

# INCIDENT MANAGEMENT ASSISTANCE PATROL (IMAP) CERTIFICATION

By: North Carolina Department of Transportation

## IN THIS CASE STUDY YOU WILL LEARN:

1. The primary services provided by IMAP drivers include the detection of incidents, removal of vehicles and debris from travel lanes, deployment of emergency traffic control, and assistance of stranded motorists.
2. The certification program currently certifies all drivers and is being expanded to include certification for supervisor levels.
3. The training program was built to address key challenges that were limiting the maturity of the IMAP Program.



## COMMUNICATIONS PLANNING AND EXECUTION

The training program is built on a well-defined path to certification that has been designed for both drivers and supervisors. It includes four to seven weeks of organized training with an observation period prior to the final week for drivers. Each course contains specific components of the materials to guide the personnel through the concepts and application.

- **Talking Points** – Specific guidance, policy, and procedures
- **Discussion Questions** – Tests the trainee’s recall of topics
- **Basic Tasks** – Provides the trainee with hands-on experience
- **Trial Exercises** – Allows the trainee to practice the complete delivery of an IMAP service or strategy
- **Full Demonstrations** – Tests the trainee’s ability to properly execute a complete IMAP service or strategy
- **Scorecard** – Used to grade each action that a trainee must do to execute the service/strategy properly

## OUTCOME, LEARNINGS, AND PUBLIC BENEFIT

While developing the training and certification program, stakeholders at the statewide level and in the divisions identified key challenges that were limiting the maturity of the IMAP Program. Focused solutions to each of these identified challenges are listed below. This comprehensive approach guaranteed that the program would address recognized user needs and better support integration of the training and certification into the overall IMAP Program.

## BACKGROUND

The North Carolina Department of Transportation (NCDOT) provides a safety service patrol through the Incident Management Assistance Patrol (IMAP) Program that covers more than 850 miles of freeways across the state. The IMAP Program began in 1991 and currently operates in eight of the 14 divisions. The development of the IMAP certification program began in 2010 and is continually evaluated and expanded as roles change and the program grows. In 2017, over 9,000 stops were completed by IMAP drivers. The primary services provided by IMAP drivers include the detection of incidents, removal of vehicles and debris from travel lanes, deployment of emergency traffic control, and assistance of stranded motorists.

## TSMO PLANNING, STRATEGIES, AND DEPLOYMENT

In an effort to grow the maturity of the IMAP Program, a training and certification program has been implemented. The program currently certifies all drivers and is being expanded to include certification for supervisor levels. These drivers are being asked to perform independently in live traffic and perform critical decision making in emergency situations. The training involves a range of content provided in four different settings: classroom, traffic incident management training track, TMC Control Room, and live roadway. Prior to the official training program, on-the-job training was the only available method for staff development.

## CASE STUDY: INCIDENT MANAGEMENT ASSISTANCE PATROL (IMAP) CERTIFICATION

| CHALLENGES   | SOLUTIONS   |
|--|---|
| <p><b>Inconsistency across IMAP Regions</b></p> <ul style="list-style-type: none"> <li>■ Practices</li> <li>■ Equipment</li> <li>■ Focus (IM vs. Motorist Assistance)</li> </ul>   | <p><b>Collaborative Production</b></p> <ul style="list-style-type: none"> <li>■ Training content provided by drivers from all regions</li> <li>■ Regional review of materials at every step</li> </ul>  |
| <p><b>Regional Buy-In</b></p> <ul style="list-style-type: none"> <li>■ Acceptance of new/different practices</li> <li>■ Confidence in training content &amp; methodology</li> </ul>  | <p><b>Leadership Support</b></p> <ul style="list-style-type: none"> <li>■ Board of Transportation</li> <li>■ Division Engineers</li> </ul> <p><b>Statewide Shares Cost</b></p> <ul style="list-style-type: none"> <li>■ Develops materials</li> <li>■ Delivers training</li> </ul>  |
| <p><b>IMAP Trainers</b></p> <ul style="list-style-type: none"> <li>■ Knowledgeable &amp; experienced</li> <li>■ Adhere to training standards</li> <li>■ Can support training needs statewide</li> </ul>  | <p><b>Dedicated IMAP Trainers</b></p> <ul style="list-style-type: none"> <li>■ Reports to Statewide NCDOT</li> <li>■ Former IMAP drivers/supervisors from different regions</li> <li>■ Teaches official standards (not their personal way of doing things)</li> <li>■ Three trainers who are mobile can reach all drivers in all regions</li> </ul>   |
| <p><b>Unclear Standards for Temp. Traffic Control (TTC)</b></p> <ul style="list-style-type: none"> <li>■ MUTCD – Chapter 6 is open to interpretation</li> <li>■ MAP regions had their own, unwritten standards</li> <li>■ “Proper” TTC standards don’t match IMAP’s equipment or typical work duration (less than one hour)</li> </ul> | <p><b>IMAP Emergency Temp. Traffic Control Standard</b></p> <ul style="list-style-type: none"> <li>■ Performed study and developed written justification for IMAP</li> <li>■ Based IMAP TTC on MUTCD C6 with consideration for: <ul style="list-style-type: none"> <li>○ IMAP truck capacity</li> <li>○ Typical work duration</li> <li>○ Ideal deployment time by one driver</li> </ul> </li> </ul> |
| <p><b>Training Materials That IMAP Will Use</b></p> <ul style="list-style-type: none"> <li>■ Low familiarity with computers</li> <li>■ Limited computer access in field where training occurs</li> </ul>   | <p><b>Hard Copy, “All-in One” Training Manual</b></p> <ul style="list-style-type: none"> <li>■ Trainers carry with them to training sites</li> <li>■ All training materials in one, easy-to-navigate manual</li> </ul>  |
| <p><b>Materials That Will Survive Training Environment</b></p> <ul style="list-style-type: none"> <li>■ Outdoor/wet setting</li> <li>■ Rugged environment</li> <li>■ Rough use</li> </ul>  | <p><b>Durable Manual</b></p> <ul style="list-style-type: none"> <li>■ Water &amp; tear resistant (polyester paperback)</li> <li>■ High-density laminate and rugged bindings</li> </ul>  |
| <p><b>Training Location</b></p> <ul style="list-style-type: none"> <li>■ Safe, controlled environment</li> <li>■ Sufficient size for full demonstrations</li> <li>■ Road geometrics similar to real world</li> </ul>   | <p><b>NCSHP Driver Training Facility Near Raleigh</b></p> <ul style="list-style-type: none"> <li>■ Focused design for TIM training</li> <li>■ Support multi-agency training scenarios</li> <li>■ Mimics real-life roadway characteristics</li> </ul>  |

### FURTHER INFORMATION

NCCoE Knowledge Center: <https://transportationops.org/knowledge-center>