

Air Transportation Advisory Committee

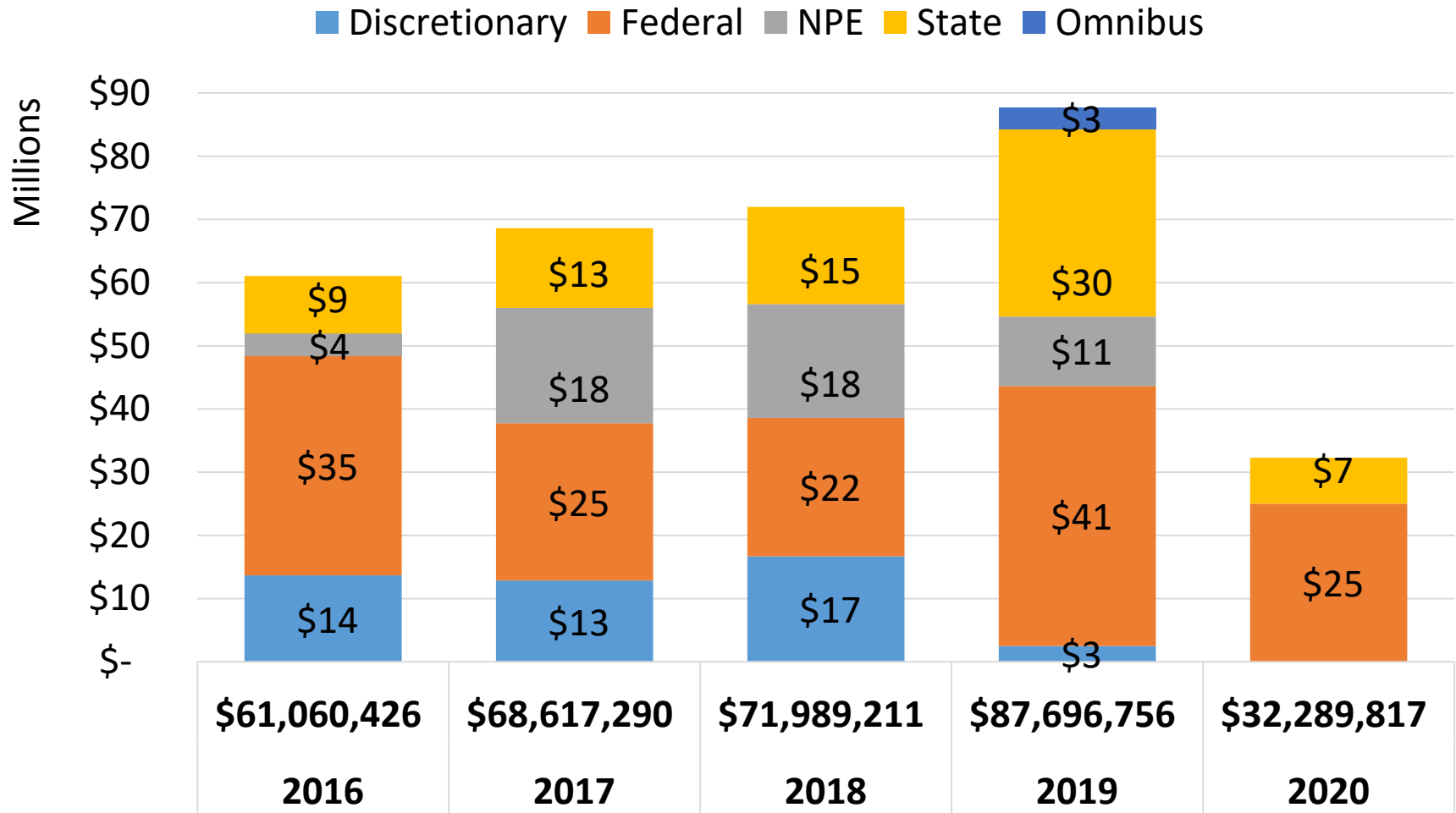
June 4, 2020



Regional Airport Funding Update

Texas

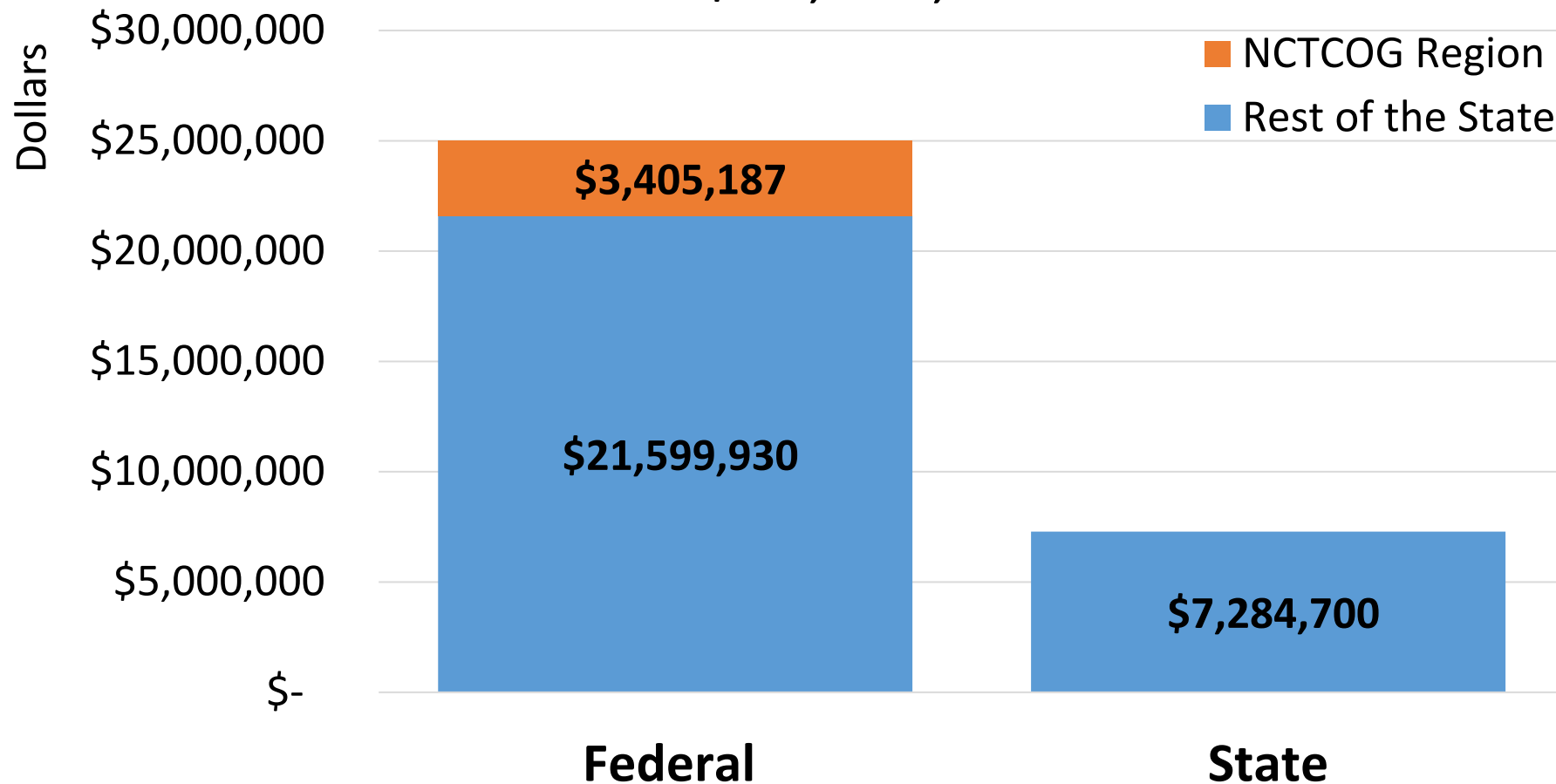
Annual Funding Comparison



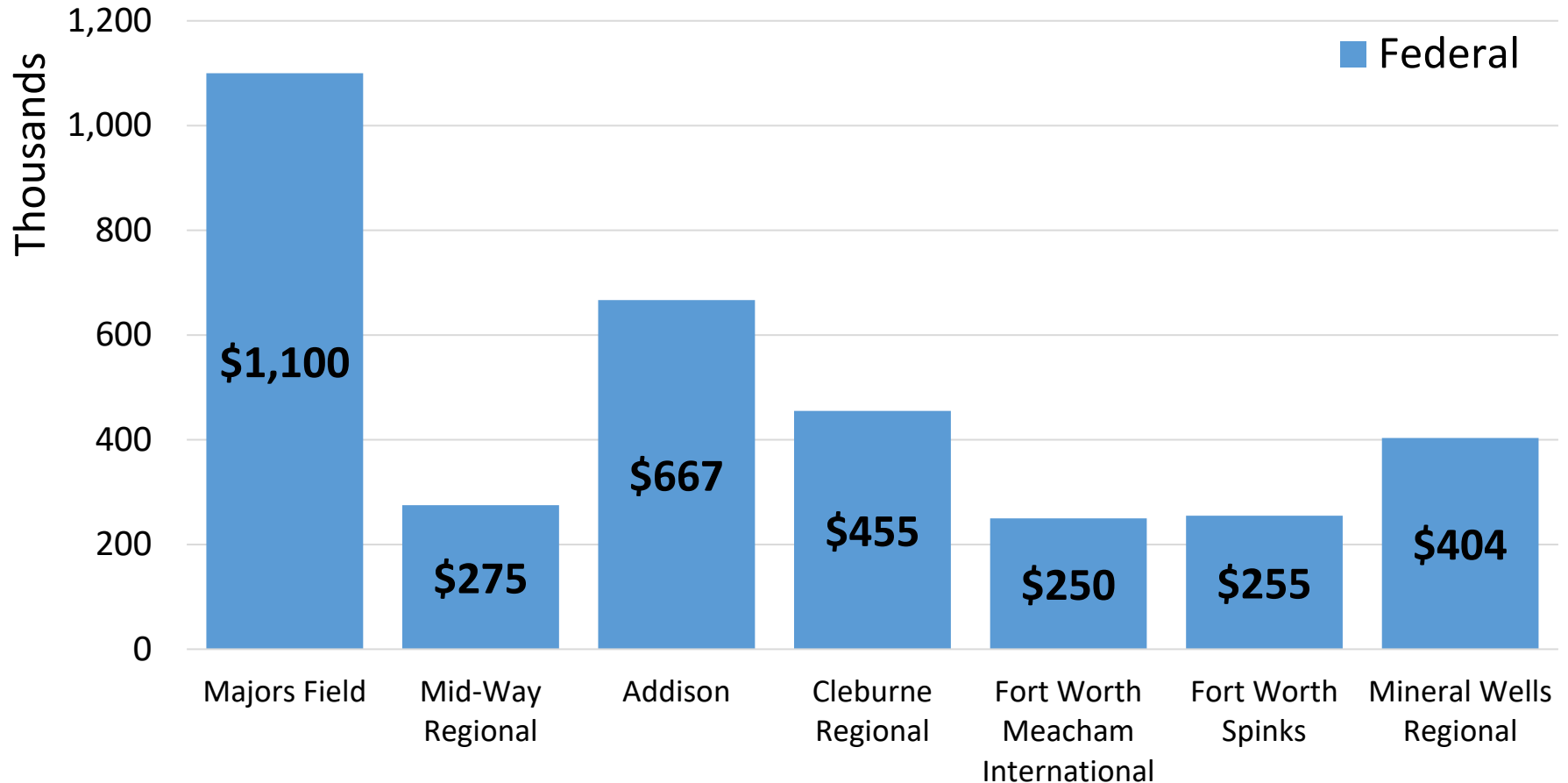
Grants by Funding Source

2020

Total - \$32,289,817



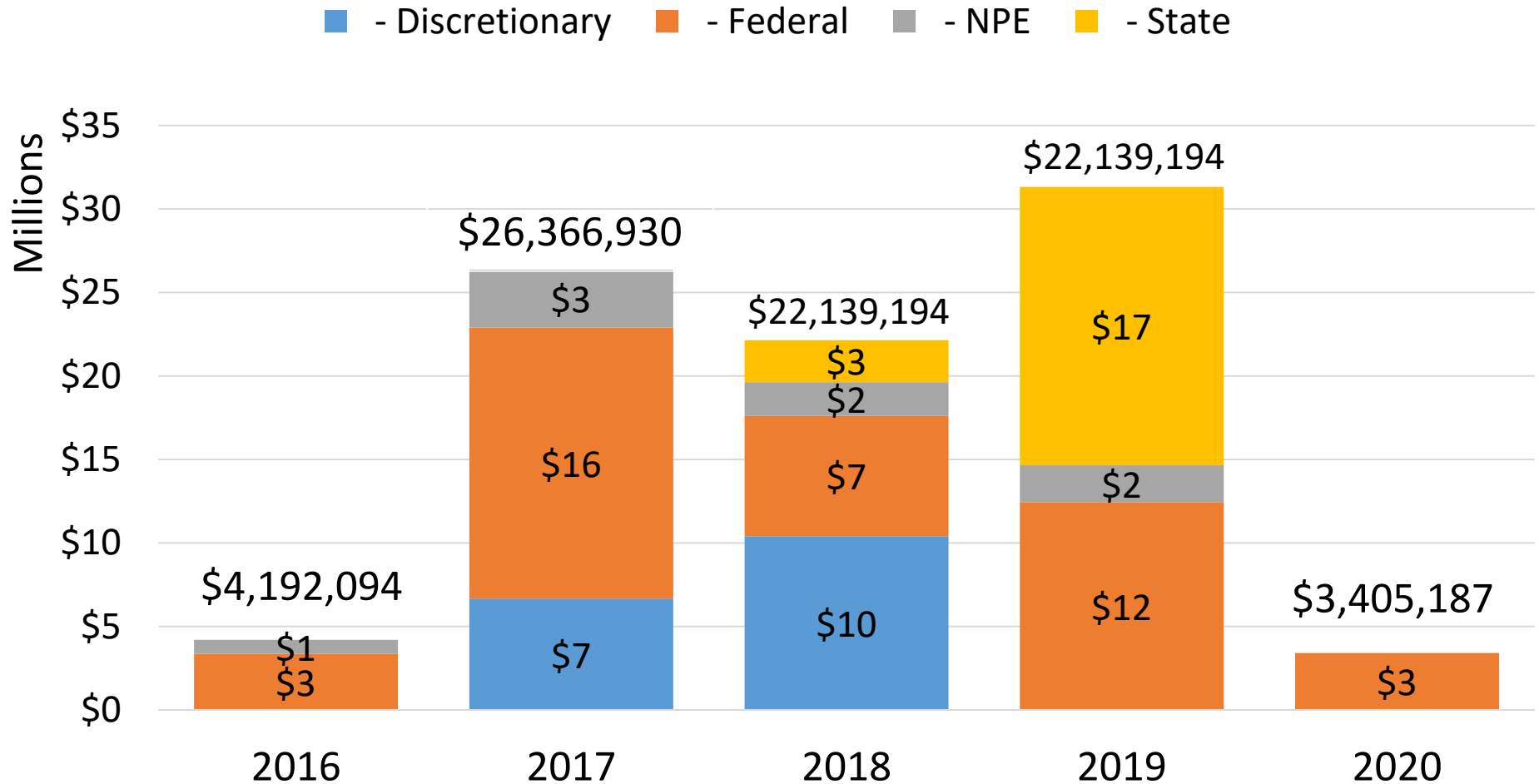
NCTCOG Regional Airport Grant Amount



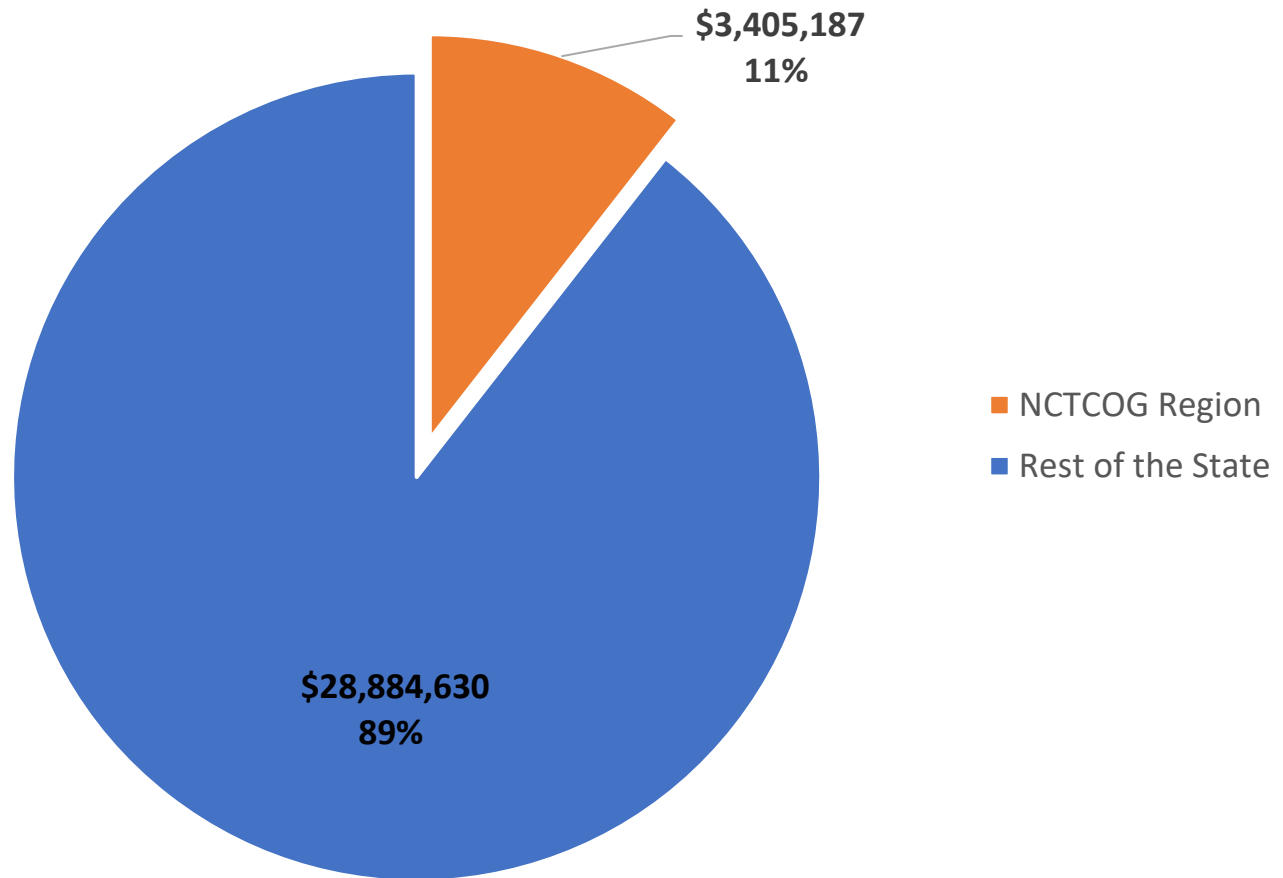
NCTCOG Region Airports

DFW Region

Annual Funding Comparison



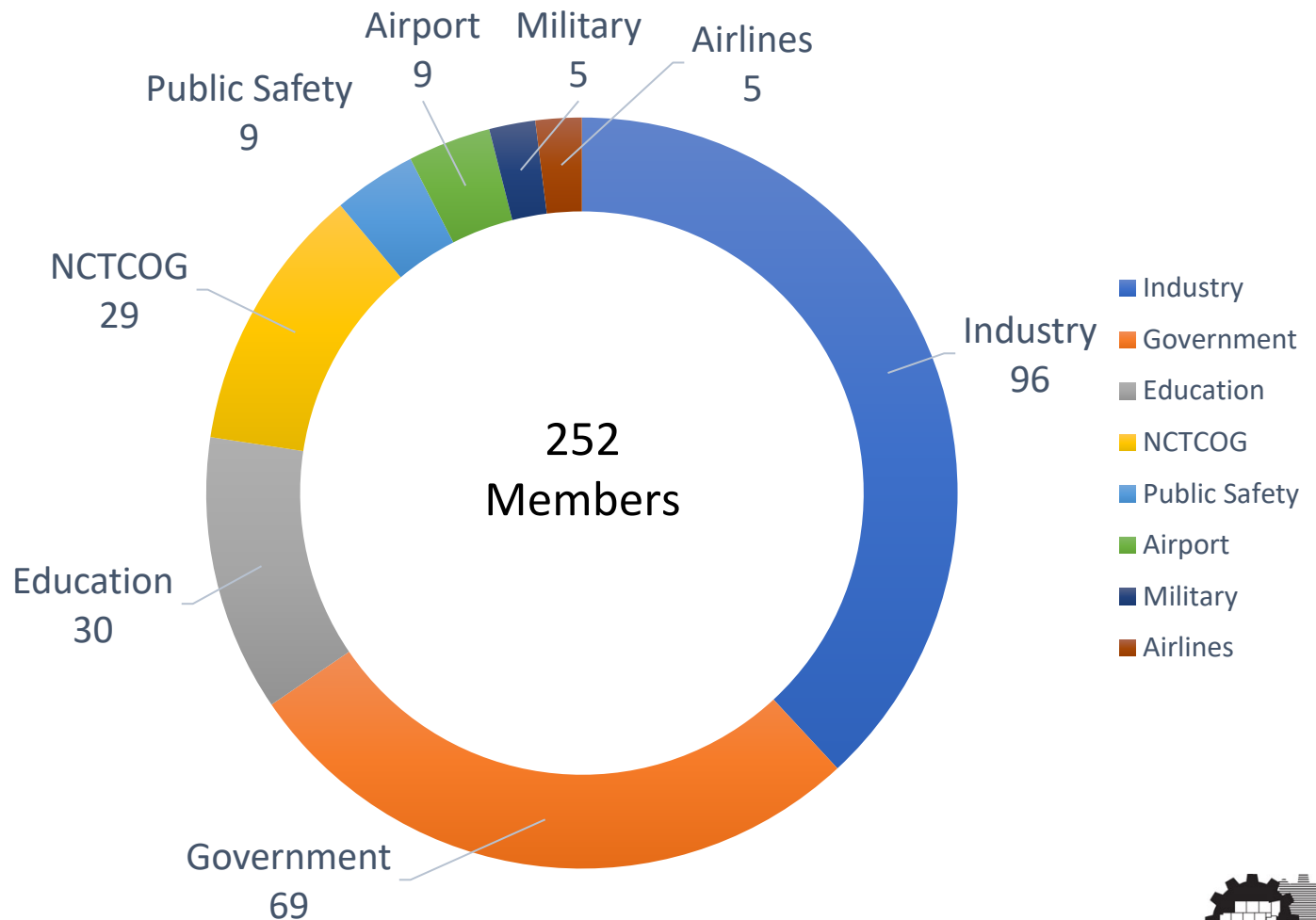
NCTCOG Region vs. Non-Regional Funding



North Texas UAS Safety and Integration Task Force Update



Task Force Composition



Topics Discussed

- Alliance Texas Mobility Innovation Zone
- UAS Workforce Steering Committee
- UAS Real Estate Inventory
- Public Safety Unmanned Response Team (PSURT)
- Texas Disaster Emergency Management Update
- **Know Before You Fly Workshops**
- NASA Grand Design Challenge Update
- Urban Air Mobility Market Study

Topics Discussed

- Mineral Wells Innovation Zone Update
- **COVID 19 UAS Use Cases and Disaster Relief**
- Giant Drones in Texas: AVA Winged X8 Flying Robotic Platform
- UNT and NASA Grand Design
- sUAS and Professional Services
- Women in Drones Job Board
- FAA Survey of Unmanned Aircraft Systems RFC

How You Can Help

1. If you represent a municipality that is interested in hosting testing, please let me know.
2. Join Task Force!

What's Next?

- Planning for Drone Conferences in DFW Region
 - AUVSI – October 5-8
 - Interdrone – December 15-17
- Resumption of Working Group Meetings
- Task Force Meeting – June 30, 2020

Contacts

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CHANGES TO THE FAA'S NPIAS-ACIP ORDER

FAA Order 5090.5, *Formulation of the NPIAS and ACIP*, published September 3, 2019

AGENDA

National Plan of Integrated Airport Systems – Airport Capital Improvement Plan

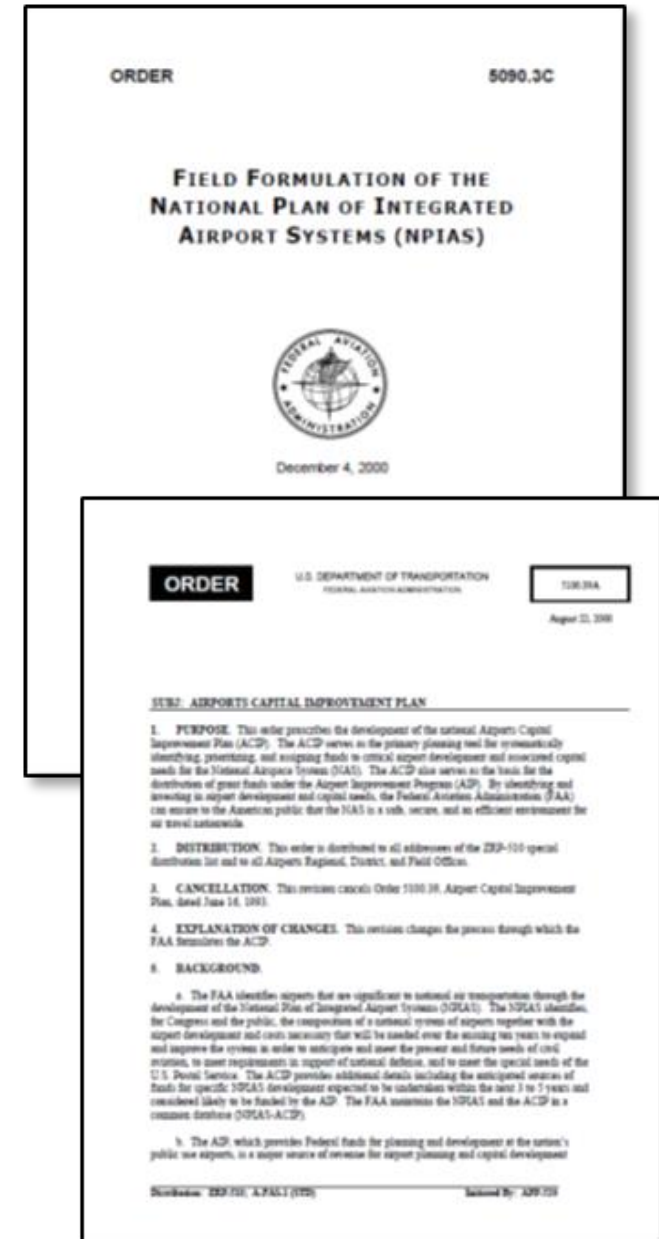
- Background
- What changed?
- Order structure and key elements
- Sources for answers



BACKGROUND

Updating and revising the 20-year-old NPIAS and ACIP Orders

- FAA team of field and HQ staff began working in 2012 based on changes to:
 - Airport and airline industry
 - Authorizing statutes
 - FAA policy and priorities
- Combining into a single order
 - Streamlines processes
 - Reduces redundancy
 - Consolidates airport development planning guidance
- Drafts were coordinated within FAA and briefed to industry



WHAT CHANGED?

Overview of the new Order

- Updated
 - Legal and policy requirements
 - NPIAS entry and withdrawal requirements
 - Overall Development Objective concept
 - National Priority System (NPS) equation
 - Project work codes
 - Airfield and landside development
 - Fundamental Airport Development table with Typical Development for primary and nonprimary airports based on airport's role in the system
- Incorporated ability to include PFC-funded projects

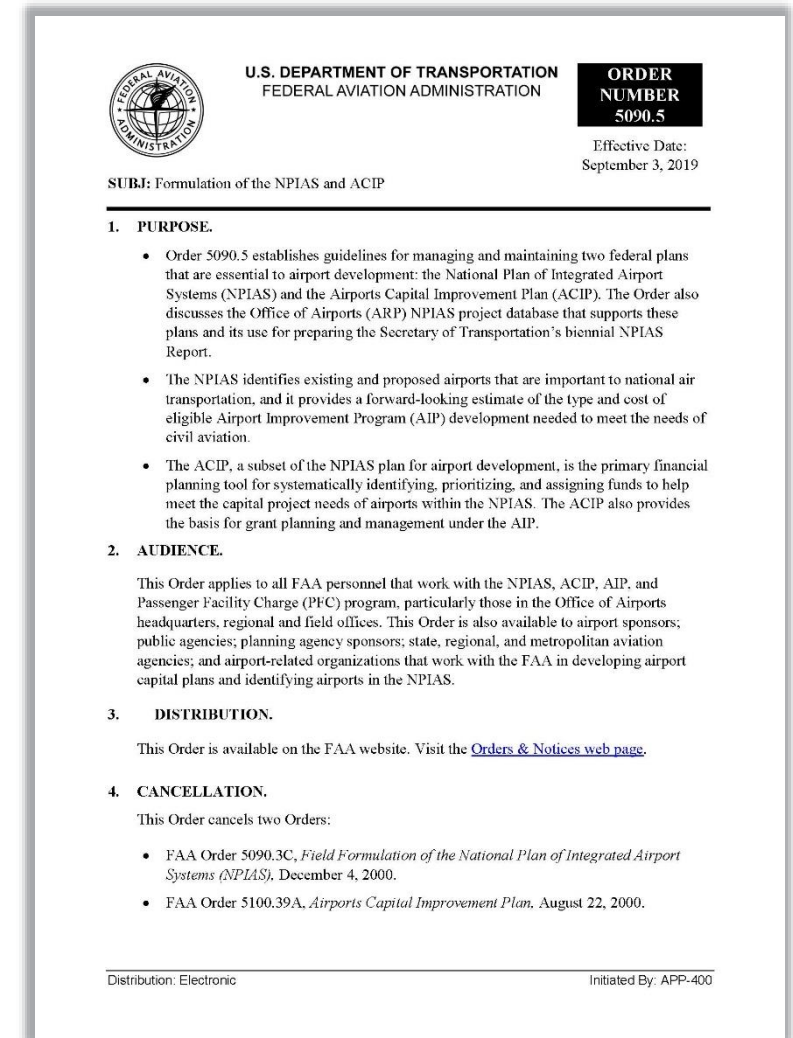


CONTENT AND ORGANIZATION

Chapters and titles

1. What Do I Need to Know About this Order?
2. What is the Airport Development Planning and Funding Process?
3. How are NPIAS Airports Categorized and Selected?
4. How is the NPIAS Planned?
5. How is the ACIP Planned?
6. What is the Overall Development Objective – Capital Project System?

Appendices



CHAPTER 1: ABOUT THE ORDER AND PURPOSE

Updating legal and policy requirements / incorporating changes since 2000

- Updates citations to public laws and statutes and provides web-links to source documents
- Outlines essential airport and airport system characteristics
- Defines key terms
- Introduces the SOAR database
- States general principles for using the Order



CHAPTER 2

Overall process and planning information

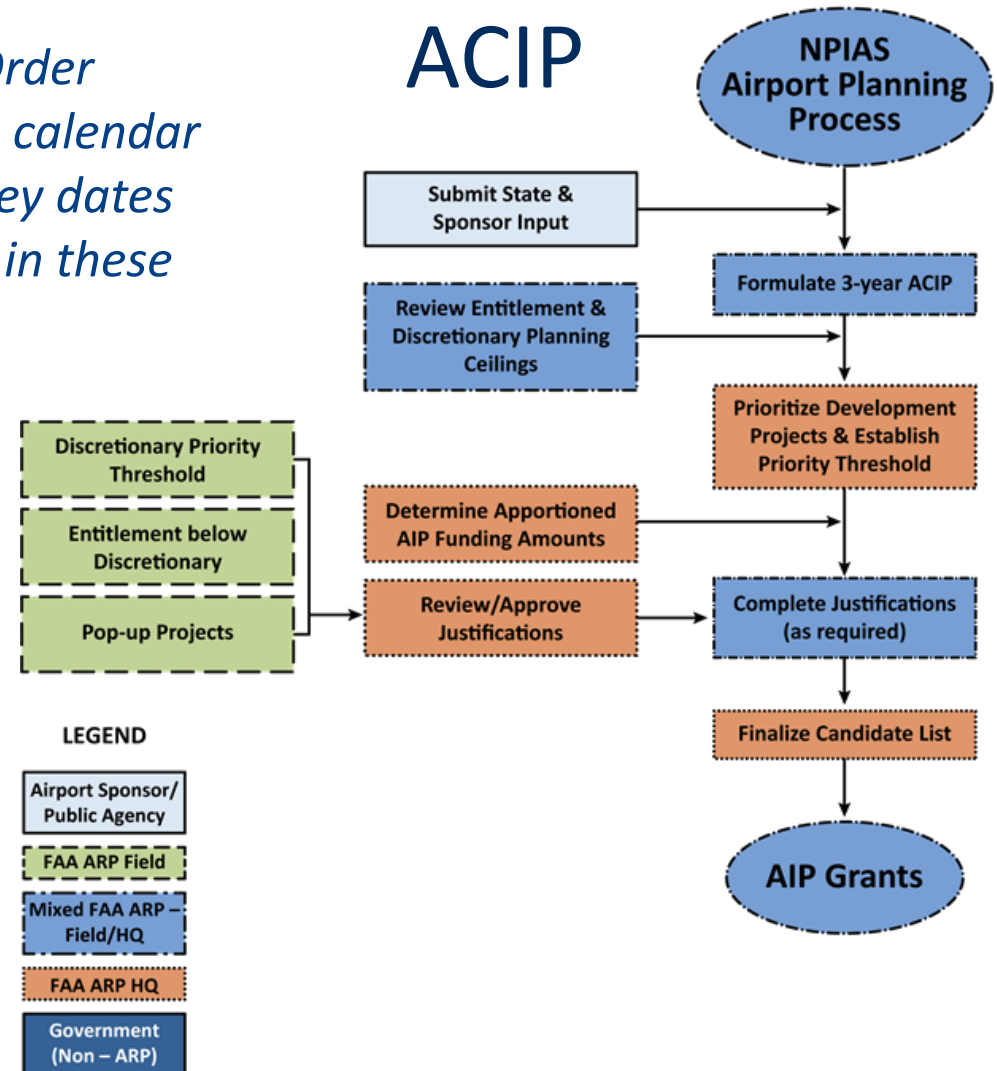
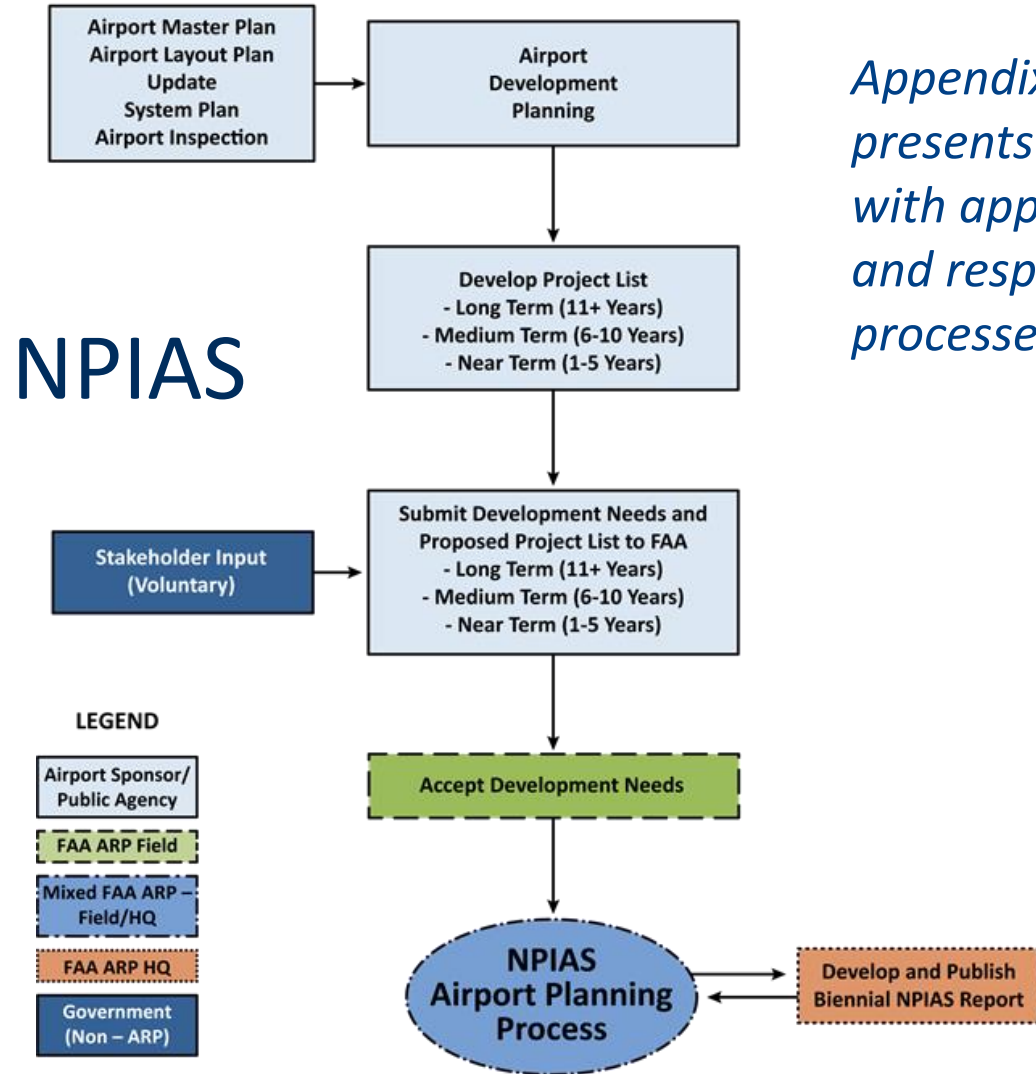
- Defines the NPIAS and the ACIP
- Explains airport planning timeframes
- Emphasizes the continuous process from inputting NPIAS planning data through ACIP and project ranking
- Harmonizes the PFC process with Planning Process and the AIP



Long-Term	Medium-Term	Near-Term
11+ years	6 – 10 years	1 – 5 years

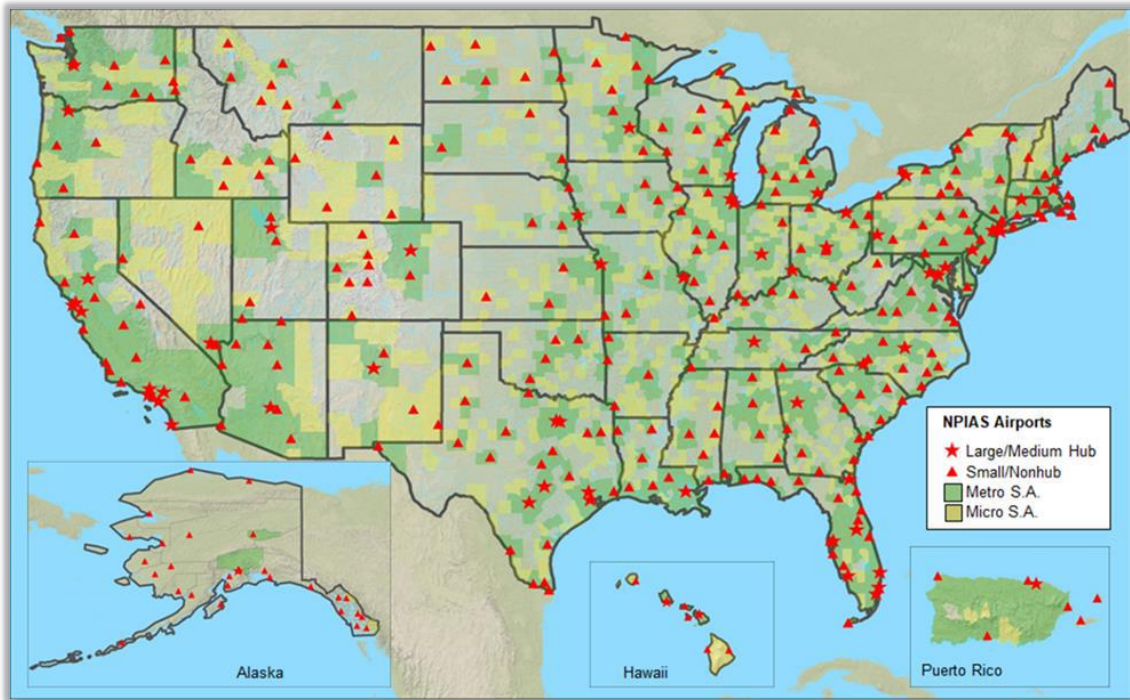
NPIAS AND ACIP PROCESSES

Relationship between airport planning and funding



CHAPTER 3

NPIAS airports categories and NPIAS inclusion, entry, exit criteria



Primary Airports – NPIAS Report to Congress, 2019 - 2023

Defines airport categories contained in statute and policy

- Commercial service
 - Primary – Large, medium, small hubs, non-hubs
 - Nonprimary – public use with scheduled commercial service between 2,500 and 10,000 annual passengers
- Reliever
- GA – nonprimary, characterized by ASSET categories

Clarifies requirements on:

- Process and criteria for requesting inclusion in the NPIAS for existing and proposed airports
- Process and criteria for withdrawal from the NPIAS
- Commercial space transportation facilities

CHAPTER 3 – NPIAS ENTRY

Screening Criteria and Process – Entry into the NPIAS



- Replaces criteria with screening requirements
 - Existing facilities must meet requirements for entry when requesting entry
 - Replaced the 30-minute drive time requirement with 30 miles from the nearest NPIAS airport, regardless of state boundaries
 - Defines what types of aircraft will count as “based aircraft” and outlines the process to update this information
 - Consistent definition of “regular use”
 - Requires analysis of existing airport and any necessary improvements required to meet current FAA standards
- Identifies what FAA will consider when reviewing the request

CHAPTER 3 - NPIAS WITHDRAWAL

Criteria and Process – Withdrawal from the NPIAS



- Withdrawal from the NPIAS
 - Generally, FAA will not consider removing an airport that serves a unique role, however, all requests are reviewed on a case-by-case basis
 - Unobligated airports requesting removal must provide specific information and follow process outlined
 - Obligated airports requesting removal must follow guidance in FAA Order 5190.6. Airport sponsors released from federal obligations will be subsequently removed from NPIAS.
- References the Orders and Advisory Circulars defining the obligations of an airport/sponsor exiting the NPIAS
- Harmonized with ACO policy

CHAPTER 4

Updating planning roles, sources and timing

- Describes roles of FAA, airport sponsors and other agencies
- Identifies sources used to identify AIP-eligible airport development
- Defines planning timeframes and how they relate to NPIAS and ACIP
- Identifies sources of airport development information
- Provides guidance on timing:
 - Activity levels that may trigger capacity planning and development
 - Phasing of complex programs



CHAPTER 4 – PLANNING TIMELINES

Project planning timelines and criteria used for NPIAS, ACIP and AIP

Correlates to *AIP Handbook*, FAA Order 5100.38D

Projects must meet these criteria	NPIAS				AIP (Current FY)
	Long Term (11+ years)	Medium Term (6-10 years)	Near Term (1-5 years)	ACIP (1-3 years)	
Eligible to be funded under AIP	X	X	X	X	X
Reasonable development for the airport to accomplish, with all pertinent preliminary activities (land acquisition, environmental analysis, Benefit-Cost Analysis, permitting, etc.)			X	X	X
Justified by current use, forecasts, or design standards			X	X	X
Funding available					X



CHAPTER 4 – TYPICAL INFRASTRUCTURE

Lists typical features that are essential or desirable airport infrastructure for NPIAS airports

Infrastructure Element	Infrastructure Characteristic	References (Latest Version)
Airport Land	Essential to own all land for airfield development, terminal building area, runway safety areas, runway protection zones, object free areas, obstacle free zones, runway visibility zones, and approach aids.	Airport Improvement Program Grant Assurance #4, <i>Good Title</i> ; Airport Improvement Program Grant Assurance #21, <i>Compatible Land Use</i> ; Advisory Circular 150/5300-13, <i>Airport Design</i>
	Desirable for the airport to control land use out to the 65 Decibel Day Night Average Sound Level (DNL) boundary.	14 CFR Part 150; Airport Improvement Program Grant Assurance #21, <i>Compatible Land Use</i>
Primary Runway	Essential to have a primary runway with clear approaches, runway safety areas, runway protection zones, object free areas, and obstacle free zones.	Advisory Circular 150/5300-13, <i>Airport Design</i> ; Advisory Circular 150/5325-4B, <i>Runway Length Requirements for Airport Design</i>
Crosswind Runway	Desirable if wind coverage on the primary runway is less than 95%.	Advisory Circular 150/5300-13, <i>Airport Design</i>
Lighting and Rotating Beacon	Type of lighting for runway and taxiway is justified by the runway usage and type of approach. Reflectors may be adequate depending on the runway usage.	Advisory Circular 150/5340-30, <i>Design and Installation Details for Airport Visual Aids</i>
Full Parallel Taxiway	Desirable for efficiency and improved instrument approach procedure minimums. May be essential depending on the type of airport and/or aircraft operations.	Advisory Circular 150/5300-13, <i>Airport Design</i>



CHAPTER 5

Describes how the FAA plans the ACIP

- Describes FAA review process for CIPs from airport sponsors
- Outlines the annual airport development planning process
 - Issuing guidance
 - Establishing Entitlement and Discretionary Planning Ceilings
 - Formulating “snapshots”
 - Identifying the Discretionary Candidate List (DCL)
 - Prioritizing projects and establishing the NPR threshold
 - Use of qualitative criteria



CHAPTER 5 – NPS EQUATION

Used in quantitative ranking of projects to help define the Discretionary Candidates List

- Used to quantify project priority according to FAA goals and objectives to assign a National Priority Rating (NPR)
- Revised as part of this Order to:
 - Better reflect national priorities of the FAA
 - Recognize airports' roles to the NAS
 - Reduce the influence of project purpose over other factors
 - Produce a greater spread in scoring to help define cut-offs
- Multiple formulas were evaluated, and the final selection tested on multiple years of project data to determine effect on NPR



CHAPTER 5 – NPS EQUATION

Comparison of old formula to revised formula

	Old NPS Equation	Revised NPS Equation
Formula	$NPR = 0.25P * (1.4P + A + C + 1.2T)$	$NPR = ((4A) + (2C) + (.7P) + (.7T)) / 4.2$
Variables (Codes)	Old Value Range	Revised Value Range
Purpose (P)	1 to 10	1 to 100
Airport (A)	2 to 5	7 to 20
Component (C)	10 to 100	1 to 100
Type (T)	10 to 100	1 to 100

- Paired with new work codes
- Results in a higher DCL threshold
- Purpose code no longer dominates score

Appendix B of the Order provides more background on the NPS equation change.



WORK CODE UPDATES

Improving project descriptors and incorporating PFCs

- Reorganizes some codes so that:
 - Purpose code better reflects project purposes
 - Components are actually components
 - Types are more diverse to better define the project
- Eliminates use of “double” codes
- Minimizes or combines duplicate descriptions for same code
- Incorporates PFC coding into the NPIAS side of SOAR to more completely capture airport “needs” (important for the NPIAS report)

pos	mp	Typ	Standard Description
SA	OB	RM	Obstruction Removal [Hazard]
SA	RW	SF	Construct/Extend/Improve Safety Area
SP	OB	RM	Obstruction Removal [Non-Hazard APP or DEP]
SA	OB	IM	Obstruction Marking [Hazard]
SA	OB	LI	Obstruction Lighting [Hazard]
SA	EQ	RF	Acquire Aircraft Rescue & Fire Fighting Vehicle
SA	EQ	RF	Acquire Safety Equipment and/or Fencing
SP	RW	SG	Install Runway Distance-To-Go Signs
SP	OB	IM	Obstructions Marking [Non-Hazard APP or DEP]
SP	OB	LI	Obstruction Lighting [Non-Hazard APP or DEP]
SP	RW	FR	Groove Runway
SA	RW	LI	Install Runway Lighting
ST	OB	RM	Obstruction Removal [Non-Hazard]
EN	RW	CO	Construct Runway
SP	RW	VI	Install Runway Vertical/Visual Guidance
SP	RW	LI	Install Runway Lighting
CA	RW	CO	Construct Runway
CA	RW	IM	Reconstruct

WORK CODES: AIRPORT

New values based on classifications

Primary Airport Classification	“A” Value	Nonprimary Airport Classification (includes nonprimary commercial service)
Large Hub	20	NA
Medium Hub	18	National
Small Hub	16	Regional
Nonhub	14	Local
NA	12	Basic
NA	7	Unclassified

- Values changed to reflect airport contribution to the National Airspace System based on size classification
- Classifications are defined in Chapter 3 of the Order



WORK CODES: PURPOSE AND COMPONENT

Component codes include PFC elements

Because PFC projects are not prioritized, those elements receive a zero-value work code. This allows those portions of projects to be captured in the NPIAS and ACIP.

Purpose	Description	AIP “P” Value
CA	Capacity	70
EN	Environmental	80
OT	Other	25
PL	Planning	65
RC	Reconstruct	75
RE	Rehabilitate	75
RS	Reseal	75
SA	Safety	100
SE	Security	100
SP	Special Emphasis	80
ST	Standards	35
CC	Passenger Facility Charge Program	0
SB	State Block (only use as SB GP PP)	0

Component	Description	AIP Value “C”	PFC Value “C”
AF	Airfield	25	NA
AP	Apron	65	0
AR	Access Road	20	NA
BD	Building	32	0
BE	Building and Equipment (Control Tower)	65	NA
EQ	Equipment	85	0
GT	Ground Transportation	20	0
GP	Grant Program (SBGP)	0	NA
HE	Helipad/Heliport	65	0
HO	Homes	72	0
LA	Land	70	0
MA	Airport Master Planning	70	NA
ME	Metro Area Planning	60	NA
NA	New Airport	45	0
OT	Other	15	0
PB	Public Building	62	0
PI	Privatization Planning	65	NA
PL	Planning	60	0
PM	People Mover	20	NA
RL	Rail	20	NA
RP	State/Regional Planning	65	NA
RV	Revenue Producing	10	NA
RW	Runway	90	0
SB	Seaplane Base	70	0
SL	Sealane	70	NA
SV	Service/Perimeter Road	15	NA
TE	Terminal	22	0
TL	Taxilane	60	NA
TW	Taxiway	80	0
FI	Financing	NA	0
NO	Noise	NA	0



WORK CODES: TYPE

Type codes also include PFC elements with zero values

Type	Description	AIP "T" Value	PFC "T" Value
60	Outside 65 DNL	10	0
65	65-69 DNL	35	0
70	70-74 DNL	65	0
75	Within 75 DNL	85	0
AC	Access	16	0
AQ	Acquire	43	0
CO	Construct	70	0
CT	Construct New Contract Tower	50	0
DI	Deicing	50	NA
DR	Drainage	62	0
DV	Development	44	0
ES	Environmental Related Assessment/Plan/Study	62	NA
EX	Expand/Extend	64	0
FF	Fuel Farm/Utilities	24	NA
FR	Friction Course	89	NA
GE	Generator	62	NA
GI	Geographic Information	50	0
HG	Hangar/T-Hangar	8	NA
IM	Improve/Modify	62	0
IN	Install	85	0
LF	Lift Device	15	0
LI	Lighting	62	0
MS	Miscellaneous	15	0
MT	Mitigation	65	0
NO	Noise	61	0
NP	New Plan/Study/Assessment	70	0
OB	Obstruction	100	0
PA	Parking	3	0
PR	Energy Production	1	NA
PS	Power Supply	62	NA
RF	Rescue and Fire Fighting	100	0
RM	Remove	90	0
RT	Reconstruct Contract Tower	48	0
SE	Security	85	0

Type	Description	AIP "T" Value	PFC "T" Value
SF	Safety Area	100	0
SG	Marking/Signage	92	0
SH	Shift or Reconfigure	62	NA
SN	Snow	91	0
SR	Sensors	85	0
SZ	Approach Protection	84	0
TD	Terminal Development	45	NA
UP	Update	80	0
VI	Vertical/Visual Guidance System	68	0
VU	Electrical Vault	62	NA
WH	Wildlife	80	0
WR	Wash Rack	5	NA
WX	Weather	75	0
ZE	Zero Emissions	25	0
PP	SBGP Project (SBGP only)	0	NA
AD	Administrative Costs	NA	0
AT	Air Traffic Modernization Program	NA	0
DS	Debt Service	NA	0
EA	Environmental Study	NA	0
HO	Homes	NA	0
LA	Land	NA	0
MP	Multi-Phase	NA	0
OT	Other	NA	0
PB	Public Building	NA	0
PM	People Mover	NA	0
RL	Rail	NA	0
RX	Runway Incursion Mitigation	NA	0
SV	Service Road	NA	0
VL	VALE	NA	0

See Appendix E of the Order. Changes will be published on https://www.faa.gov/regulations_policies/orders_notices/



CHAPTER 6: THE ODO CONCEPT

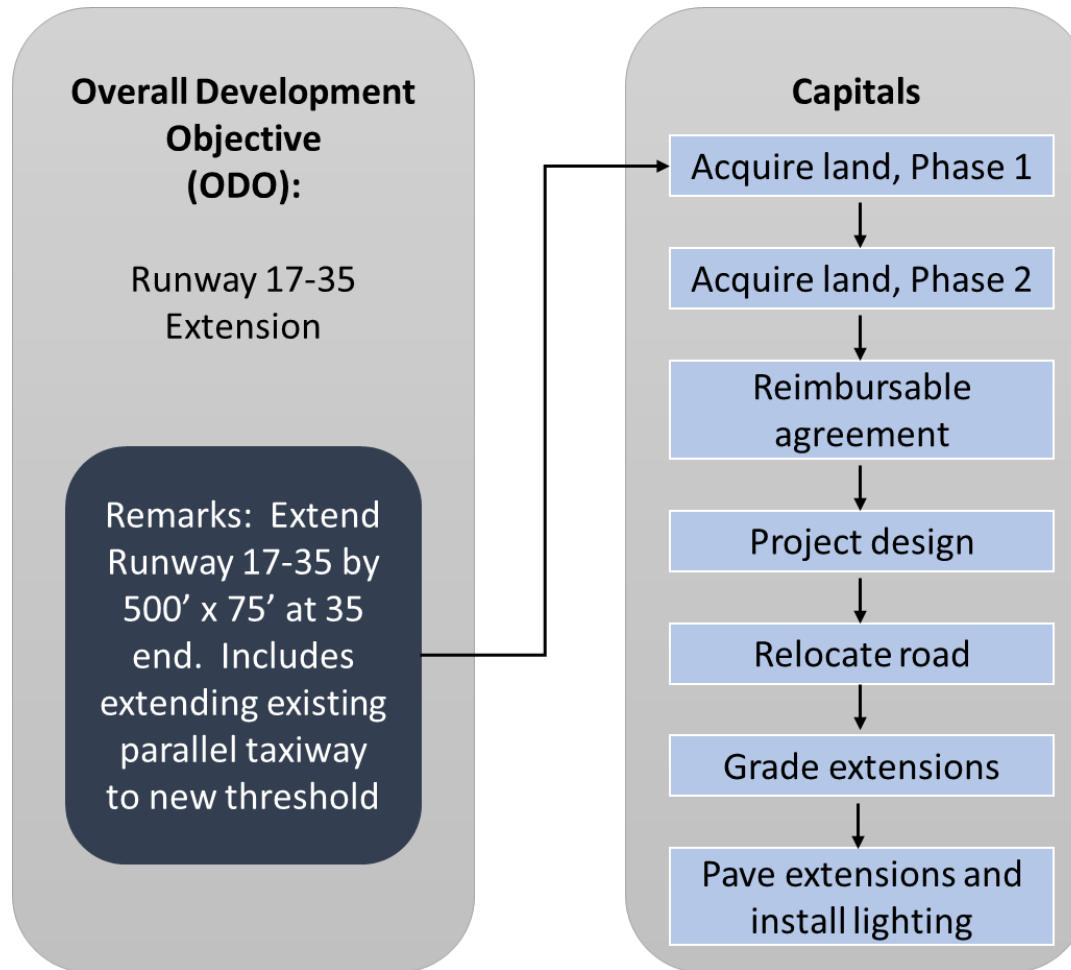
Better project organization, descriptions and tracking

- Multiple capital projects can be combined under one Overall Development Objective or ODO
 - Groups multiple phases and logically related elements
 - Allows better definition of complex projects
- Improves FAA's ability to track details of development projects
- The Order defines data requirements for ODOs and Capital Projects



CHAPTER 6: ODO/CAPITAL SYSTEM

Representative grouping of Capitals under an ODO



- Includes all related and necessary work
- Capital projects can span multiple fiscal years
- Captures planned development need regardless of funding sources
- All projects in the ODO receive the same priority (NPR)
- ODOs can be created in SOAR without capital projects

BEST SOURCE FOR ANSWERS

To find out more

- Read the Order
https://www.faa.gov/regulations_policies/orders_notices/index.cfm/go/document.list?documentTypeIDList=2&display=current
- Talk to your ADO
- Talk to TXDOT Aviation, for airports in the State Block Grant program





Mid-Way Regional Airport

2020 CIP Development with Covid-19

June 4, 2020

ATAC



History

- Began in **1992** as a joint municipal airport owned by the cities of **Midlothian** and **Waxahachie**
- Has evolved to serve the growing region with more frequent use by business aircraft including business jets
- **1998** had **19** based aircraft; today has **98** and a consistent waiting list of **15** or more





Operations

Mid-Way has a staff of 3 who are responsible for the administration and safety of the airport.

Airport Manager, Darrell Phillips

Operations Assistant, Tammy Bowen

Maintenance, Mario Martinez



Capital Improvements

2011 - 2022

- **2011 Increased runway to 6,500 ft. long and 100 ft. wide investment \$9,069,000**
- **2012 Renovated the terminal and doubled from 4,000 sf. to 8,000 sf. \$850,000.00**
- **2013 Expanding of aircraft parking ramp 20,000 sq. yds. to accommodate large and small aircraft \$2,200,000**
- **2017 New T-Hangars Development 14 units \$1,200,000**
- **2020 -2022 Security Fence and Wildlife Fence \$790,000**



CIP 2020 with COVID-19

- **March 2020 Caution and procedures came out on how to handle Covid-19, now being in the middle of CIP project what is next.**
- **Working with TxDOT Ed Mayle and KSA Chad Pennel, this is how we handled meetings and pre-bid inspections with Covid -19.**
- **With Construction planned to start by end of May or first of June we decided to move forward.**



CIP 2020 with COVID-19

- **With State Offices and Local Gov. CDC restrictions we could not have meetings or travel so this is how we handled the bid process.**
 - * Airport Staff as of March 20th started working from home with daily visits and inspections.**
 - * All public correspondent was by phone or email. Admin Office closed to public.**
 - * All meetings were held by Phone Conf. or Zoom**



CIP Bid Process with COVID-19

- * Pre bid meeting was by phone conf. and inspections were self inspection with one on one if needed. (there were no - one on one Inspections)**
- * Bid packets, all packets were sent to the Airport and was recorded by Airport Staff on delivery time and date.**
- * Bid Opening, Chad Pennel from KSA and I, hosted the bid opening at the Airport and read the bids allowed by Phone Conf. Ed Mayle joined us by phone from TxDOT.**



Airport Businesses During COVID-19

- **Southern Star Aviation.** Fixed Base Operator
- **A-1 Aircraft Paint.** True artist painting all sizes of aircraft.
- **Trojan Phlyers.** Aerobatic Airshow Team.
- **Big Q Aviation.** Specialize in glider and tail wheel training.
- **Airborne Imaging.** Provides aerial test facility for some of the latest leading-edge technology today that is used primarily by the US military



Future CIP and Airport Development

Mid-Way Regional 5 year Plan and Development Target.

- Mid-Way Regional Airport is location on 287 corridor growth and development with new business, major corporations and new homes in the next 5 years. Our goal is to recruit MRO (Maintenance Repair and Overhaul) facilities that bring in good jobs for the airport expansion. Also, to collaborate with local schools to encourage education in Aviation.
- With growth in our area we are looking at expansion in Land Acquisitions that will be part of our 5 year plan and to provide a buffer to our Airport. Both Cities Midlothian and Waxahachie have already Zoned this area for Commercial Aviation use.



Planning 5 year CIP for the Future

Where to Start: TxDOT and KSA

- In January of this year we sat down with KSA and reviewed our goals and direction on how we want to direct this airport for the future.
- We have completed new T-Hangar in 2017-18 but with our waiting list we are now looking at RFP (Request for Proposals) for additional box hangars.
- We already had the Airport Security fence and gates on our CIP for 2020-2022 so now we need to look at the airport as an whole. My motto is “Always start with the runways and work out”.



5 year CIP Plan

Working with TxDOT and KSA

- 2023-24 we are looking at the seal coat and paint for the main runway 18/36 and Taxiways/Terminal parking expansion.
- For 2024 we are looking to update our Airport Master Plan, it is coming up on a ten years and with development and expansion we need to update the Master Plan and ALP (Airport Layout Plan).
- 2025 Land Acquisitions, this is a process that will start early and hopping to complete in 2025.



Events Pancake Breakfast/Fly-In

- Held annually on the first Saturday in June cancelled because of Covid-19 rescheduled for Oct. 3rd 2020 depending on CDC guidelines.
- In 2019 over 1000 people were served pancakes in 3 hours
- Other attractions include vintage aircraft and cars; helicopter, biplane, and DC3 rides; flyovers and skydiving; live music; and children's activities.
- No admission or parking fees.





Keys to Mid-Way's Success

- **Customer Service**
 - Easy in-and-out
 - Good fuel prices
 - Friendly staff
 - Good mechanics



- **Located outside of congested Class B air space** of Dallas-Fort Worth International and Love Field



Keys to Mid-Way's Success

- **Proud of our hospitality to our military**
 - We have hosted all 5 branches of the military plus Border Patrol and DEA have visited Mid-Way for either fuel or RON (Remain Over Night)
 - 4 Chinook helicopters RON and was served barbeque chicken dinner.
 - V-22 Osprey RON and served breakfast
 - 101st Airborne 13 Apache Helicopters hosted overnight with food and transportation to the Hotels.



Quality of Life, The Crossroads of Texas



Questions?



NCTCOG Aircraft Hanger Fire Code Update

IFC Building codes section 903.2.11.9

Buildings Over 6,000 Sq. Ft.

An automatic sprinkler system shall be installed throughout all buildings with a building area 6,000 sq. ft. or greater and in all existing buildings that are enlarged to be 6,000 sq. ft. or greater. For the purpose of this provision, fire walls shall not define separate buildings.

- Current Exception: Open parking garages in compliance with Section 406.5 of the International Building Code
- *Aviation-Related Exception: Aircraft Hangars under 12,000 sq. Ft. (draft text)*

Next Steps

Fire Code Amendment Team

- Pat Stewart
- Karen Vanwinkle
- Sharlette Wright
- Joel Jenkinson (tentative)

Join the Fire Code Committee - end of 2020 or beginning of 2021

- Draft Exception Text
- Draft Exception Justification