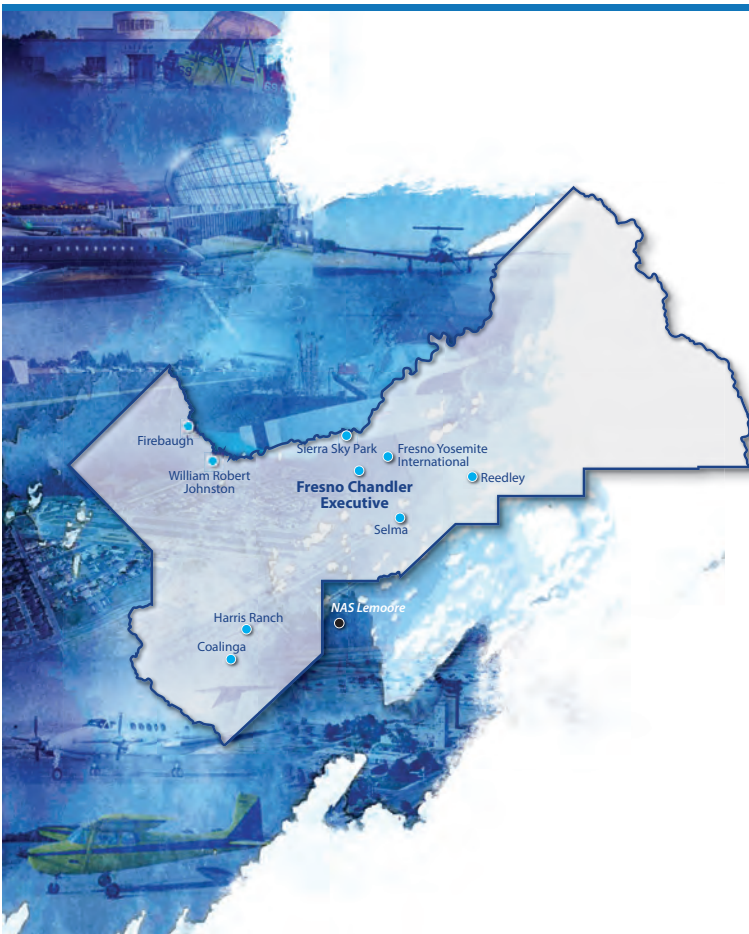




Fresno Council
of Governments

Appendix C

FRESNO-CHANDLER EXECUTIVE AIRPORT



Appendix C: Fresno-Chandler Executive Airport

Appendix C provides an overview of Fresno-Chandler Executive Airport's (Airport) setting, airport influence area (AIA), safety zones, noise, and airspace and overflight areas. This Appendix will also discuss existing and planned land uses, as well as current and future Airport facilities.

Fresno-Chandler Executive Airport is owned and operated by the City of Fresno. It is approximately two miles west of downtown Fresno. The Airport covers 200 acres at an elevation of 280 feet above mean sea level. It is a public use facility, classified in the 2017 – 2021 *National Plan of Integrated Airport Systems* (NPIAS) as a regional reliever airport and as a regional airport in the *California Aviation System Plan* (CASP).

SAFETY ZONES

The AIA and Safety Zones for Fresno-Chandler Executive Airport are shown on **Exhibit C1**. Figure 3A of the California Airport Land Use Planning Handbook (Handbook) provides three example zones for general aviation airports, which are differentiated by runway length. The Handbook zone examples are provided as a starting point for developing safety zones specific to an airport. As discussed below, Fresno-Chandler Executive Airport has one runway, Runway 12-30, which is 3,627 feet long. The Federal Aviation Administration (FAA)-approved Airport Layout Plan (ALP) includes a runway extension to 4,000 feet. Therefore, the Safety Zones are based on the Medium General Aviation Runway example. For this Airport Land Use Compatibility Plan (ALUCP), the outermost zone in the Handbook examples was replaced by the 14 CFR Part 77 Conical Surface, which also represents the airspace and overflight review area boundaries. Additional information regarding the safety compatibility zones can be found in **Appendix M**.

NOISE

Exhibit C2 depicts the noise exposure contours from the Fresno Chandler Executive ALUCP dated September 2014.

AIRSPACE AND OVERFLIGHT

Exhibit C3 depicts the Airspace Plan from the 2011 *Fresno-Chandler Executive Airport Layout Plan Narrative Report*. This exhibit includes the 14 CFR Part 77 Conical Surface which is also the Airport Influence Area (AIA) for Fresno-Chandler Executive Airport.

AIRPORT INFORMATION

AIRPORT FACILITIES

Airport facilities are detailed in **Table C1** and **Exhibit C4** shows the ALP (July 2010).

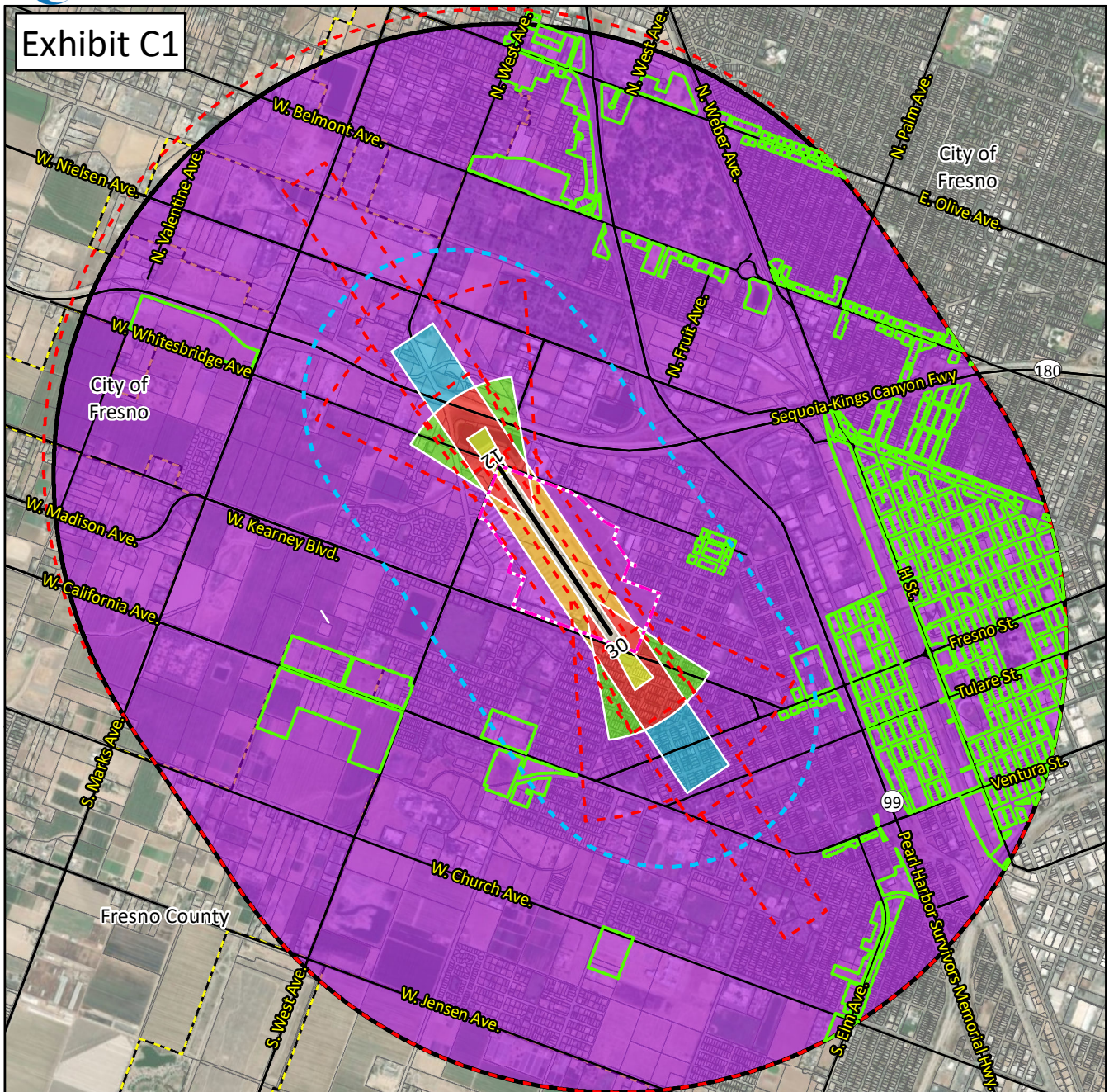
Fresno-Chandler Executive Airport has one runway, Runway 12-30, which is 3,627 feet long and 75 feet wide. There is a 415-foot displaced threshold on Runway 12 and a 538-foot displaced threshold on Runway 30. The runway is made of asphalt and is in good condition. Runway 12 has a right-handed traffic pattern and Runway 30 has a left-handed traffic pattern. The runway bearing strength for a single wheel aircraft is 17,000 pounds, which is the maximum weight the runway can withstand. There are non-precision runway markings that are in good condition. There is medium intensity runway lighting (MIRL), runway end identifier lights (REILs), and an unlighted touchdown point. Runway 12 has a two-light precision approach path indicator (PAPI) on the left at a three-degree glide angle, and Runway 30 has a four-light PAPI on the right at a three-degree glide angle. Runway 12-30 has two instrument approach aids.

FUTURE AIRPORT PLANS

At the time of this study, the Airport is undergoing an update to its master plan, which will likely include facility and infrastructure updates and enhancements. However, the Airport does have facility improvements planned that are documented in the *Fresno-Chandler Executive Airport Layout Plan Narrative Report* (2011). In this plan, the Runway 30 end would shift 200 feet northwest to allow the full runway safety area, object free area, and object free zone to be included on Airport property inside a perimeter service road. This extension would require land acquisition. The Runway 12 end is extended 500 feet northwest.



Exhibit C1

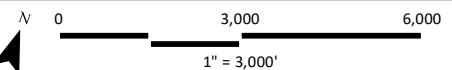


LEGEND

- Existing Runway¹
- Airport Property¹
- Parcel Boundary
- Municipal Boundary
- Streets
- Airport Influence Area (AIA)²
- Vulnerable Occupant Review Area
- Previous Safety Zone
- Urban³

Safety Zones⁴

- 1. Runway Protection Zone
- 2. Inner Approach/Departure Zone
- 3. Inner Turning Zone
- 4. Outer Approach/Departure Zone
- 5. Sideline Zone
- 6. Traffic Pattern Zone



¹ Fresno Chandler Airport Layout Plan (2023).

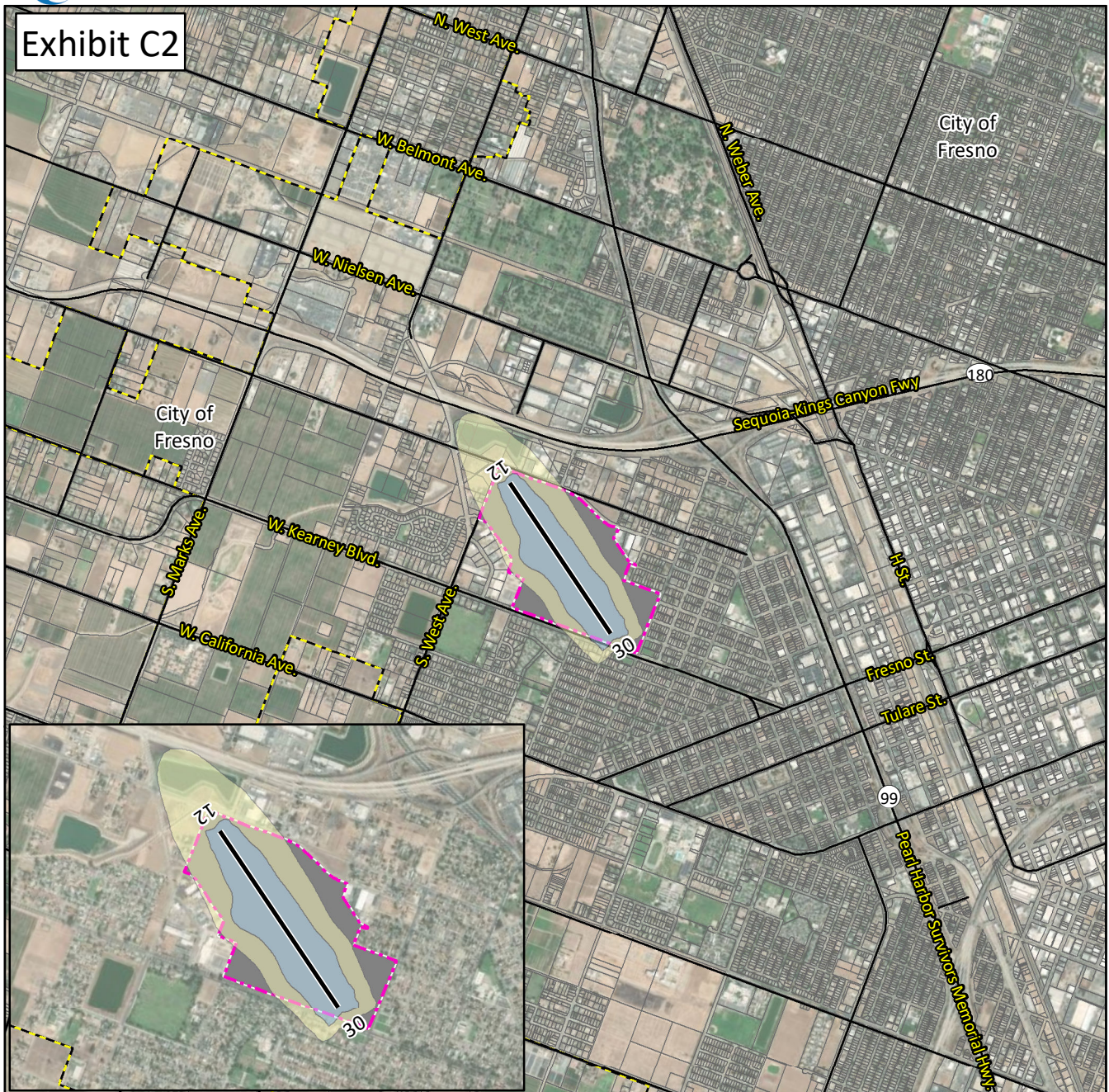
² AIA drawn from Part 77 Conical Surface. See 14 CFR, Subchapter E, Part 77, §77.25.

³ City of Fresno, 2018.

⁴ Figure 3A, California Airport Land Use Planning Handbook (2011), and Coffman Associates Analysis. Sources: Fresno County Parcels, Fresno County Streets, ESRI Basemap Imagery (2016).



Exhibit C2

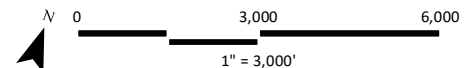


LEGEND

- Existing Runway¹
- Airport Property¹
- Parcel Boundary
- Municipal Boundary
- Streets

Future Noise Contours²

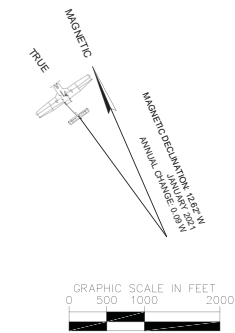
- 60 CNEL
- 65 CNEL



¹Fresno Chandler Airport Layout Plan (2023).

²Coffman Associates Analysis, 2023.

Sources: Fresno County Parcels, Fresno County Streets, ESRI Basemap Imagery (2022).



OBSTRUCTION TO PART 77 SURFACES								
POINT ID	OBJECT PENETRATION (FT)	DESCRIPTION	OBSTRUCTION ELEVATION (FT)	PART 77 ELEVATION (FT)	PART 77 SURFACE	EG ELEVATION (FT)	FAA STUDY ID	PROPOSED DISPOSITION
123	31	BLDG	355	324	TRANSITIONAL	280	N/A	LIGHT
124	19	BLDG	346	327	TRANSITIONAL	278	N/A	LIGHT
128	95	BLDG-TWR	642	547	CONICAL	UNKNOWN	0092_AW009590E	NONE
130	27	BLDG-TWR	630	603	CONICAL	UNKNOWN	2002AWP040520E	NONE
135	209	TOWER	639	430	HORIZONTAL	UNKNOWN	0066_SF00070DE	LIGHT
136	14	TOWER	634	620	CONICAL	UNKNOWN	0069_SF002370E	NONE
140	19	BLDG-TWR	533	514	CONICAL	UNKNOWN	N/A	NONE
144	34	TOWER	565	531	CONICAL	UNKNOWN	N/A	NONE
445	5	ANTENNA	607	602	CONICAL	UNKNOWN	N/A	NONE
446	28	BUILDING	574	547	CONICAL	UNKNOWN	N/A	NONE
472	29	CONTROL TOWER	353	323	TRANSITIONAL	280	N/A	REMOVE
476	20	ANTENNA	347	327	TRANSITIONAL	278	N/A	LIGHT
653	5	NAVAID	303	298	TRANSITIONAL	278	N/A	NONE
2000	-87	PRIMARY ROAD	273	360	APPROACH RWY 12	256	N/A	NONE
2001	-48	PRIMARY ROAD	285	333	APPROACH RWY 12	268	N/A	NONE
2002	-117	PRIMARY ROAD	283	400	APPROACH RWY 12	266	N/A	NONE

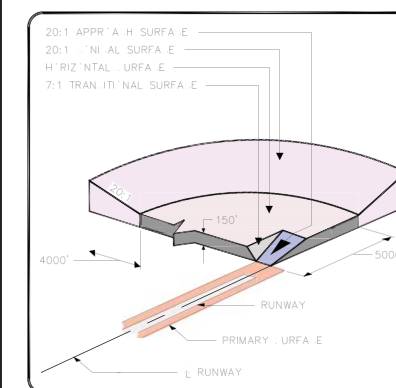
- NOTES:**
1. SURVEY DATA FROM 11/16/2018.
 2. QUAD MAP SOURCE: USGS FRESNO SOUTH, CA 2015.
 3. TRAVERSE WAY ELEVATIONS ARE ADJUSTED AS SHOWN:
 - 23' FOR RAILWAYS
 - 17' FOR INTERSTATE HIGHWAYS
 - 15' FOR OTHER PUBLIC ROADS
 - 10' FOR PRIVATE ROADS
 4. NEGATIVE PENETRATION VALUES INDICATE THE CLEAR DISTANCE FROM THE TOP OF THE OBJECT TO THE PART 77 SURFACE.
 5. THE CITY OF FRESNO HAS NO HEIGHT RESTRICTIONS ZONING ORDINANCES IN PLACE.

ABBREVIATIONS:

- EG EXISTING GROUND
- BLDG BUILDING
- TWR TOWER
- NAVAID NAVIGATIONAL AIDS

SEE SHEET 8 FOR RUNWAY 12-30 CENTERLINE PROFILE

ISOMETRIC VIEW

[illegible]

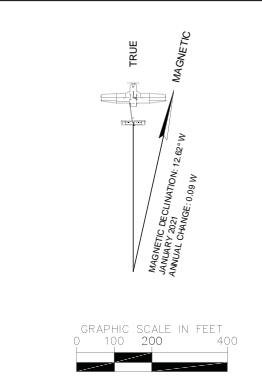


TABLE C1
Airport Facilities
Fresno-Chandler Executive Airport

Runway 12-30	
RUNWAY	
Length (feet)	3,627
Width (feet)	75
Threshold Displacement (feet)	415 538
Runway Pavement Surface Material	Asphalt
Runway Pavement Surface Treatment	None
Runway Pavement Condition	Good
Traffic Pattern	Right Left
Runway Pavement Load Bearing Strength (lbs.)	
Single Wheel	17,000
Dual Wheel	N/A
Double Tandem	N/A
Double Dual Tandem	N/A
Runway Pavement Markings	
Type	Non-precision
Condition	Good
Runway Lighting	
Runway Edge Lighting	MIRL
Approach Lighting System (ALS)	None
Touchdown Point	Yes (no lights)
Runway End Identifier Lights (REILs)	Yes
VISUAL APPROACH AIDS	
Type	2-Light PAPI on left 4-Light PAPI on right
Glide Path	3.00 degrees 3.00 degrees
INSTRUMENT APPROACH AIDS	
Instrument Landing System (ILS)	No
Global Positioning System (GPS)	Yes
VOR/DME	Yes

N/A: Not Applicable

MIRL: Medium Intensity Runway Lights

PAPI: Precision Approach Path Indicator

VOR/DME: Very High Frequency Omnidirectional Range Distance Measuring Equipment

Source: AirNav (July 2017)

AIRPORT ENVIRONS

EXISTING LAND USES

Exhibit C5 illustrates existing land uses in the AIA.

The Airport is surrounded by a variety of land uses that are both in the City of Fresno and unincorporated Fresno County. There are single and multi-family residential uses around the Airport. In addition to residential uses, there are also industrial and public land uses along the western Airport property boundary, and to the immediate east there are commercial and industrial uses. Farther out from the Airport, there are more varied uses, including agriculture, open space, and areas reserved for parks and recreation.

Transportation and right-of-way land uses included the street network in the AIA. The major streets and highways/freeways in the AIA include California State Route 180, California State Route 99, West Kearney Boulevard, West Nielsen Avenue, North Weber Avenue, West California Avenue, South West Avenue, Ventura Street, H Street, and South Marks Avenue.

ZONING

Exhibit C6 shows the current zoning in the AIA.

To the west and north of the Airport, the areas are zoned for industrial and office uses. Areas to the southwest, the southeast, and east are zoned primarily for single and multi-family residential, as well as parks and open space. Predominant zoning classifications in the AIA include residential, agriculture, and industrial.

GENERAL PLAN

Exhibit C7 illustrates the planned land uses for the areas surrounding the Airport in the future.

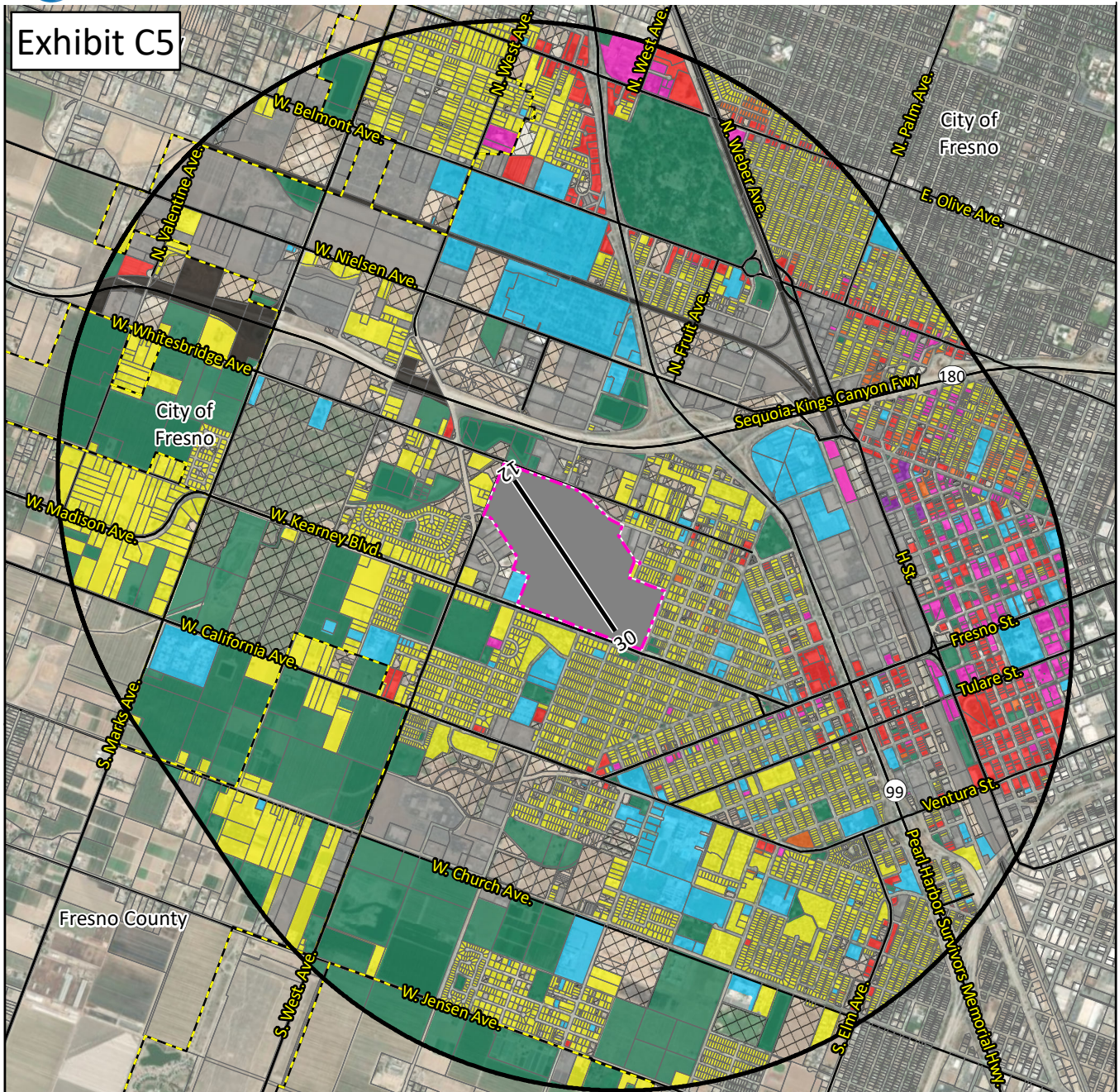
The predominant planned land uses are mixed use, residential, and industrial. The areas around the Airport are mostly planned for office uses, industrial, and mixed use, with only a handful of parcels intended for residential uses.

COMPATIBILITY FACTORS

Exhibit C8 is a compatibility factors map, which compiles National Transportation Safety Board flight accident data for all airports in the United States, noise exposure contours, and arrival and departure flight tracks from the noise exposure contours. The purpose of this exhibit is to illustrate the methodology behind the shape and size of the safety, noise, and airspace compatibility zones.



Exhibit C5

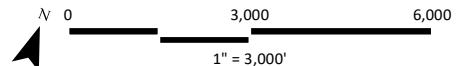


LEGEND

- Existing Runway¹
- Airport Property¹
- Parcel Boundary
- Municipal Boundary
- Streets
- Airport Influence Area (AIA)²

Existing Land Use³

- Single Family Residential
- Multi-Family Residential
- Mixed Use
- Commercial
- Office
- Industrial
- Public
- Open Space
- Agricultural
- Transportation/Right-of-Way
- Vacant



¹Fresno Chandler Airport Layout Plan (2023).

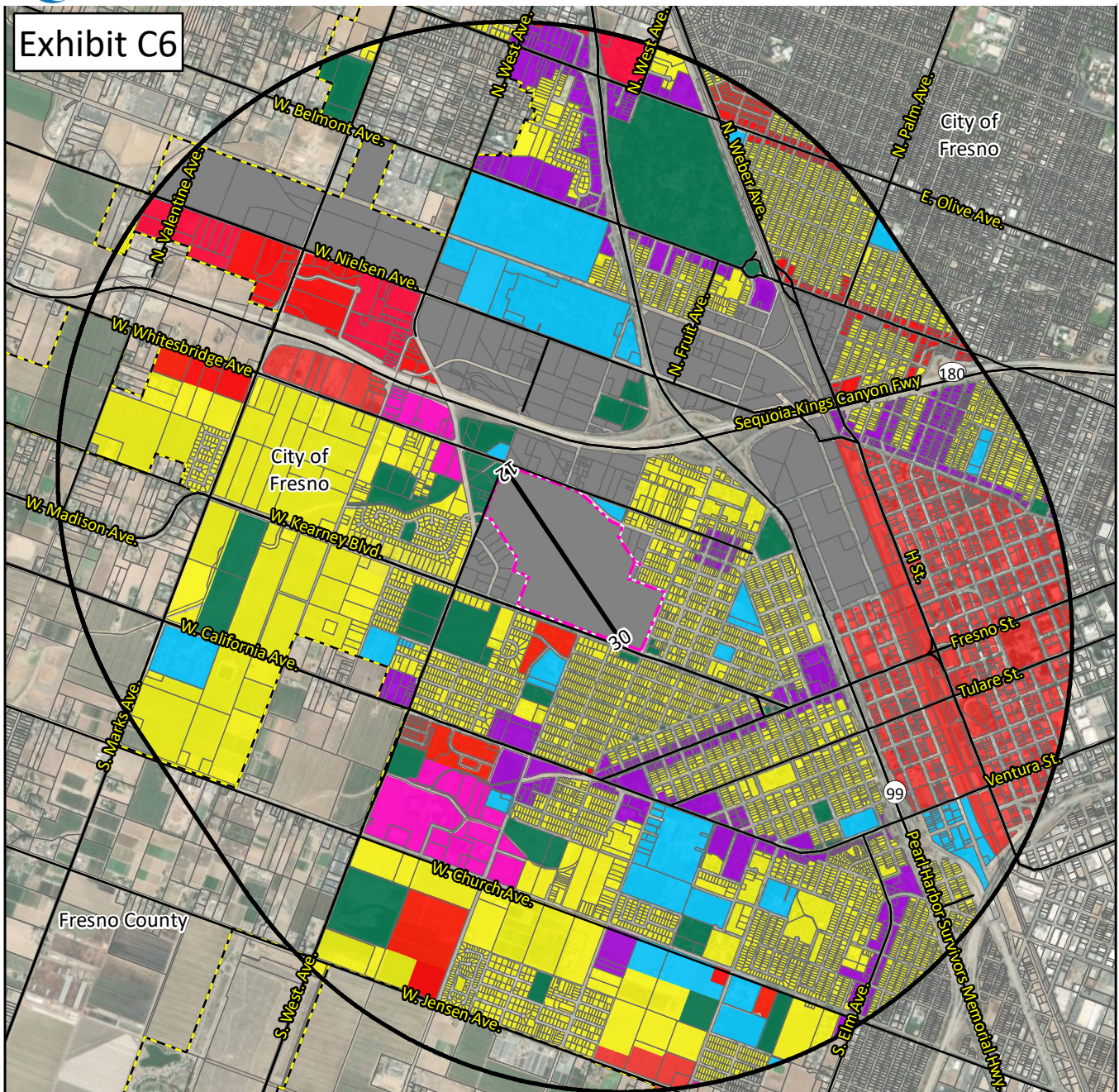
²AIA drawn from Part 77 Conical Surface. See 14 CFR, Subchapter E, Part 77, §77.25.

³City of Fresno Existing Land Use, Fresno Council of Governments.

Sources: Fresno County Parcels, Fresno County Streets, ESRI Basemap Imagery (2022).



Exhibit C6



LEGEND

- Existing Runway¹
- Airport Property¹
- Parcel Boundary
- Municipal Boundary
- Streets
- Airport Influence Area (AIA)²

Zoning³

- Mobile Home Park
- Single Family Residential
- Multi-Family Residential
- Mixed Use
- Commercial
- Office
- Industrial
- Public
- Open Space
- Agriculture



0 3,000 6,000
1" = 3,000'

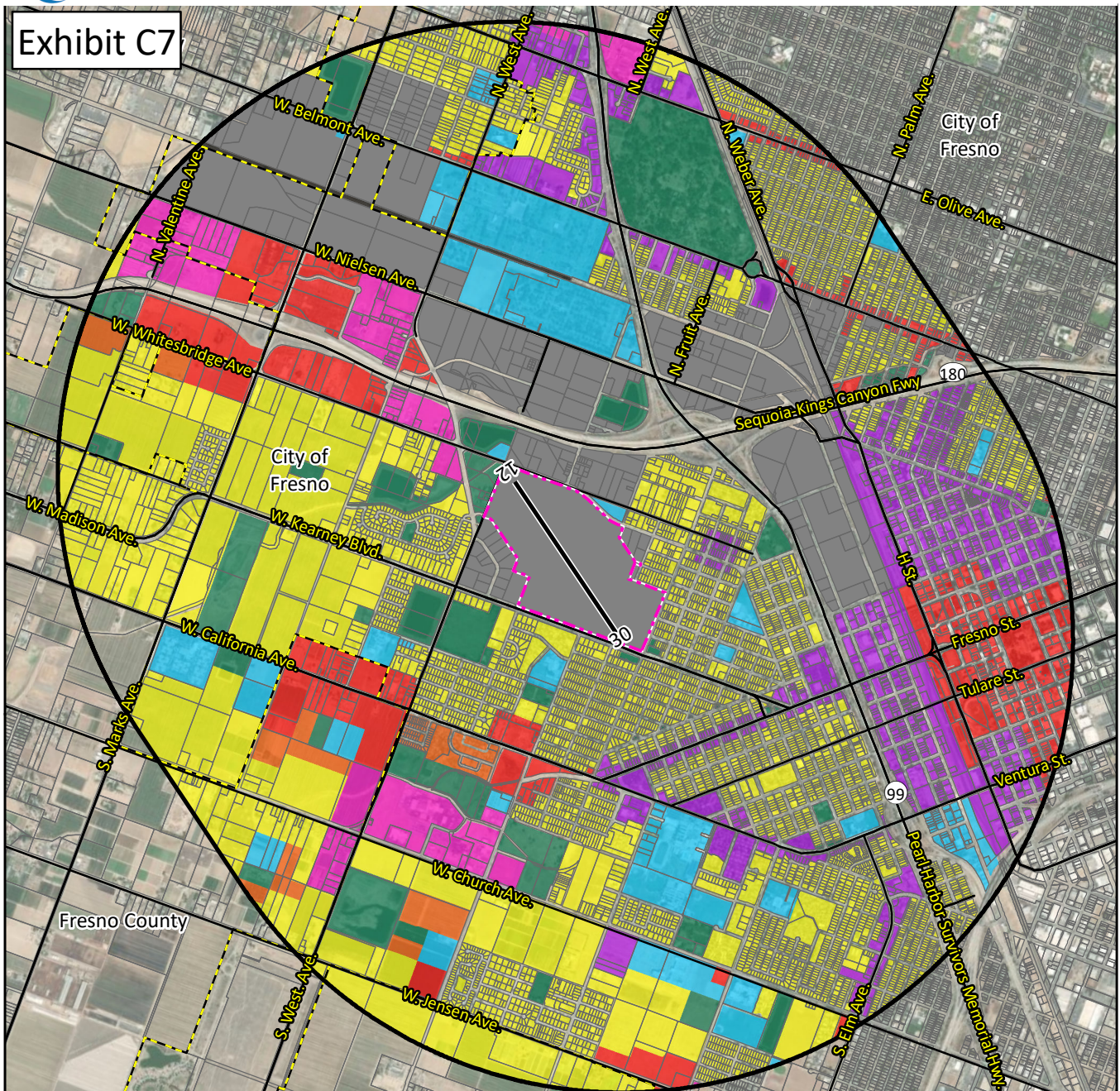
¹Fresno Chandler Airport Layout Plan (2023).

²AIA drawn from Part 77 Conical Surface. See 14 CFR, Subchapter E, Part 77, §77.25.

³City of Fresno Zoning, Fresno County Zoning.
Sources: Fresno County Parcels, Fresno County Streets, ESRI Basemap Imagery (2022).



Exhibit C7



LEGEND

- Existing Runway¹
- Ultimate Runway¹
- Airport Property¹
- Parcel Boundary
- Municipal Boundary
- Airport Influence Area (AIA)²

General Plan³

- Single Family Residential
- Multi-Family Residential
- Mixed Use
- Commercial
- Office
- Industrial
- Public
- Open Space
- Transportation/ROW



0 3,000 6,000
1" = 3,000'

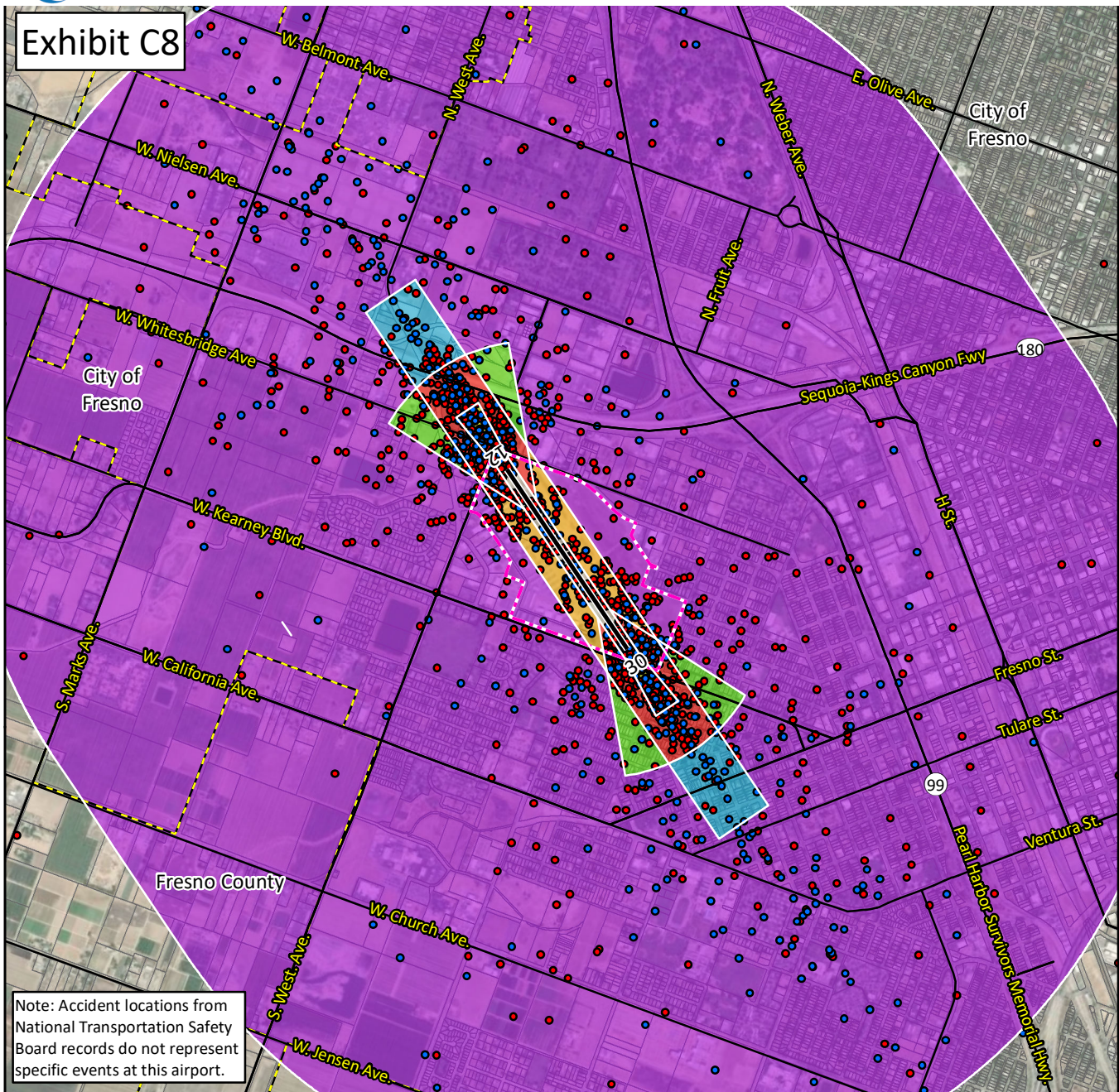
¹Fresno Chandler Airport Layout Plan (2023).

²AIA drawn from Part 77 Conical Surface. See 14 CFR, Subchapter E, Part 77, §77.25.

³City of Fresno General Plan
Sources: Fresno County Parcels, Fresno County Streets, ESRI Basemap Imagery (2022).



Exhibit C8



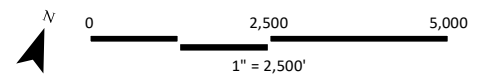
Note: Accident locations from National Transportation Safety Board records do not represent specific events at this airport.

LEGEND

- Existing Runway¹
- Airport Property¹
- Parcel Boundary
- Municipal Boundary
- Streets
- Arrival Accidents²
- Departure Accidents²
- Airport Influence Area (AIA)³

Safety Zones⁴

- 1. Runway Protection Zone
- 2. Inner Approach/Departure Zone
- 3. Inner Turning Zone
- 4. Outer Approach/Departure Zone
- 5. Sideline Zone
- 6. Traffic Pattern Zone



¹Fresno Chandler Airport Layout Plan (2023).

²California Airport Land Use Planning Handbook, 2011. Normalized from airports in United States.

³AIA drawn from Part 77 Conical Surface. See 14 CFR, Subchapter E, Part 77, §77.25.

⁴Figure 3A, California Airport Land Use Planning Handbook (2011), and Coffman Associates Analysis. Sources: Fresno County Parcels, Fresno County Streets, ESRI Basemap Imagery (2022).