AVIATION CAPITAL PROJECTS AUDIT

PRESENTATION TO TRANSPORTATION COMMITTEE MAY 29, 2024

AMANDA NOBLE, CITY AUDITOR
STEPHANIE JACKSON, DEPUTY CITY AUDITOR
MICHEAL JONES, PERFORMANCE AUDIT MANAGER
DUANE BRAITHWAITE, PERFORMANCE AUDIT SUPERVISOR
BRANDI BELL, SENIOR PERFORMANCE AUDITOR
KATHY MCCAULEY, PERFORMANCE AUDITOR
TIAJAH SHERMAN, PERFORMANCE AUDITOR
CHRISTOPHER ARMSTEAD, DATA ANALYTICS AUDITOR

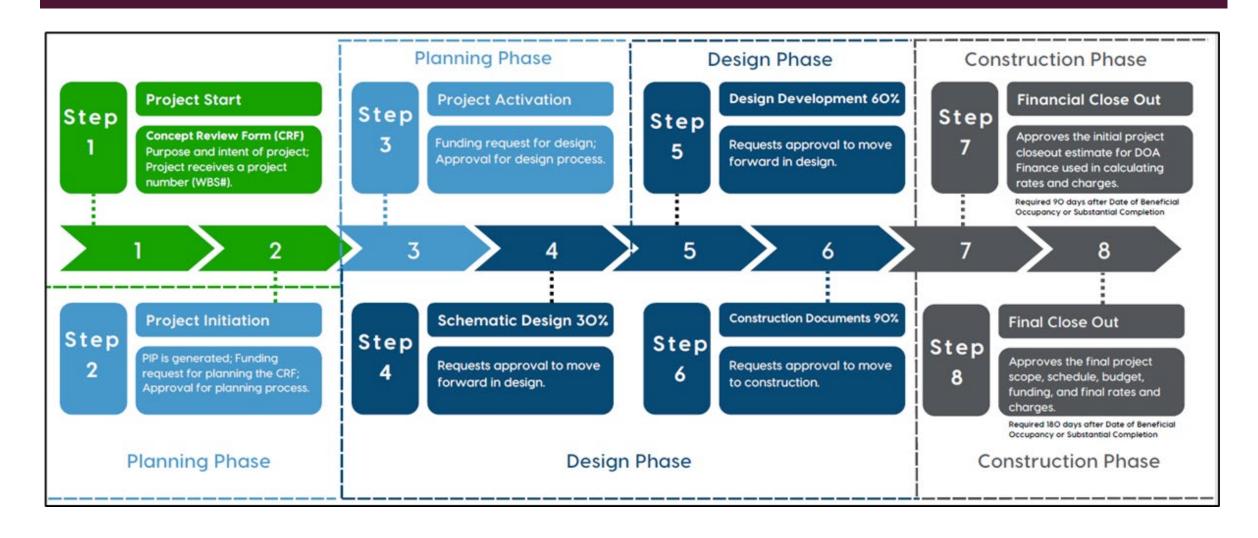
AUDIT OBJECTIVES

- Are transaction-level internal controls designed and functioning to ensure that payments to construction contractors and design consultants are properly supported and allowable?
- Are change orders and charges against allowances and contingencies properly supported, reviewed, and approved?

ATLNEXT IS AVIATION'S \$7.2 BILLION CAPITAL IMPROVEMENT PROGRAM

- ATLNext is the Airport's \$7.2 billion capital improvement program, consisting of a set of projects spanning two decades.
- The Bureau of Planning and Development manages the design and construction of ATLNext projects.
- ATLNext's program policies exist to mitigate project risks.

PROJECT LIFECYCLE PROCESS ESTABLISHES APPROVAL AT EACH PHASE



WE ASSESSED CONTROLS IMPLEMENTATION WITHIN FOUR PROJECTS

Exhibit 8: Projects Sampled Within ATLNext to Assess Control Implementation

Project Name	Project Completion Date	Project Scope	
Domestic Terminal Police Precinct Facility	6/22/2021	Project's scope of work was to upgrade the interior space within the Police Precinct located in the Domestic Terminal.	
Noise Insulation Program (NIP) – Harvard Avenue Properties	11/23/2021	Project's scope of work included the construction of noise insulation measures in aircraft noise- incompatible structures located at the Harvard Avenue Properties.	
Concourse E Central Utility Plants (E-CUP) Enhancements	1/24/2023	Project's scope of work required the replacement of aging chillers, cooling towers, and boilers with new highly efficient equipment in Concourse E.	
Demolition of Sheraton Hotel Complex	3/30/2023	Project's scope of work was to design and execute the demolition of the Sheraton Hotel Complex.	

Source: Auditor generated based on review of contract scope of work or task order descriptions

WE TESTED 270 CONTROLS ACROSS FOUR PROJECTS

Our testing assessed 270 project controls across seven lifecycle elements for each sampled project to identify whether Planning and Development staff have measures in place to mitigate potential project risks. We reviewed:

- organizational framework, which included startup and project activation activities
- scope and change management, which included construction changes (including allowance work authorizations) and design changes
- cost and financial management (including planning, design, and construction invoice review and approval)
- schedule management, included as part of the ongoing project management review

- risk management, included as part of the ongoing project management review
- quality management, which included design oversight and construction oversight (including inspection daily reports and requests for information)
- safety management

FINDINGS OVERVIEW

- Overall, ATLNext's program policies generally follow best practices for capital project with some gaps identified in the design of controls.
- Most key controls were implemented to manage risks (across sampled projects).
- Portions of the ATLNext program policies are inconsistent with current practices.

OVERALL, PROCEDURES ARE CONSISTENT WITH BEST PRACTICES

Exhibit 5: Controls Exist for Most Project Elements and Lifecycle Phases

		Project Lifecycle							
		Planning	Design	Execution	Testing	Turn-over	Operations/ Maintenance		
Project Elements	Organization Framework	Project resource plan, organization, roles and responsibilities		Mobilize and manage labor	Demobilization	Operations staff planning	Ongoing requirements/skills review		
	Procurement and Contract Management	Contract strategy	Contractor qualification and evaluation	Contractor selection and negotiation	Contract compliance review	Trouble-shoot and punch list	Vendor qualification and selection		
	Scope and Change Management	Project objectives and scope definition	Detailed project design and scope freeze	Change control		Owner acceptance	Asset change management		
	Cost/Financial Management	Project estimate	Project cost baseline	Cost control		Final payment/retention release	Operations & maintenance budgeting		
	Schedule Management	Project schedule requirements	Project schedule baseline	Schedule management		Completion checklist	Ongoing Maintenance Schedule		
	Systems and Tools	Project systems strategy	Implement project systems	System support and maintenance		Transition to enterprise asset management			
	Risk and Issue Management	RISK and issue management planning	Risk and issue tracking and resolution		Confirm issue resolution	Ongoing issue management			
	Communication and Reporting	Assess stakeholder requirements	Project status and regulatory filings	Project performance	Asset performance	Project close-out	Operations and financial reporting		
	Quality Management	Quality plan	Specifications compliance criteria	Quality assurance and control		Transition as-built specifications to operations			
	Safety Management	Safety plan	Safety training program	Safety trend tracking and incident investigations		Commissioning interface plan	Operation safety program		

we found best practices were fully satisfied based on review of DOA P&D's policies and procedures. We found best practices within the project element category were a mix of fully and partially/not satisfied based on review of DOA P&D's policies and procedures. We found best practices within the project element category were partially satisfied based on review of DOA P&D's policies and procedures. We found best practices within the project element category were not satisfied based on review of DOA P&D's policies and procedures. We found best practices within the project element category were not satisfied based on review of DOA P&D's policies and procedures. We did not review best practices for this project phase.

LOCATION OF THE POLICE PRECINCT IN THE AIRPORT PRESENTS MAINTENANCE CHALLENGES

Exhibit 1: Airport Police Precinct Underwent Multiple Upgrades



Source: Auditor observation of the Police precinct on 1/4/2023

Exhibit 3: Police Precinct Sustained Water Damage After Renovations





Left: Covered office furniture with water capture device

Right: Tube and bucket attached to water capture device in conference room

Source: Auditor observation of the Airport Police precinct on 1/4/2023

MOST INTERSECTIONS OF PROJECT ELEMENTS AND PROJECT PHASES SATISFY BEST PRACTICES

- The ATLNext program has planning controls in place to proactively manage costs and schedules.
 - Project information packages are used to report project scope, schedule, budget, and funding information.
 - Project execution plans define staff roles and responsibilities.
 - Safety requirements are defined within contract terms.
- The ATLNext program's design phase includes guidance to balance quality, schedule, scope, and cost.
 - Scope changes should not occur unless formal approval is obtained.
- Execution and testing controls exist to ensure construction work is done according to project specifications and requirements.

SMALL ADJUSTMENTS WOULD ALIGN ATLNEXT PROCEDURES WITH BEST PRACTICES

- Design phase controls including value engineering policies, the use of plan review checklists, and continuing safety training are not fully documented
- ATLNext program lacks guidance for contractor mobilization and demobilization activities
- Closeout policies need updating to better align with best practices

IMPROVEMENTS CAN HELP REDUCE CAPITAL PROJECT RISKS

- Critical safety records and design submittals were not available for review in project files.
- A few exceptions were identified in processes for pay application review and approval.
- Daily inspection reports were not always complete.
- Closeout procedures were not consistently followed.
- Allowance work authorizations were approved without adequate supporting documentation.

RECOMMENDATIONS

- We made 21 recommendations to the airport general manager. Our recommendations focus on aligning policies and procedures with current practices and best practices and ensuring project files are available for review along with focusing on ensuring project management tools are applied consistently according to contract terms and program procedures.
- The recommended changes are relatively minor but would have an impact in a \$7.2 billion capital improvement program.

QUESTIONS?

Full Report: Aviation Capital Projects - April 2024 (atlaudit.org)