

City of Austin-Department of Aviation Austin-Bergstrom International Airport Master Plan

Project Advisory Committee Meeting #4

August 28, 2018

**THE AIRPORT OF CHOICE
FOR CENTRAL TEXAS**



Austin-Bergstrom
International Airport

DISCUSSION TOPICS

2040 ABIA Master Plan Schedule

Public Involvement Overview

Airport Development Phasing

Terminal Layout Concept

Terminal Curbfront Concept

Environmental & Sustainability

Mobility

Next Steps



ABIA 2040 MASTER PLAN SCHEDULE



Austin-Bergstrom
International Airport



ABIA 2040 Master Plan Schedule Status



PUBLIC INVOLVEMENT OVERVIEW



Public Input Overview & Survey

- **Public Meetings**

- October 12, 2017
- April 19, 2018
- June 7, 2018
- September 26, 2018

- **PAC and TAC Meetings**

- June 26, 2017
- October 19, 2017
- April 18, 2018
- August 28, 2018

Survey Results and Feedback

Respondents were asked to note their level of agreement with the preferred alternative, ranging from Highly Agree (1) to Highly Disagree (5) and why

- **11 Question Survey open for 2.5 weeks**

- ABIA Facebook and Twitter pages shared the survey link
- Letters were sent to surrounding property owners
- Yard signs were placed in nearby neighborhoods
- Signs were placed in terminal

- **257 Respondents**

- 92 Open-ended comments were collected
- Diverse user base, ranging from frequent fliers to rare users

Survey Question Results

- **New Runway**

- 73.5% noted the most important factor for a new runway is its capacity to meet future demand

- **New Terminal**

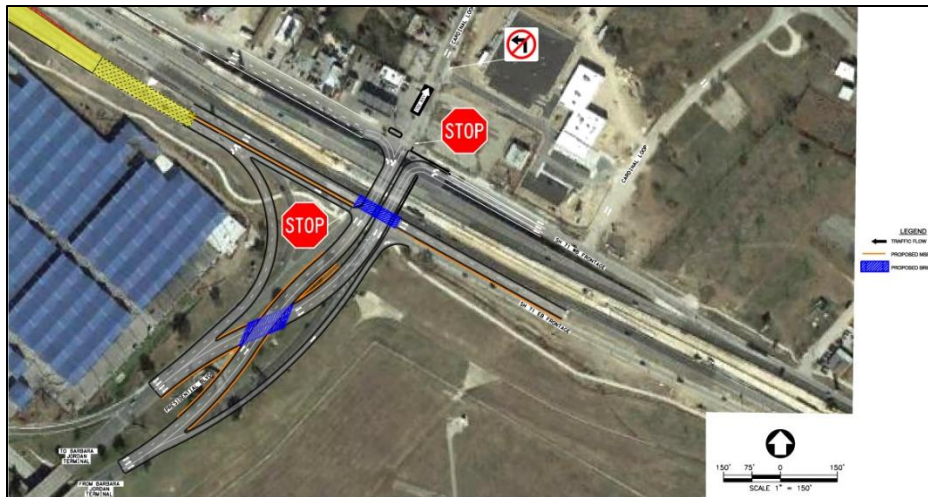
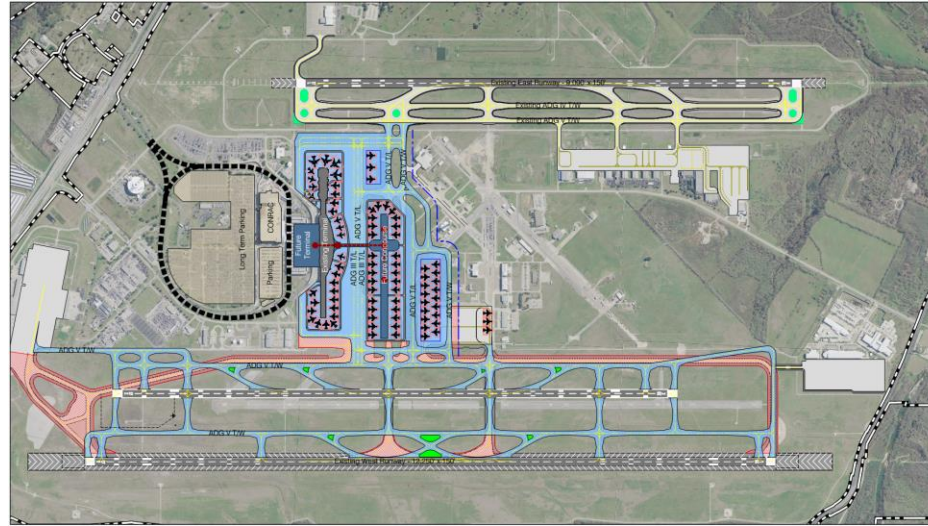
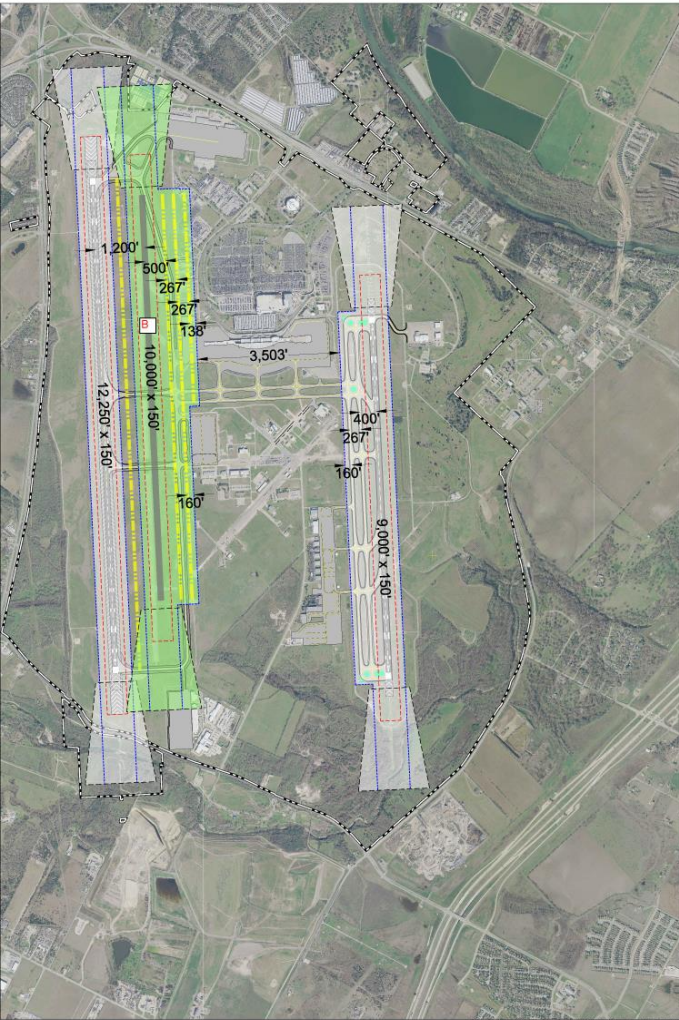
- 75% : Ability for future expansion
- 62%: Walkability and Ease of Travel

- **New Roadway Access**

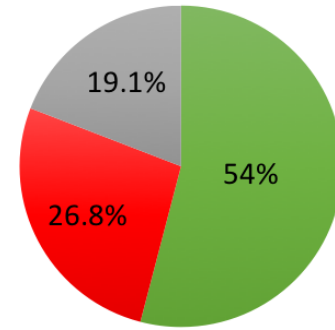
- 66.4% : Ability to meet future demand
- 45.3% : Overall constructability

Airport Alternatives Feedback

Austin-Bergstrom International Airport Runway Alternative 2

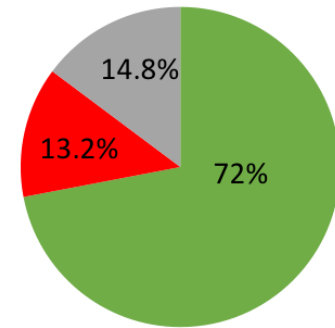


Runway Feedback



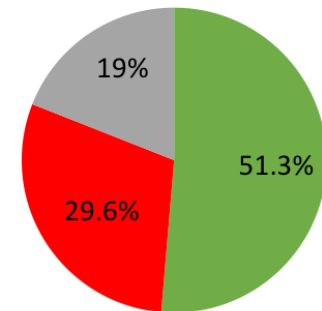
Agree Disagree Neutral

Terminal Feedback



Agree Disagree Neutral

Roadway Feedback



Agree Disagree Neutral

Survey Comments

- ABIA needs a **rail system** that connects to downtown and surrounding areas (Round Rock, Cedar Park)
 - ABIA should be more **inter-modal** (adequate bike access and storage, buses, rail, etc.)
- People are concerned the roadway alternative is a **short-term fix**
- Start **overbuilding** now for future growth
- Planners should maintain the unique **Austin experience** when developing new facilities
- Several comments referred to **Roadway Relocation of SH 71 to the North** as the preferred alternative



“Mobility”

“Mobility”

“Growth”

“Terminal”

“Mobility”

AIRPORT DEVELOPMENT PHASING



Austin-Bergstrom
International Airport



Draft Construction Phasing Schedule

• Phase 1 Development

- New Taxiway “Delta”
- Barbara Jordan Terminal Upgrades
- New 20-gate Terminal/Concourse with Option for Hydrant Fueling
- New Terminal Curbs
- New Airport Roadway Network
- New Central Bag Handling System
- New Apron, Taxiways and Taxilanes
- South Maintenance/Deicing Ramp Rehab
- Central Warehouse
- Consolidated Maintenance Facility
- Utility Infrastructure Upgrades
- New Support Facilities (ARFF, GSEM, Belly Cargo, Maintenance, Catering, etc.)
- New Fuel Farm
- New Central Utility Plant

• Phase 2 Development

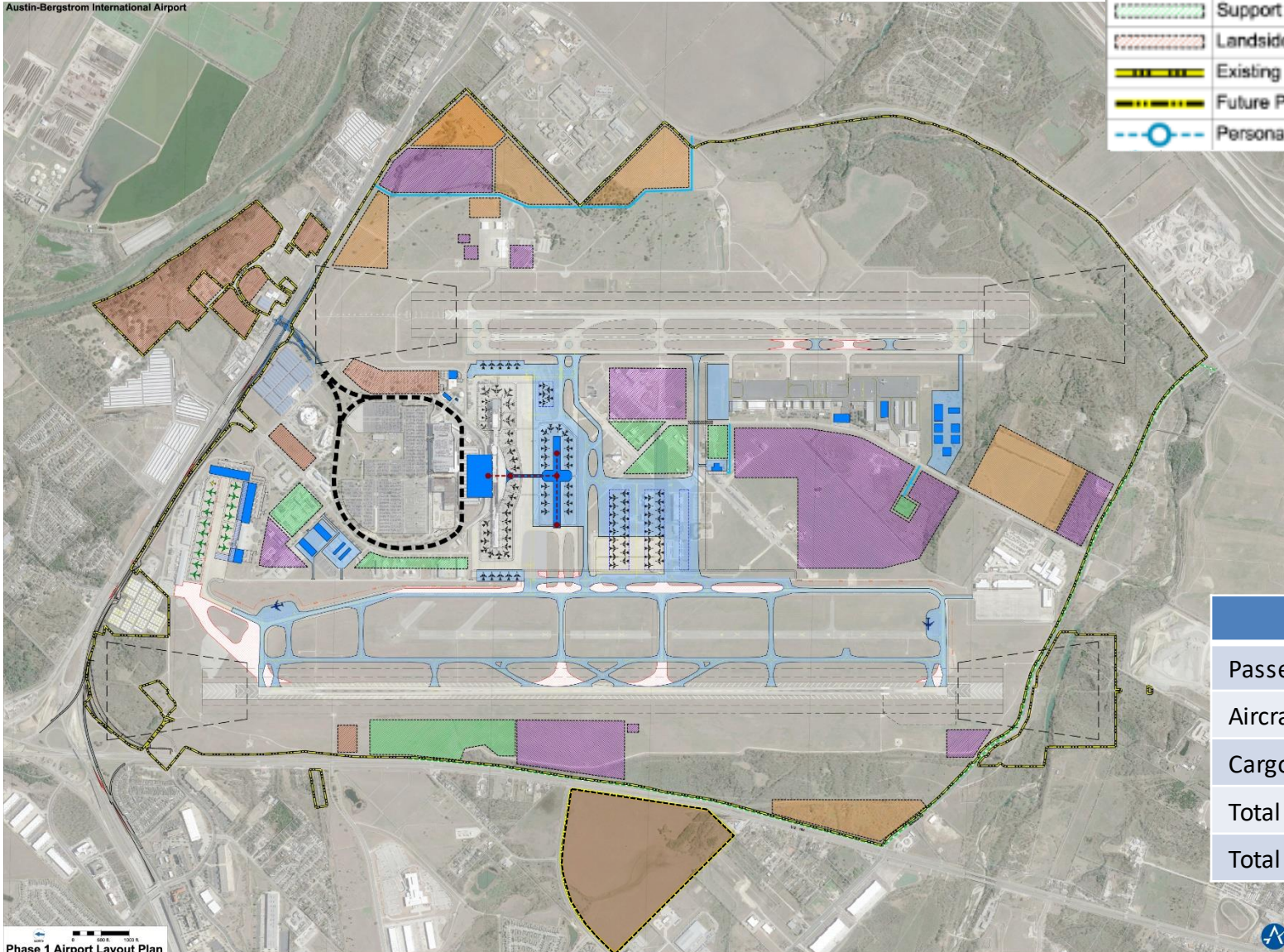
- Renovations to Barbara Jordan Terminal/Ticketing
- New North and Southwest Cargo Buildings
- New 12 gate Concourse Expansion with Hydrant Fueling Option
- New Apron Taxiways and Taxilanes
- Existing Runway Upgrades
- Expansion of Support Facilities

• Long-Term Development

- New Runway
- New Taxiways
- Relocated SH 71
- Land Acquisition

Phase 1 Layout

Austin-Bergstrom International Airport



| DRAWING LEGEND | |
|----------------|--------------------------------|
| Item | Description |
| | Aeronautical Area |
| | Non-Aeronautical Area |
| | Support Facility Area |
| | Landside Facility Area |
| | Existing Property Line |
| | Future Property Line |
| | Personal Rapid Transit (P.R.T) |

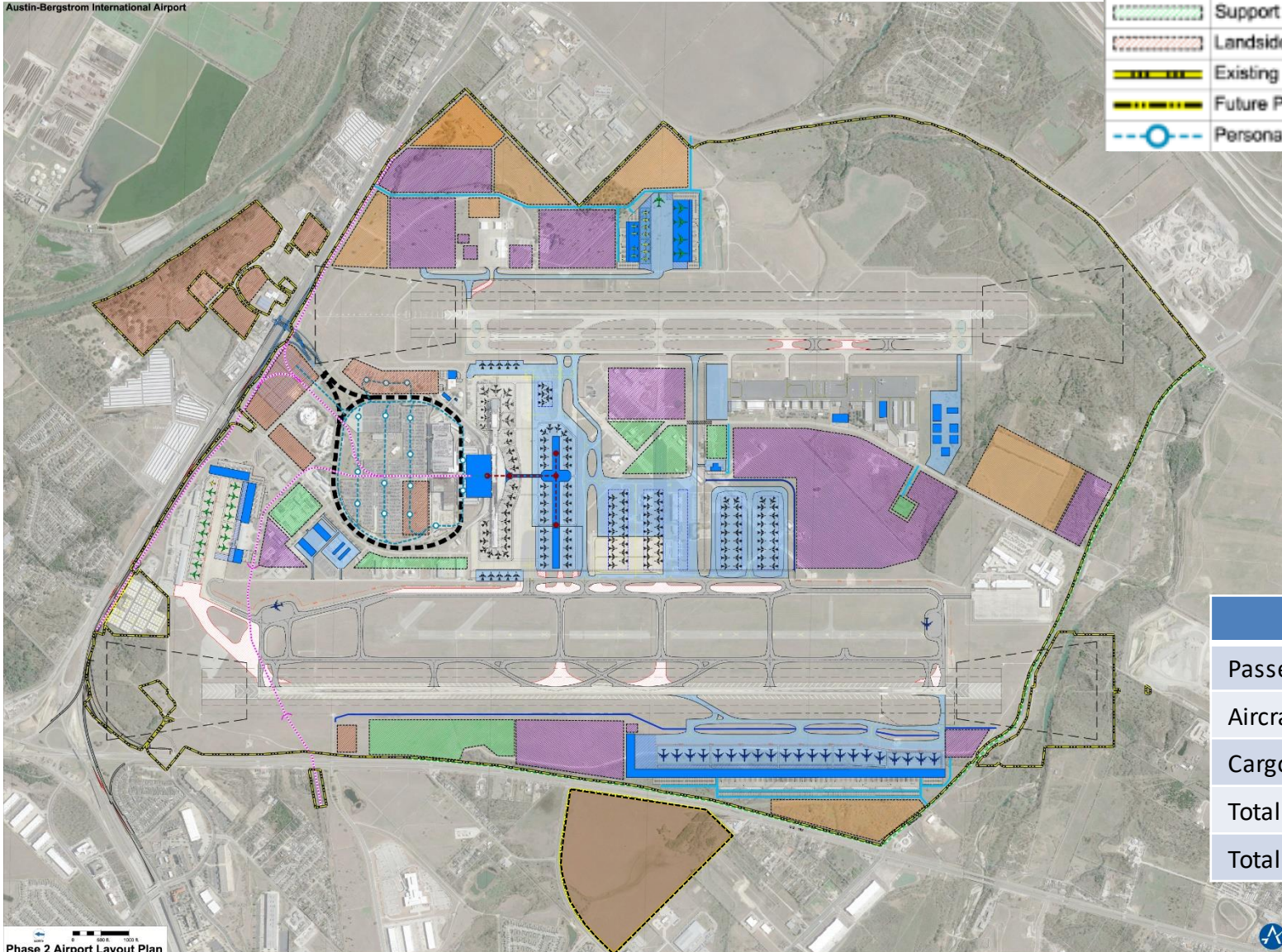
4.5% Avg. Annual Pax. Growth Rate

| Phase 1 - 2027 | |
|----------------------|---------|
| Passengers (million) | 21.7 |
| Aircraft Operations | 287,214 |
| Cargo (million lbs.) | 1,132 |
| Total Gates | 48 |
| Total RON | 58 |



Phase 2 Layout

Austin-Bergstrom International Airport



| DRAWING LEGEND | |
|----------------|--------------------------------|
| Item | Description |
| | Aeronautical Area |
| | Non-Aeronautical Area |
| | Support Facility Area |
| | Landside Facility Area |
| | Existing Property Line |
| | Future Property Line |
| | Personal Rapid Transit (P.R.T) |

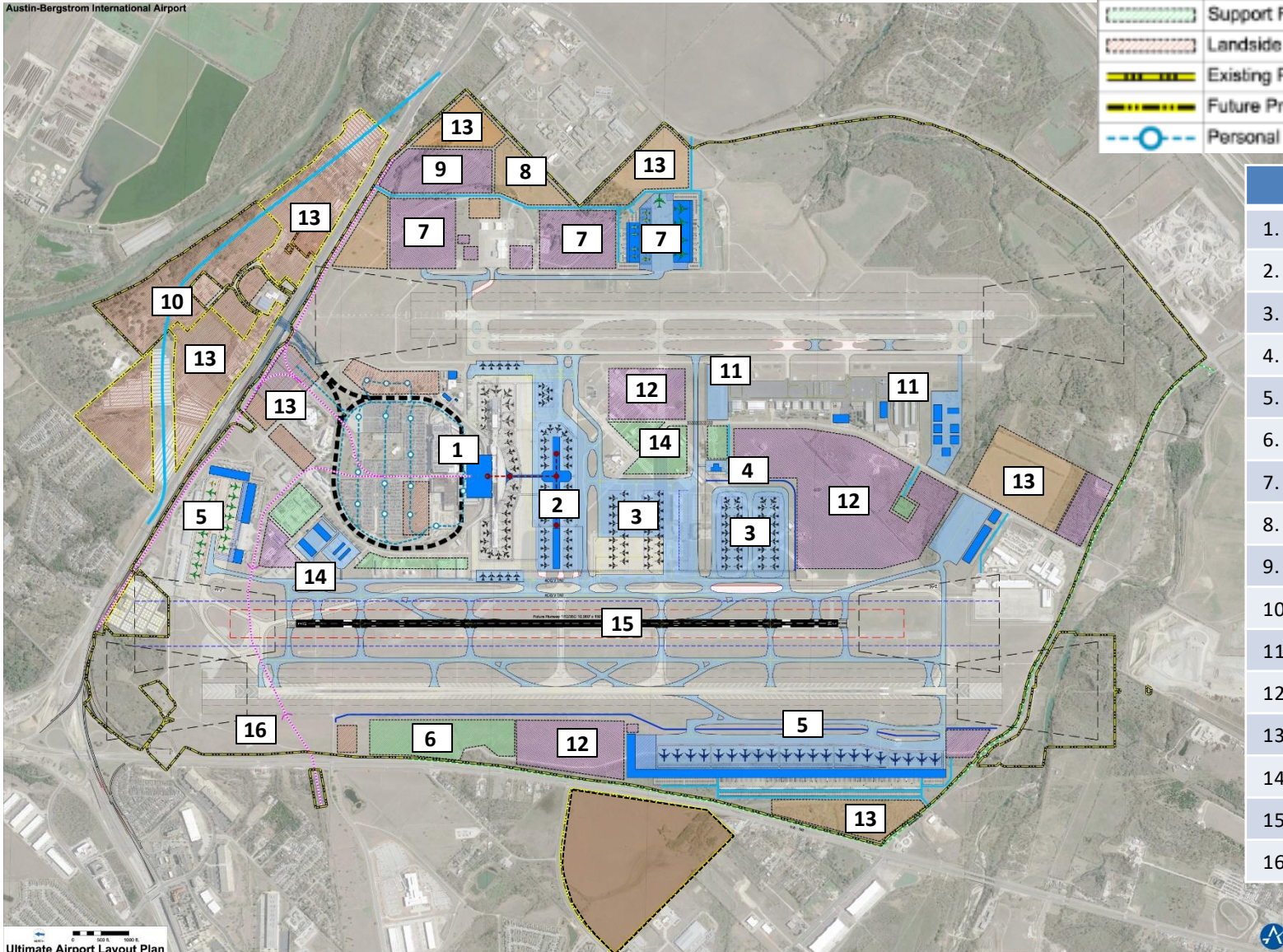
4.5% Avg. Annual Pax. Growth Rate

| Phase 2 - 2037 | |
|----------------------|---------|
| Passengers (million) | 31.4 |
| Aircraft Operations | 426,552 |
| Cargo (million lbs.) | 3,415 |
| Total Gates | 64 |
| Total RON | 74 |



Long-Term Layout

Austin-Bergstrom International Airport



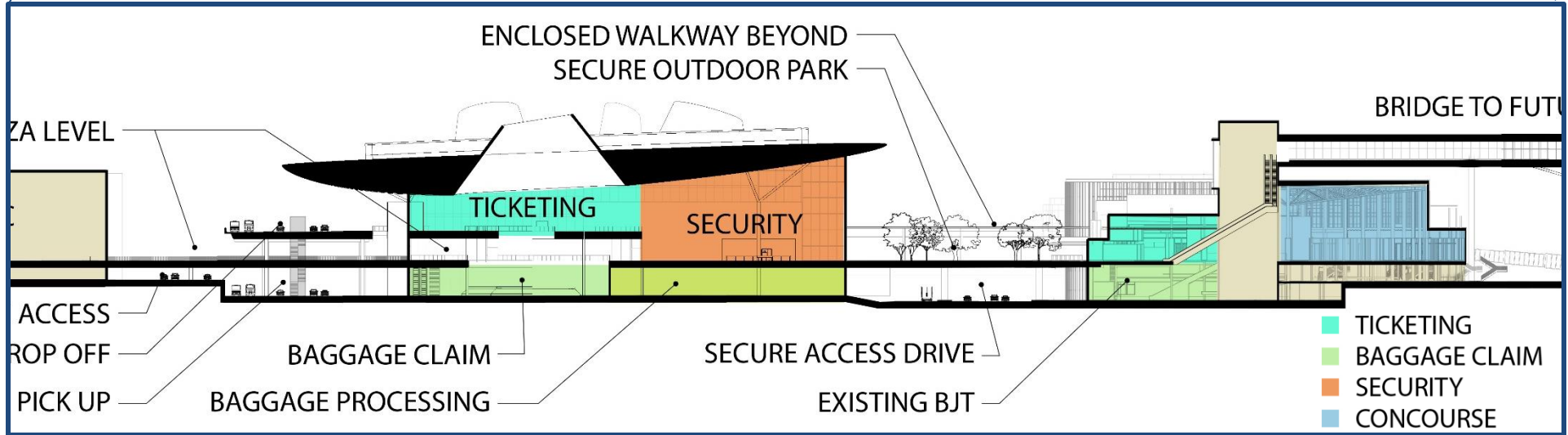
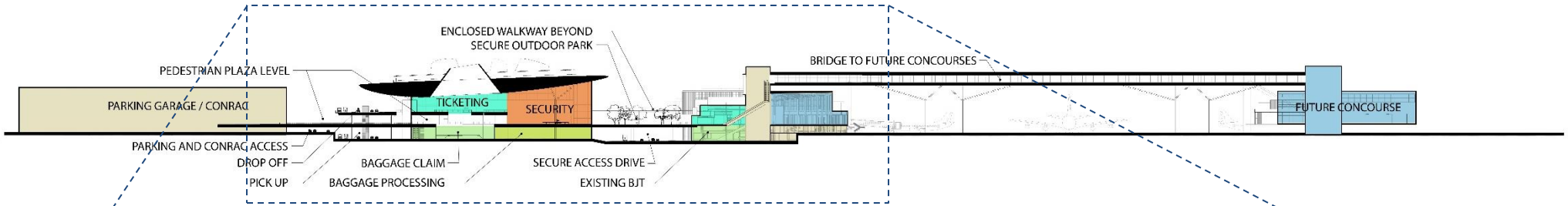
| DRAWING LEGEND | |
|----------------|--------------------------------|
| Item | Description |
| | Aeronautical Area |
| | Non-Aeronautical Area |
| | Support Facility Area |
| | Landside Facility Area |
| | Existing Property Line |
| | Future Property Line |
| | Personal Rapid Transit (P.R.T) |

| PROJECT |
|--|
| 1. Terminal Process & Central Bag System |
| 2. Remote 32 Gate Concourse |
| 3. Remain Overnight Parking Positions |
| 4. Airport Firefighting Station |
| 5. Cargo Development |
| 6. Fuel Farm |
| 7. Aircraft Maintenance |
| 8. Central Warehouse |
| 9. Airport Maintenance |
| 10. Relocated SH 71 |
| 11. General Aviation |
| 12. Aeronautical Development Areas |
| 13. Non-Aeronautical Development Areas |
| 14. Support Facility Areas |
| 15. New Runway 17C-35C |
| 16. Light Rail |

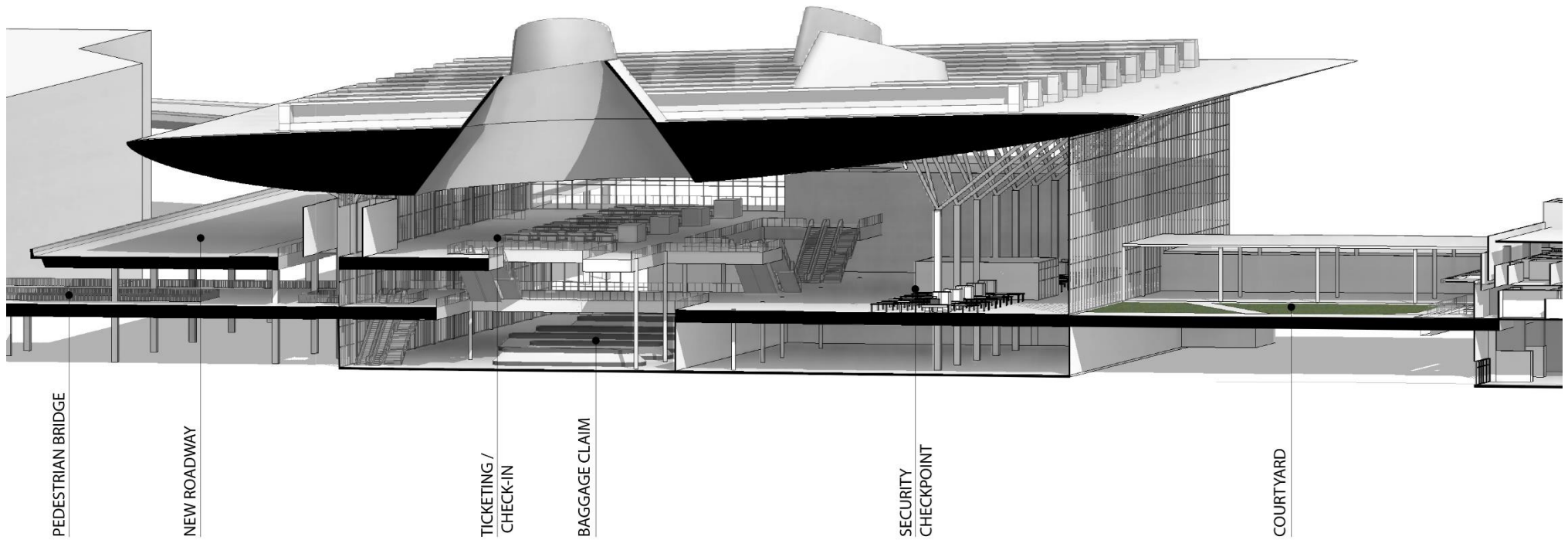
2037 TERMINAL ALTERNATIVES UPDATED DESIGN



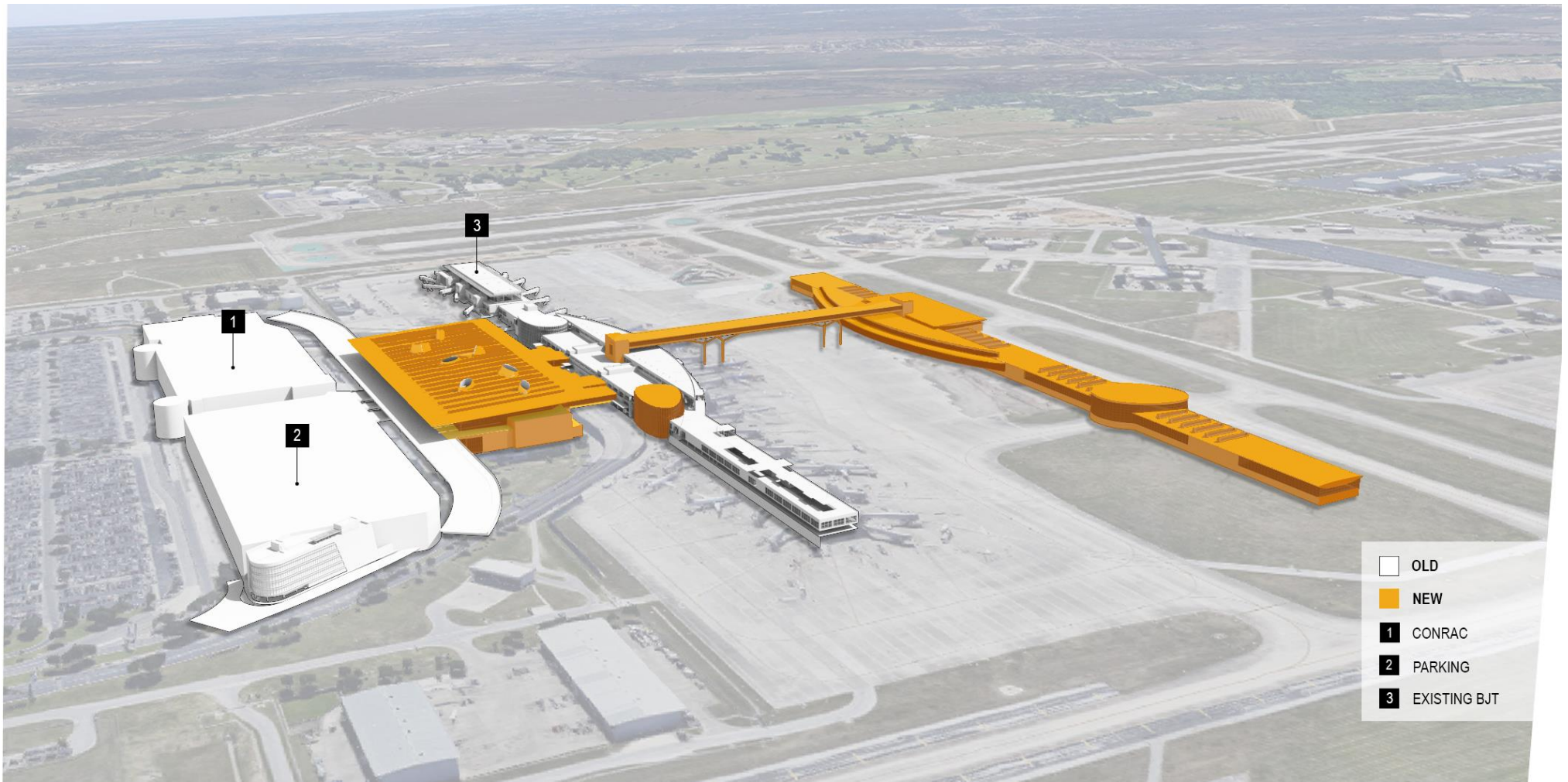
Terminal Section Diagram



Terminal Section Diagrams North/South Section



Terminal / Concourse Aerial View



Terminal Concept Courtyard View



Terminal Concept Departures Hall Rendering View



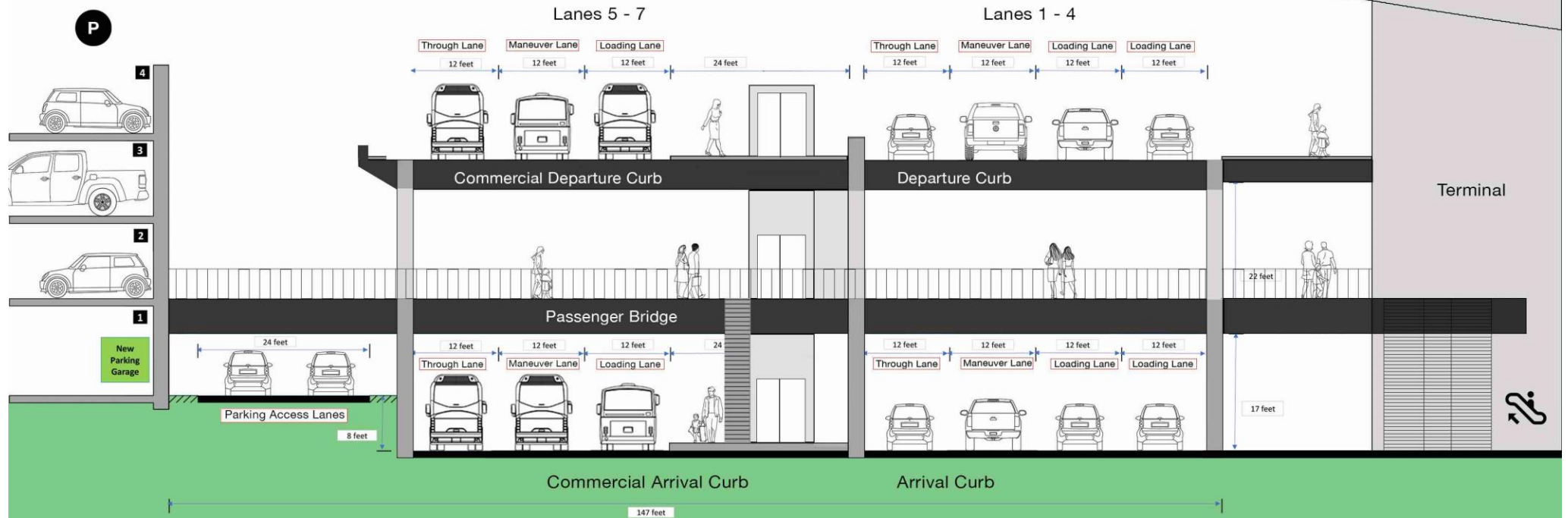
TERMINAL CURBFRONT CONCEPT

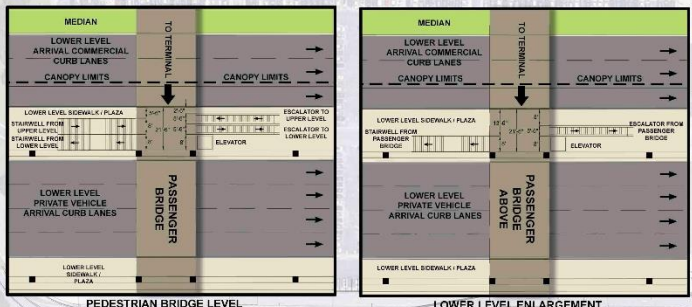


Austin-Bergstrom
International Airport



| MODE | CURB LENGTH REQUIRED (ft.) | CURB LENGTH PROVIDED (ft.) |
|-----------------------|----------------------------|----------------------------|
| POVs/ TNCs | 990 | *2,000 |
| Parking Shuttles | 342 | 460 |
| Hotel Shuttles | (no existing forecast) | 400 |
| Shared Ride (non-TNC) | (no existing forecast) | 120 |
| Taxis | 750 | 750 |
| Limos | (no existing forecast) | 250 |
| Charter/Transit Bus | 114 | 300 |

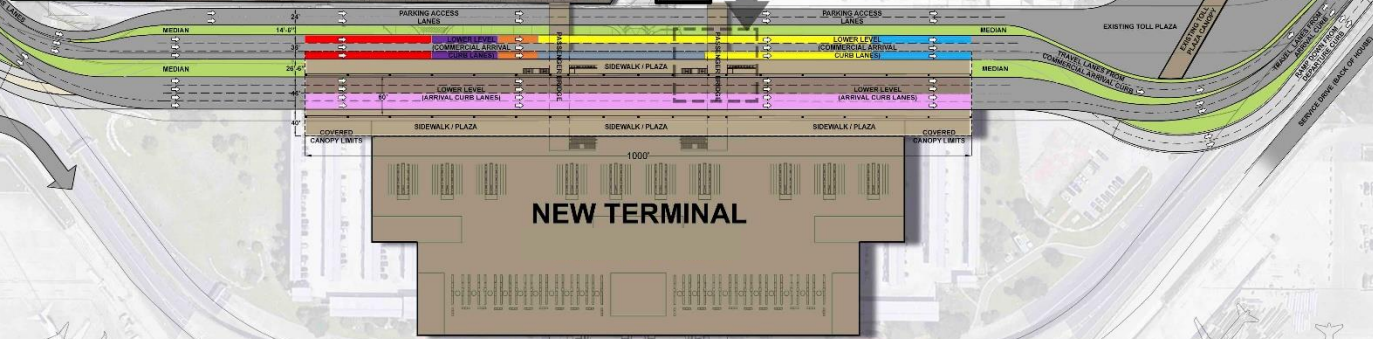




PEDESTRIAN BRIDGE LEVEL ENLARGEMENT LOWER LEVEL ENLARGEMENT



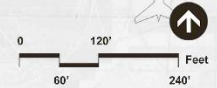
SEE ENLARGEMENTS



CURB ALLOCATION LEGEND

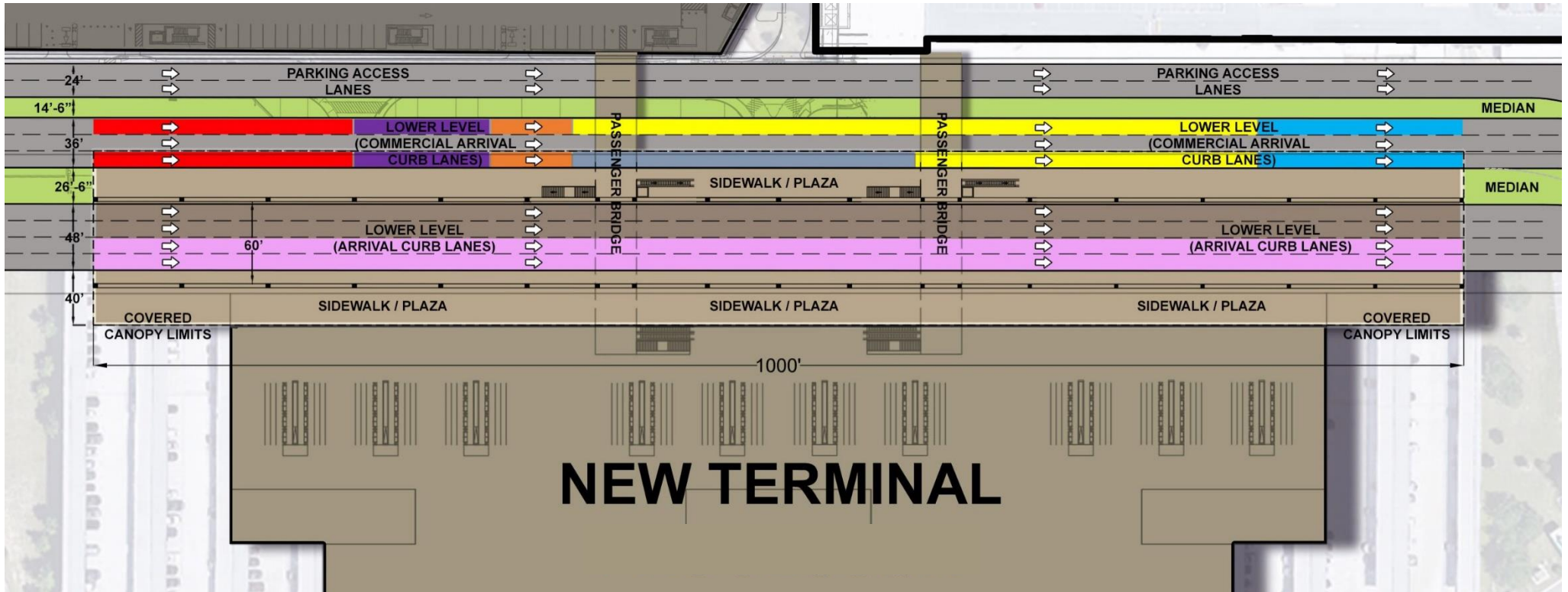
- Private Vehicles/TNCs:
(2,000 Feet)
- Parking Shuttles:
(380 Feet)
- Hotel Shuttles:
(400 Feet)
- Shared Ride (Non-TNC):
(120 Feet)
- Taxis:
(750 Feet)
- Limos:
(250 Feet)
- Charter/Transit Bus/Capital Metro:
(300 Feet)

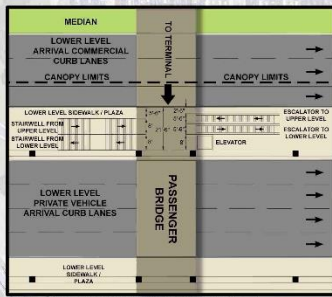
ALTERNATIVE A LOWER LEVEL (ARRIVAL CURB)



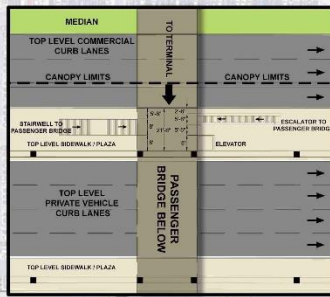
Preferred Curb Design Plan View

(Plan View: Lower Level Arrivals Curb)





PEDESTRIAN BRIDGE LEVEL ENLARGEMENT



TOP LEVEL ENLARGEMENT



NEW PARKING GARAGE



PARKING GARAGE / CONRAC

SEE ENLARGEMENTS

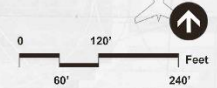


NEW TERMINAL

CURB ALLOCATION LEGEND

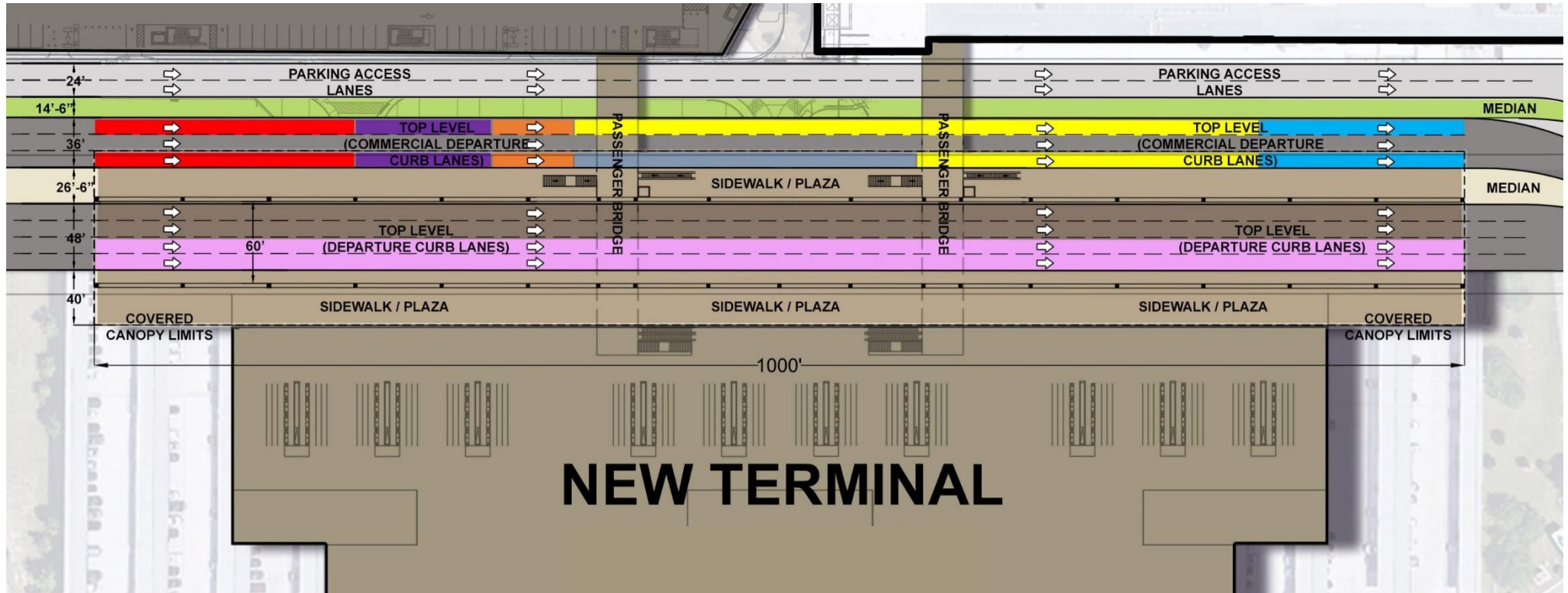
- Private Vehicles/TNCs: (2,000 Feet)
- Parking Shuttles: (380 Feet)
- Hotel Shuttles: (400 Feet)
- Shared Ride (Non-TNC): (120 Feet)
- Taxis: (750 Feet)
- Limos: (250 Feet)
- Charter/Transit Bus/Capital Metro: (300 Feet)

ALTERNATIVE A TOP LEVEL (DEPARTURE CURB)



Preferred Curb Design Plan View

(Plan View: Top Level Arrivals Curb)

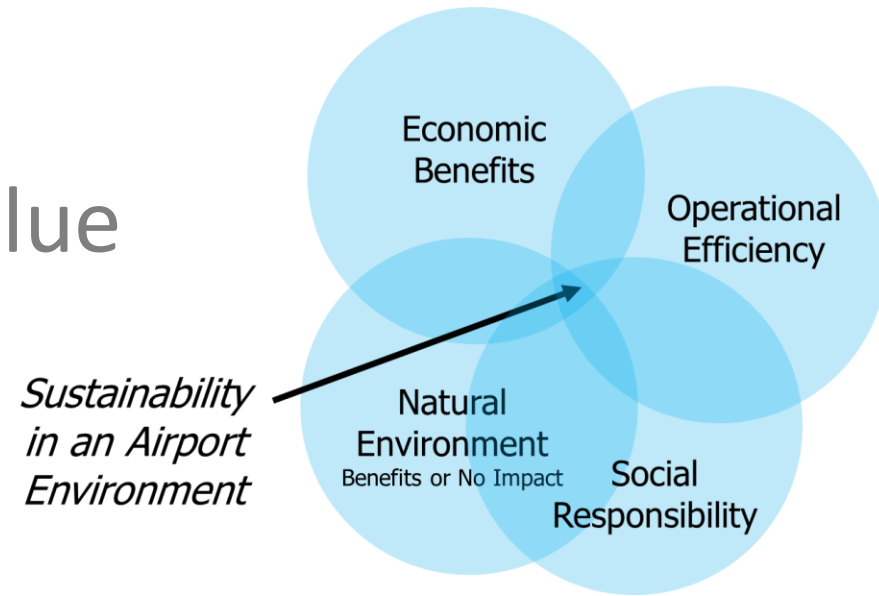


ENVIRONMENTAL & SUSTAINABILITY



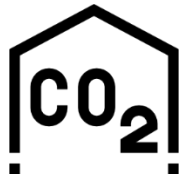
Sustainability

- Customer and community value
- Operational excellence
- Economic sustainability
- Environmental stewardship
- Sustainability initiatives recommended based on current ABIA efforts, City of Austin and ABIA goals, and global best practices



Sustainability

Recommendations are made in the following categories:



Air and greenhouse gas emissions



Energy



Local and community partnerships



Site ecology and land management



Waste



Water



Revenue



Design and construction



Surface transportation

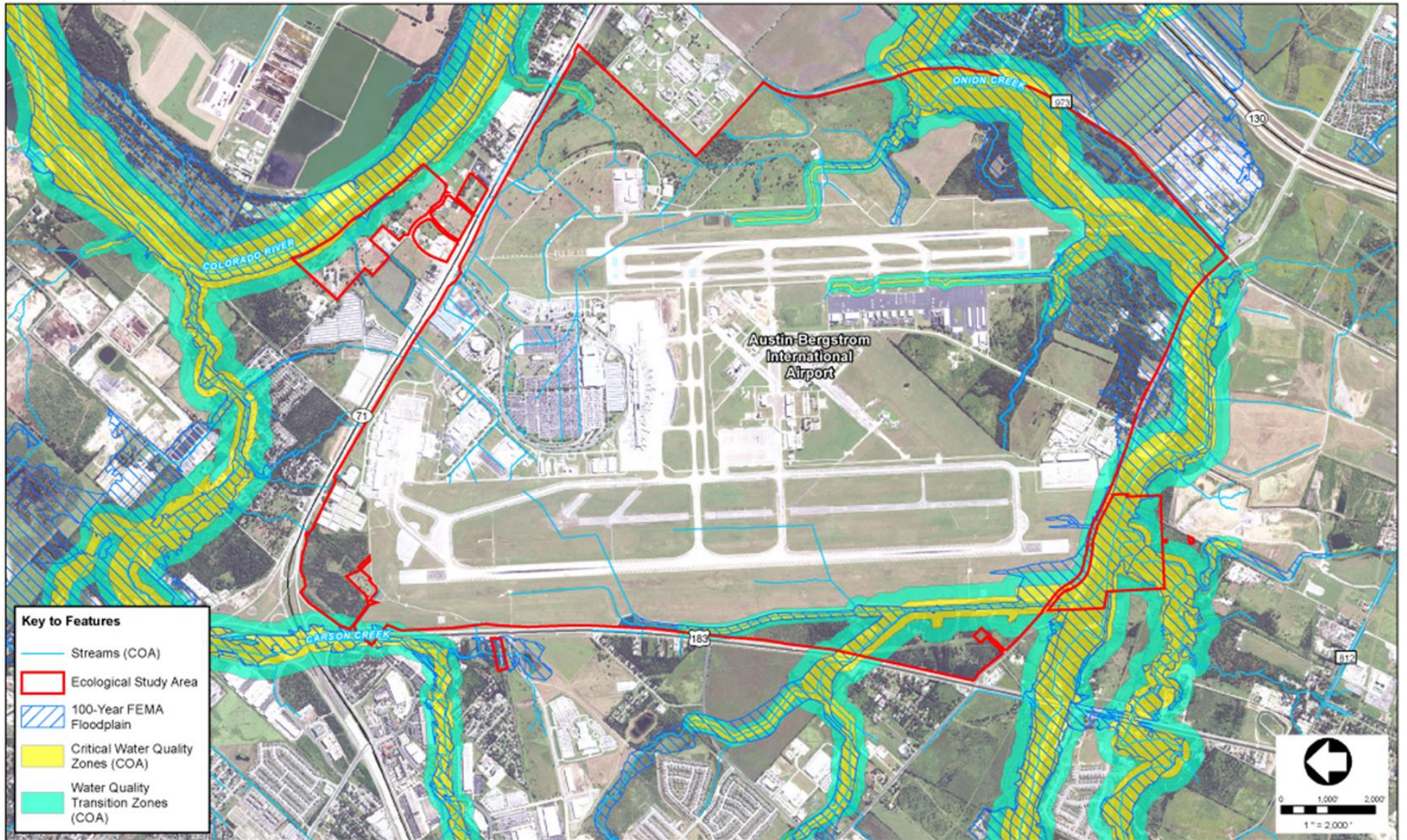


Resiliency

Environmental Considerations Included in the Master Plan

- Existing and future land use
- Noise compatibility
- Socioeconomic and community resources (churches, schools, etc.)
- Ecological resources (vegetation and wildlife, threatened and endangered species, water resources)
- Air quality and climate
- Cultural resources (archeological and historic resources)
- Hazardous materials

Ecological Study Areas



MOBILITY

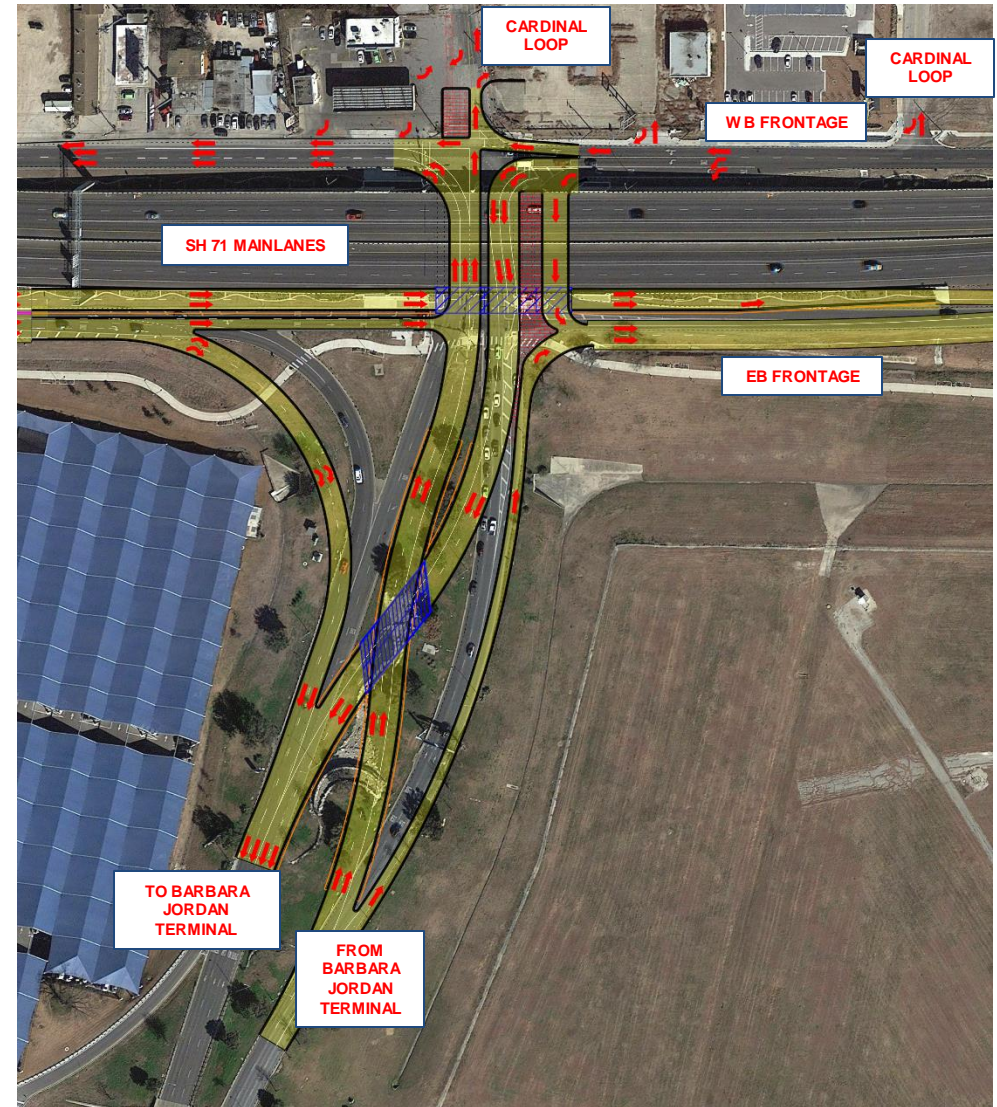


Connected Airport Campus

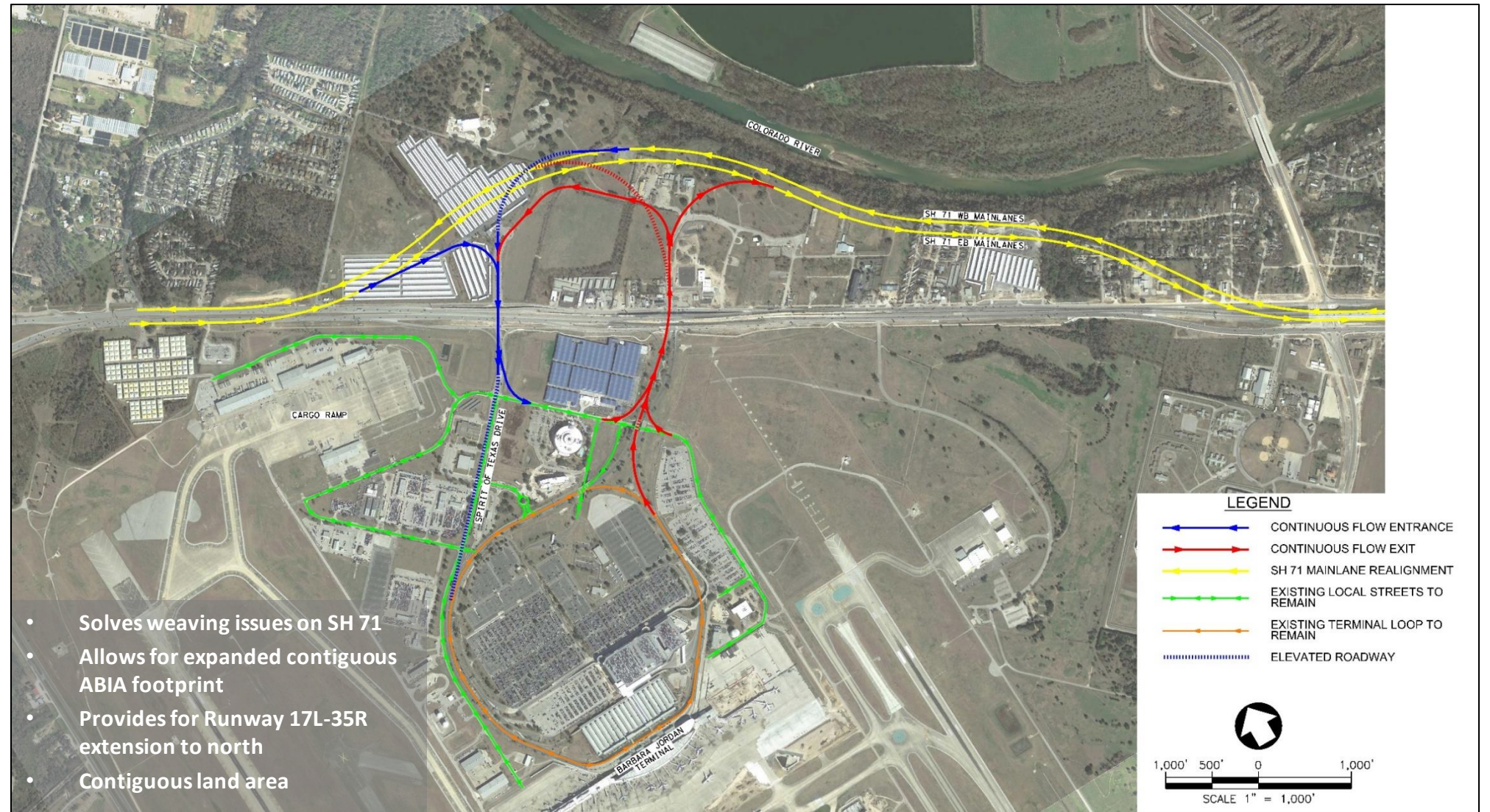
- Provide Free Flow Traffic Patterns
- Tie into Capital Metro routes
- Enhance Bike Access
- Sidewalk Access
- Relocated SH 71 (long-term)

Alternative 1: Braided Left Turn Preferred Near-Term Roadway Layout

- Near term Presidential Blvd. modification
- Reverse flow under SH 71 via overpass switch on Presidential
- Free flow entrance/exit
- Elevated East Bound frontage along SH 71
- Maintain current SH 71 bridge
- Coordinated with TxDOT SH 71 Frontage Roadway project

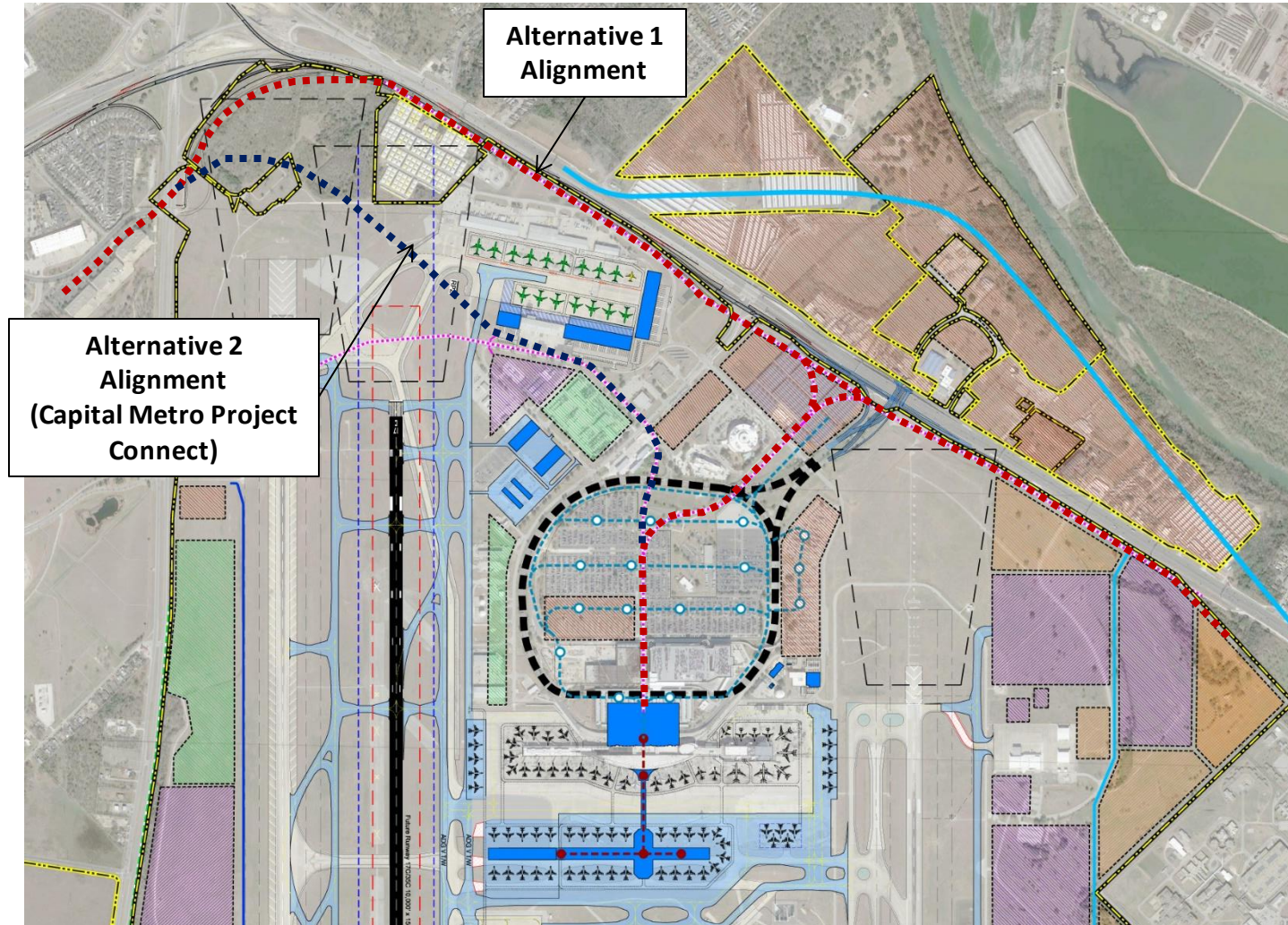


Alternative 6: Relocating SH 71 to the North Preferred Long-Term Roadway Layout



- Solves weaving issues on SH 71
- Allows for expanded contiguous ABIA footprint
- Provides for Runway 17L-35R extension to north
- Contiguous land area

Potential Light Rail Alignments



NEXT STEPS



Austin-Bergstrom
International Airport



Next Steps

- Aug. 28th: TAC Mtg. #4
- Sept. 26th: Public Mtg. #4
- Oct. 9th: Austin Airport Advisory Commission Mtg. #4
(Master Plan Executive Summary and ALP)
- Nov. 1st: City Council (Master Plan Executive Summary and ALP)
- Nov. 15th: Final Master Plan to FAA