CIA TEAM

MOBILITY & OPS

NJDOT – Wayne Patterson

FHWA – Ek Phomsavath

EDC5 Initiative-Institutionalized

Use of Crowdsourcing to Advance Operations

Goals:

- Expands and improves real-time monitoring
- Enables more targeted and timely response
- Enables strategic / programmatic operational improvements

Status of using crowd source operations data in New Jersey:

- NJDOT is not participating in the use of crowd-sourcing to advance traffic operations. We're institutionalized.
- The state has adopted as a standard practice crowd sourcing for operations and is embedded as critical to the success of operations programs, systems, and strategies.
- Waze has been sharing traffic and incident report data with NJDOT by way of TRANSCOM. NJDOT TOC operators are using it for their incident detection and situational awareness when monitoring and verifying traffic conditions. We use INRIX Data for travel times.

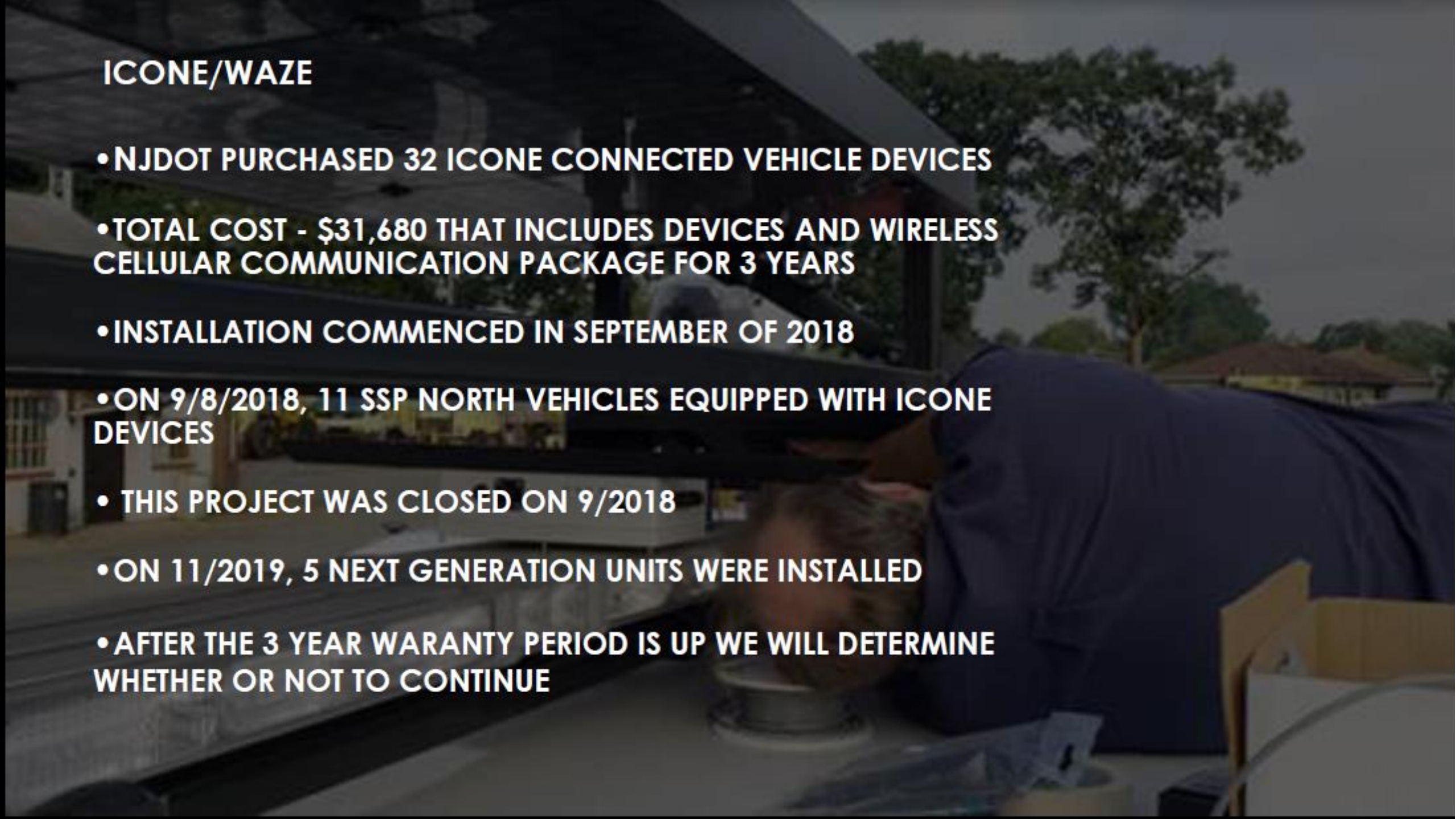
ICONE/Waze

Testing continues with NJDOT and Contractors.

We Assessed the performance of current units, we now have Next Generation Units installed on 5 Trucks. We are currently evaluating the reliability of all new units.

At end of 2019 the final report was submitted for all other older units.
In 2020 we will Possibility install The Next Generation units and planning to remove the old ones.

NJDOT already uses crowd sourcing probe data (Inrix and HERE) for real time performance management and traffic monitoring tools. NJDOT will be engaging Waze© in 2020 to bring their crowd sourced data into operations and planning as well.



ICONE/WAZE

- NJDOT PURCHASED 32 ICONE CONNECTED VEHICLE DEVICES
- TOTAL COST - $31,680 THAT INCLUDES DEVICES AND WIRELESS CELLULAR COMMUNICATION PACKAGE FOR 3 YEARS
- INSTALLATION COMMENCED IN SEPTEMBER OF 2018
- ON 9/8/2018, 11 SSP NORTH VEHICLES EQUIPPED WITH ICONE DEVICES
- THIS PROJECT WAS CLOSED ON 9/2018
- ON 11/2019, 5 NEXT GENERATION UNITS WERE INSTALLED
- AFTER THE 3 YEAR WARANTY PERIOD IS UP WE WILL DETERMINE WHETHER OR NOT TO CONTINUE

EDC5 Initiatives Assigned:

Weather-Responsive Management Strategies - Development Stage

Goals:

- Maximize the use of mobile road weather data to support NJDOT in implementing traffic and maintenance operations strategies during inclement weather.
- Improve safety, mobility, and minimize environmental impacts of weather on the transportation system.

Development Stage:

- **The state* is establishing a project team**
- **Getting acquainted with applications**
- **Has grass roots support**
- **Develops an implementation plan with responsibilities of each team member, the communication methods, and t criteria,Training is provided**
- **Implementation plan is used to secure support and funding from middle and upper management**

WEATHER-RESPONSIVE MANAGEMENT STRATEGIES

Accomplishments and Benefits.

- **Project authorized.**
- **Contract executed with NJIT.**
- **Coordination among lead staff and NJIT; slight adjustments made to plan as details became clearer (Cyber Security, camera software platform, etc.)**
- **Vehicles identified; vehicles inspected for possible placement of equipment**

New Jersey DOT UAS Program

2019 STIC Funding will Provide;

- Training for 3D modelling and thermal Imaging
- Two Matrice 210 RTK UAS with thermal & 30x optical zoom capability
- UAS Lighting Kits for Fleet Night Operations
- A Large screen, generators, VO radios
- Phantom 4 Pro RTK for precision mapping
- UAS Software and maintenance tools

UAS Program 2019 Report

- Developed a Night Training Course
- SimpliGov Electronic Support Requests
- Take Your Child to Work Day
- Created NJDOT UAS Program Video
- 2019 Transportation Road-EO
- Union Trail Pedestrian Project
- Traffic Congestion Management
- I-495 Bridge Project Management