

ACEC/MA Annual State Markets 2017



*John Audi, PhD.
Assistant Director*

Program Structure

Logan Airport	Maritime	Worcester Airport	Hanscom Field	Agency Wide
Logan Airside Logan Landside Logan Intermodal Logan Mitigation	Black Falcon Conley Terminal Dredging Fish Pier Hoosac Pier Maritime Other Moran Terminal Real Estate Development WTC/S. Boston East Boston	Worcester Airside Worcester Landside	Hanscom Airside Hanscom Landside	Administration Capital Programs Data Storage FARS Information Systems Network Operations System Operations Systems Security Telecommunications Resiliency



Program Evaluation

Project Evaluation Criteria

- Safety and Security
- Asset Maintenance
- Operational Efficiencies
- System Enhancement/
Customer Service
- HOV/Ground Access
Improvements
- Commitment to Surrounding
Communities

Financial Evaluation Criteria

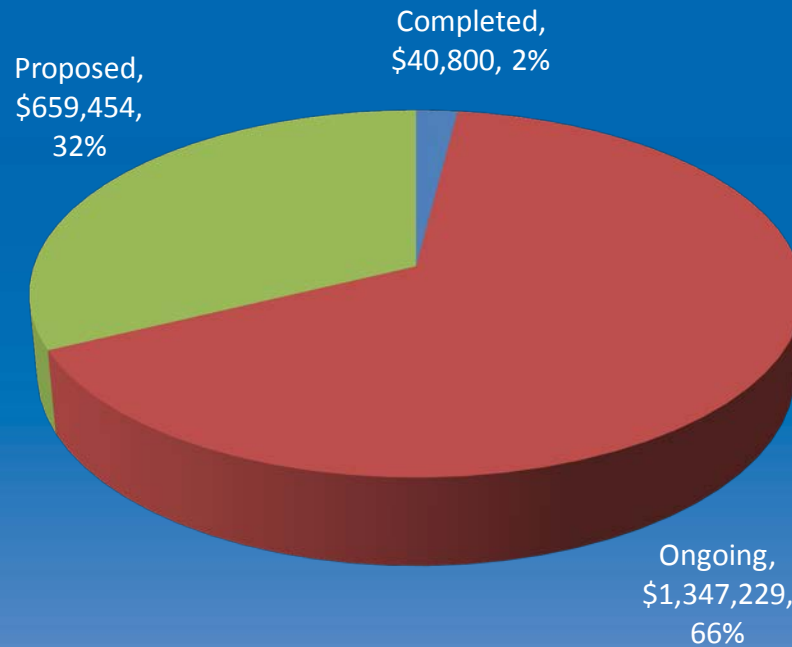
- Grants and Outside Funding
- PFC Eligibility
- Cost Recovery
- Rates and Charges Impact
- Credit Rating Impact

- **Complement and Support Strategic Plan**



Proposed FY17 – FY21 Capital Program

	As of FY16	FY17	FY18	FY19	FY20	FY21	FY17-21	FY22+	Total Cost
Grand Total	\$829,126	\$443,809	\$402,319	\$426,846	\$367,042	\$407,467	\$2,047,483	\$452,706	\$3,329,315.41



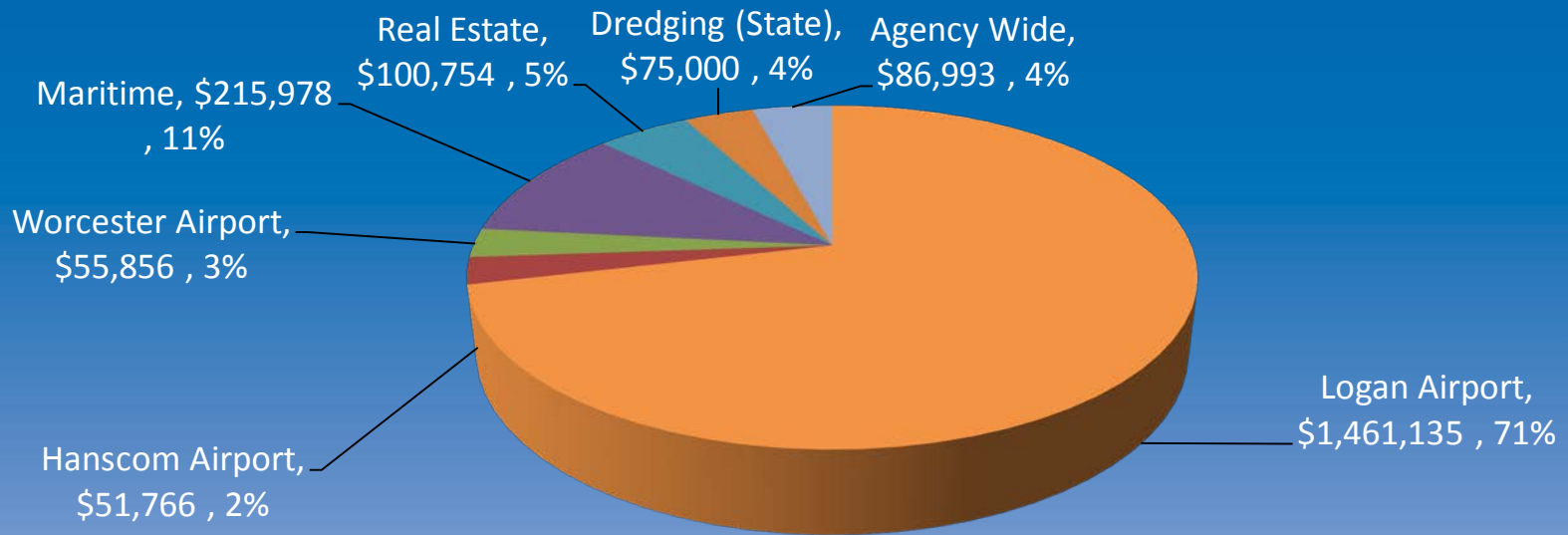
*FY16-FY20 Total: \$1,736,951
An Increase of 18%*

- Contingent on Funding Source (CFS): \$276,117M
- Unfunded Projects: \$989,154M
- Total: \$1,265,271M



Capital Program by Facility

Project	FY17-21	Current Program %
Logan Airport Total	\$1,461,135	71.36%
Hanscom Airport Total	\$51,766	2.53%
Worcester Airport Total	\$55,856	2.73%
Maritime Total	\$215,978	10.55%
Real Estate Total	\$100,754	4.92%
Dredging (State Portion)	\$75,000	3.66%
Agency Wide Total	\$86,993	4.25%
Grand Total	\$2,047,483	100.00%



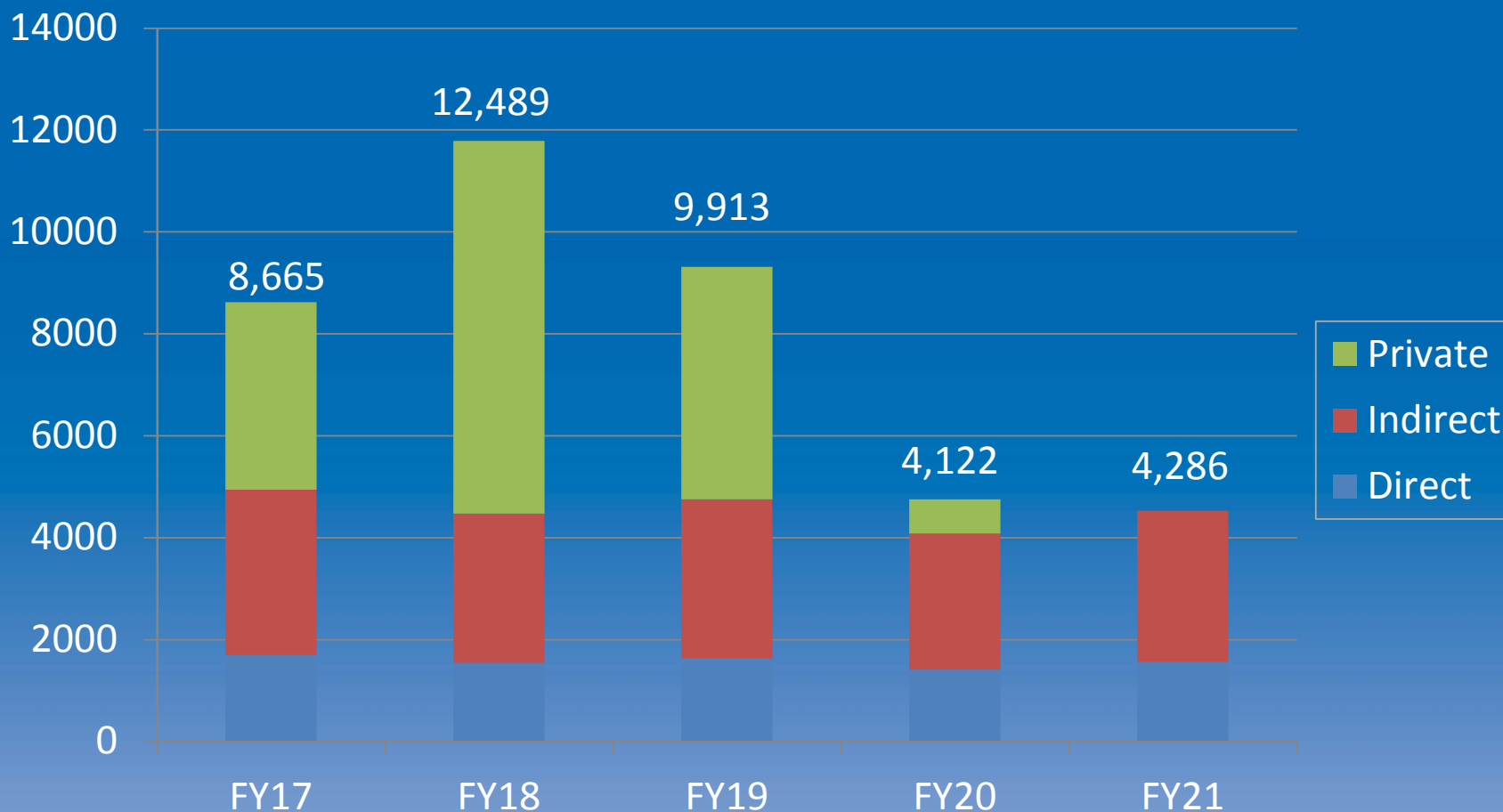
Proposed FY17 – FY21 Capital Program

Element	Value
Total Projects	358
Total Program	\$2,047M
Private Funds	\$1,458M
Total and Private Funds	\$3,505M
Contingent on Funding Source (CFS)	\$276M
Unfunded	\$989M



Economic Impact by Year

Estimated Job Creation (FTEs): Total 39,012



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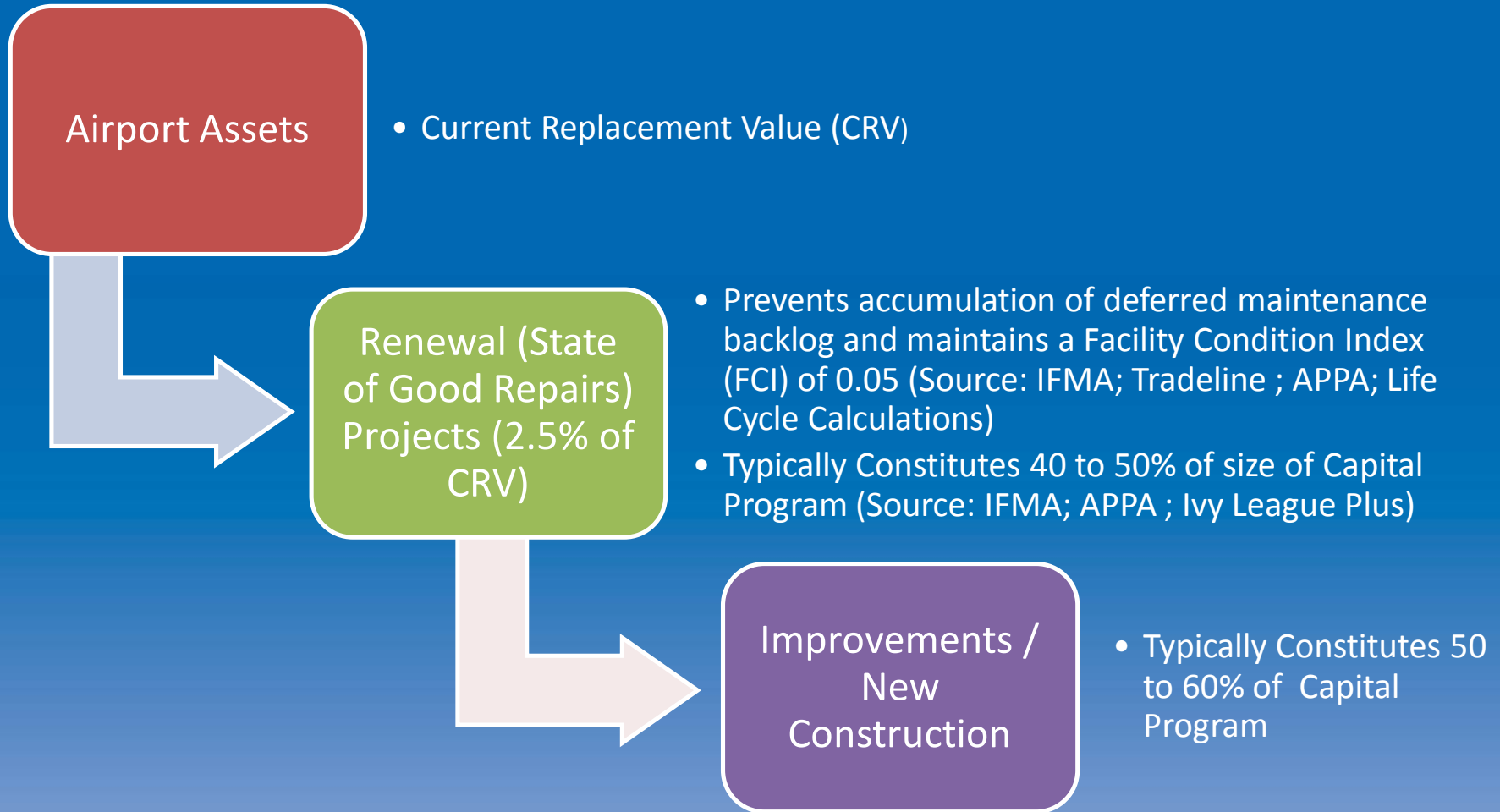


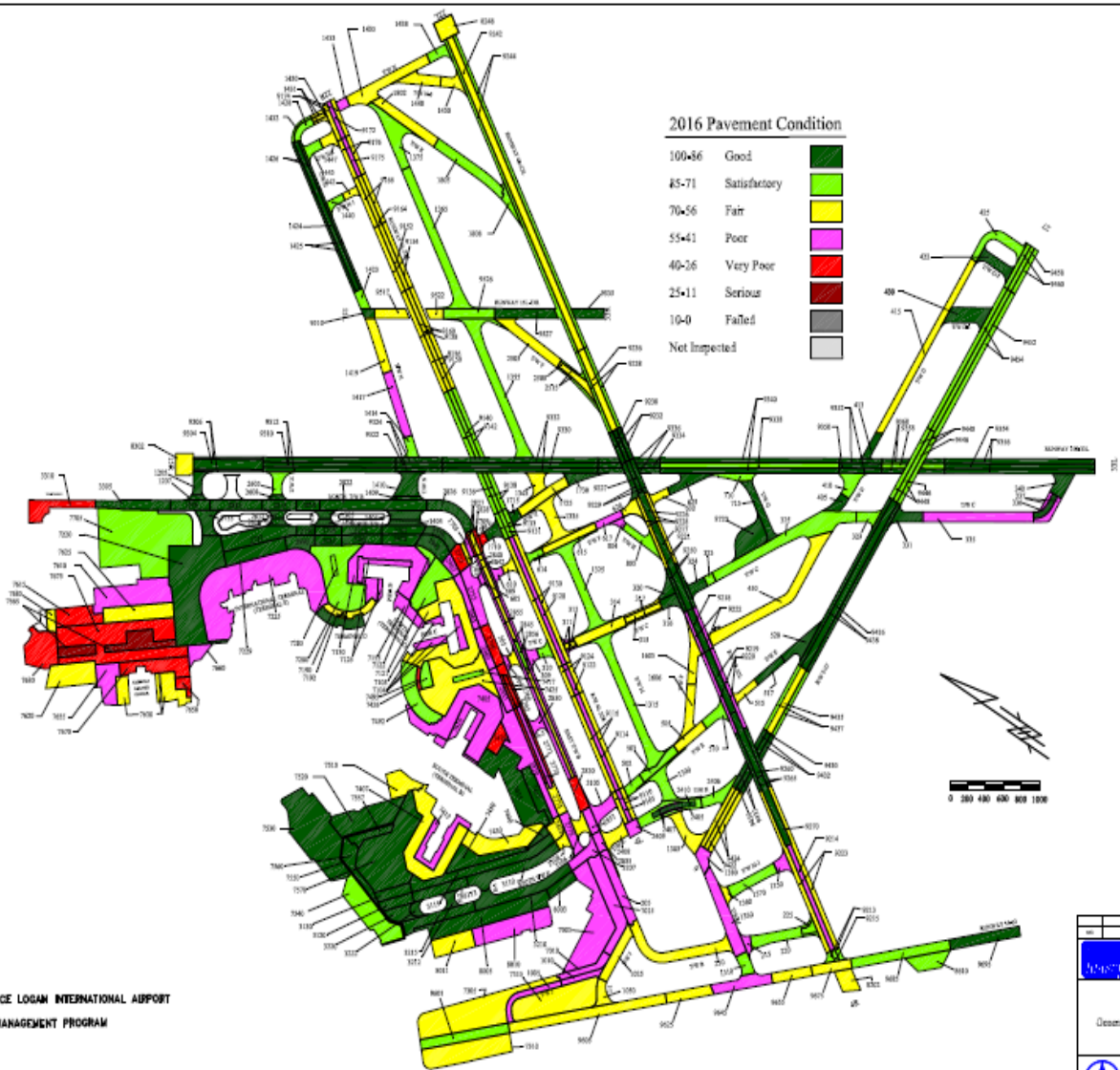
Capital Program Composition

- New/Improvements
 - Airside: Logan, Hanscom, Worcester
 - Landside: Logan, Hanscom, Worcester, Maritime, Agency Wide
- State of Good Repairs
 - Airside: Pavement Condition Index
 - Landside: Facility Condition Index



Capital Program Composition





2016 Pavement Condition

- 100-86 Good
- 85-71 Satisfactory
- 70-56 Fair
- 55-41 Poor
- 40-26 Very Poor
- 25-11 Serious
- 10-0 Failed
- Not Inspected

GENERAL EDWARD LAWRENCE LOGAN INTERNATIONAL AIRPORT
PAVEMENT MANAGEMENT PROGRAM

2016 Pavement Condition	
Massachusetts Port Authority	
2016 Projected PCI General Edward Lawrence Logan International Airport - BOS Boston, MA	
Applied Research RUBICORP, INC.	SHEET: 1 of 1



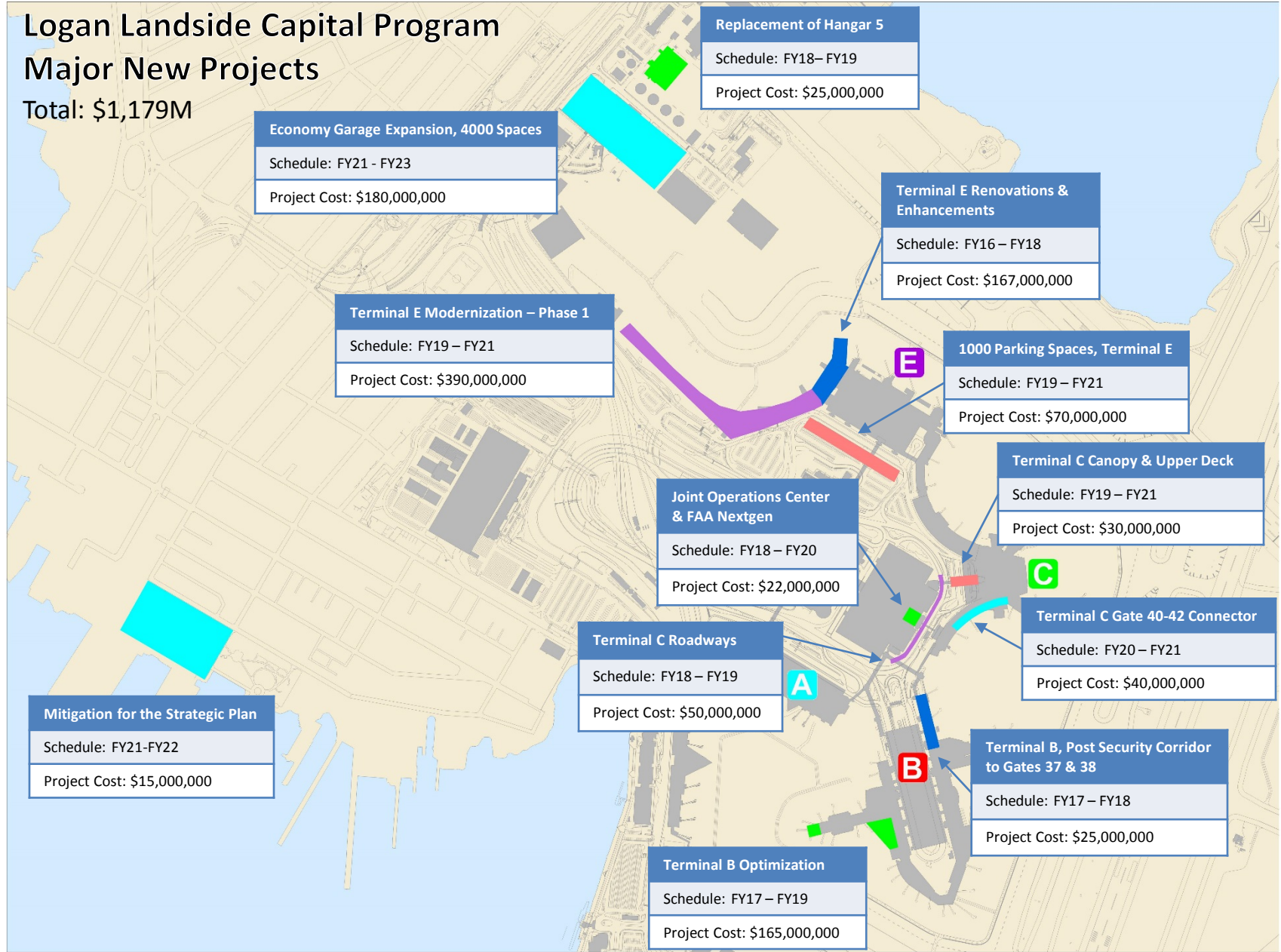
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Logan Landside Capital Program

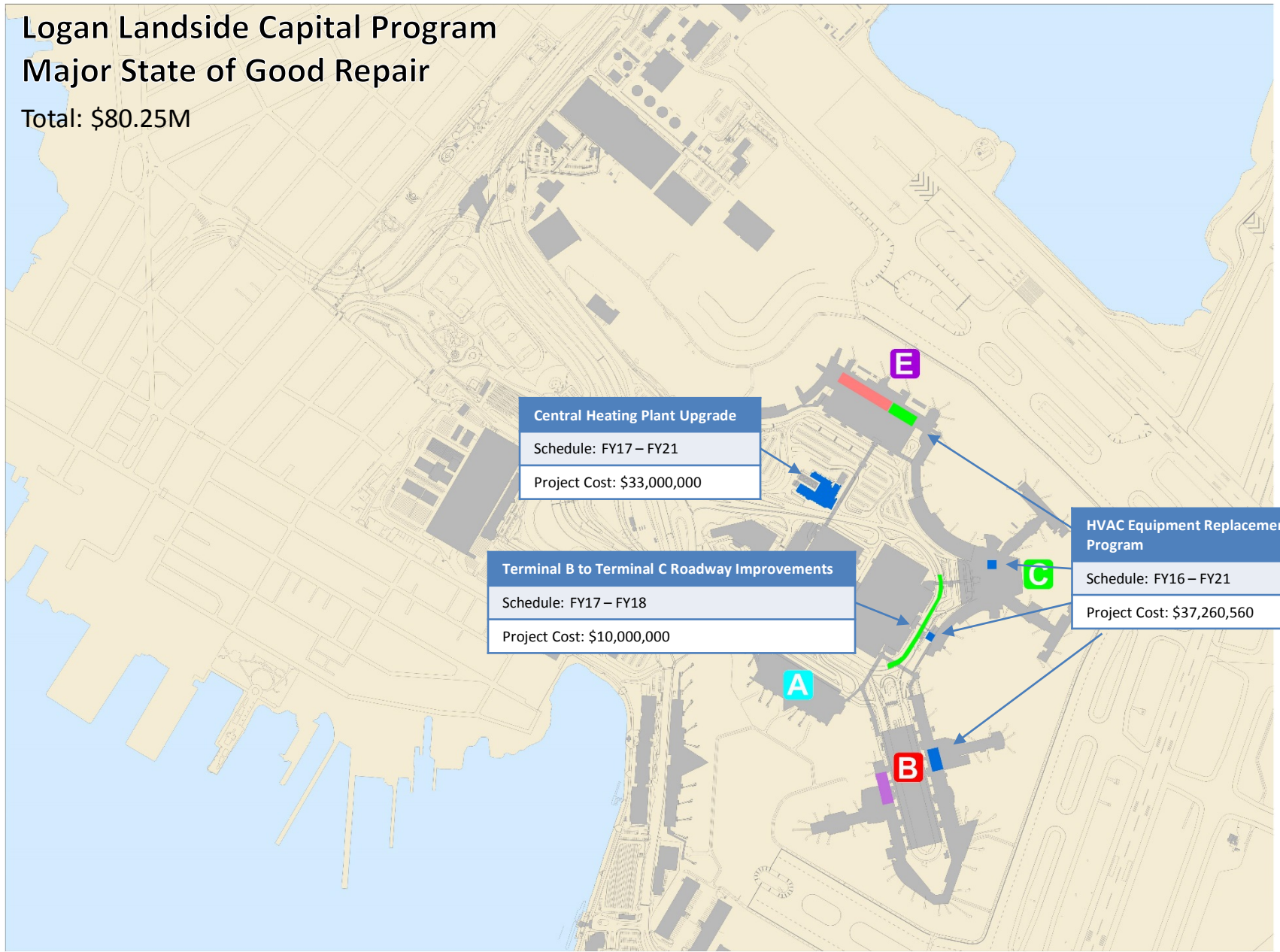
Major New Projects

Total: \$1,179M



Logan Landside Capital Program Major State of Good Repair

Total: \$80.25M



Logan Airside Capital Program Major New Projects

Total: \$11M

Second Airfield Lighting Vault

Schedule: FY19 – FY21

Project Cost: \$8,000,000

New Centerline LED Lights on Taxiways A & B

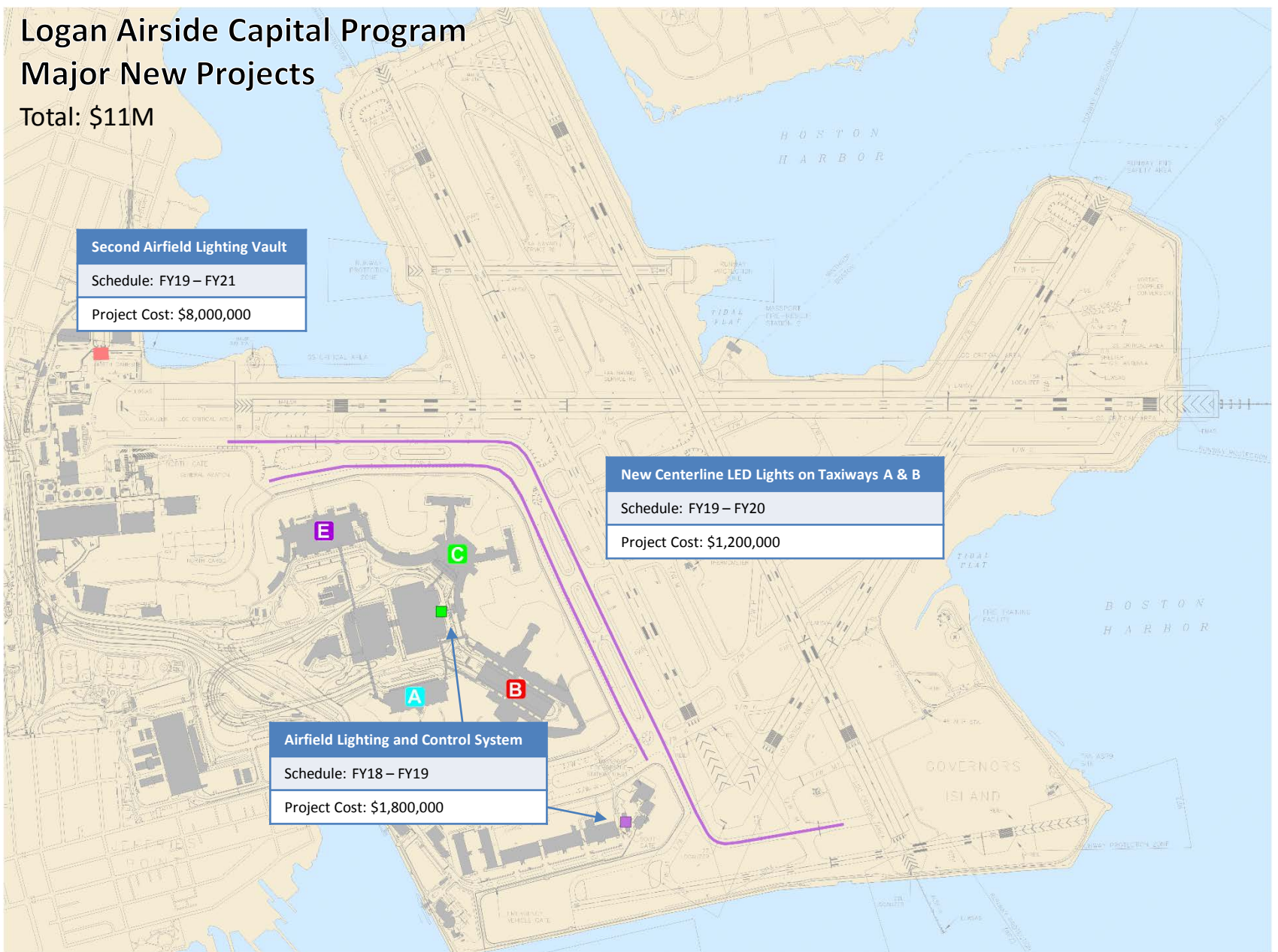
Schedule: FY19 – FY20

Project Cost: \$1,200,000

Airfield Lighting and Control System

Schedule: FY18 – FY19

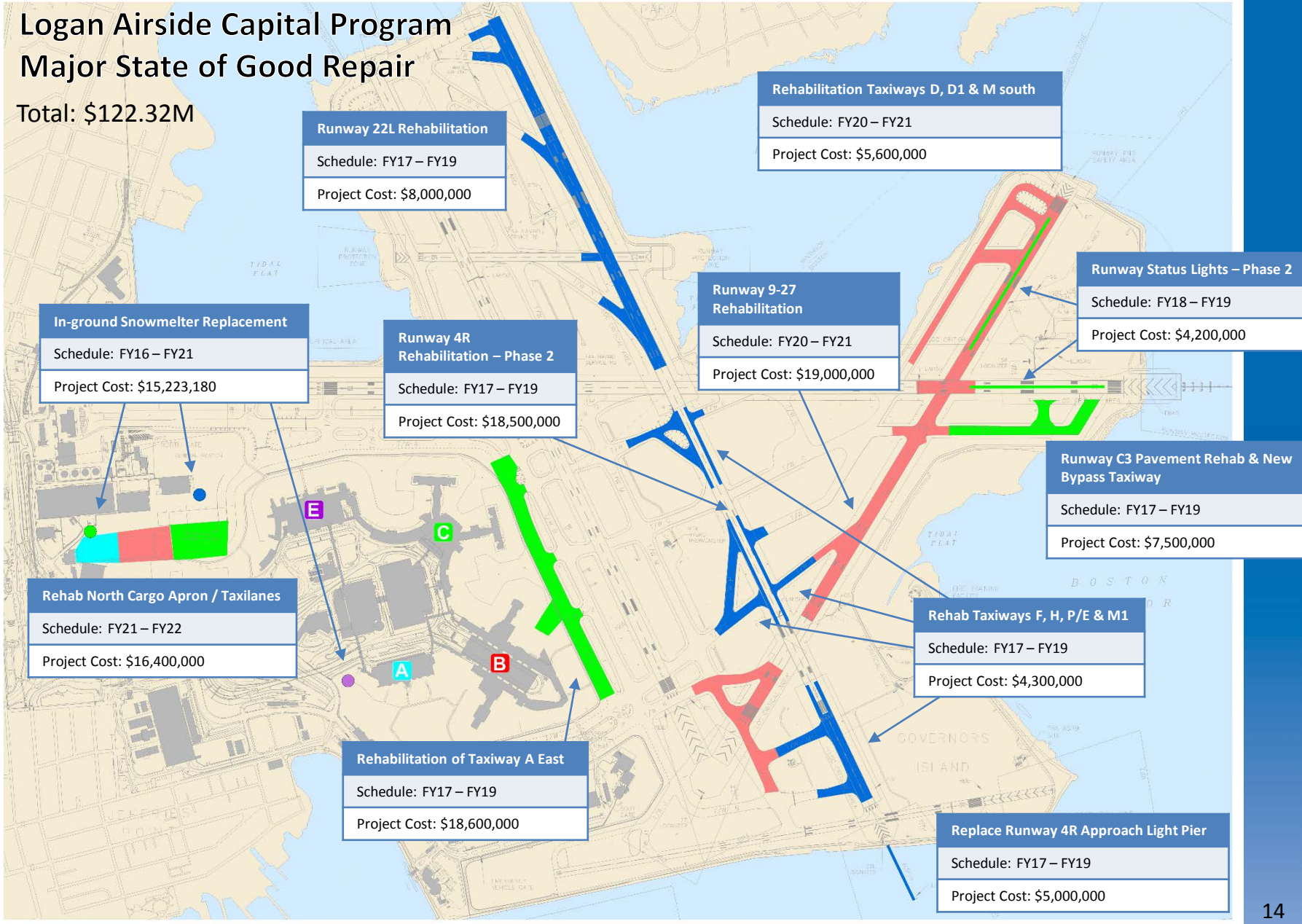
Project Cost: \$1,800,000



Logan Airside Capital Program

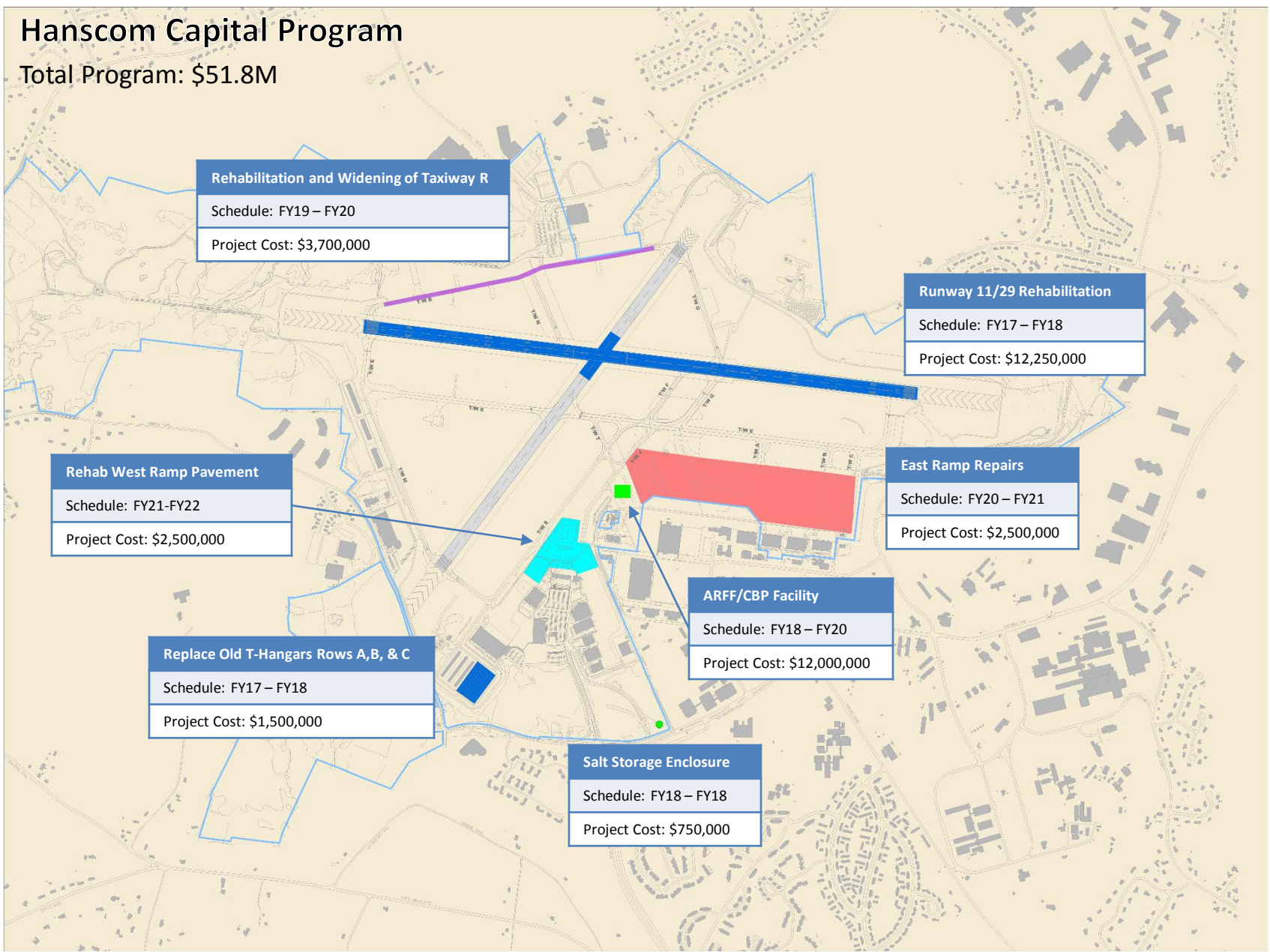
Major State of Good Repair

Total: \$122.32M



Hanscom Capital Program

Total Program: \$51.8M

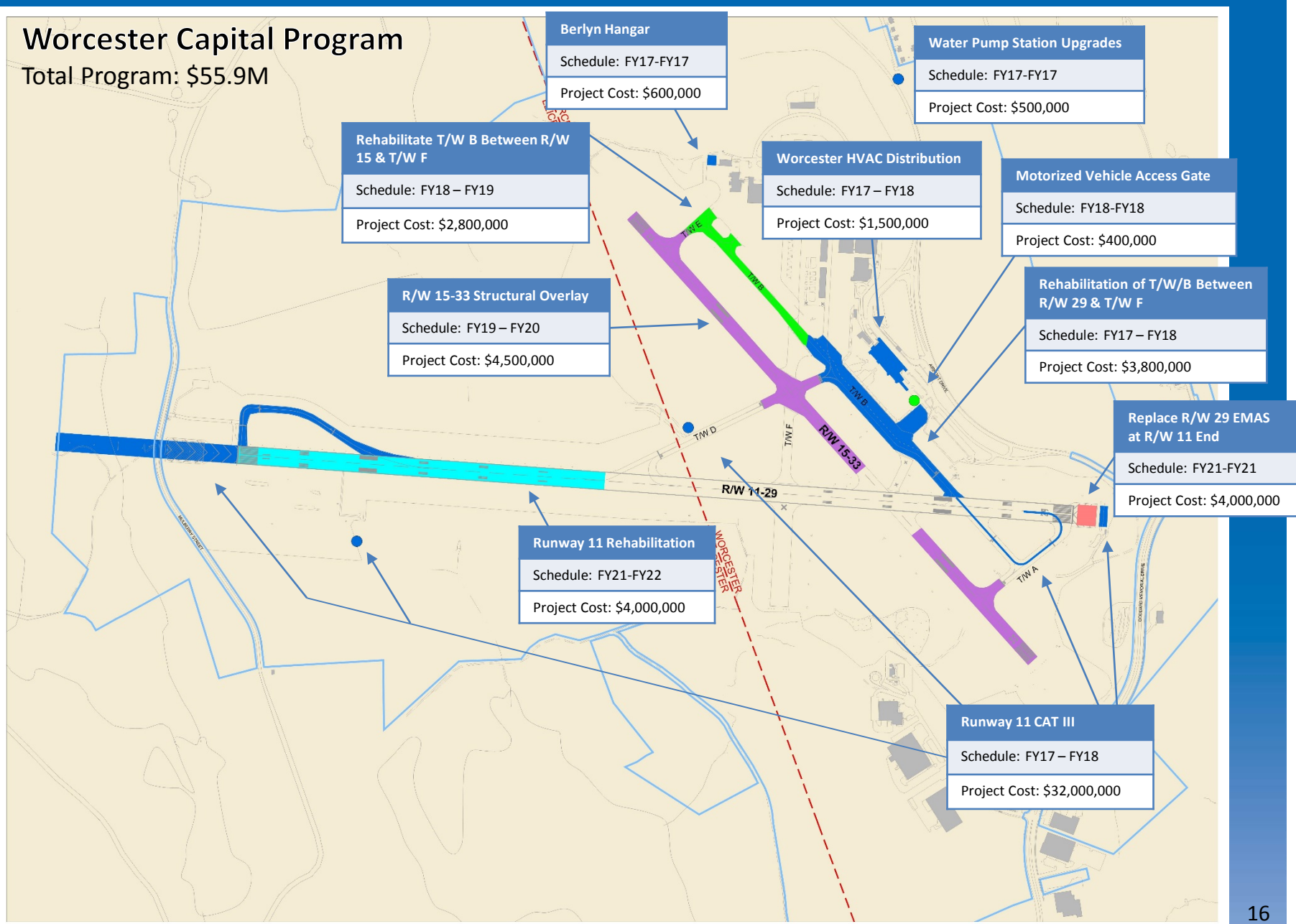


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Worcester Capital Program

Total Program: \$55.9M



Conley Terminal FY17-21 Capital Projects

Total Program: \$130M



Conley Terminal Dedicated Freight Corridor

Additional Conley Projects:

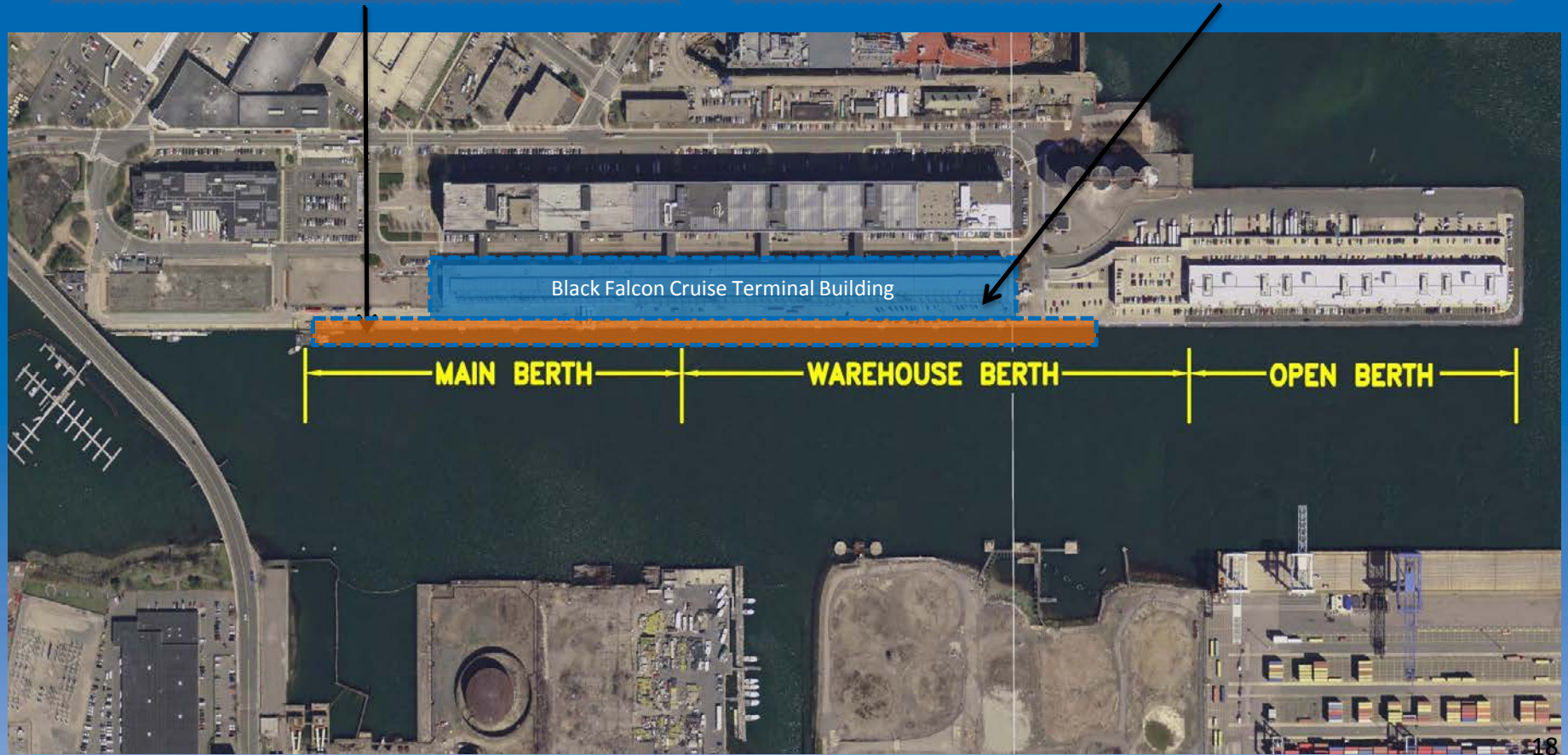
- RTG Drives Replacement
- Wireless Network/Terminal Lighting
- Crane Painting Program
- Tractor Replacement



Black Falcon Cruise Terminal FY17-21 Capital Projects

Total Program: \$19M

- New Automatic Gangway Project
- Seawall Reconstruction
- Façade Concrete Repairs and Coating/Painting
- Building Window Replacement



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South Boston Waterfront FY 17-21 Major Capital Projects

Department of Army Landswap/Devens Improvements

South Boston Waterfront Transportation Center



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Capital Programs & Environmental Affairs Department

Professional Services

- Design Services:
 - *Building*
 - *Non-Building*
- Term Consultants
- Environmental Services

Construction Services

- MGL c.149: Building Construction Contracts (ECC < \$5 MIL)
- MGL c.149A: CMR (Construction Management at Risk) (ECC > \$5 MIL)
- MGL c.30: Public Works (Non-Building)
- MGL c.149A s.14-21: Design-Build Public Works (ECC > \$5 MIL)

Term Construction Contracts

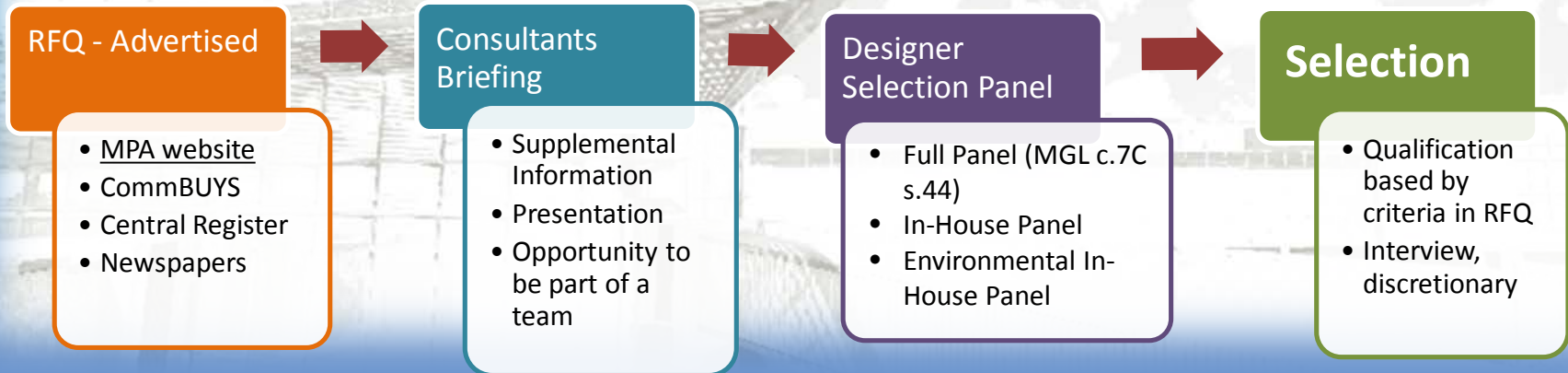


Capital Programs & Environmental Affairs Department

Professional Services

- Design Services:
 - *Building (MGL c.7C s.44)*
 - *Non-Building*
- Term Consultants
- Environmental Services

The process is similar, but the Selection Panel changes by project type



Consultants Selection Criteria

- Experience of the team and communication skills of the PM
- Minimal disruption to airport operations
- Familiarity with Ch. 149, Ch. 149 A, Ch. 30
- Experience in using and managing BIM
- Experience in Lean Design & Construction
- Cost and Schedule management
- M/WBE proposed percentage
- Current and Past work with the Authority
- Experience with Sustainability and Resiliency
- Design Approach ... *“Design Excellence”*



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Opportunities - 2017

- 1000 Parking Spaces
- BHS - Terminal-E Discontinued Hardware Replacement
- Terminal C Roadways
- Terminal C Canopy & Upper Deck
- New Automatic Gangway
- Department of Army / Ft Devens
- Replacement of Hangar 5
- Joint Operations Center & FAA NextGen ATCT Tower



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Ongoing Initiatives

- PMIS (PMWeb) Implementation
- Data Warehouse / Dashboard
- Online Bidding
- GIS/BIM Integration
- Cost Estimating Guidelines
- Mobile Apps
- Lean Implementation Guidelines
- CPM Schedules and Pull Plan Integrations
- Process Enhancements



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Thank You

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