

gateways
TO OUR COMMUNITIES

2040



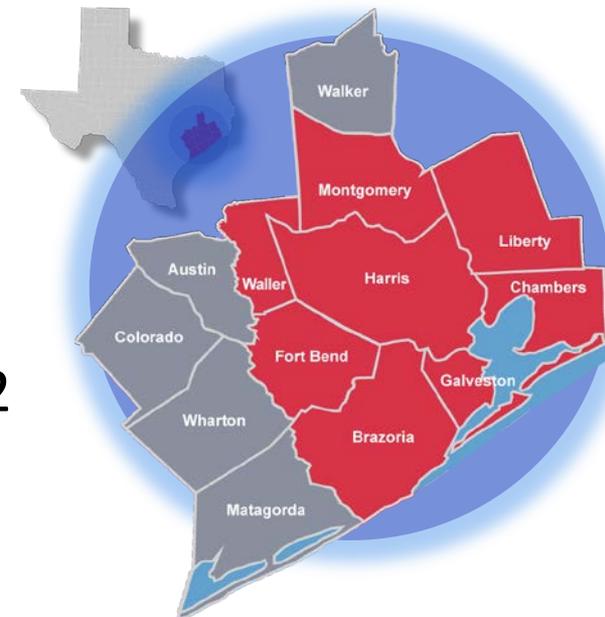
Regional Aviation System Plan (RASP)

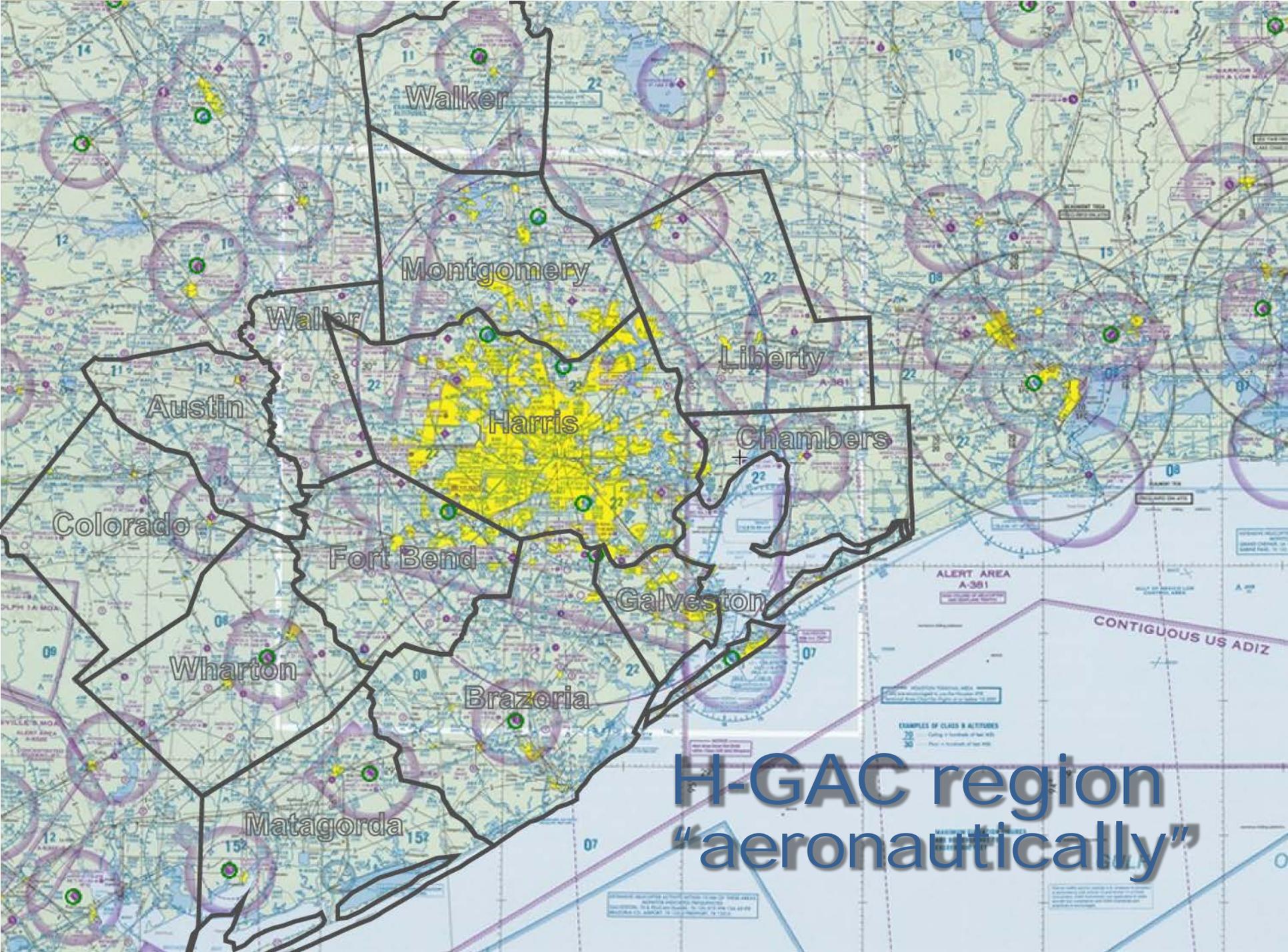
Keith Garber
May 21, 2012



Overview & History

- **6th largest metropolitan area**
- **4th most populous city—Houston**
- **H-GAC serves:**
 - 13 counties
 - 105 cities
 - MPO for 8-county metro area
- **First plan in 1973**
 - Updated in 1981, 1986 & 1992
- **Since 1992 RASP**
 - + 2m people/1m jobs
 - 2 airports closed—1 opened
 - 3 towers added





H-GAC region
"aeronautically"



Airport System

- **Evaluate System/Develop Criteria**
 - Public ownership
 - Public-use airport
 - Attractions for itinerant operations
 - 3,000' paved primary runway
 - 10 based aircraft minimum
- **Realign w/Texas Airport System Plan (TASP)**
 - 4 airports added:
 - Houston Executive (NEW) – Waller County
 - Palacios – Matagorda County
 - R.R. Wells – Columbus County
 - Winnie-Stowell – Chambers County
 - 1 airport removed:
 - Skydive Houston – Waller County

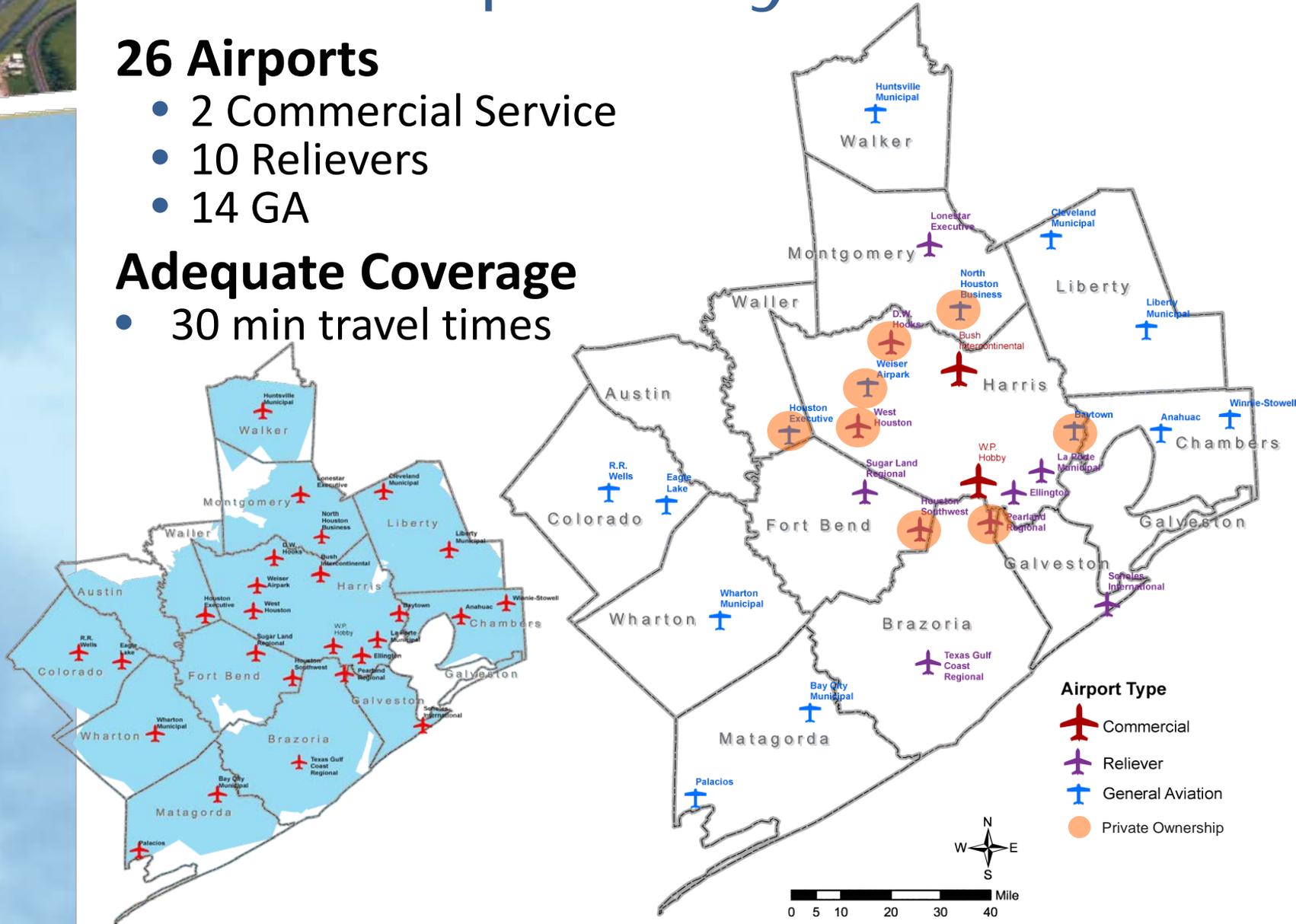
Airport System

26 Airports

- 2 Commercial Service
- 10 Relievers
- 14 GA

Adequate Coverage

- 30 min travel times

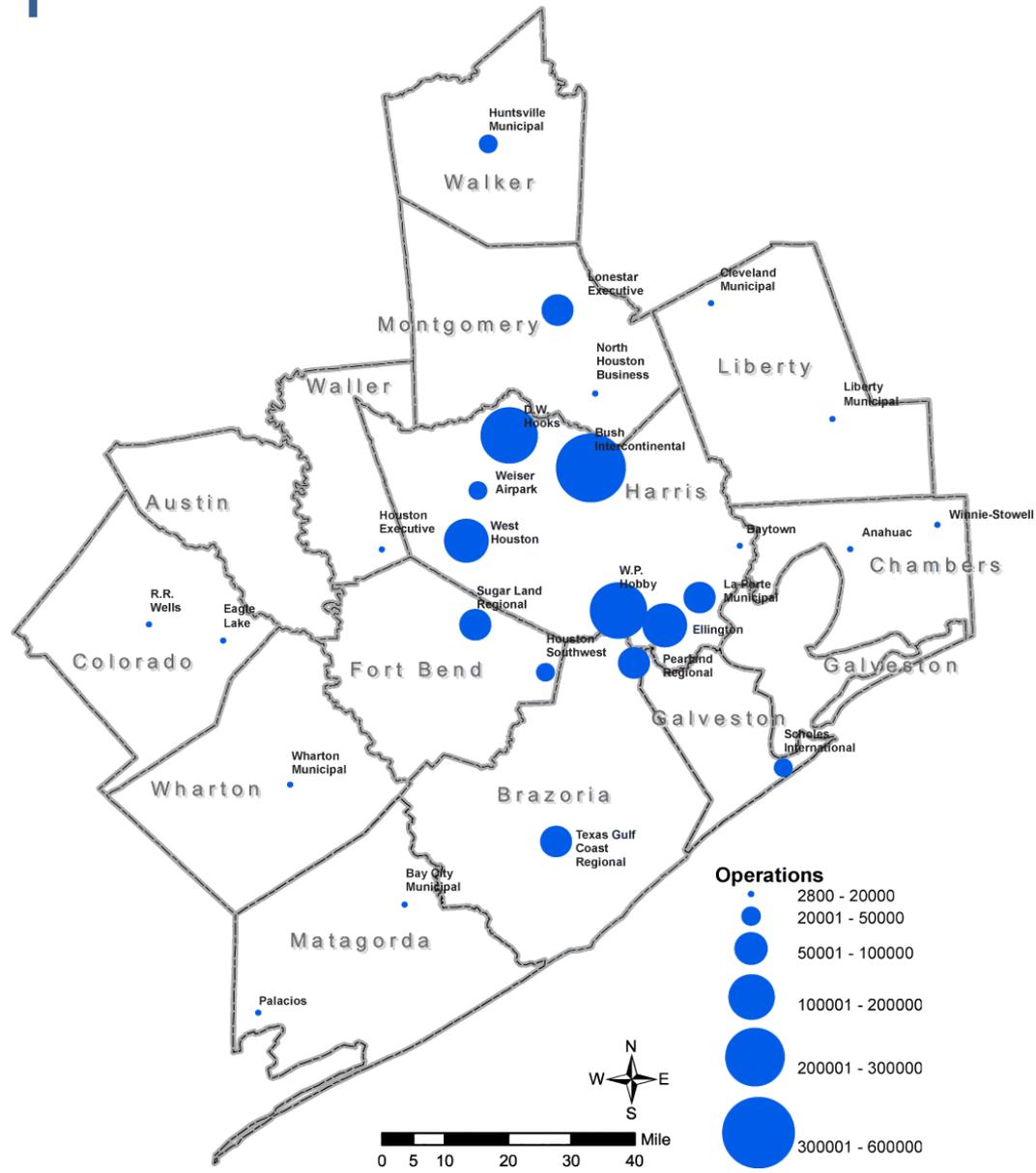




Operations



GA	153,500
Reliever	972,200
Commercial	810,700
TOTAL	1,936,400



IFR Access/Towers

AIRPORT	ILS	LPV	LNAV	OTHER NON-PREC	TOWER
Air Carrier Airports					
George Bush Intercontinental	●	●	●	●	●
William P. Hobby	●	●	●	●	●
Reliever Airports					
Texas Gulf Coast Regional	●	●	●	●	
David Wayne Hooks Memorial		●	●	●	●
Ellington	●	●	●	●	●
Houston Southwest		●	●	●	
La Porte Municipal			●	●	
Lone Star Executive	●	●	●	●	●
Pearland Regional			●	●	
Scholes International	●	●	●	●	●
Sugar Land Regional	●	●	●	●	●
West Houston			●	●	
General Aviation Airports					
Bay City Municipal			●	●	
Baytown			●		
Chambers County			●		
Cleveland Municipal			●	●	
Eagle Lake			●	●	
Houston Executive		●	●		
Huntsville Municipal		●	●	●	
Liberty Municipal			●	●	
Palacios Municipal			●	●	
Robert R. Wells					
Weiser Air Park			●	●	
Wharton Regional		●	●	●	
North Houston Business					
Winnie-Stowell					



New Tower at CXO

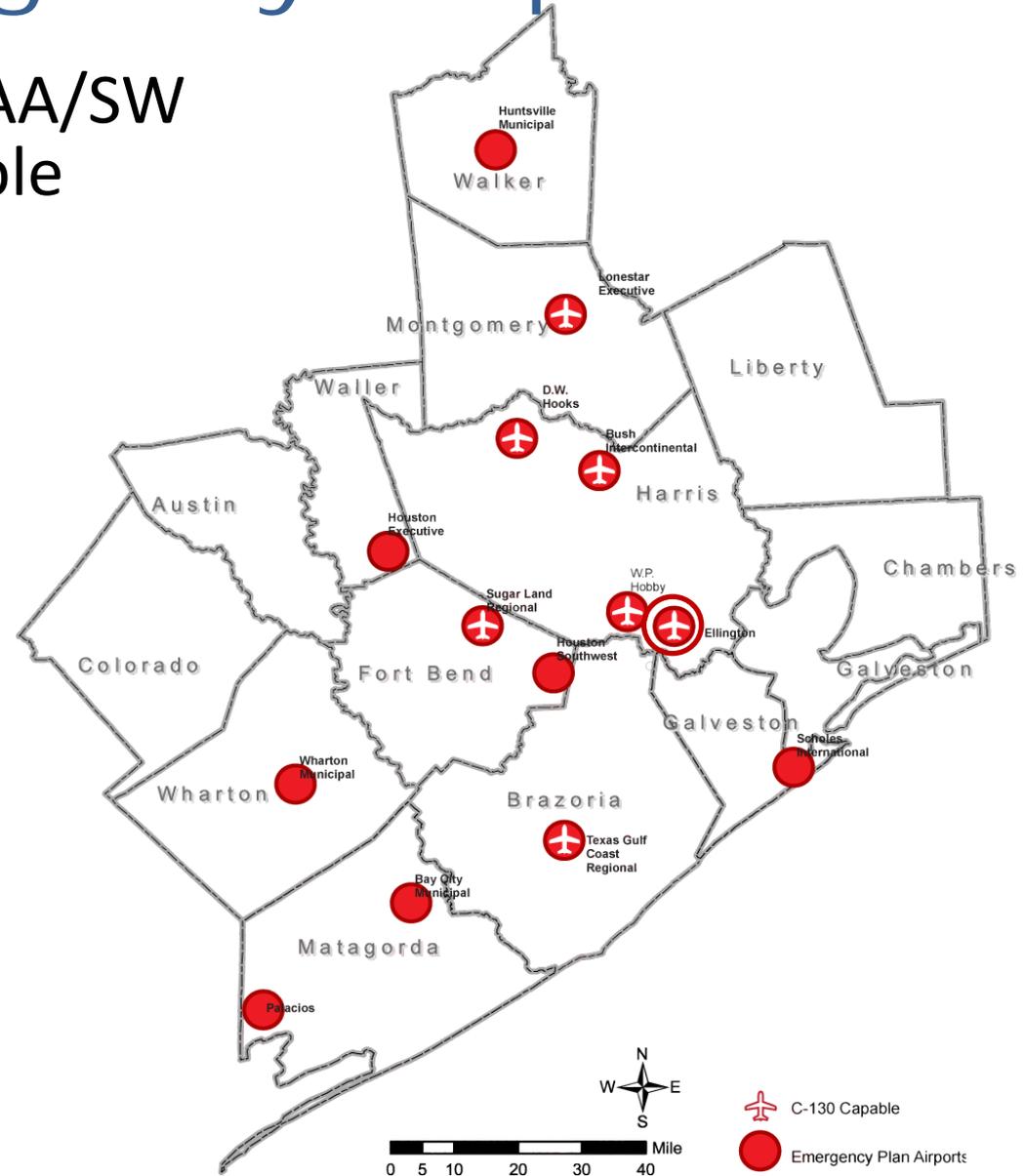


New IAP at HPY



Emergency Airports

- 14 listed by FAA/SW
- 7 C-130 capable





Regional GA Issues

- **Funding—Always a Challenge for GA**
 - Runways, taxiways, aprons, hangars, etc.
 - Competition with other TASP airports
 - Local match for grants
- **Private vs. Public Ownership**
 - 4 private relievers—35% of based aircraft
 - 2 have no grant obligations—can invest or close at will
- **Security**
 - Proposed Large Aircraft Security Program
 - Surveillance & fencing
- **Local Support**
 - Community awareness—setting airport purpose
 - Marketing challenges

A Houston Thing—Privately Owned Relievers

33% of
Based
Aircraft
(ba)



25% of
Aircraft
Operations
(ops)

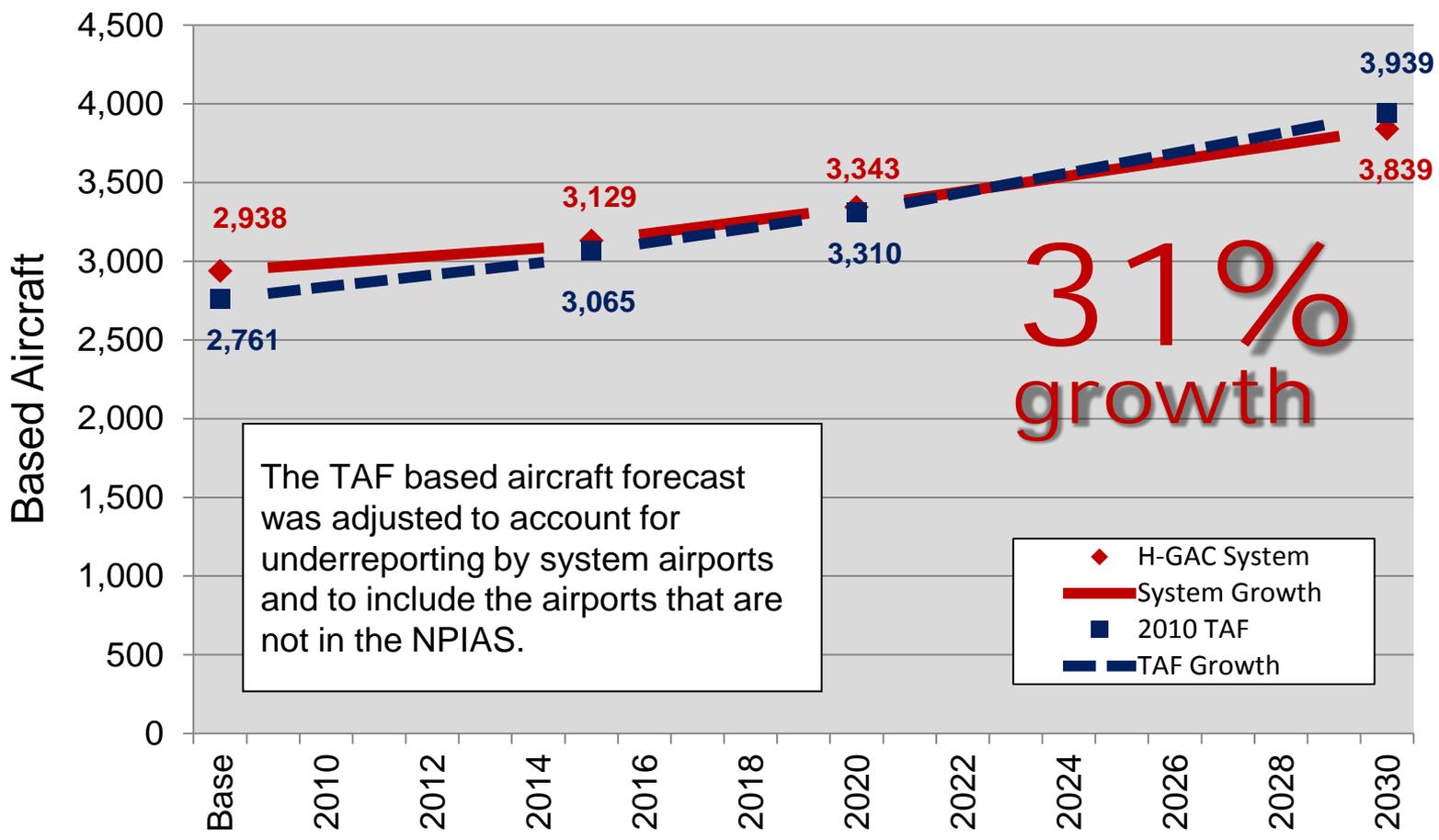
RASP Goals

- **Preserve Existing Airports**
 - Public ownership—public/private partnership
 - Regional partnerships
- **Improve Safety and Security**
 - Bring airports to standards
 - Identify emergency airports
- **Improve Efficiency**
 - Add capacity as needed if feasible
 - Eliminate capacity constraints
- **Benefit Communities**
 - Promote land use restrictions
 - Improve signage





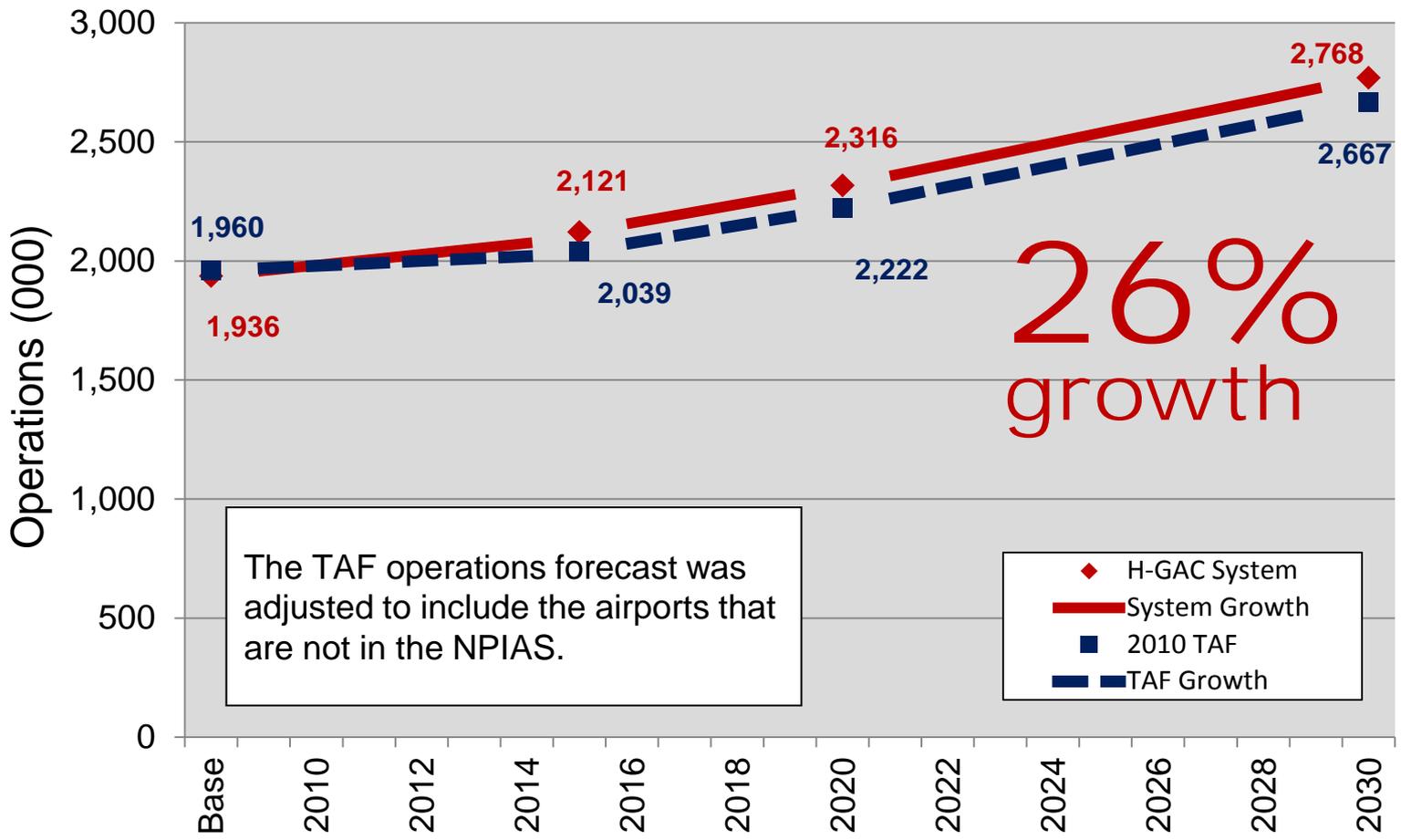
Forecast Based Aircraft RASP vs. TAF





Forecast Operations

RASP vs. TAF



Airport Capacity

- **Annual Service Volume (ASV)**
 - Weather conditions
 - Runway configuration
 - Aircraft fleet mix
 - Flight training operations
 - Taxiways and runway exit locations
- **Runway length**
- **Instrument access**
- **Aircraft storage**



Capacity Summary



AIRPORT	AIRSIDE CAPACITY			STORAGE CAPACITY		
	0-5	6-10	11-20	0-5	6-10	11-20
Reliever Airports						
Texas Gulf Coast Regional	Green	Green	Green	Green	Green	Red
D.W. Hooks	Red	Red	Red	Red	Red	Red
Ellington	Green	Green	Green	Red	Red	Red
Houston Southwest	Green	Green	Green	Red	Red	Red
La Porte Municipal	Green	Green	Green	Green	Green	Green
Lone Star Executive	Green	Green	Green	Red	Red	Red
Pearland Regional	Green	Green	Green	Green	Red	Red
Scholes International	Green	Green	Green	Green	Red	Red
Sugar Land Regional	Green	Green	Green	Green	Red	Red
West Houston	Green	Green	Green	Grey	Grey	Grey
General Aviation Airports						
Bay City Municipal	Green	Green	Green	Green	Green	Red
Baytown	Green	Green	Green	Green	Green	Red
Chambers County	Green	Green	Green	Green	Green	Green
Cleveland Municipal	Green	Green	Green	Red	Red	Red
Eagle Lake	Green	Green	Green	Green	Green	Red
Houston Executive	Green	Green	Green	Red	Red	Red
Huntsville Municipal	Green	Green	Green	Green	Green	Green
Liberty Municipal	Green	Green	Green	Red	Red	Red
Palacios Municipal	Green	Green	Green	Green	Red	Red
Robert R. Wells	Green	Green	Green	Green	Red	Red
Weiser Air Park	Green	Green	Green	Green	Red	Red
Wharton Regional	Green	Green	Green	Green	Green	Green
North Houston Business	Green	Green	Green	Green	Red	Red
Winnie-Stowell	Green	Green	Green	Green	Green	Red

- One airport at ASV
- Many airports have airside capacity issues

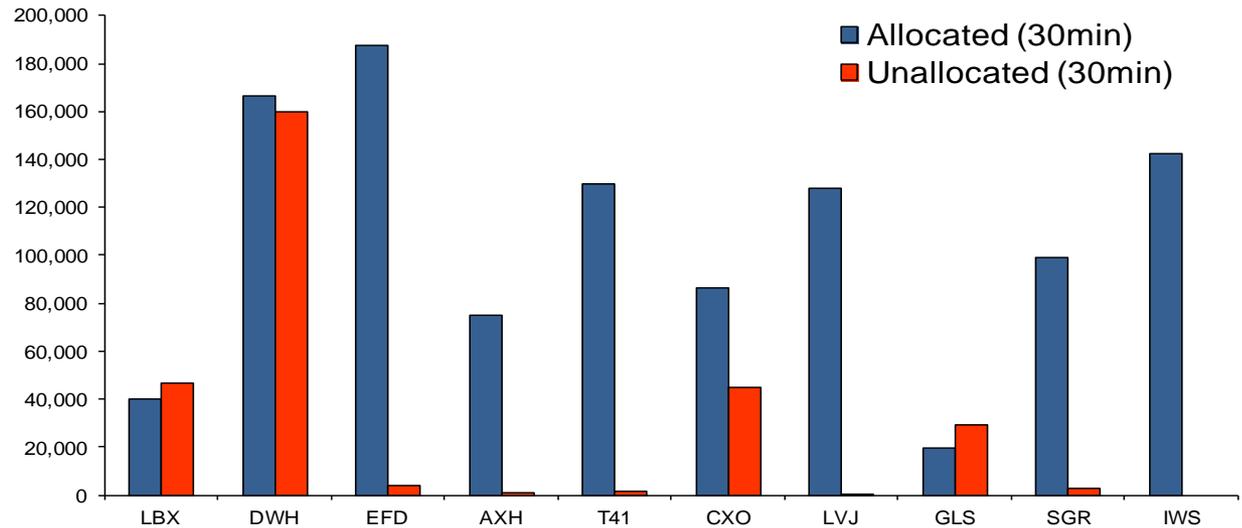


- Adequate
- Not Adequate
- Not Available

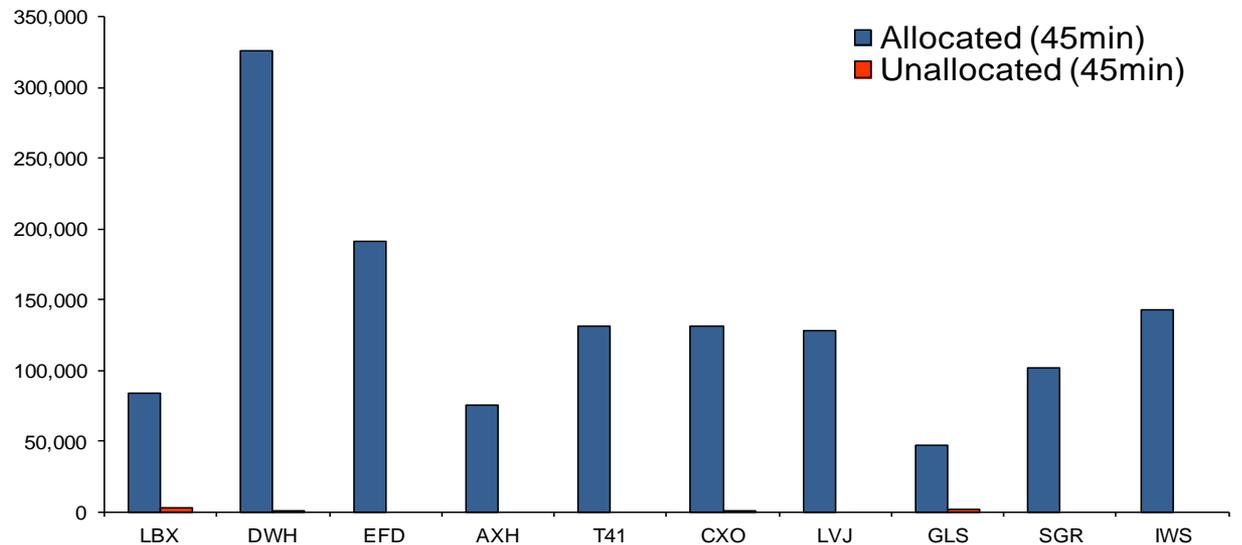
S1: Reliever Airport Closes



**30-minute
service
areas**



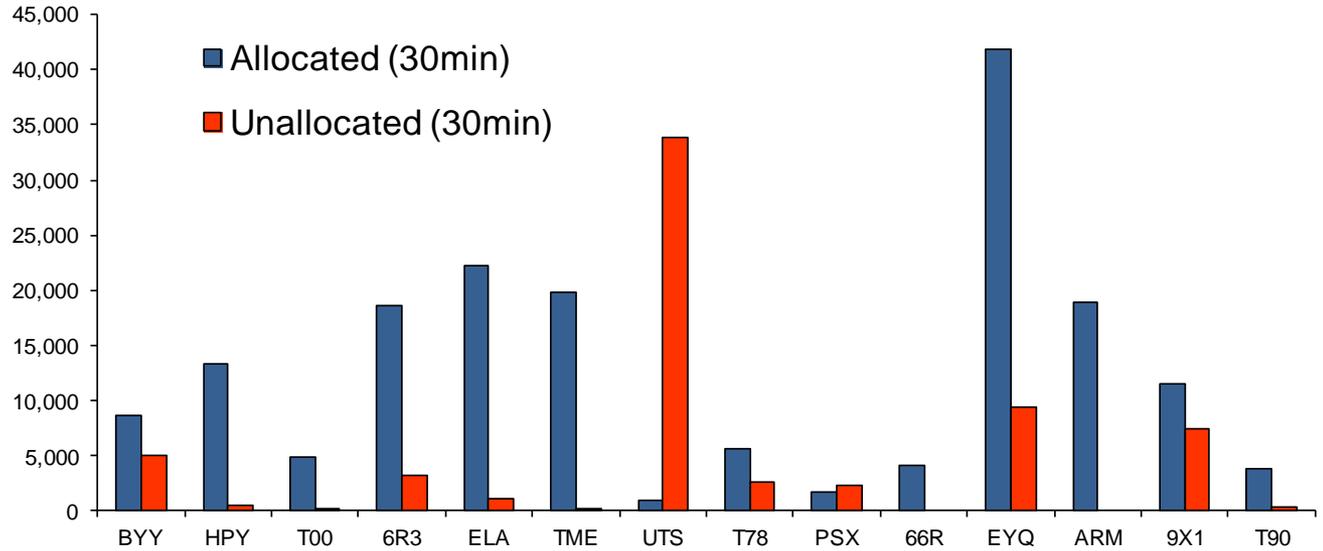
**45-minute
service
areas**



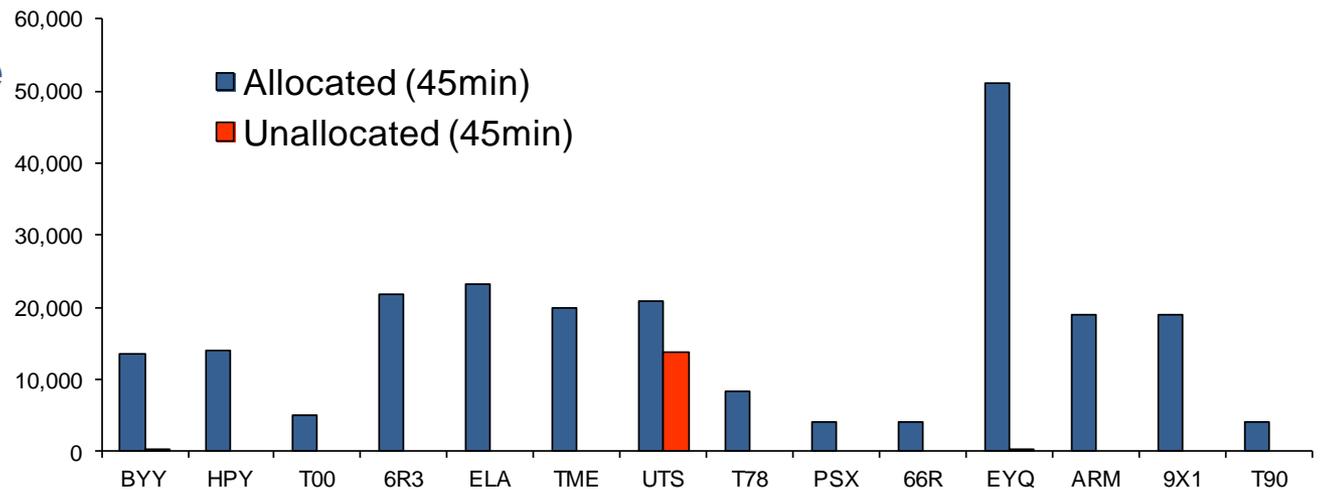
S2: A GA Airport Closes



30-minute service areas



45-minute service areas



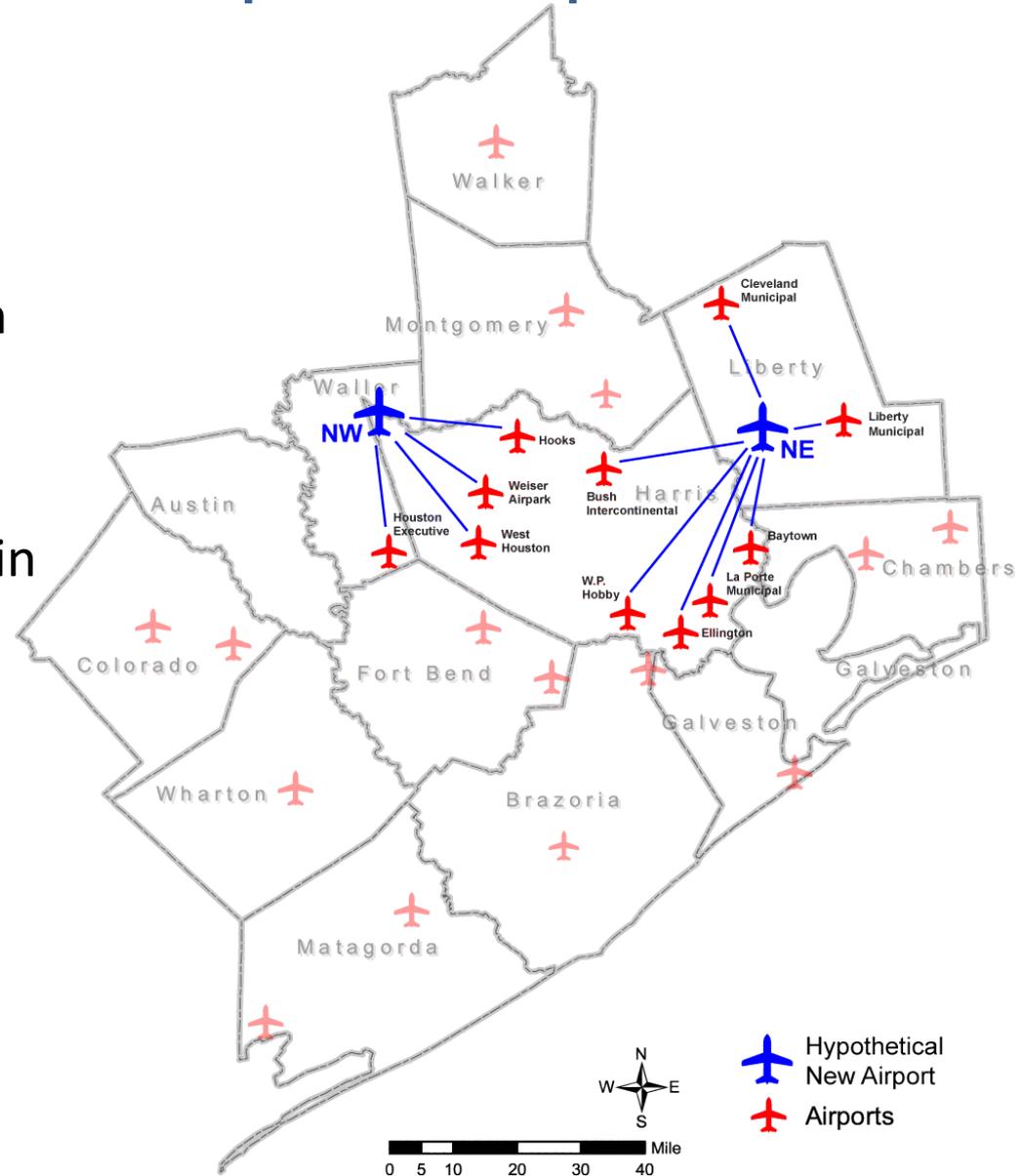
S3: A New Airport Opens

NW Airport

- 6,200 ops/30-min
- 92,000 ops/45-min

NE Airport

- 8,600 ops/30-min
- 178,400 ops/45-min





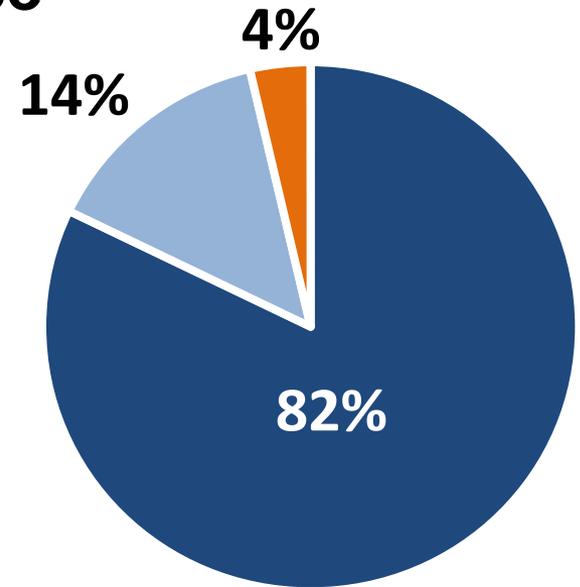
Recommended Plan

- Current airport issues
 - Future constraints
 - Reserve capacity needs
 - Role of airport in system
 - Includes HAS, TASP & proposed RASP projects
 - Identify needed projects not in TASP
 - Estimate costs of additional projects
- 

RASP Costs by Airport Type

\$2.27 billion

- Commercial Service: **\$1.87b**
- Reliever: **\$322m**
- General Aviation: **\$83m**



Type of Airport	Short-term (0-5)	Mid-term (6-10)	Long-term (11-20)
Commercial Service	\$504.3	\$1,366.4	\$0
Reliever	\$161.9	\$99.7	\$60.5
General Aviation	\$33.6	\$30.9	\$18.2
TOTAL*	\$699.8	\$1,497.0	\$78.7

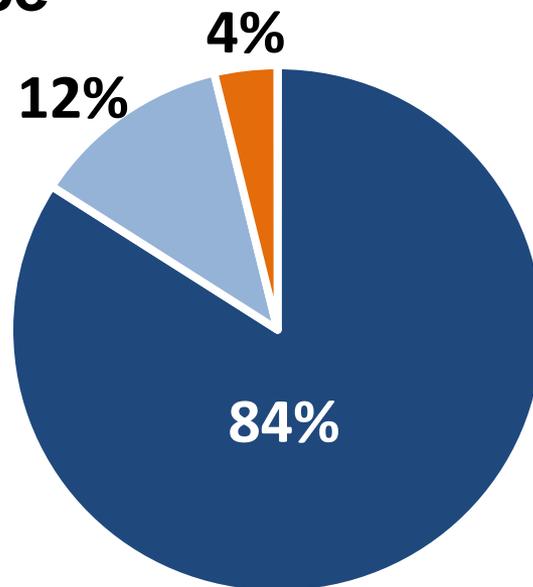
* In \$millions



RASP Costs by Project Source

\$2.27 billion

- HAS: **\$1.91b**
- TASP: **\$274m**
- RASP: **\$87m**



Project Source	Short-term (0-5)	Mid-term (6-10)	Long-term (11-20)
HAS	\$504.3	\$1,366.4	\$0
TASP	\$182.3	\$83.3	\$52.3
RASP	\$13.2	\$47.3	\$26.4
TOTAL*	\$699.8	\$1,497.0	\$78.7

* In \$millions



NPIAS Changes

- **No NPIAS changes, consider in future**
 - Baytown Airport
 - Houston Executive Airport
 - North Houston Business Airport





Next Steps

- Integrate RASP with 2040 Regional Transportation Plan
- Incorporate new IAH master plan
- Work with TXDOT to move proposed projects from RASP to TASP
- Monitor project lettings/completion





Questions?

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