Mid-Atlantic Traffic Incident Management Training Facility Feasibility Study

2017 Transportation Engineering & Safety Conference
December 8, 2017
Troy D. Truax, AICP
Michael Baker International
PENN TIME JOINT OPERATIONAL POLICY FRAMEWORK

- Training
- Technology
- Quick Clearance
- Public Education and Outreach
Purpose and Need

- Evaluate the need and demand for a PA-based Mid-Atlantic TIM Training Facility
- Centrally located facility offering:
  - Hands-on, multi-agency and multi-disciplinary TIM training
  - Certified TIM training for partners across the Mid-Atlantic region
  - Simulated environment with a variety of incident scenarios
  - Innovative technologies and equipment testing related to roadway safety

1,178,022
Total Number of Responders to be Trained Nationwide!
Source: FHWA, July 10, 2017
<table>
<thead>
<tr>
<th>State</th>
<th>Responders Trained</th>
<th>Responders To Be Trained</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pennsylvania</td>
<td>54,500</td>
<td>9,542</td>
</tr>
<tr>
<td>New York</td>
<td>54,443</td>
<td>5,582</td>
</tr>
<tr>
<td>Virginia</td>
<td>53,082</td>
<td>19,165</td>
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<tr>
<td>Ohio</td>
<td>37,126</td>
<td>21,992</td>
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<tr>
<td>New Jersey</td>
<td>29,798</td>
<td>12,290</td>
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<tr>
<td>Maryland</td>
<td>23,218</td>
<td>6,587</td>
</tr>
<tr>
<td>West Virginia</td>
<td>13,830</td>
<td>4,367</td>
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<tr>
<td>Delaware</td>
<td>4,715</td>
<td>449</td>
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Source: FHWA National Traffic Incident Management Responder Training Program, July 10, 2017
Project Scope

- Identify Industry Need
- Conduct Market Analysis
- Outline Business and Services
- Determine Operations and Management Plan
- Develop Financial Plan
- Conduct Site Selection
- Release Procurement Documents
Stakeholder Engagement

- Federal and State Agencies
- Planning Partners - MPOs/RPOs
- County and Local Governments
- TIM Partners/Experts
- Corridor Coalitions
- Safety Organizations
- Technology Partners
- Work Zone Safety
- Education Institutions
Online Surveys

- **Survey #1**
  - Target Audience = First Responders
  - 851 responses

- **Survey #2**
  - Target Audiences = Technology, Work Zone, Commercial Vehicles
  - 93 responses
  - Conducting follow-ups with particular technology entities
Facility Characteristics

- Highway/roadway design to simulate real TIM conditions
- Integration of innovative technologies and equipment
- Supporting indoor training classrooms/labs
- Easily accessible from major transportation networks
- Located near supporting amenities

Real Life Training Simulations
TECHNICAL TRAINING ELEMENTS

Traffic Incident Management
- ITS Technologies
  - Tolling Technology
  - Connected Automated Vehicles
  - Unmanned Aerial Vehicles (Drones)

Construction/Work Zone Safety

Commercial Vehicles

TARGET AUDIENCES

Law Enforcement
- Fire/Rescue
- EMS
- Towing & Recovery
- Public Works
- Utilities

Tolling Agencies
- Tolling Technology Vendors
- Research Institutions
- Industry Associations/Coalitions
- State ITS

OSHA and ANSI Work Zone Safety Training
- Contractors
- Flagger Force

Motor Truck Carrier Associations
- Bus Associations
- Manufacturers
- Integrators
1. 4 Point Roundabout with area for Green Space
2. Rural Intersection
3. Urban 4 Point Intersection (Leg 1 Simulates Multilane through with Left turn lane and center island, Leg 2 Simulates Concrete Median, Leg 3 Simulates Multilane through with no additional left turn lane, Leg 4 Simulates a Typical Intersection layout.)
4. Potential Automation Test Loop (Will Have sections to simulate Type 31-3 guide rail, Cable systems, and Concrete Jersey Barrier)
5. Typical Bridge Section with embankments
6. Truck Turnaround areas
7. Building for Classrooms
8. Parking Lot Currently Showing 160 spaces
9. High Speed Testing with Return Loop
10. Truck Parking and Staging Area
11. 6 Lane Highway Section with On Ramp and Off Ramp Simulations
12. Overhead Tolling Gantry
13. City Simulation with Small Intersection Radii
14. Helipad
1. 4 Point Roundabout with area for Green Space
2. Rural intersections
3. Urban 4 Point intersection (Leg 1 Simulates Multilane through with Left turn lane, Leg 2 Simulates Multilane through with right turn only, Leg 3 Simulates Left turn and Right turn only with concrete island and signal, Leg 4 Simulates a Typical Intersection layout with left turn into a rural intersection.)
4. Potential Automation Test Loop (Will Have sections to simulate Type 31-8 guide rail, Cable systems, and Concrete Jersey Barrier.)
5. Typical Bridge Section with embankments
6. Truck Turnaround area
7. Building for Gazetons
8. Parking Lot Currently Showing 160 spaces
9. High Speed Testing with Return Loop
10. Truck Parking and Staging Area
11. 6 Lane Highway Section with on ramp and off ramp simulations
12. Overhead Towing Gantry
13. City Simulation with Small Radii
14. Helipad

OPTION 2
110 Acre Site

SCALE
0 125 250 375 500 FEET

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INTERNATIONAL
1. 4 Point Roundabout with area for Green Space
2. Rural Intersections
3. Urban 4 Point Intersection (Leg 1 Simulates Multilane through with Left turn lane, Leg 2 Simulates Multilane through with right turn only, Leg 3 Simulates Left turn and Right turn only with concrete island and signal, Leg 4 Simulates a Typical intersection layout with left turn into a rural intersection.)
4. Potential Automated Test Loop (Will have sections to simulate Type 3-1-6 guide rail, Cable systems, and Concrete Jersey barriers.)
5. Typical Bridge Section with embankments
6. Truck Turnaround area
7. Building for Classrooms
8. Parking Lot Currently Showing 160 spaces
9. High Speed Testing with Return Loop
10. Truck Parking and Staging Area
11. 6 Lane Highway Section with on ramp and off ramp simulations
12. Overhead Tolling Gantry
13. City Simulation with Small Radii
14. Helipad

MID-ATLANTIC TIM TRAINING FACILITY STUDY

OPTION 3
110 Acre Site

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SCALE
0  125  250  FEET

0  100  200  300  400  500  FEET
KEY NEXT STEPS

1. Identify Industry Need
2. Conduct Market Analysis
3. Outline Business and Services
4. Determine Operations and Management Plan
5. Develop Financial Plan
6. Conduct Site Selection
7. Release Procurement Documents
## MILESTONE SCHEDULE

<table>
<thead>
<tr>
<th>Step</th>
<th>Target</th>
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<tr>
<td>Outreach Engagement</td>
<td>Spring/Summer 2017</td>
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<tr>
<td>Feasibility Study/Business Plan</td>
<td>Fall 2017/Winter 2018</td>
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<tr>
<td>Site Selection Due Diligence Development</td>
<td>Spring 2018</td>
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<tr>
<td>Request for Proposals</td>
<td>Summer 2018</td>
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Questions?
Contact Information

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