NJDOT Bordentown Training Center



By New Jersey Department of Transportation 12/28/2023

Benefits Statement

NJDOT's Bordentown Training Center improves transportation safety by offering hands-on training, reducing on-the-job accidents, and saving lives. It streamlines training, saving time and resources, while also enhancing technical skills through ITS training. The facility benefits first responders, aiding in emergency preparedness and response, ultimately saving lives during crises. Collaboration with partner agencies ensures efficient, certified professionals, reducing costly errors. Public events raise awareness and support for this valuable resource, contributing to its success in promoting safety, saving time, and conserving resources for NJDOT and the transportation industry.

In this case study you will learn:

- How NJDOT's Bordentown Training Center, opened in 2023, offers specialized infrastructure training with advanced facilities, costing \$21 million.
- How the center provides hands-on training with advanced tech assets and plans for unmanned aerial vehicle testing and supports first responder training.
- How collaboration with partner agencies shaped curriculum, and extensive renovation transformed the center into a modern training hub for transportation professionals.

Case Study #163



Version Number: 1

BACKGROUND

NJDOT's Bordentown Training Center was officially opened in May of 2023. The facility previously served as the New Jersey National Guard **Bordentown Combined Support Maintenance** Shop. NJDOT acquired the property from the New Jersey Department of Military and Veterans Affairs in 2016 and converted its three buildings and surrounding land into a purposebuilt training complex that caters specifically to the evolving needs of professionals working in the transportation infrastructure field. The facility includes specialized classrooms and adjoining labs outfitted with real roadway structures, traffic control components, and vehicle maintenance equipment. These spaces allow trainees to gain valuable hands-on experience in a safe and controlled setting without adverse weather or road hazards. A mock roadway was constructed on the premises and features a signalized intersection, crosswalks, overhead static signs, multiple dynamic message signs, closed circuit television cameras, and a railroad grade crossing to present trainees with the conditions and structures they will encounter on the job.



The facility was constructed at a cost of \$21,011,201 and is managed by the Division of Support Services and Division of Operations Administrative Support – Training & Equipment Inspection Unit. A Training Unit staff of 20 employees is responsible to oversee and administer training for critical certification programs such as the Commercial Driver's License, Traffic Incident Management (TIM) training, Pesticide Spray Licensing for Vegetation Control on our highways, for Safety Service Patrol Operator and Snow Operations New Hire Training, Highway Operations Technician Advancements, Electrical Maintenance, and Fleet Equipment / Maintenance.

Our Training Program and Equipment Outfitting Programs are paramount in ensuring that the necessary customer service and support is given to the Department Units that have subject matter questions and requests for training. Inspection and outfitting of State equipment and vehicles will be greatly streamlined so they can be issued promptly to Department employees for training and effective use.



The training center is equipped with the latest ergonomic and technologically

advanced setups so that course instruction can be delivered in the most effective manner and so that the latest training means, methods, and techniques can be incorporated. The training course was designed with real life highway assets and appurtenances that can be trained on in a safe environment while protected from the dangers from working on our roadways. Trainees can build confidence and can learn the safe and effective ways to do their work while being able to protect themselves.

TSMO PLANNING, STRATEGIES AND DEPLOYMENT

Recognizing the need to have advanced technologies at the Bordentown Training Center, multiple ITS assets were designed and constructed at the facility to provide field technicians with the ability to get hands-on technical training on new and existing technology hardware without having to be in the field, exposed to traffic conditions.



The assets designed and constructed include one ground mounted dynamic message sign and one cantilever dynamic message sign with their corresponding controller cabinets, lane use control signs (LUCS) that are being

strategically deployed as part of the Department's Hard Shoulder Running (HSR) projects, two closed circuit television cameras on poles of varying heights, and traffic signal controller cabinets which were reconfigured in recent years to be larger in order to hold additional power and space requirements for Road-Side Unit (RSU) connected vehicle technology. Future use of the facility for unmanned aerial vehicle testing and certification is expected to begin in the near future, providing certified pilots with a closed off course to test their skills before using the aircraft in more demanding field environments.



In addition to the technical capabilities at the Bordentown Training Center, NJDOT will be expanding its progress in training first responders from all response disciplines at the facility. With the availability of multiple classrooms, lecture halls, and the large outdoor roadway, NJDOT and their NJSP Incident Management partners will continue expanding TIM training classes at the facility to larger class sizes, tabletop exercises, and outdoor response scenarios where safety can be properly set up in a controlled environment.

NJDOT's Office of Emergency Management, Security, and Response coordinates multiple emergency operations plans and annual exercises, including the contraflow evacuation plan from Jersey shore areas and the Department's Continuity of Operations Plan. These plans now include the Bordentown Training facility as their base of operations for training and after-action reviews of these large-scale events.

The facility also includes computer training labs, offices, conference and breakout rooms, and locker room facilities for instructors and trainees.



COMMUNICATIONS PLANNING AND EXECUTION

Since training and testing for vital licensing programs will be conducted at the facility, numerous partner agencies have been involved in the planning and design of training efforts and certification programs. In addition to traditional partners such as the New Jersey Turnpike Authority and South Jersey Transportation Authority, the NJ Civil Service Commission, NJ Department of Environmental Protection, NJ Motor Vehicle Commission, and others have been strategically involved in the development of curriculums and participating in the certification processes. As this Training Center is for the whole Department, there is availability for other Department Offices and Outside Agencies as well. There will be a presence by Human Resources and the Personnel Unit(s) to be able to collaborate directly with Training Staff and provide their guidance to integrate into various training and advancement activities.

NJDOT's Communications team worked to put together a media event in May 2023 which brought local officials, leadership from numerous state agencies and authorities as well as guests and the press.



OUTCOME, BENEFITS AND LEARNINGS



The transformation of a dilapidated cold war relic into a modern, cuttingedge center of transportation

training excellence was no small feat and required the efforts of numerous NJDOT staff from various business areas in order to result in a facility capable of producing a technical professional workforce. Providing new hires with a closed environment, supported by classroom to hone their skills before applying them on the roadway is critical to promoting a safe work-experience. Retrofitting three older buildings and creating a mock roadway required strategic planning, consultant support and execution on numerous levels. The exterior of the buildings, including windows, doors, roofs and brickwork, were repaired or replaced. The interior of the buildings were completely renovated. Other improvements to the site included full utility upgrades for gas, electric, and water, as well as significant upgrades to stormwater management/drainage and the sanitary sewer pump station serving NJDOT and adjacent NJSPbuildings requiring utility coordination as well as contractor effort.

Building 1 is a single-story building with a mezzanine level and an interior floor area of 18,871 sf. comprised of offices, training class-rooms, conference rooms, lunch/break room, lecture hall assembly, and vehicle maintenance garage bays. Building 2 is another single-story structure with an interior floor area of 11,915 sf. comprised of offices, training classrooms, conference room, lunch/breakroom, and hands-on training bays. Finally Building 3 the final single-story building with an interior floor area of 6,226 sf. comprised of manager office, lunch/break room, and vehicle maintenance garage bays.

