



WHAT'S YOUR LAND USE COMPATIBILITY PRIORITY?

Airspace
Obstructions

Noise

Safety on
the Ground

Wildlife
Hazards

Other

Empty response area for Airspace Obstructions

Empty response area for Noise

Empty response area for Safety on the Ground

Empty response area for Wildlife Hazards

Empty response area for Other



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Empty response area for Airspace Obstructions

Empty response area for Noise

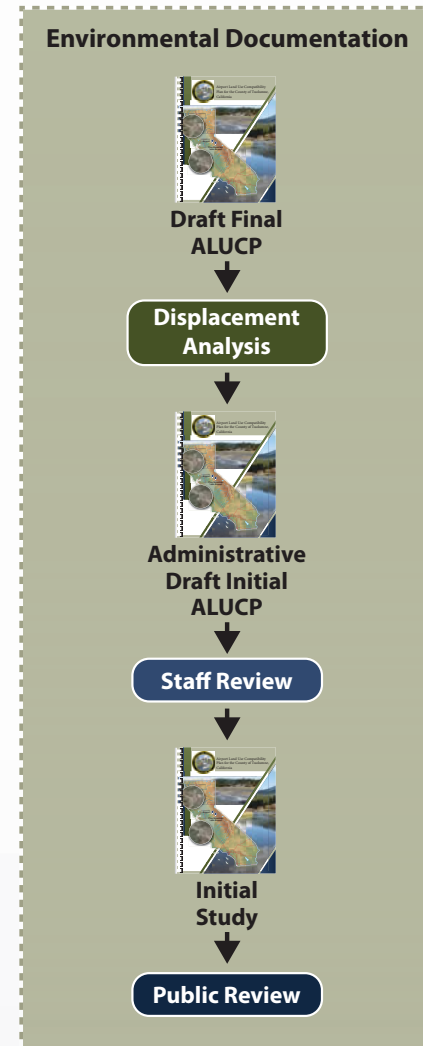
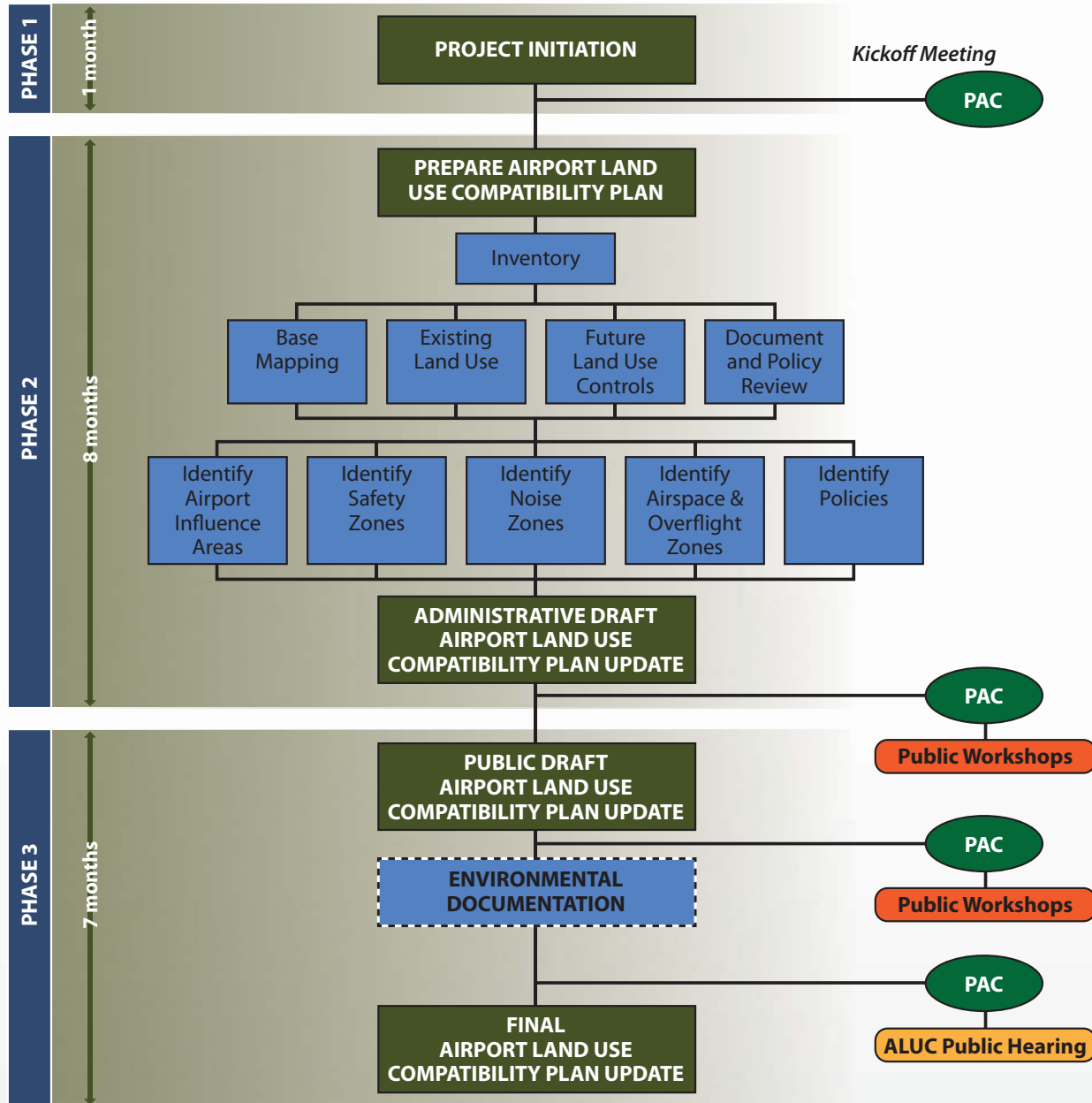
Empty response area for Safety on the Ground

Empty response area for Wildlife Hazards

Empty response area for Other



STUDY PROCESS



KEY:
ALUCP - Airport Land Use Compatibility Plan
ALUC - Airport Land Use Commission
PAC - Planning Advisory Committee



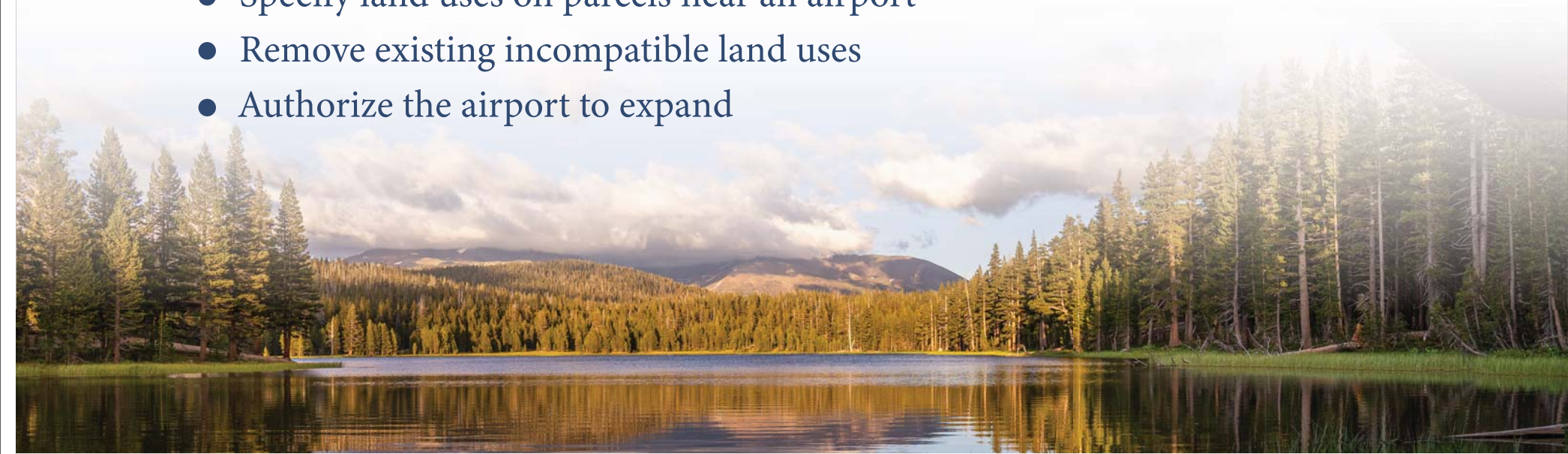
WHAT IT IS/WHAT IT ISN'T

The Airport Land Use Compatibility Plan Can Be Used To:

- Protect the public from airport noise
- Ensure land use development is not concentrated in areas of high aircraft accident risk
- Ensure no structures or activities adversely affect navigable airspace

The Airport Land Use Compatibility Plan Cannot Be Used To:

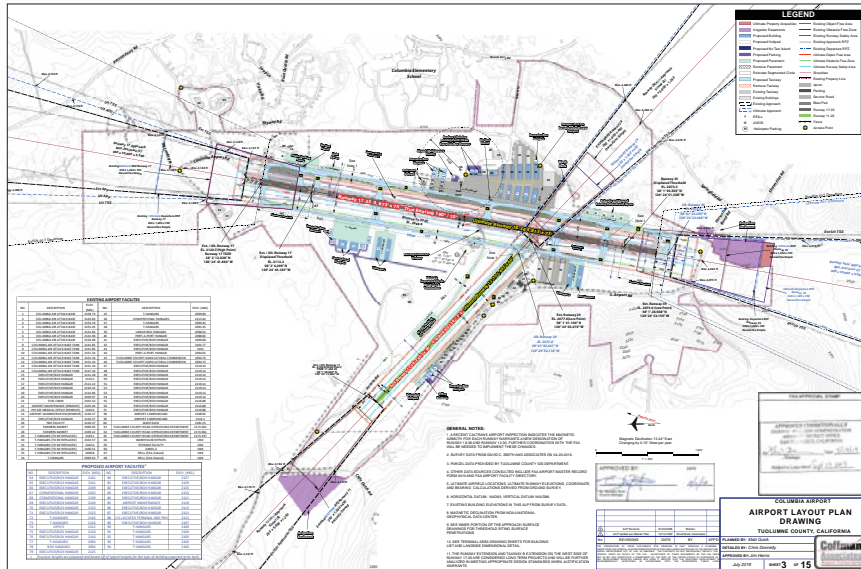
- Control aircraft operations
- Specify land uses on parcels near an airport
- Remove existing incompatible land uses
- Authorize the airport to expand



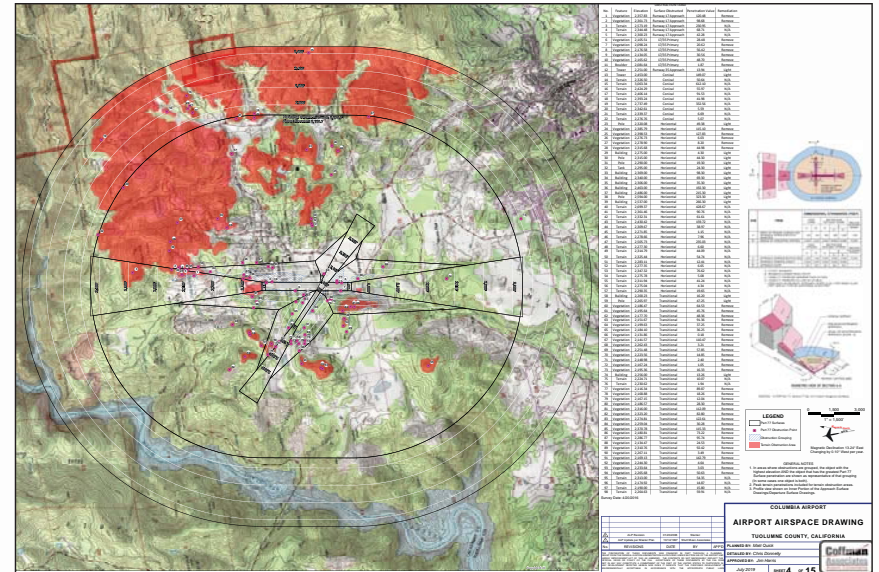


KEY PLANNING INPUTS FROM THE AIRPORTS

AIRPORT LAYOUT PLAN/DIAGRAM

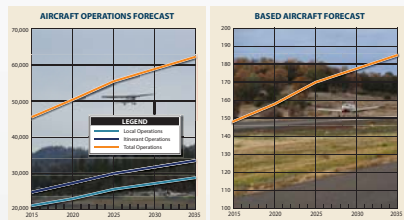


AIRSPACE DRAWING



20-YEAR FORECAST

	2015	2020	2025	2035
BASED AIRCRAFT				
Single Engine	133	138	144	154
Multi-Engine	7	7	7	6
Turboprop	4	6	9	12
Jet	0	1	2	3
Helicopter	4	6	8	10
TOTAL BASED AIRCRAFT	148	158	170	185
ANNUAL OPERATIONS				
General Aviation	21,000	23,100	25,500	28,800
Air Taxi	1,740	2,000	2,200	2,500
CalFire	1,900	2,100	2,100	2,100
Military	17	100	100	100
Total Forecast	24,657	27,300	29,900	33,500
LOCAL				
General Aviation	21,000	23,100	25,500	28,800
Total Local	21,000	23,100	25,500	28,800
TOTAL OPERATIONS	45,657	50,400	55,400	62,300
PEAK OPERATIONS FORECAST				
Annual Operations	45,657	50,400	55,400	62,300
Peak Month	5,940	6,550	7,200	8,100
Design Day	200	230	240	270
Busy Day	250	280	300	340
Design Hour	30	33	36	41
ANNUAL INSTRUMENT APPROACHES				
	600	550	600	670



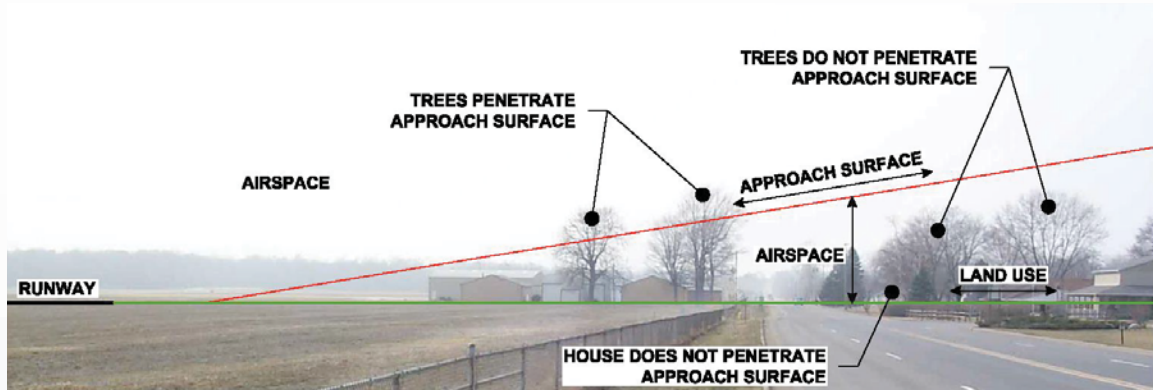
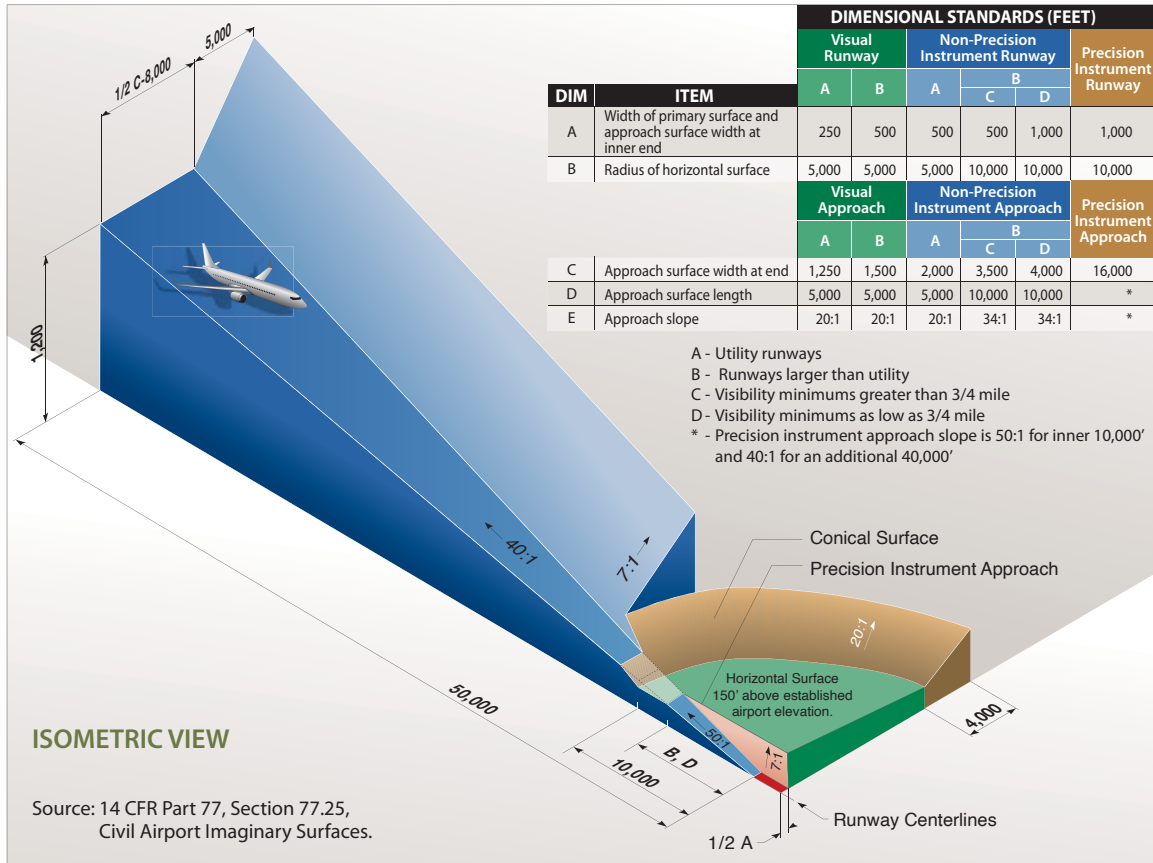
Source: Colfax Associates analysis

NOISE CONTOURS





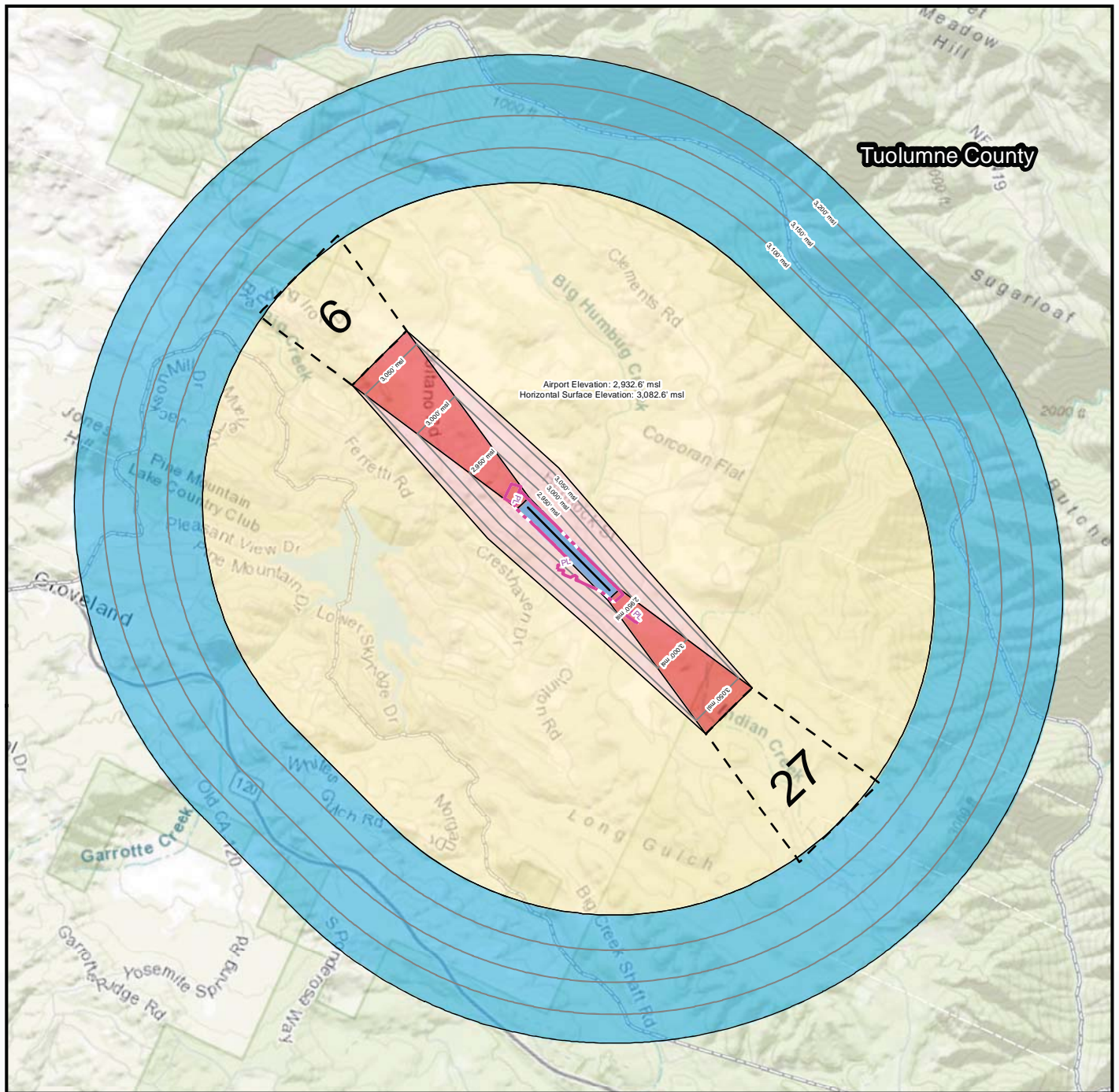
AIRSPACE HEIGHT OF STRUCTURES



- Developers must submit FAA Form 7460, FAA does not have the authority to stop off-airport construction.
 - Determined to be a hazard to air navigation;
 - Determined not to be a hazard to air navigation; or
 - Determined not to be a hazard with certain mitigation measures, such as lighting or marking.
- It is critical for local communities to create the height restrictions that prevent and/or mitigate structures that could be obstructions or hazards to air navigation.



PART 77 SURFACES

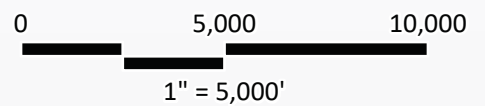


LEGEND

- Airport Property Boundary
- Runway Centerline
- Municipal Boundaries
- Part 77 Surface Contours

Part 77 Surfaces

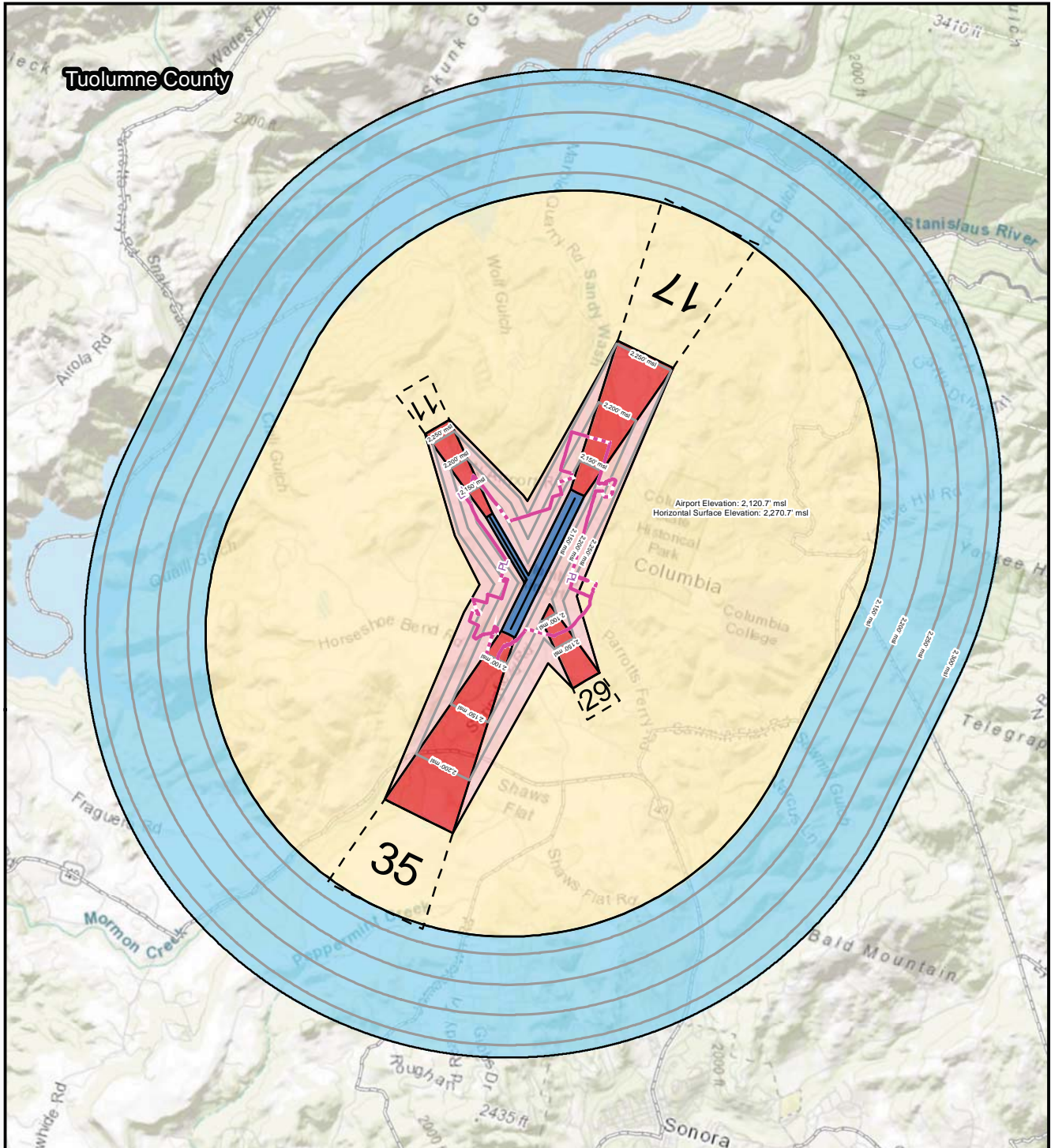
- Primary
- Approach
- Transitional
- Horizontal
- Conical



Sources: ESRI Basemap Imagery (2023),
TIGER/Line, Coffman Associates Analysis.



PART 77 SURFACES

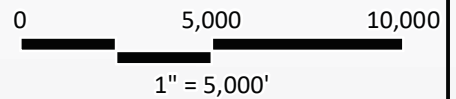


LEGEND

- Airport Property Boundary
- Runway Centerlines
- Municipal Boundaries
- Part 77 Surface Contours

Part 77 Surfaces

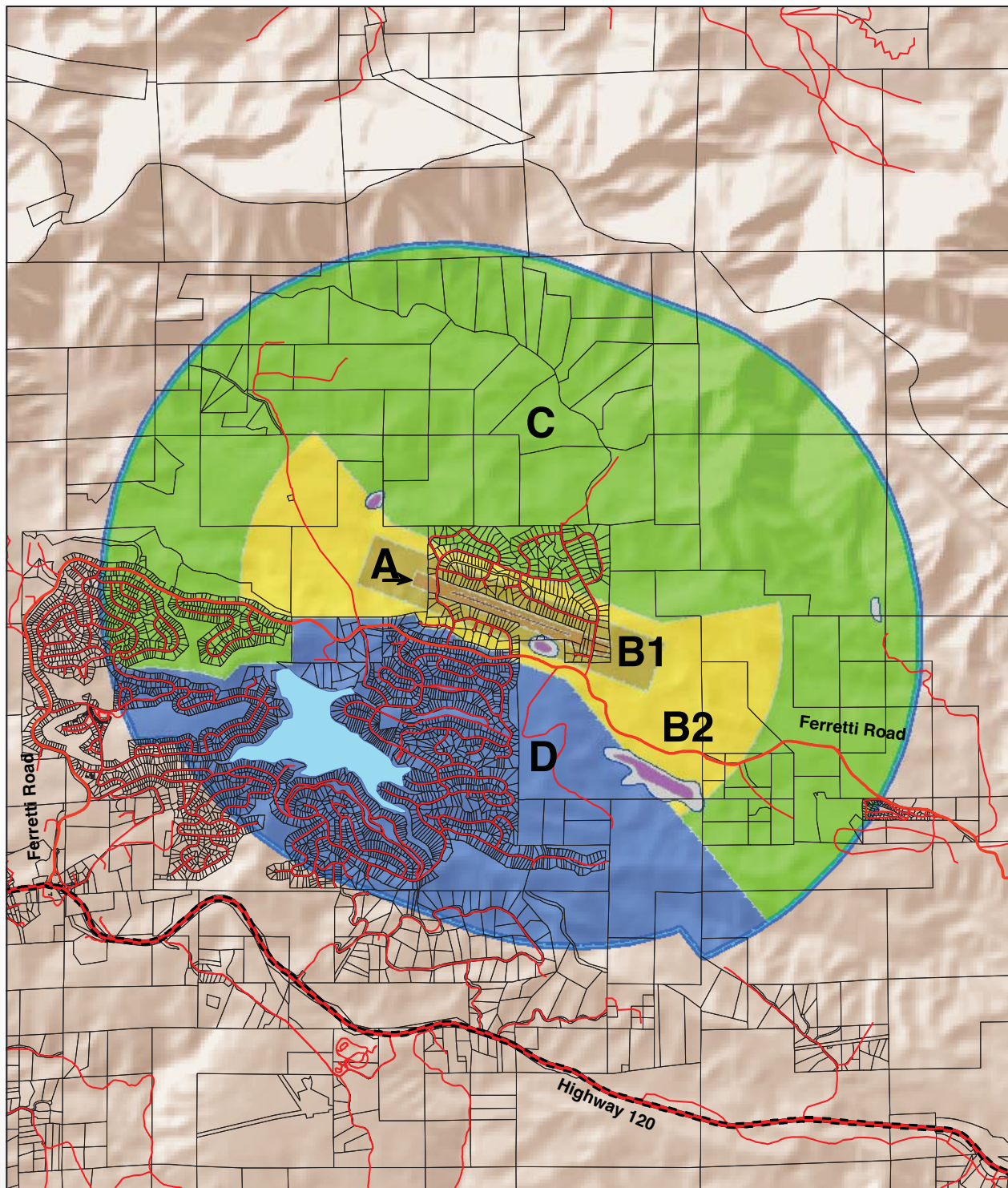
- Primary
- Approach
- Transitional
- Horizontal
- Conical



Sources: ESRI Basemap Imagery (2023),
TIGER/Line, Tuolumne County Streets,
Tuolumne County Land Use Parcels.
Coffman Associates Analysis.

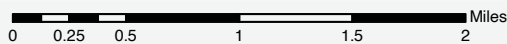


EXISTING PLAN AIRPORT REFERRAL AREAS



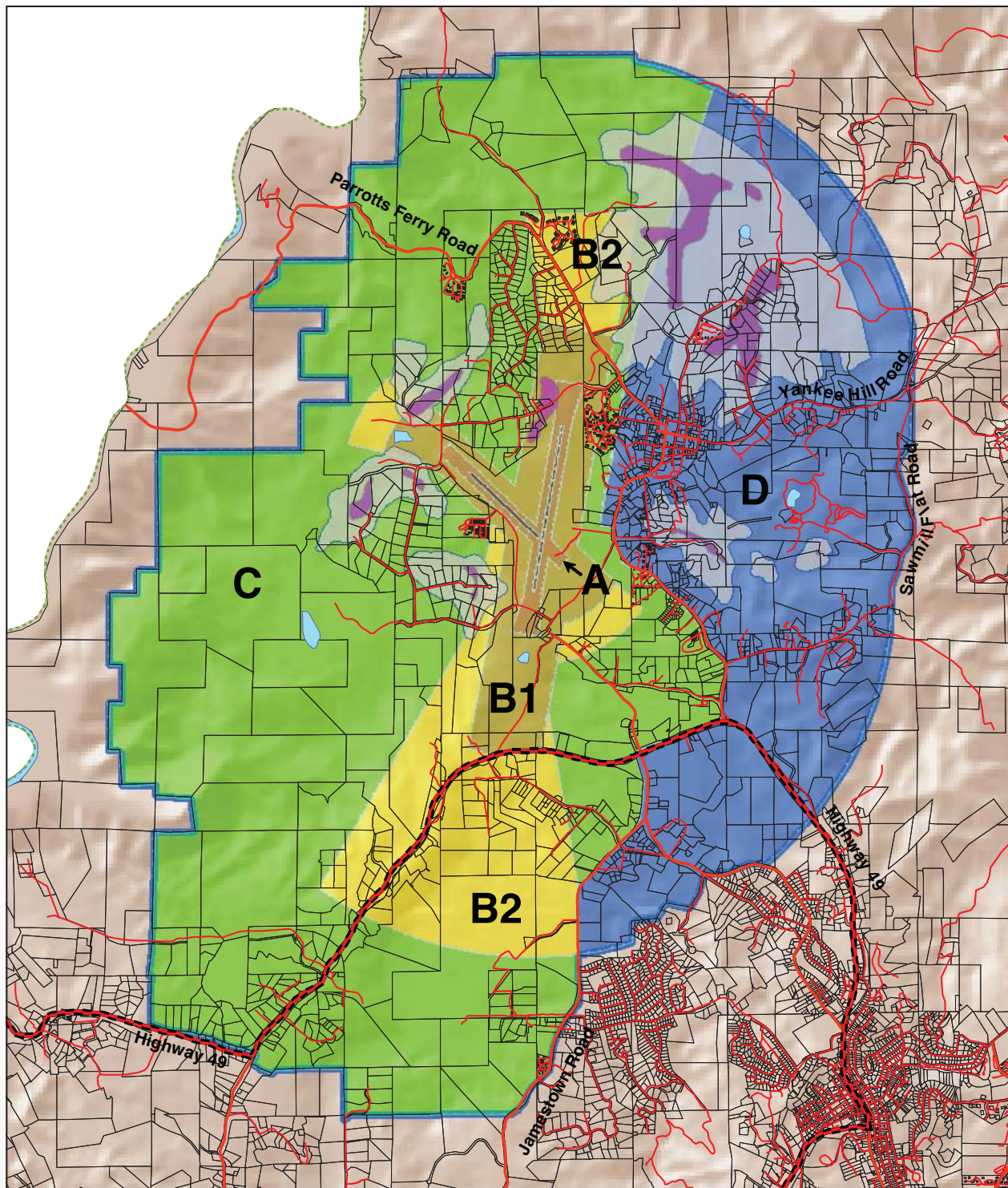
LEGEND		
Lines	ALUC Zones	
Highways	Zone A	Zone D
Roads	Zone B1	
Runway	Zone B2	HR Zone
Misc	Zone C	CH Zone
Parcel		

Pine Mountain Lake Airport Referral Areas





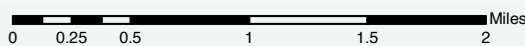
EXISTING PLAN AIRPORT REFERRAL AREAS



LEGEND

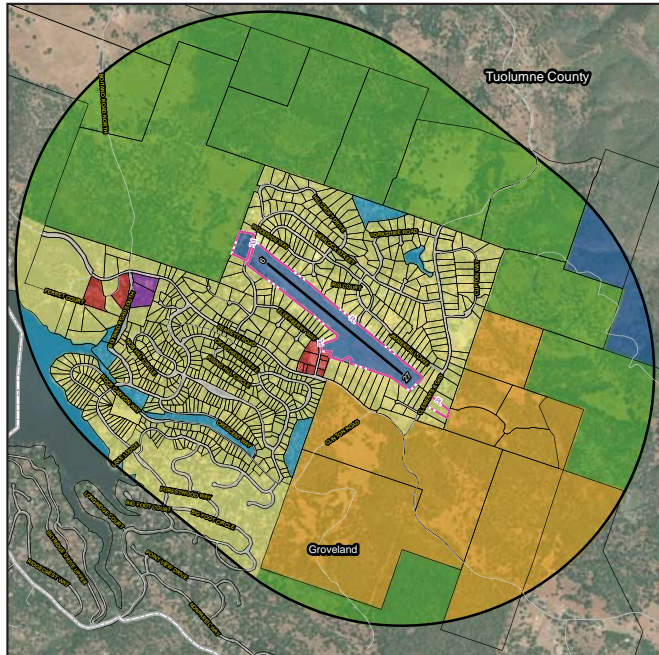
Lines	ALUC Zones
Highways	Zone A
Roads	Zone B1
Runway	Zone B2
Misc	Zone C
Parcel	Zone D
	HR Zone
	CH Zone

Columbia Airport Referral Areas

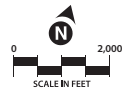




EXISTING LAND USE

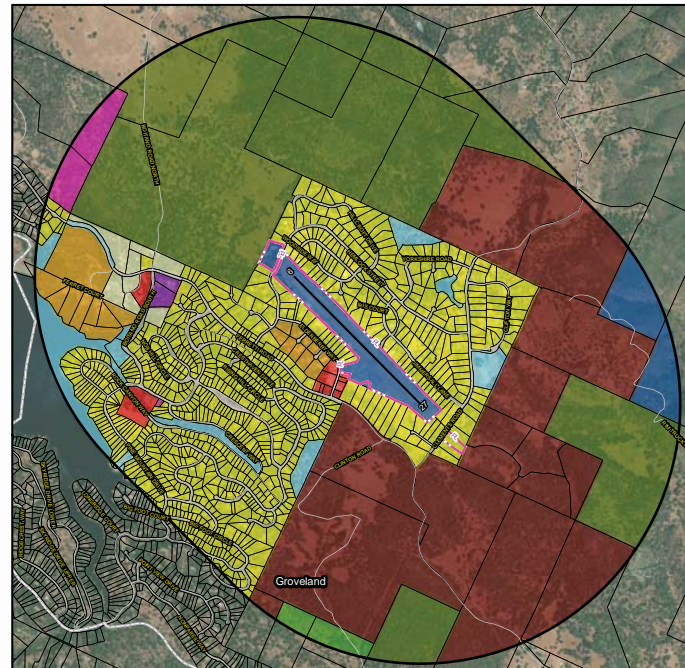


- LEGEND**
- Airport Property Boundary
 - Runway Centerlines
 - Municipal Boundaries
 - 1-Mile Runway Buffer
 - Parcel Boundary
 - Streets
- Existing Land Use**
- Commercial
 - Industrial
 - Public Use
 - Residential
 - Rural Residential
 - Agriculture
 - Parks & Open Space
 - Right of Way

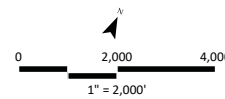


Sources: ESRI Basemap Imagery (2023), TIGERLine, Tuolumne County Streets, Tuolumne County Land Use Parcels, Coffman Associates Analysis.

ZONING LAND USE

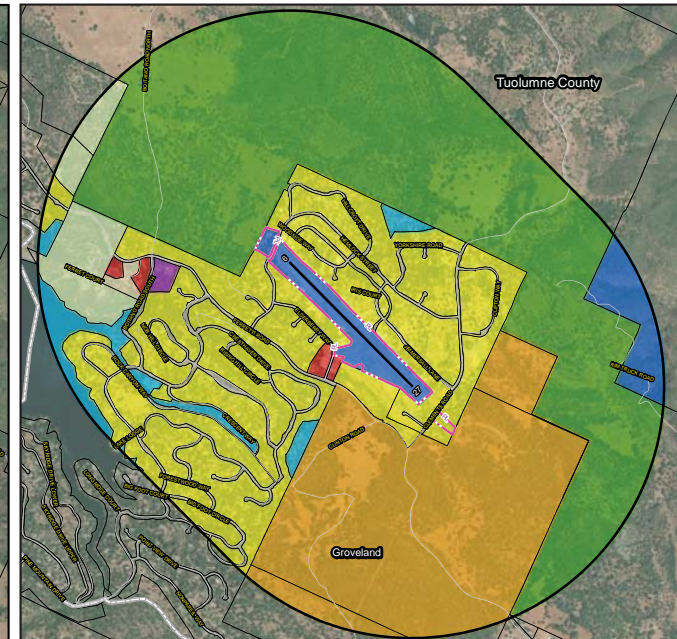


- LEGEND**
- Airport Property Boundary
 - Runway Centerlines
 - Municipal Boundaries
 - 1-Mile Runway Buffer
 - Parcel Boundary
 - Streets
- Zoning Parcels**
- Right of Way
 - Commercial
 - Light Industrial
 - Public
 - Mixed Use
 - High Density Residential
 - Medium Density Residential
 - Low Density Residential
 - Rural Residential & Agriculture
 - Agriculture
 - Exclusive Agriculture
 - Parks & Open Space

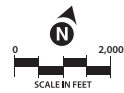


Sources: ESRI Basemap Imagery (2023), TIGERLine, Tuolumne County Streets, Tuolumne County Zoning Parcels, Coffman Associates Analysis.

GENERAL PLAN



- LEGEND**
- Airport Property Boundary
 - Runway Centerline
 - 1-Mile Runway Buffer
 - Municipal Boundaries
 - Parcel Boundary
 - Streets
- General Plan Parcels**
- Commercial
 - Light Industrial
 - Public
 - High Density Residential
 - Homestead Residential
 - Estate Residential
 - Rural Residential
 - Agricultural
 - Parks & Open Space
 - Right of Way

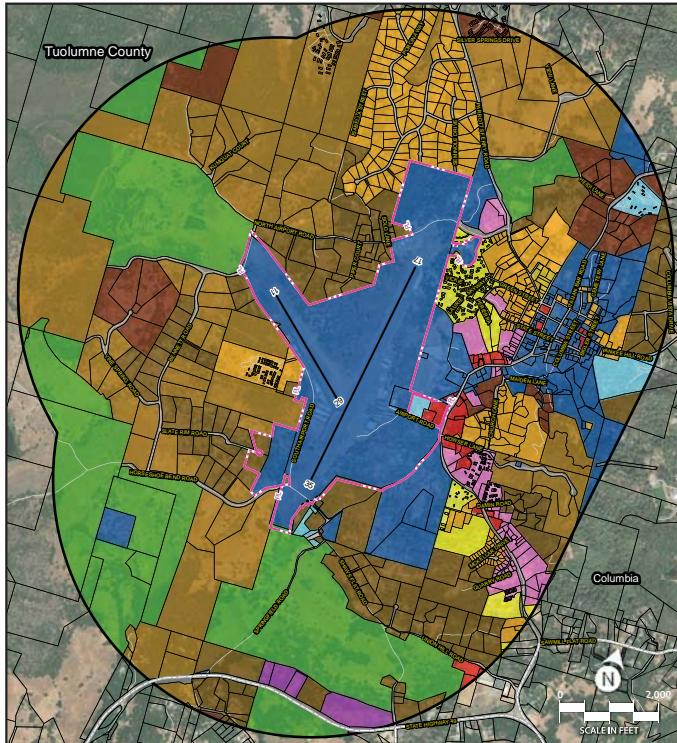


Sources: ESRI Basemap Imagery (2023), TIGERLine, Tuolumne County Streets, Tuolumne County General Plan Parcels, Coffman Associates Analysis.

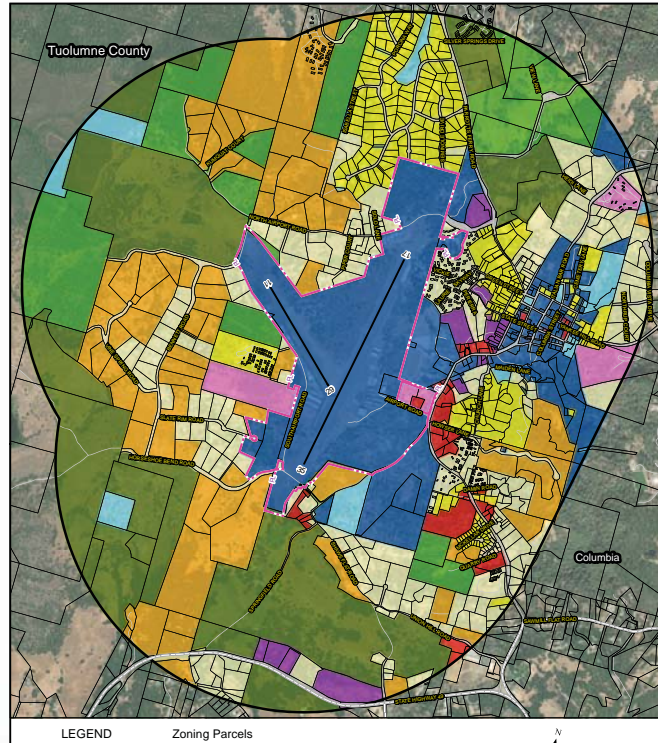




EXISTING LAND USE



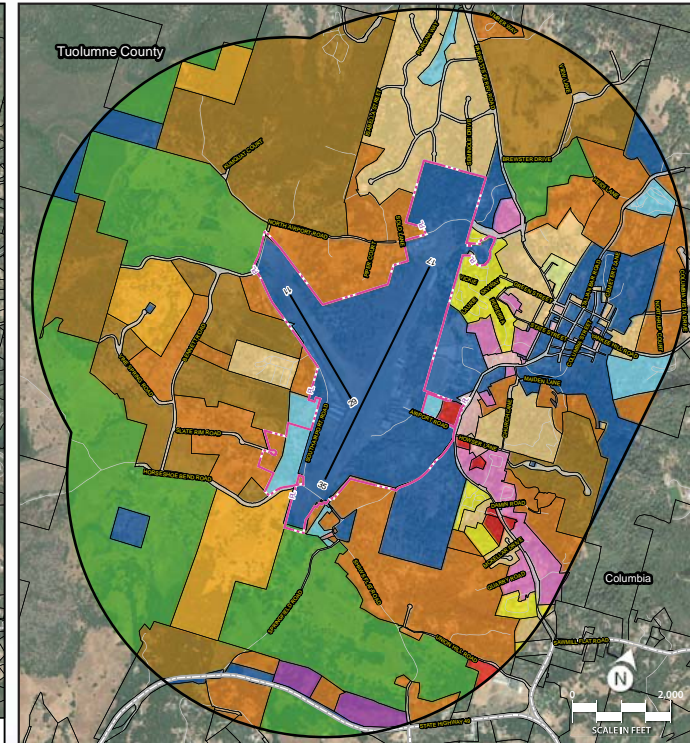
ZONING LAND USE



LEGEND		Zoning Parcels	
	Airport Property Boundary		Commercial
	Runway Centerlines		Industrial
	Municipal Boundaries		Public
	1-Mile Runway Buffer		Mixed Use
	Parcel Boundary		High Density Residential
	Streets		Medium Density Residential
			Low Density Residential
			Agriculture
			Exclusive Agriculture
			Parks & Open Space
			Right of Way

Sources: ESRI Basemap Imagery (2023), TIGER/Line, Tuolumne County Streets, Tuolumne County Land Use Parcels, Coffman Associates Analysis.

GENERAL PLAN



LEGEND		General Plan Parcels	
	Airport Property Boundary		Commercial
	Runway Centerlines		Special Commercial
	Municipal Boundaries		Neighborhood Commercial
	1-Mile Runway Buffer		Heavy Industrial
	Parcel Boundary		Light Industrial
	Streets		Public
			Mixed Use
			High Density Residential
			Medium Density Residential
			Low Density Residential
			Large Lot Residential
			Homestead Residential
			Rural Residential
			Agricultural
			Parks & Open Space
			Right of Way

Sources: ESRI Basemap Imagery (2023), TIGER/Line, Tuolumne County Streets, Tuolumne County General Plan Parcels, Coffman Associates Analysis.





LONG RANGE NOISE CONTOURS



LEGEND

Airport Property Boundary	55 CNEL
Runway Centerline	60 CNEL
Municipal Boundaries	65 CNEL
Parcel Boundary	
Streets	

2043 CNEL Noise Contours

0 2,000 4,000
1" = 2,000'

Sources: ESRI Basemap Imagery (2023), TIGER/Line, Tuolumne County Streets, Noise Contour Data, Tuolumne County Landuse Parcels, Coffman Associates Analysis.

Operations	AEDT Designator	2023 ¹	2043 ²
Itinerant			
Single Engine, Fixed	GASEPF	3,498	4,683
Single Engine, Variable	GASEPV	3,498	4,683
Multi-Engine Piston	BEC58P	804	1,077
Turboprop	CNA208	150	201
Small turbojet	CNA510	150	201
Helicopter	B206L	150	201
Subtotal		8,250	11,046
Local			
Single Engine, Fixed	GASEPF	3,027	4,053
Single Engine, Variable	GASEPV	3,027	4,053
Multi-Engine Piston	BEC58P	696	932
Subtotal		6,750	9,038
Grand Total		15,000	20,084

Source: Coffman Associates Analysis; Pine Mountain Lake Airport Aviation Demand Forecast Study (2023); Pine Mountain Lake Airport Master Plan (2006)

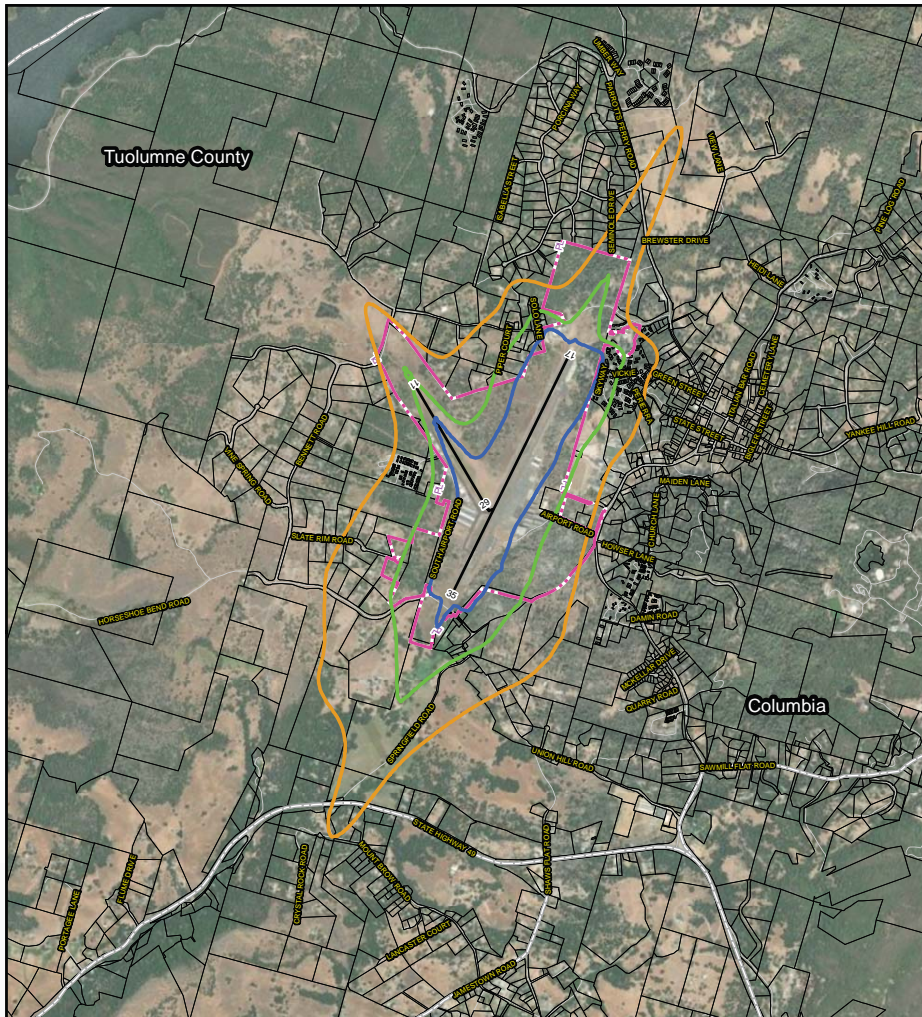
¹ FAA 5010 Airport Master Record, operations for 12 months ending June 25, 2022

² Total Operations Forecast reflects a Compound Annual Growth Rate (CAGR) of 1.47% as discussed in the Pine Mountain Lake Airport Aviation Demand Forecast Study





LONG RANGE NOISE CONTOURS



LEGEND

- Airport Property Boundary
- Runway Centerlines
- Municipal Boundaries
- Parcel Boundary
- Streets

2043 CNEL Noise Contours

- 55 CNEL
- 60 CNEL
- 65 CNEL

0 2,500 5,000
1" = 2,500'

Sources: ESRI Basemap Imagery (2023), TIGER/Line, Noise Contours, Tuolumne County Streets, Tuolumne County Zoning Parcels, Coffman Associates Analysis.

Operations	AEDT Designator	2023 ¹	2043 ²
Itinerant			
Single Engine, Fixed	GASEPF	10,010	14,494
Single Engine, Variable	GASEPV	10,009	14,494
Multi-Engine Piston	BEC58P	1,000	1,132
Turboprop	DHC6	2,048	3,511
Small turbojet	CNA55B	50	283
Medium turbojet	CL600, CNA750	40	283
Helicopter	SA350D, S65, B212	1,200	3,738
Subtotal		24,357	37,935
Local			
Single Engine, Fixed	GASEPF	9,650	15,004
Single Engine, Variable	GASEPV	9,650	15,004
Multi-Engine Piston	BEC58P	1,000	1,132
Turboprop	DHC6	500	906
Helicopter	B212	500	566
Subtotal		21,300	32,612
Grand Total		45,657	70,547

Source: Coffman Associates Analysis; Columbia Airport Master Plan (2019)

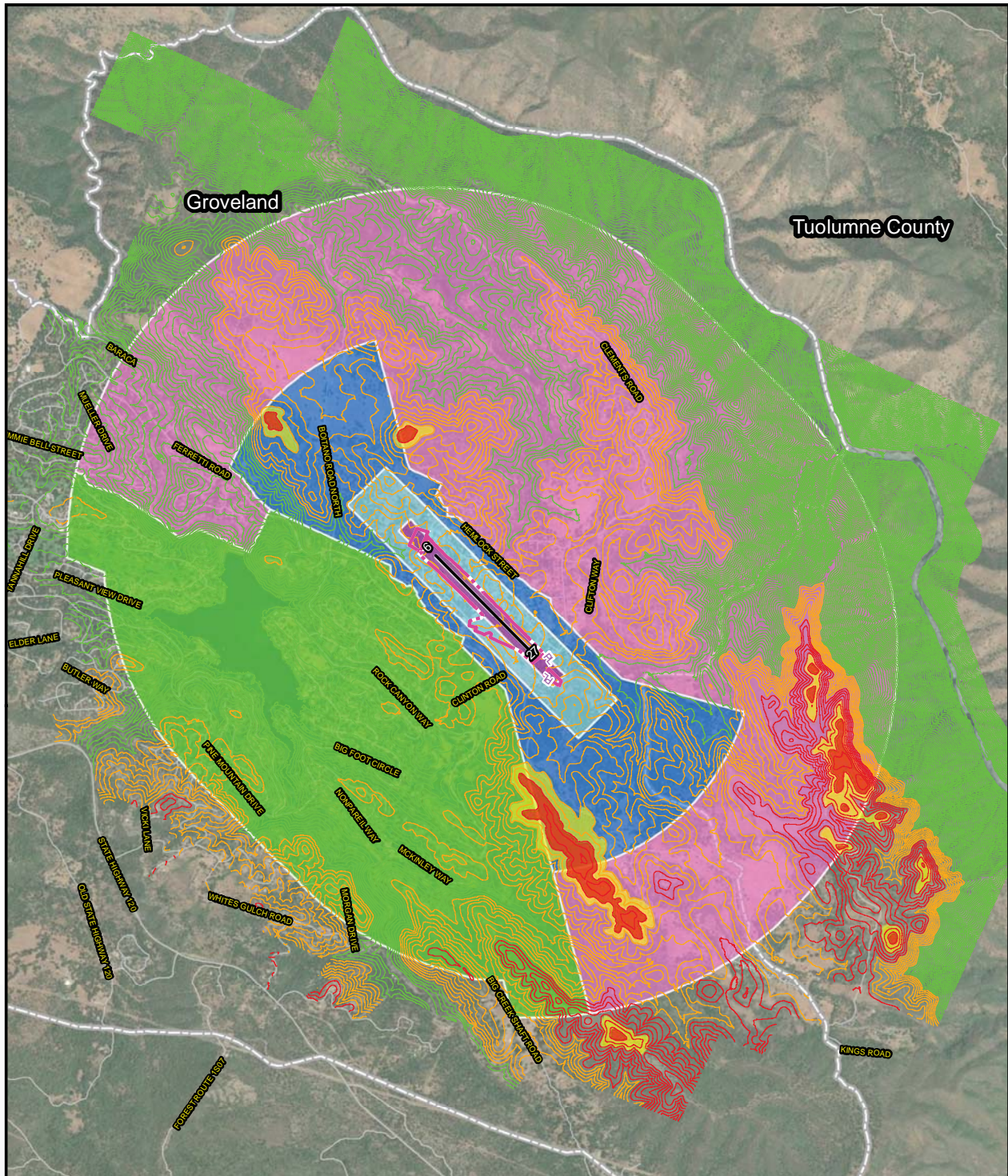
¹ FAA 5010 Airport Master Record, operations for 12 months ending June 25, 2019

² Total Operations Forecast reflects a Compound Annual Growth Rate (CAGR) of 1.57% as discussed in Chapter Two – Forecast of the 2019 Columbia Airport Master Plan.





COMPATIBILITY ZONES



<p>Legend</p> <ul style="list-style-type: none"> Airport Property Boundary Runway Centerline Critical Height Zone Overlay Height Caution Zone Overlay Municipal Boundaries Streets 	<p>Safety Zones</p> <ul style="list-style-type: none"> A – Runway Protection Zone or within Building Restriction Line B1 – Approach Departure Zone and Adjacent to Runway B2 – Extended Approach/Departure Zone C – Common Traffic Pattern D – Other Airport Environs 	<p>Contour Lines</p> <ul style="list-style-type: none"> Limited Review Area Caution Area Hazard Area <p>- Limited Review Area is 100ft or more below the runway end elevations - Caution area is between 100ft below and 100ft above runway end elevation - Hazard areas is 100ft or more above the runway end elevations</p>	<p style="text-align: center;">N</p> <p style="text-align: center;">1" = 4,000'</p>
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Sources: ESRI Basemap Imagery (2023), TIGER/Line, Tuolumne County Streets, Tuolumne County Airport Land Use Compatibility Plan (2003), Tuolumne County GIS 10 ft Interval Contours (2023), Figure 3A, California Airport Land Use Planning Handbook, and Coffman Associates Analysis



COMPATIBILITY ZONES

