

Minutes Tempe Aviation Commission September 10, 2019

Minutes of the Tempe Aviation Commission meeting held on September 10, 2019, 6:30 p.m., at the Engineering & Transportation Conference Room, Garden Level, City Hall Complex, 31 E. Fifth Street, Tempe, Arizona.

(MEMBERS) Present:

Lane Carraway (Vice Chair)
W. David Doiron
Shannon Dutton
Gordon Gauss
Valeriy Khaldarov
Peter Schelstraete

(MEMBERS) Absent:

John Q. Nunes
Trevor Pan

Guests Present:

Jordan Feld, *Deputy Aviation Director, City of Phoenix
Department Planning & Environmental Division*

Citizens Present:

Desiree Walker

City Staff Present:

Ken Jones, *Deputy City Manager, Chief Financial
Officer*
Oddvar Tveit, *Environmental Quality Specialist*

Agenda Item 1 – Call to Order

Vice Chairman Lane Carraway called the meeting to order at 6:35 p.m.

Agenda Item 2 – Public Appearances

Ms. Desiree Walker introduced herself to the members.

Agenda Item 3 – Consideration of Meeting Minutes (July 9, 2019)

Mr. Carraway asked for any comments on the drafted July 9, 2019 meeting minutes.

Motion: Mr. Schelstraete moved to approve the minutes as drafted. The motion was seconded by Mr. Doiron.

Action: The motion to approve the drafted July 9, 2019 meeting minutes passed by a unanimous vote. Ayes: Mr. Carraway, Mr. Doiron, Ms. Dutton, Mr. Gauss, Mr. Khaldarov, and Mr. Schelstraete. Abstentions: None. Nays: None. Absent: Mr. Nunes and Mr. Pan.

Agenda Item 4 – Phoenix Sky Harbor International Airport Comprehensive Asset Management Plan (CAMP)

Mr. Feld talked about the master planning process for the airport. City of Tempe communities' experiences with the airport's master plans in the past have been mixed, e.g. in 1988 the plan included a proposed 4th runway. This time the City of Phoenix included a comprehensive stakeholder involvement process to come up with a long-term plan for future development needs. What the airport is facing:

1. The significantly smaller airport footprint of 3,400 acres compared to other peer airports limits the planning options.
2. The extensive stakeholder participation process has resulted in prioritizing plans for:
 - a. Terminal facilities.
 - b. Aero support facilities like Cutter, Swift, Honeywell and the Air National Guard.
 - c. Roadways, congestion and safety, vehicle access relative to airport security.

3. The airline fleets, larger aircraft with more passengers per flight.
4. A forecasted strong growth in passenger volumes and even stronger in cargo volumes over the next twenty years.
5. The need to accommodate growth in ground support facilities at the airport within a small airport footprint. The 210 acres occupied by ground support today would need 390 acres in 2039.
6. Comparing growth forecasts to available facilities the airport would get a failing grade in 2029 and be graded even worse in 2039. To avoid overbuild ahead of time it is better aim for a grade in the middle than an A plus.

Mr. Feld explained items included in the airport layout plans:

- Consolidation of cargo and aero support facilities.
- Free up the terminal area by moving the cargo and aero support facilities northeast of Honeywell using the old dog track site.
- Adding cross over taxiways.
- Proposed trenching of the railroad tracks along the north side of the airport.

Mr. Doiron asked about the planning a taxiway over a trenched railroad to access a consolidated cargo area on the north side of the airport. When considering the following parameters, it appeared to be not to be feasible plan:

- a.) The point where the cross over taxiway go over the trench.
- b.) The thickness of the concrete bridge.
- c.) The 25 feet needed for double stacked railroad cars.
- d.) The five hundred feet transition zones on both sides of the overpass.
- e.) The no more than two-percent grade slope.

The airport has been working with the Union Pacific and has included a one percent grading in the planning. The proposed plan is an engineering challenge, particularly when it comes to including a second bridge to the planned cargo area. The airport would need to provide funding for all aspects of trenching the railroad tracks.

- The cargo consolidations free up cargo areas used by UPS and FedEx on the south side of the airport to accommodate of Air National Guard 161 Air Refueling Wing expansion needs with the larger KC-46 transition.

More detailed technical maps of changes over different planning periods:

- f.) The 0 through 3-year map shows land acquisitions on the north side south of Washington Street, the demolition of Terminal 2 after which the area can be used for hardstand aircraft parking. The map also shows the plan to move the American Airlines cargo loading area at the Terminal 3 north ramp over to the east aircraft maintenance area, which opens space up for a second six gate north concourse at Terminal 3 where passengers can go from Terminal 4 to Terminal 3 without leaving the security zone.
- g.) The 3 through 5-year map shows the complete acquisition of remaining properties on the north side to build the consolidated cargo area, the bridge over the trenched railroad, including a fly over bridge for 24th Street over the tracks. The map also shows new facility complex on the north side to accommodate airport operations, security, flight kitchen etc. which do not need to stay in the terminal core. The Air National Guard expansion included on the south side of the airport is shown as leaving more room for a possible addition to Cutter and Swift in the south side general aviation area. In cooperation with the ADOT and MAG west side access improvements to and from I-10 and the building of security plazas on both ends of the airport. Forty (40) percent of daily traffic goes through the airport. It is not a safe and long-term secure situation to have vehicles going through the terminal areas at higher speeds.
- h.) The 5 to 10-year map shows continued build out of the north cargo area and facilities complex, the incremental development of a west terminal, initially by expanding Terminal 3 creating the south half of a west terminal first and a second crossover taxiway. Then the realignment of the Sky Harbor Blvd. will occur that will eliminate the sharp turn at the west end of Terminal 3

- i.) The end of the planning period 15 to 20 years map shows the completion of the north cargo and facilities complex, the security connections and some terminal modifications at Terminal 4, replacing two concourses with new ones that can accommodate different aircraft.

The planning schedule ahead is as follows:

- The Phoenix Council approved a general land use plan in June 2019.
- More detailed plan layout (ALP) to the FAA next week.
- Publish draft plan and executive summary in about two weeks.
- Internal scoping for CAMP environmental assessment (EA) has been started. Generally, an eighteen months process but can take two years to complete. The north side acquisitions are in areas with cultural resources and historic native sites, which can lengthen the process.
- FAA approval of ALP by December 2019.
- Public scoping of the CAMP EA expected to start in December 2019.
- RFP for land acquisition in February 2020.
- Some pre-construction/utility work for "Year 0-3" mapped projects in October 2020.
- Complete the CAMP EA in December 2020.

The members discussed the alignments of United Pacific Railroad and expressed concerns that the railroad could find reasons not to continue support the current rail transportation corridor in Phoenix and more cargo transport will be moved over to roadways and to trucks.

Agenda Item 5 – Staff update on staffing the recommended Noise Abatement Office

Mr. Tveit informed about a draft developed by the Municipal Utilities Environmental Services staff create an aviation noise liaison staff position to follow up the recommendation made by the Commission about establishing a Noise Abatement Office (NAO). The new half full-time position is based on the aviation support functions of one of the city's Environmental Quality Specialist positions, but with a dedicated focus on the aviation noise support functions that the Commission has recommended for the NAO. Staff's intends is to propose the position being created to the City Council. Copies of the proposal will become available when presented to the Council.

Mr. Jones emphasized that the purpose is to commit the resources necessary so staff can prioritize noise abatement issues.

Comments:

- Did the city consider applying for federal funds, e.g. CFR 14, Part 150 to staff the NAO? Tempe is not eligible to receive AIP funds. Resources to create the position will come from existing budgets. Other funding options might become available should intergovernmental cooperation lead to the creation of a joint forum.
- This opens possibilities for cooperation on aircraft noise relief with Tempe's neighboring cities.
- North Scottsdale has had more traction on addressing aviation issues lately.
- Since the new position adds outreach to surrounding cities, would it include additional workload and pay? No, all the aviation related functions are expected to be taken care of by the proposed half of a full-time position.

Agenda Item 6 – West flow arrivals

Mr. Tveit explained how west flow arrivals over north Tempe is a result of the environment of runway configurations and flying conditions. The parallel runway configuration at PHX with the separation between the north and the south runway centerlines has enabled PHX to establish two separate flows of arrival traffic. During bad weather, 1% of annual weather, the configuration enables aircraft to fly side by side on parallel approach paths at a slower rate, and during good weather, 99% of annual weather, aircraft fly one behind the other on a staggered parallel flow at a higher rate. The problem for residents in north Tempe is aircraft coming in closer to their homes when traffic from different routes are merged into the parallel flow during conditions when rules allow air traffic controllers to accept higher rates

of incoming air traffic. This is possible because air traffic controllers can rely on pilots to keep visual separation to other aircraft in the flow during good weather conditions before landing. The flow of various types of aircraft from different altitudes and speeds and pilots executing the final phase of the approach by keeping required visual separation, can lead to late adjustment being made to the flight paths at low altitudes. On occasion this situation brings low flying aircraft closer to or over north Tempe homes. The new technology RNP and continuous descent noise benefits occur in the outer airspace before the arrivals enter Tempe airspace.

Comments:

- One of the last navigation points for arrivals to the north runway is called JAGAL located between N. Country Club Drive and N. Gilbert Road where the ILS and GPS maps for the north runway show the interception point is at about 3,500 feet above sea level, which is brings planes down to about 1,000 feet above ground when they reach Tempe airspace.
- The commission needs to find persuasive arguments that help keep arriving aircraft on predictable paths and altitudes.

Agenda Item 7 – Commissioners’ business

- The FAA’s response to the commission’s public meeting invitation.
- Synopsis of annual report discussion.

Agenda Item 8 – Schedule next TAVCO meeting

The next meeting was scheduled for October 8, 2019.

Agenda Item 9 – Adjournment

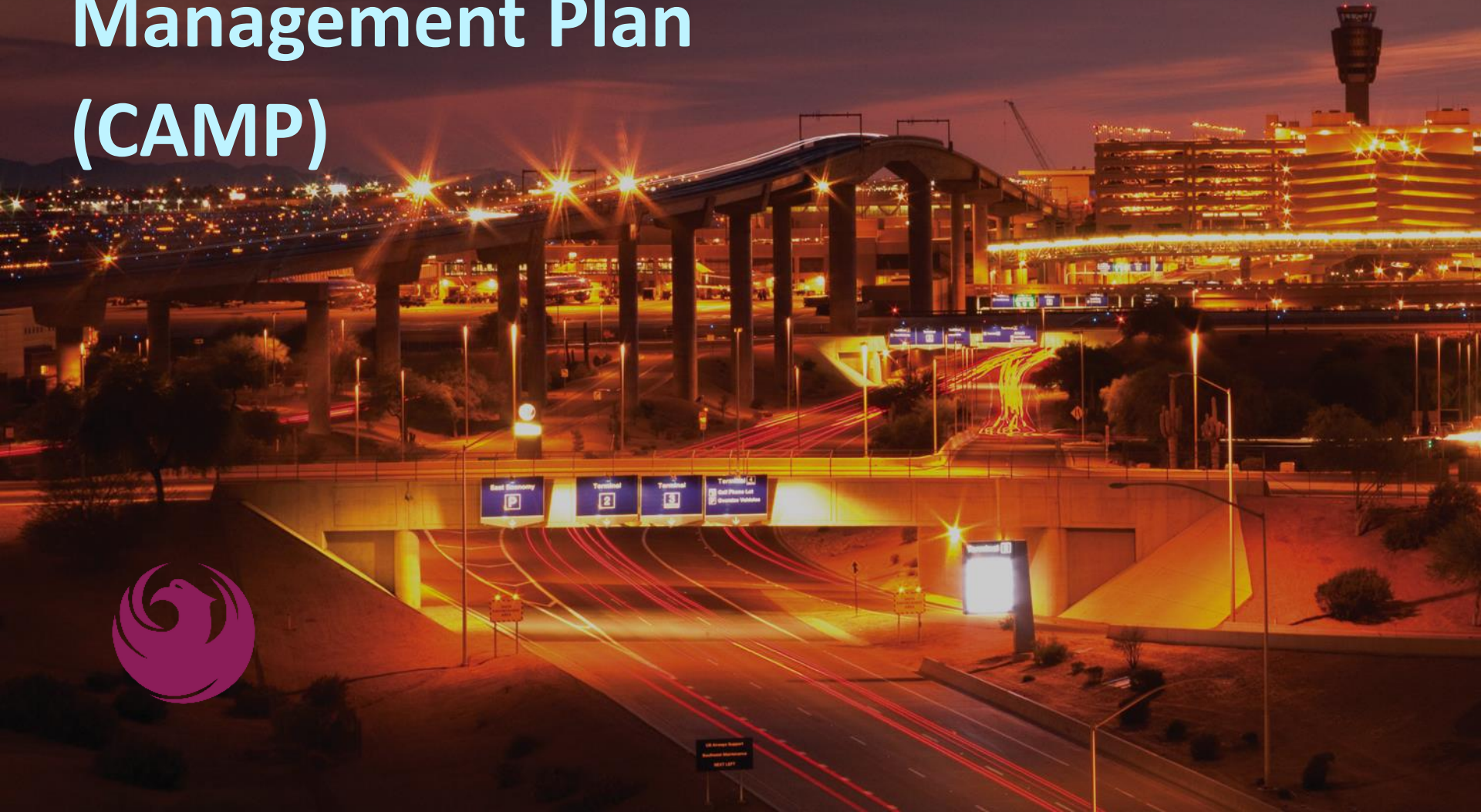
Motion: Mr. Schelstraete moved to adjourn the meeting. Mr. Doiron seconded the motion.

Action: The meeting was adjourned at 8:05 p.m. by a unanimous vote. Ayes: Mr. Carraway, Mr. Doiron, Ms. Dutton, Mr. Gauss, Mr. Khaldarov, Mr. Schelstraete. Abstentions: None. Nays: None. Absent: Mr. Nunes and Mr. Pan.

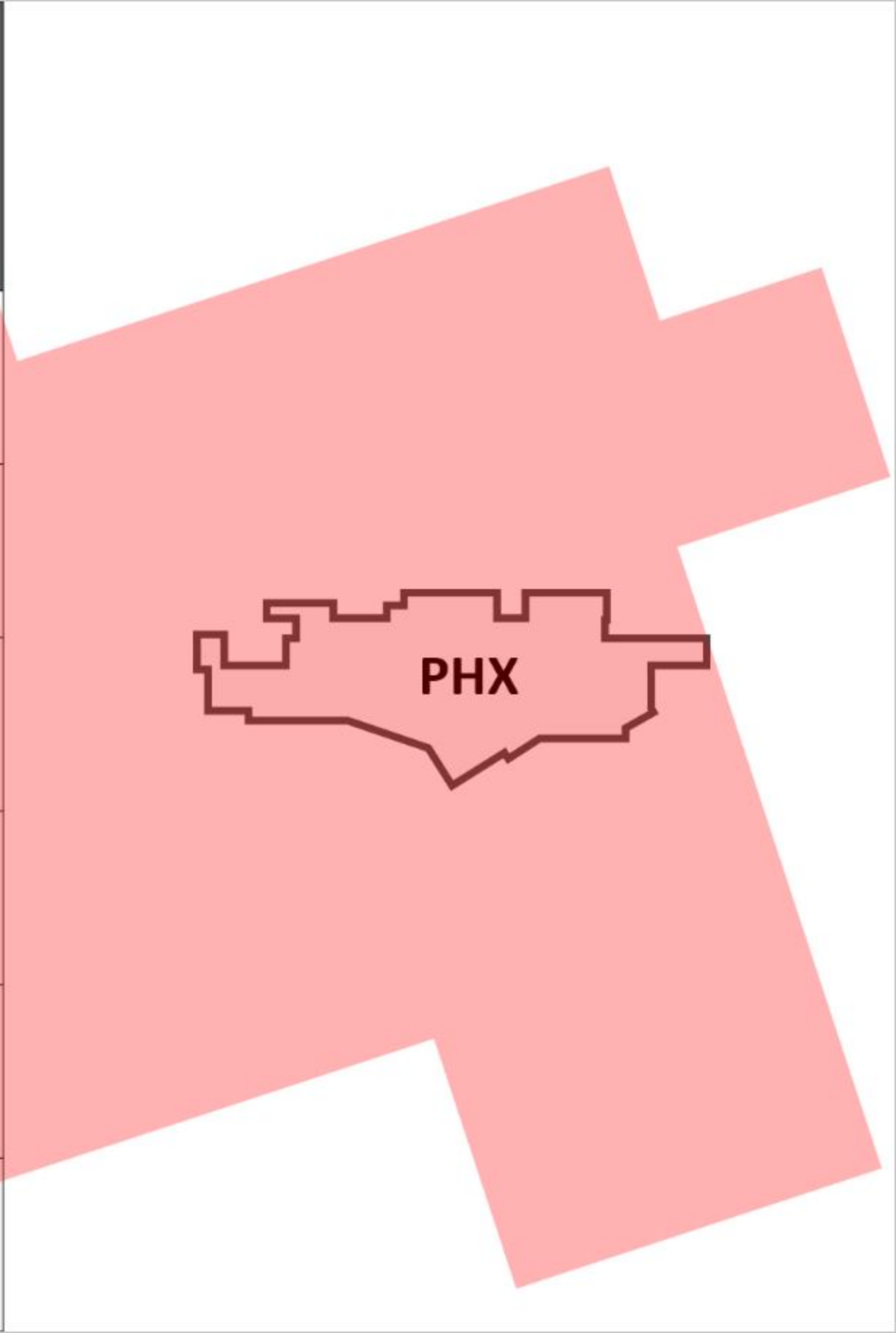
Prepared by: Oddvar Tveit

Reviewed by: Christina Hoppes

Phoenix Sky Harbor International Airport Comprehensive Asset Management Plan (CAMP)



Peer Airports	Annual Passengers	Footprint (acres)
PHX	45,000,000	3,400
Las Vegas	48,500,000	2,800
Tucson	3,000,000	8,000
Houston	40,000,000	10,000
Dallas	67,000,000	17,200
² Denver	60,000,000	34,000



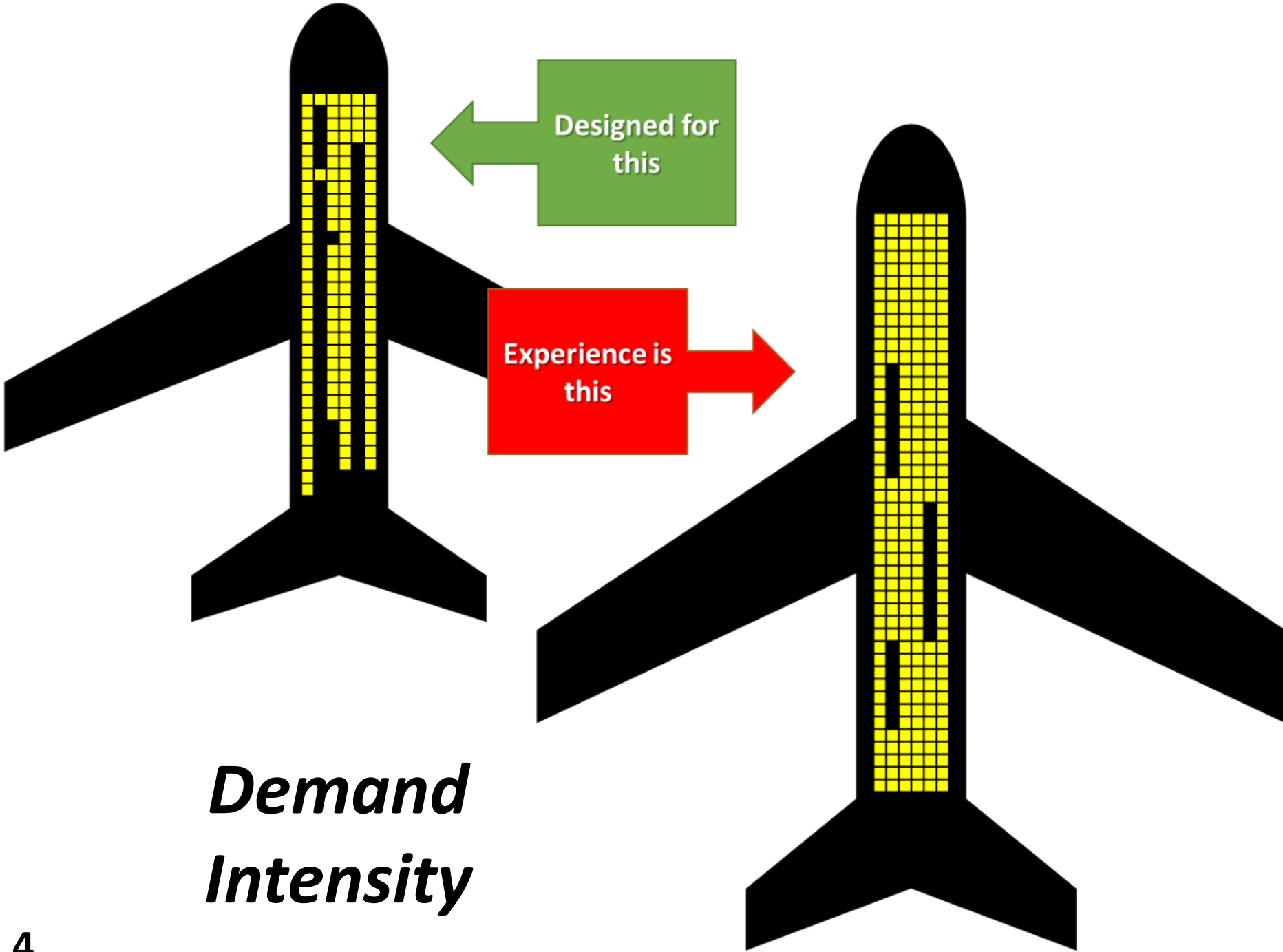
Stakeholder Priorities

Terminal Facilities

**Aero/ Support
Facilities**

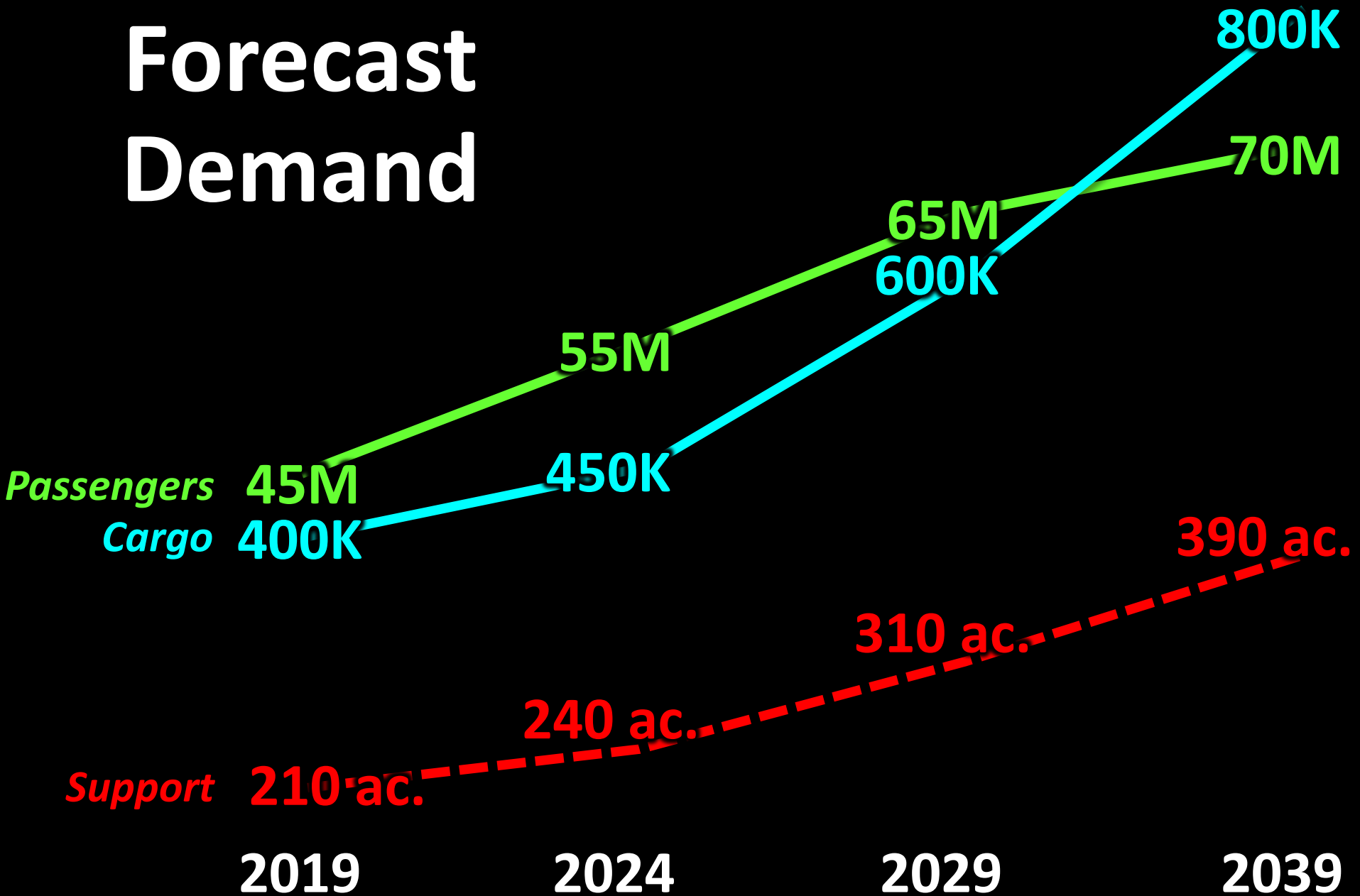
**Roadways/
Security**



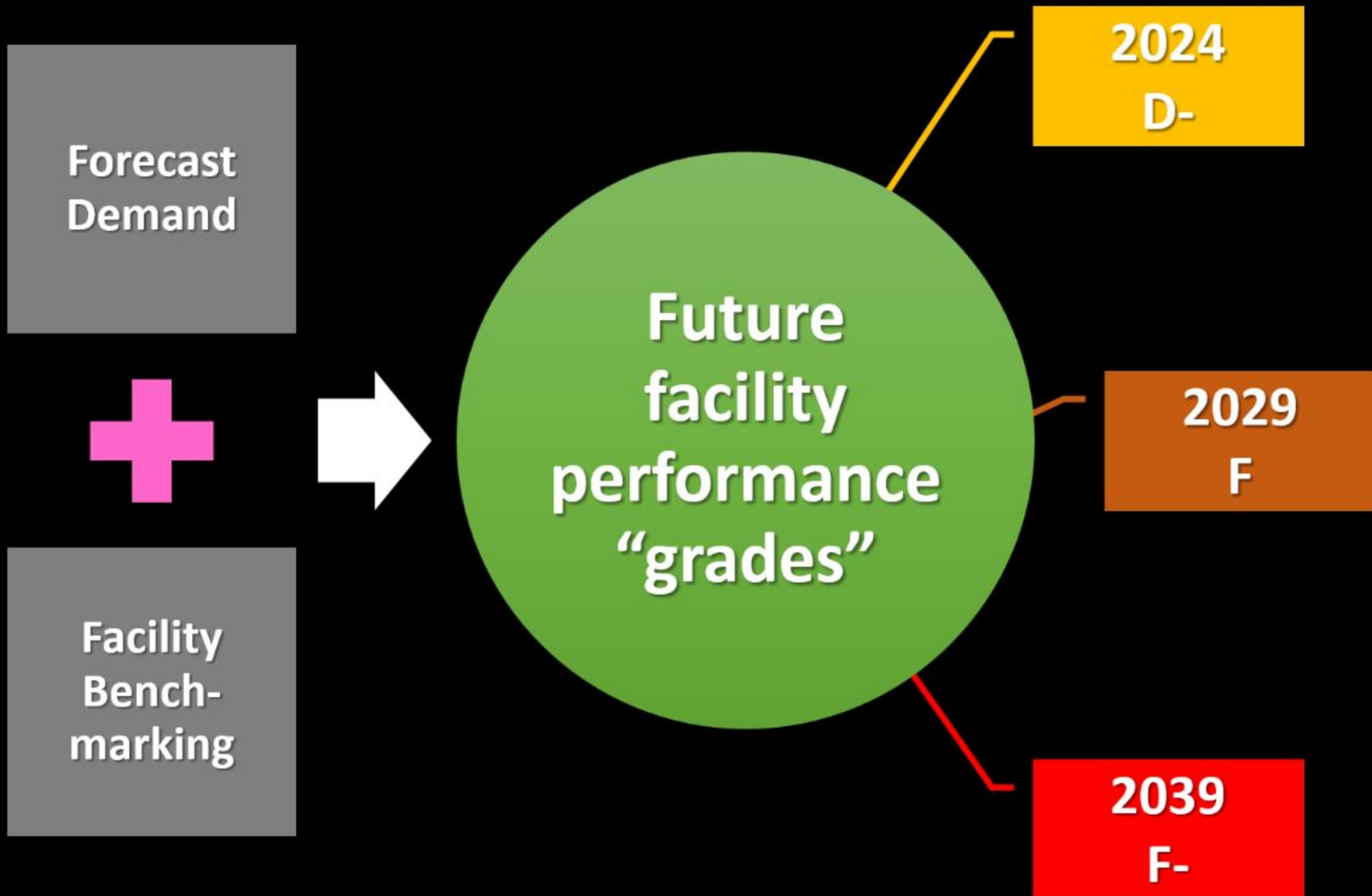


***Demand
Intensity***

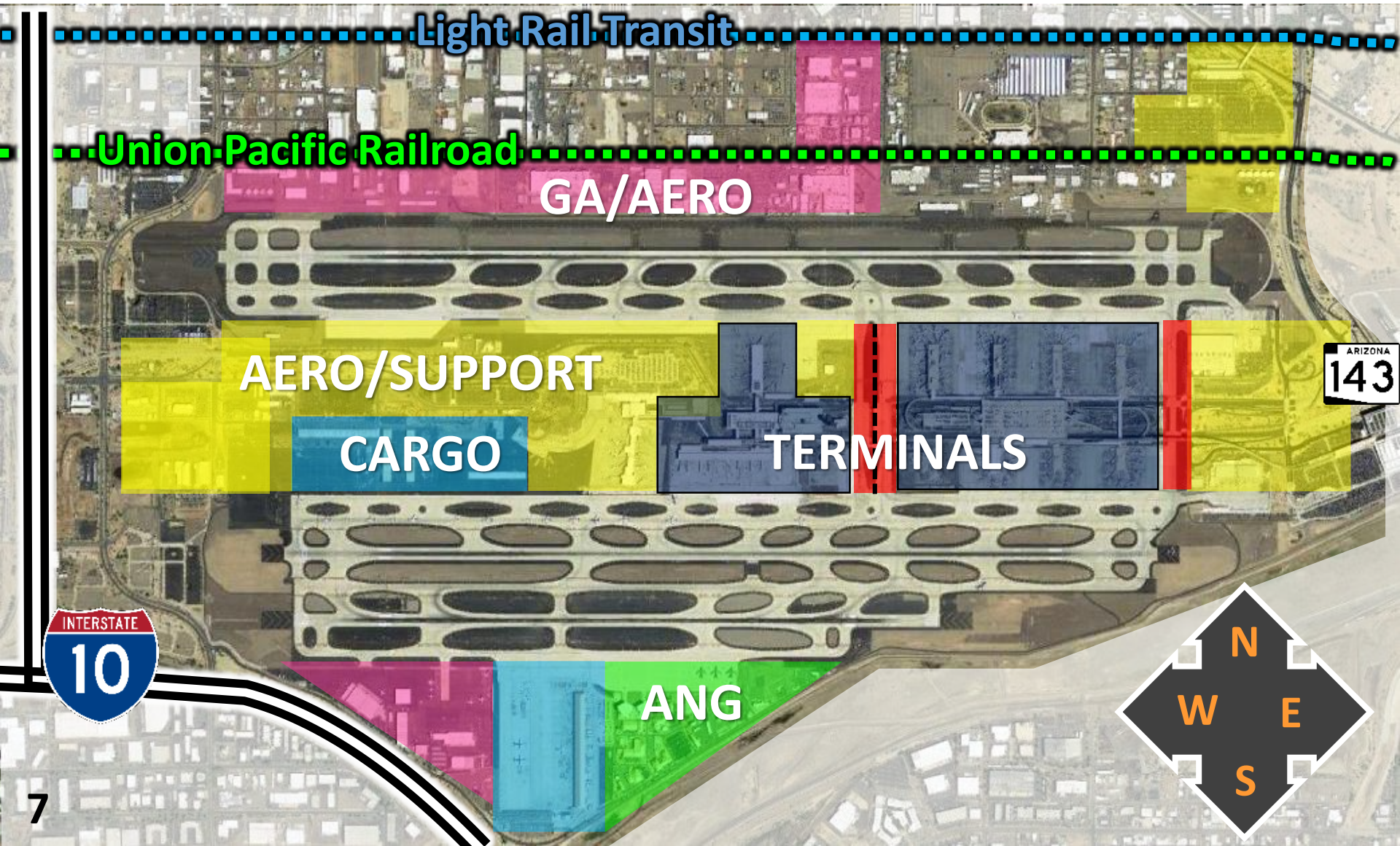
Forecast Demand



Anticipated Service Levels



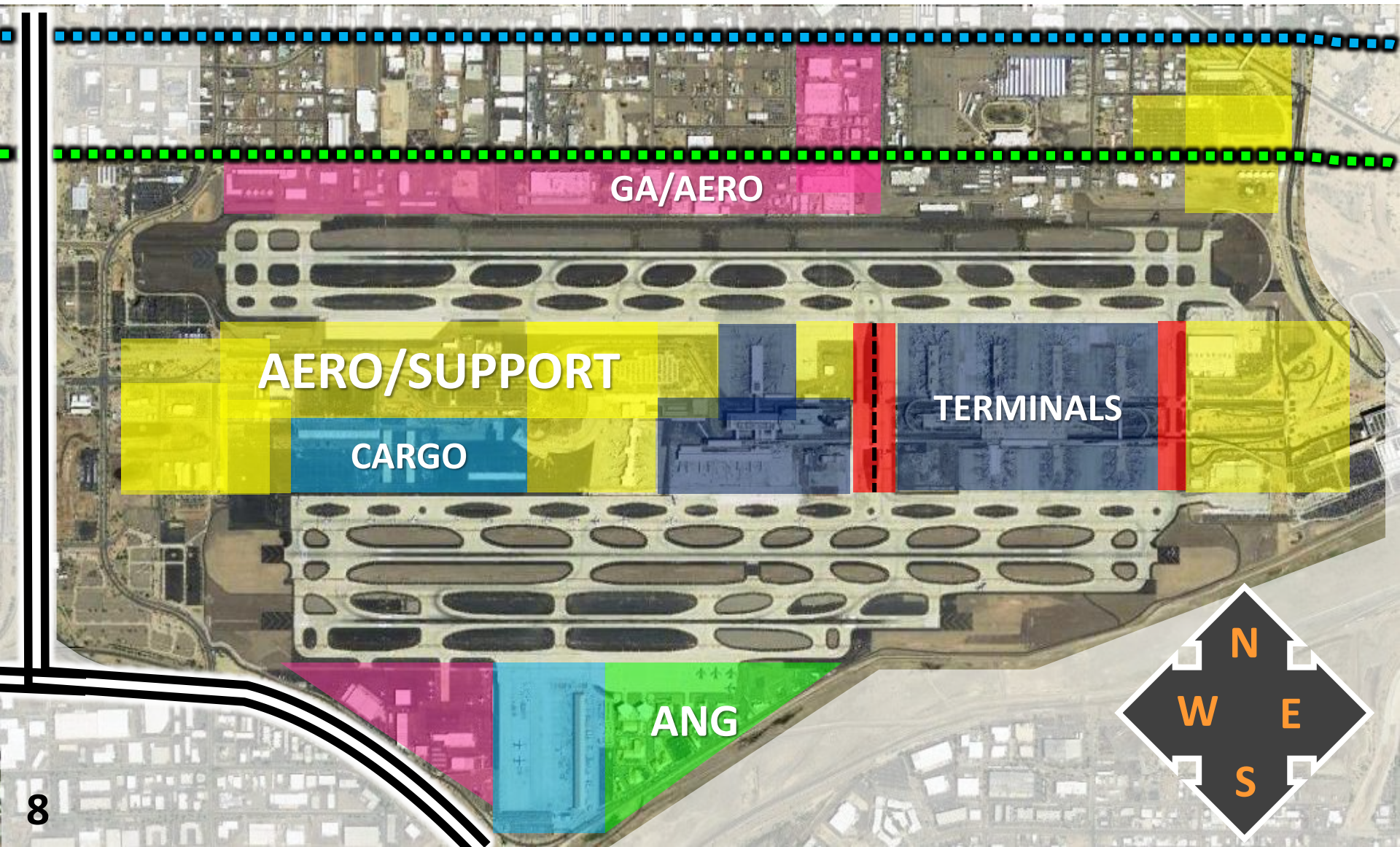
EXISTING LAND USE



RECOMMENDED LAND USE



North Facilities/
Aero-Support Complex



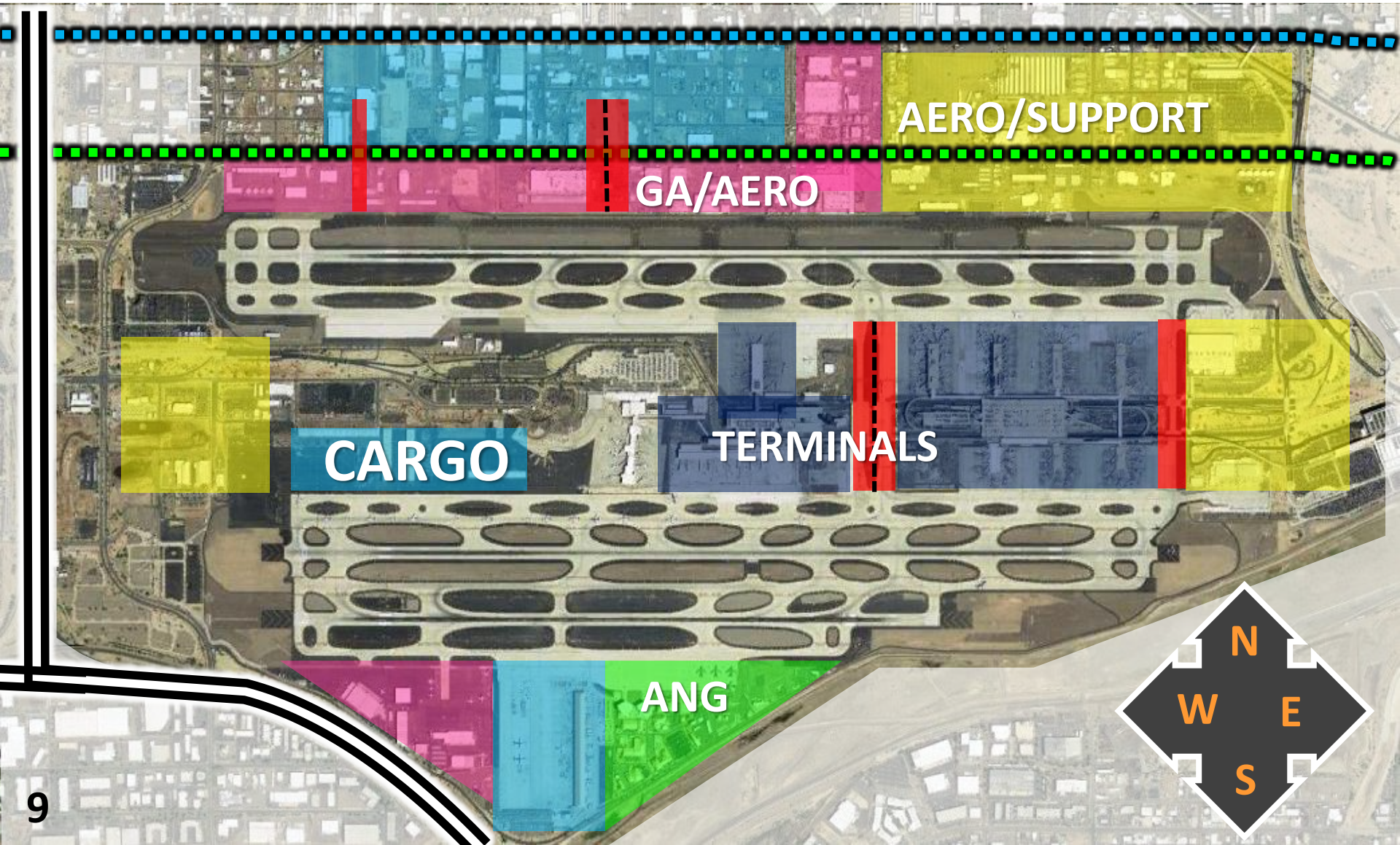
RECOMMENDED LAND USE



North Cargo
Complex



Cross-field/
Bridge Taxiways



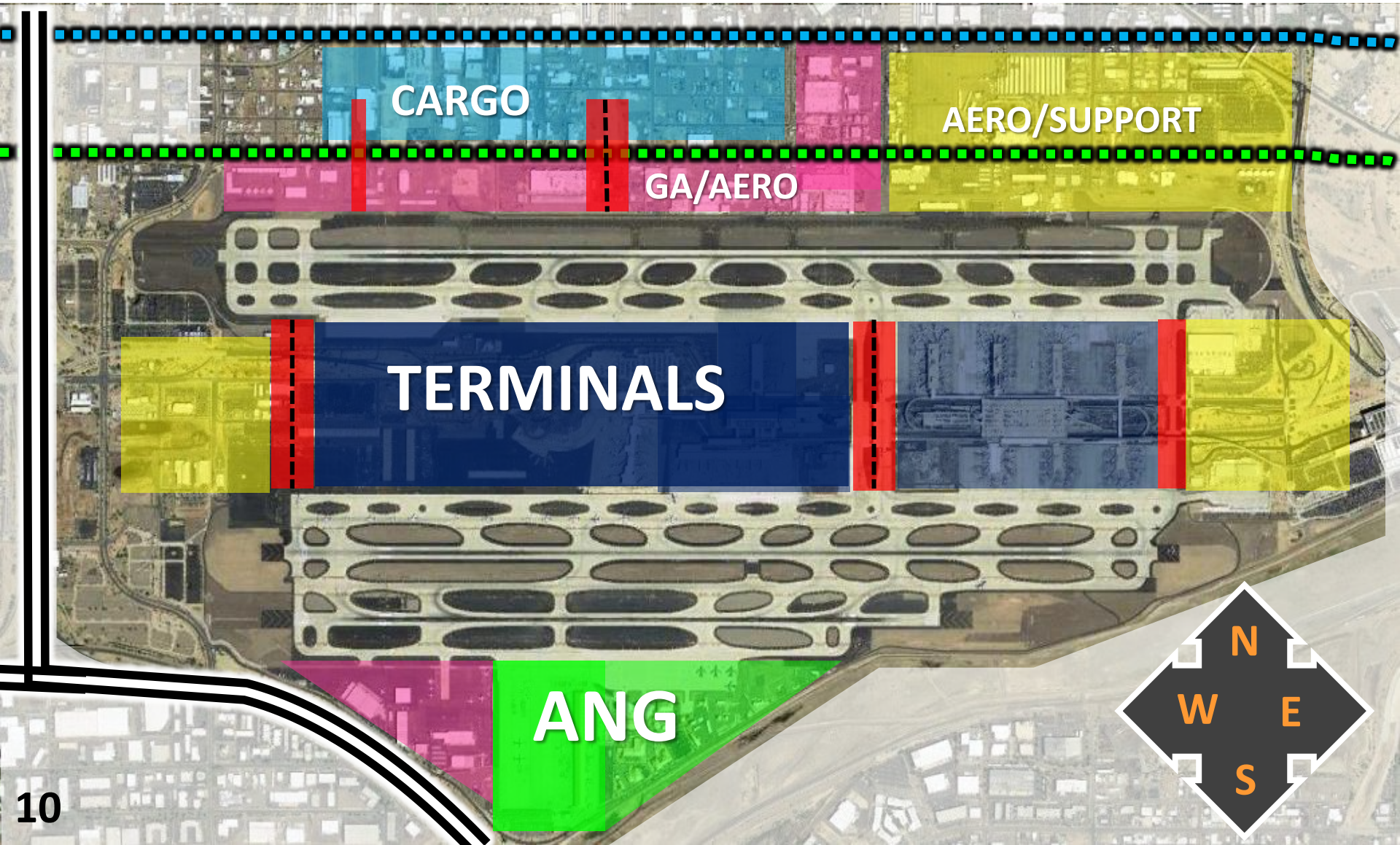
RECOMMENDED LAND USE



Terminal Core
Expansion



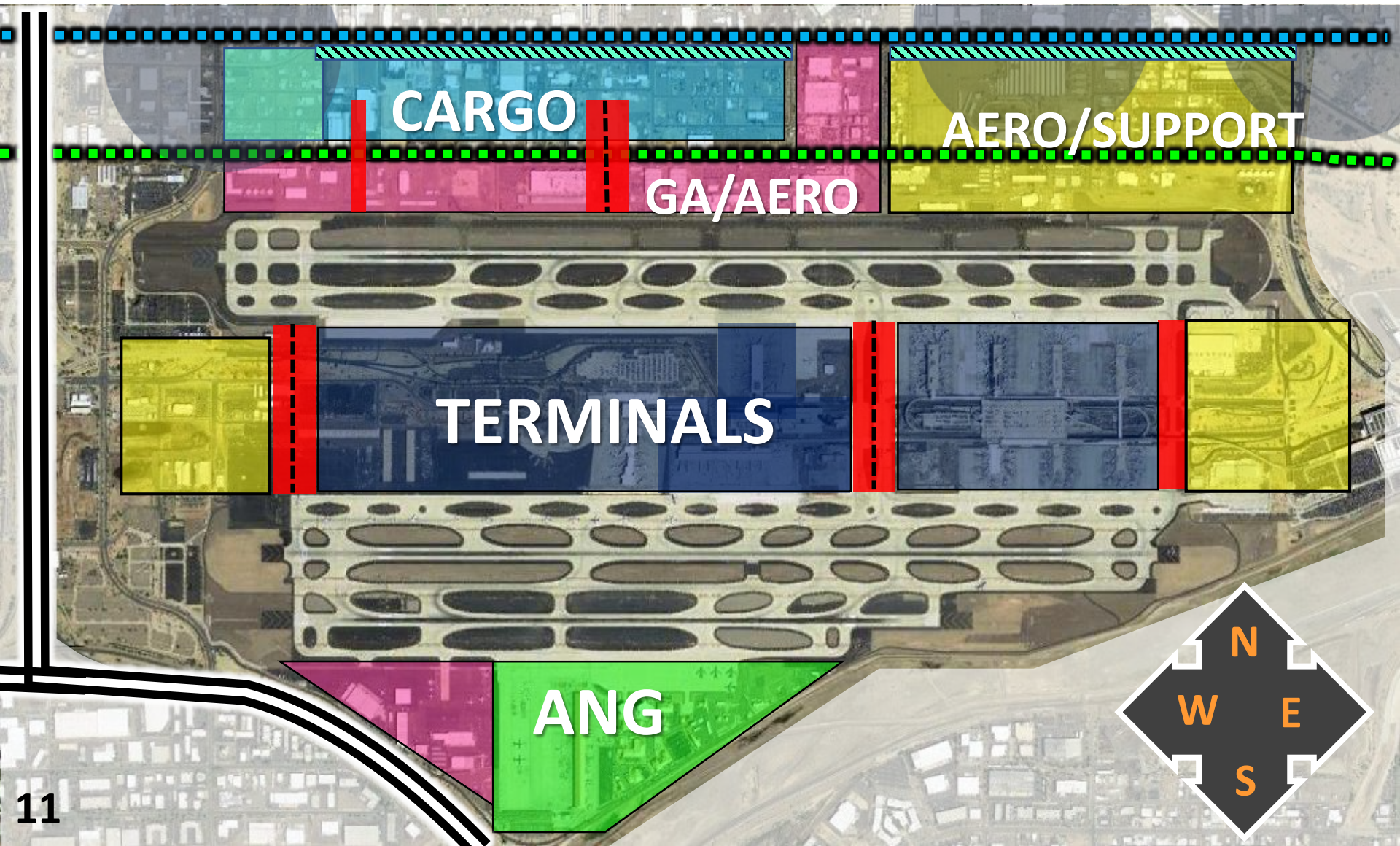
Air National
Guard Expansion

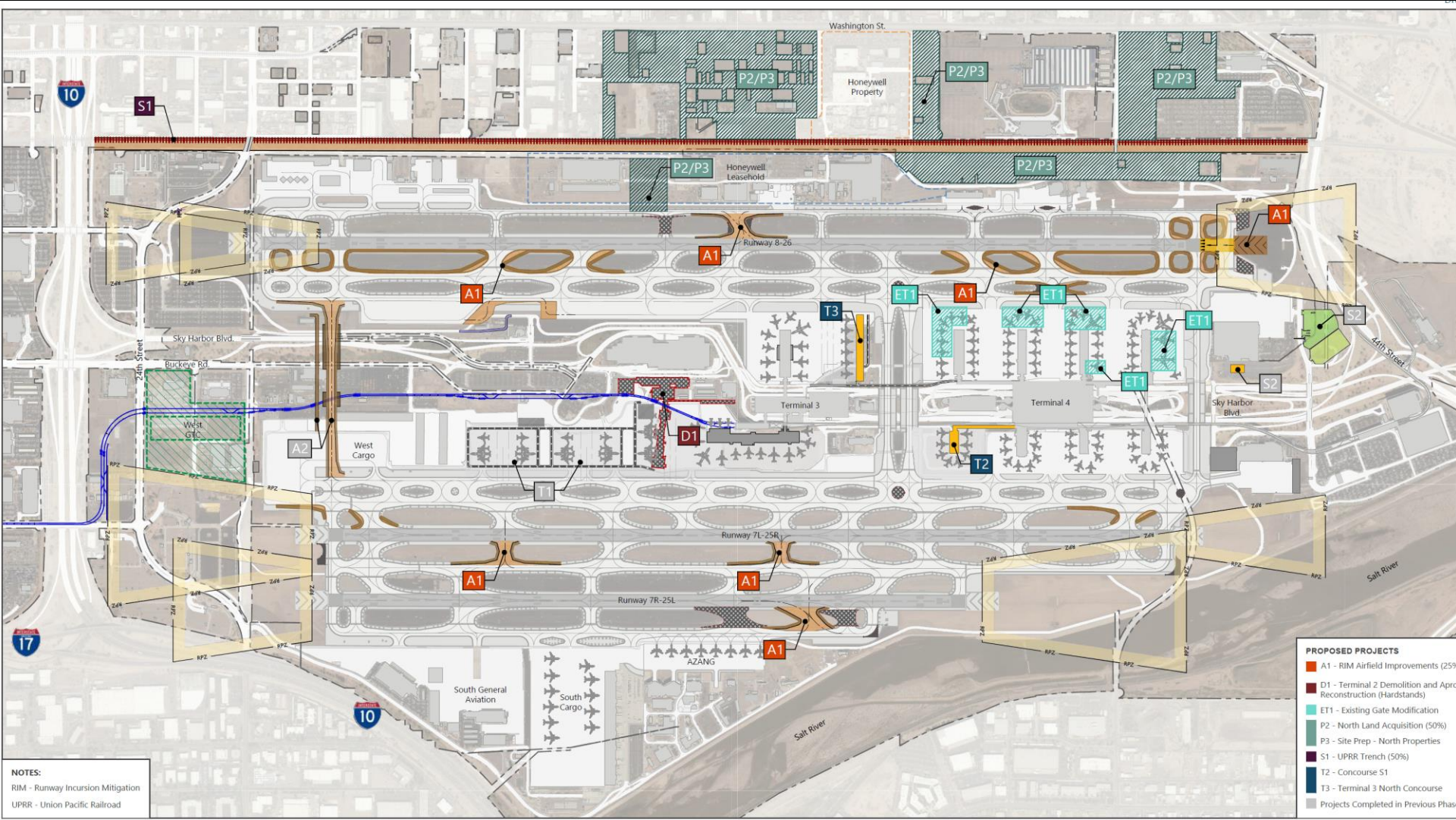


RECOMMENDED LAND USE

 Interim Non-Aero Small Business Zone

 Transit-Oriented Design Transition Zone

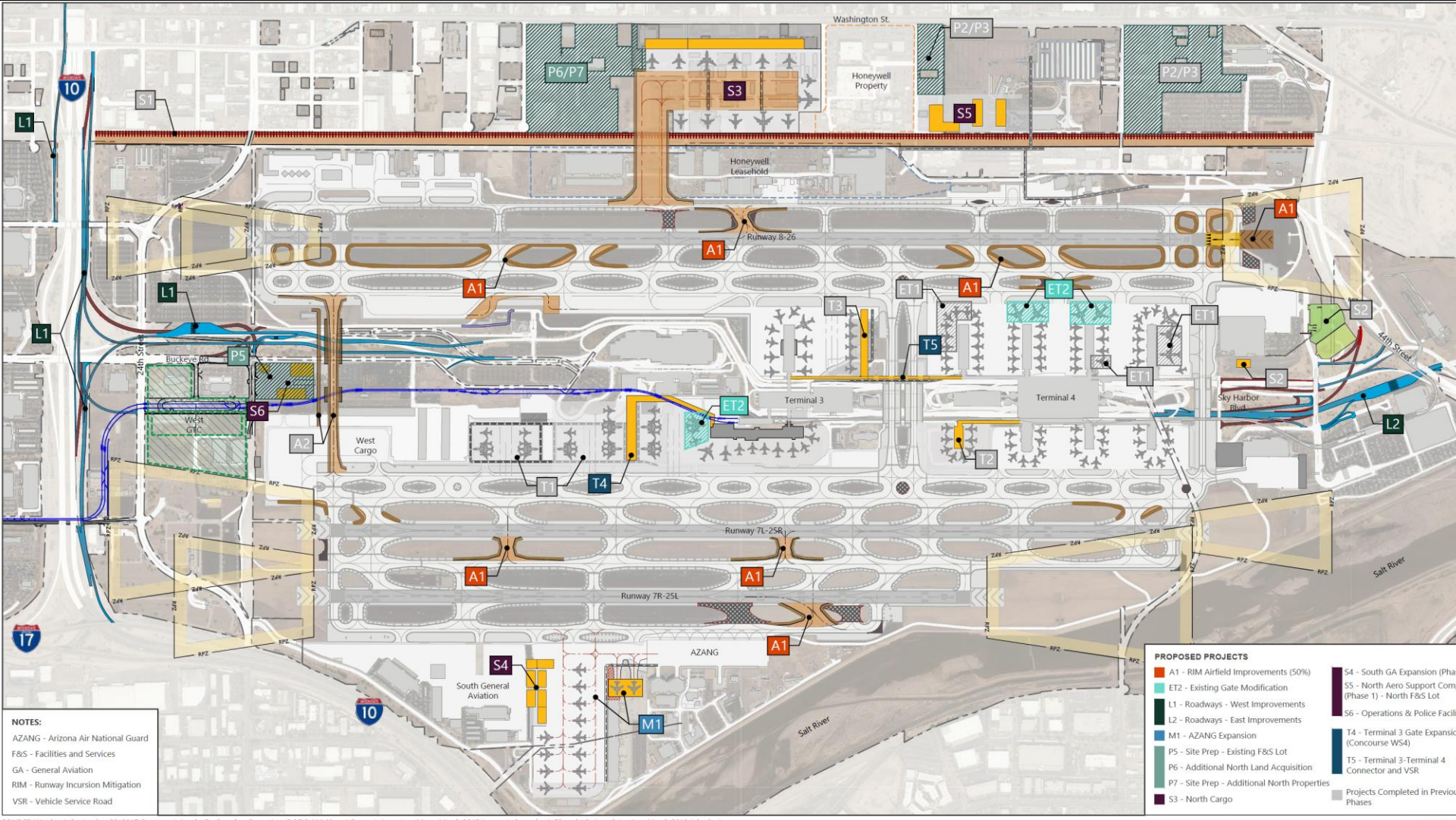




PROPOSED PROJECTS

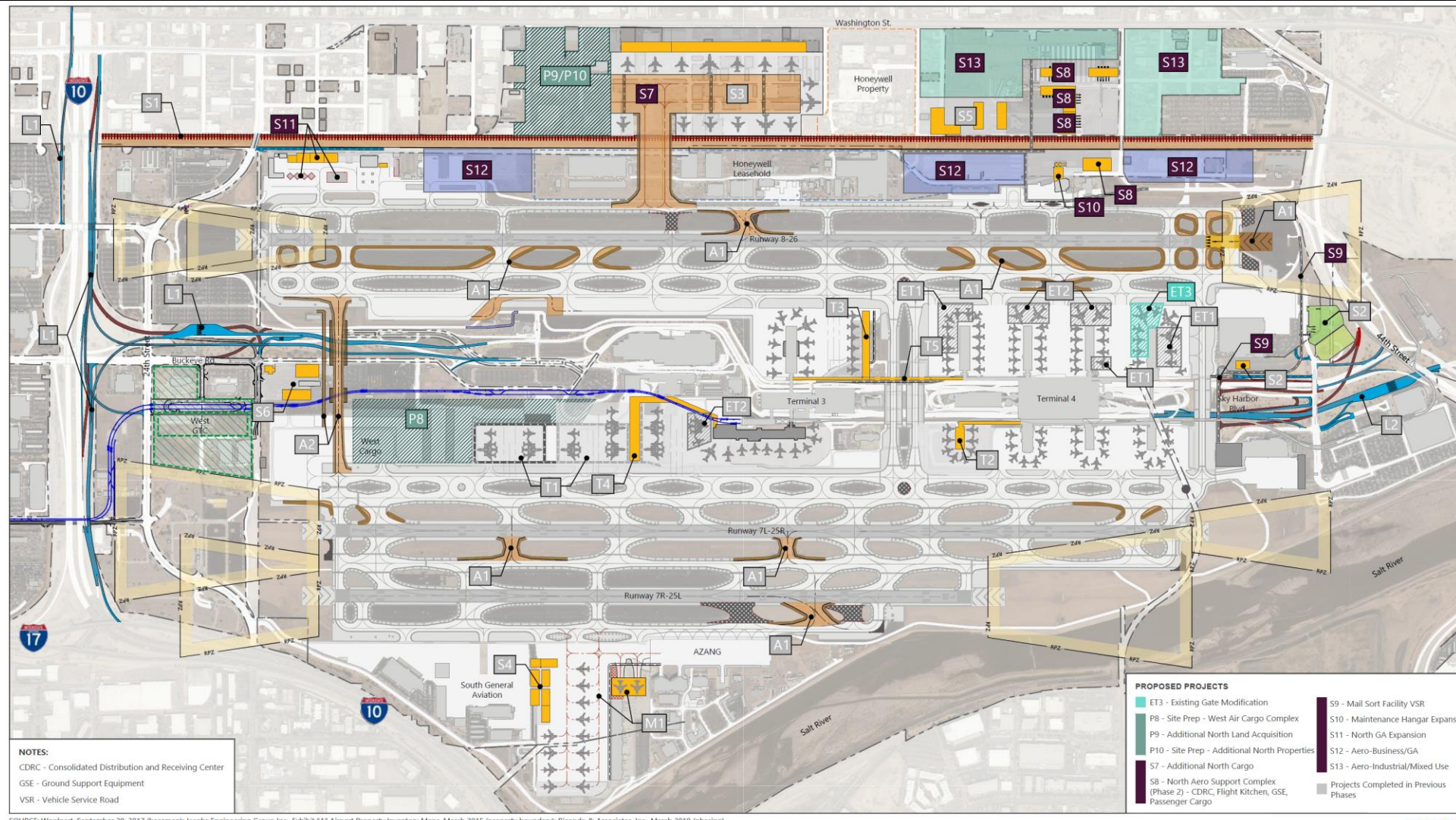
- A1 - RIM Airfield Improvements (25%)
- D1 - Terminal 2 Demolition and Apron Reconstruction (Hardstands)
- ET1 - Existing Gate Acquisition Modification (50%)
- P2 - North Land Acquisition (50%)
- P3 - Site Prep - North Properties
- S1 - UPRR Trench (50%)
- T2 - Concourse S1
- T3 - Terminal 3 North Concourse
- Projects Completed in Previous Phases

NOTES:
 RIM - Runway Incurion Mitigation
 UPRR - Union Pacific Railroad



NOTES:
 AZANG - Arizona Air National Guard
 F&S - Facilities and Services
 GA - General Aviation
 RIM - Runway Incursion Mitigation
 VSR - Vehicle Service Road

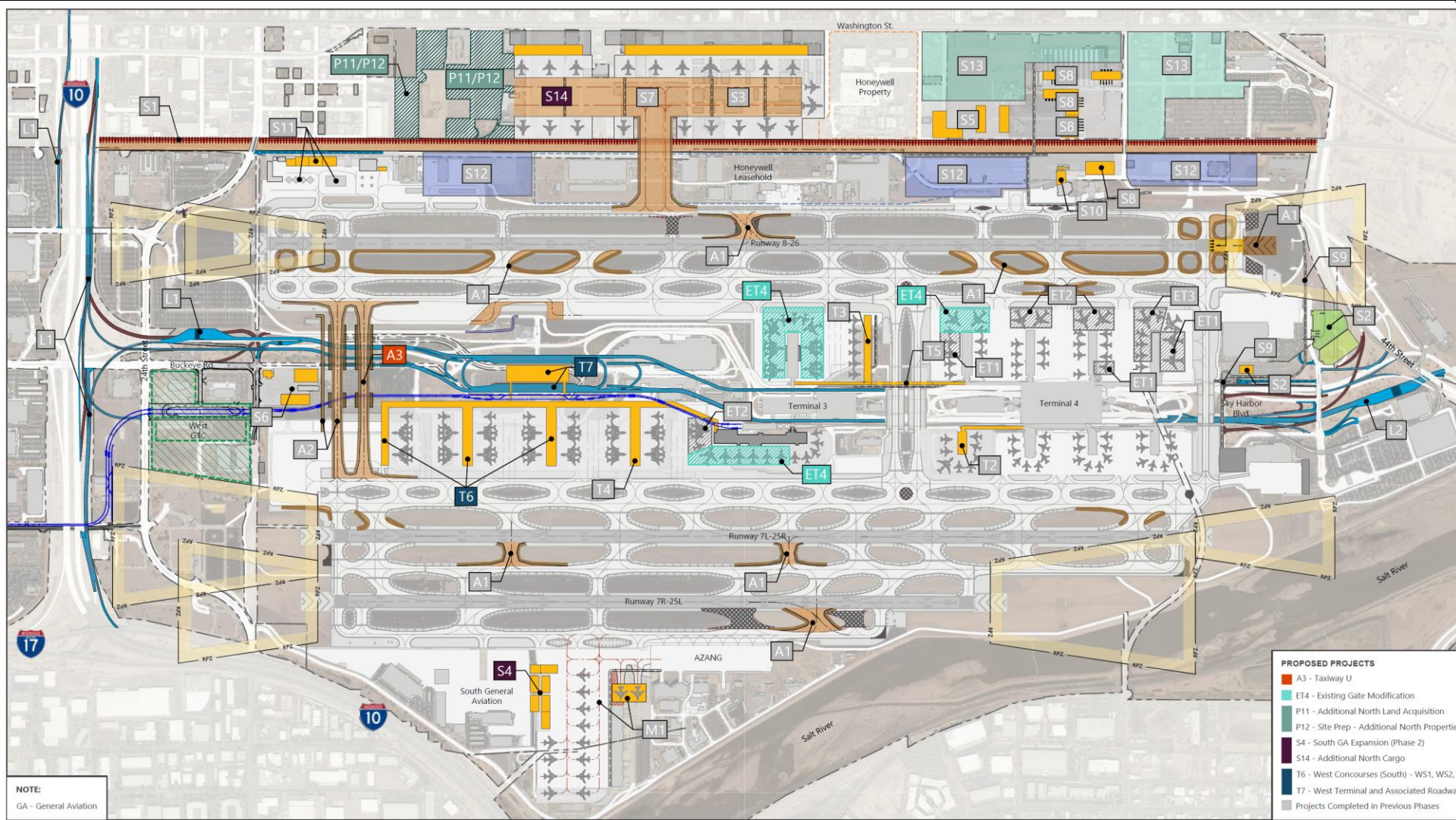
PROPOSED PROJECTS	
■ A1 - RIM Airfield Improvements (50%)	■ S4 - South GA Expansion (Phase 1) - North F&S Lot
■ ET2 - Existing Gate Modification	■ S5 - North Aero Support Com (Phase 1) - North F&S Lot
■ L1 - Roadways - West Improvements	■ S6 - Operations & Police Facility
■ L2 - Roadways - East Improvements	■ T4 - Terminal 3 Gate Expansion (Concourse WS4)
■ M1 - AZANG Expansion	■ T5 - Terminal 3-Terminal 4 Connector and VSR
■ P5 - Site Prep - Existing F&S Lot	■ Projects Completed in Previous Phases
■ P6 - Additional North Land Acquisition	
■ P7 - Site Prep - Additional North Properties	
■ S3 - North Cargo	



NOTES:
 CDRC - Consolidated Distribution and Receiving Center
 GSE - Ground Support Equipment
 VSR - Vehicle Service Road

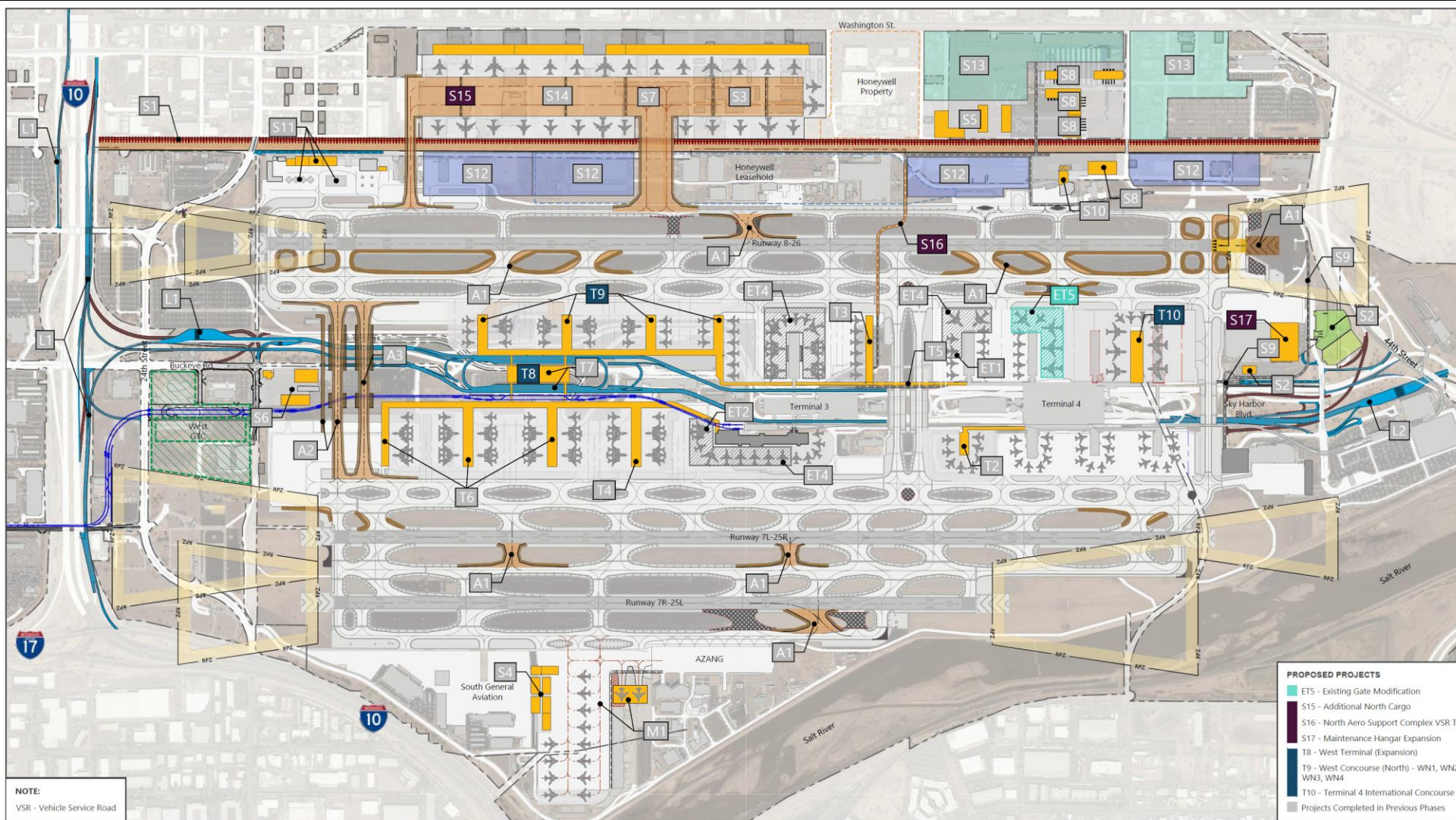
PROPOSED PROJECTS

■ ET3 - Existing Gate Modification	■ S9 - Mail Sort Facility VSR
■ P8 - Site Prep - West Air Cargo Complex	■ S10 - Maintenance Hangar Expansion
■ P9 - Additional North Land Acquisition	■ S11 - North GA Expansion
■ P10 - Site Prep - Additional North Properties	■ S12 - Aero-Business/GA
■ S7 - Additional North Cargo	■ S13 - Aero-Industrial/Mixed Use
■ S8 - North Aero Support Complex (Phase 2) - CDRC, Flight Kitchen, GSE, Passenger Cargo	■ Projects Completed in Previous Phases



- PROPOSED PROJECTS**
- A3 - Taxiway U
 - ET4 - Existing Gate Modification
 - P11 - Additional North Land Acquisition
 - P12 - Site Prep - Additional North Property
 - S4 - South GA Expansion (Phase 2)
 - S14 - Additional North Cargo
 - T6 - West Concourses (South) - W51, W52,
 - T7 - West Terminal and Associated Roadway
 - Projects Completed in Previous Phases

NOTE:
GA - General Aviation



- PROPOSED PROJECTS**
- ET5 - Existing Gate Modification
 - S15 - Additional North Cargo
 - S16 - North Aero Support Complex Expansion VSR T
 - S17 - Maintenance Hangar Expansion
 - T8 - West Terminal (Expansion)
 - T9 - West Concourse (North) - WN1, WN2, WN3, WN4
 - T10 - Terminal 4 International Concourse
 - Projects Completed in Previous Phases

NOTE:
VSR - Vehicle Service Road

Schedule

2019

- City Council CAMP Land Use Plan Approval (June)
- Submit ALP to FAA (next week)
- “Publish” Draft Plan and Executive Summary (two weeks)
- Internal scoping for CAMP EA (now)
- FAA approval of ALP (December)
- Public scoping for CAMP EA (December)

2020

- Issue Land Acquisition RFP (February)
- Precon/utility work “Year 0-3” projects (October)
- Complete CAMP EA (December)