

MAJOR PROJECT AUTHORIZATIONS

North Satellite and International Arrivals Facility

Seattle and Sea-Tac Face Challenges, but Are Envy of Other Cities /Airports

- Fastest growing U.S. city (of top 50)
- Increasingly internationally-oriented economy
- Hometown airline (Alaska) quite profitable
- Principal international airline (Delta) building major Asian gateway

Growth at Sea-Tac Airport

- Among fastest growing airports in the U.S.*
 - Most recent 12 months – 4.8%, 2nd fastest
- One of fastest growing international airports
 - 2013: 10.2%, 2nd fastest
 - 2012: 8.8%, 5th fastest
- Century Agenda: Double international flights and destinations in 25 years
 - Have already added five intercontinental destinations in first 4 years, 40% toward goal.

*comparisons to top 20 busiest U.S. airports

Growth at Sea-Tac Airport

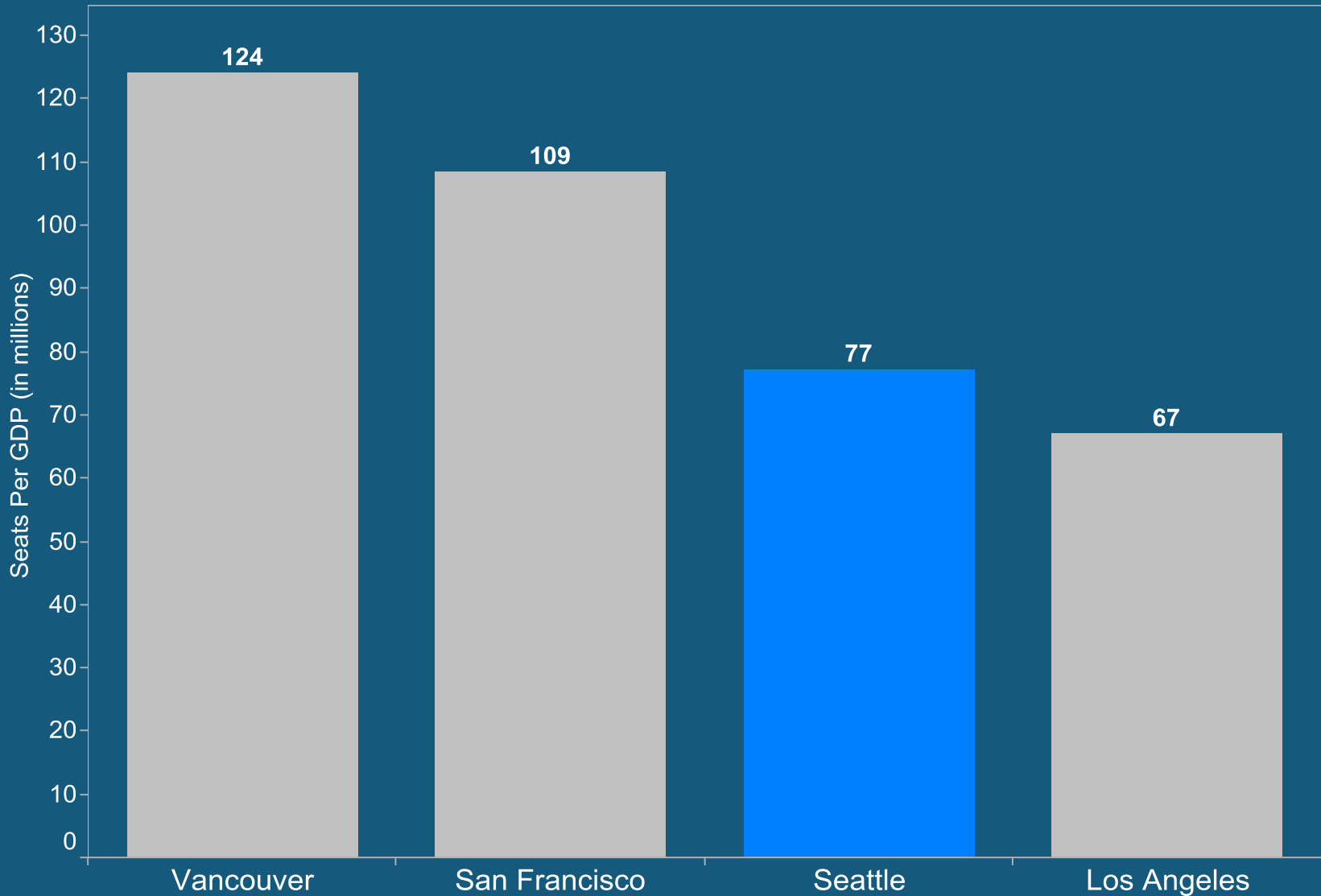
- Delta:
 - December, 2014 - 95 daily departures vs. 35 in 2013
 - Projects 150 daily departures in 2017
 - Has added six intercontinental destinations since 2007
- Alaska:
 - Added 8 daily departures in past 12 months

Growth at Sea-Tac Airport

- Master Plan Forecast:
 - Preliminary analysis indicates DL/AS growth projections are sustainable -- reasonable growth expectations for five year period; will eventually revert to more modest growth
 - In line with what has happened at other airports
 - Staff will provide full briefing in August
- Facilities Planning:
 - Must start focusing on post-NorthSTAR needs

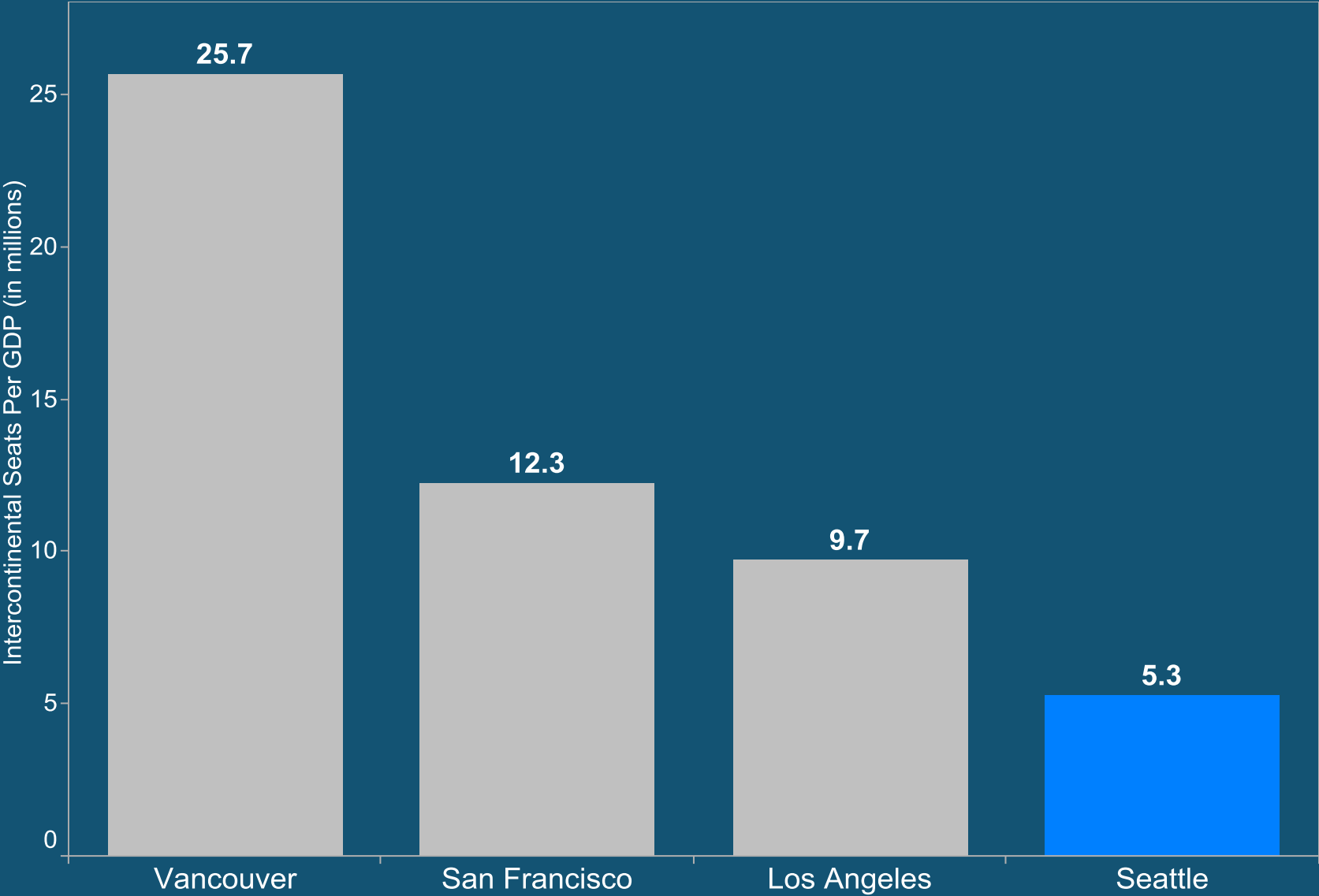
SEA is underserved in relation to GDP:

Total seats per million dollars of regional GDP, 2013



SEA significantly underserved on intercontinental service:

Total intercontinental seats per million dollars of regional GDP, 2013



San Francisco includes SFO, OAK, and SJC. Los Angeles includes LAX, LGB, SNA, BUR, and ONT. Source: US Census, StatsCanada, Diio Mi Scheduling Data. CY 2013. 7

Sea-Tac is Ideal Asian Gateway

Origin City	Connecting via	Flight Duration to:		
		Shanghai (PVG)	Ho Chi Minh City (SGN)	Seoul (ICN)
DENVER (DEN)	LAX	13:02	16:01	12:09
	SFO	12:37	17:35	11:45
	SEA	11:58	14:59	11:04
CHICAGO (ORD)	LAX	14:36	17:35	13:43
	SFO	14:11	17:10	13:18
	SEA	13:12	16:13	12:18
BOSTON (BOS)	LAX	16:08	19:07	15:16
	SFO	15:42	18:42	14:50
	SEA	14:34	16:13	13:40
WASHINGTON (IAD)	LAX	15:33	18:33	14:41
	SFO	15:12	18:11	14:19
	SEA	14:14	17:15	13:20

NorthSTAR – Need for Additional Gates at North Satellite

- Very Conservative Assumptions re Gate Demand When Project Complete in 2020
 - Delta: 2014 (old) schedule – 80 departures
 - Alaska: 2017 projection (old) - 291 departures
 - Other airlines: No growth
- All Gates Available at All Times
- “Gated” Every Anticipated Flight
- Need 4 More Gates for Peak AM/PM Need

12 ungated flights require 4 additional gates

2020 NorthSTAR/Airport Wide Gating Analysis

NORTH SATELLITE

12 Ungated flights require 4 additional gates

Legend

- Gate unavailable due to adjacent use
- Aircraft on gate/RON
- Buffer

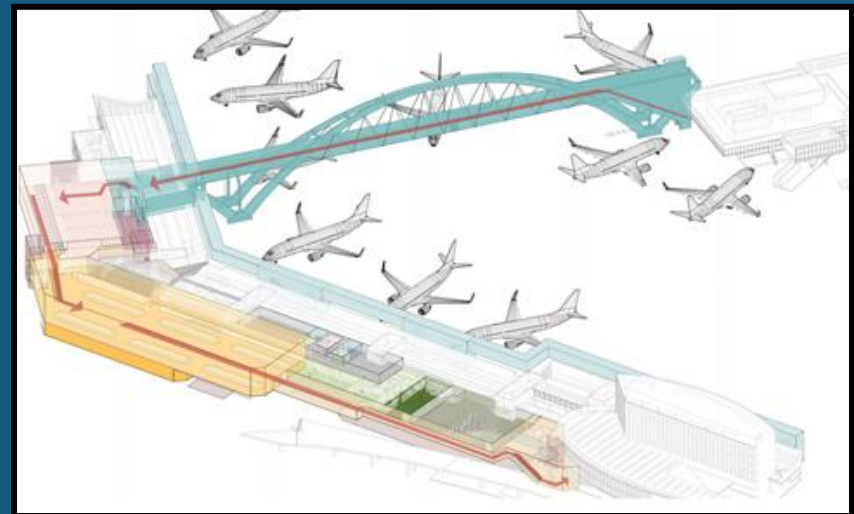
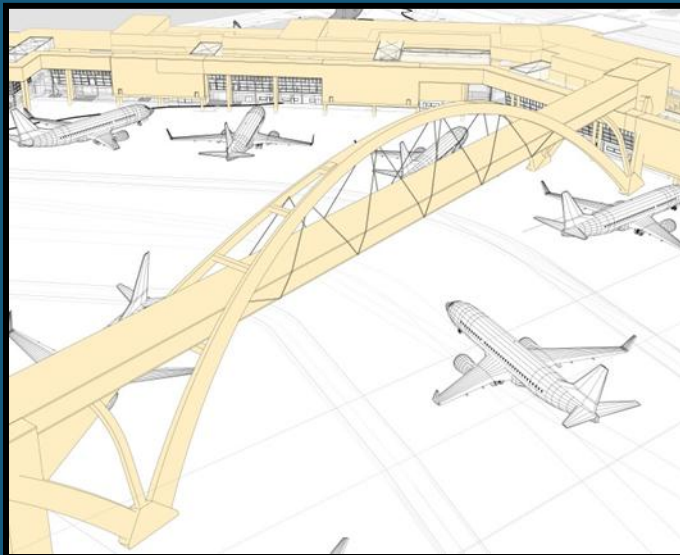
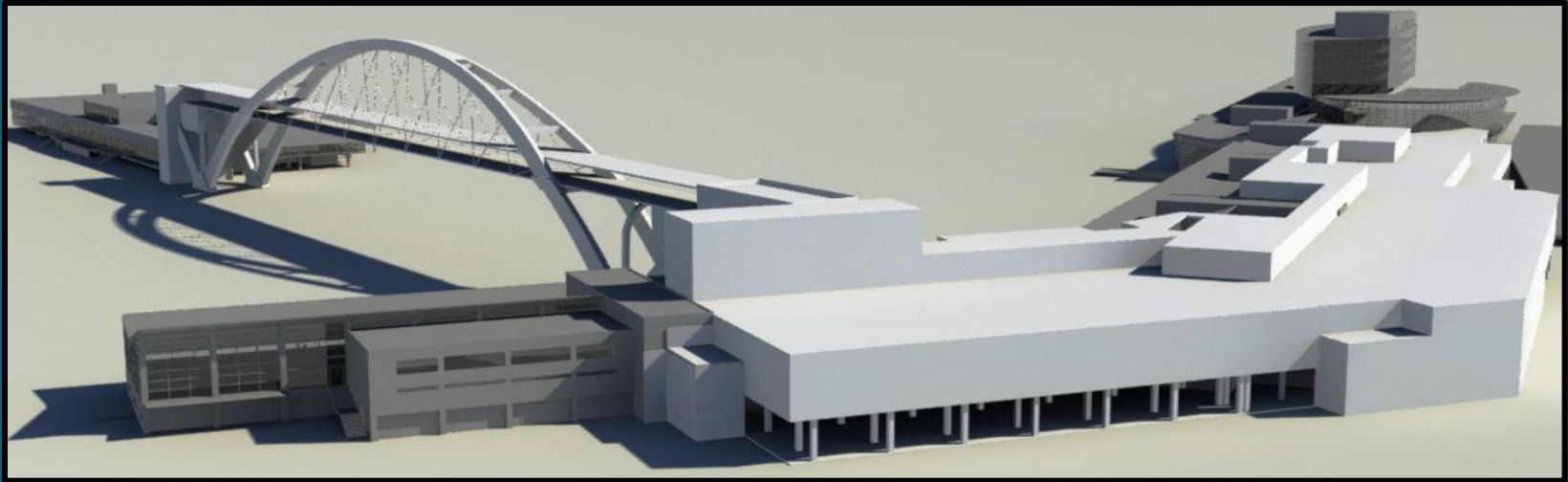
Concourse	Position	Max AC Type	12 AM	1 AM	2 AM	3 AM	4 AM	5 AM	6 AM	7 AM	8 AM	9 AM	10 AM	11 AM	12 PM	1 PM	2 PM	3 PM	4 PM	5 PM	6 PM	7 PM	8 PM	9 PM	10 PM	11 PM
NSAT	N1	B-737-900WL							B-737-400 AS /ANC																	
NSAT	N2	B-737-900WL	B-737-800WL AS LAS/						B-737-800WL AS /SAN																	
NSAT	N3	B-737-900WL							B-737-900WL AS /SAN																	
NSAT	N4	B-737-900WL							B-737-400 AS /INU																	
NSAT	N5	B-737-900WL	B-737-400 AS INU/						B-737-400 AS /KTN																	
NSAT	N6	B-737-900WL							B-737-900WL AS /SNA																	
NSAT	N7	B-737-900WL							B-737-800WL AS /MSP																	
NSAT	N8	B-737-900WL							B-737-900WL AS /ANC, DAK																	
NSAT	N9	B-737-900WL							B-737-700WL AS /DFW																	
NSAT	N10	B-737-900WL							B-737-800WL AS /SMF																	
NSAT	N11	B-737-900WL	B-737-900WL AS ANC/						B-737-900WL AS /ANC																	
NSAT	N12	B-737-900WL							B-737-400 AS /ANC																	
NSAT	N13	B-737-900WL							B-737-800WL AS /SFO, OGG/																	
NSAT	N14	B-737-900WL							B-737-800WL AS /SIC																	
NSAT	N15	B-737-900WL							B-737-800WL AS /SIC																	
NSAT	New1	B-737-900WL							B-737-800WL AS FAI/ 1																	
NSAT	New2	B-737-900WL							B-737-900WL AS ANC/DAS 2																	
NSAT	New3	B-737-900WL							B-737-800WL AS ANC/ 3																	
NSAT	New4	B-737-900WL							B-737-800WL AS ANC/ 4																	

Sea-Tac More Intensely Uses Gates and Aircraft Parking Positions

2013 Ranking (U.S.)	Airport	Passengers (2013)	Gates*	Passengers per Gate (in thousands)
12	Houston (IAH)	39,799,414	151	264
13	Newark (EWR)	35,016,236	107	327
14	Seattle (SEA)	34,826,741	87	400
15	Orlando (MCO)	34,768,416	96	362
16	Minneapolis (MSP)	33,892,074	114	297
17	Detroit (DTW)	32,389,544	147	220
18	Philadelphia (PHL)	30,504,112	126	242

*Gates are defined as boarding hold area locations in which ticketed passengers are directed for boarding of aircraft.

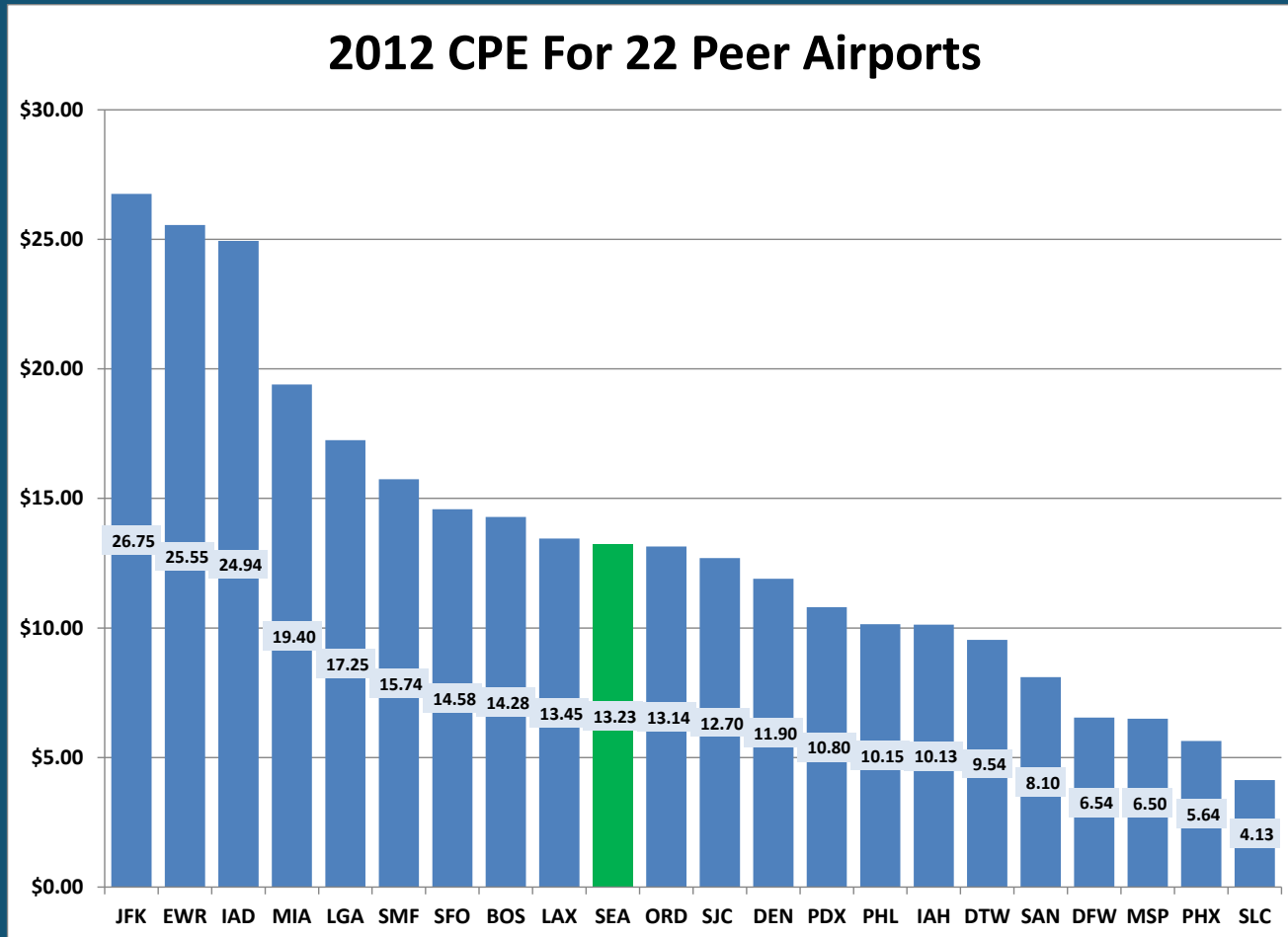
International Arrivals Facility: Bridge Best Connection Option



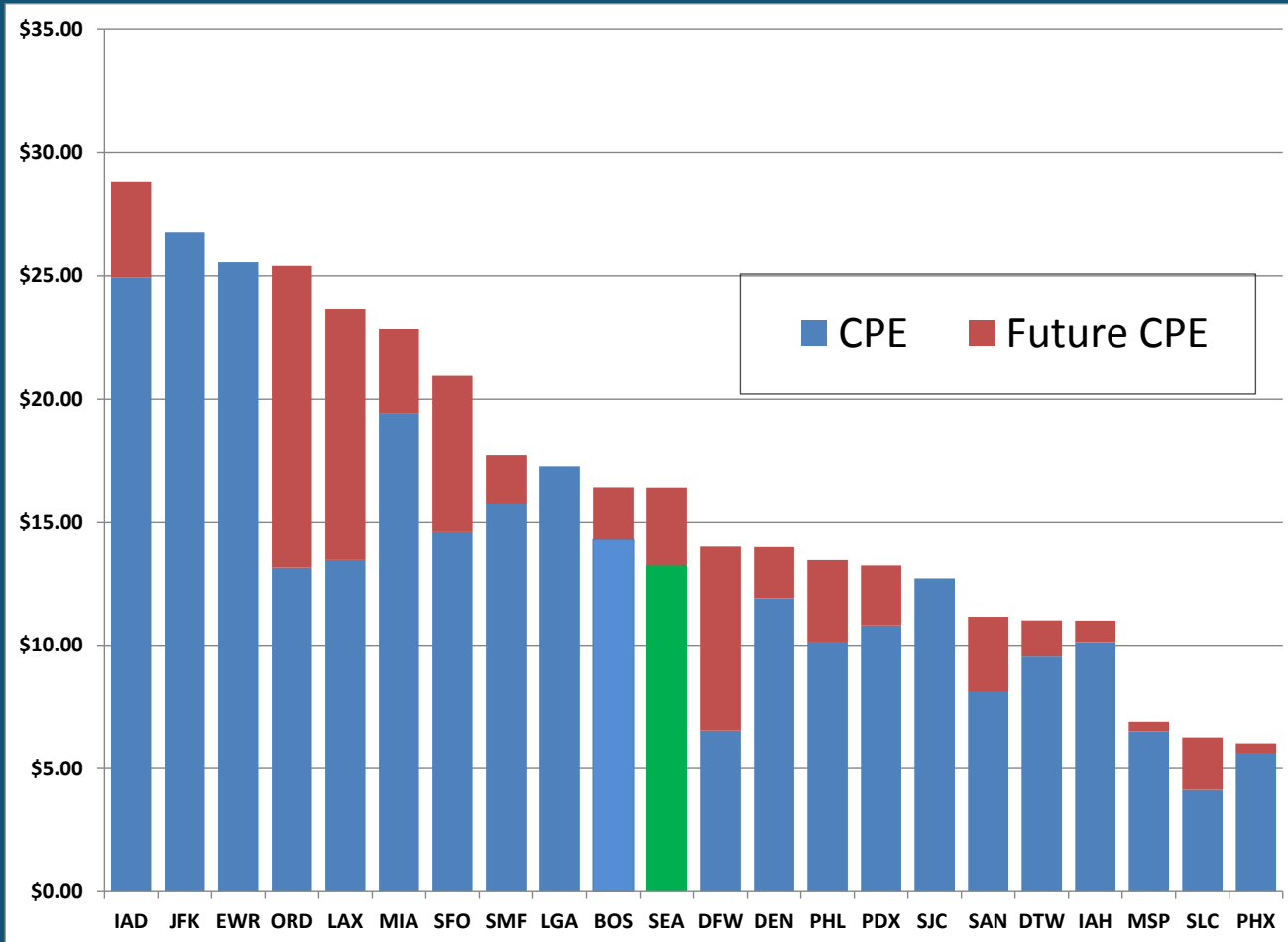
Sensitivity Analysis of Potential Cost Increases for NSAT and IAF

- Key metrics for affordability: Airline cost per enplanement (CPE) and debt per enplaned passenger
- CPE -- Remain in middle third of peer airports
 - Forecast data is available, yet information is not equally up-to-date
- Debt per enplaned passenger
 - Compare against peer airports; no forecast data available for other airports

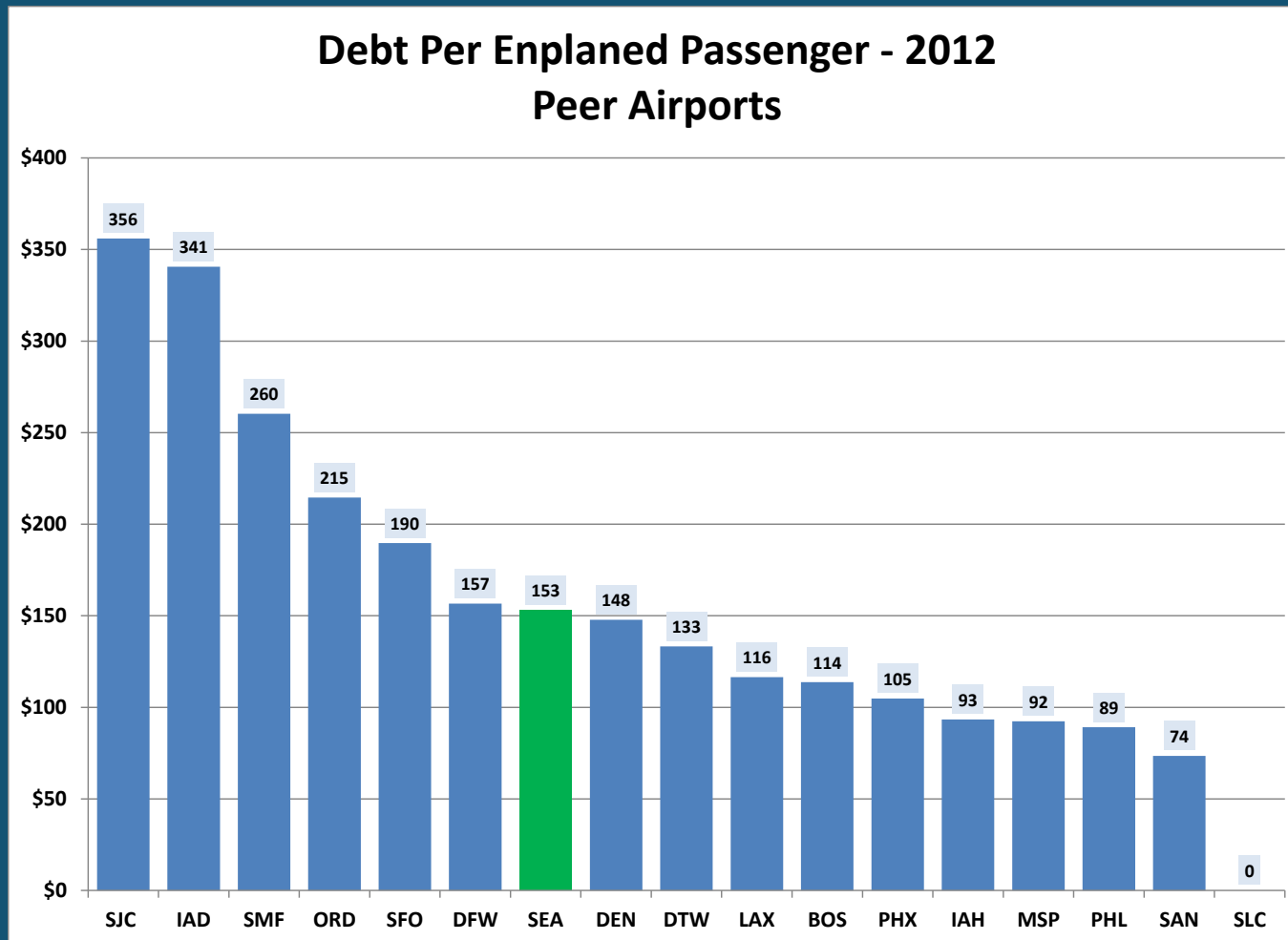
CPE Comparison - Current



CPE Comparison - Future



Debt Per Enplaned Passenger 2012 Peer Airports

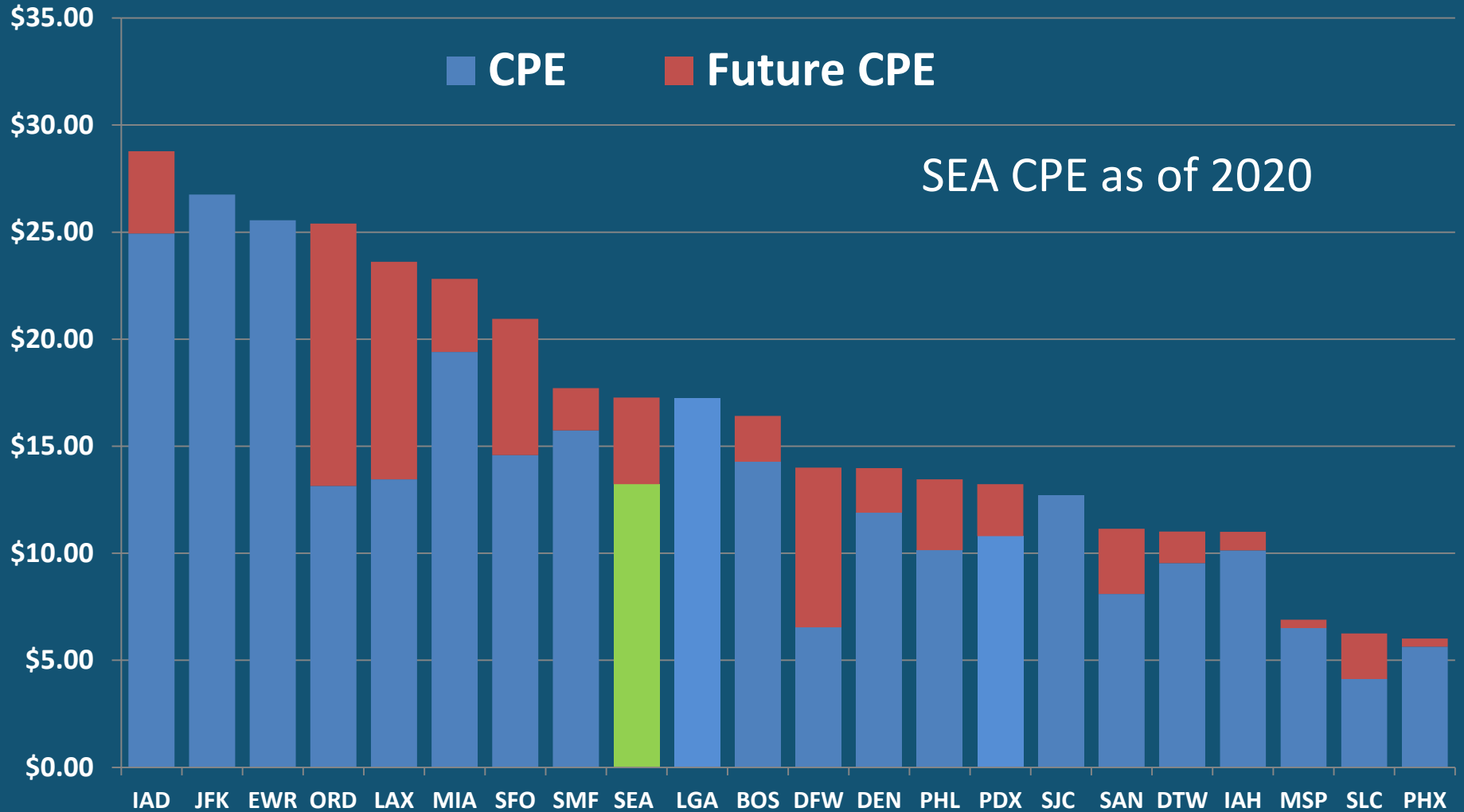


Airports that serve as major hubs have a higher percentage of connecting traffic and thus lower debt per enplaned passenger

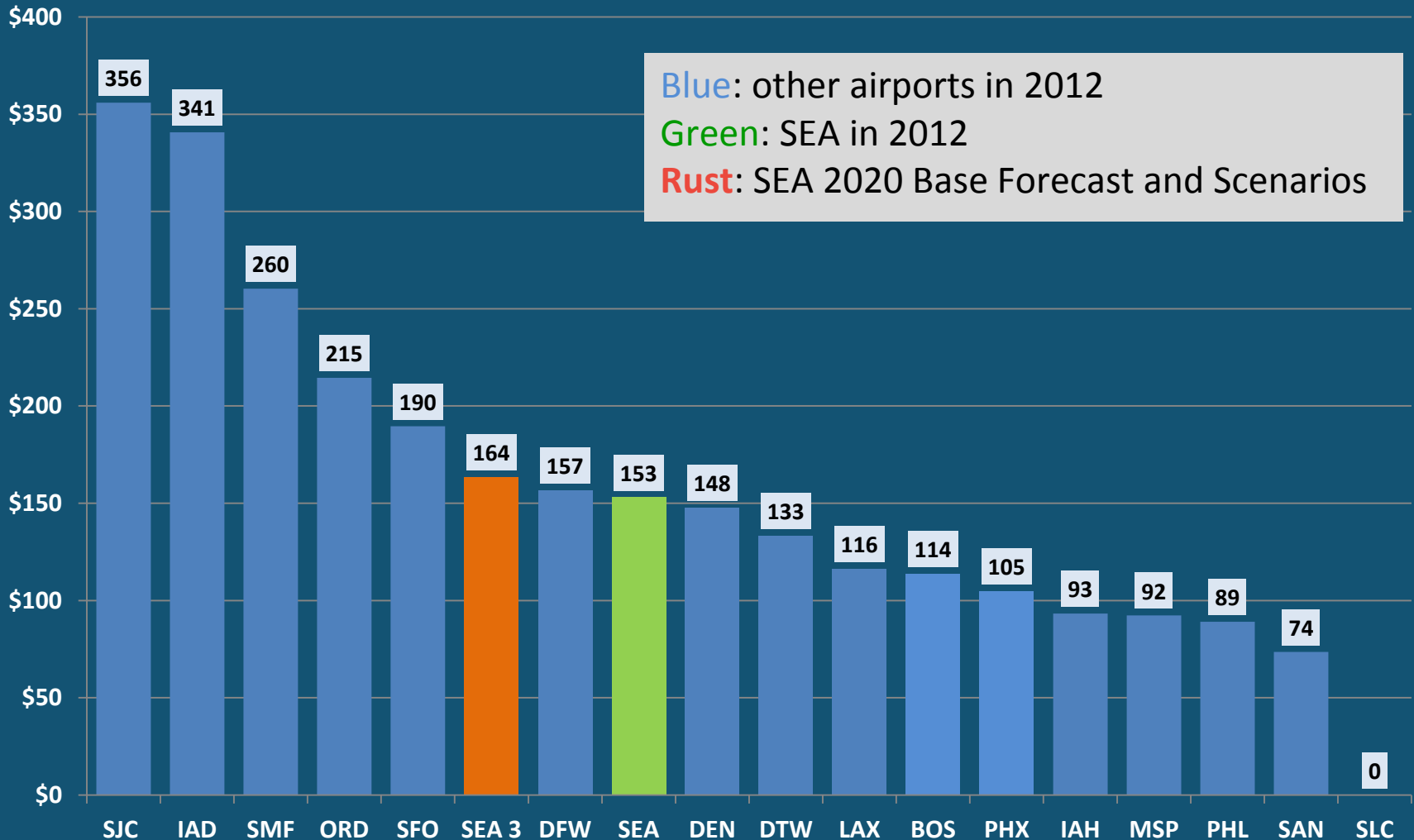
Cost Increase Scenario

- Multiple changes in project costs and enplanement growth, coupled with management response --
 - IAF cost increases by \$122M (\$316M to \$416M in Phase I and \$28M to \$50M in Phase II)
 - NorthSTAR cost increases by \$50M
 - Reduce other capital spending by \$172M
 - Enplanement growth reduced from 2.2% to 1.5% for 2015 – 2019 (CAGR, 2012 through forecasted YE 2014= 5.5%)

CPE Comparison - Future



Debt Per Enplaned Passenger 2012 Peer Airports vs. SEA Forecast



Summary

- Seattle's Economy Driving Growth in Airline Capacity
- Sea-Tac is Ideal North American Gateway to Asia
- Need Additional NSAT Gates and Must Start Planning for Additional Capacity
- Possible Growth in Project Costs Can be Accommodated

International Arrivals Facility Project Progress Briefing & Actions Ahead

Briefing Outline

- IAF Project History
 - Why IAF is needed
 - Comparison to other West Coast Arrivals Facilities
 - Short & long term approach to improvements
 - Project funding and accomplishments
 - Schedule over next 6 months
 - Connector contracting
 - Customer service metrics
 - Next steps: July 29 request

Project History

- Why SEA needs a new IAF
 - Existing facility is outdated, beyond capacity, and provides poor customer service



Project History

- Comparison to other West Coast Arrivals Facilities



SFO



YVR



LAX

Project History

- Two Prong Approach - Short and Long Term:
 - Making SSAT short term improvements in existing facility to meet growing customer demands until IAF opens
 - Reconfigure wayfinding
 - graphics, colors, signs
 - HVAC and stanchions
 - 12th wide body aircraft gate
 - Ramp and plans for hardstand bussing



Project History

- Two Prong Approach - Short and Long Term:
 - Long term improvements – develop the IAF
 - 11 Commission briefings and actions since 2010



Project History

- In July, 2013, Commission authorized \$3.5M
- In March, 2014, Commission authorized \$5M
- Accomplishments in the last 12 months:
 - Validated best and responsive procurement method (PDB)
 - Assembled team (staff, specialty consultant, ATR)
 - Conducted lessons learned effort including visits to other airports and outreach to other public agencies using PDB
 - Completed project planning (including Connector options evaluation)
 - Started cost validation

Schedule

- Cost validation effort initiated 06/30/2014
- Advertise RFQ for DB Team 07/30/2014
- **Commission update** 08/19/2014
- DB Statement of qualifications due 09/09/2014
- **Commission update** 09/09/2014
- Shortlist 3-5 firms as finalists 10/14/2014
- **Commission update, cost validation** 10/28/2014
- Issue RFP to finalists 10/30/2014
- **Commission update** 11/25/2014
- Select IAF DB Team 01/12/2015
- **Commission update** 01/13/2015

Connector Contracting

- Benefits of contracting the design and construction of the IAF and Connector together include:
 - Simultaneous coordination of design and construction
 - Management by a single team
 - Allows faster completion for both airlines and travelers
 - Reduces construction coordination and other risks

IAF Connector Evaluation Criteria

- Passenger Experience
- Capacity/Future Flexibility
- Construction Impacts
- Capital Cost
- Maintenance Cost
- Risk

Evaluation Criteria	Bridge	Tunnel
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Passenger Experience

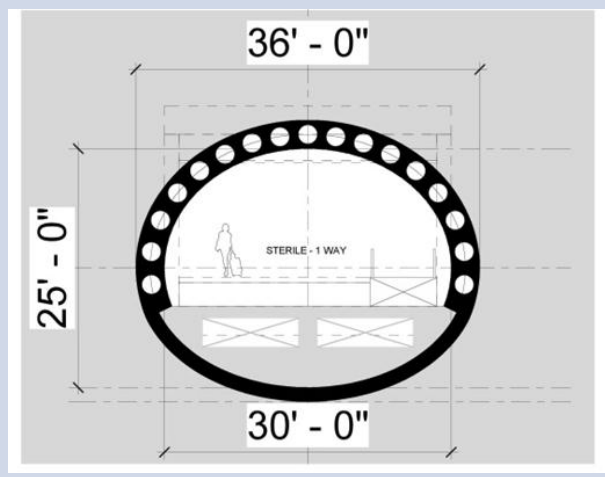
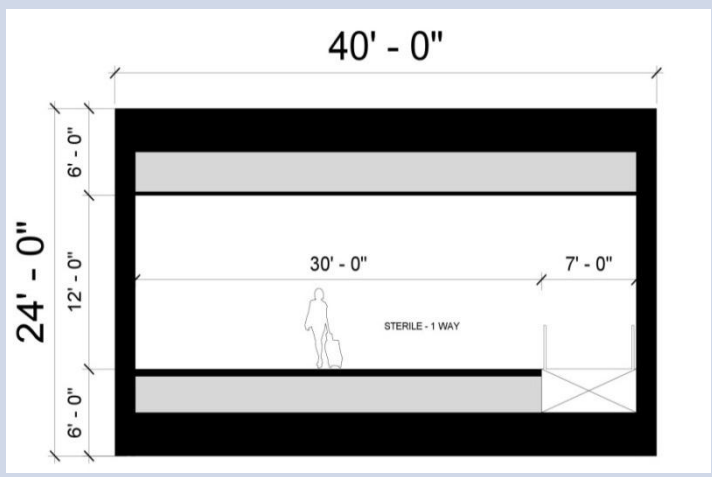
- Natural Light
- Unique views: airfield activity and mountains
- More intuitive way finding

- More lighting necessary
- Interior finishes more important
- More vertical transitions
- Longer passenger route

Capacity/Future Flexibility

- Smaller ramp footprint
- Wider profile allows 2 way passenger flow

- Larger ramp footprint
- Could limit STS expansion



Evaluation Factor	Bridge	Tunnel
Taxi-lane and Gate Impacts	<ul style="list-style-type: none"> • 12 months 	<ul style="list-style-type: none"> • 18 months
		
Initial Capital Cost	<ul style="list-style-type: none"> • Lower (estimated \$12-17M) 	<ul style="list-style-type: none"> • Higher
On-going Maintenance Cost	<ul style="list-style-type: none"> • Slightly higher (estimated \$15-30K/yr) 	<ul style="list-style-type: none"> • Slightly lower

Evaluation Factor

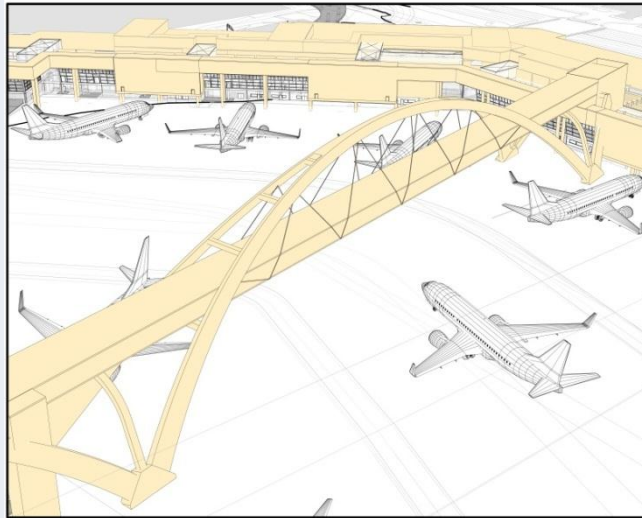
Bridge

Tunnel

Risk

- Scale/Height

- Contaminated/soft soil conditions
- Utilities disruption
- Work under active taxi-lane
- More construction traffic on ramp (soils hauling)



Summary: Bridge is Best Option

- Passenger Experience
 - Offers a better passenger experience
 - Offers a unique opportunity: image and views
- Capacity/Future Flexibility
 - Yields a smaller footprint
 - Offers opportunity for future two way travel
- Construction Impacts
 - Effects less impact to airport operations
- Capital Cost
 - Is more cost effective
- Maintenance Cost
 - Is minimally more
- Risk
 - Presents less risk

Customer Service Metrics

Customer Service at Peak	1973	2013	IAF 2018
International Wide-Body Gates:	~4	11	20
Hold on Boards:	0	23	0
Hold in corridors:	0	339	0
Over Ramp Busing – possible times/day:	0	2	0
Lines at “Primary” (Passport Check):	0	Long	Modest
Crowding at baggage			
International Carousels:	0	Extreme	Low
Terminal Carousel:	0	Medium	Low
Double Bag Handing: FIS & Bag Claim:	Yes	Yes	No
STS Train Wait (minutes):	Low	4 (2 nd Train)	n/a
Minimum Connect Time (minutes):	n/a	90	75

Next Steps: July 29, 2014 Action Items

- Authorize procurement of connector as part of the IAF progressive design build contract
- Authorize additional funding of \$16 million for the new IAF
- Advertise a Request for Qualifications to procure a design-build team
- Authorize use of Port crews

Thank you

