Ralph M. Hall Municipal Airport City of Rockwall









Project Kickoff and Airport Inventory

Aviation Demand Forecasts and Facility Requirements

Alternatives Evaluation: Airside and Landside

Capital Improvement Program and Phased Development Plan

Airport Layout Plan and Final Report







Ralph M. Hall Municipal Airport Mission Statement

To provide resident pilots and aircraft owners a safe recreational facility while offering regional corporations and growing businesses a local transportation base with national reach and accessibility to Rockwall's thriving economy.















Forecasts

- → Aviation Demand Forecasts
 - ▲ Local & regional influences
 - ▲ Changes in fleet mix, industry trends
 - ▲ Meets FAA requirements
 - Forwarded to TxDOT for approval
- → Airport Operations
- → Based Aircraft

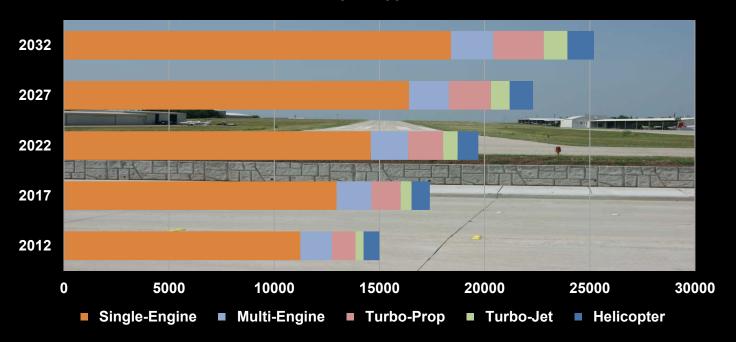






Rockwall Aviation Demand Forecast Summary

SUMMARY OF OPERATIONS BY AIRCRAFT TYPE, 2012-2032



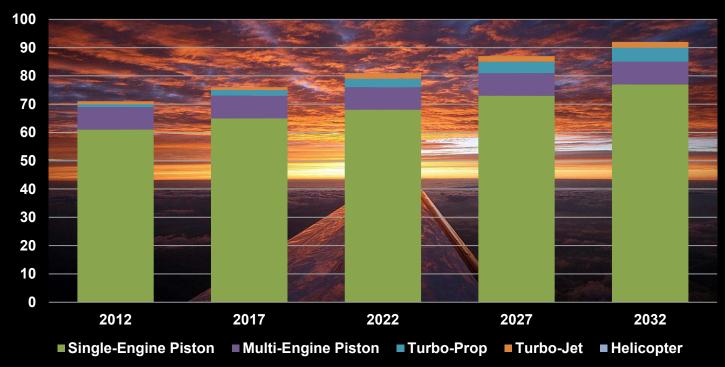






Rockwall Aviation Demand Forecast Summary

GENERAL AVIATION BASED AIRCRAFT FLEET MIX, 2012-2032









Texas Airport System Plan



Update 2010



Facility Requirements

- → Updated every 2 years
- → Classifies each airport in the system
 - **▲** Commercial
 - **▲** Reliever
 - ▲ Business/Corporate
 - **▲** Community Service
 - **▲** Basic Service
- → Defines minimum_ facilities and services



Facility Requirements

Appendix

Community Service

	Gty	Airport	Airport ID	County Name	NPIAS Airport	State Role	Current Design Standard	Functional Category
	ROCKPORT	ARANSAS CO	RKP	ARANSAS	Υ	BC	C-II	REGIONAL
	ROCKSPRINGS	EDWARDS COUNTY	ECU	EDWARDS		BS	B-I	REMOTE
	ROCKWALL	ROCKWALL MUNI	F46	ROCKWALL	Υ	cs	B-I	MULTI
	ROTAN/ROBY	FISHER COUNTY	56F	FISHER		BS	A-I	AGRICULTURE
	SAN ANGELO	SAN ANGELO RGNL/MATHIS FIELD	SЛ	TOM GREEN	Υ	CMS	C-IV	COMMERCIAL
	SAN ANTONIO	BEXAR COUNTY (NEW)	XXX	BEXAR		CS	B-II	MULTI
	SAN ANTONIO	SAN ANTONIO INTL	SAT	BEXAR	Υ	CMS	D-V	COMMERCIAL
	SAN ANTONIO	STINSON MUNI	SSF	BEXAR	Υ	RL	B-II	RELIEVER
7	SAN AUGUSTINE	SAN AUGUSTINE COUNTY	78R	SAN AUGUSTINE		BS	B-II	ACCESS
	SAN MARCOS	SAN MARCOS MUNI	HYI	CALDWELL	Υ	RL	C-II	RELIEVER
	SAN SABA	SAN SABA COUNTY MUNI	81R	SAN SABA		CS	B-I	MULTI
	SEMINOLE	GAINES COUNTY	GNC	GAINES	Υ	CS	B-II	MULTI
	SEYMOUR	SEYMOUR MUNI	60F	BAYLOR	Υ	CS	B-I	MULTI
	SHAMROCK	SHAMROCK MUNI	2F1	WHEELER		BS	A-I	MULTI
	SHERMAN	SHERMAN MUNI	SWI	GRAYSON		CS	B-II	MULTI
	SHERMAN/DENISON	GRAYSON COUNTY	GYI	GRAYSON	Υ	BC	D-IV	INDUSTRIAL
	SINTON	ALFRED C "BUBBA" THOMAS	T69	SAN PATRICIO		CS	B-II	MULTI
	SLATON	SLATON MUNI	F49	LUBBOCK	Υ	CS	B-II	MULTI
	SMITHVILLE	SMITHVILLE CRAWFORD MUNI	84R	BASTROP	Υ	CS	B-II	MULTI
	SNYDER	WINSTON FIELD	SNK	SCURRY	Υ	BC	B-II	REGIONAL
	SONORA	SONORA MUNI	SOA	SUTTON		BS	B-I	MULTI
	SPEARMAN	SPEARMAN MUNI	E42	HANSFORD	Υ	CS	B-II	AGRICULTURE
	STAMFORD	ARLEDGE FIELD	F56	JONES	Υ	CS	B-I	MULTI

Airport Design Standards

ltem	Runway 17/35	TxDOT and FAA Design Standards	
Runway Design			
Length	3,373'	4,000'	
Width	45'	60'	
Safety Area Width	120'	120'	
Safety Area Length Beyond R/W End	0'/0'	240'/240'	
Object Free Area Width	380'	400'	
Object Free Area Length Beyond R/W End	0'/0'	240'/240'	
Obstacle Free Zone Width	250'	250'	
Obstacle Free Zone Length Beyond R/W End	0'	200'	
Runway Setbacks - Runway Centerline to:			
Parallel Taxiway Centerline	121'/157'/177'	225'	
Holdline	100'	200'	
Aircraft Parking Area	140'	250'	
Taxiway Design			
Width	17'/23'	25'	
Safety Area Width	25'/49'	49'	
Object Free Area Width	60'/89'	89'	









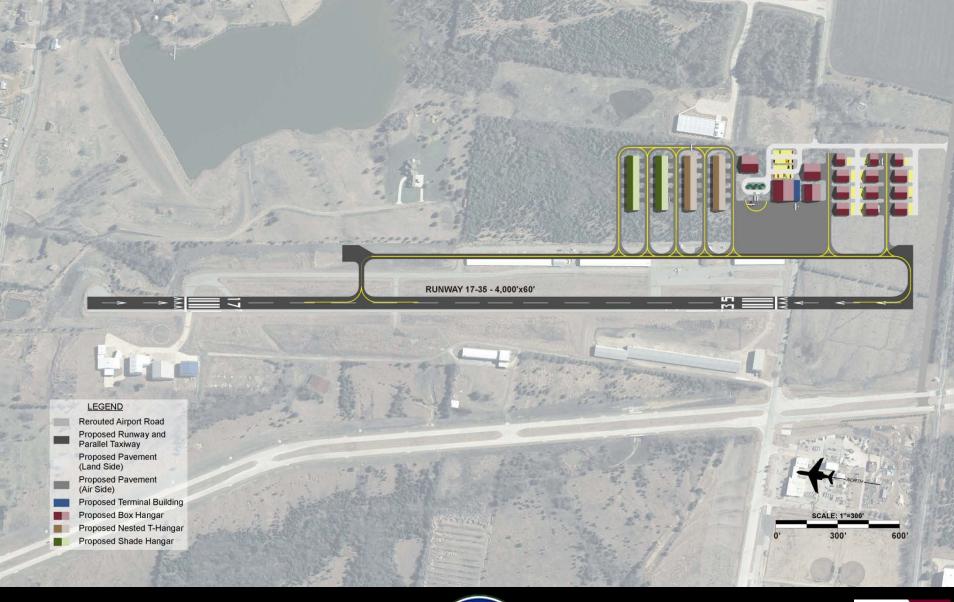
Airfield Alternatives

- → Maintain Current Boundaries North and South
 - North − Fill to meet safety area design standards
 - South and North Publish declared distances
- → Explore Expansion
 - ▲ Runway Expansion to 4,000' x 60'
 - ▶ Parallel Taxiway Offset at 225' and Width of 25'
 - Airport Road Realignment
 - ▲ Property Acquisition

















Terminal Development Alternatives

- → Addresses Parallel Taxiway Offset of 225'
- > Assumes Acquisition of 19-acre Parcel
- → Provides new
 - ▲ Terminal Building
 - ▲ Fuel Storage/Delivery System
 - Auto Access/Entrance w/ Security
 - Ample Apron for Aircraft Parking and Maneuvering
 - ▲ Mix of Hangars: Box/Corporate, Enclosed T-hangars, and Open Shade T-hangars















FAA Program Guidance Letter – Fall 2012

- → Existing Uses Grandfathered
- Changes to Runway End Location
 - ▲ Runway Protection Zone Land Use Requiring Analysis, Coordination, and Approval
 - ➤ Buildings/Structures
 - Transportation Facilities
 - Roads
 - Railroads

- Recreational Uses
- ➤ Fuel Storage Facilities
- > Hazardous Materials
- ➤ Wastewater Treatments Facilities
- ➤ Above-ground Utility Infrastructure









Airfield Alternatives

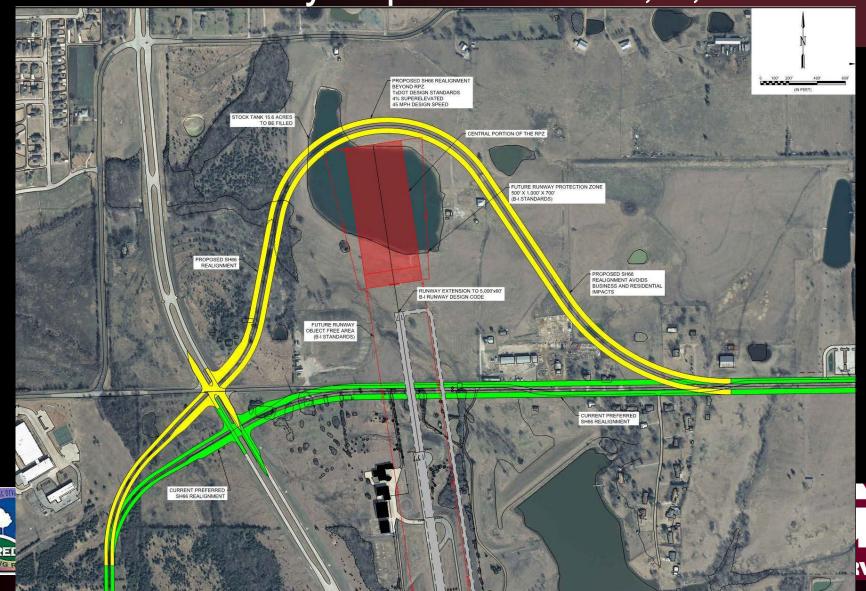
- → Northern Runway Expansion 5,000'
 - ★ Fill to meet safety area design standards
 - ▲ SH66 and Powerline Reroutes
 - ▲ Property Acquisition and RPZ
- → Southern Runway Expansion 5,000'
 - ▲ Railroad Impact
 - Property Acquisition
 - ▲ IH30 Approach Clearances
 - ▲ Industrial Development Considerations



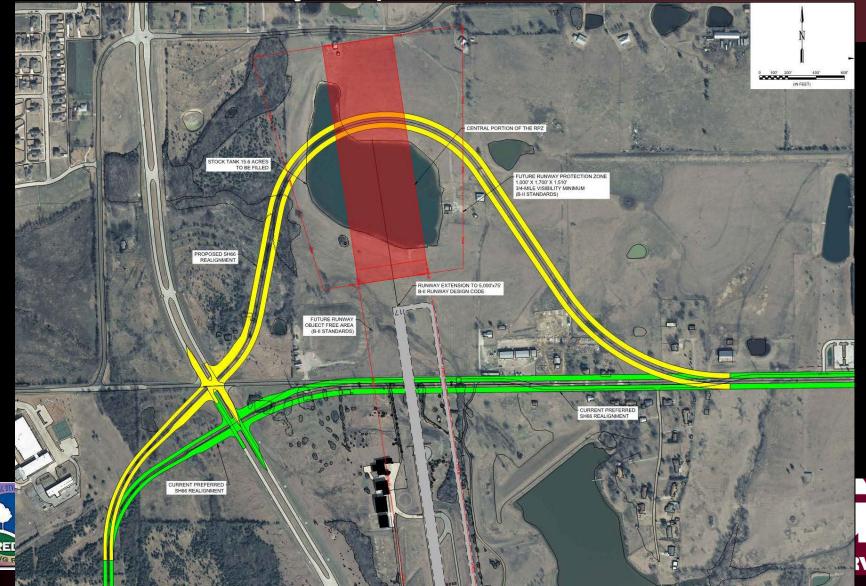




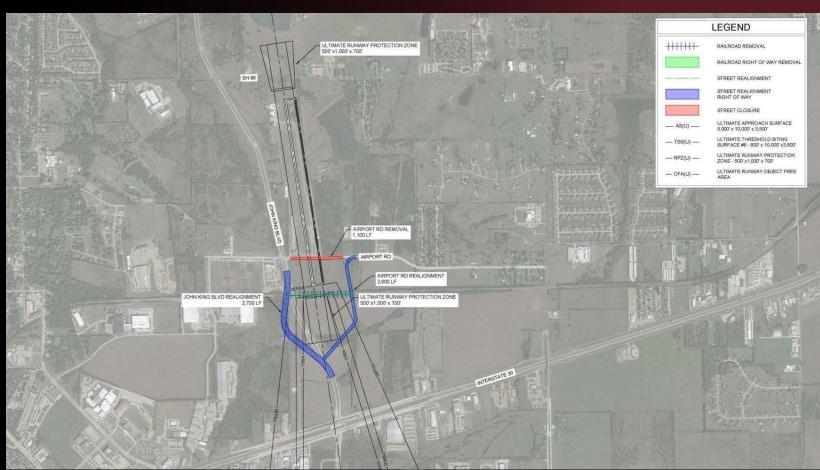
Northern Runway Expansion – B-I, 5,000' x 60'



Northern Runway Expansion – B-II, 5,000' x 75'



Southern Runway Expansion – B-I, 4,000' x 60'

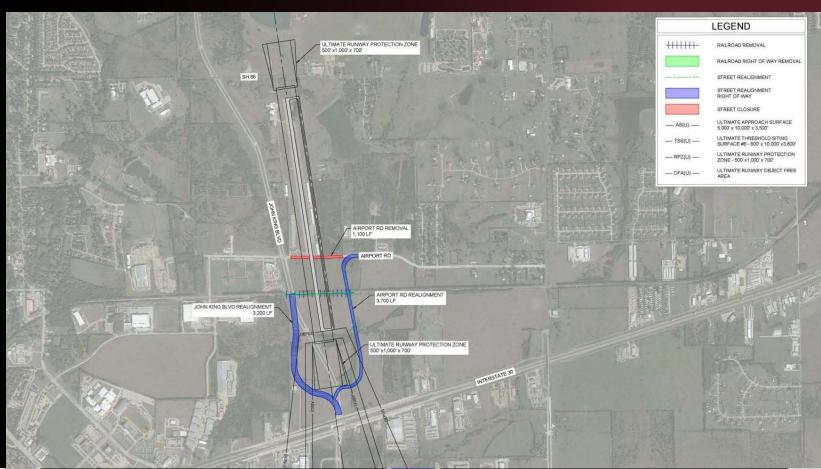








Southern Runway Expansion – B-I, 5,000' x 60'

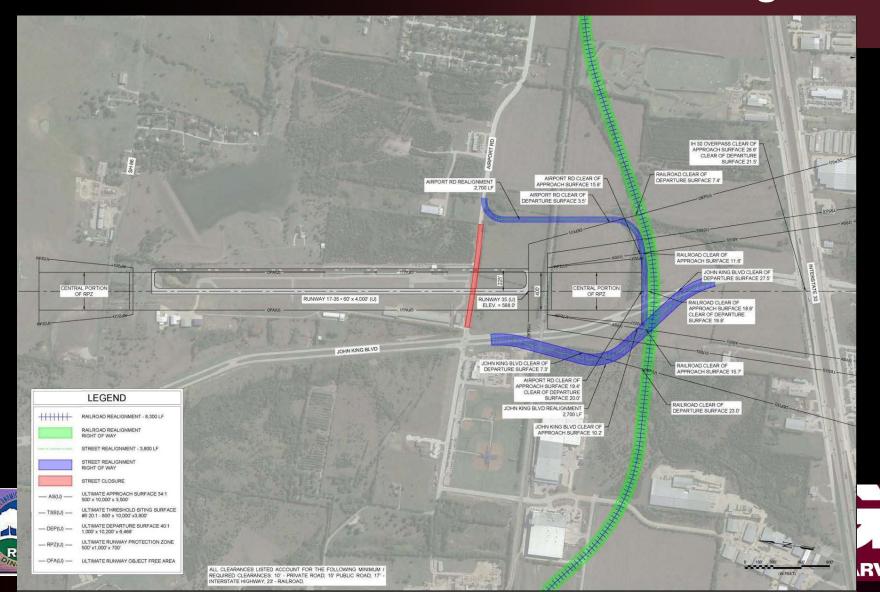




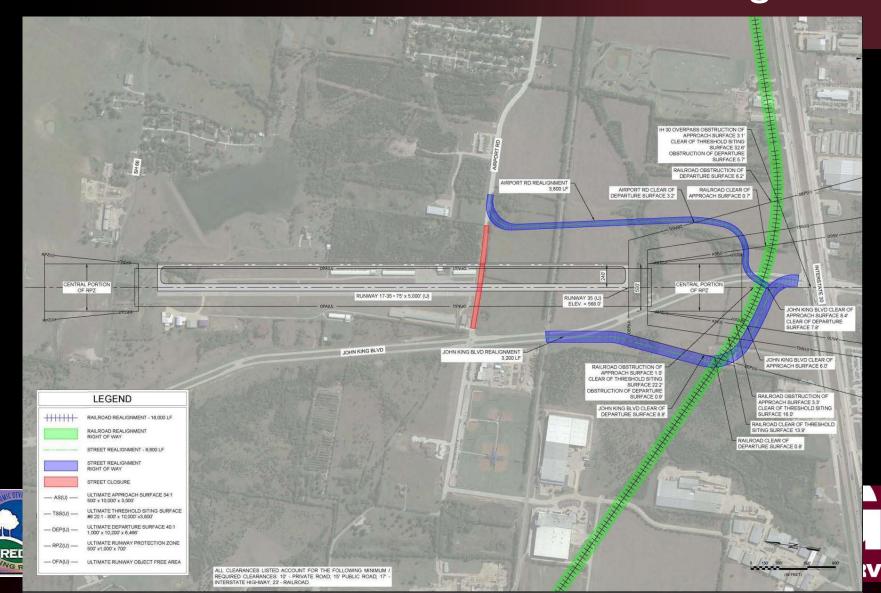




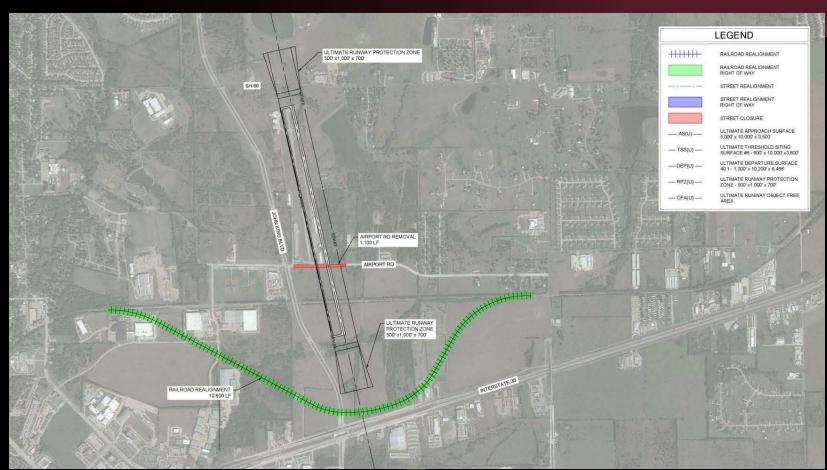
Southern Runway Expansion – B-I, 4,000' x 60' with Railroad Realignment



Southern Runway Expansion – B-II, 5,000' x 75' with Railroad Realignment



Southern Runway Expansion – B-II, 5,000' x 75' with Runway and Railroad Realignment

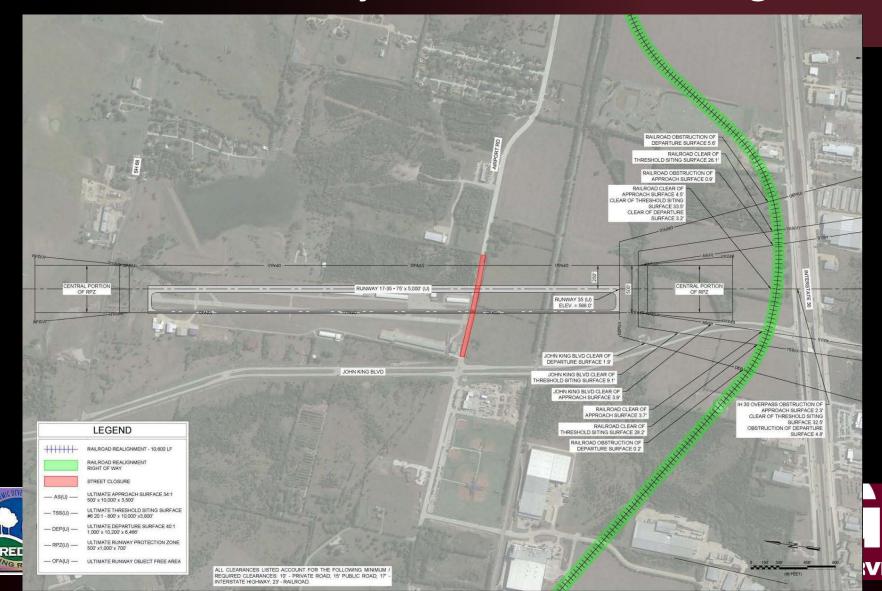








Southern Runway Expansion – B-II, 5,000' x 75' with Runway and Railroad Realignment



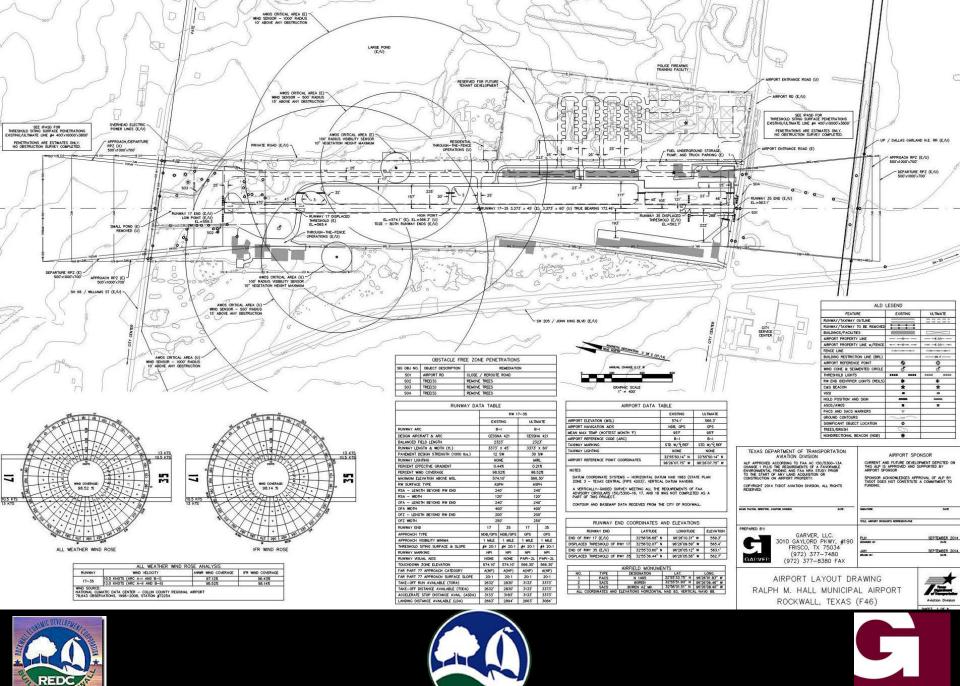
Airport Layout Plan

- → Airport Layout Drawing
- → Inner Portion of the Approach Surface Drawings
- → Terminal Area Drawings
- → Land Use Drawing
- → Property Map















Capital Improvement and Phasing Plan

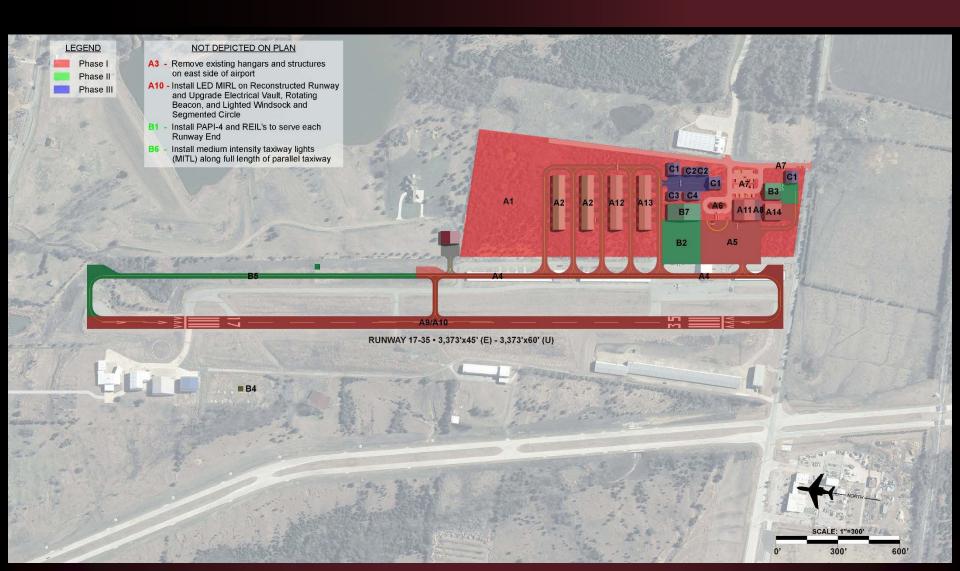
- → Three Phase CIP and Phasing Plan
 - ▲ 0 5 Years Property, T-hangars, Apron, Terminal building, FBO hangar, Auto access, Fuel facility, Runway and Taxiway improvements
 - ▲ 6 10 Years Taxiway extension, Apron expansion, Hangar development, Airfield/Runway Electrical/Lighting, AWOS relocation
 - ▲ 11 20 Years Future Hangar development
- → Airfield maintenance







Phasing Plan



CIP: Phase IA (0-5 Years)

	Project Type	Local Funding	State/Federal Funding	Total Cost	TXDOT Program Source
A1	Acquire Land Adjacent to and East of the Airport (approx. 19 acres)	\$179,000	\$1,611,000	\$1,790,000	AIP
A2	Construct Two New 10-unit Shade T-Hangars and Associated Taxilanes	\$114,000	\$1,026,000	\$1,140,000	AIP/Hangar Program
А3	Remove Existing hangars and structures on east-side of airport	\$20,000	\$180,000	\$200,000	AIP/Hangar Program
A4	Construct 25' Parallel Taxiway 225' Offset from Runway 17/35 centerline (AWOS to Rwy 35 end)	\$75,000	\$675,000	\$750,000	AIP
A5	Construct New Terminal Area Apron	\$76,000	\$684,000	\$760,000	AIP
A6	Remove and Replace Underground AvGAS Fuel Storage Tank with Above-ground 12,000 gallon 24-hour Credit Card System	\$87,500	\$262,500	\$350,000	AIP/Fuel Program
A 7	Construct New Airport Entrance Road, Auto Parking, and Security Fence	\$48,000	\$432,000	\$480,000	AIP
A8	Construct New Terminal Building (3,000 S.F.)	\$225,000	\$225,000	\$450,000	Terminal Program







CIP: Phase IB (0-5 Years)

	Project Type	Local Funding	State/Federal Funding	Total Cost	TXDOT Program Source
A9	Reconstruct, Widen, and Re-stripe Runway 17/35 (Width increase of 15', correct line-of-sight)	\$204,000	\$1,836,000	\$2,040,000	AIP
A10	Install LED MIRL on Reconstructed Runway and Upgrade Electrical Vault, Rotating Beacon, and Lighted Windsock and Segmented Circle	\$94,000	\$846,000	\$940,000	AIP
A11	Construct 100' x 100' Box Hangar	\$75,000	\$675,000	\$750,000	AIP/Hangar Program
A12	New 10-unit Nested T-Hangar with Bi-Fold Doors (southern unit) and Associated Taxilane	\$66,000	\$594,000	\$660,000	AIP/Hangar Program
A13	New 10-unit Nested T-Hangar with Bi-Fold Doors (center unit) and Associated Taxilane	\$70,000	\$630,000	\$700,000	AIP/Hangar Program
A14	Construct 80' x 80' Box Hangar and Associated Taxilane/Ramp	\$37,500	\$337,500	\$375,000	Hangar Program
	PHASE I TOTAL	\$1,371,500	\$10,014,000	\$11,385,500	







CIP: Phase II (6-10 Years)

	Project Type	Local Funding	State/Federal Funding	Total Cost	TXDOT Program Source
B1	Install PAPI-4 and REILs to serve each Runway End	\$54,000	\$486,000	\$540,000	AIP
B2	Expand Apron South	\$51,000	\$459,000	\$510,000	AIP
В3	Construct one 80' x 80' Box Hangar and Associated Taxilane/Ramp	\$91,000	\$819,000	\$910,000	AIP/Hangar Program
B4	Relocate AWOS	\$10,000	\$30,000	\$40,000	AWOS Program
B5	Extend Parallel Taxiway north to Runway 17 End	\$45,000	\$405,000	\$450,000	AIP
В6	Install Medium Intensity Taxiway lights (MITL) along full length of parallel taxiway	\$20,000	\$180,000	\$200,000	AIP
	PHASE II TOTAL	\$291,000	\$2,559,000	\$2,850,000	







CIP: Phase III (11-20 Years)

	Project Type	Local Funding	State/Federal Funding	Total Cost	TXDOT Program Source
C1	Construct three 60' x 60' Box Hangars and Associated Taxilane/Ramp	\$150,000	\$550,000	\$700,000	Hangar Program
C2	Construct two 60' x 40' Box Hangars and Associated Taxilane/Ramp	\$90,000	\$420,000	\$510,000	Hangar Program
C3	Construct one 60' x 60' Box Hangar and Associated Taxilane/Ramp	\$50,000	\$210,000	\$260,000	Hangar Program
C4	Construct one 80' x 40' Box Hangar and Associated Taxilane/Ramp	\$70,000	\$315,000	\$385,000	Hangar Program
	PHASE III TOTAL	\$360,000	\$1,495,000	\$1,855,000	
	TOTAL	\$2,022,000	\$14,068,000	\$16,090,000	







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The Funding Cycle

→ TxDOT / FAA

- ▲ Airport Development Plan Review and Acceptance
- ▲ Airport Layout Plan Airspace Review
- ▲ Letter of Interest Receipt and Review
- Aviation Division Acceptance and Project Scoping
- ▲ Update of CIP / System Plan Data
- ▲ Airport Sponsor Commitment = 10% Match Paid
- ▲ TxDOT Commission Approval
- Consultant Selection Process
- Project Design and Construction







Questions, Comments, and Discussion







