2017
FRA Rail Program Delivery
Meeting

Acela Express 2021

Mark Yachmetz
Melissa Biancardi

U.S. Department of Transportation
Federal Railroad Administration

Agenda

01

ACELA EXPRESS 2021 OVERVIEW

02

PROGRAM HISTORY

03

WHERE ARE WE?

04

ROLE OF AMTRAK EPMO

05

ORGANIZING FOR SUCCESSFUL OUTCOMES

06

CLOSING COMMENTS

Acela Express 2021 Overview

What is it?

Why is it important?

The program: trainsets and beyond

What is it?

A relaunch of Acela Express Service

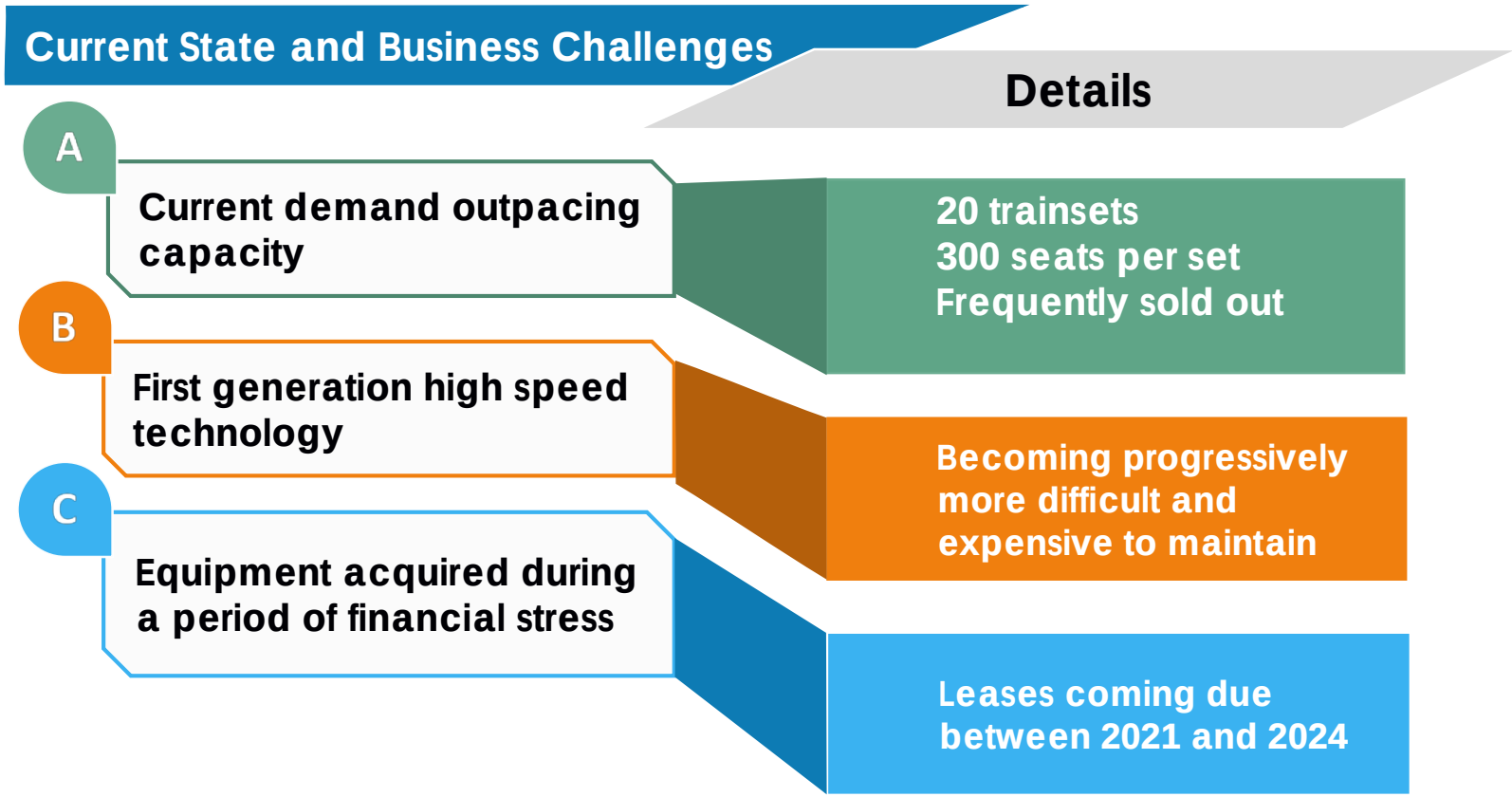
- Premium service from Washington DC through to NYC to Boston
- Only high speed service in Western Hemisphere
- A financial success since its introduction in 2000

Acela Express 2021 Program

(AE 2021)

- Designed to position Amtrak for continued success for the next generation

Why is it important?



The Program: Trainsets

28 high-speed trainsets

Flexible seating configuration

30% Capacity Increase

Most energy efficient

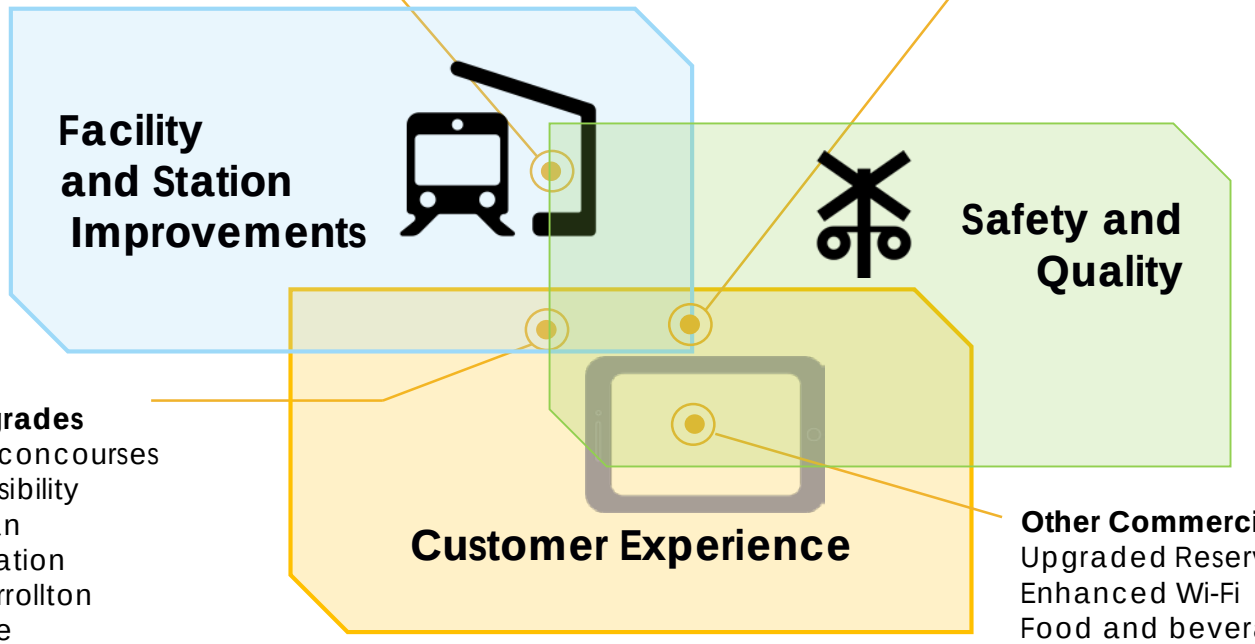
U.S. Manufacturing

Technical support and spares supply agreement

The Program: Beyond Trainsets

Expanded service and inspection facilities
Washington, D.C. (Ivy City)
New York City (Sunnyside)
Boston (Southampton)

Safety and ride quality enhancements
High speed zones
Northeast Corridor (NEC)
Congested areas



Station upgrades
Passenger concourses and accessibility
- Moynihan
- Union Station
- New Carrollton
- Baltimore

Other Commercial
Upgraded Reservation System
Enhanced Wi-Fi
Food and beverage
Personal outlets
Etc.

Moynihan Station

Moynihan Station

Washington Union Station Concourse Modernization Project Rendering: Passenger Concourse

Washington Union Station

Washington Union Station Concourse Modernization Project Rendering: Club Acela

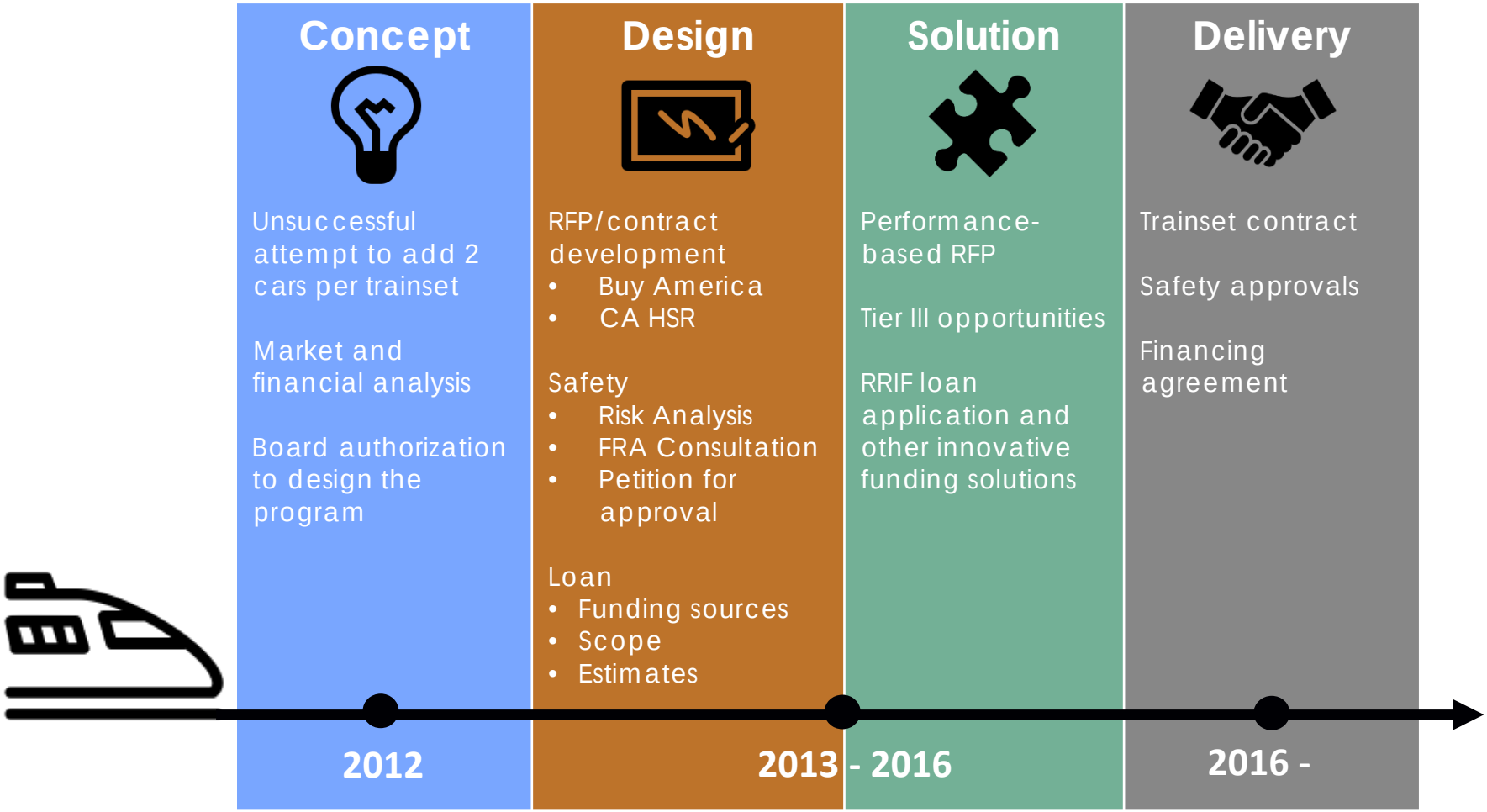
Washington Union Station

Program History

AE 2021 program history

Program superlatives

AE 2021 Program History



Program Superlatives

186+ mph — **The Fastest**

The First

1

- **Application of Tier III safety standards**
- **Major application of the PRIIA-Buy America standards**
- **Use of performance-based specifications for a major project**

The Largest

Largest and most **comprehensive program** to-date

Largest loan ever made by USDOT and undertaken by Amtrak

Where Are We?

Where are we today?

Bringing past lessons forward

Where Are We Today?

100% Design level complete for improvements for stations serving NYC and DC

60% Service and inspection facility design

Intermediate Trainset design reviews are completed

Accessibility design of the trainset in progress

Trainset Manufacturing Initiated

Bringing Past Lessons Forward

Past lesson

- **Stakeholder communication:** No substitute for good and frequent communication with the lender and safety regulator (USDOT/FRA). The same applies to suppliers/contractors
- **RFP/contract strategy:** Performance-based specifications shift risk
- **Project management investment:** Complex projects require dedicated project management resources
- **Monitoring and controlling**: Project risks and schedules need to be identified and managed throughout the project until completion

Bringing it forward

- ✓ **Better alignment:** The trainset contract and TSSSA are managed by a dedicated and co-located project management office (PMO)
- ✓ **Stronger project management standards and practices:** Enterprise Project Management Office (EPMO)established to bring a standard approach to project management to all Amtrak project delivery
- ✓ **Oversight and project monitoring:** EPMO established the AE 2021 PMO to lead the overall program implementation through the successful relaunch of Acela Express

Role of Amtrak EPMO

What is it?

How does it work?

Enterprise governance

What is it?

Enterprise Program Management Office
Vice President, EPMO

Enterprise Portfolio Governance

Enterprise Portfolio Delivery

One Amtrak way for project management

Organizational PM Maturity
Talent/Training/Coaching
Standards/Templates/ Methodologies/Tools

Enables repeatable and scalable process and enterprise portfolio management & reporting

Voice of project management

Policy
Portfolio Selection/Prioritization Process
PPM Application & Data Capture
Analysis & Reporting

Executive decision support and portfolio governance, annual enterprise strategic planning, & ongoing progress tracking

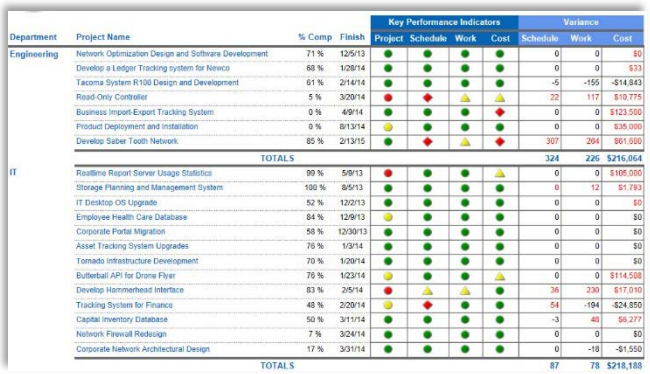
Enterprise Program/Project Delivery Capability

Operate, Optimize, Grow

Lead or oversee as appropriate any enterprise, cross functional, initiatives using captured & credentialed program and project managers

AE2021 Program

How Does It Work?



Department	Project Name	% Comp	Finish	Key Performance Indicators: Project	Schedule	Work	Cost	Variance: Schedule	Work	Cost
Engineering	Network Optimization Design and Software Development	71 %	12/5/13					0	0	$0
	Develop a Ledger Tracking system for Newco	68 %	1/28/14					0	0	$33
	Tacoma System R100 Design and Development	61 %	2/14/14					-5	-155	-$14,843
	Read-Only Controller	5 %	3/20/14					22	117	$10,775
	Business Import-Export Tracking System	0 %	4/9/14					0	0	$123,500
	Product Deployment and Installation	0 %	8/13/14					0	0	$35,000
	Develop Saber Tooth Network	85 %	2/13/15					307	294	$61,600
	TOTALS							324	226	$216,064
IT	Realtime Report Server Usage Statistics	99 %	5/9/13					0	0	$105,000
	Storage Planning and Management System	100 %	8/5/13					0	12	$1,793
	IT Desktop OS Upgrade	52 %	12/2/13					0	0	$0
	Employee Health Care Database	84 %	12/9/13					0	0	$0
	Corporate Portal Migration	58 %	12/30/13					0	0	$0
	Asset Tracking System Upgrades	76 %	1/3/14					0	0	$0
	Tornado infrastructure Development	70 %	1/29/14					0	0	$0
	Butterball API for Drone Flyer	76 %	1/23/14					0	0	$114,508
	Develop Hammerhead Interface	83 %	2/5/14					36	230	$17,010
	Tracking System for Finance	48 %	2/20/14					54	-194	-$24,850
	Capital Inventory Database	50 %	3/11/14					-3	48	$6,277
	Network Firewall Redesign	7 %	3/24/14					0	0	$0
	Corporate Network Architectural Design	17 %	3/31/14					0	-18	-$1,550
	TOTALS							87	78	$218,188

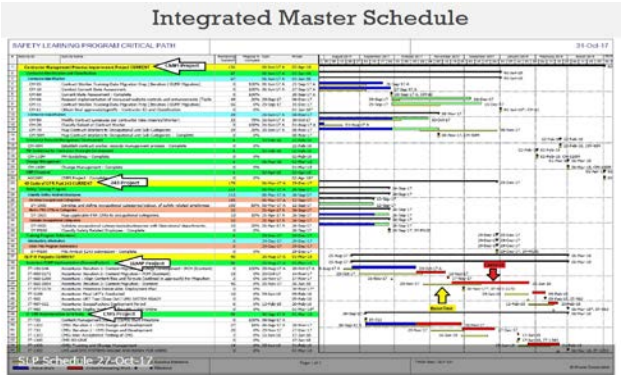
Enterprise Portfolio

Data-driven decision-making

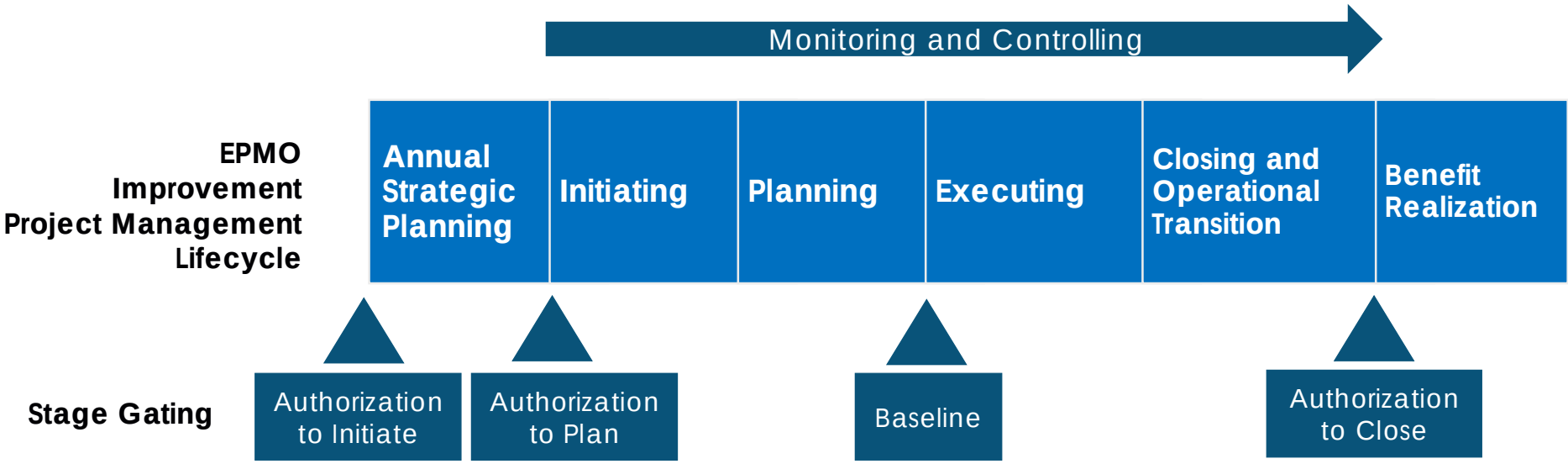
One Amtrak Way

Training

Organizational Alignment



Enterprise Governance



Project Types	Enterprise Definitions
Improvement	An **Improvement** Project / Program is a temporary endeavor with defined scope, that enhances the asset functionality or adds new asset or capacity.
Maintenance	A **Maintenance** Project / Program is a reoccurring effort that takes place in specific time intervals, which is required for continuous ongoing operation of an asset or capability

Organizing for Successful Outcomes

Program success criteria

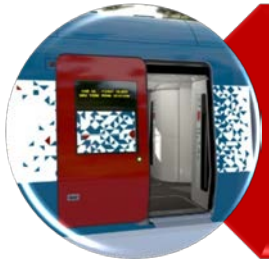
Program complexity rating

Readying the organization for execution

Program Success Criteria

Increase net commercial benefit of Acela by increasing ridership capacity while also addressing growing obsolescence of current equipment

Create same or better customer experience (safety, reliability, onboard experience, etc.)



Eliminate opportunity for service disruption during commissioning period

Complexity Rating

Gray (Low)	Blue (Moderate)	Purple (High)	Orange (Mega)
Score < 8	Score 8 to 12	Score 13 to 16	Score 17 to 20

Total Project Cost:

<$5M
$5 - <$50M
$50 - <$100M
≥$100M

Scope & Schedule:

Deadlines and Impacts
Technical Difficulty
Scope Flexibility
Location and ROW Proximity

Organizational & Resource:

Involved departments
System/Data interfaces
Similarity to other projects
Procurement needs

Overall Project Risk:

Low
Moderate
High
Very High

Stakeholder Engagement:

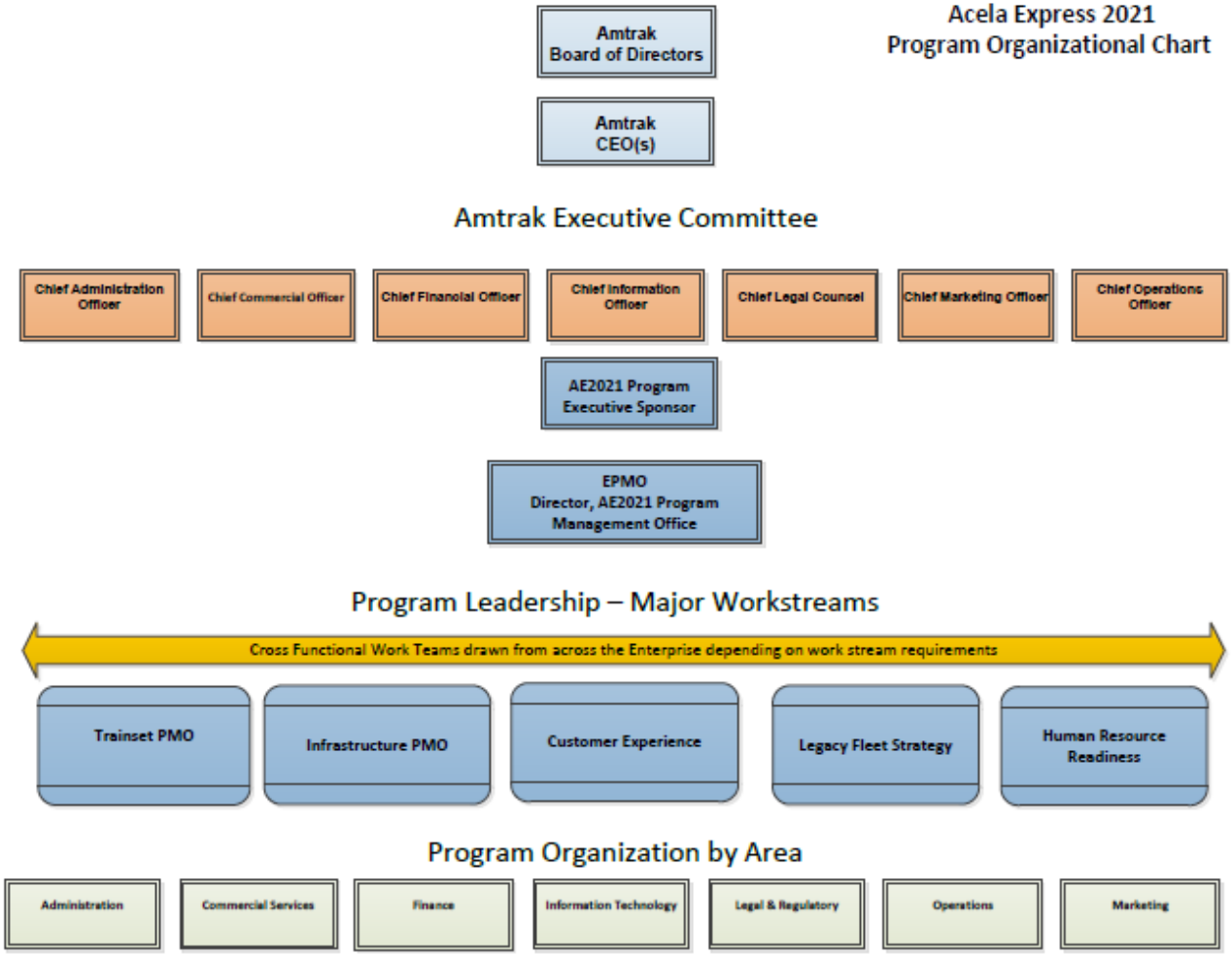
Executive visibility
External Stakeholder Exposure
Impacted Amtrak Departments
Impacted Customers
Stakeholder Cohesion

Complexity Score weights and adds each category rating to create score of 5 to 20

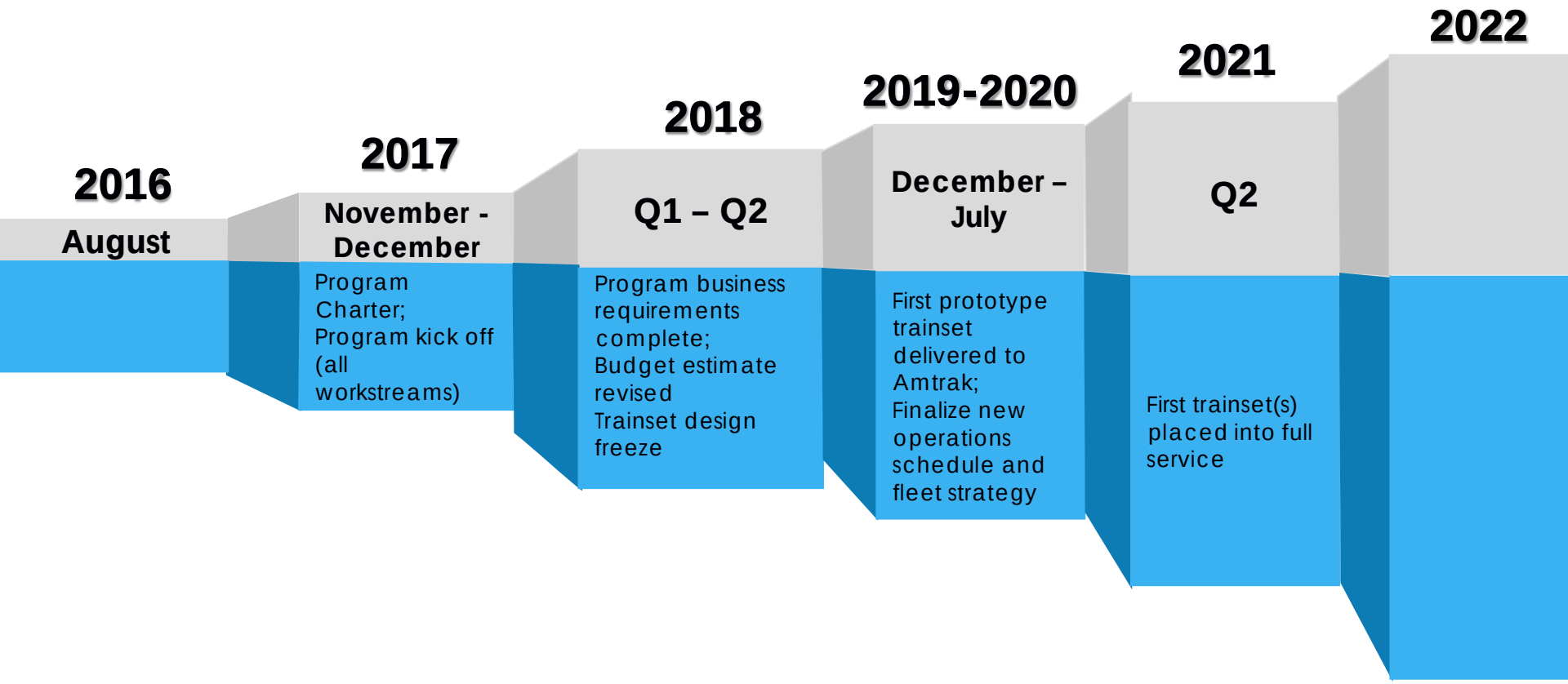
Readying the Organization for Execution

Unpack	Success criteria into deliverables and key performance indicators (KPIs)
Formalize	Program roles and governance in alignment with “One Amtrak Way”
Unite	Work-in-progress and new workstreams and bring together for enterprise mobilization
Assemble	The program implementation delivery team

AE 2021 Program Team



Program Timeline



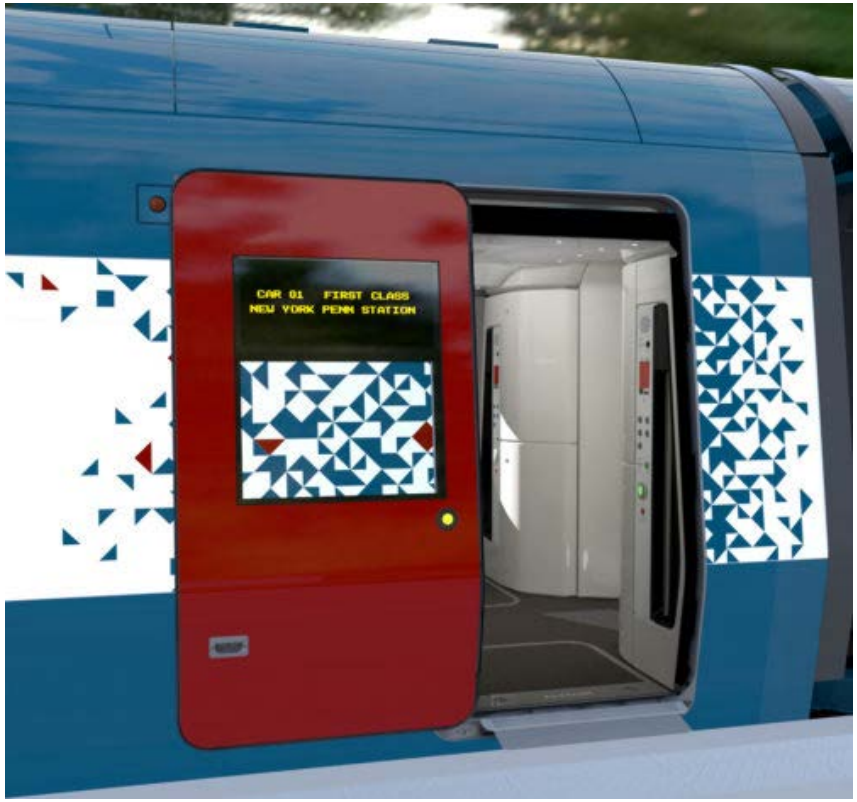
References to business quarters (Q) are tied to the Amtrak Fiscal Year (10/1 – 9/30)

Closing Comments

Questions & Answers

Securing our future

Questions and Answers



DO YOU HAVE A QUESTION?

Securing Our Future(Video)

2017 FRA Rail Program Delivery Meeting

Thank you!

Mark Yachmetz
Vice President, NEC Business Development
Mark.Yachmetz@Amtrak.com
202-906-2730