

## Next-Generation Traffic Incident Management (NextGen TIM): Technology for Saving Lives

EDC-7 State of the Practice/Implementation Plan Form

### Below are the EDC-7 progress report questions and schedule.

Report	Reporting Period	Due from Division Offices
Baseline Report #1	Current status as of April 2023	COMPLETED!
Progress Report #2	May 2023 through April 2024 (1 year)	May 17, 2024
Progress Report #3	May 2024 through October 2024 (6 months)	November 15, 2024
Final Progress Report #4	November 2024 through April 2025 (6 months)	May 16, 2025

Progress Report Questions		
<ol> <li>If there has been NO CHANGE on this innovation during this reporting period and the previous Report is still accurate, select "No Change from last Progress Report" and you do not need to complete Questions 2-5.</li> <li>What is the State's current stage of innovation implementation?</li> <li>Review your past progress report responses and the Implementation Stage Definitions on page 1.</li> </ol>	(Choice)  ☐ No Change from last Progress Report  ☐ Changes indicated in Progress Report Below  (Choice)  ☐ Not Implemented  ☐ Development Stage  ☐ Demonstration Stage	
	☐ Assessment Stage ☐ Institutionalized	
<ul> <li>3) Describe the State's accomplishments for this reporting period (State DOT, local agency, and transportation partners accomplishments).</li> <li> If advanced to the next implementation stage, consider the prompt questions in the chart and explain the advancements made to support your selection.</li> <li> Please include benefits as part of your explanation (i.e. time/cost savings, delay/crash reductions, etc.)</li> </ul>	UAS for TIM: Assessment. Our 2x tethered drones are still operational to respond on scene in areas with minimal to no camera coverage. Using for additional use cases such as work zone queue management and flood monitoring. Funding secured for additional drone purchases. Submitted procurement request to purchase additional tethered drones to have 1 drone per region on IMAP trucks. Published final report on UAS and EVAs from STIC grant.  Debris Removal Systems: Development – moving towards Demonstration. Piloting 4 systems: 2 installed and 2 completing fabrication and installation. Anticipate 2 systems installed by end of May 2025. Coordinating with NCDOT Statewide Fleet to finalize the truck distribution on the final two.  Emergency Vehicle Lighting: Development stage. Held demonstration day at TIM training track with multiple technology lighting vendors in April 2025. Submitted STIC Grant to pilot emergency vehicle lighting on SSP vehicles in 1 region with the capability to sync lights with NCSHP trooper vehicles to assist with the Move Over law.	



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Advance Warning Technologies: Demonstration stage: completed EVA pilot with Makeway, Icone, and Haas. Installing full-matrix CMS on the back of the SSP vehicles. These message boards are being installed on both the new trucks and existing trucks with adequate time in their life cycles. Attended EDC Workshop in Indianapolis and will be presenting lessons learned in an upcoming statewide SSP meeting in December. Published final report on UAS and EVAs from STIC grant.
TIM Technologies for EMS: n/a Fabrication of the final two systems has been challenging along with
the installation of the third system based on the requirements of the truck age and maintenance issues. Due to external circumstances, the overall schedule had been pushed. Working with NCDOT Statewide Fleet, we've identified a new schedule and should have the final two systems fabricated and installed by the end of the month and the third vehicle is operational.
(open discussion) n/a



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The below table is meant to provide a means to define the implementation stages that will be used throughout the 2-years of EDC-7 deployment. These definitions are used when capturing your baseline, progress, and final reports for each of the innovations and were developed to provide consistency between states in measuring the deployment progress of an innovation.

The six NextGen TIM Technology categories covered in EDC-7 include:

- 1. Unmanned Aircraft Systems (UAS) for TIM
- 2. Debris Removal Systems
- 3. Emergency Vehicle Lighting
- 4. Advance Warning Technologies

- 5. Emergency Vehicle Preemption (EVP)
- 6. TIM Technologies for Emergency Medical Services (EMS) to Support Post-Crash Care

States\* can choose to select one or more NextGen TIM Technology categories to focus on during EDC-7. However, to simplify tracking, it is recommended that the State\* use the NextGen TIM Technology category that will be the top priority, or most likely to advance, to select their Baseline and Goal implementation stages.

Innovation Implementation Stage		Guidance Questions	
	Definitions	Prompt questions to help assess your current state of practice.	
*State is all-inclusive (e.g., state transportation agency, local municipalities, contractors, consultants)		NOTE: Not all questions have to be affirmatively answered to meet any given stage; judgment is required; call the NextGen TIM Technology Deployment Team w/ questions.	
	Not Implemented:  The State* is not implementing any of the six NextGen TIM Technology categories.	<ul> <li>Implementation of the NextGen TIM Technologies has been evaluated and it was determined that they are not appropriate for the State*.</li> </ul>	
		<ul> <li>Resources (personnel, financial, or technological) are not available to assist with implementation of any of the NextGen TIM Technologies.</li> </ul>	
		The State* is not interested in creating an implementation plan or learning more at this time.	
	Development Stage:	Has an implementation lead/champion been identified?	
	The State* has identified one or more NextGen TIM Technology categories	<ul> <li>Have efforts to gather information (i.e., participation in webinars or workshops, identification of best practices, etc.) been initiated?</li> </ul>	
	to advance and is gathering facts and building support for implementation.	<ul> <li>Are efforts underway to build support with involved stakeholders?</li> </ul>	
		<ul> <li>Has development of an approach or supporting processes for technology deployment been initiated?</li> </ul>	
	Demonstration Stage:	<ul> <li>Is the State* conducting field testing of the NextGen TIM Technology?</li> </ul>	
	The State* is testing or has initiated a pilot for one or more of the NextGen TIM Technology categories.	<ul> <li>Has the State* secured management support to the field testing or a pilot program of the technology?</li> </ul>	
		Has the State* applied for, or received, grant funding (e.g., State Transportation Innovation Council (STIC) or Accelerated Innovation Deployment (AID) Demonstration funding), or secured State* funding to pilot the technology?	



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	Assessment Stage:  The State* has tested or piloted one or more NextGen TIM Technology categories and is assessing the performance of the technology and adjusting any processes for broader deployment.	<ul> <li>Is the State* assessing and refining the use of the NextGen TIM Technology based on the results of the field testing/pilot, with the intention of expanded deployment?</li> <li>Is the technology being considered for regular use?</li> <li>Are performance measures and baseline data for evaluating the effectiveness of the technology in place?</li> <li>Are plans in place to incorporate the technology into contracts, guidance, manuals, or policies?</li> </ul>	
	Institutionalized:  The State* has adopted the chosen NextGen TIM Technology categories as a standard practice.	<ul> <li>Has the State* implemented the NextGen TIM Technology as standard practice?</li> <li>Has the technology been incorporated into contracts, guidance, manuals, or policies?</li> </ul>	

#### **Deployment Team Contact Information**

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