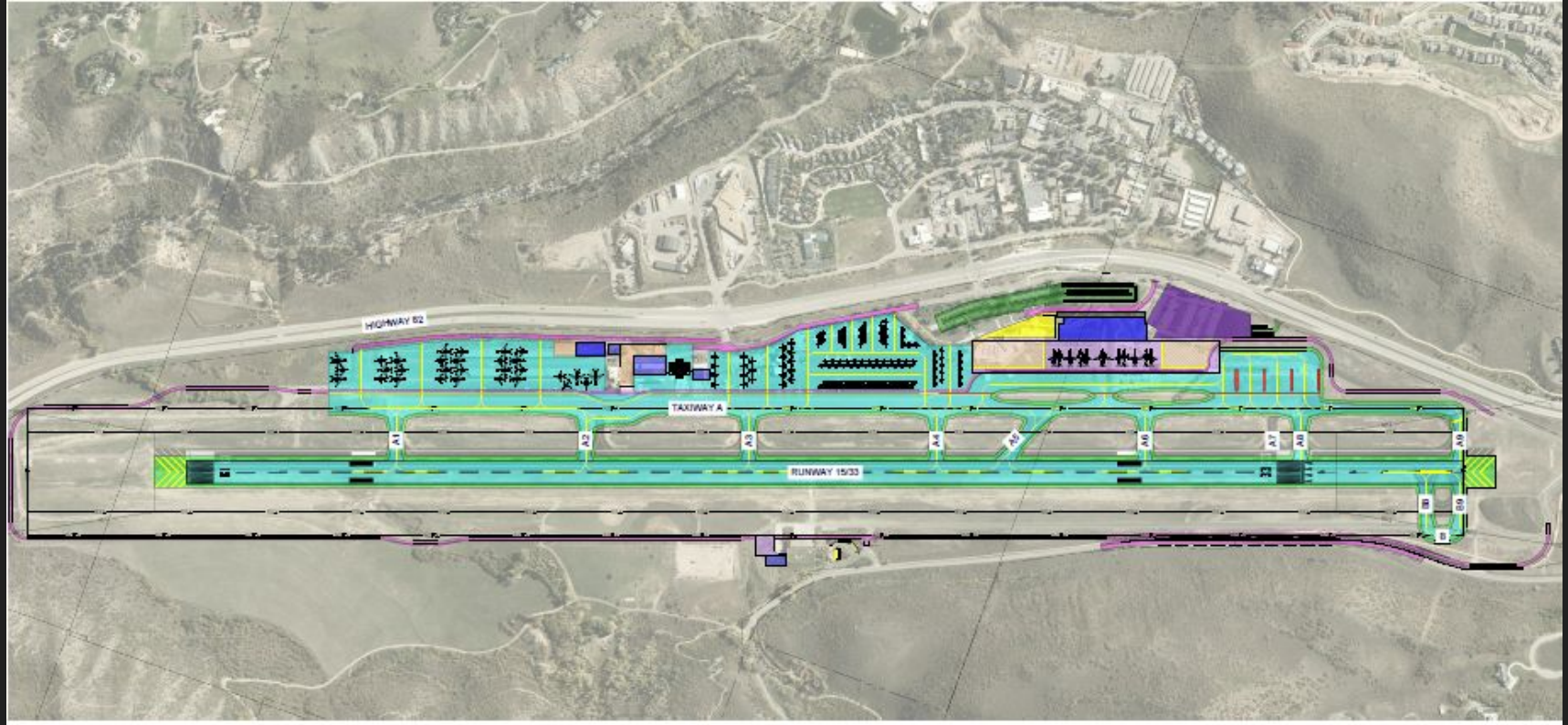
ASE Vision Committee

3/10/2020

ASPEN/PITKIN COUNTY AIRPORT
OWNED AND OPERATED BY PITKIN COUNTY

ASE VISION

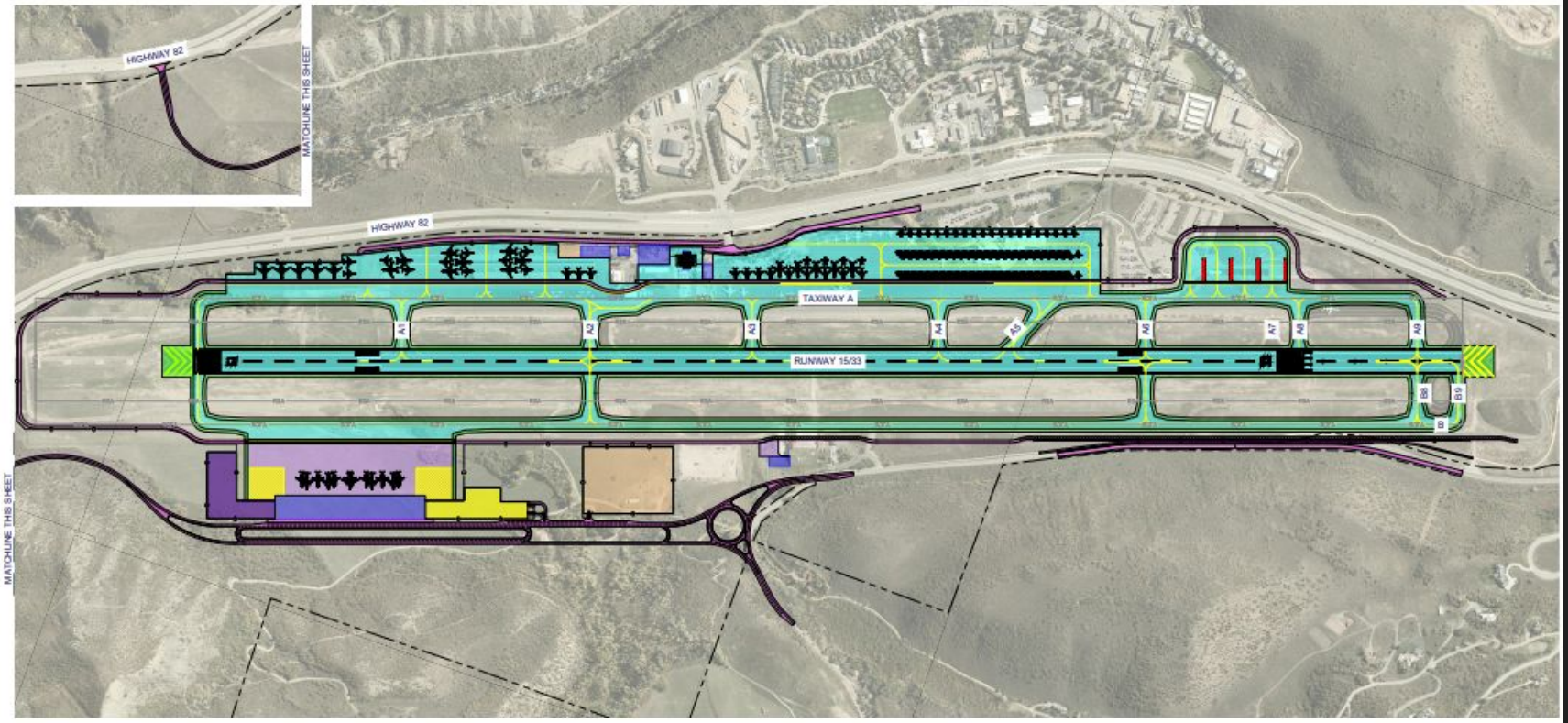


AIRPORT SAFETY AND MODERNIZATION PROGRAM
ASPEN/PITKIN COUNTY AIRPORT
SHIFT RUNWAY 80' WEST

SCALE IN FEET

ASPEN/PITKIN COUNTY AIRPORT

ASE VISION



AIRPORT SAFETY AND MODERNIZATION PROGRAM
ASPEN/PITKIN COUNTY AIRPORT
WEST SIDE TERMINAL

300 0 300 600
SCALE IN FEET

ASPEN/PITKIN COUNTY AIRPORT

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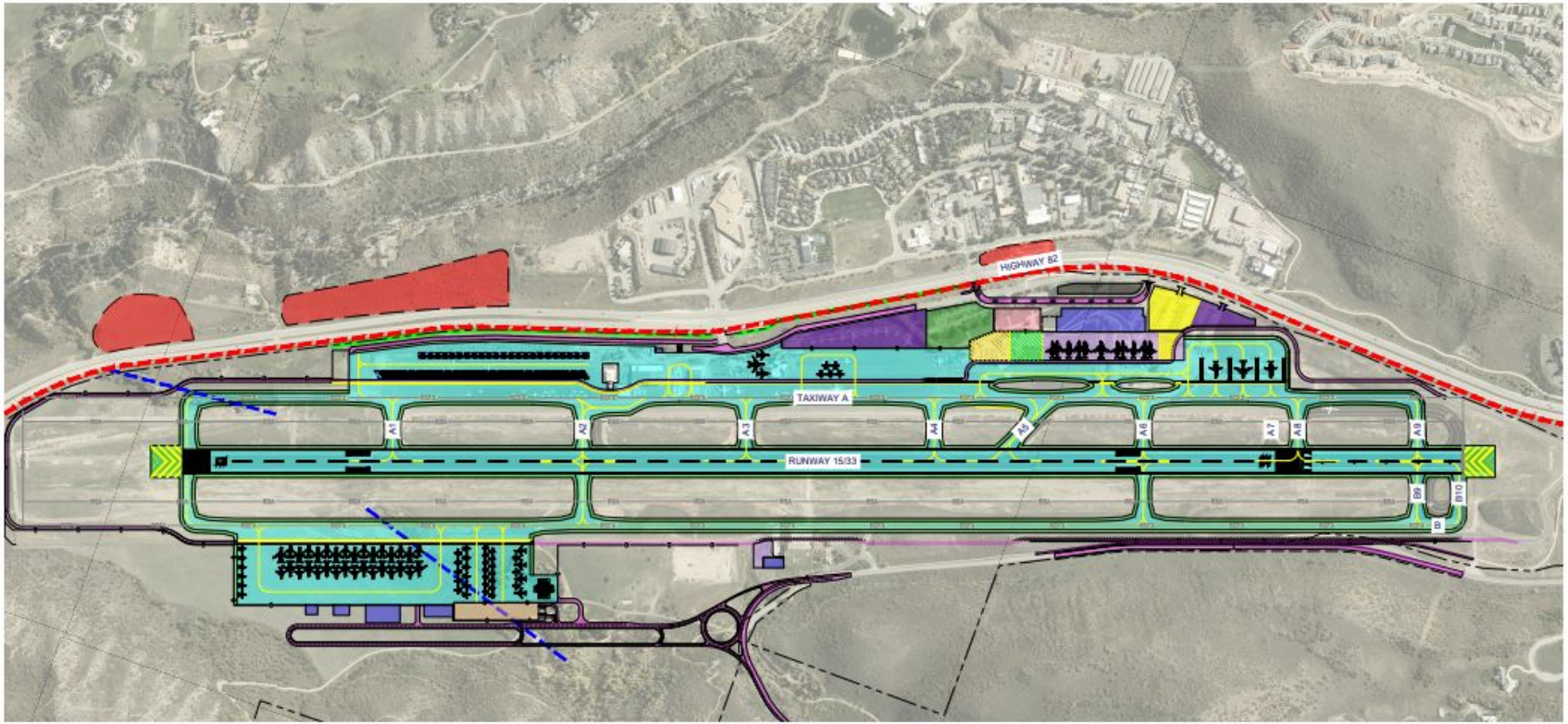

LEGEND

- PROPOSED ASPHALT PAVEMENT
- PROPOSED CONCRETE PAVEMENT
- PROPOSED SHOULDER PAVEMENT
- PROPOSED VSR, OWL CREEK ROAD, BIKE PATH, AND SIDEWALK PAVEMENT
- PROPOSED TERMINAL BUILDING, NEW BUILDING OR EXPANSION
- RESERVED FOR TRANSIT
- FBO PARKING
- PUBLIC AND EMPLOYEE PARKING
- COMMERCIAL PARKING
- SHORT TERM PARKING
- RENTAL CAR PARKING
- FUTURE CONSTRUCTION

AIRPORT SAFETY AND MODERNIZATION PROGRAM
ASPEN/PITKIN COUNTY AIRPORT
WEST SIDE FBO AND ITINERANT AIRCRAFT

NORTH

300 0 300 600
SCALE IN FEET

ASPEN/PITKIN COUNTY AIRPORT

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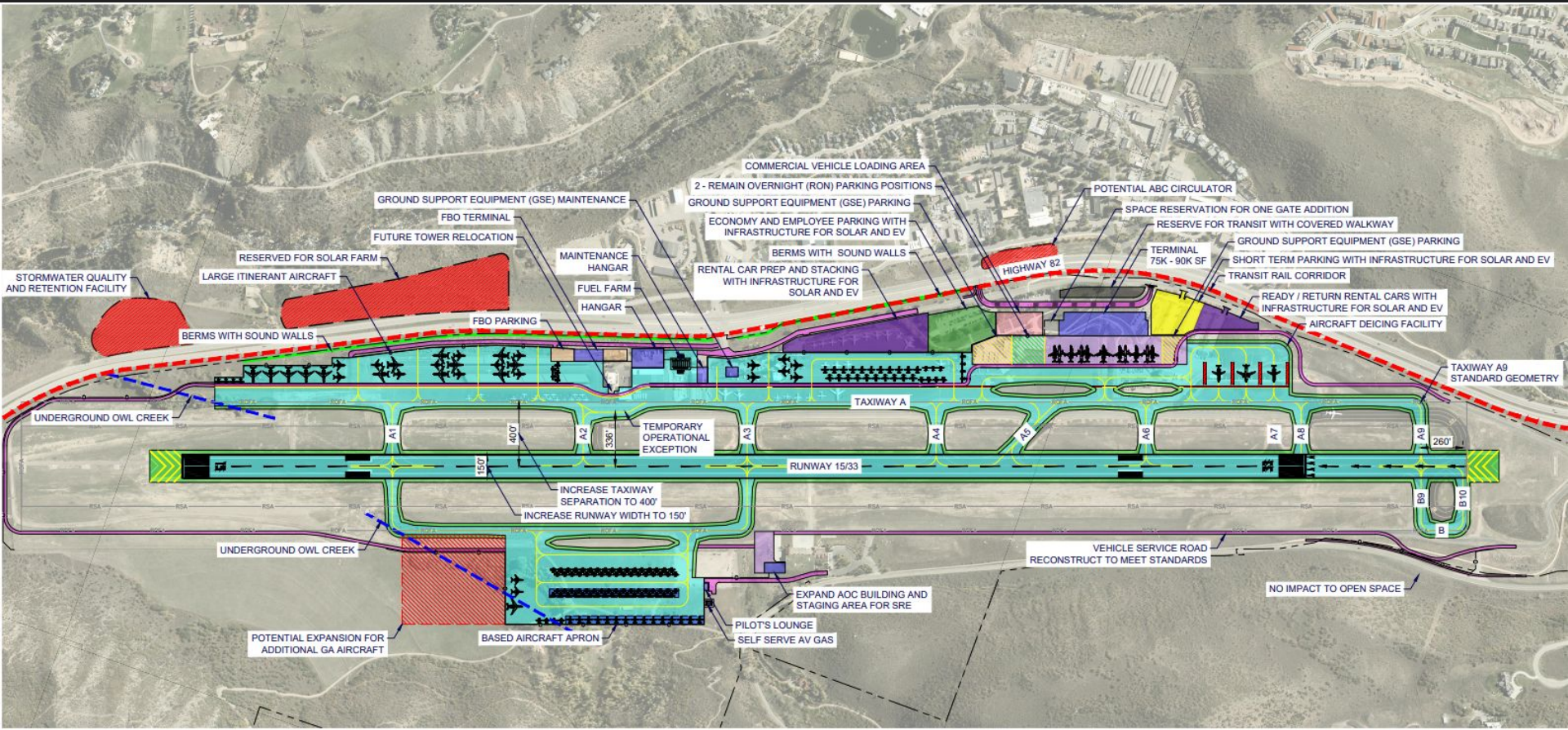

COMMON GROUND RECOMMENDATIONS

ASPEN/PITKIN COUNTY AIRPORT

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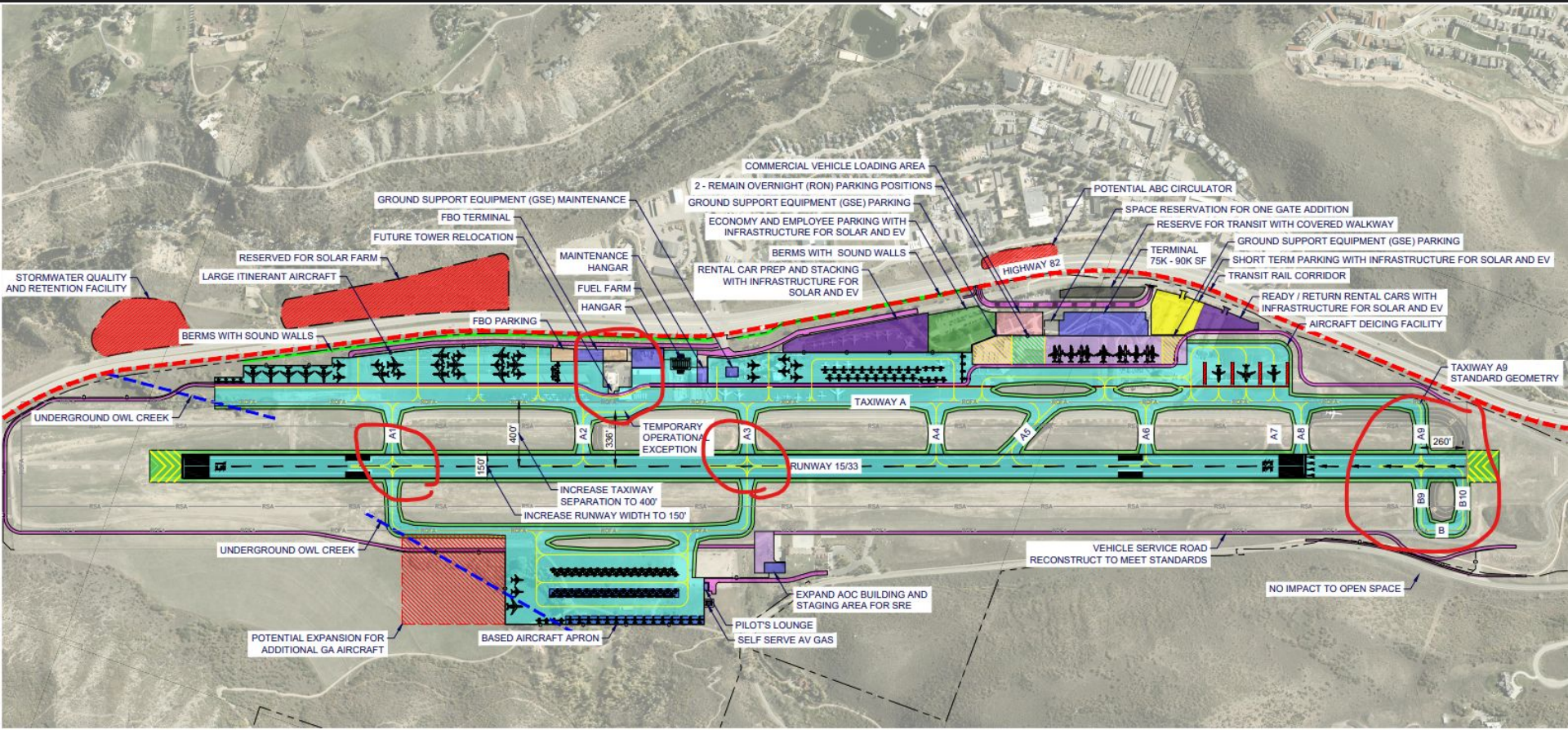
Thanks!



COMMON GROUND RECOMMENDATIONS

ASPEN/PITKIN COUNTY AIRPORT

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Operations at 0.8% Compound Annual Growth

ADG	Manufacturer	Model	Physical Class (Engine)	AAC	Approach Speed (V_{ref})	Seating	Wingspan (ft.)	Range (NM)	MTOW	Operations Data		Ability to limit Operations Score
										Annual Ops 2018	Annual Ops Future	
III	Boeing	737-MAX 8	Jet	D	142	178****	117.83	3,550	181,200	4,621	5,005	
III	Boeing	737-MAX 7 (same engine as MAX 8)	Jet	D	142	153***	117.83	3,850	177,000	5,376	5,822	
III	Airbus	A320-200 Sharklet	Jet	C	136	157	117.45	3,300	171,961	5,484	5,939	
III	Airbus	A220-300	Jet	C	135	140	115.08	3,350	149,000	5,876	6,363	
III	Airbus	A320 NEO Sharklet	Jet	C	136	157	117.45	3,500	174,165	5,876	6,363	
III	Airbus	A319-100 Sharklet	Jet	C	126	132	117.45	3,750	168,653	6,426	6,959	
III	Boeing	737-700 with winglets	Jet	C	130	137	117.42	4,400	154,500	6,528	7,070	
III	Embraer	EMB 195-E2	Jet	C	124	120	115.15	2,600	135,584	6,855	7,423	
III	Airbus	A220-100	Jet	C	130	109	115.08	3,400	134,000	7,547	8,173	
III	Embraer	EMB 190-E2	Jet	C	124	97	110.70	2,850	124,341	8,480	9,184	
III	Embraer	E 190 Standard	Jet	C	124	96**	94.25	2,450	105,359	8,569	9,279	
III	Mitsubishi	M90 SpaceJet	Jet	C		88*	95.83	2,040	94,358	9,348	10,123	
III	Embraer	EMB 175-E2	Jet	C	124	80	101.70	2,000	98,767	10,282	11,135	
III	Mitsubishi	M100 SpaceJet	Jet	C		76	91.30	1,910	86,000	10,823	11,721	
III	Embraer	EMB 175 LR, extended wingtips	Jet	C	124	76	93.92	2,150	85,517	10,823	11,721	
III	Bombardier	Dash 8 Q400	Turboprop	C	125	76	93.25	1,100	65,200	10,823	11,721	
II	Bombardier	CRJ 700/701/702 LR	Jet	C	135	70	76.27	1,400	77,000	11,751	12,726	2
III	Embraer	E 170 Standard	Jet	C	124	69	85.42	2,150	82,012	11,921	12,910	
II	Bombardier	CRJ 100/200/440 LR (CL-600-2B19)	Jet	C	140	50	68.67	1,650	53,000	16,452	17,816	
II	Bombardier	CRJ 550 (Same airframe as CRJ-700)	Jet	C	135	50	76.27	1,000	65,000	16,452	17,816	

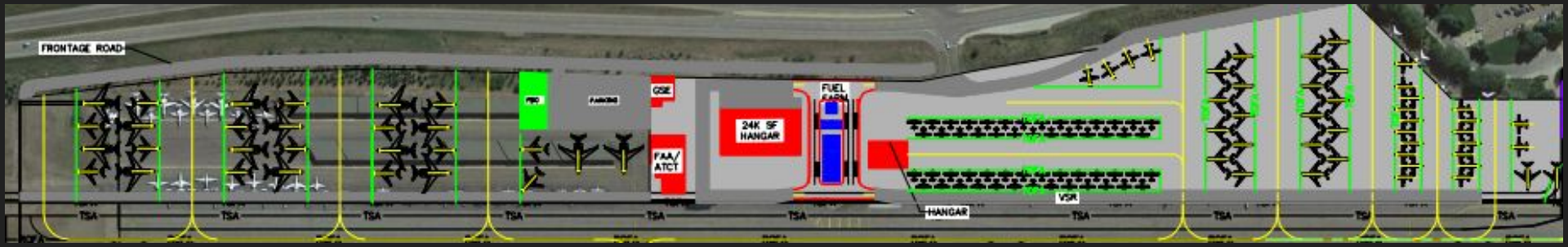
1 = Measurably meets community goals
2 = Generally maintains current condition
3 = Worsens current condition

Notes:

Noise and Emissions Source - ICAO Certification Database, August 2019 | HMMH, August 2019; Per-passenger interpretation - Kimley-Horn August 2019.
Operations 2018 = Actual Enplanements at 70% load factor. Future = 2028 Enplanments at 0.8% Annual Growth and 70% load factor
Aircraft Load and Dimensions from FAA Aircraft Design Characteristics Database OCT 2018
ASE Operational Capability from August 2018 Aircraft Feasibilty analysis done by Alec Seybold - Flight Tech Engineering
Range is nominal stated by manufacturer

* Single-class seating as configured for ANA for use in Japan. Range is 76 to 92
** Dual-class seating per Manufacturer
*** Dual-class range 138 to 153
**** Dual-class range 162 to 178

International Civil Aviation Organization (ICAO) Parking.



Why? ICAO Parking?

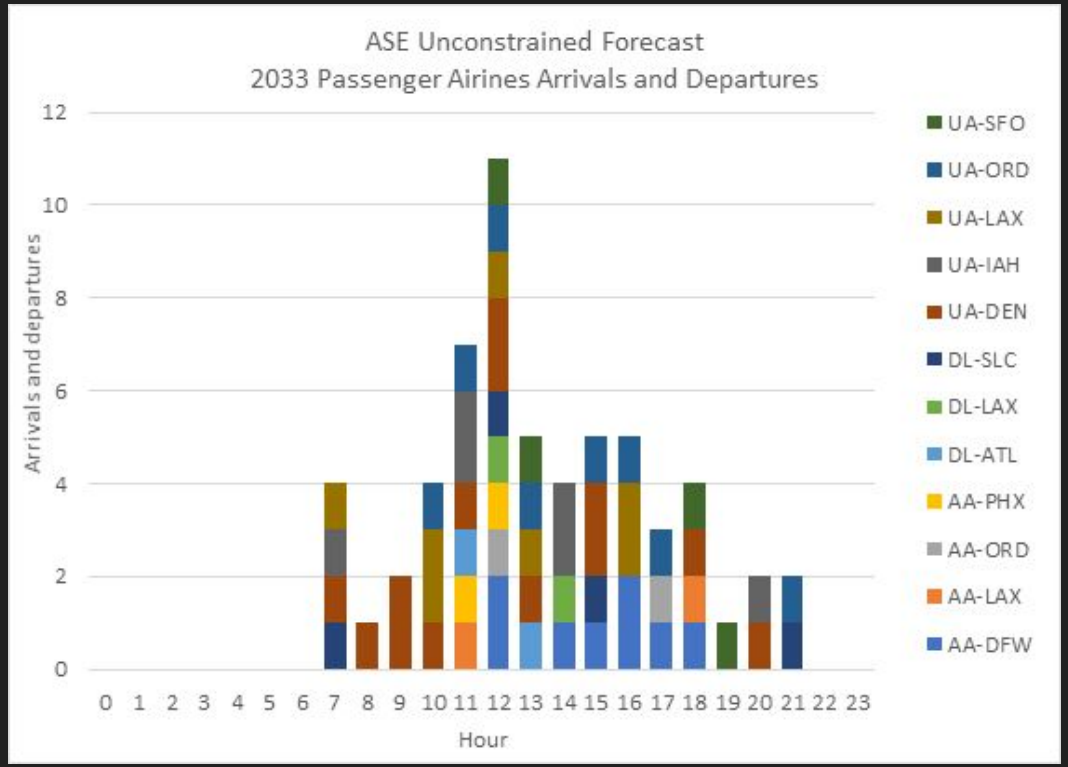
- Safety
- Emissions Reductions (allows for electric service and conditioned air to GA aircraft)
- Noise Reductions
- Predictable number of parked GA Aircraft

Issues?

- Takes more ramp space for same number of aircraft
- Reduced GA parking spaces would increase drop & go's during busy times.

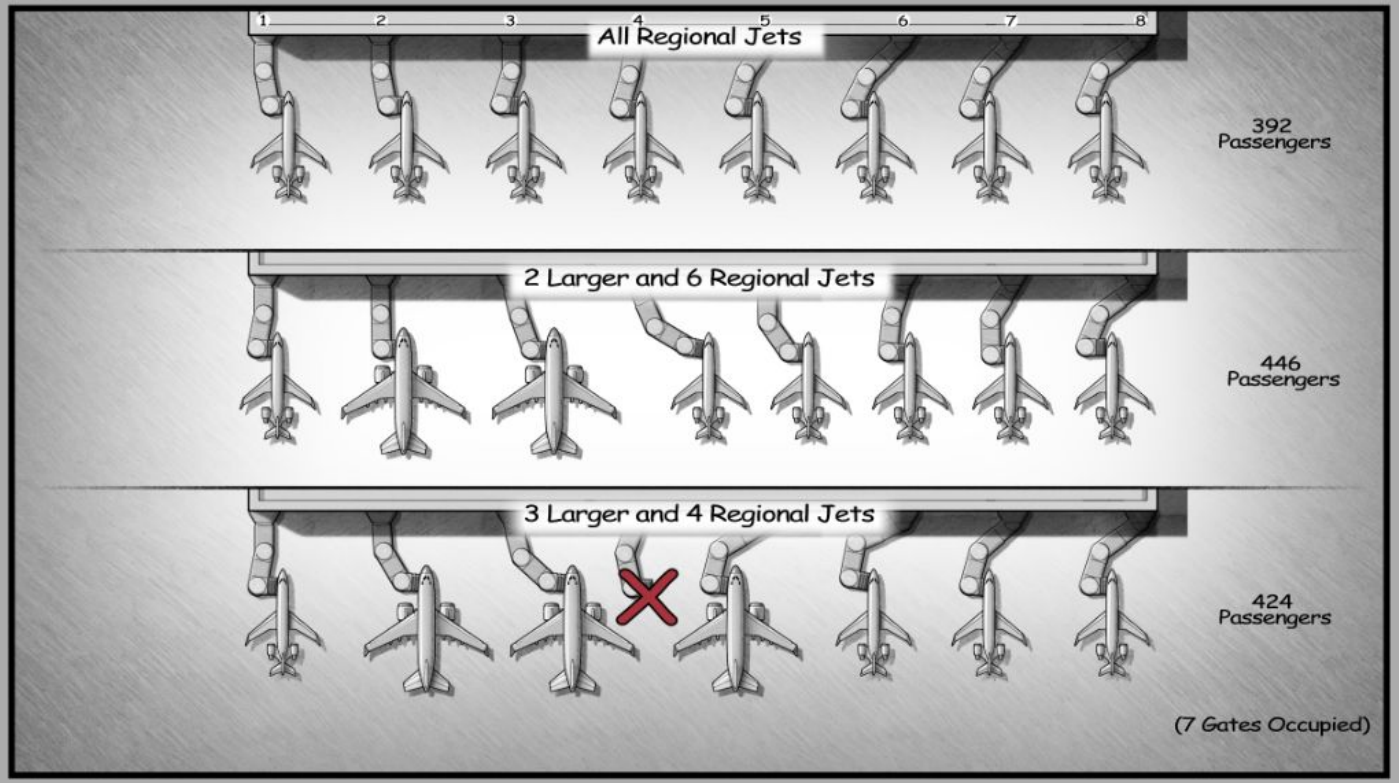
Unconstrained Forecast:

- 386-442 Estimated maximum passengers per a gate turn (with 8 gates).
- Projected based on market demand with no constraints.
- Could be accommodated with 8 flex gates by flattening schedule between 12:00 and 2:00.
- 1.5% estimated compound growth (2018-2048).



ASE VISION

8 GATE TERMINAL SCENARIO

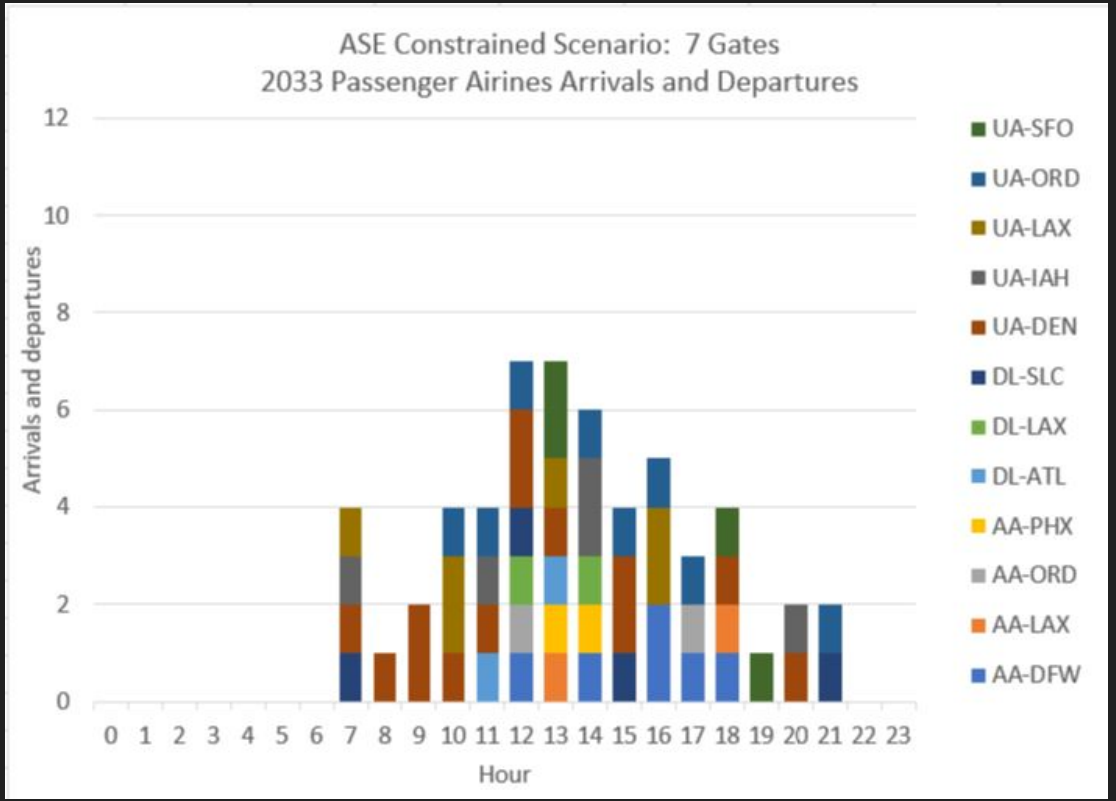


Seven Flex Gates

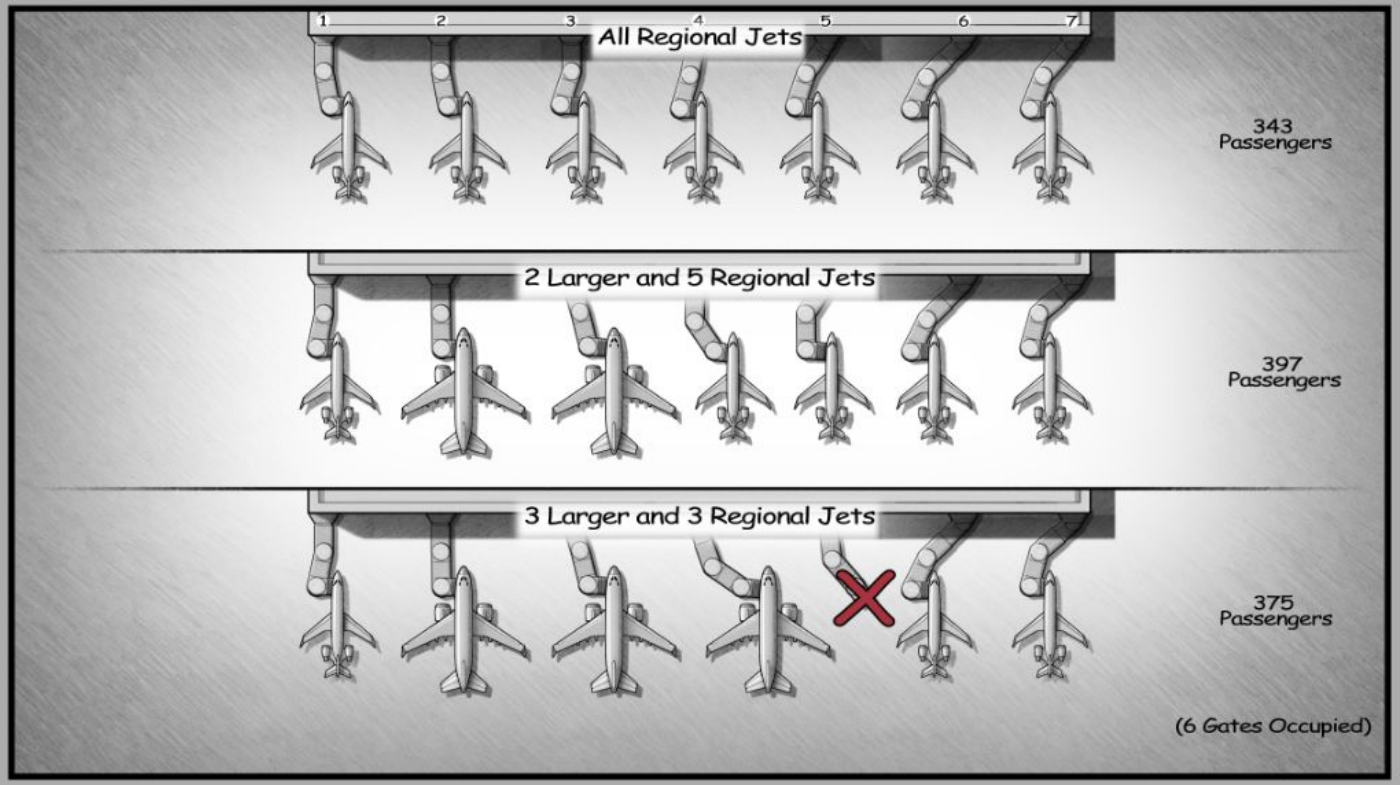
Introduces Constraint in Forecast:

- 338-394 Estimated maximum passengers per a gate turn.
- Flattens schedule, but allows for recovery periods.
- 1.1% estimated compound growth (2018-2048).

- Option to design ‘unload only’ passage directly into unsecured baggage area to help relieve backup during weather delays.



7 GATE TERMINAL SCENARIO



Six Flex Gates

Introduces significant constraint in forecast:

- 290-346 Estimated maximum passengers per a gate turn.
- Flattens schedule -- does not allow for recovery periods for weather events.
- Airlines likely unable to flatten schedules to this degree, unlikely to meet 0.8% target.

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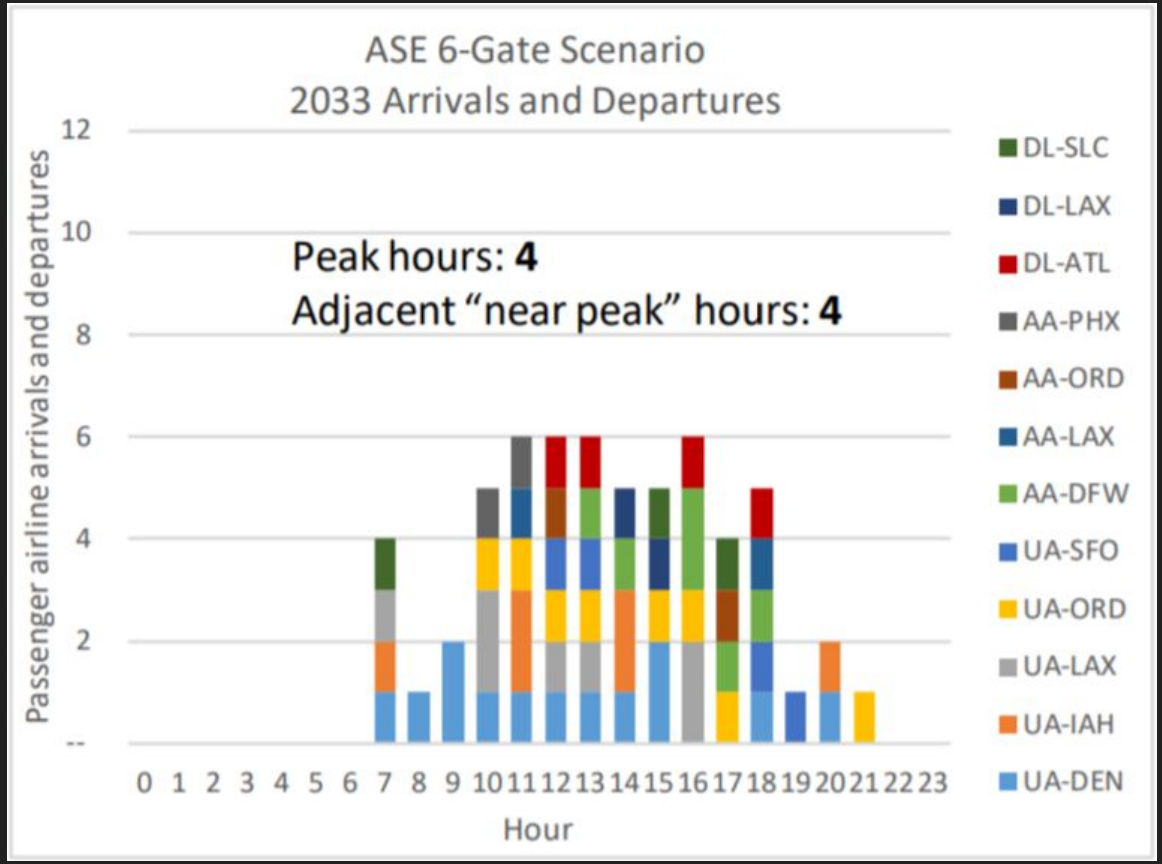

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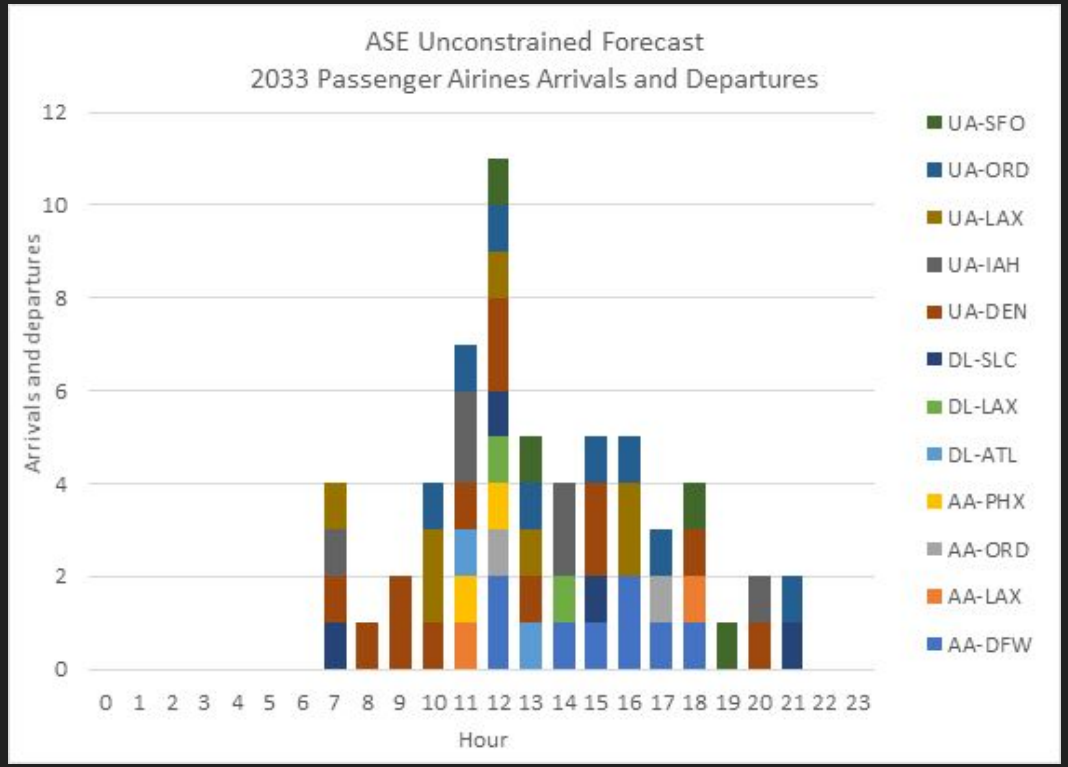

ASE VISION

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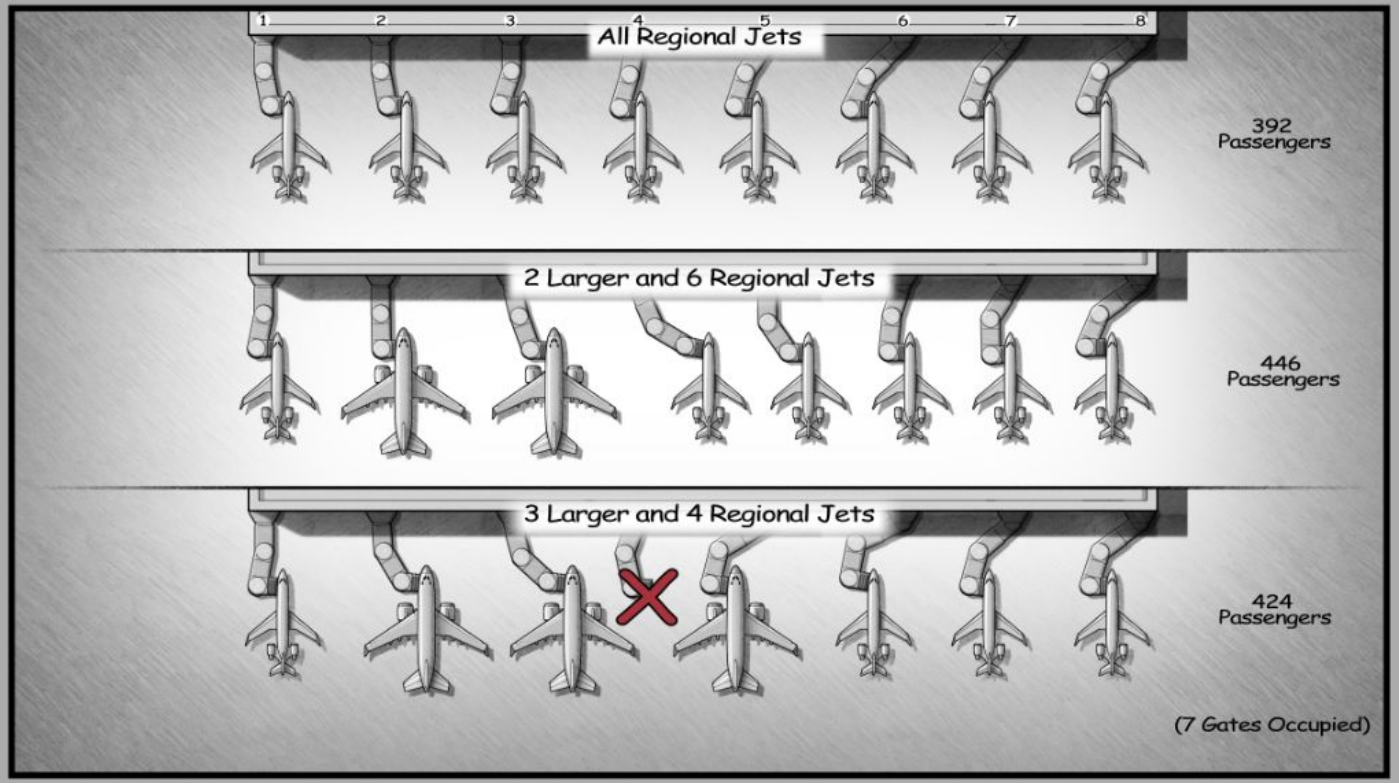

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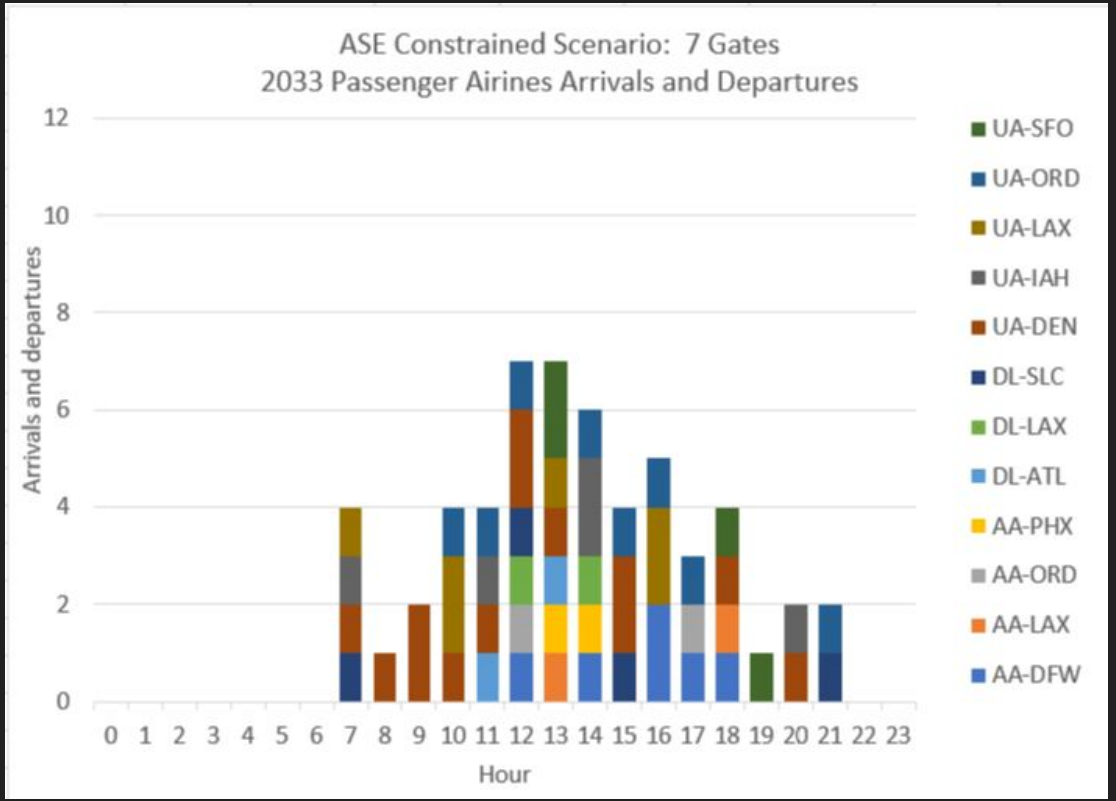

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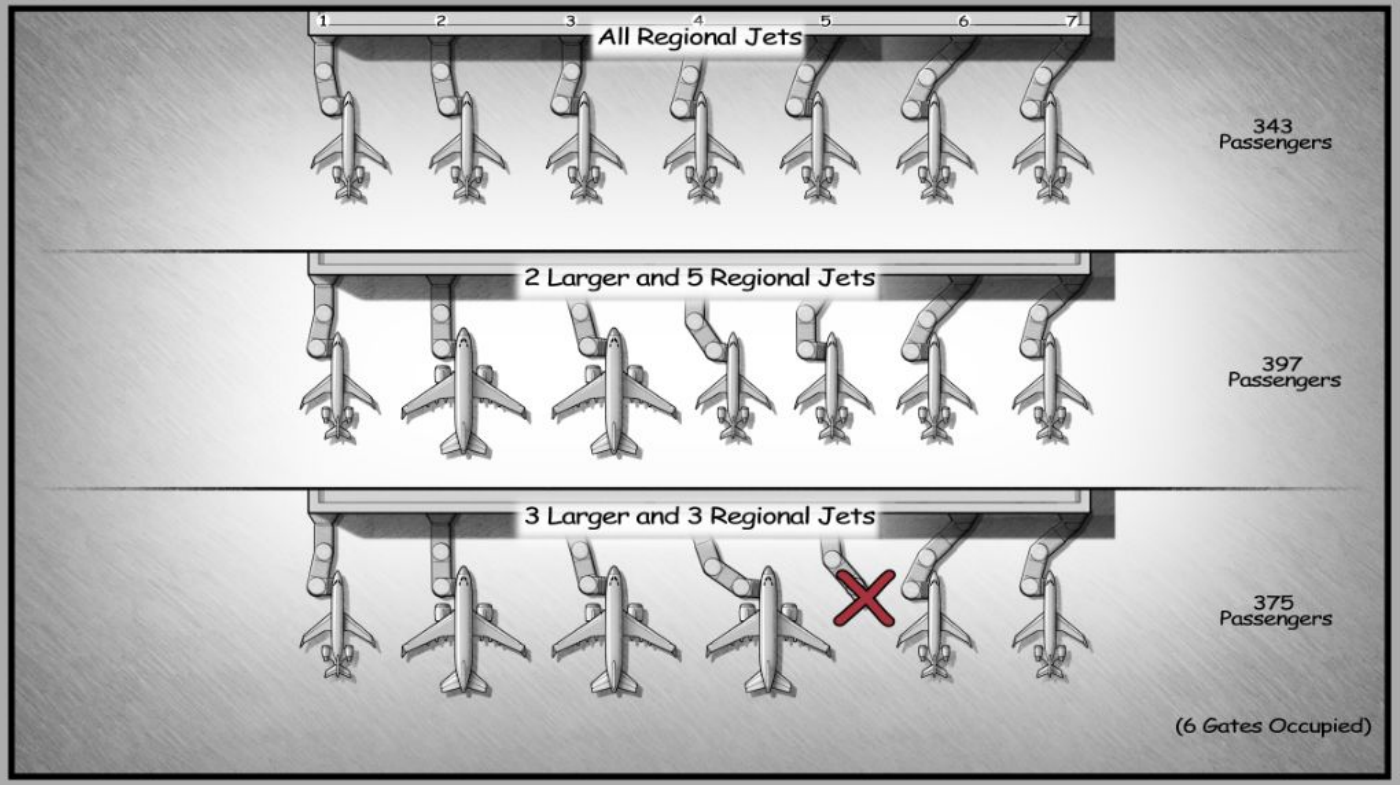

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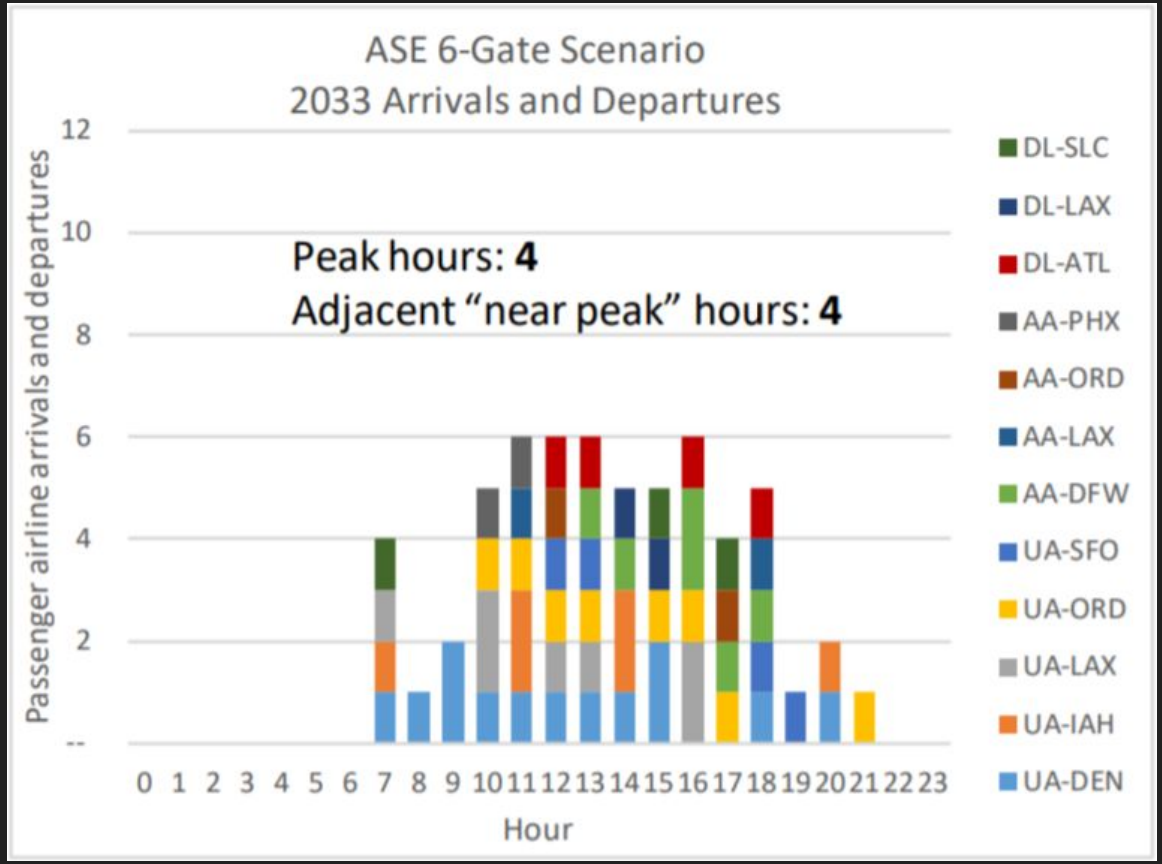
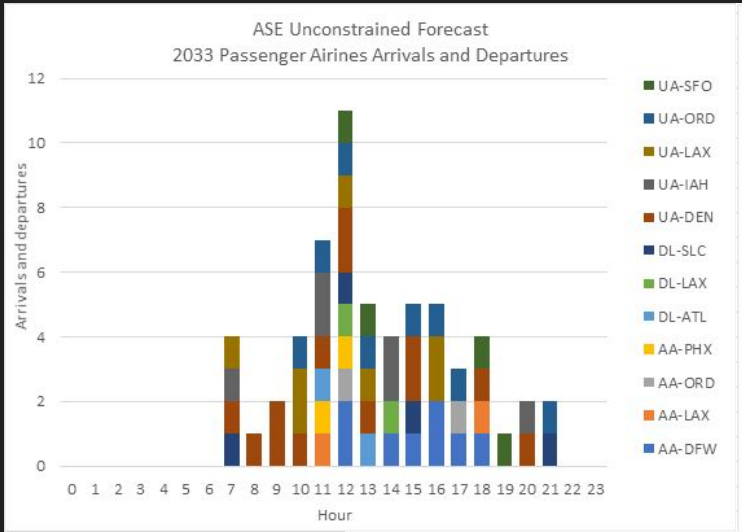
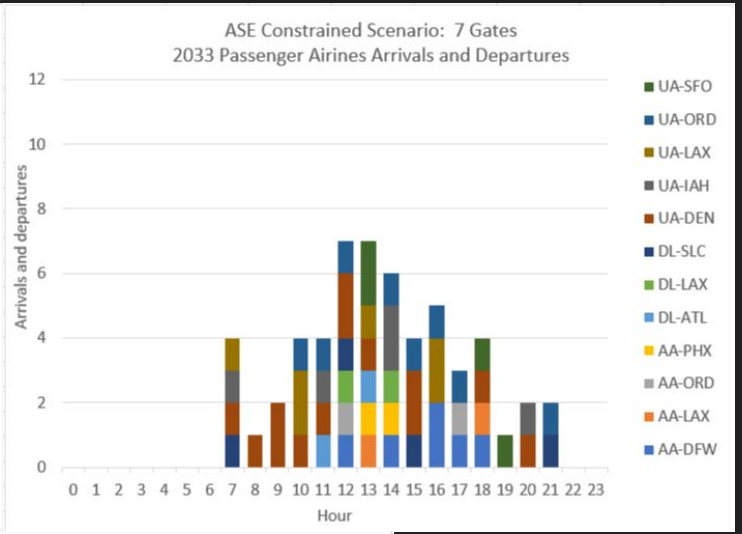
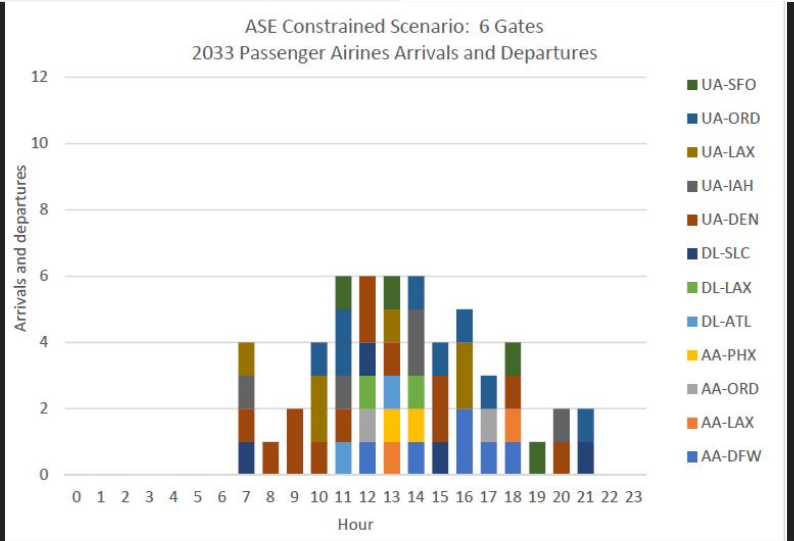



ASE Unconstrained Forecast
2033 Passenger Airines Arrivals and Departures
Arrivals and departures
Hour
UA-SFO
UA-ORD
UA-LAX
UA-IAH
UA-DEN
DL-SLC
DL-LAX
DL-ATL
AA-PHX
AA-ORD
AA-LAX
AA-DFW


ASE Constrained Scenario: 7 Gates
2033 Passenger Airines Arrivals and Departures
Arrivals and departures
Hour
UA-SFO
UA-ORD
UA-LAX
UA-IAH
UA-DEN
DL-SLC
DL-LAX
DL-ATL
AA-PHX
AA-ORD
AA-LAX
AA-DFW


ASE Constrained Scenario: 6 Gates
2033 Passenger Airines Arrivals and Departures
Arrivals and departures
Hour
UA-SFO
UA-ORD
UA-LAX
UA-IAH
UA-DEN
DL-SLC
DL-LAX
DL-ATL
AA-PHX
AA-ORD
AA-LAX
AA-DFW

Connectivity - Conceptual Layout