



U.S. Department of Transportation

ITS 4 US

The logo for ITS 4 US. The letters 'ITS' and 'US' are in a dark grey, bold, sans-serif font. The number '4' is stylized in blue with a white outline and is integrated with a graphic of a road or path. The path is a dashed orange line that starts from the bottom left, goes up and right, then down and right, and finally up and right to the top of the '4'. There are two red location pin icons: one at the top of the path and one at the bottom of the path.

IT'S TRANSPORTATION FOR ALL OF US

Task 2-K:
Performance Measurement and IE Support



Elina Zlotchenko

ITS4US Program Manager

ITS Joint Program Office

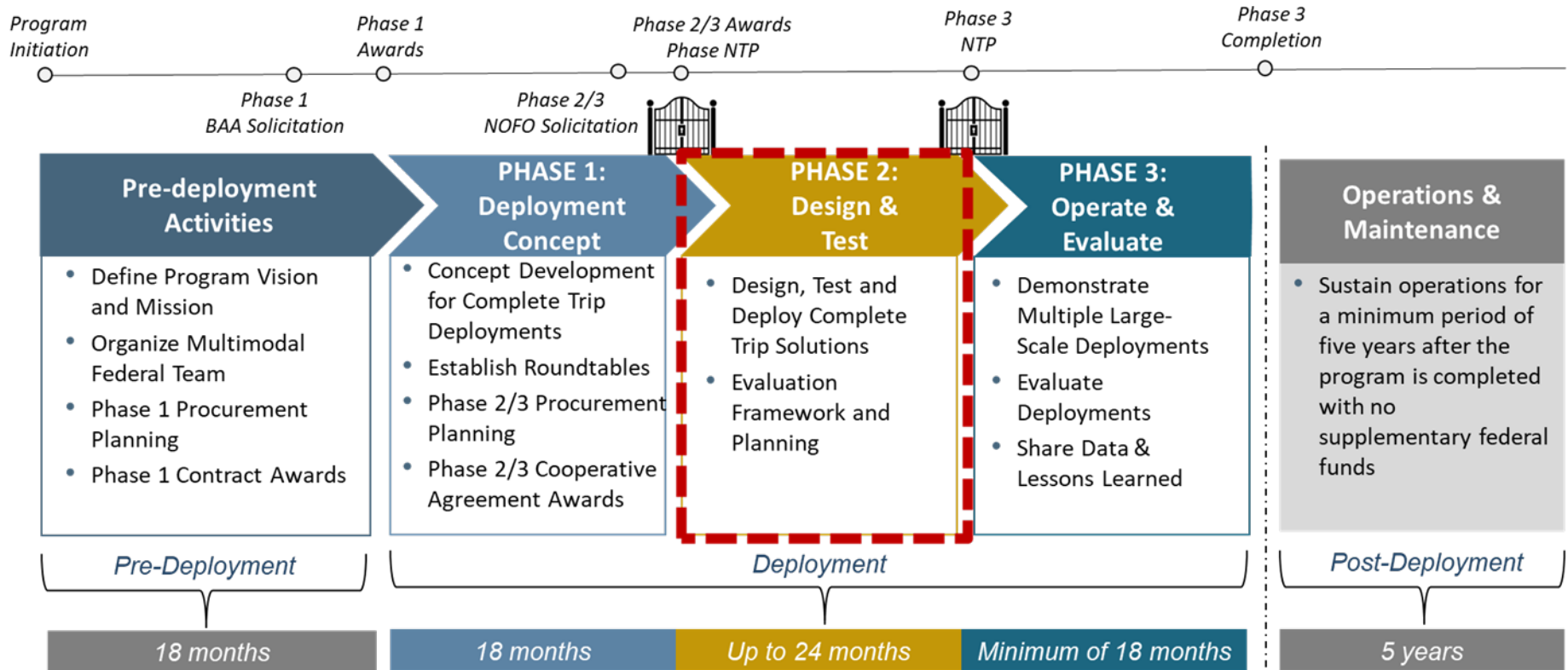
ITS4US Program Overview

- A USDOT Multimodal Deployment effort, led by ITS JPO and supported by OST, FHWA and FTA
- Supports multiple large-scale replicable deployments to address the challenges of planning and executing all segments of a complete trip

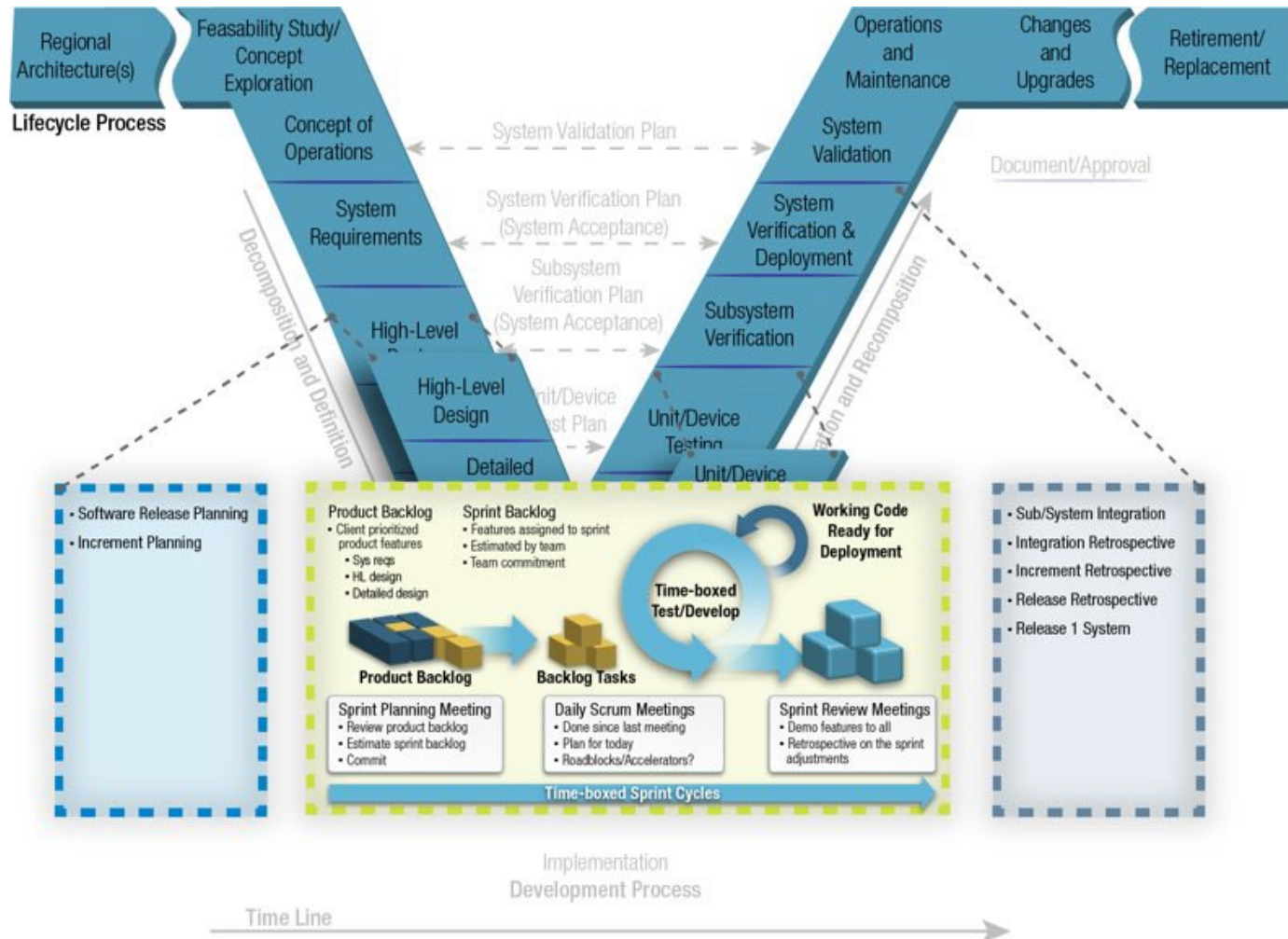


Vision: Innovative and integrated complete trip deployments to support seamless travel for all users across all modes, regardless of location, income, or disability

Deployment Phases



Systems Engineering “Vee” Diagram



(Source: FHWA 2007 and modified by Noblis 2017)

Task 2-K: Performance Measurement and IE Support



Christina Gikakis

Sr. Engineer/Program Manager
Office of Mobility Innovation
Federal Transit Administration

ITS4US Performance Measurement SME

2-K Performance Measurement and IE Support

- Task 2-K extends from Month 5 to Month 24. A key activity is the collection, processing and sharing of **baseline data** necessary for the performance measurement and evaluation, using the Phase 1 PMESP and Phase 2 DMP to guide processes.
- Key documents are the Performance Measurement and Evaluation Support Schedule (PMESS) and monthly updates, updated PMESP and HUAS, as well as any materials identified in the PMESP and PMESS.

Deliverables

1. PMESS
2. PMESS Monthly Progress Updates and Risk Assessments
3. Updated PMESP
4. Revised HUAS (updated as necessary with IRB approval)
5. Performance Measurement Materials identified in the PMESP and PMESS

PMESS Requirement

- Format: MS Project and MS Excel Spreadsheet

- Content:
 - Work breakdown structure of activities
 - Milestones, performance summary reports, data collection (baseline and/or post deployment), surveys, dashboard development, etc.

- Review and Update:
 - An initial draft PMESS to the AOR for review and approval
 - PMESS monthly update
 - Document progress against plan
 - Track risks/issues

PMESS Template & Monthly Updates (Part 1)

| Task Name | Duration | Start | Finish | % Complet | Contractual Deliverables | SDS | TIS | IOIS | OIS | PMESS | Notes |
|---|------------------|--------------------|--------------------|-----------|--------------------------|-----|-----|------|-----|-------|--|
| 2-K Performance Measurement and IE Support | 523 days? | Wed 6/15/22 | Fri 6/14/24 | 0% | | | | | | | |
| Initial Performance Measurement and Evaluation Support Schedule (PMESS) | | | Tue 12/6/22 | 0% | ✓ | | | | | ✓ | |
| Monthly Updates to PMESS | | | Fri 6/14/24 | 0% | ✓ | | | | | ✓ | Monthly updates at the time of progress |
| Updated Performance Measurement and Evaluation Support Plan (PMESP) | | | Fri 6/14/24 | 0% | ✓ | | | | | | Minimum 1 update |
| Revised Human Use Approval Summary | | | Fri 6/14/24 | 0% | ✓ | | | | | | As needed, per IRB approval |
| Performance Measurement Materials | | | Fri 6/14/24 | 0% | ✓ | | | | | ✓ | Materials and timing determined by the PMESP and |

PMESS Template & Monthly Updates (Part 2)

The screenshot displays the Microsoft Project interface. The ribbon is set to 'Gantt Chart Tools'. The 'Filter' dropdown menu is open, showing a list of filter options. The 'PMESS' option is highlighted with a red underline. The background shows a Gantt chart with task bars and a data table.

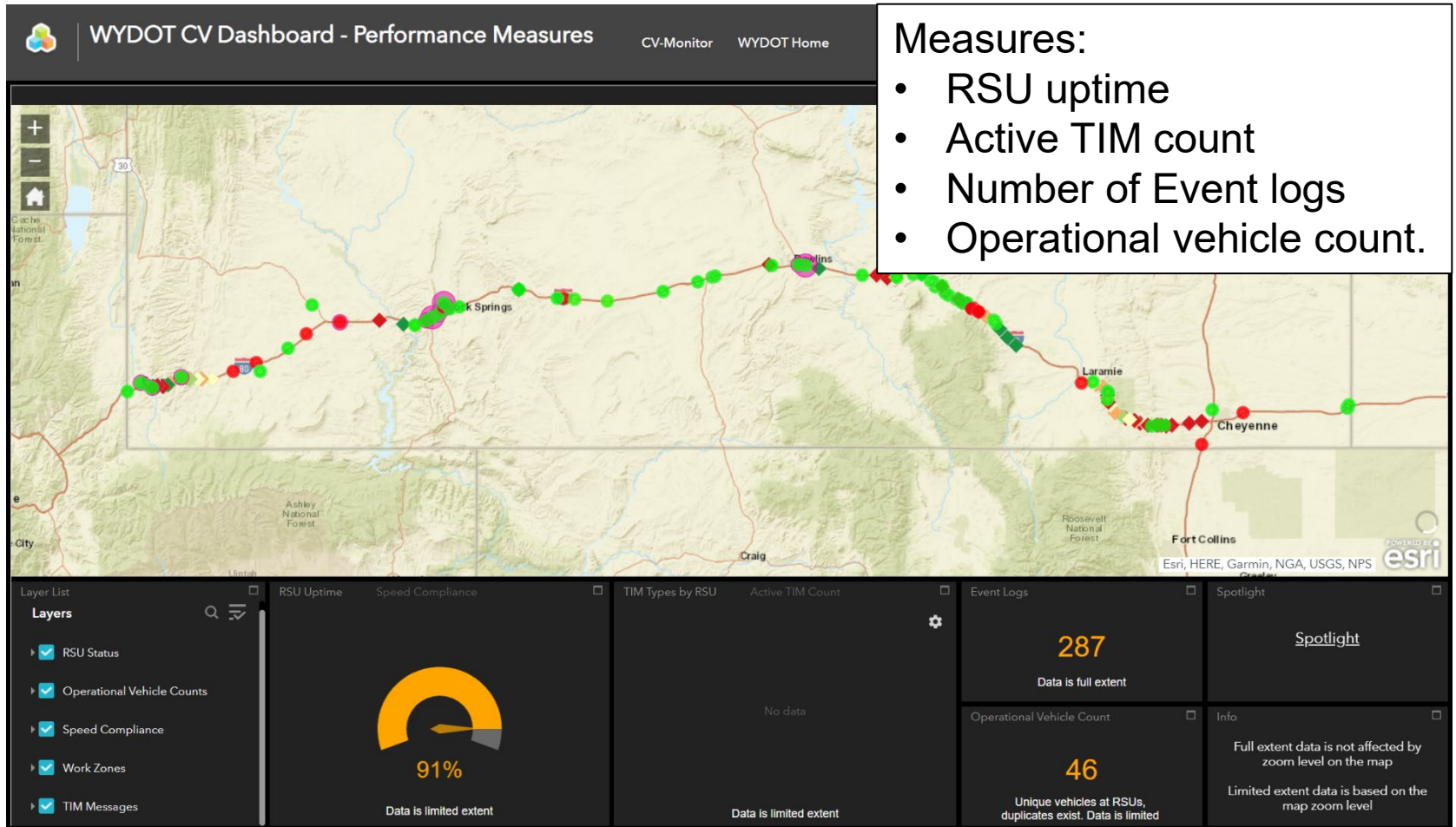
| Duration | Start | Finish | % Complet | Contractual Deliverables | SDS | TIS | IO |
|----------|-------------|-------------|-----------|--------------------------|-----|-----|----|
| 23 days? | Wed 6/15/22 | Fri 6/14/24 | 0% | | | | |
| | | Tue 12/6/22 | 0% | ✓ | | | |

Site Performance Measurement Dashboard

- NOFO requirement:
 - At least one dashboard that shows performance to date on key performance measures and targets.
 - All dashboards should be updated regularly, as per the PMESS.

- Example dashboards from CV Pilot sites:
 - WYDOT CV Pilot:
 - <https://wydot.maps.arcgis.com/apps/webappviewer/index.html?id=1e41c17c89b643f5b16291a3bce5885b>
 - NYCDOT CV Pilot:
 - <https://cvp.nyc/project-status>
 - THEA CV Pilot:
 - <https://cavdashboard.com>

WYDOT CV Pilot Dashboard

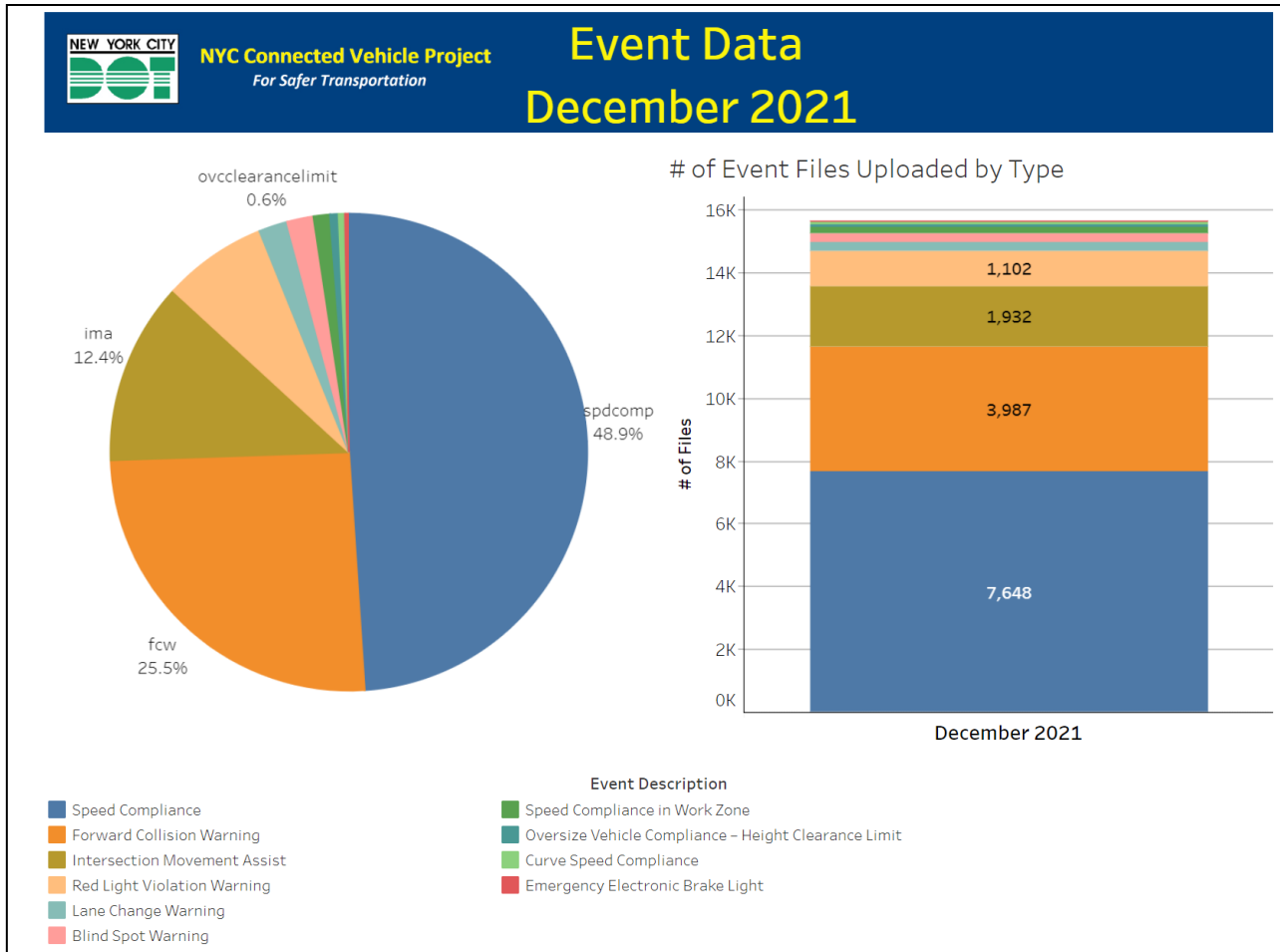


Measures:

- RSU uptime
- Active TIM count
- Number of Event logs
- Operational vehicle count.

Source: USDOT / WYCDOT CV Pilot

NYCDOT CV Pilot Dashboard

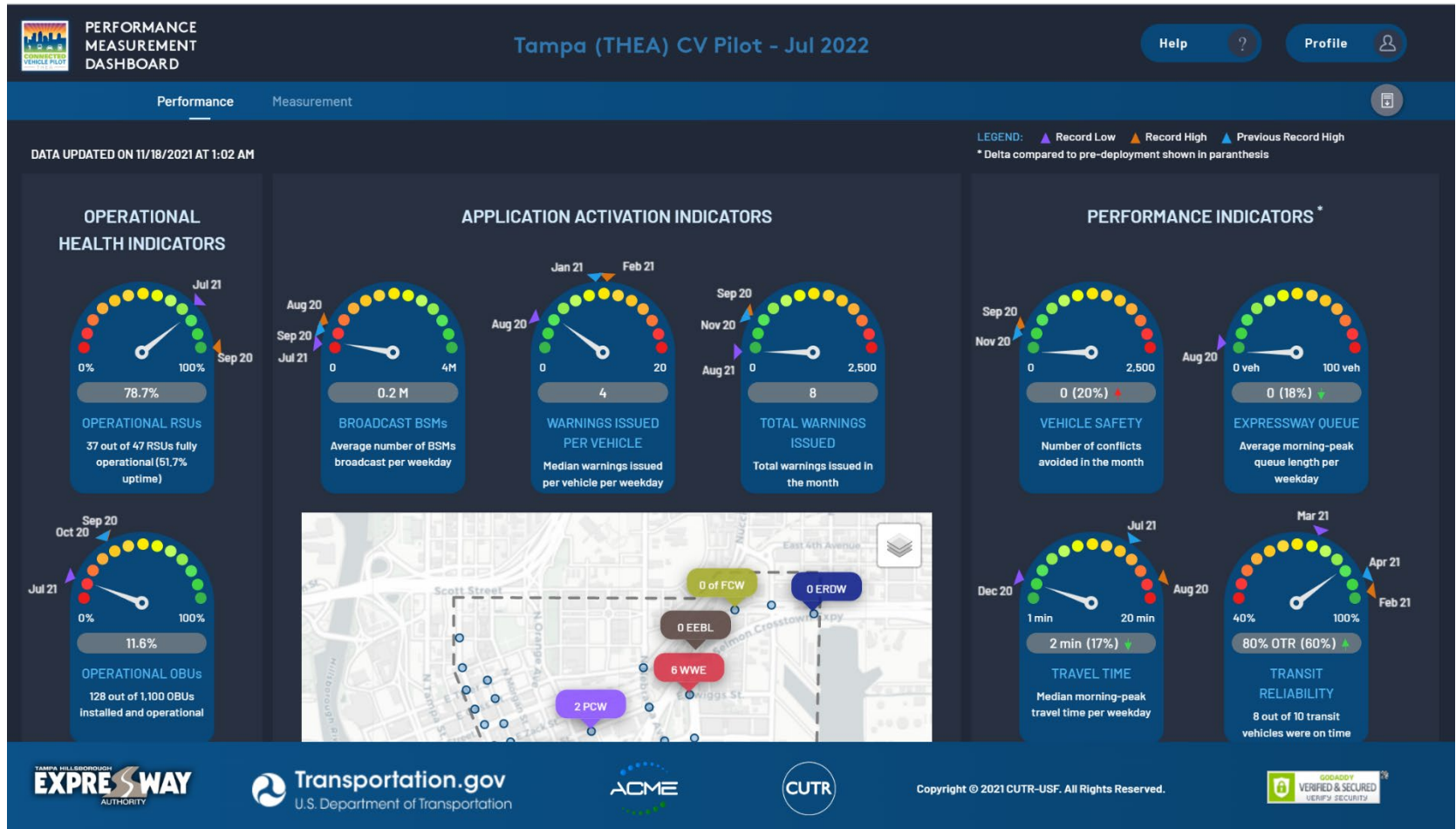


Measures:

- Number of event files by CV apps.
- Percentage of event files by CV apps.

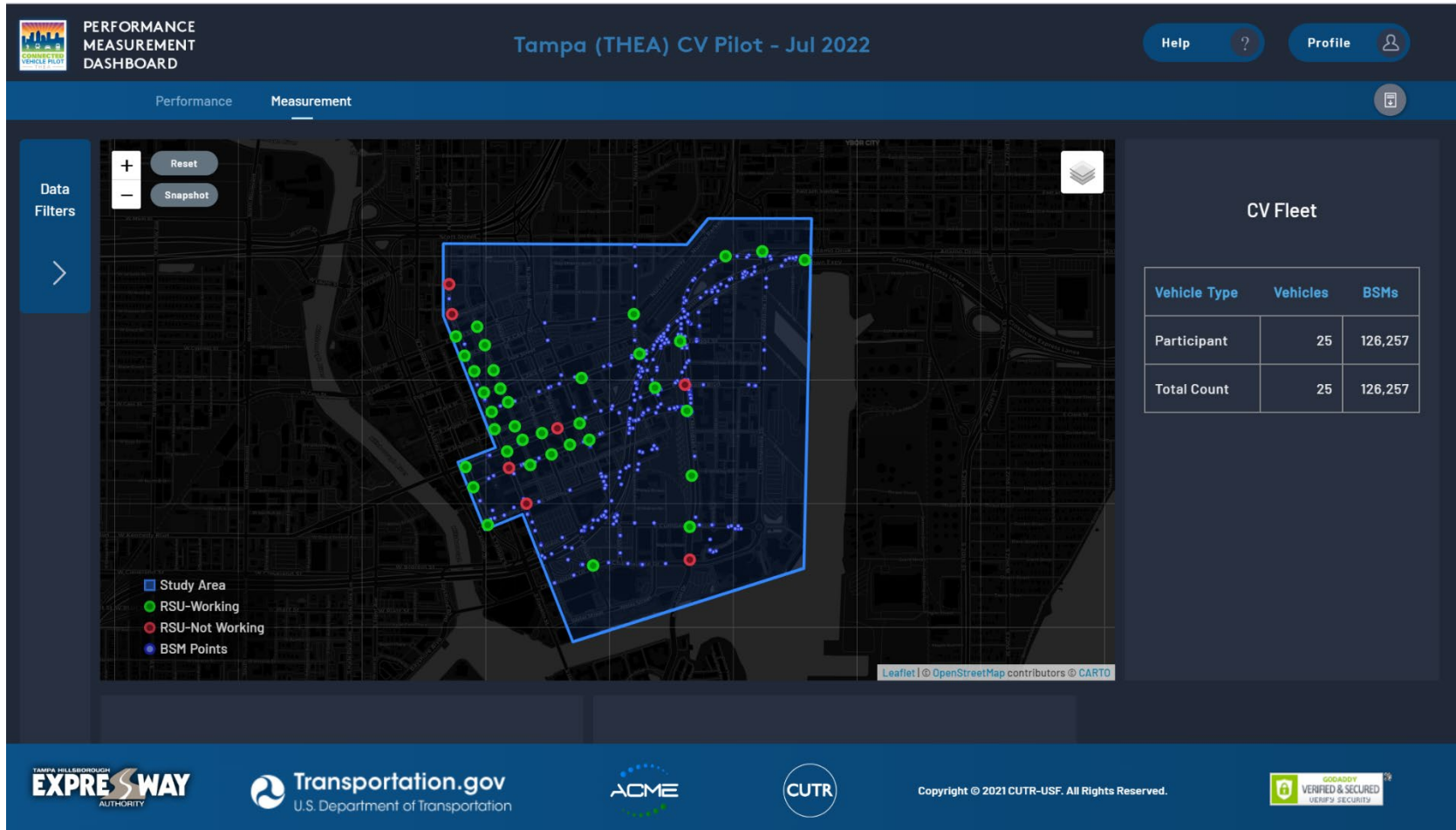
Source: USDOT / NYCDOT CV Pilot

THEA CV Pilot Dashboard - High Level Performance



Source: USDOT / THEA CV Pilot

THEA CV Pilot Dashboard – Detailed Data



Source: USDOT / THEA CV Pilot



Melissa Wong

Program Manager

Innovative Research Division

Volpe, USDOT

ITS4US Independent Evaluation Lead

Independent Evaluation Deliverables

- Independent Evaluation Deliverables During Phases 2 and 3:
 - **Review Lessons Learned:** review and provide input on documented lessons learned provided by sites to improve utility of material.
 - **Performance Results Assessment:** document findings from sites' Phase 2 deliverables and Phase 3 deployment site-reported performance measurement results.
 - **Conduct Interviews and Questionnaires:** conduct the interviews/survey and document the results and stakeholder feedback.
 - **Conduct Financial and Institutional Assessment:** conduct the financial and institutional assessment informed by site documents and/or interviews.
 - **Conduct National Replicability Assessment:** collect and synthesize site statistics, conduct synthesis and estimation for national replicability.

Independent Evaluation Coordination

- **Expected Coordination:**

- IE will review Lessons Learned:
 - During Phase 2 and 3, Volpe will review the site lessons learned logbooks and providing input that may assist each site in documenting thorough materials.
- Sites will provide access to performance and other data supporting a comprehensive assessment of deployment impacts.
 - Sites will share initial performance dashboard with IE and provide access as needed.
 - Sites will provide access to baseline (BEFORE) data to IE.
 - IE will review updated PMESPs when available.
- Sites will participate in the interview/survey conducted by IE.
 - If needed, sites will provide access to deployment managers, team members, partners and stakeholders.
 - Currently the IE plans on both Pre and Post Deployment interviews.
- Both sites and IE will participate in the PMESP roundtable as needed.
- Representative from IE team will attend site specific meetings as appropriate.

ITS4US Contact Information

Elina Zlotchenko
Program Manager, ITS JPO
Elina.Zlotchenko@dot.gov



Visit the ITS4US Deployment Program Website:

<https://its.dot.gov/its4us/>



ITS4US Deployment Program Video

<https://youtu.be/pztl1lRyXAc>