



Chandler Municipal Airport (CHD) Overview

Airport Bond Subcommittee
Sept. 10, 2020

Council Strategic Framework

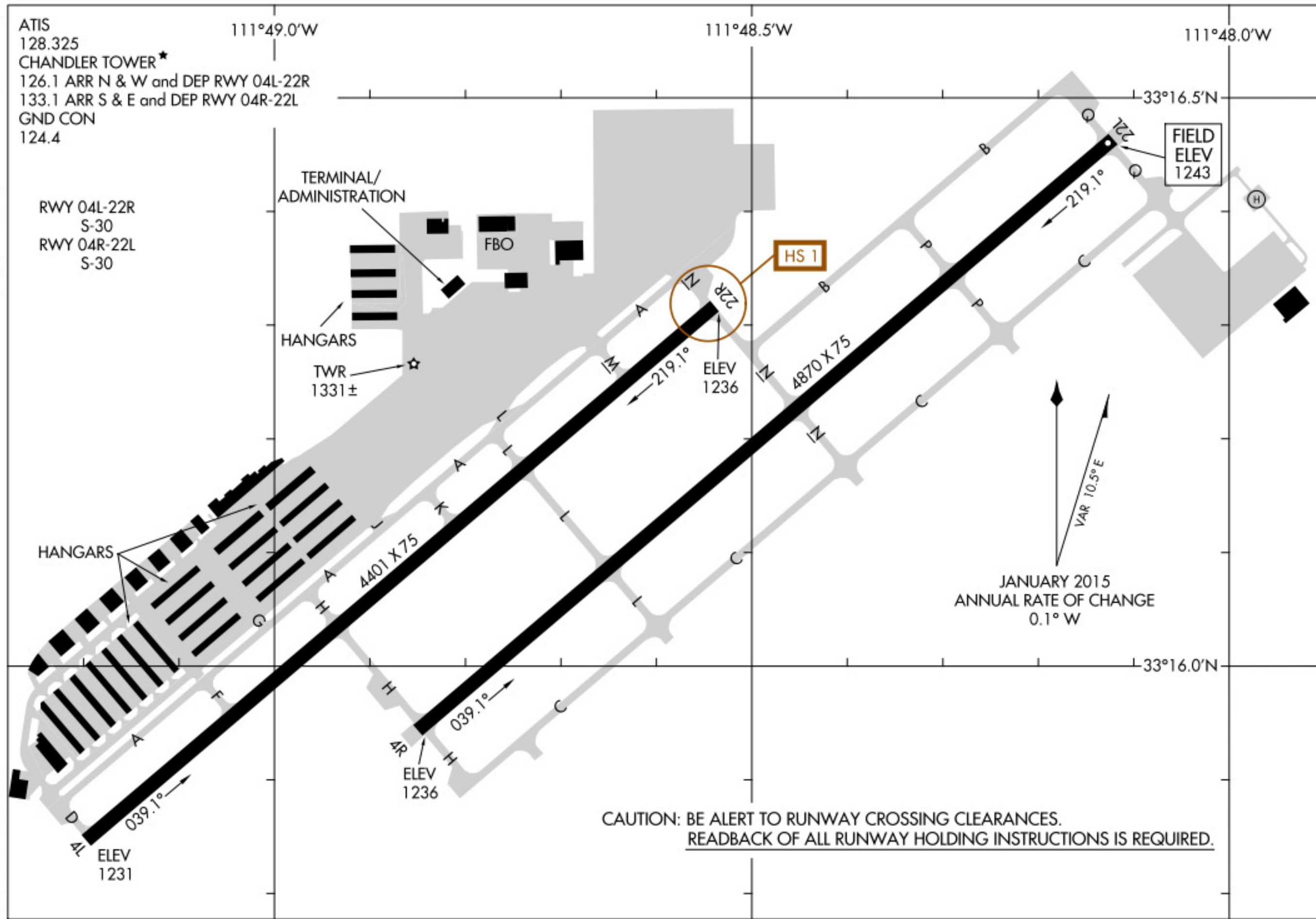
Mobility:

- Mobility includes bicycling, autonomous vehicles, new transit modes, business aviation, traffic technologies and safety enhancements.”
- “Forward-thinking transportation networks with a modern airport that serves as an engine for economic development.”

Innovation and Technology:

- “The City recognizes the importance of providing solid infrastructure...to support the implementation of current and future technologies.”
- “Embracing global technology that offers enhanced opportunities for citizens and businesses through investing in infrastructure to drive future technological advancements.”





Facility Overview

Two parallel runways (4,870 ft. and 4,401 ft.)

- Only public airport in Maricopa County with runways <5,000 ft.
- One of three GA airports in Maricopa County with two runways

Aeronautical businesses include:

- Flight training
- Fixed base operator
- Charter services
- Aircraft repair & maintenance
- Aircraft sales
- Aircraft avionics
- Aircraft rental



Facility Overview

Category	Quantity
Land Area	~550 acres
Total Building Square Footage	~465,000 sf
Based Aircraft (as of 8/7/2020)	443
City-owned Hangars	116
City-owned Open Tie Downs	233
City-owned Shaded Tie-Downs	12
Privately-owned Hangars	141

Facility Overview

- ~100 unleased, developable acres
- ~20 acres on the north
- ~80 acres on the south



Facility Overview

- Predominately flight training, private recreational flying and business aviation
- Anchors the Chandler Airpark, second largest employment center in Chandler
- One of the busiest contract control towers in the nation
 - Tower is owned and maintained by Chandler
- Large heliport
- Seven Airport staff
 - Four in Business & Administration
 - Three in Operations & Maintenance



Organizational Chart

As of Sept. 2020
7 Airport FTEs



Joshua Wright
Assistant City
Manager



Cristabel Dykstra
Sr. Mgmt. Analyst
(PT, Temp Assignment)

Vacant
Airport
Manager



Chris Andres
Airport Planning
Manager



Ryan Reeves
Airport Business
Coordinator



Dave Sorensen
Operations & Maintenance
Supervisor



Diana Alonzo
Sr. Administrative Assistant



John Nytrae
Operations &
Maintenance Technician

Vacant

Operations &
Maintenance
Technician

Principal Activities

- Grant administration & compliance
- Lease administration & compliance
- Regulatory compliance
- Business permit administration
- Tenant relations
- Airport Commission staffing
- Aircraft noise monitoring
- Off-airport development conflict evaluations
- Project management
- Strategic planning
- Marketing
- Community outreach/communications

Principal Activities

- Airfield inspections
- Fuel system oversight (purchasing, compliance, quality control)
- Maintenance
 - Air Traffic Control Tower (Airport owned)
 - 116 Airport-owned Hangars
 - Pavement
 - Fence / Gate Repair
 - Lights / Airport Electrical System
- Mowing infields & retention basins
- Coordination with Air Traffic Control Tower
- Monitor FAA 7460 process (obstruction evaluations)
- On-airport construction oversight
- Emergency response
- Enforcement of Rules & Regulations
- Access control



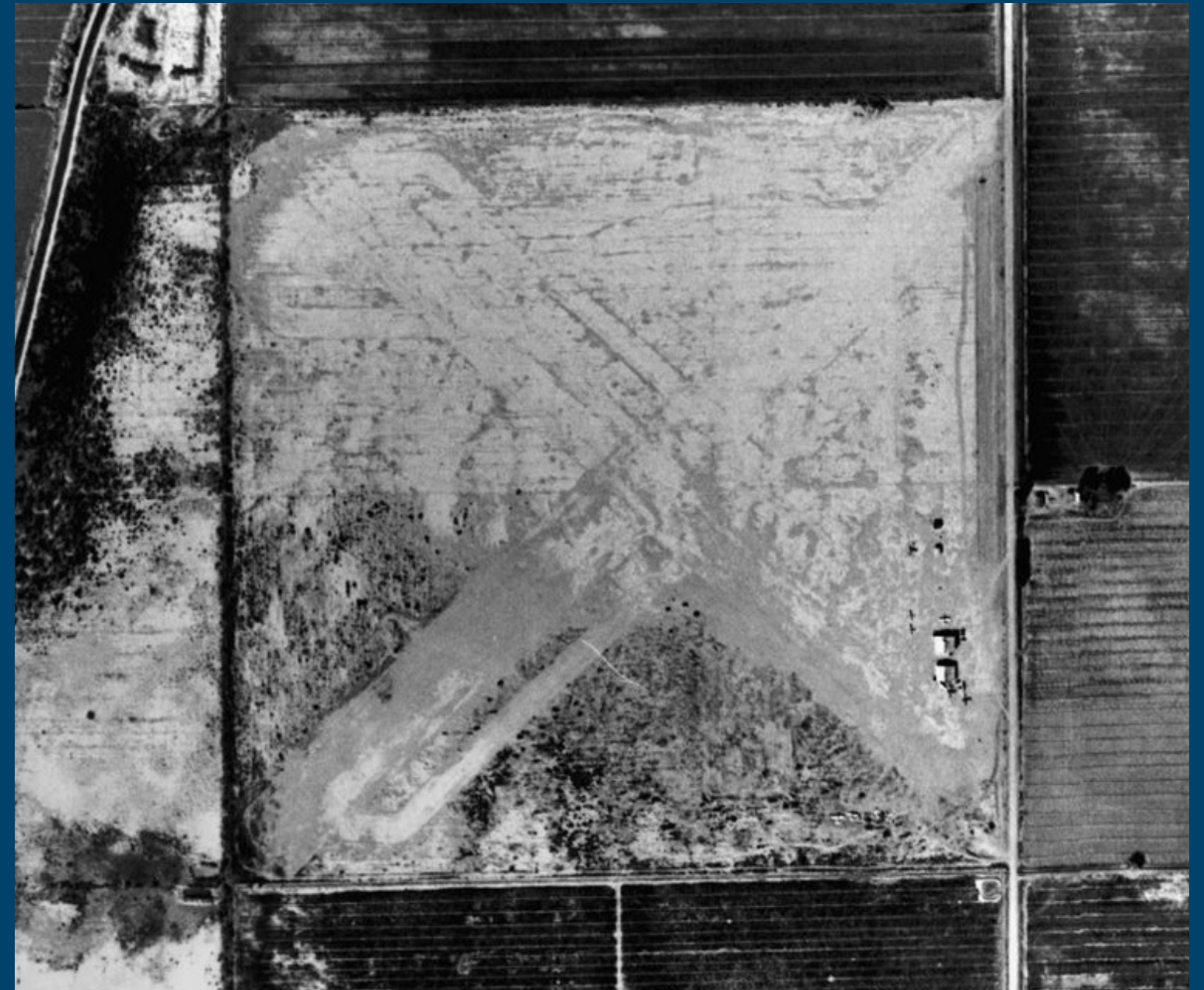
Airport History

- Chandler has had an airport since 1928
 - First site: south of the Loop 202 between Alma School Road and Arizona Avenue
 - Second site: Tumbleweed Park
- Chandler briefly had commercial air service in the late 1920s through Standard Airlines
- The current site was chosen in 1947



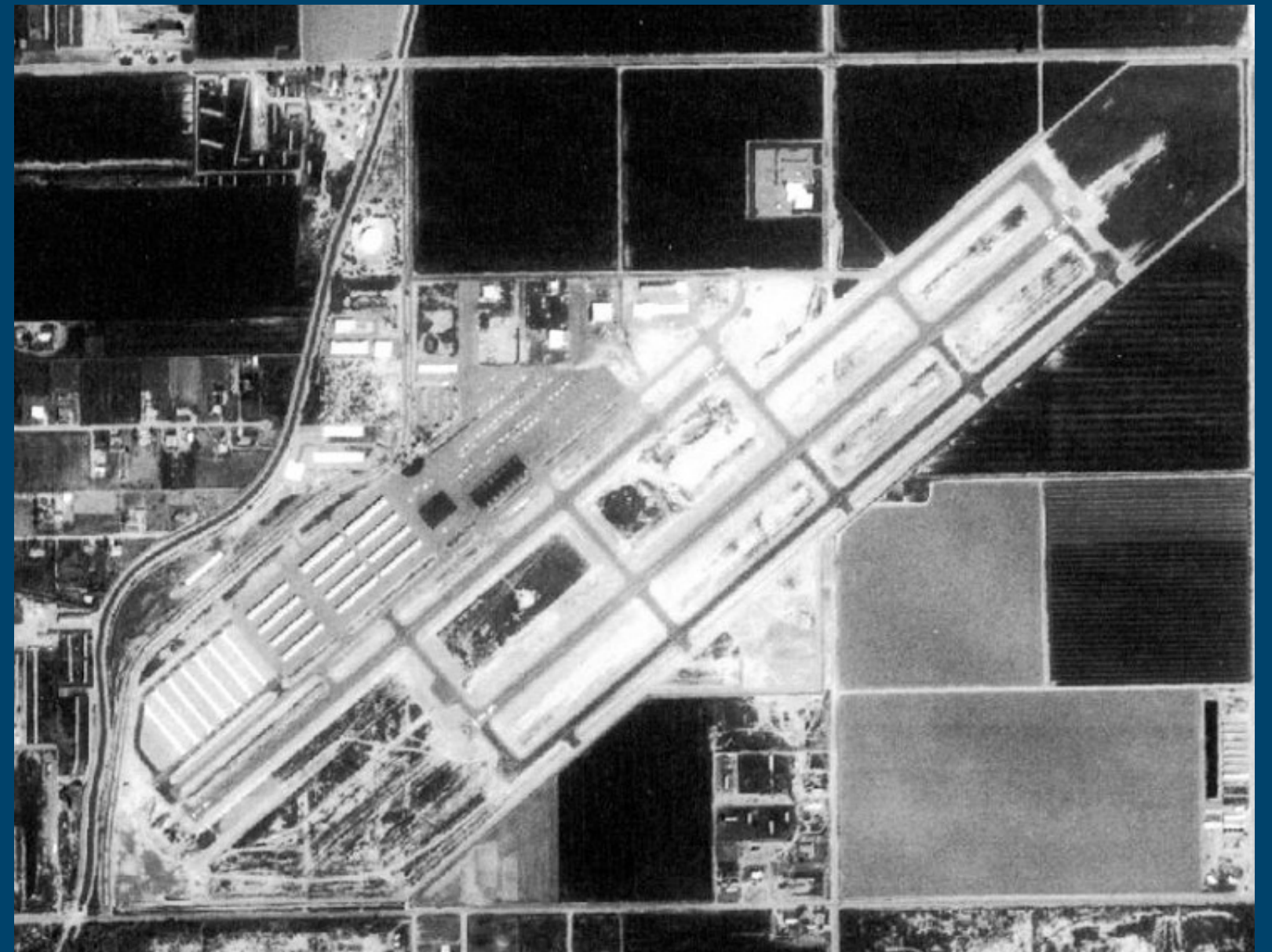
Airport History

- 1948: Airport was opened on land purchased from the Roosevelt Water Conservation District for \$8,000.
- 1950: First improvement project completed (Rwy 18/36)
- 1960: New Runway (existing Rwy 4L/22R) and full parallel taxiway constructed + new apron area
- 1970s: RWY 4L/22R and parallel taxiway extended 1200' to the south; perimeter fencing installed, new apron area built



Airport History

- 1983: RWY 4L/22R + taxiway extended 600' to the northeast and new apron constructed
- 1985-88: City acquired 230 acres for future expansion
- Mid 1980s: new city hangars constructed
- 1990s: City acquired 137 acres
- 1994: Second runway constructed (RWY 4R/22L) with length of 4,870'. New heliport opened.
- 1996: New Airport Terminal opened
- 1998: New Air Traffic Control Tower opened



Airport History

- Early 2000s: New private hangars developed; New Heliport completed and opened.
- 2010s: Additional private hangars developed, airport drainage system redeveloped. New airfield pavement and lighting improvements.



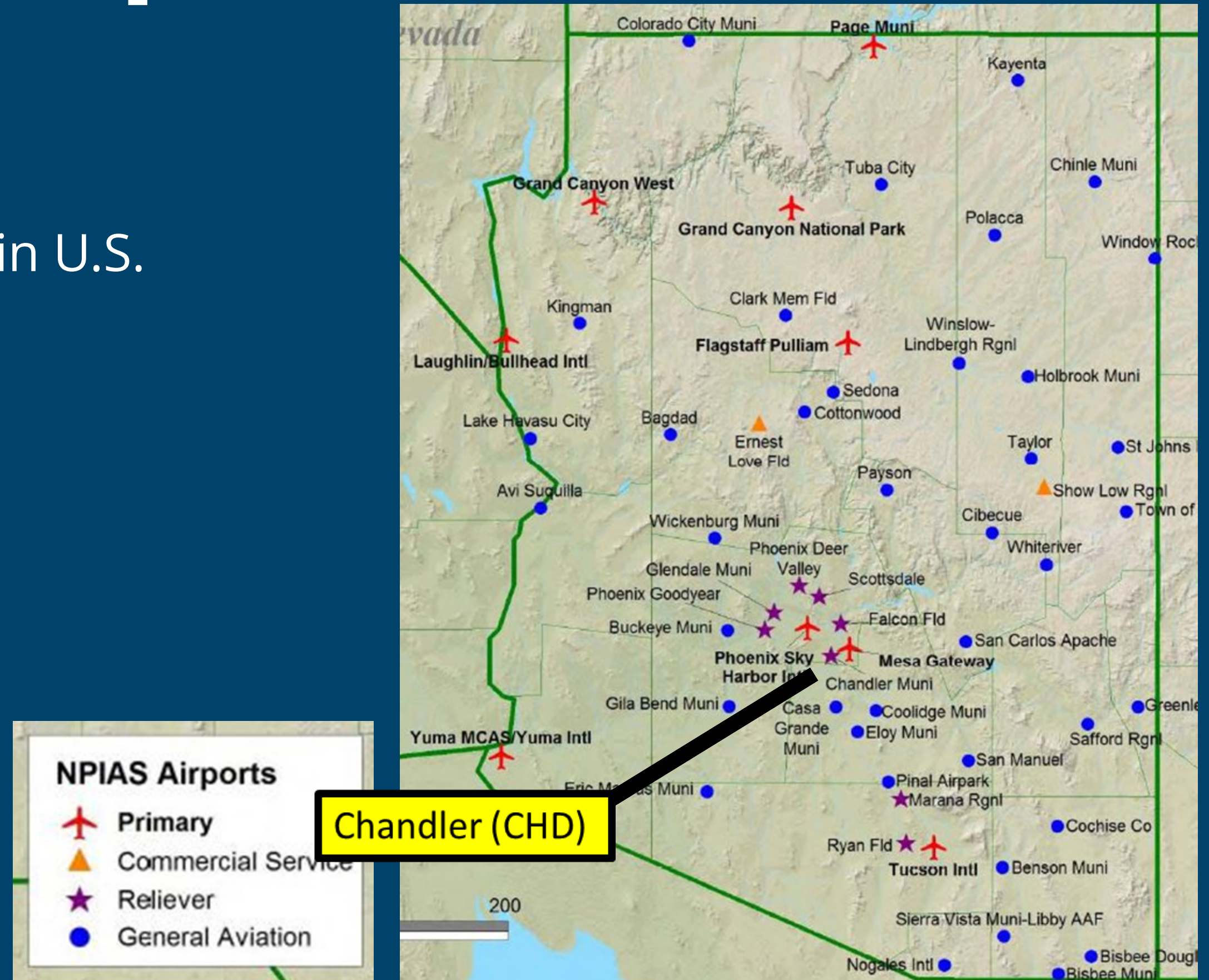
Airport Planning History

Year	Event	Comment
1982	Airport Master Plan - 6,900' rwy with 2 displaced thresholds of 900' on each end	Effectively a 6,000' rwy in each direction
1987/88	City plans 6,200' rwy; FAA approves final design	
1989	Citizen Initiative passes to ban jets at Airport	Violates FAA grant reqmts
1998	Airport Master Plan – 6,800' rwy	
1999	Ord. #2978 – Max. rwy length of 6,800' and voter-approved bonds to extend rwy	
2000	Airport Layout Plan - 6,800' rwy	
2000	Bond Election – Rwy extension fails 6,914 to 6,409	
2007-10	Airport Master Plan – 5,700' rwy	ALP not approved by FAA
2007	Bond election – Rwy extension fails 6,194 to 5,297	
2007	Ord. #3888 – Max rwy length of 5,700'; Airport not designed for aircraft >75,000 lbs or >79' wingspan	
2015	Airport Layout Plan – 5,550' rwy	Not part of a Master Plan update
2020	Airport Master Plan (in progress)	

The Airport's Role

National Plan of Integrated Airport Systems

- 3,332 Existing NPIAS Airports in U.S.
- 382 Primary Airports
- 2,950 Non-primary
- 2,564 General Aviation
- 259 Relievers
- 127 Comm. Service











Airport Operations

- 12th busiest General Aviation (GA) airport in U.S. in CY2019
 - 52nd busiest airport in U.S.
 - Sixth busiest airport in Ariz.
 - “Regional Reliever” classification by FAA
- An operation is one take-off or one landing
- 1995: Air Traffic Control Tower built
- 2006: Highest year for operations

Year	Operations
1995	73,523
1996	156,212
1997	184,139
1998	196,511
1999	221,018
2000	249,811
2001	232,449
2002	230,538
2003	219,671
2004	233,079
2005	235,111
2006	269,072
2007	265,212

Year	Operations
2008	236,842
2009	204,370
2010	165,797
2011	161,589
2012	197,427
2013	211,656
2014	217,549
2015	219,853
2016	221,473
2017	194,224
2018	228,589
2019	220,662
2020	...

Aircraft Types

		AIRCRAFT WINGSPAN (Airplane Design Group)				
		I Less than 49'	II 49' to 79'	III 80' to 118'	IV 119' to 170'	V 171' to 214'
AIRCRAFT APPROACH SPEED (Aircraft Approach Category)	A Less than 91 kts	 Beech Bonanza Cessna 150 Cessna 177 Embraer-820	 Beech E18S Britten-Norman BN-2A Pilatus PC-6 Raytheon E-18	CHD is designed for Group B-II aircraft. Piston-driven propeller, small turboprop and small jet aircraft The aircraft design group is based upon an aircraft's approach speed and wingspan.		
	B Weigh less than 12,500 lbs. 91 to 120 kts	 Cessna 402 Cessna Citation I Piper 31-310 Navajo Rockwell International 690A	 Beech King Air C90-1 Cessna-441 Conquest Rockwell 840			
		 Dassault Falcon 10 Gates Learjet 28/29 Mitsubishi MU 300 Rockwell Sabre 60	 Cessna Bravo, Encore, Excel Dassault Falcon 200, 900 Grumman Gulfstream I Saab SF 340			
	D & C 121 to 166 kts	 Bombardier 60 Gates Learjet 25, 35A, 55 Israeli Westwind Rockwell Sabre 75A	 Canadair CL-600 Cessna Citation X Grumman Gulfstream II, III Rockwell Sabre 80			

Business A/C Operating at CHD

HondaJet



Embraer Phenom 300



Cessna Citation X



Dassault Falcon
900LX

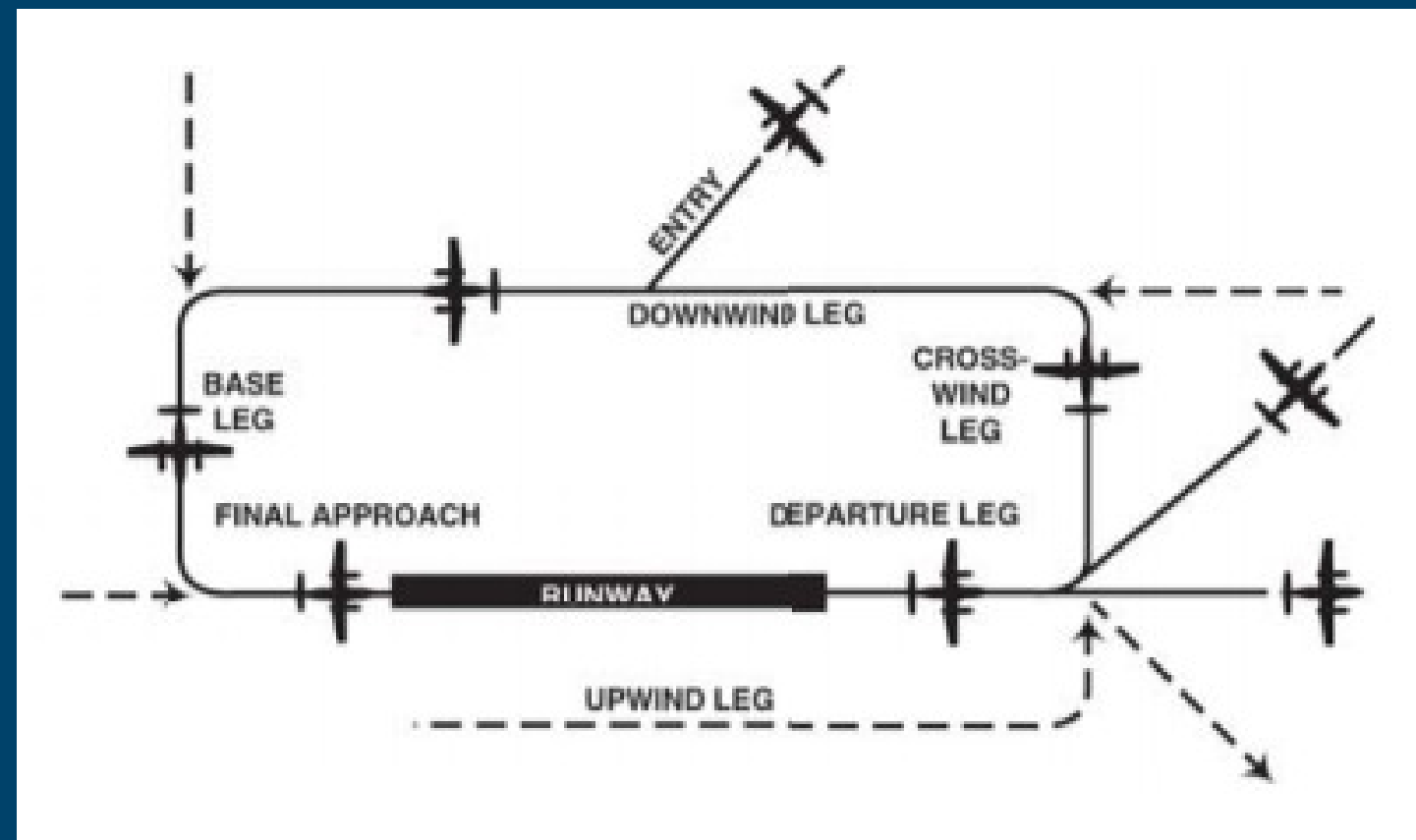


Beech King Air 350



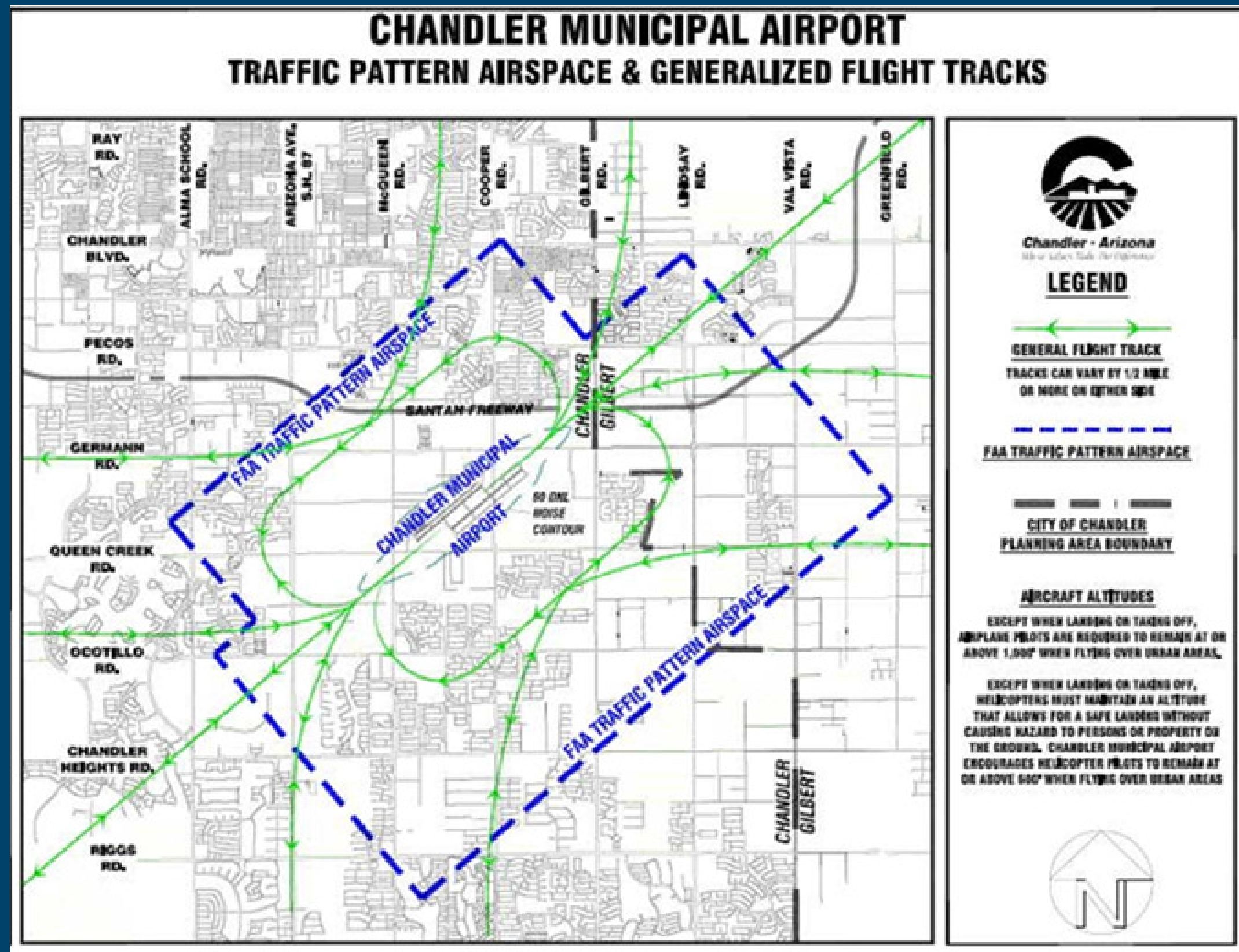
Airspace

- Per federal law, only the U.S. government has authority over navigable airspace.
- Also, the pilot-in-command has the authority to operate in civilian airspace.
- Traffic Pattern is the same configuration at every airport:

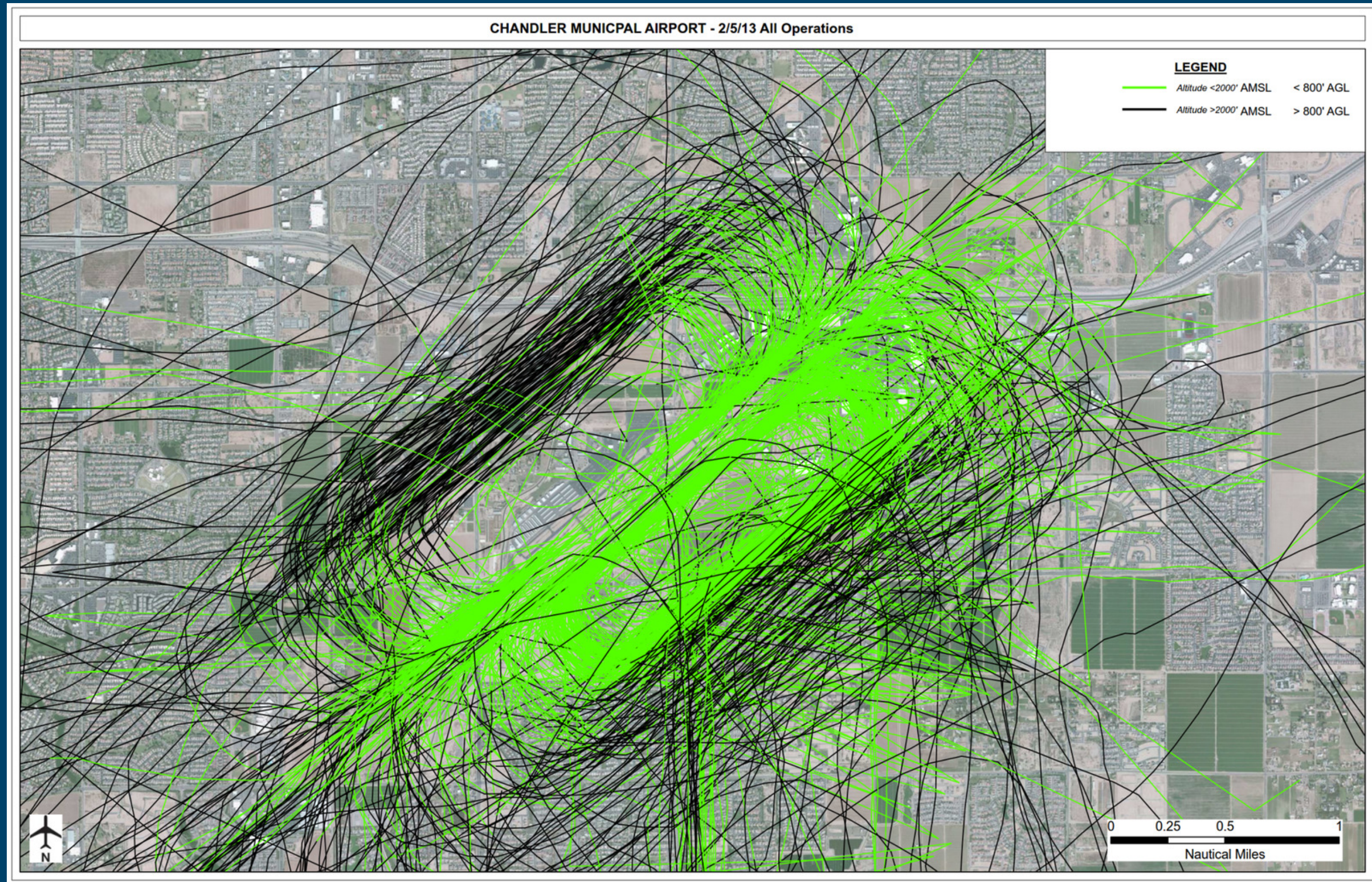


Graphic courtesy of Coffman Associates

Traffic Pattern



Traffic Pattern



Operating Budget

Description	FY 20 Budget (\$)	Percentage
Personnel	\$573,222	47.33%
Aviation Fuel	\$246,661	20.37%
Repairs/Maintenance/Supplies	\$95,661	7.90%
Utilities	\$84,858	7.01%
Depreciation	\$73,104	6.04%
Professional Contract	\$48,808	4.03%
Capital Replacement/New Equip	\$40,000	3.30%
Insurance/Taxes	\$21,500	1.78%
Transfer	\$17,717	1.46%
Comm./Transp./Training/Other Charges	\$9,570	0.79%
TOTAL	\$1,211,101	100%

Capital Budget

2020-29 Capital Program: \$30.18 million

Year	Project	Budget (\$)	Funding
2019-20	Airport Master Plan Update	685,000	FAA/ADOT
2019-20	Airfield Lighting/4L-22R PAPI Repl	2,034,000	FAA/ADOT
2019-20	Rehabilitate Taxiway C	1,144,000	ADOT
2019-20	Hangar Electrical Rewiring	310,000	City
2019-20	Heliport Apron Lighting Repl	115,000	City
2019-20	Annual Pavement Maintenance	100,000	City
2020-21	Rehabilitate Rwy 4R-22L Pavement	1,670,000	FAA/ADOT
2020-21	Annual Pavement Maintenance	100,000	City

- FAA/ADOT funding provides 95.53% of project funding
- ADOT funding provides 90% of project funding

Revenue

Revenue Source	FY21 Budget Amount	Percentage
Tie Down/Hangar Fees	\$503,844	55.31%
Fixed Leases	\$188,988	20.75%
Aviation Fuel Sales	\$117,743	12.93%
Fuel Flowage Fees	\$63,899	7.01%
Transaction Privilege (Sales) Tax	\$15,521	1.70%
Recovery of Damage Claim	\$8,794	0.97%
Misc Charges for Services	\$6,438	0.71%
Airport Business Permits	\$5,720	0.63%
TOTAL	\$ 910,947	100%

- 96% of Airport revenue is from hangar/tie down rental, fixed leases and fuel sales (100LL)

Economic Impact

- ~800 full time jobs are created on/off airport
- Airport anchors the Airpark

By the Numbers:

\$109M Total Annual Impact
(\$299,000 each day)

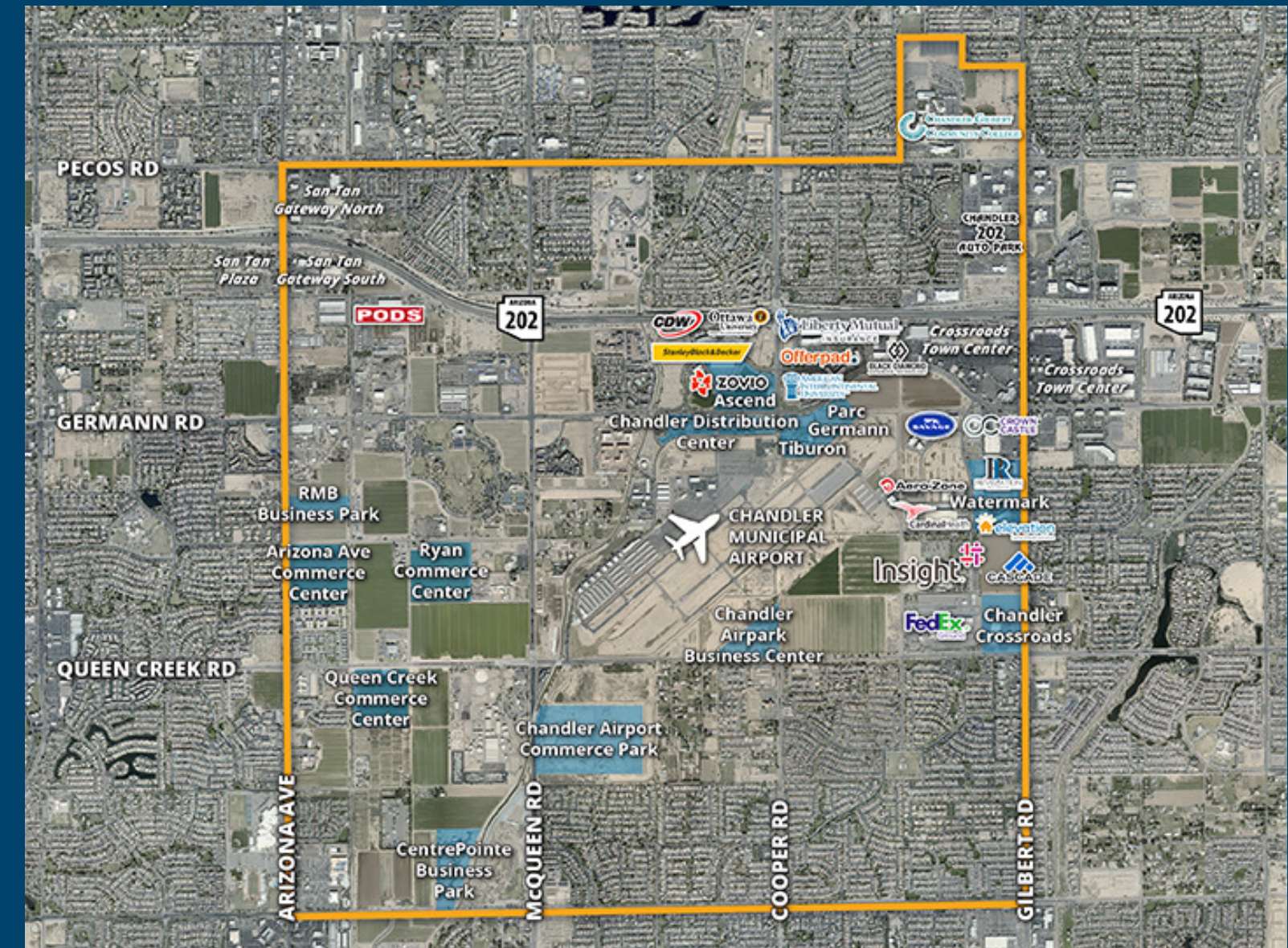
\$31.45M Total Annual Payroll
(\$39,312 per job)

Source: ASU / Kimley-Horn | Chandler Airport Economic Impact Study, 2015

Chandler
Airport Center

Chandler Airpark Area

- Land use documents dating to 1976 identify Airpark area for future employment
- Airpark is fastest growing of City's five employment corridors, up to 1,300 jobs per year (~10,000 jobs as of 2019)
- ~18% of Airpark area remains undeveloped, 94% of which General Plan identifies as business park, office, or industrial
- Airpark Area Plan simultaneously being updated



Top Challenges

- Enterprise revenue generation for needed improvements
- Maintaining infrastructure and level of service
- New technologies in business aviation, including eVTOL and drones
- Diversifying the air traffic mix to include more business aviation
- Forecasted demand for operations, based aircraft, and hangar space
- Continuing to position Airport and Airpark as major employment centers amid fierce competition from other cities and airports



Thank You

ChandlerAirport.com
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