

International Arrivals Facility (IAF)

Scope and Budget Update

Key Message

- Used 3 independent estimating teams to produce cost at 100% Planning/0% Design
- Prioritized metrics to assist in scope refinement
- Identified and evaluated 34 possible scope changes/cost savings
- Engaged airlines in evaluation
- Identified key additions during process
- Evaluated the plan of finance
- Next step: Design/Builder team will help validate cost and schedule, refine scope, value-engineer and advance program

Agenda

- Today's Briefing
 - Refined Target Metrics for IAF Operations
 - Capital Budget and Funding
 - Program Budget
 - Cost Validation Process Over 5 Months
 - Airline Input Meetings
 - Notification to Design Build Teams
- Next Briefing
 - Timeline for start of Design and Construction Activities

INTERNATIONAL ARRIVALS FACILITY

PERFORMANCE METRICS

PRIORITY

Capacity

Preserving Long Term Airport Capacity

1

Widebody International Gates
Eliminate Aircraft Holding for Gates
Minimizes Daily Hardstand Operations

2014	2020
11	18-20
22	0
2	0

PRIORITY

Customer Service

Expanded Facility

2

Passengers per Hour
Claim Device # and Capacity
Eliminate the Holding of Pax on Aircraft
Eliminate the Holding of Pax in Corridor

2014 YTD	2020
1200	1900
4 / Max Capacity 460 Bags	6 / Max Capacity 1020 Bags
4	0
524	0

PRIORITY

Customer's Gateway of Choice

Enhanced Experience

3

Eliminate Double Bag Claim
Reduced Connecting Times

2014	2020
	✓
90 Minutes	75 Minutes

Major Future Infrastructure Required to Attain 60 Minutes

- Baggage Weight Inspection Systems
- Train Improvements
- Moving Walkways

Evaluation of Capital Plan

IAF

- Update estimate of potential savings and underspending with existing projects
- Evaluate new needs:
 - List of “delayed approval” projects
 - NSTAR – pavement replacement, other?
 - Future projects: Master Plan, Part 150, other?
- Evaluate alternatives:
 - Defer projects/spending
 - Reduce allowances, replenish with actual savings
 - Increase overall budget
- Update Plan of Finance based on changes in Capital Plan

IAF Funding Plan: Background & Process

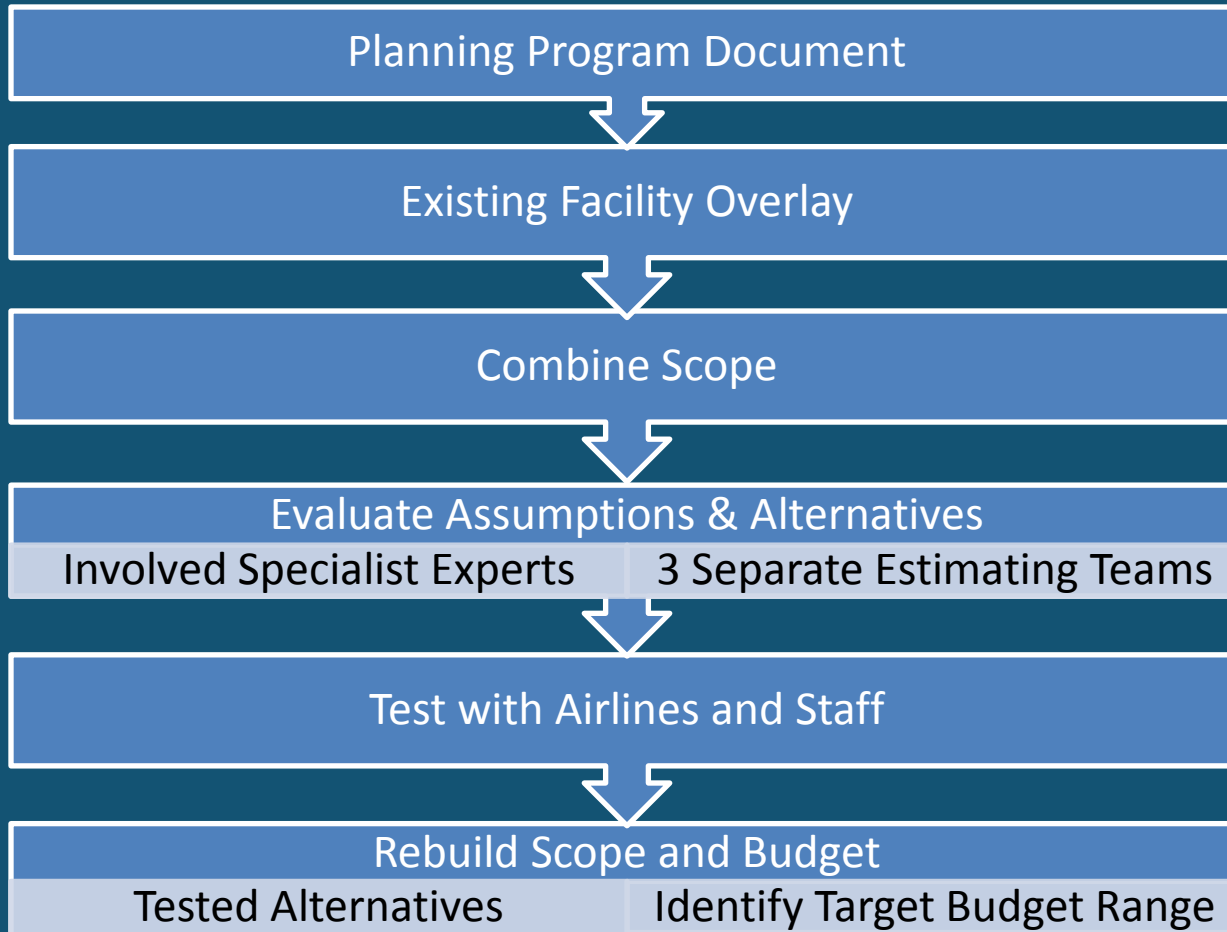


- October 7 Budget presentation - intent to absorb IAF cost increase in existing \$1.7 billion capital budget through:
 - Projected underspending on other projects
 - Use of Allowance CIPs
 - Deferral of 2015 projects
- Need to reassess due to magnitude of IAF increase

Program Budget History

- Initial Budget \$344M (\$316M Phase 1, \$28M Phase 2)
(July 2013)
- Budget Update \$631M
(Sept. 2014)
- Program Budget \$596M
(Dec. 2014)

Scope Analysis & Confirmation



Assumptions & Alternatives

Assumptions

- IAF - full service
- Sterile Corridor - elevated at Concourse A
- Bridge – assembled off-site, transported and installed in place

Alternatives

- Reduce Primary
- Eliminate Recheck
- Eliminate SSCP
- Eliminate O&D Use of SSCP
- Eliminate Accommodation for Growth/Capacity
- Reduce Bag Claim
- Reduce Vertical Circulation Changes
- Reposition Sterile Corridor
- Reduce number of connected gates
- Construct Bridge in Place
- Construct Bridge with 2-way flow

Airline Input Meetings

IAF

Meeting 1
10/15/2014

Delta
Hainan

Horizon

Meeting 2
10/22/2014

Delta
Hainan

British Air

Alaska

Emirates

Lufthansa

Meeting 3
10/29/2014

Delta
Hainan

British Air

ANA

Meeting 4
11/5/2014

Delta
Hainan

British Air

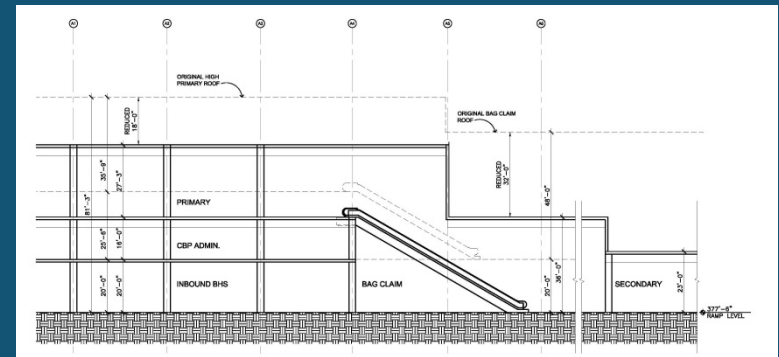
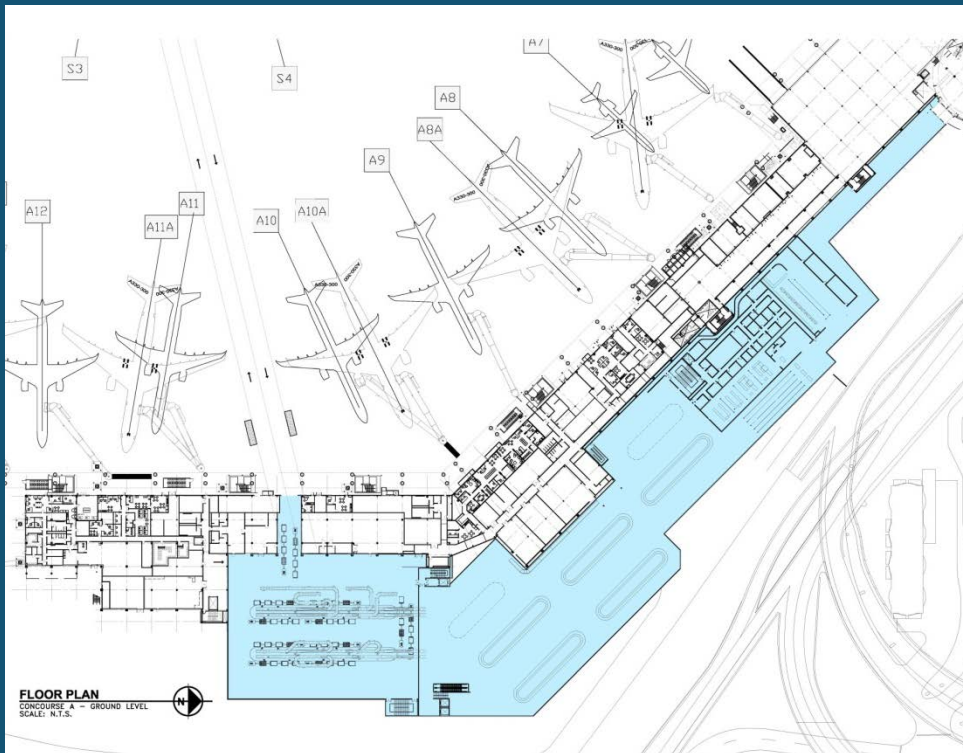
Meetings organized, chaired and recorded by Airline Technical

11/26/2014

Representative – a Port/Airlines liaison independent from the project team.

Tested Alternatives

Example: At Grade Bag Claim & Secondary Screening

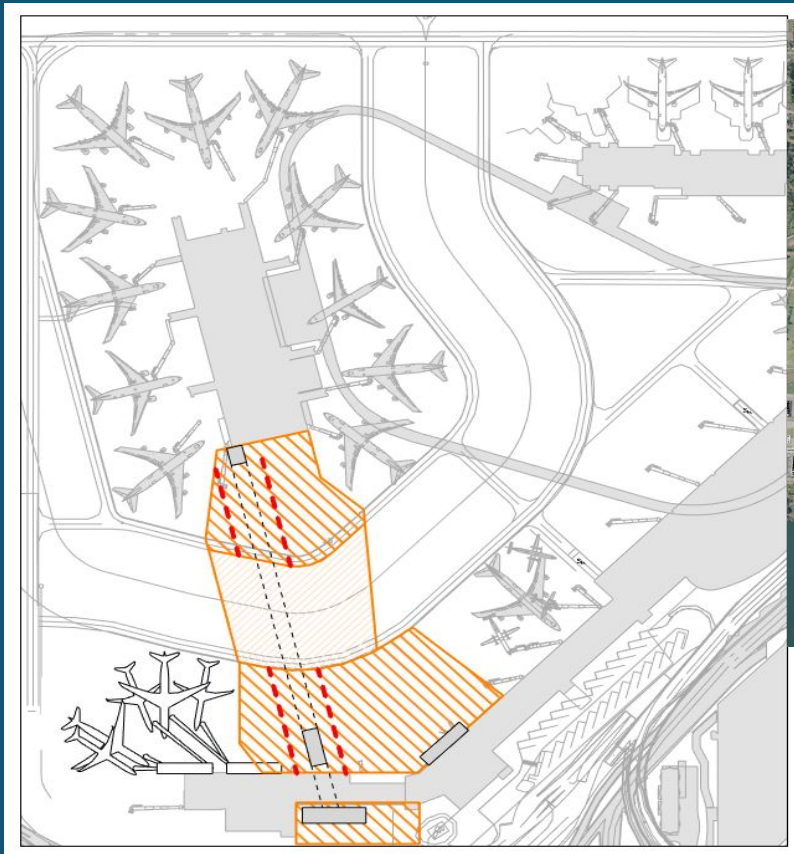


Cross section through IAF

Rejected

Tested Alternatives

Example: Bridge Construction in Place

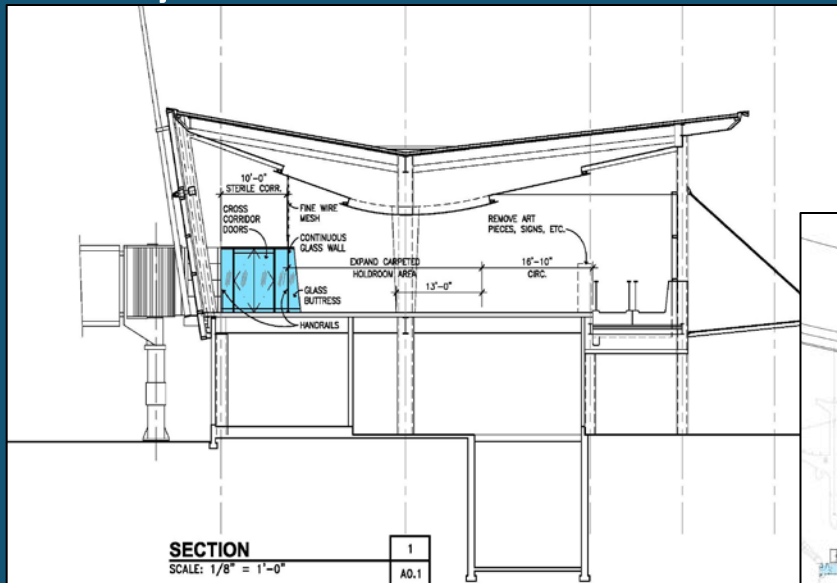


Assembly Area at Cargo 2

Rejected

Tested Alternatives

Example: Sterile Corridor Within Concourse A



Cross Section of Concourse A



Rejected

Program Budget

Independent Estimator Results (Sept. 2014):	\$631M
Program Alternatives Accepted (deduct):	-\$ 39.7M
Program Alternatives Accepted (add):	<u>+\$4.7M</u>
Resultant Target Budget:	\$596M
Cost Reduction Alternatives Rejected:	-\$111.6M

Program Cost Reduction Alternatives Considered & Rejected

International Arrivals Facility:

- At grade bag claim and secondary -\$32.0M
- Reduce size of bag claim -\$17.7M
- Delete security checkpoint -\$11.5M
- Eliminate new vertical circulation at GML Hall -\$9.1M
- Remove re-check ticket counter -\$6.9M

International Corridor:

- Corridor within Concourse A -\$22.0M

Bridge:

- Bridge constructed in place -\$12.4M

Total -\$111.6M

Program Alternatives Accepted (Deducts)

- Postpone Sterile Corridor A3-A6 -\$18.7M
 - Eliminate security checkpoint
accommodation for passengers originating
in Seattle -\$2.9M
 - Ramp to GML Hall -\$11.8M
 - Eliminate egress stair enclosures -\$6.3M
- \$39.7M

Program Alternatives Accepted (Adds)

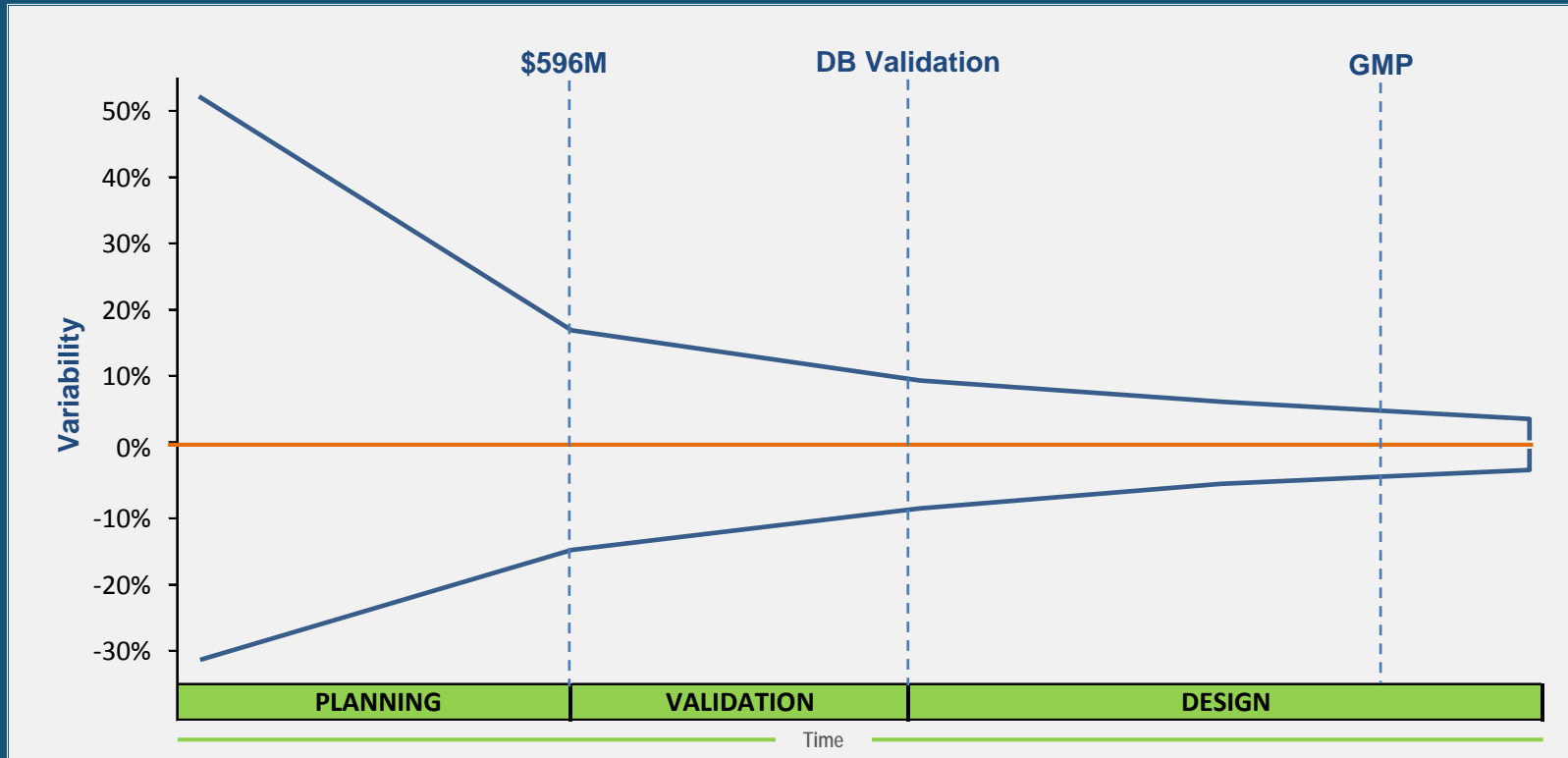
- Future 2-way Bridge Capability +\$4.7M

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Range of Cost Certainty

100% Planning, 0% Design



Adapted from the Association for the Advancement of Cost Engineering International variability in estimate accuracy ranges for Building and General Construction Industry

Current Project Scope

IAF

Major Program Components

IAF

- FIS – per CBP Standards
- Recheck
- Security Screening Checkpoint for connecting passengers only
- Provision for future expansion of IAF bag claim
- Maintain South GT Lot/Allow future domestic baggage system expansion
- Maintain South Loading Dock

Concourse A
Sterile Corridor

- Elevated corridor with multiple circulation cores
- Provision for future expansion to Gates A3 – A6

Bridge

- Remote assemble, transport and install
- Provision for future 2-way passenger flow

Notification to Design Builder Teams

- Notify prospective firms of updated cost range
- Confirm Statement of Qualifications 12/24/2014 deadline
- Proposers told to watch this commission briefing so all have the same information on this program

Commission

- Next Briefing
 - Timeline for start of design and construction activities
 - Update on capital budget and funding plan
- Next Action Item
 - Authorization to advertise RFP to shortlisted teams

Questions?