

Item No.
Meeting Date

7a_supp
October 7, 2014

SUSTAINABLE AIRPORT MASTER PLAN (SAMP)

Activity Forecast and Facilities Challenges

Briefing outline

- Master Plan Schedule
- Activity Forecast
 - Forecast development
 - Demand drivers
 - Results
- Facilities Challenges - Near-term and Long Term
 - Gates
 - Check-in lobby
 - Curbs
 - Roadways
- Next Steps

SAMP Milestone Schedule



Forecast influenced by key passenger traffic components.

SEA Key Passenger Traffic Components



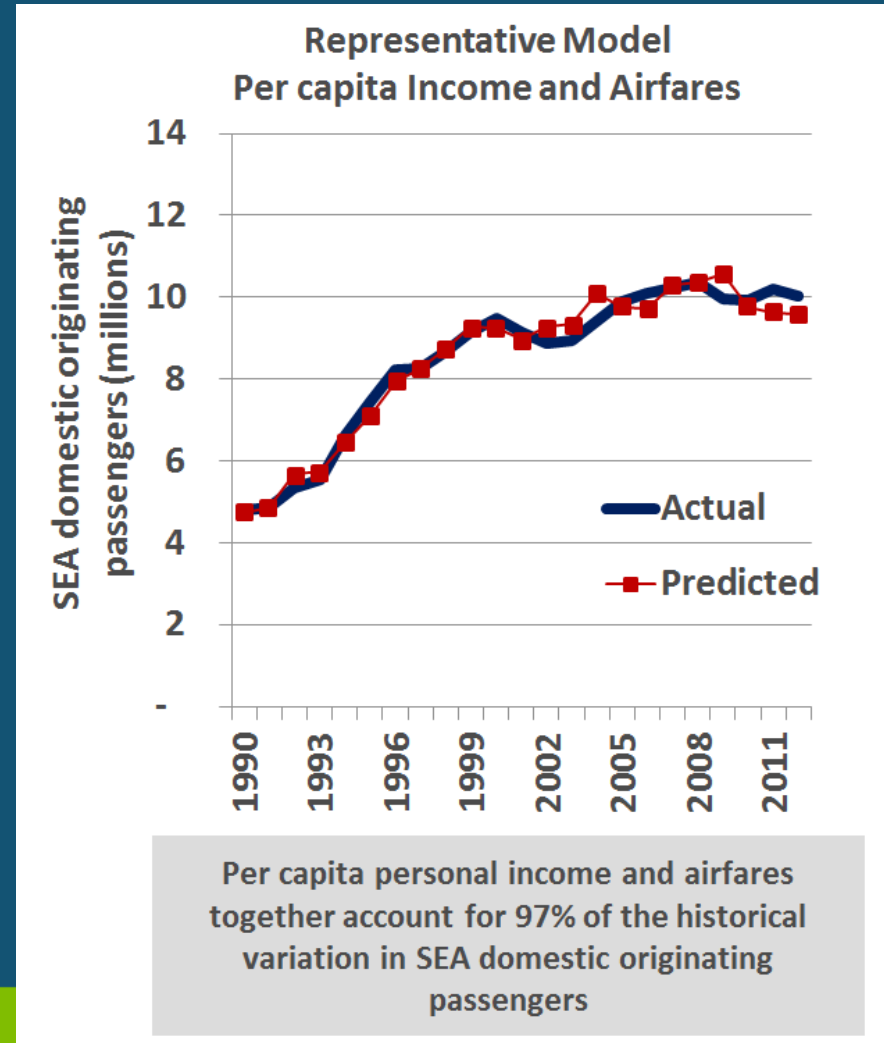
Key Drivers

- Underlying socioeconomic conditions
- Cost of travel (airfares, yields, and LCC seats)
- Airline service decisions related to connecting hub and international gateway operations
- Route networks of hubbing airlines
- Overlapping service and competition
- Competing service at West Coast gateways

1. Domestic Originating Passengers

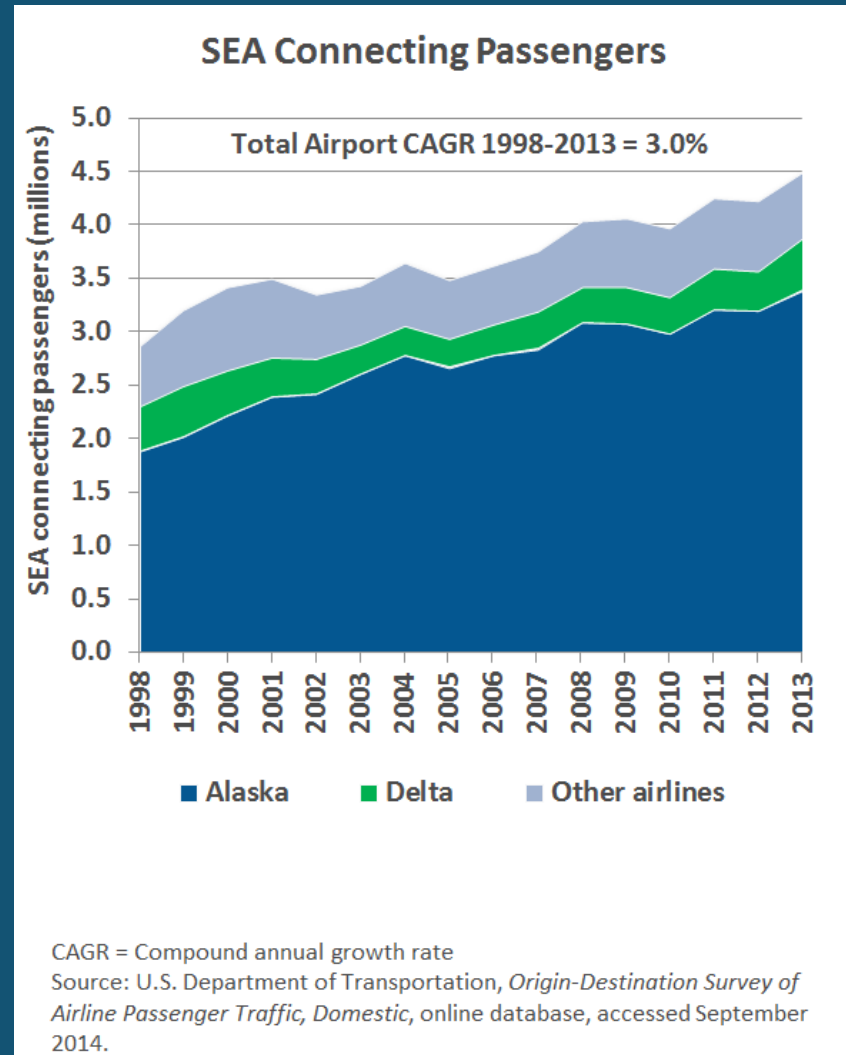
- Independent forecasts by the Puget Sound Regional Council are for strong economic growth in the Seattle Region
- FAA forecasts of airline yield, a measure of the cost of travel, are for slight decreases through the forecast period*
- These independent forecasts, combined with a strong explanatory model, suggest continued strong growth in SEA domestic originating passengers at rates above the national average

*Note: USDOT data for airline yield do not include ancillary and other fees.



2. Connecting Passengers (domestic & int'l)

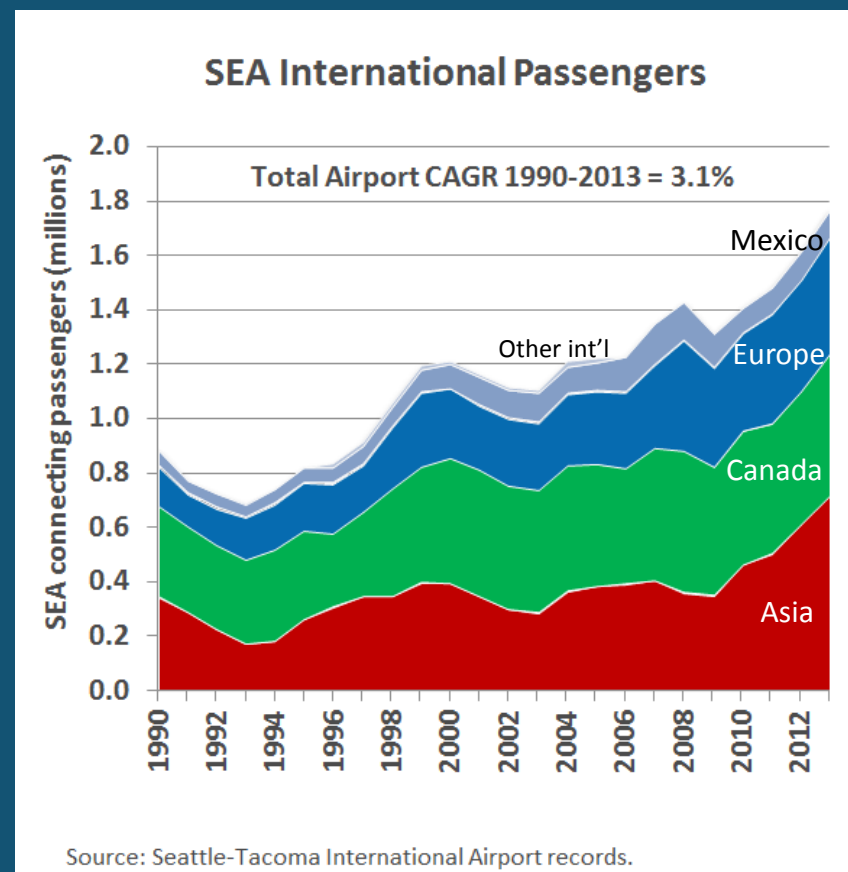
- According to USDOT data, approximately 4.5 million passengers boarded connecting flights at SEA in 2013
- Alaska accounted for nearly 75% of SEA connecting passengers in 2013
- Between 1998 and 2013, Alaska Airlines' connecting passengers at SEA increased an average of 3.9% per year
- The expansion of Delta's service at SEA is likely to increase the overall number of connecting passengers and Delta's share of the Airport total



3. International Gateway Passengers

The continued development of international service at SEA will be supported by:

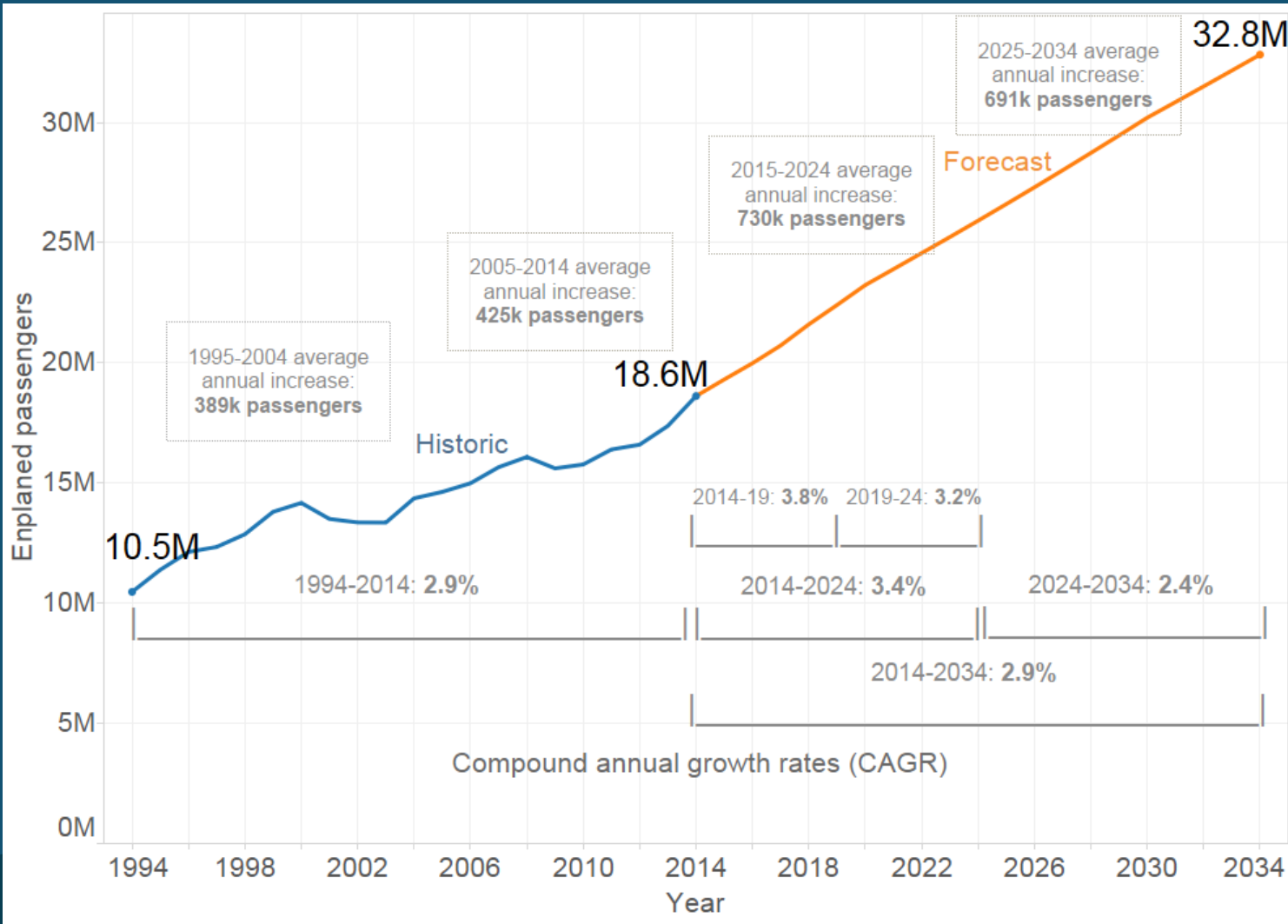
- The location of global companies and strong international communities of interest in the Seattle region
- Shorter flight times to Asian destinations compared with other West Coast gateways
- The increasing presence of SkyTeam members at SEA
- Delta's Pacific gateway at Seattle - strategically located with cost advantages over Asian gateways
- Delta expects international passenger traffic growth at SEA to be organic



Forecast results

- Airport traffic will grow by 14 million enplanements (28 million total passengers) in next 20 years
- Growth in total passengers (by million annual passengers - MAP)
 - 2014: 37 MAP
 - 2024: 52 MAP
 - 2034: 66 MAP
- Growth in aircraft operations
 - 2014: 332,000
 - 2024: 445,000
 - 2034: 538,000

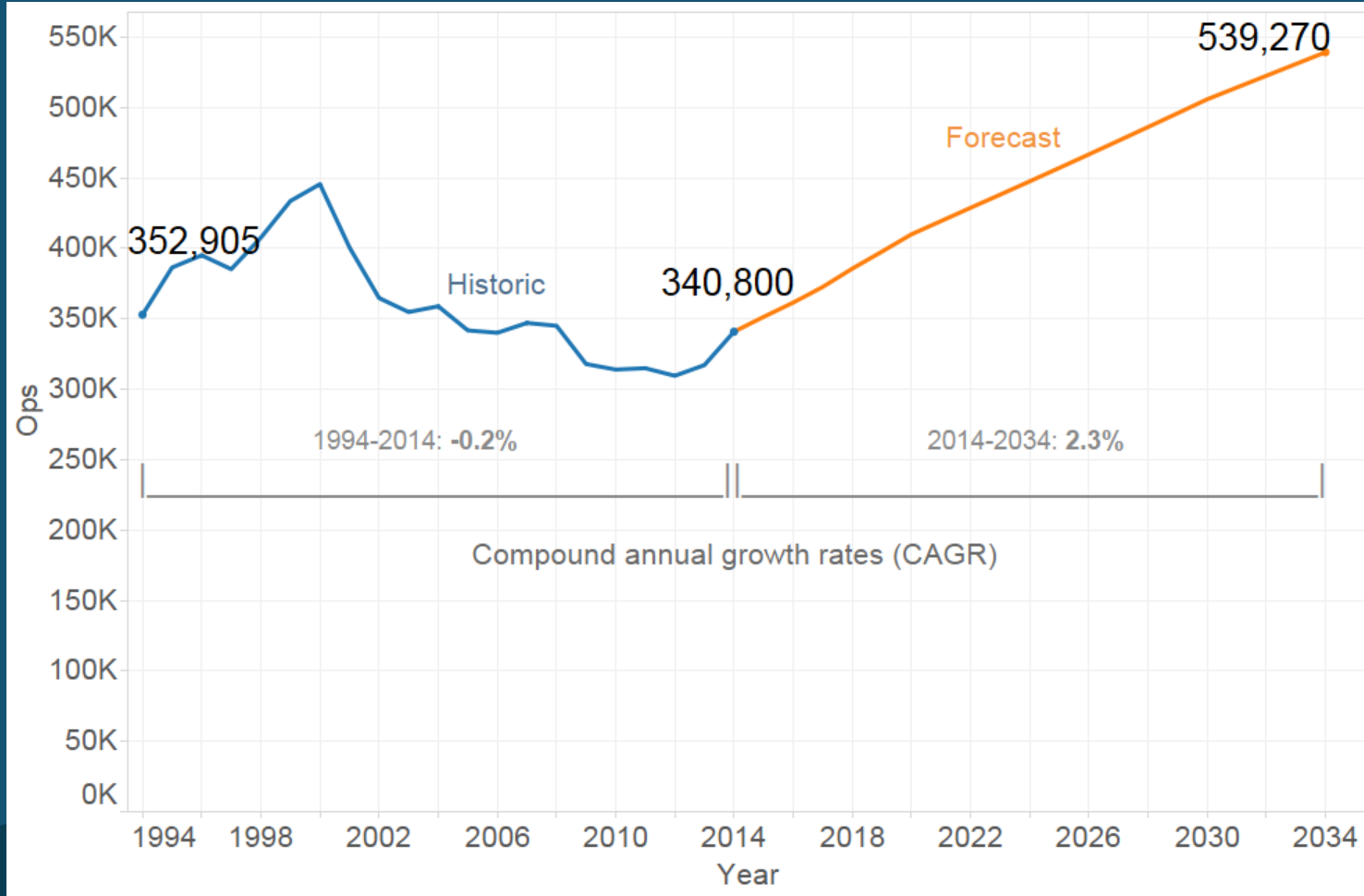
SEA enplaned passenger forecast (draft)



CAGR = Compound annual growth rate
 Sources: Historical—Seattle-Tacoma International Airport records. Forecast—LeighFisher, September 2014.

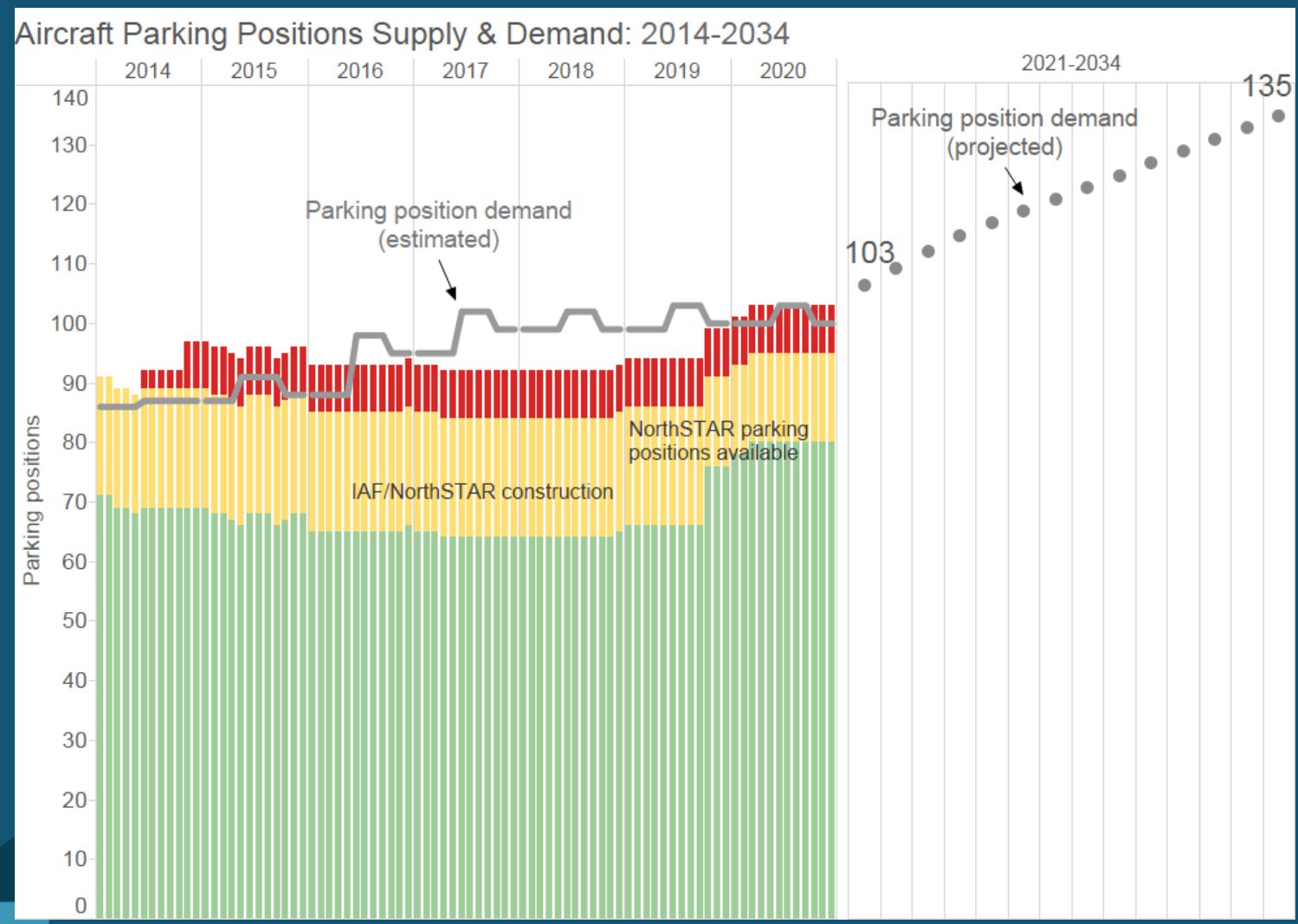
SEA aircraft operations forecast (draft)

SEA aircraft operations increased 2.5% in 2013 and are estimated to increase 7.4% in 2014



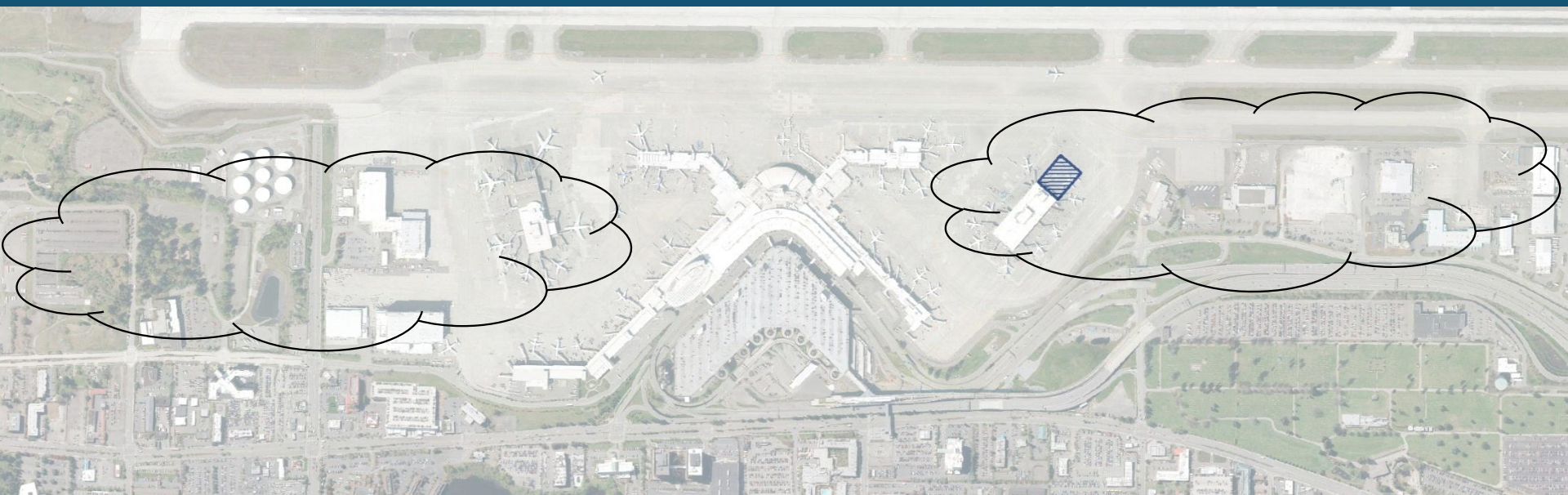
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Sources: Historical—Seattle-Tacoma International Airport records. Forecast—LeighFisher, September 2014.

Severe shortage of contact gates for at least the next decade



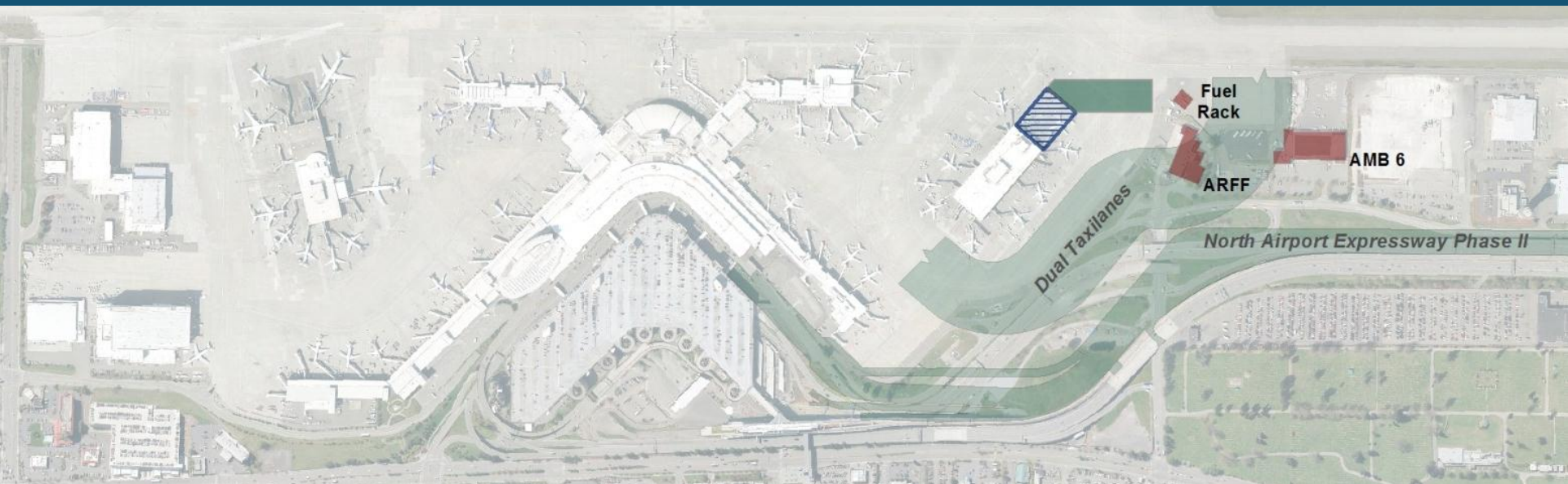
50% more aircraft parking positions required in 2034

- Early stages of SAMP planning considers terminal expansion options
- Recommended alternative could include expansion north or south – or a combination of both



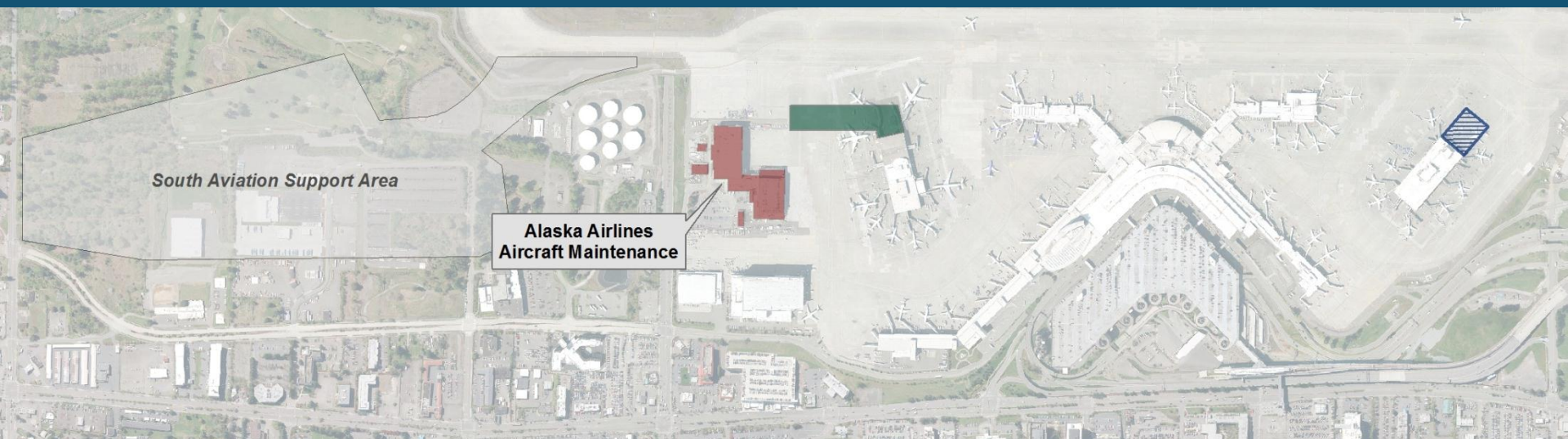
North Satellite expansion option

- Due to dependent projects, the soonest gates could be added to the North Satellite is 2024-2026
- Dual taxilane construction requires partial or full relocation of the southbound lanes of the North Airport Expressway
- Dislocates Fuel Rack, AMB 6, & the Air Rescue and Fire Fighting station (ARFF)



South Satellite expansion option

- Expansion to the south may trigger development of a South Aviation Support Area (SASA) to replace dislocated facilities
- If SASA is constructed, the soonest gates could be added to the South Satellite is 2026-2030



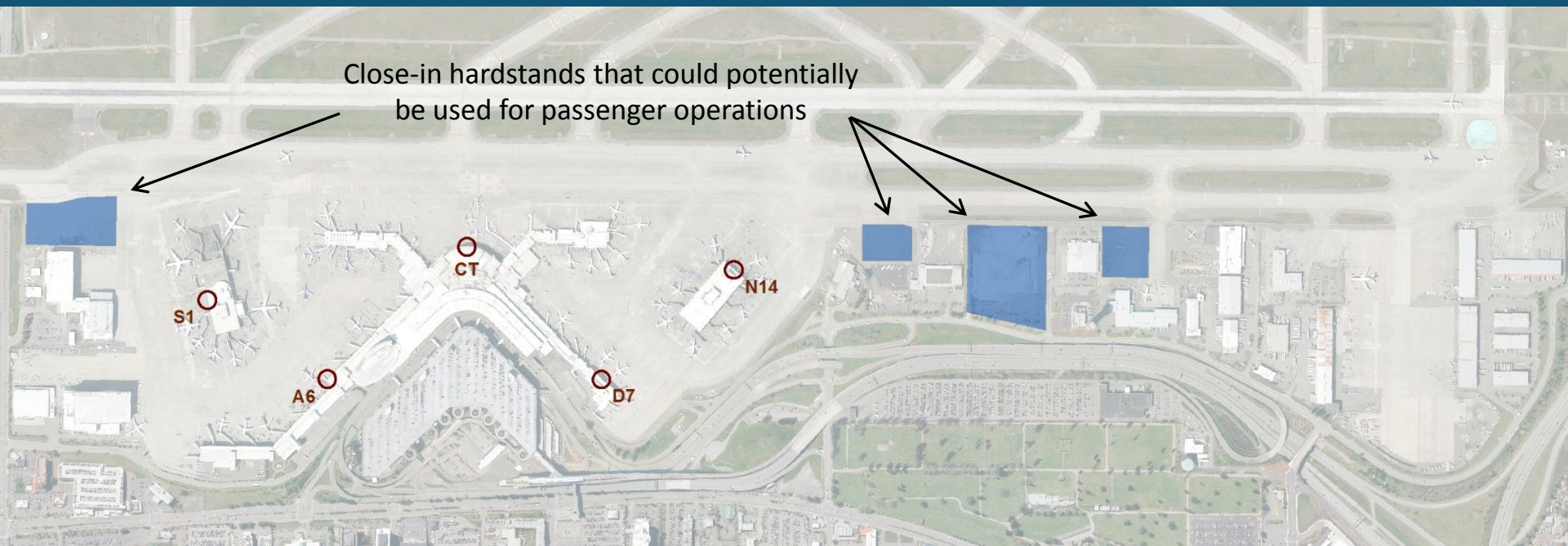
South pier construction option

- Expansion to the south may trigger development of a South Aviation Support Area (SASA) to replace dislocated facilities
- If SASA is constructed, the soonest gates could be constructed as a pier satellite is 2026-2030



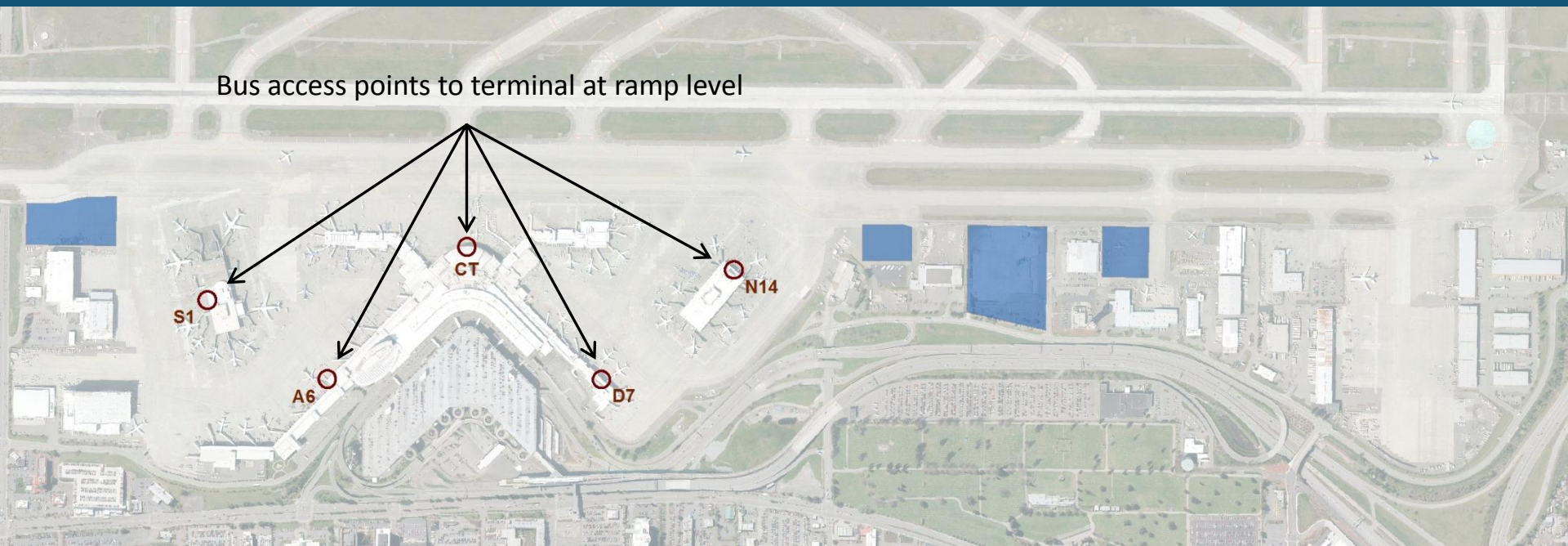
Hardstand operations and busing provide low level of passenger service

- As many as five hardstand operations at peak in 2015 and eight in 2020
- Hardstand use competes with Remain Over Night (RON) parking at morning peak



Hardstand operations and busing provide low level of passenger service

- Passenger loads at bus access points strain holdroom and concessions capacities



Airline growth will require major changes to check-in lobby facilities

- Potentially all check-in positions will be utilized by 2015
 - Leverage technology and common use positions
 - Reposition airlines
- Near-term solutions
 - Flow through ticketing
 - Connecting counters - baggage system-gates
- Longer-term solutions
 - Self-bag drop (garage, RCF, promenade, cruise terminals)
- Additional complexities
 - Internal circulation
 - Curbside congestion and imbalance w/ check-in
 - Baggage systems

Airline growth will bottleneck airport access without major improvements

- Upper drive sidewalk congestion creates an unsafe condition and low level of service
 - Remove curbside check-in?
 - Improve access from North Ground Transportation Lot?
- Limited frontage and lanes to access curbs
 - Expand upper drive?
 - Relocate some modes to garage?
- RCF busing breaks down at roughly 40 million annual passengers (MAP)
 - Automated people mover (APM)?

Next steps - Near Term

- Prepare for remote hardstand and busing operations-now
- Reposition airline ticket counters-2015
- Utilize technological solutions to minimize capital expense
- Near-term capacity and operational challenges task force deployed-now

SAMP Stakeholder Involvement

- Airlines provided input into forecast
- Airline and tenant engagement will continue through Master plan alternatives analysis and plan of finance
- Public involvement and open houses in Q4 2014 (forecast and preliminary alternatives), Q2 (alternatives analysis) and Q4 2015 (preferred alternative)
- City of SeaTac, other SW King County community entities
- Commission engagement at each stage of the master plan- Forecast, preliminary alternatives, alternatives analysis and preferred alternative.
- NEPA/SEPA environmental review and public comment period

SAMP Next steps

- Completion of alternatives - 2015
- Preferred alternative - 2015
- Environmental review - 2016
- Identify post-2020 facility investments and plan of finance
- Finalize 2020-2030 facility strategy for Commission consideration - 2015-2016