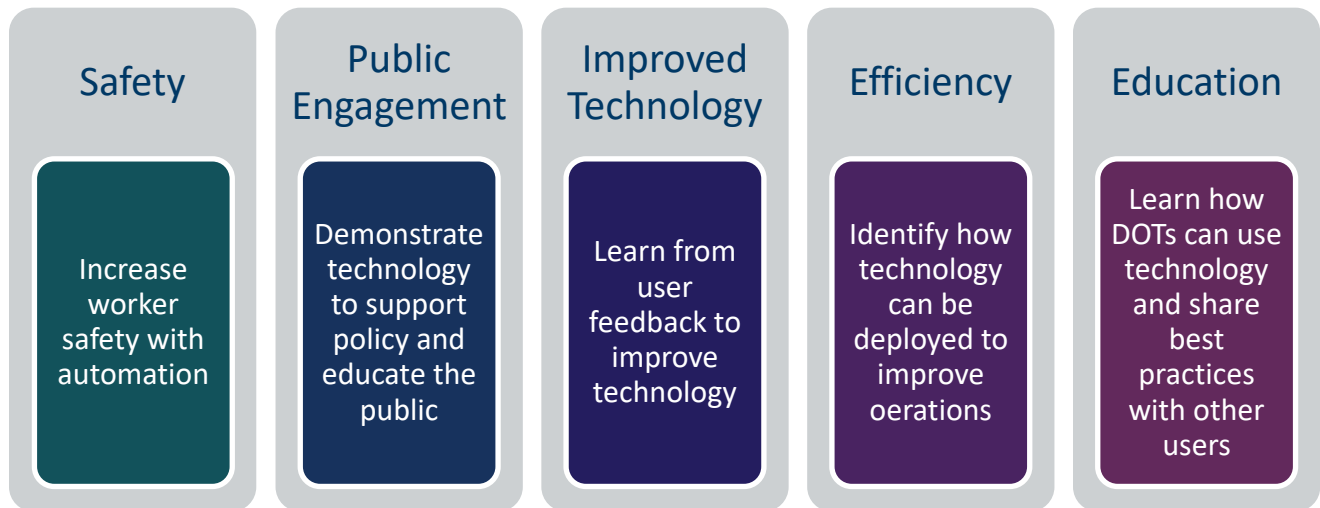


The ATMA truck follows the path of lead maintenance vehicles. This idea uses connected and automated vehicle technology. The lead vehicle leaves “electronic bread crumbs” for the ATMA, allowing the ATMA to operate autonomously. For this project demonstration, a safety driver will be in the ATMA vehicle at all times. In the future, ATMAs have the potential to increase safety during mobile work zone operations by removing workers from harm’s way.

### Benefits of the Technology



## Project Goals

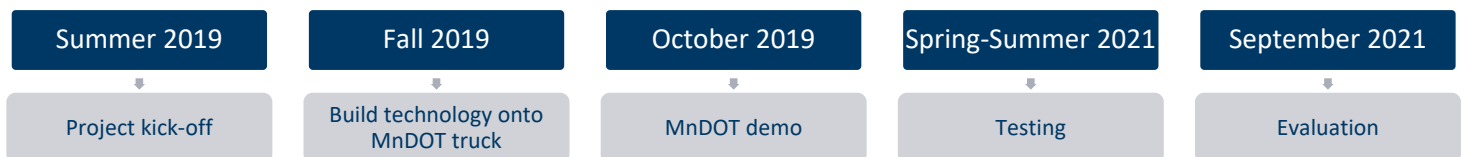


## How does it work?



1. Retrofit existing MnDOT maintenance vehicle and install “ATMA kit” technology
2. Install automated technology on the follower vehicle (truck mounted attenuator)
3. Test on closed roads
4. Test on closed roads
5. Refine software as-needed

## Schedule



### For more information contact:

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