

ITEM NO: 7b Supp

DATE OF MEETING: April 9, 2013

# Sea-Tac Airport International Arrivals Facility

## Commission Briefing



# Briefing outline

- Review historic and projected airport activity and existing conditions for arriving international passengers
- International Arrivals Facility (IAF) planning progress
- Work to make the most of the existing facility with modest improvements and mitigation
- Coordination with airlines and Customs and Border Control (CBP)
- Review IAF facility expansion alternatives
- Recommendation and next steps

# Commission Century Agenda

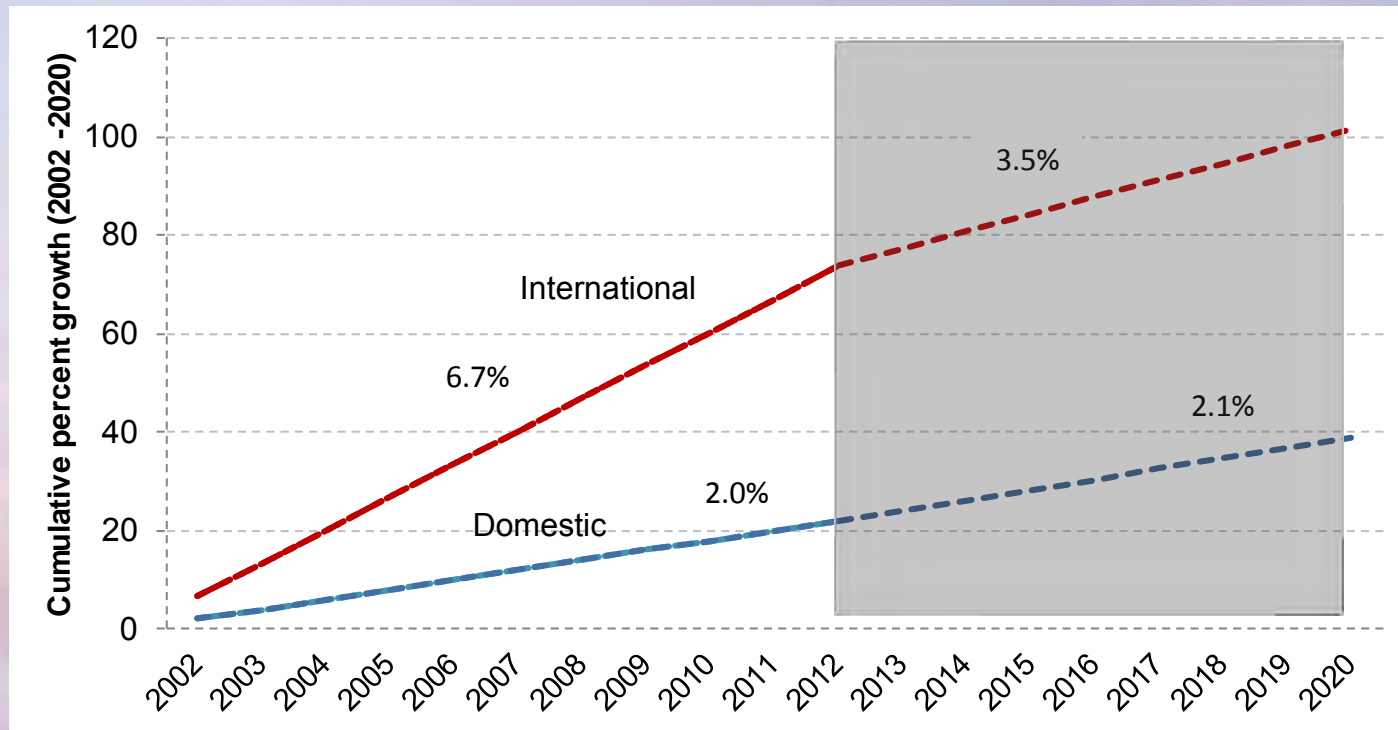
- 25 year vision to advance region as a leading tourism and business gateway
  - Make Sea-Tac Airport the West coast “Gateway of Choice” for international travel
  - Double international flights and destinations
  - Meet region’s air transportation needs at Sea-Tac Airport for the next 25 years, and encourage cost-effective expansion of domestic and international passenger and cargo service
  - Double the economic value of cruise traffic to Washington State

# 2012 passenger traffic

- Passenger traffic - overall
  - 33.2 million total passengers
  - approx. 73% originating and 27% connecting airport-wide
  - 1.6 million arriving international passengers (incl. Canada)
  - Alaska Air Group (AAG) largest share of international passengers
- Passenger traffic – requiring Federal Inspection Services (FIS) clearance on arrival
  - 1.2 million arriving international FIS passengers
  - 33% of arriving international passengers connected to domestic flights
    - 50% of passengers arriving from Asia connect to domestic flights
    - 25% of passengers arriving from Europe connect to domestic flights
  - Delta Air Lines has the largest share (28%) of passengers requiring FIS processing

# International growth to outpace domestic

- International passengers forecast to grow at 3.5% annually to 2020



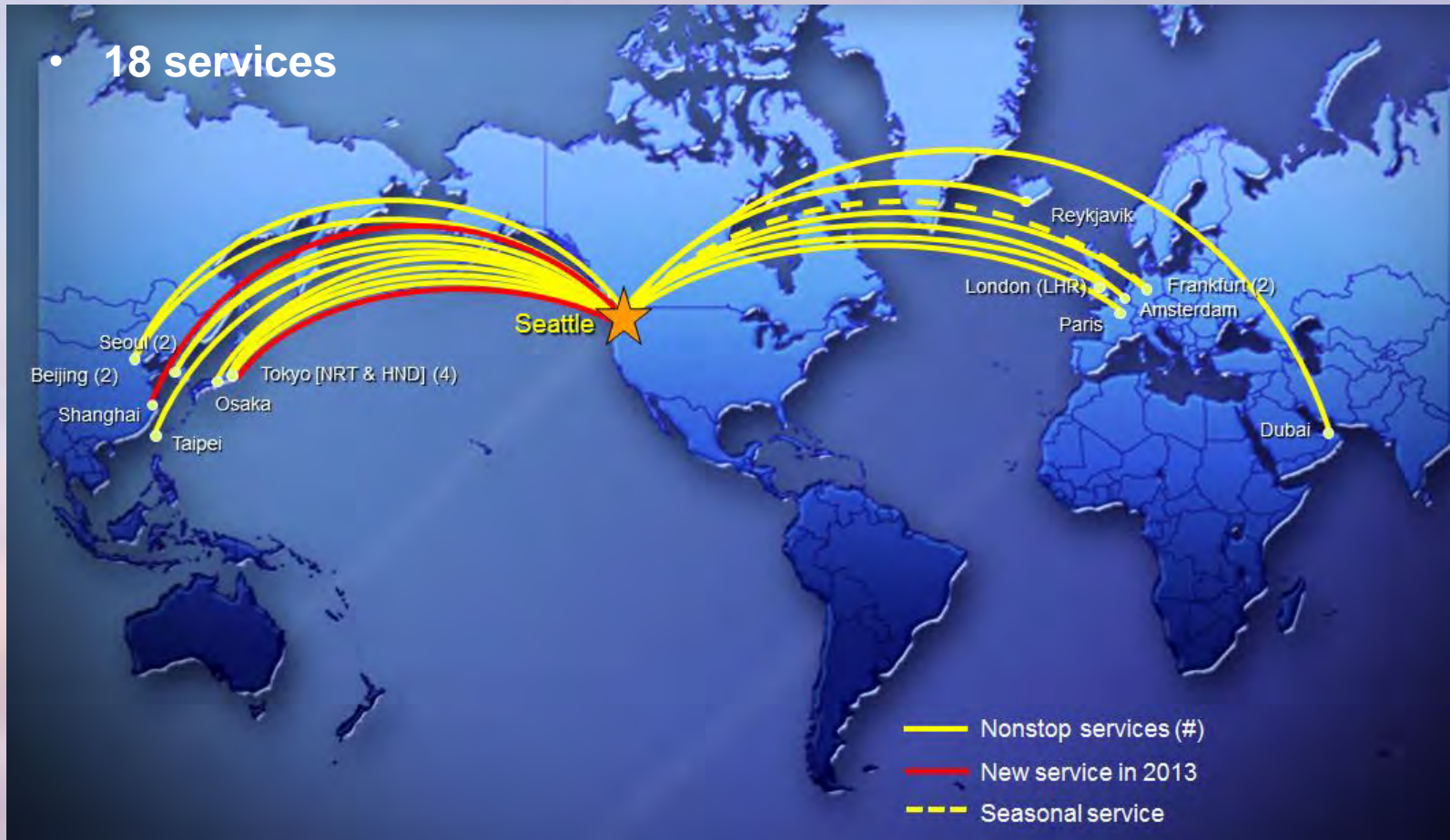
Source: airline reports (historic), and Part 150 forecast (projected).

# South satellite has reached capacity

- Originally constructed 1973 for 600 peak hour passengers
- Significant addition in 1983 to accommodate 1200 peak hour passengers
- Passenger activity reached facility capacity in 2013

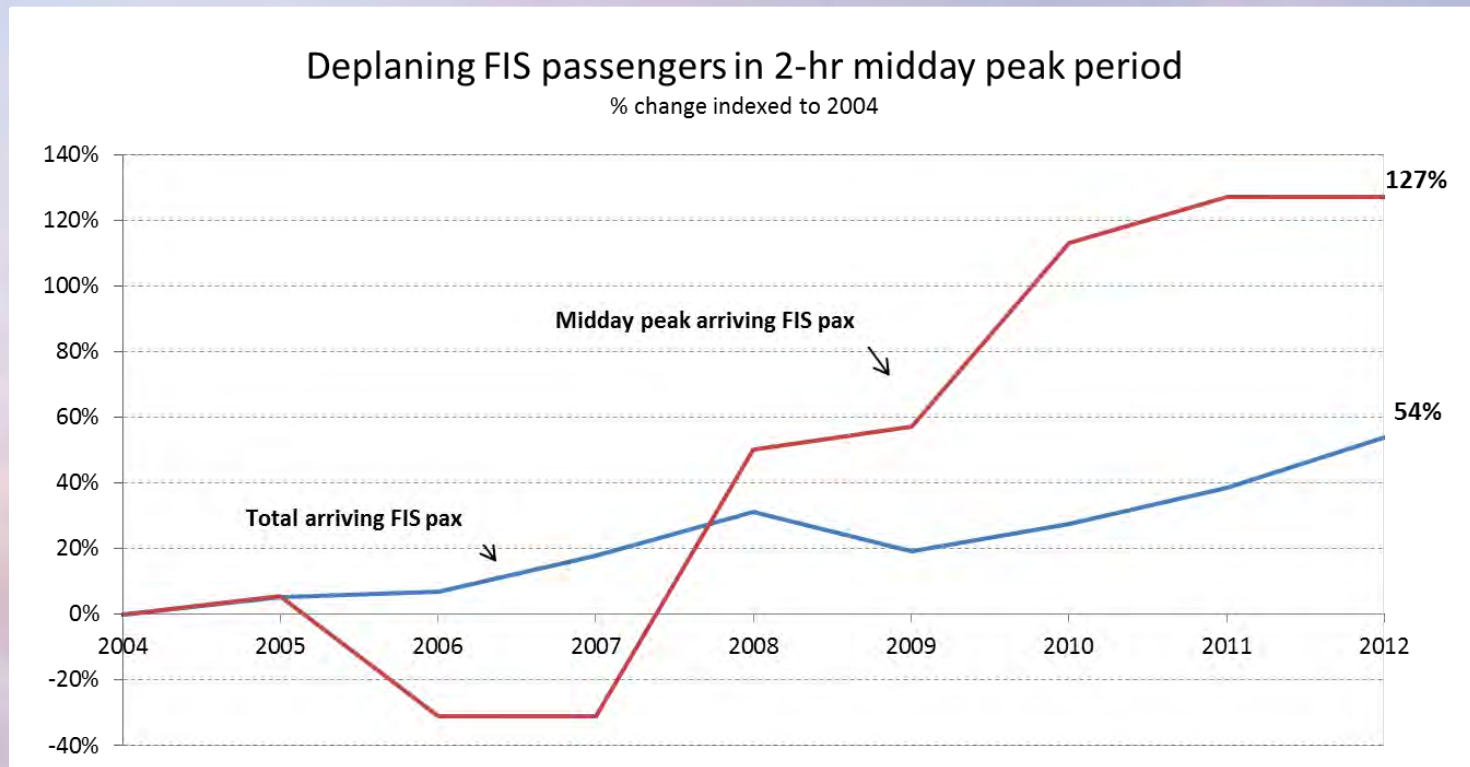


# Nonstop intercontinental service: 2013



# Mid-day peak increased 127% since 2004

- 54% increase in international passengers
- Peak volumes drive capacity, not annual volumes

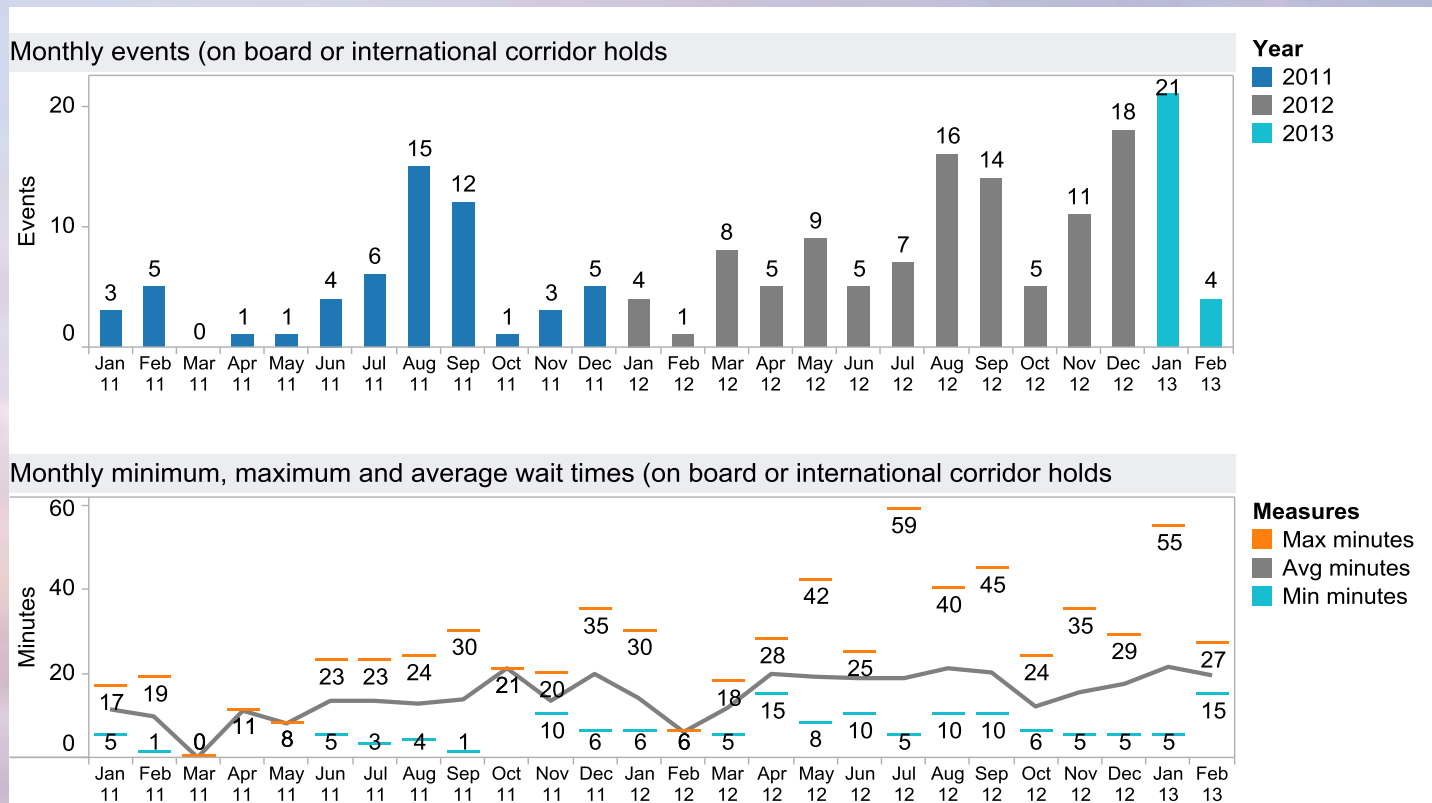


Source: airline reports and flight schedules



# Inadequate capacity results in passengers being held on planes or in sterile corridor

- Frequency of hold on plane or corridor events increasing



Source: Port of Seattle Operations Department records

# At capacity, no room for growth

- Facility has reached capacity at peak, risk of gridlock without improvements
- Anticipated 50% increase in peak hour, 600 passengers beyond capacity over the next 5 to 10 years
- 5 years to design and construct new facility – time to act is now

# Remote location

- Forces terminating passengers to double-claim bags
- Confusing route to main terminal bag claim and arrivals hall
- TSA security checkpoint inefficient and no room for expansion
- Expensive train capacity project needed if IAF remains at SSAT location

# Poor customer experience

- Congestion
- Difficult wayfinding
- Inadequate HVAC - “sauna like” atmosphere
- Holding area too small to accommodate peak
  - Lengthy queues
  - Hold passengers on aircraft or in sterile corridor



## Action needed on two fronts

- Operate existing facility with modest improvements and mitigation until a new facility can be completed
- Proceed with planning and design of new facility with goal of 2018 completion

# Making the most of the existing facility

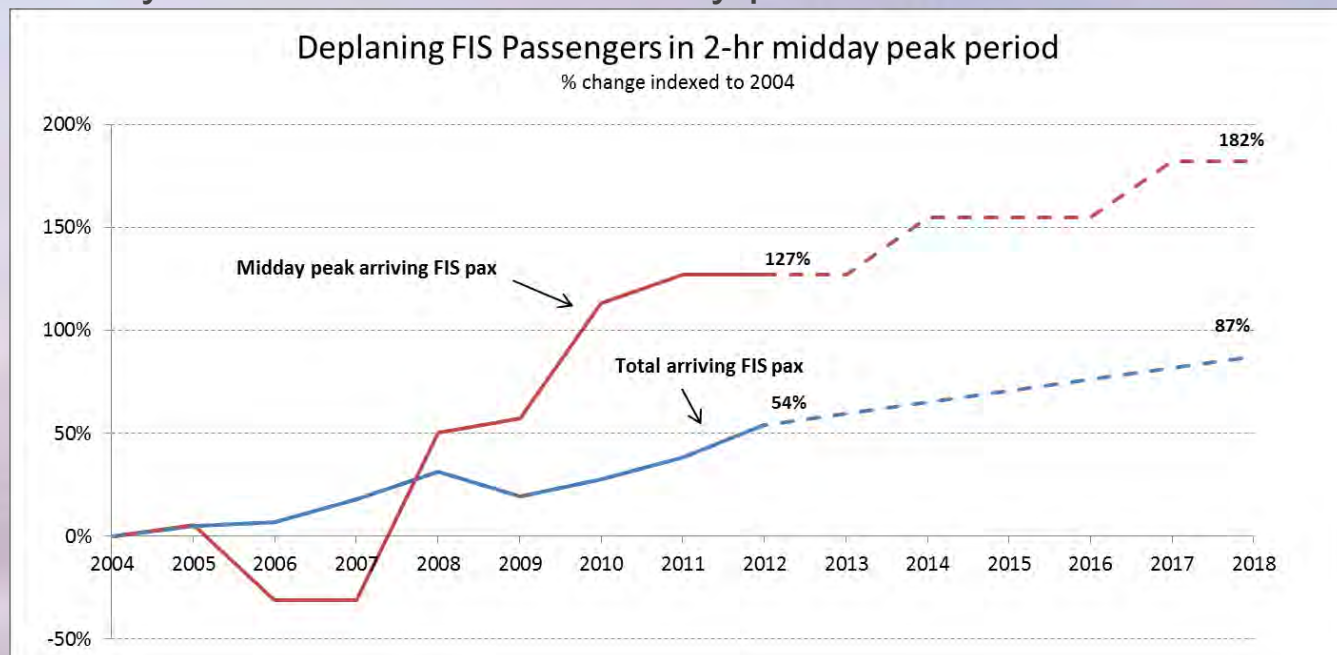
- Implemented numerous short-term measures to optimize existing facility
  - Hired full-time manager to improve IAF operations
  - Reassigned Port customer service “Pathfinders” from main terminal
  - Increased primary inspection capacity from 20 to 30 booths
  - Installed 3 Global Entry kiosks – plans for 3 additional in 2014
  - Gained commitment from CBP to increase and optimize “surge” staffing-opening 2-4 additional booths when needed
  - Worked with airlines and ground handlers to manage “just in time” baggage delivery
  - Improved air conditioning and escalators

# Making the most of the existing facility

- Upcoming short-term improvements
  - 2 new elevators
  - Removal of “grade crossing”
  - Reconfigured/improved TSA checkpoint
  - Public Address System
  - Improved wayfinding at FIS exit
- Developed plans for hardstand busing operation may begin summer 2013
- Developed plans for 12<sup>th</sup> South Satellite wide body gate
- Determined operational workarounds will not meet long-term needs

# Projected international peak

- Anticipated 50% increase in peak hour, 600 passengers beyond capacity over the next 5 to 10 years
- Growth anticipated to come primarily from new service to Asia
- SEA is key to Delta's Pacific Gateway plan



Source: airline reports and flight schedules



# Serious problems post 2018 without new IAF

- Passengers held on board aircraft
- Busing passengers from remote hardstands
- Backup at primary
- Lack of bag claim device capacity
- Checkpoint queue space exceeded
- Train system capacity exceeded
- Passengers missing connections to domestic flights
- Increasing aircraft towing with operations split onto two gates

# SEA lagging competition

- Vancouver International Airport (YVR)
  - Aggressive strategy to reduce connection time and simplify the process for international passengers
  - \$600M in planned improvements, marketing and branding
- Other major international airports on the West Coast
  - Los Angeles & San Francisco have new and enlarged facilities
- Potential loss of market share

**Vancouver**



**San Francisco**



**Los Angeles**



# Sea-Tac one of the oldest IAF facilities in North America

Rank	Airport	Recent (in operation)	Design	Planning
1	New York JFK (Terminal 1,4,7,8)	■ < 5 Yr		
2	Miami (Concourse J)	■ < 5 Yr		
3	Los Angeles (Bradley Terminal)	■ < 5 Yr		
4	Newark Liberty (Terminal B)		■ >20 Yr	
5	Chicago O'Hare	■ <15 Yr		
6	Atlanta	■ < 5 Yr		
7	Toronto	■ <10 Yr		
8	San Francisco	■ >10 Yr		
9	Houston Bush (Terminal E)	■ <10 Yr		
10	Washington Dulles	■ < 5 Yr		
11	Dallas Fort Worth	■ <10 Yr		
12	Philadelphia	■ < 5 Yr		
13	Vancouver	■ <10 Yr		
14	Boston Logan (Terminal E)	■ < 5 Yr		
15	Honolulu		■ >20 Yr	
16	Fort Lauderdale			■ >30 Yr
17	Orlando			■ >30 Yr
18	Detroit	■ <10 Yr		
19	<b>Seattle-Tacoma</b>			■ <b>&gt;40 Yr</b>
20	Charlotte			■ >30 Yr
21	Minneapolis (Humphrey Terminal)	■ <10 Yr		
22	Las Vegas McCarran	■ < 5 Yr		

# Airline partner coordination

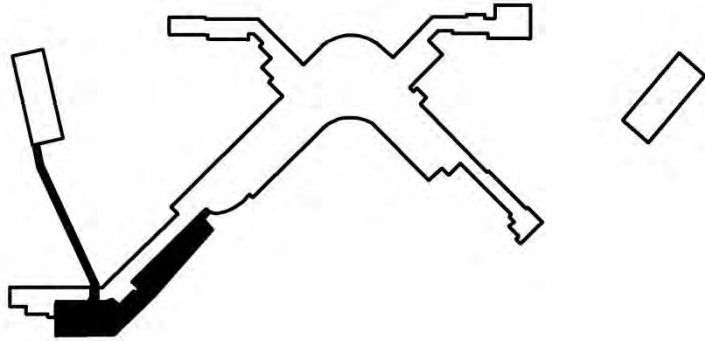
- Series of meetings with Delta Air Lines
  - Meetings and tour of new Atlanta International Terminal
  - Worked with Delta representatives to develop and prioritize alternatives
  - Shared data and coordinated analysis of alternatives
  - Ensured alternatives are consistent with Delta's Pacific Gateway plans
- Meeting with AAAC and International Airline Station Managers

# Long-term facility planning objectives

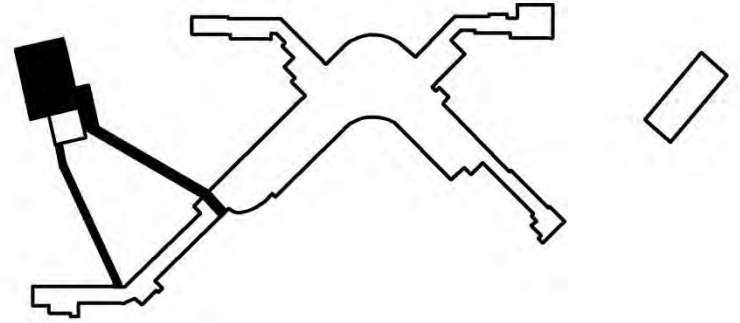
- Deliver just in time capital improvements
- Minimize capital and operational costs
- Minimize long-term cost of ownership
- Encourage international service
  - Minimize connect times for transfer passengers
  - Provide world class facilities/experience

# IAS expansion options

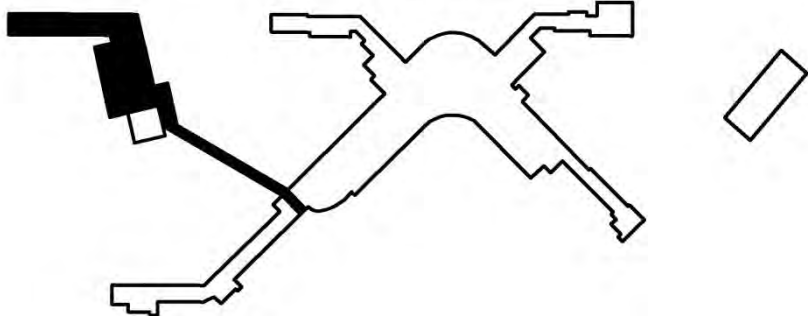
**Option 1: New Concourse A IAF**



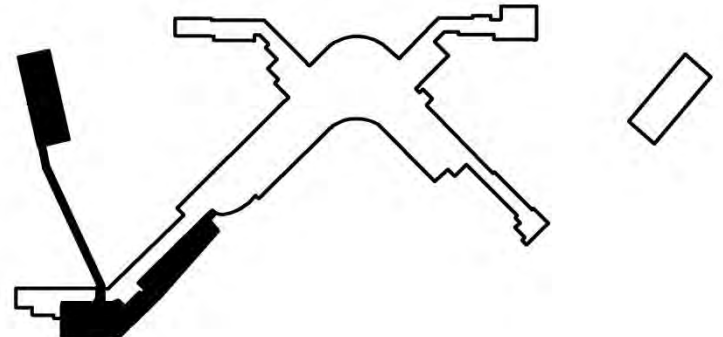
**Option 2: Expand South Satellite IAF**



**Option 3: Expand South Satellite IAF  
*with additional gates***



**Option 4: Dual Processing IAF**



# Option 1: New Concourse A IAF

- International arrivals on South Satellite and Concourse A
- Bridge or tunnel connection from South Satellite to Concourse A IAF
- Cost: \$250M - \$300M



FIS Planning Options  
Option 1 - New Concourse A IAF

## Option 2: Expand South Satellite IAF

- International arrivals on South Satellite and Concourse A
- Bridge or tunnel connection from Concourse A to South Satellite IAF
- Train connection from South Satellite to Concourse A
- Cost: \$320M - \$385M

### REJECTED

- Underground expansion & train expensive w/ significant impacts to airside & FIS operations



FIS Planning Options  
Option 2 - Expand South Satellite IAF Facility



## Option 3: Expand South Satellite IAF

- International arrivals on South Satellite only
- Above ground expansion accommodates 5 additional gates
- Train connection from South Satellite to Concourse A
- Cost: \$545M - \$655M

### REJECTED

- Most expensive of four options
- Above ground expansion requires relocation of Alaska Airlines maintenance hangar



FIS Planning Options  
Option 3 - Expand South Satellite IAF Facility

## Option 4: Dual Processing IAF

- International arrivals on South Satellite and Concourse A
- Existing South Satellite IAF renovation (transfer passengers)
- New Concourse A IAF (local passengers)
- Bridge or tunnel connection for two way flow between South Satellite and Concourse A
- Cost: \$335M - \$405M



FIS Planning Options  
Option 4 - Dual Processing IAF Facility

# IAF Options 1 & 4 pros & cons

CRITERIA	Option 1 <i>New Concourse A IAF</i>	Option 4 <i>Dual Processing IAF</i>
<b>Capital cost</b>	+ \$250M - \$300M	○ \$335M - \$405M
<b>Constructability</b>	+ Build entire shell in Phase 1 - lower cost  + Easy to maintain FIS ops during construction	- Build shell in two phases - higher cost - Requires more square footage  + Conc A - Easy to maintain FIS ops during construction - SSAT - Difficult to maintain FIS ops during construction
<b>Customer experience terminating PAX</b> (67% of total)	+ Local PAX exit IAF on landside + International arrivals hall works as intended	+ Local PAX exit IAF on landside - Congested PAX flow & confusing at aircraft exit
<b>Customer experience transfer PAX</b> (33% of total)	- Difficult PAX connections - time and level changes	○ Faster PAX connections - relatively difficult way-finding - Congested PAX flow & confusing at aircraft exit
<b>Operational cost/efficiency</b>	+ Lower O & M cost	- Higher O & M cost - Requires more staff to operate
<b>Anticipates longer-term development w/ least</b>	+ Anticipates bag claim expansion & mid-term train capacity	+ Anticipates long-term train expansion
<b>Ability to develop as gateway hub</b>	○ Slower PAX connections, could be made faster with additional investments elsewhere  + Shorter baggage connections	- Longer baggage connections
<b>Renewal of aging facility</b>	+ Renewal occurs as part of redevelopment	- Renewal could be viewed as discretionary
<b>Branding identity</b>	+ Above ground landside location  + Natural advantages of views & daylight Bridge offers dramatic views of region	○ Above ground landside location ( <i>terminating PAX only</i> )  + Natural advantages of views & daylight Bridge offers dramatic views of region

# Next steps

- Additional alternatives analysis
- Evaluation and recommendation of preferred option
- Project definition
- Environmental review
- Seek Commission design authorization summer 2013
  - Procure design services to begin work on preliminary design
  - Date of opening 5 years following project approval