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AAPA Environment Committee

November 14, 2017

Norfolk, VA



MARAD
U.S. MARITIME ADMINISTRATION





StrongPorts

U.S. Department of Transportation

46 USC 50302

Mission

To lead the development and expansion and modernization of port infrastructure, including water, road, and rail, for the benefit of every American.

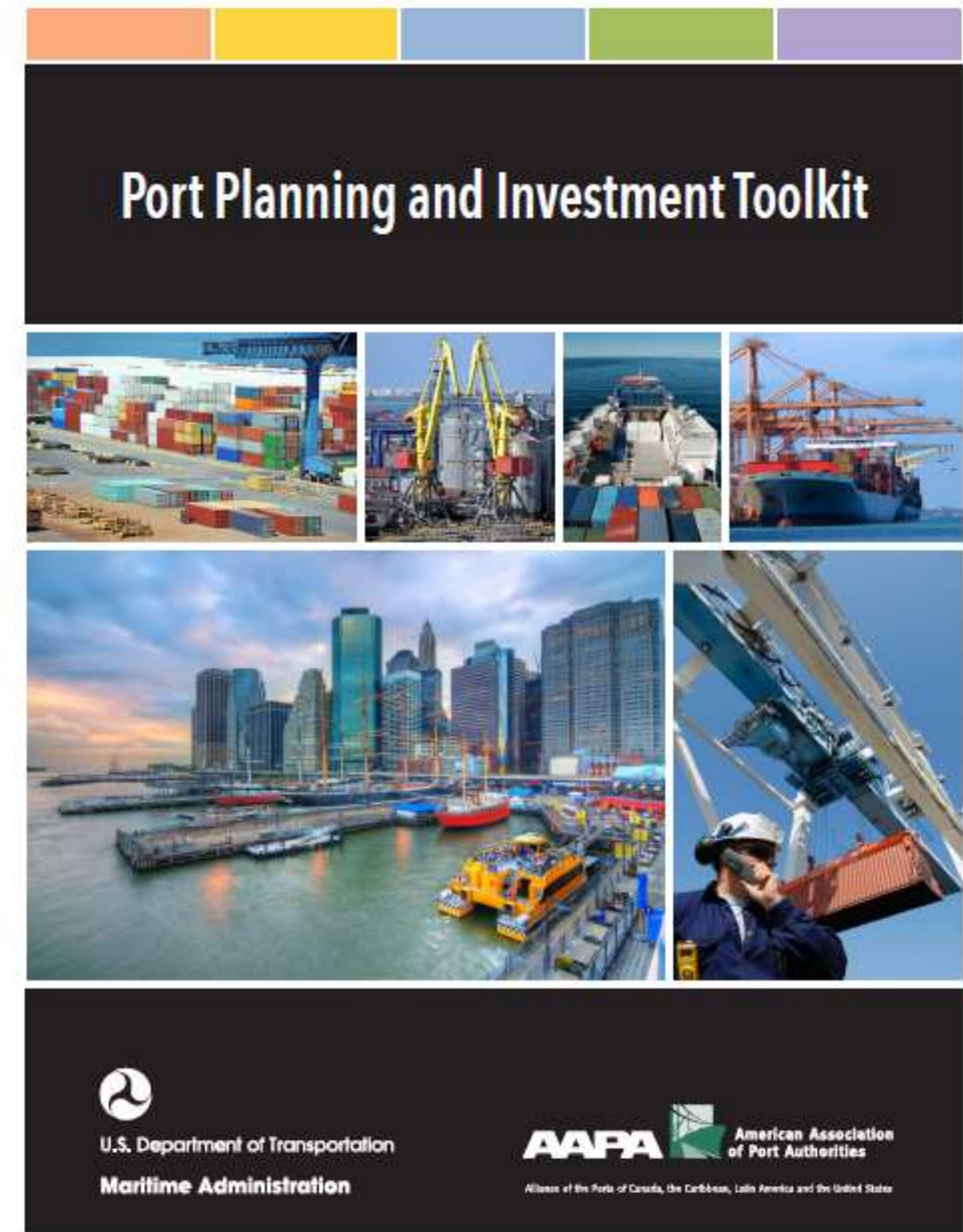
Vision

A modern, efficient system of diverse modern inland and coastal ports that are integrated into the surface transportation system.

Port Planning & Investment Toolkit

A Maritime Industry Joint Venture

- MARAD and AAPA released the PPIT in early 2017
- Feedback from Environment Committee, Ways to enhance the Toolkit?
- New Module(s)



Port Planning and Investment Toolkit



U.S. Department of Transportation

Maritime Administration



American Association
of Port Authorities

Alliance of the Ports of Canada, the Caribbean, Latin America and the United States



Port Planning & Investment Toolkit

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Planning

Feasibility

Financing

StrongPorts Initiatives - FY2018

ITS-JPO MARAD Initiative

- Seeks to develop foundational research to support Intelligent Transportation Systems (ITS) projects that will improve the performance of ports and terminals and will further integrate ports into the larger transportation system

Phased Approach

- Phase 1: Pre-Deployment Preparation & Analysis (2016-2017)
- Phase 2: Development & Demonstration Planning (2017-2018)
- Phase 3: Demonstration & Assessment (2018-2020)

Phase I - Recent Activities

Business Case Assessments (4)

- Queue Detection and Wait Time Systems
- Truck Appointment System
- Advanced Transportation Management Information and Security System (ATMIS) and Freight Advanced Traveler Information Systems (FRATIS)
- Port Community System (PCS)

Business Case Analysis Continued

- The project team reviewed each ITS solution as described in the Technology Scan and Gap Analysis.
- The team assessed the potential ITS solutions using Benefit-Cost Analysis methodologies consistent with best practices and Federal grant program guidelines.
- The team then developed specific Business Cases for the candidate ITS solutions:
 - Port Community System (PCS)
 - Queue Detection and Wait Time Systems (QD)
 - Truck Appointment System (TAS)
 - Advanced Transportation Management Information and Security System (ATMIS) and Freight Advanced Traveler Information Systems (FRATIS)

Truck Staging

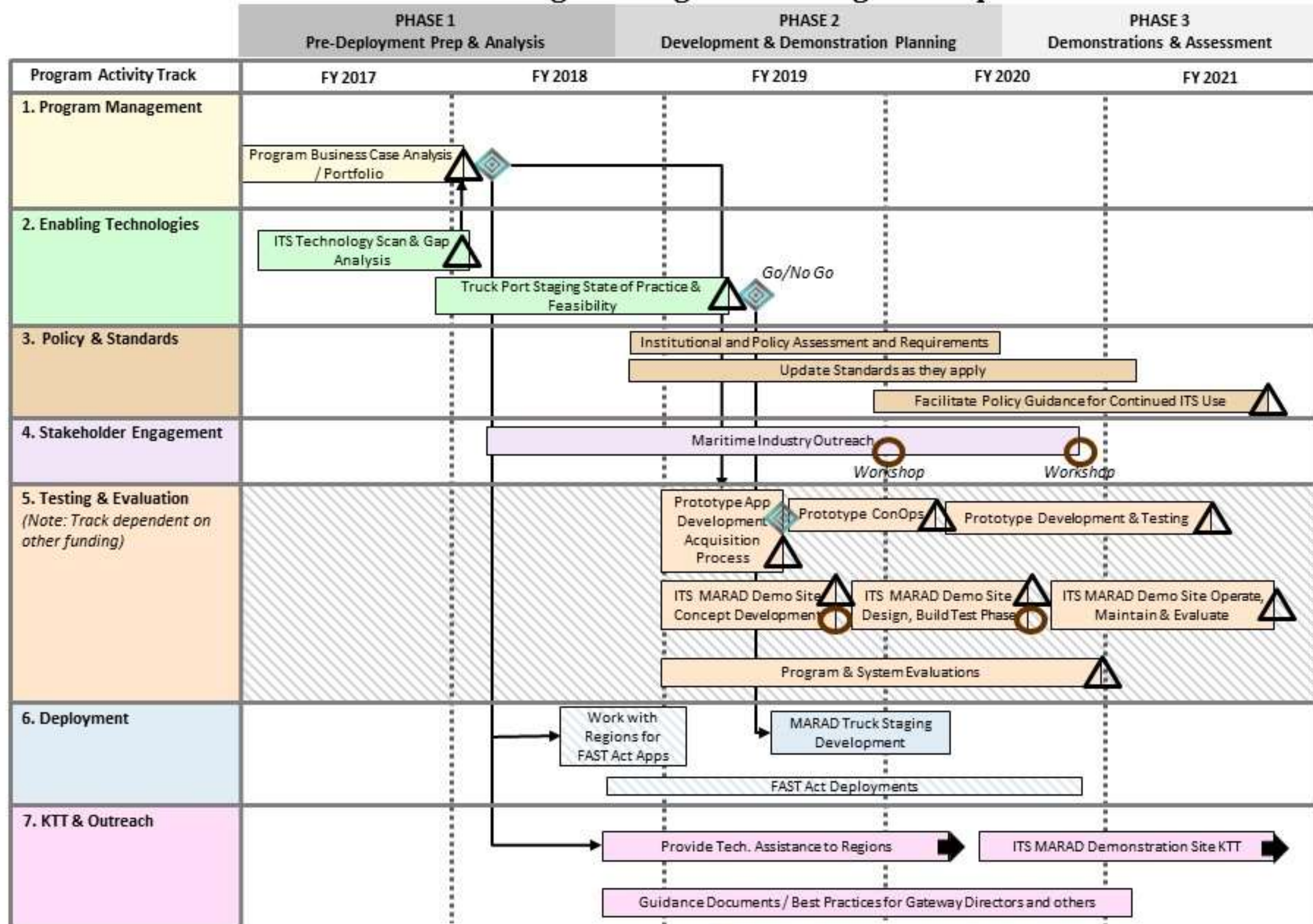
- The Program recently began the Truck Port Staging State of Practice and Feasibility Analysis to perform an economic feasibility study of several port & truck queuing solutions.
 - Potential ITS solutions will be identified during this project.
 - Kickoff meeting was held in mid-October with contractors Battelle & Gannett Fleming.
 - Work will be completed by February 2019.
- Project includes Modal Cooperation within USDOT:
 - Maritime Administration (MARAD)
 - Federal Highway Administration (FHWA)
 - Federal Motor Carrier Safety Administration (FMCSA)

Truck Staging Project Approach

- 1. Clearly define the strategic needs and opportunities.**
- 2. Identify innovative efforts that address technical innovations for port truck staging, focusing on issues that can be addressed in the near term.**
- 3. Establish and strengthen links between truck / port operations, technologies, land area and public policy where truck movement has major implications.**
- 4. Leverage existing practices, innovation, and technologies to develop truck staging/parking solutions.**
- 5. Level 4 low-speed truck platooning/queueing feasibility study**

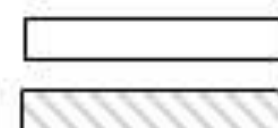
Program Roadmap *

ITS MARAD Program: High-Level Program Map



10/13/2017

LEGEND:



Solid – Program Funded
Gray – Outside Funded



Stakeholder Meeting / Workshop
Decision Point
Major Deliverable

Draft 0.1

Current Activities

Advanced Transportation and Congestion Management Technologies Deployment Program

- **Global Opportunities at the Port of Oakland Freight Intelligent Transportation System** \$9,720,000 Alameda County Transportation Commission, CA.
- **Truck Reservation System and Automated Work Flow Data Model** \$1,550,000 Virginia Port Authority.

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- Exploring New Module(s) Topics:
 - Environmental sustainability: energy savings, use of solar panels, etc.
 - On-dock rail planning and operations
 - Cybersecurity
 - Navigating through Formula Funds
 - Others?

Questions/Comments

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