

ODESSA AIRPORT SCHLEMEYER FIELD

AIRPORT LAYOUT PLAN AND NARRATIVE



DRAFT



Draft Final ALP UPDATE AND NARRATIVE REPORT

**Odessa Airport – Schlemeyer Field
Ector County, Texas**

**Prepared for:
Ector County**

Prepared by:



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TABLE OF CONTENTS





TABLE OF CONTENTS

INTRODUCTION

STUDY PARTICIPATION.....	2
PROCESS.....	2
SWOT ANALYSIS.....	4

INVENTORY

AIRPORT BACKGROUND.....	7
CLIMATE.....	7
ECONOMIC IMPACT	9
AIRPORT ROLE.....	12
AIRPORT ADMINISTRATION	13
GRANT HISTORY	13
AIRPORT FACILITIES.....	15
Airfield Facilities	15
Landside Facilities.....	23
AVIATION ACTIVITY	28
Aircraft Operations	28
Based Aircraft	29
ENVIRONMENTAL FEATURES	29
Air Quality.....	30
Biological Resources	30
Climate	31
Coastal Resources.....	32
<i>Department of Transportation Act, Section 4(F)</i>	32
Farmlands	33
Hazardous Materials, Solid Waste, and Pollution Prevention.....	34
Historical, Architectural, Archaeological, and Cultural Resources	34
Land Use	34
Natural Resources and Energy Supply	35
Noise And Noise Compatible Land Use.....	35
Socioeconomics, Environmental Justice, and Children's Environmental Health And Safety Risks.....	37
Visual Effects	39
Water Resources	40
AIRSPACE CHARACTERISTICS.....	41
AIRPORT TRAFFIC CONTROL.....	45
REGIONAL AIRPORTS.....	45
COMMUNITY PROFILE.....	45

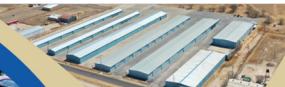


AVIATION DEMAND FORECASTS

FORECASTING APPROACH.....	49
NATIONAL GENERAL AVIATION TRENDS	50
General Aviation Aircraft Shipments and Revenue.....	51
Risks to the Forecast.....	55
AIRPORT SERVICE AREA FORECASTS	55
Registered Aircraft Forecast	56
Based Aircraft Forecast.....	61
General Aviation Operations	65
Air Taxi Operations Forecast.....	69
Military Operations Forecast	70
Annual Instrument Approaches.....	71
Peak Period Forecasts.....	71
FORECAST COMPARISON TO THE <i>TERMINAL AREA FORECAST</i>	72
CRITICAL AIRCRAFT	72
Aircraft Classification	74
AIRPORT AND RUNWAY CLASSIFICATION	77
Airport Critical Aircraft	78

FACILITY REQUIREMENTS

AIRSIDE FACILITY REQUIREMENTS	83
Runway Safety Areas	83
Runway Orientation.....	91
Runway Length Requirements.....	92
Runway Width	97
Runway Pavement Strength	97
Runway Line-of-Sight and Gradient	97
Separation Standards	99
Taxiways	101
Navigational and Approach Aids.....	105
LANDSIDE FACILITY REQUIREMENTS.....	107
Terminal Building Requirements	107
Aircraft Storage Hangars, Apron, and Vehicle Parking Requirements	109
Aircraft Rescue and Firefighting (ARFF)	111
Aviation Fuel Storage.....	111
Utilities	112
Perimeter Fencing and Gates.....	112
Landside Facility Requirements Summary	112
SUMMARY.....	114



AIRPORT DEVELOPMENT ALTERNATIVES

AIRPORT DEVELOPMENT ALTERNATIVES	115
Runway System	115
Primary Runway.....	116
Airfield Design Standards.....	117
Runway Length	117
Instrument Approach Capability.....	118
Land Use	118
Airport Alternative 1.....	119
Airport Alternative 2.....	124
Airport Alternative 3.....	130
SUMMARY.....	135

RECOMMENDED DEVELOPMENT CONCEPT

AIRSIDE DEVELOPMENT	138
Design Standards	138
Runway Designations.....	141
Runway Dimensions	141
Safety Areas.....	142
Pavement Strength.....	144
Taxiways	145
Holding Positions.....	146
Holding Bays	146
Instrument Approach Procedures.....	146
Visual Aids	147
Airfield Marking, Lighting, and Signage	147
Weather Reporting Equipment.....	148
LANDSIDE DEVELOPMENT.....	148
ENVIRONMENTAL OVERVIEW	151
AIRPORT RECYCLING, REUSE, AND WASTE REDUCTION.....	163
Regulatory Guidelines.....	163
Solid Waste	164
Solid Waste Management System	167
Existing Services.....	167
Goals and Recommendations	167

CAPITAL IMPROVEMENT PROGRAM

SHORT-TERM IMPROVEMENTS.....	177
2024 Projects	177



CAPITAL IMPROVEMENT PROGRAM (continued)

2025 Projects.....	177
2026 Projects.....	178
2027 Projects.....	178
2028 Projects.....	179
Short-Term Summary	179
INTERMEDIATE-TERM IMPROVEMENTS.....	179
Intermediate-Term Summary	181
LONG-TERM IMPROVEMENTS	181
Long-Term Projects Summary.....	183
PROJECTS ASSOCIATED WITH ULTIMATE PRIMARY RUNWAY.....	183
CAPITAL IMPROVEMENT SUMMARY.....	184
CAPITAL IMPROVEMENT FUNDING SOURCES.....	184
Federal Grants	185
State Funding Programs.....	188
Local Funding.....	190
PLAN IMPLEMENTATION.....	192

EXHIBITS

1 Project Workflow	3
2 Vicinity/Location Map	8
3 Climate Data.....	9
4 Wind Roses	10 / 11
5 ODO Economic Impact Summary	12
6 Existing Airside Facilities	17
7 Airfield Pavement Condition	19
8 Existing Landside Facilities	25 / 26
9 Aircraft Parking Aprons	27
10 Environmental Sensitivities	36
11 Airspace Classification.....	42
12 Vicinity Airspace	44
13 Vicinity Airports.....	47
14 Community Profile	48
15 National General Aviation/Air Taxi Forecasts.....	53
16 Airport Service Area	57
17 Ector County Registered Aircraft Projections	60
18 Based Aircraft Projections	63
19 Itinerant GA Operations Projections	67
20 Local GA Operations Projections	68
21 Forecast Summary	73
22 Aircraft Classification	75
23 Aircraft Reference Codes	76

**EXHIBITS (continued)**

24	Historical Turboprop and Jet Operations	79 / 80
25	Runway Safety Areas.....	85
26	Dual Runway Wind Coverage	92
27	Aircraft Parking Separation	100
28	Nonstandard Taxiway Conditions.....	104
29	Airside Facility Requirements.....	108
30	Landside Facility Requirements.....	113
31	Airport Alternative 1A/1B	121 / 122
32	Airport Alternative 2A/2B	125 / 126
33	Runway 2-20 Declared Distances (Alternative 2A)	128
34	Airside Alternative 3A/3B.....	131 / 132
35	Runway 11-29 Declared Distances (Alternative 3A)	133
36	Overall Recommended Airside Development Concept / Declared Distances.....	139 / 140
37	Recommended Landside Development Concept	149
38	Existing Noise Contours / Ultimate Noise Contours	157 / 158
39	Airport Waste Streams.....	166
40	Waste Management Systems.....	168
41	Development Staging	175

APPENDIX A – Glossary of Terms**APPENDIX B – Airport Layout Plans****APPENDIX C – Draft Height/Hazard Zoning Ordinance**

NARRATIVE REPORT





INTRODUCTION

This Airport Layout Plan (ALP) Update and Narrative for Odessa Airport-Schlemeyer Field (ODO) serves as an update to the most recent Master Plan completed in 1997 and the ALP drawing set that was more recently updated in 2012. The primary focus of this study is to provide the airport sponsor (Ector County), the Texas Department of Transportation (TxDOT) – Aviation Division, and the Federal Aviation Administration (FAA) with a strategic plan and vision for short-term and long-term operations, as well as any necessary improvements that may be needed over the next 20 years. The report will include an updated ALP set, which serves as a blueprint of the current and future conditions at the airport. The updates to the ALP will focus on the development direction and facility changes that have taken place since the completion and approval of the previous planning study. The development of a Height Hazard Zoning Map for the sponsor's implementation will also be completed with this study.

This study was designed to guide future development and provide updated justification for projects for which the airport may receive funding participation through federal and state airport improvement programs. Coffman Associates, an airport consulting firm specializing in master planning and environmental studies, is preparing this plan.





This ALP Update and Narrative is being prepared in accordance with FAA requirements, including Advisory Circular (AC) 150/5300-13B, *Airport Design*; AC 150/5070-6B, *Airport Master Plans*; and FAA ARP Standard Operating Procedure (SOP) 2.00 and 3.00 – Appendix A – ALP Review Checklist. The following goals and objectives have been determined for the ALP Update and Narrative.

- Analyze the current situation at ODO by conducting an inventory of existing conditions and operational data
- Identify aviation demand forecasts for airport operations and based aircraft for 5, 10, and 20 years into the future
- Determine facility requirements necessary to meet forecasted demand
- Draft alternatives for airport development and operation, in line with facility requirements
- Select a preferred development concept, which will be reflected on the ALP
- Develop a 20-year demand-based Capital Improvement Plan (CIP), including a recommended phasing plan
- Prepare an updated ALP drawing set of existing and proposed facilities
- Develop a Height Hazard Zoning map

STUDY PARTICIPATION

The ALP Update and Narrative is of interest to many within the local community and region, including local citizens and businesses, community organizations, Ector County officials, airport users and tenants, and aviation organizations. To assist in the development of the study, the county has identified a group of stakeholders to act in an advisory role as the plan progresses. The Planning Advisory Committee (PAC) is comprised of individuals and organizations with a vested interest in the future development of ODO. Members of the PAC will meet at designated points during the planning process to review draft study materials and provide comments to help ensure a realistic and viable plan is developed. A community outreach program will also be established to allow members of the public to review and comment on the study as it develops.

PROCESS

The ALP Update and Narrative is prepared in a systematic fashion pursuant to the scope of services that was coordinated with Ector County and TxDOT Aviation. The study includes several elements which are described below and depicted on **Exhibit 1**:

- **Study Initiation** – Development of the scope of services, budget, and schedule.
- **Inventory** – Inventory of facility and operational data and wind data. This step establishes existing airfield facility conditions and capacities and identifies existing environmental conditions at the airport.



PAC #1

INITIATION

- Goals and Objectives
- Project Website
- Planning Advisory Committee

INVENTORY

- Airport Facilities
- Airspace and Air Traffic Activity
- Airport Access and Parking, Utilities, and Aerial Photography
- Area Socioeconomic Data
- Local Planning and Land Use

FORECASTS

- Based Aircraft and Fleet Mix
- Annual Operations
- Peaking Characteristics
- Critical Aircraft Analysis

FACILITY REQUIREMENTS

- Design Categories
- Runway Length and Strength
- Support Facilities
- Taxiways
- Airfield Capacity
- Hangar Facilities
- Terminal Building
- Aprons
- Navigational Aids

PAC #2

AIRPORT ALTERNATIVES

- Evaluate Development Scenarios
- Airside
- Landside
- Support

PAC #3

RECOMMENDED DEVELOPMENT CONCEPT AND CAPITAL FINANCIAL PLAN

- Detailed Facility and Land Use Plans
- Cost Estimates
- Funding Sources
- Airport Capital Improvement Plan

PW #1

- Working Papers
- [Redacted]
- [Redacted]

- Working Papers
- [Redacted]
- [Redacted]

PAC #4

ENVIRONMENTAL CONSIDERATIONS

- Noise Exposure
- Recycling Plan
- Height/Hazard
- Review/Evaluation of NEPA Environmental Categories

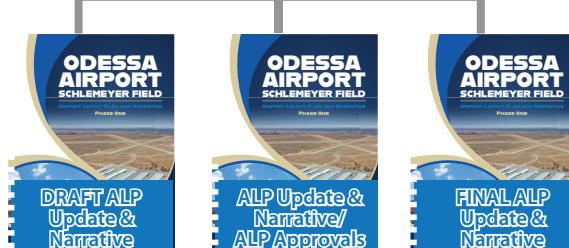
PW #2

AIRPORT LAYOUT PLANS

- Airport Layout Plan
- Landside Drawing
- Airspace/Approach Drawings
- On-Airport Land Use Plan
- Property Map
- Land Use Plans

- Working Papers
- [Redacted]
- [Redacted]

PAC: Planning Advisory Committee
PW: Public Workshop





- **Forecasts** – Aviation demand levels at the airport (based aircraft and operations) are forecasted to establish the existing and ultimate critical aircraft per FAA AC 150/5000-17. The forecasting approach utilizes the FAA's *Terminal Area Forecast* (TAF), as well as regional and local socioeconomic and aviation trends. The forecasts will ultimately be submitted to TxDOT/FAA for review and approval.
- **Facility Requirements** – Determinations will be made for the airport's facility requirements for existing, short-term, intermediate-term, and long-term timeframes based upon both the critical aircraft and updated forecasts.
- **Alternatives** – Evaluation of various development alternatives to accommodate current and forecasted facility needs for airside and landside facilities.
- **Airport Plans and Land Use Compatibility** – Coordination with airport staff and the PAC will result in the selection of a recommended development concept. Airport layout plans will be developed to depict the recommended development concept. The drawings will meet the requirements of FAA's Standard Operating Procedure (SOP), *Standard Procedure for FAA Review and Approval of Airport Layout Plans (ALPs)*, effective date October 1, 2013. The updated ALP set will be included as an appendix to this study. The airport's noise exposure and land use compatibility will also be evaluated. An environmental overview will identify any potential environmental concerns that must be addressed prior to the implementation of the recommended development program.
- **Airport Development Schedules and Cost Estimates** – Development schedules will be prepared for the recommended concept, and potential federal and state aid for specific projects will be identified. A five-year CIP will be prepared to identify capital funds required by the County to accomplish each proposed stage of improvements for the airport.
- **Final Drawings and Reports** – Final report documentation will include a technical report (printed and digital formats) and full-size/full-color copies of report exhibits, and drawings produced for the study.

SWOT ANALYSIS

A SWOT analysis is a strategic business planning technique used to identify **Strengths**, **Weaknesses**, **Opportunities**, and **Threats** associated with an action or plan. This exercise involves identifying an action, objective, or element, and then identifying the internal and external forces that are positively and negatively impacting it. The internal forces include attributes of the airport and market area that may be considered strengths or weaknesses, while the external forces are those outside the airport's control, such as the aviation industry as a whole or the economy. These manifest as opportunities or threats.

A SWOT analysis was conducted with the PAC in March 2022. A summary of this exercise and discussion is included on the next page. It is important to note that some attributes may fall into more than one category. For example, ODO has a significant amount of property, much of which is undeveloped. This was noted as a strength during the exercise, but it also serves as an opportunity.



S STRENGTHS	<ul style="list-style-type: none"> Three runway system Runway lengths available 6,200 feet (Runway 11-29), 5,703 feet (Runway 2-20), and 5,003 feet (Runway 16-34) can accommodate a wide array of business jets Nice terminal building with many amenities Instrument approach capability 	<ul style="list-style-type: none"> Significant amount of undeveloped property Airport is not a major tax burden Hangar space available Fire station is nearby for emergencies and can access airfield via a knockdown gate Location – close proximity to highway
W WEAKNESSES	<ul style="list-style-type: none"> Significant amount of pavement in need of rehabilitation Pavement strength is too low to support some aircraft or deters other operators from using ODO Wildlife on field has led to loss of customers 	<ul style="list-style-type: none"> Surrounding incompatible land uses including residential and a school located within the Runway 20 approach Other hard constraints including public roads limit expansion potential
O OPPORTUNITIES	<ul style="list-style-type: none"> Increased pilot training is combatting ongoing pilot shortage New through-the-fence (TTF) operator Federal funding opportunities due to recent legislation (i.e., Bipartisan Infrastructure Law) 	<ul style="list-style-type: none"> Economic development in area (i.e., Nacero) Development potential in the form of commercial activities including non-aeronautical uses
T THREATS	<ul style="list-style-type: none"> Competition with other airports for federal/state funds Residential and educational land uses adjacent to airport 	<ul style="list-style-type: none"> A pavement strength analysis could determine strengths that are less than what is reported, exacerbating an existing weakness