



REPORT TO THE STRATEGIC DEVELOPMENT COMMITTEE

Informational Briefing on the Implementation
of the Office of Engineering Management Plan

September 2014

Purpose

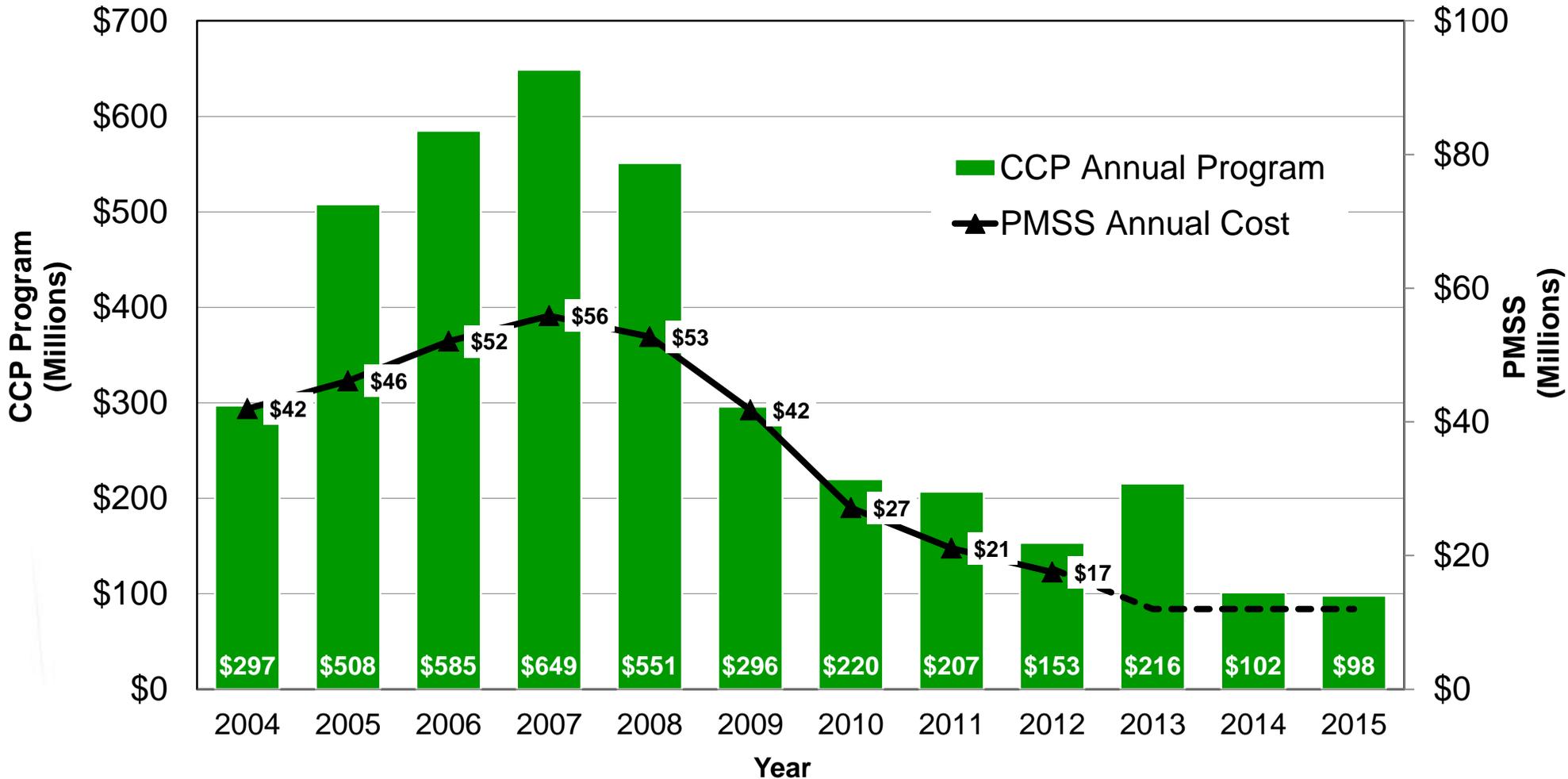
To provide a progress update on the implementation of the Office of Engineering Management Plan presented to the Strategic Development Committee in September 2012, including a proposed strategy for reorganizing program management support.

Background

- In September 2012, the Office of Engineering provided information regarding changes to the structure for managing the Aviation Enterprise Capital Construction Program (CCP), including:
 - Bringing thought leadership in-house;
 - Simplifying contracted support; and
 - Providing enhanced line-of-sight accountability for program management (PM) activities.
- These changes will further the Airports Authority's corporate goals by developing in-house technical staff, reducing reliance on contractors, enhancing operational efficiencies, and reducing the overall capital cost of projects.



Historical Model Relied Heavily on Outsourced Program Management Support



Analysis

- Peer benchmarking from 11 hub airports shows program management (PM) and construction management (CM) costs ranging from 4 to 15%.
 - The Airports Authority's historical spend on PM/CM has been 13%.
- Program management costs are declining industry-wide.
- Los Angeles World Airports case study concluded that the organization pays 15-20% more for program management services provided by a contractor than it would pay for in-house staff.

There is opportunity to restructure support contracts
for cost savings



Changing Roles & Responsibilities

Area of Responsibility	Historically	Going Forward
Project Controls	PM Contractor	Engineering Staff
Safety Oversight	PM Contractor	Engineering Staff
Quality Assurance	PM Contractor	Engineering Staff
Planning Support	PM Contractor	Engineering Staff
Design Support	PM Contractor	Engineering Staff / Task Contractor
Construction Management	PM Contractor	Engineering Staff / Task Contractor
EOP Support	PM Contractor	New Contractor
Public Affairs Support	PM Contractor	Authority Staff
Procurement Support	PM Contractor	Authority Staff
Staff Augmentation	PM Contractor	Authority Staff

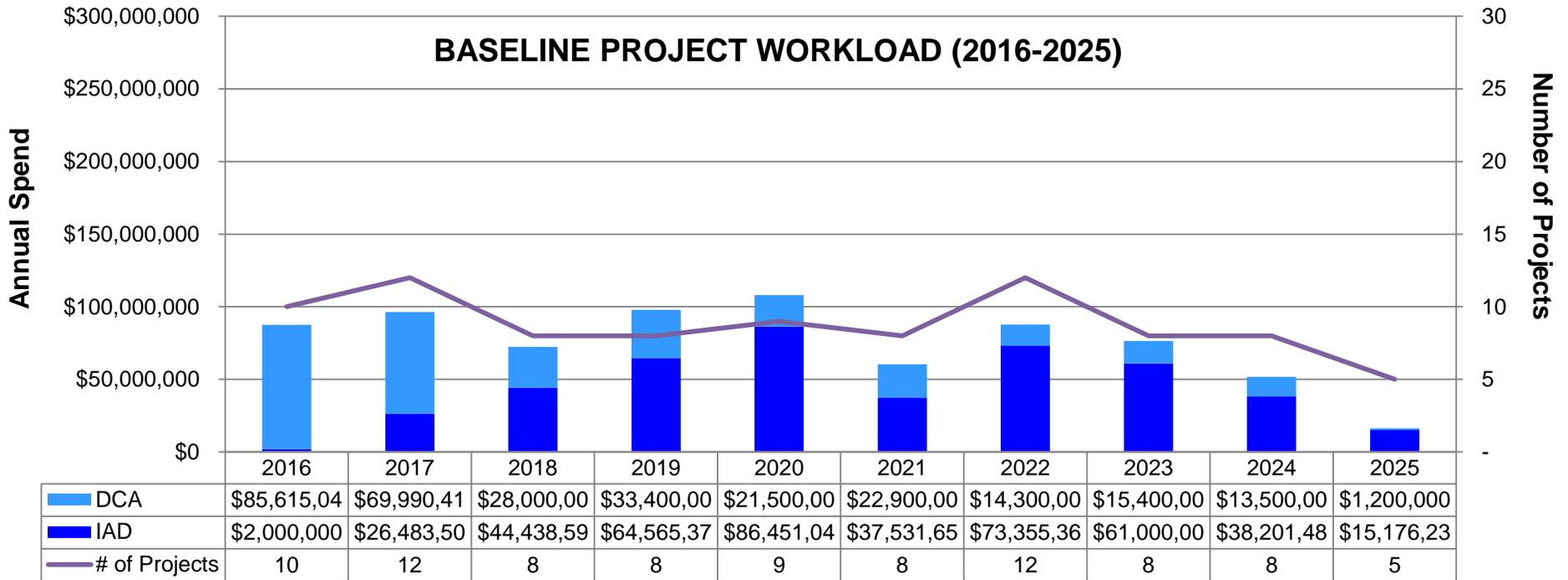
Single PM contractor provided bundled services across multiple areas

Management Strategy

- Airports Authority's staff will directly manage project controls, safety program implementation, and quality assurance – functions that were historically performed by the contractor.
- Large, complex capital projects will be managed with a dedicated, integrated MWAA/consultant management team.
 - Consultant contract will include full PM/CM services to minimize risk and maximize control.
- Ongoing discrete projects under \$100 million will be managed by MWAA and will utilize specialized task contracts that are project-specific and limited to engineering tasks, such as:
 - Construction Management services
 - Cost estimating and claims support
 - Testing and surveying



Ten-Year Forecast



Structure

- Engineering leads Project Controls, Safety, and Quality Assurance functions
- Task Order contracts will be utilized for design, testing, and construction management services

Sample Projects

- Airfield Rehabilitation
- Roadway Improvements
- Renovation of IAD Terminal C/D
- Design of DCA Capital Projects

Task Order Contracts

- Current priority is to replace legacy PMC tasks with new task order contracts, which may be utilized for:
 - Planning and Programming
 - Construction Surveying and Material Testing
 - Special Third Party Inspection
 - Construction Contract Administration
 - Construction Field Inspection Services: Civil, Mechanical, and Electrical
 - Project Controls Estimating, Claims Analysis
 - Design Services: Civil, Mechanical and Electrical Engineering, Special Systems, Airfield Panel Replacement, COMIP Task Order
 - A/E Task Order Services
 - Environmental Remediation
- In 2015, focus on in-house construction management and project controls development and initiate design for DCA Terminal B/C long-term capital program



MAJOR PROGRAM – DCA B/C Capital Projects

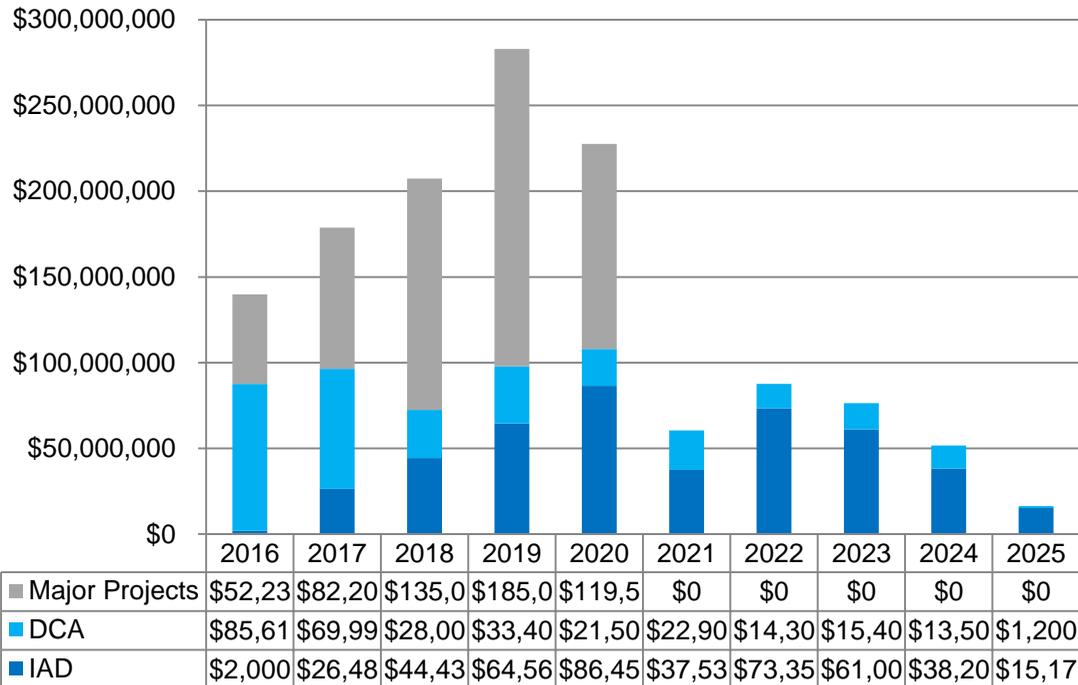
Structure

MA-30 oversight, standards for Safety and Quality

MA-30 Level 1 Project Controls

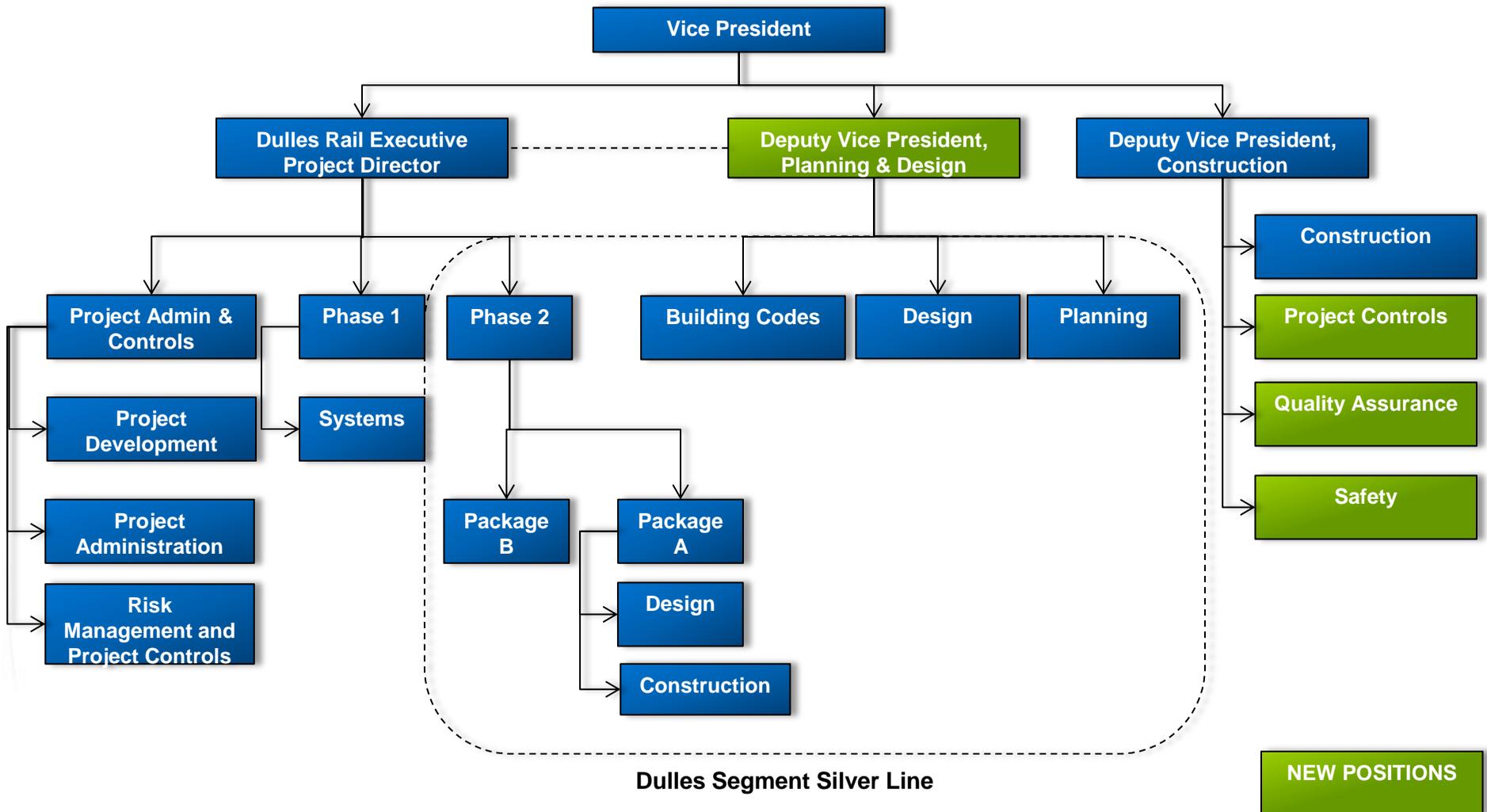
Consultant PM/ CM, project controls, testing

Rough Order of Magnitude CDP Program Cash Flow





Office of Engineering's New Organization Chart



Proposed Staffing Levels to Support the Aviation Enterprise CCP

MWAA Office of Engineering	Current Staff	Addition	Total Staff in 2015
Office of Vice President	5	-	5
Planning Department	8	-	8
Design Department	15	6	21
Building Codes/ Environmental Department	6	-	6
Construction Department (including Quality/Safety)	7	9	16
Project Controls Department	4	7	11
Total Staffing	45	22	67

Anticipated Cost Savings

- Lower overhead cost of in-house staff versus external consultants is estimated to save \$2.85 M annually.
- Utilizing external PM support for a portion of the capital program, rather than on every project, will yield additional savings.
- Target savings over the next 10 years total \$34M to \$44M.

Next Steps

- Continue recruiting and filling Engineering positions.
- Develop in-house reporting and controls functions.
- Procure individual support contracts in lieu of bundled program management support.
- Reduce overall project costs through limited use of outside full service PM/CM, focus on preliminary engineering and closer coordination of Silver Line Phase 2.
- After completion of airline negotiations, develop individual project budgets.
- Pursue additional grant funding from FAA and FEMA.



Ronald Reagan Washington National Airport



Dulles Corridor Metrorail Project



Dulles Toll Road



Washington Dulles International Airport



METROPOLITAN WASHINGTON
AIRPORTS AUTHORITY