

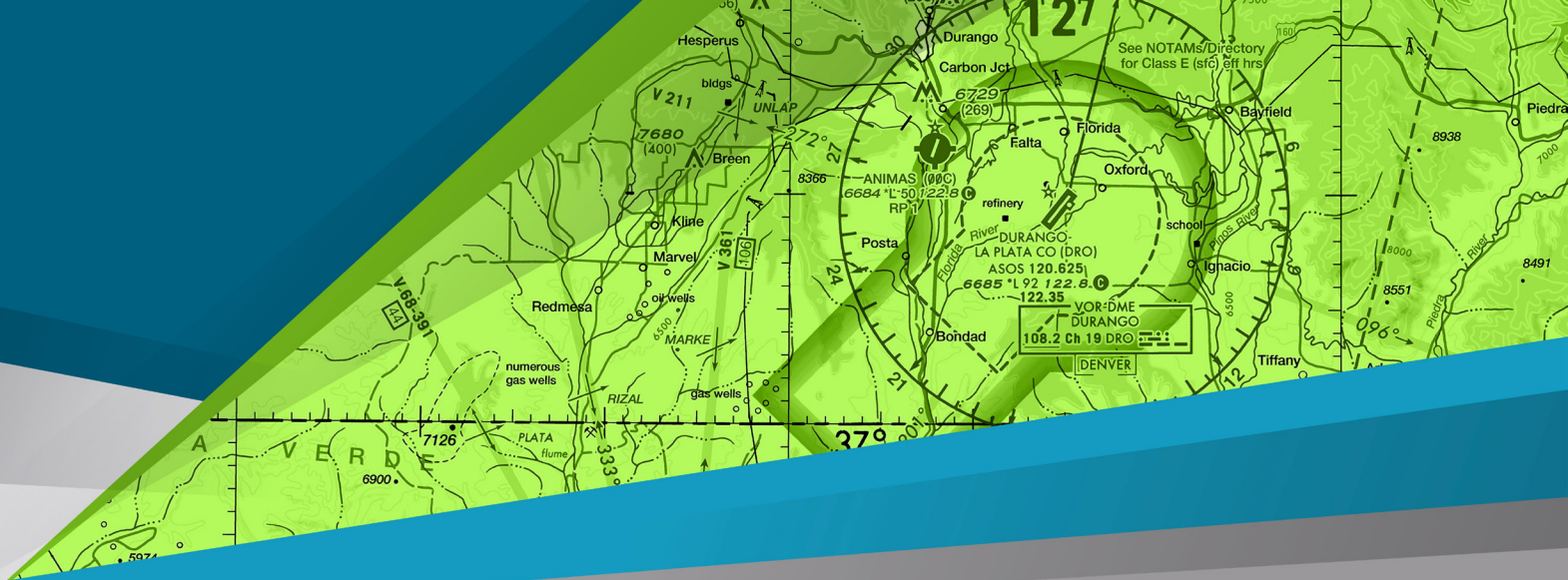
Destination: DRO



Welcome

»» Open House
September 18, 2014

JVIATION®



» MASTER PLAN OVERVIEW & INVENTORY

Master Plan Overview

Purpose of this Airport Master Plan

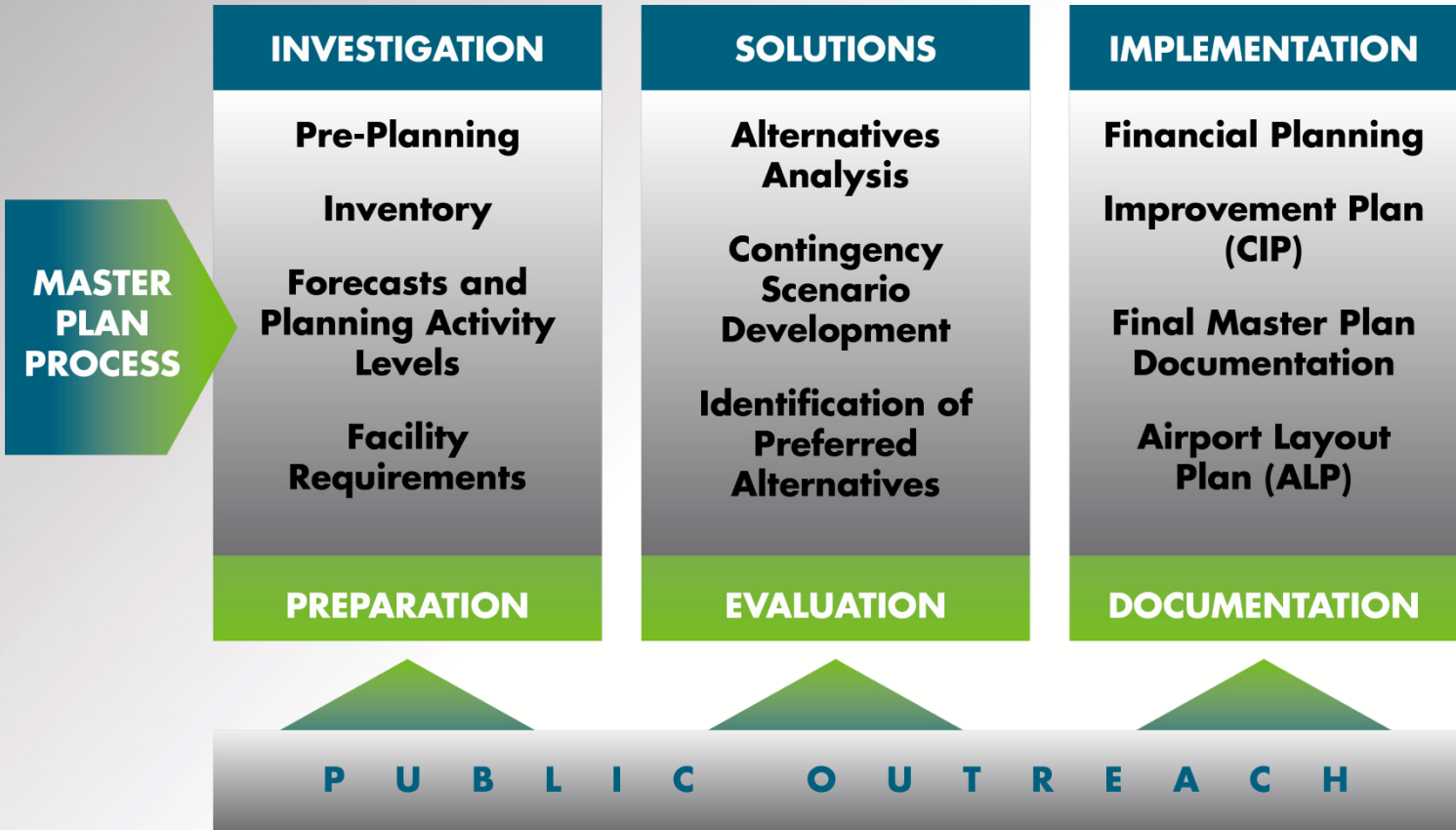
The purpose of this study is to prepare for Durango–La Plata County Airport (DRO) a Master Plan and Airport Layout Plan (ALP) drawing set that determines the extent, type, and schedule of development needed to accommodate future aviation demand at the airport over a 20 year planning period with the ability to feasibly meet demand beyond the planning horizon.

Durango and La Plata County decide when and if projects are implemented.

Objectives of a Master Plan

- Understanding of current and future needs of the airport
- Direction for the community and a path for development that fits community desires
- Long range outlook of aviation activity for 20-year timeframe and beyond
- Guidance for future facility improvements and orderly development
- Guidance for sustainability opportunities
- Development of funding strategies with the FAA and State to fund high priority needs
- A new Airport Layout Plan set for FAA approval
- Community awareness and understanding of long range airport needs

Master Plan Process

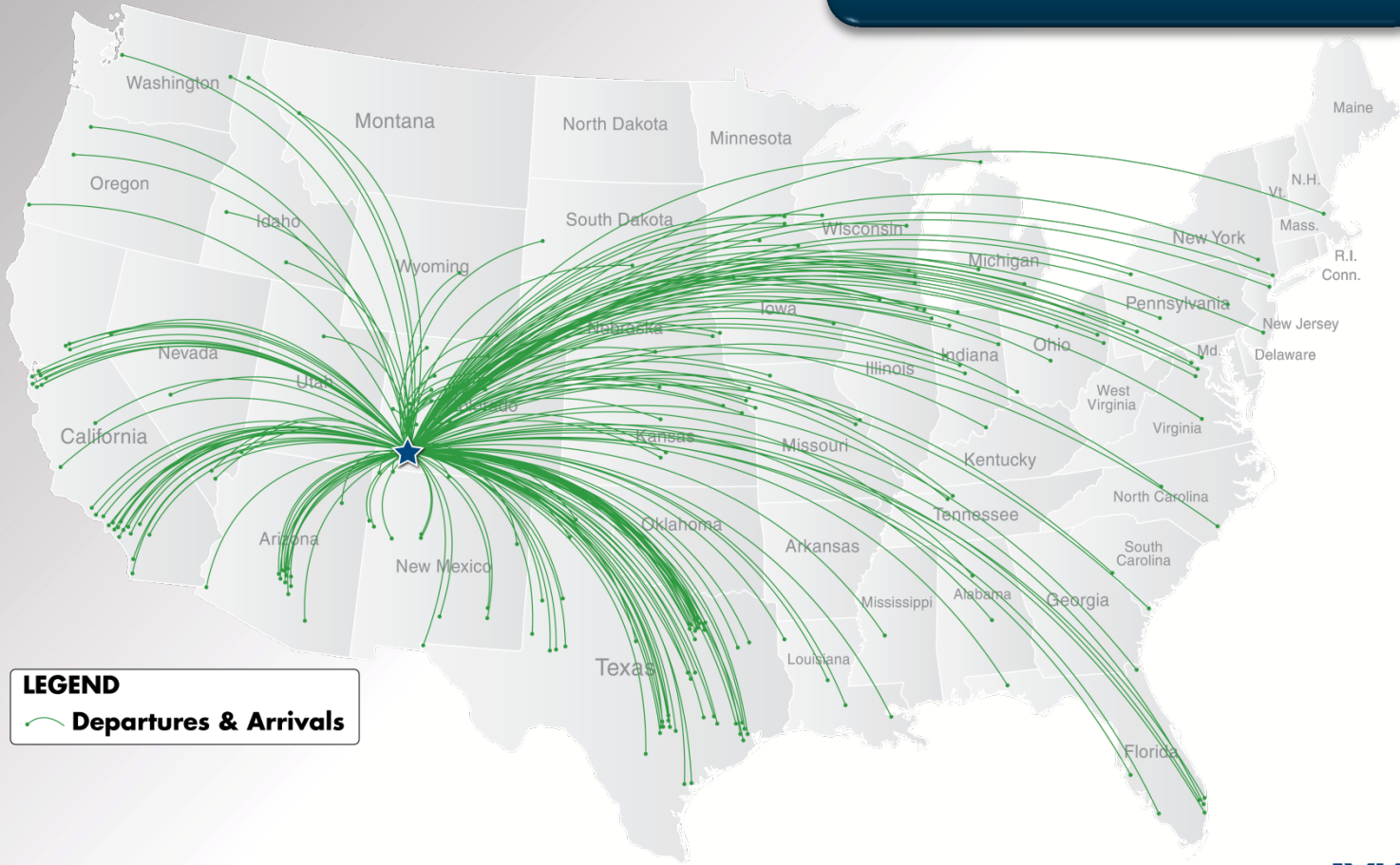


DRO Flight Map

Instrument Flight Plans Map

September 4, 2012 - September 4, 2013

This map shows instrument flight plans filed with the FAA over the course of a one year period. Instrument flight plans are typically filed for the business segment of GA as well as commercial operations.



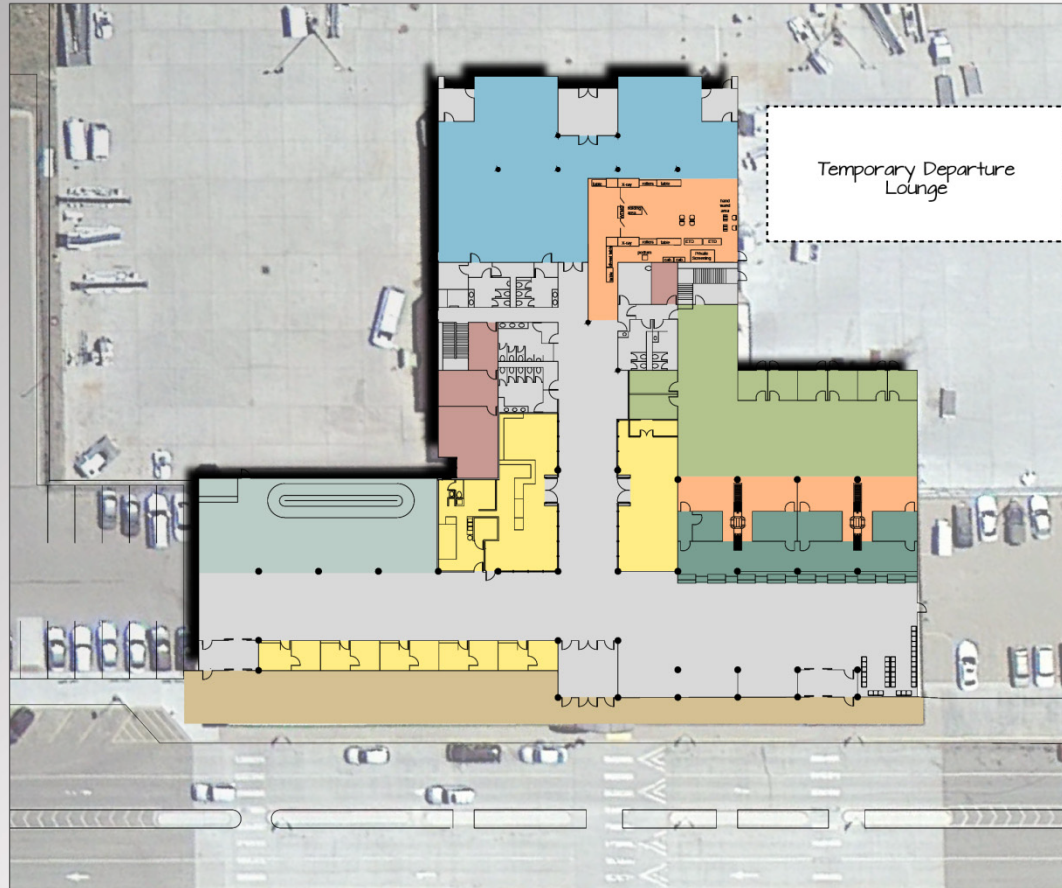
LEGEND
—•—•— Departures & Arrivals

Airport Inventory

- Airport Reference Code & Airfield Design Standards
- Airfield/Airspace
- Commercial Passenger Facilities
- Airport Certification & Regulations
- GA Facilities
- Airport Equipment & Support
- Facilities
- Access, Circulation, & Parking
- Meteorological Data
- Utilities
- Regional Setting & Land Use
- Environmental Overview



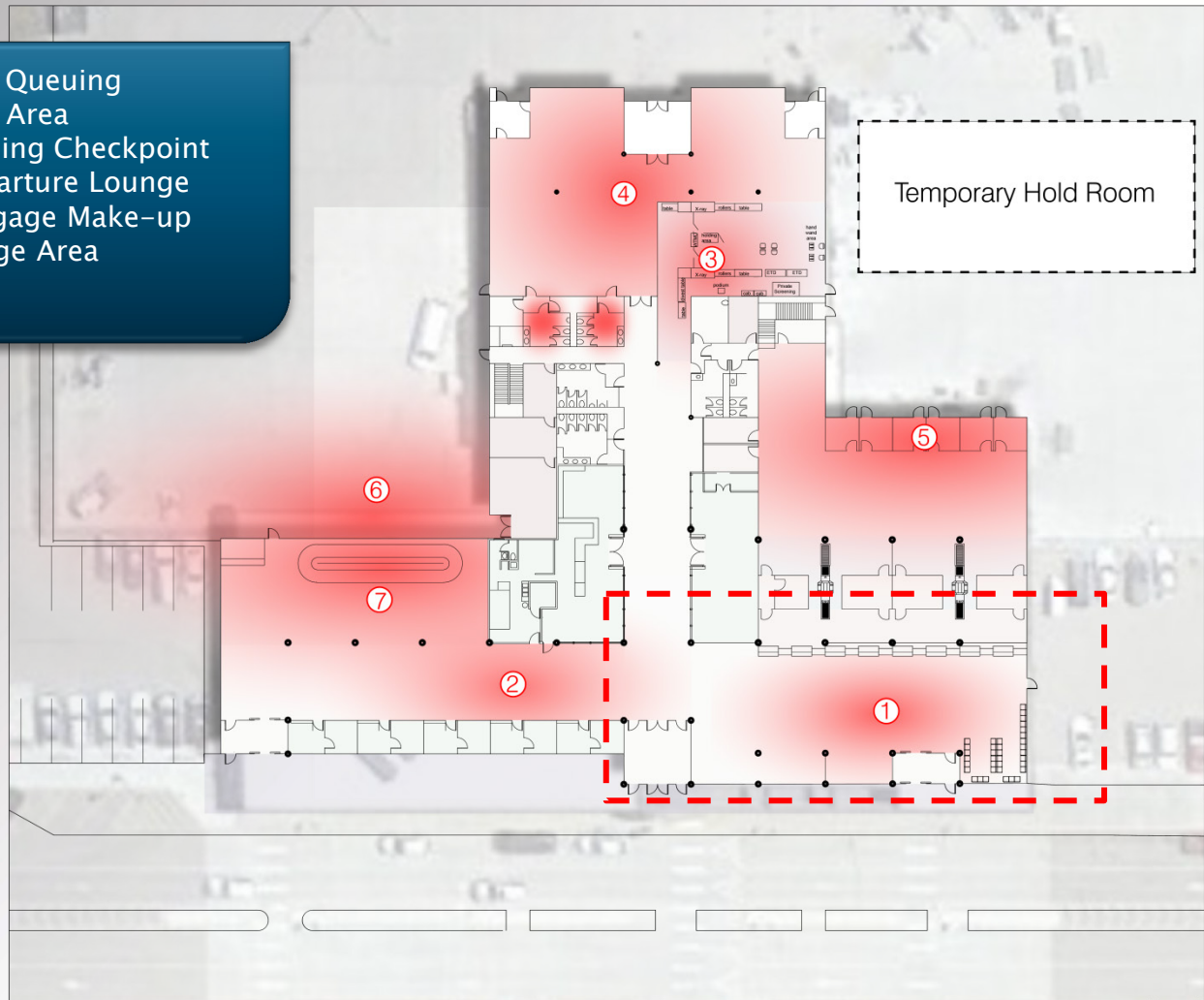
Existing Floor Plan



- Temporary Departure Lounge (4,500 sf)
- Departure Lounge (2,812 sf)
- Baggage Claim (2,516 sf)
- Outbound Baggage & Operations (4,139 sf)
- Ticketing Space (2,609 sf)
- TSA Space (2,500 sf)
- Concession Space (4,200 sf)
- Public Space & Circulation (13,500 sf)
- Airport Management Space (2,400 sf)
- Curb Front Space



1. Ticket Counter Queuing
2. Baggage Claim Area
3. Security Screening Checkpoint
4. Passenger Departure Lounge
5. Outbound Baggage Make-up
6. Exterior Baggage Area
7. Baggage Claim

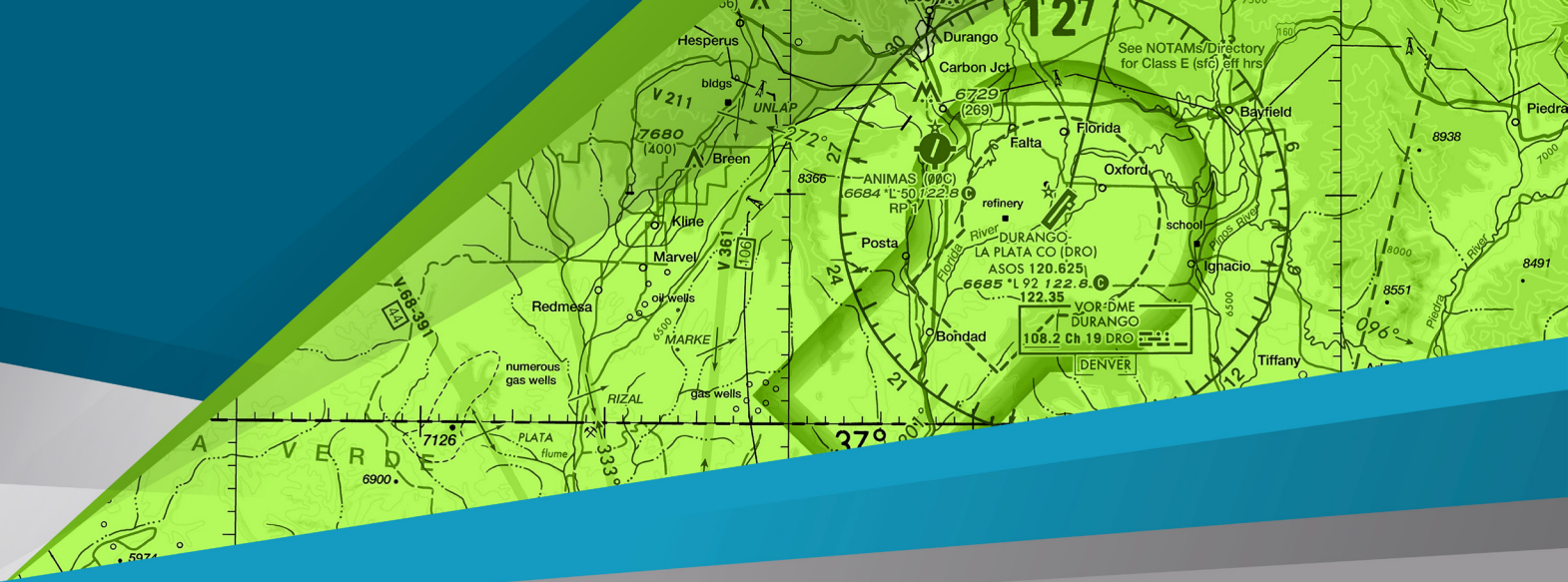


 Existing Constraints



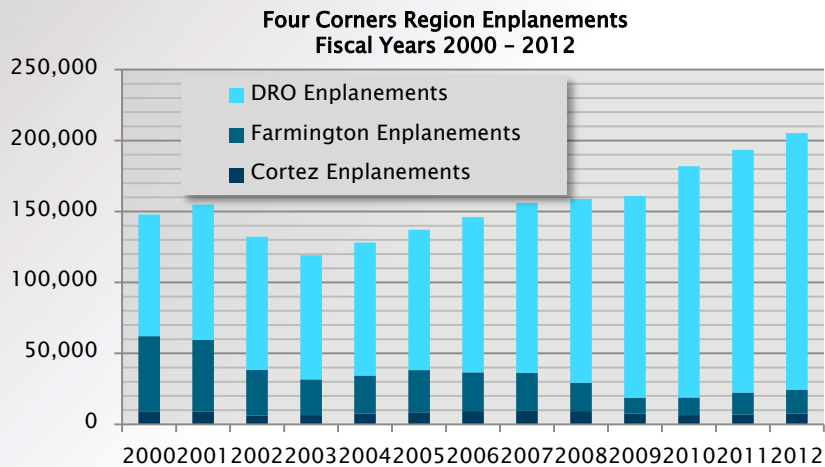
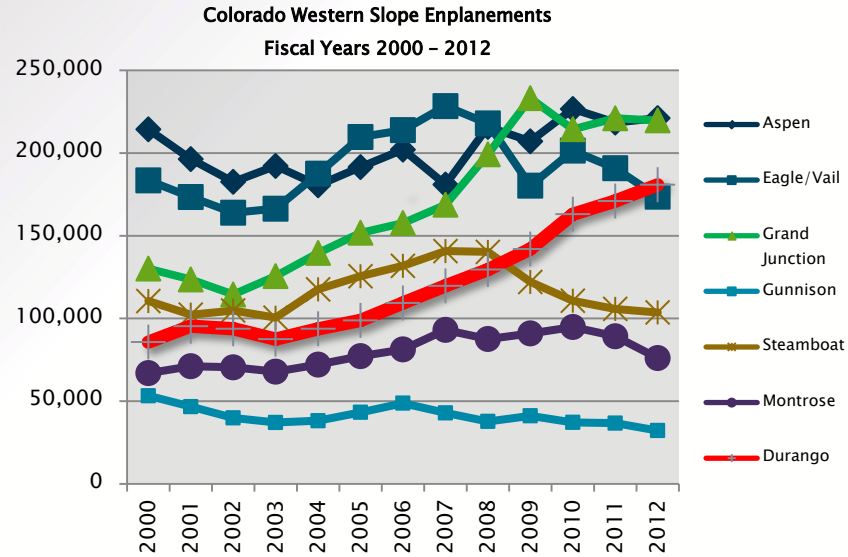
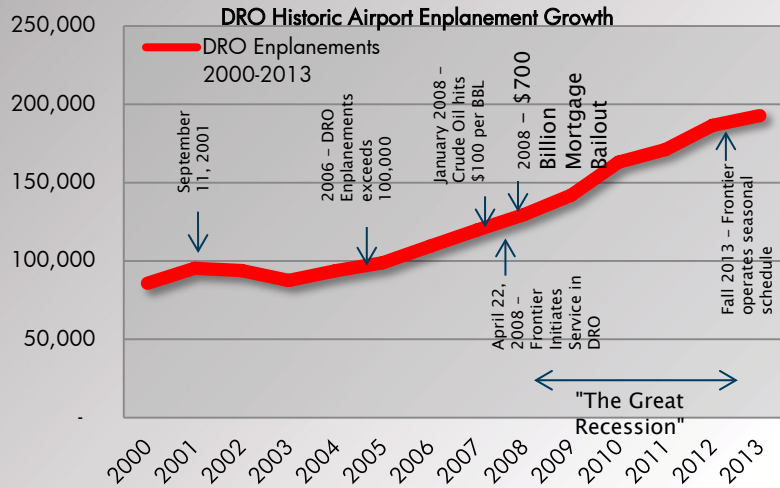
Terminal Constraints

	Existing	Required	Deficiencies
Baggage Claim Area	2,516 SF	5,247 SF	2,731 SF
Ticket Lobby Depth	28 FT	60 FT	32 FT
Ticket Counter Active Area	556 SF	1,140 SF	584 SF
Ticket Counter Queueing	1,414 SF	2,850 SF	1,436 SF
Security Screening Checkpoint	1,377 SF	8,700 SF	7,323 SF
Passenger Departure Lounges	2,812 SF	11,554 SF	8,742 SF



»» FORECAST OF AVIATION ACTIVITY

Strong Enplanement Growth



Source FAA
Terminal Area
Forecast, 2013-
2040

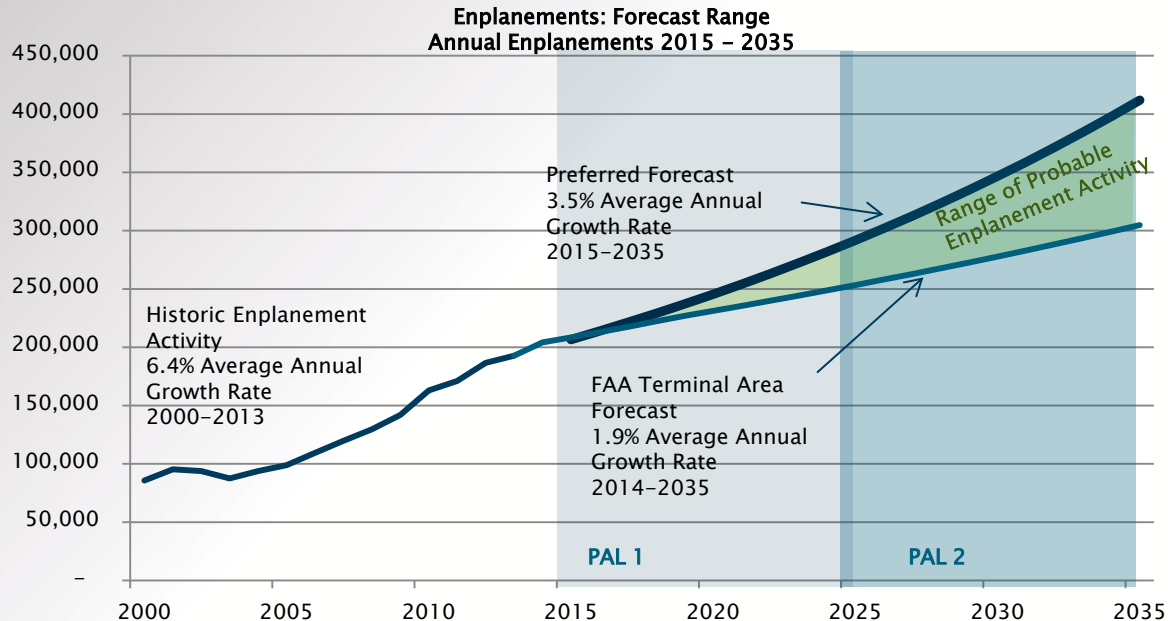
Aviation Activity Forecasts

Passenger Enplanements Forecast					
	2015	2020	2025	2030	2035
Enplanements	206,573	245,477	291,706	346,642	411,923

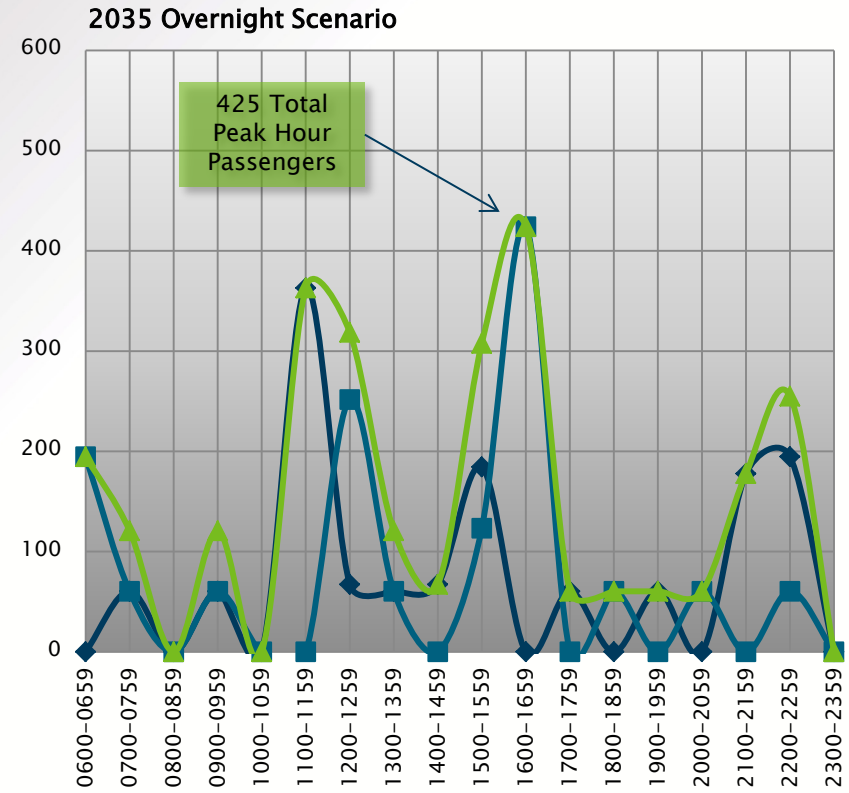
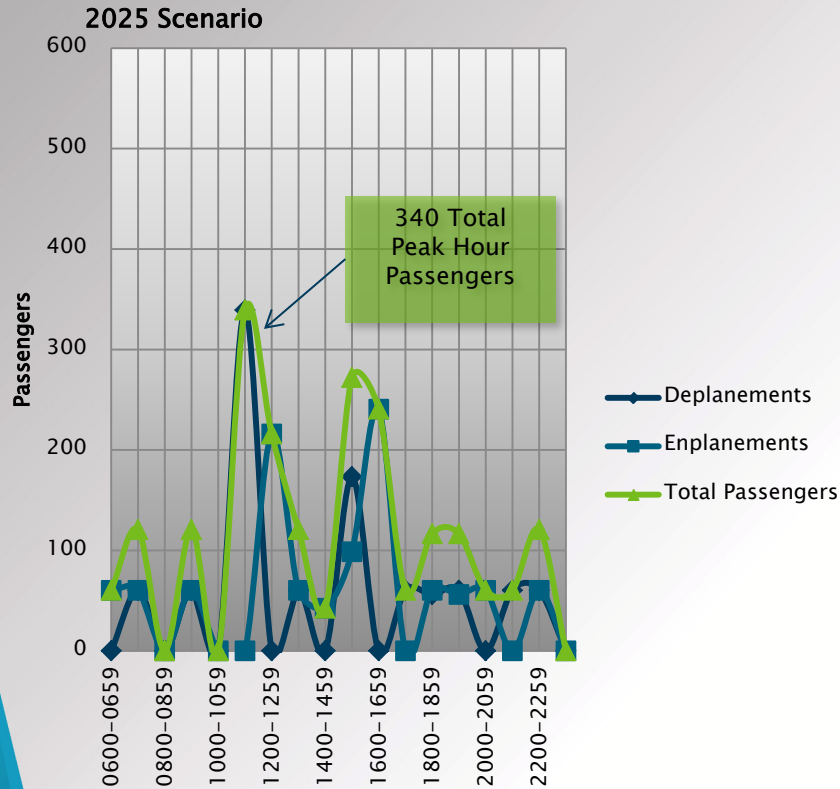
General Aviation Operations Forecast					
	2015	2020	2025	2030	2035
General Aviation Operations	35,693	38,262	41,017	43,969	47,135

Commercial Operations Forecast					
	2015	2020	2025	2030	2035
Commercial Operations	11,898	12,292	12,810	13,358	13,390

Based Aircraft Forecast					
	2015	2020	2025	2030	2035
Based Aircraft	71	75	80	85	90



Daily Peaking Analysis



Planning Activity Levels (PALs)

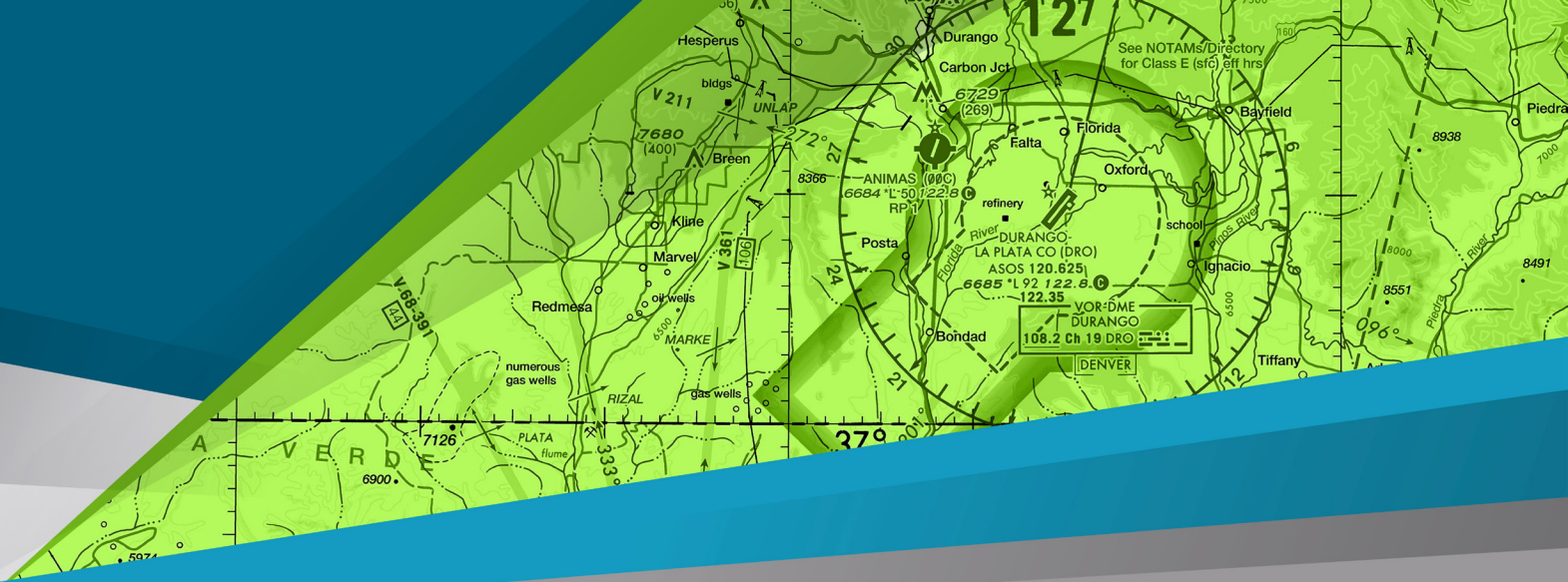
- PALs represent an activity level that facilities are designed to accommodate.
- Once an activity level is reached, plans to meet the next activity level should be implemented. Plans can be implemented before or after the forecasted year depending on actual activity and trends.
- PALs normally represent 10 years of growth as projected in the Aviation Forecast.

PAL 1 – 2025
280,000 Annual
Enplaned Passengers

340 Total Peak Hour
Enplaned Passengers

PAL 2 – 2035
400,000 Annual
Enplaned Passengers

425 Total Peak Hour
Enplaned Passengers



»» FACILITY REQUIREMENTS

Airside Facility Requirements

Facility	Improvements Recommended for CIP
Runway Design and Surface	<ul style="list-style-type: none"> • Current length, width, orientation, and protected areas meet FAA standards for current and projected traffic • Schedule periodic maintenance and rehabilitation
Runway Blast Pads	<ul style="list-style-type: none"> • Repaint chevrons for blast pads to be 50 feet apart
Taxiway Design	<ul style="list-style-type: none"> • Relocate and/or redesign several connecting taxiways to meet current FAA criteria
Taxiway Surface	<ul style="list-style-type: none"> • Rehabilitate Taxiway A from connector A1 to A6 • Fog seal Taxiway A from connector A6 to A9 and connectors A7, A8, and A9 • Rehabilitate Taxiway connectors A1, A2, A3, A5, and A6
Navigational Aids & Airfield Lighting & Signage	<ul style="list-style-type: none"> • Replace/rehabilitate high intensity runway lights (HIRLs) • Replace Runway 21 visual approach aids • Replace taxiway lighting • Replace/rehabilitate airfield signage
Apron Pavement Surface	<ul style="list-style-type: none"> • Schedule periodic maintenance and rehabilitation

Landside Facility Requirements

Facility	Required to Meet 2035 Need
On-Airport Circulation Roadways	<ul style="list-style-type: none">• Enlarge and improve circulation to terminal and parking areas
Terminal Auto Parking	<ul style="list-style-type: none">• Add 1,000 surface parking stalls on approx. 13 acres or construct parking garage
Rental Car Parking	<ul style="list-style-type: none">• Add 140 spaces during planning period
Employee Parking	<ul style="list-style-type: none">• Add 45 spaces during planning period• Pave north lot
Regional Transportation Network	<ul style="list-style-type: none">• Improve intersection of County Road 309 and State Highway 172
GA Auto Parking	<ul style="list-style-type: none">• No improvements needed

General Aviation, Airport Support & Aviation Support Requirements

General Aviation	Improvements Recommended
Transient Aircraft Parking	<ul style="list-style-type: none">• Reserve space for development
Aircraft Storage Facilities	<ul style="list-style-type: none">• Reserve space for hangars

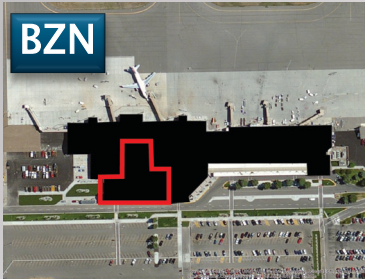
Airport & Aviation Support	Improvements Recommended
FBO Facility Needs	<ul style="list-style-type: none">• Reserve space for development
Fuel Storage Requirements	<ul style="list-style-type: none">• Reserve space for future capacity increase
Deicing Facilities	<ul style="list-style-type: none">• Improve trench drain• Expand deicing area
ARFF/SRE Building	<ul style="list-style-type: none">• Bay size modifications

Terminal Requirements Summary

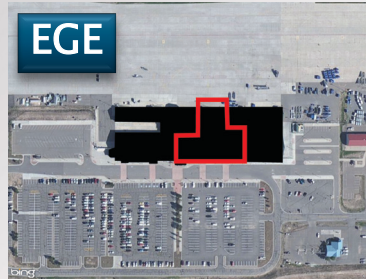
	Existing	PAL 1 – 2025	PAL 2 – 2035
Annual Enplaned Passengers	195,000	280,000	400,000
Total Peak Hour Enplaned Passengers	263	340	425
Terminal Building	37,000 SF	110,000 SF	140,000 SF
Boarding Gates/Bridges	4 (gates only)	5	7
Apron Parking Positions	4	6	9
Auto Parking*	900 Stalls	1,900 Stalls	2,400 Stalls
Total Required Area	N/A	26 Acres	33 Acres
Total Available Area (without relocations or acquisition)	N/A	30 Acres	30 Acres

*Includes Short and Long Term, Rental Cars, Ground Transportation, and Employee Parking.

Comparable Terminals:



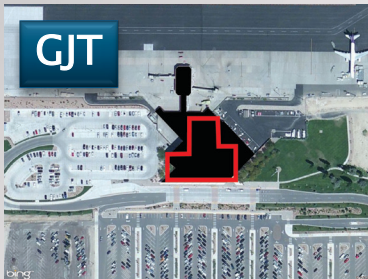
Bozeman Yellowstone International Airport (BZN)
 2012 Enplanements: 434,038
 Number of Gates: 8
 Two levels with loading bridges



Eagle County Regional Airport (EGE)
 2012 Enplanements: 167,914
 Number of Gates: 5



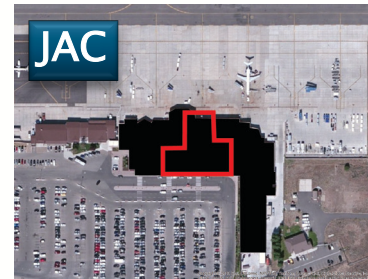
Durango - La Plata Airport (DRO)
 2012 Enplanements: 186,567
 Number of Gates: 4
 Two levels with loading bridges



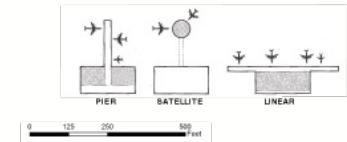
Grand Junction Regional Airport (GJT)
 2012 Enplanements: 217,369
 Number of Gates: 4
 Two levels with loading bridges



Great Falls International Airport
 2012 Enplanements: 186,790
 Number of Gates: 5
 Two levels with loading bridges



Jackson Hole Airport (JAC)
 2012 Enplanements: 274,343
 Number of Gates: 6



Biological Field Survey Results

- Potential habitat was found for the New Mexico Jumping Mouse and Southwestern Willow Flycatcher
- Known Golden Eagle nest exists
- Unknown raptor nest found

New Mexico Jumping Mouse



Southwestern Willow Flycatcher



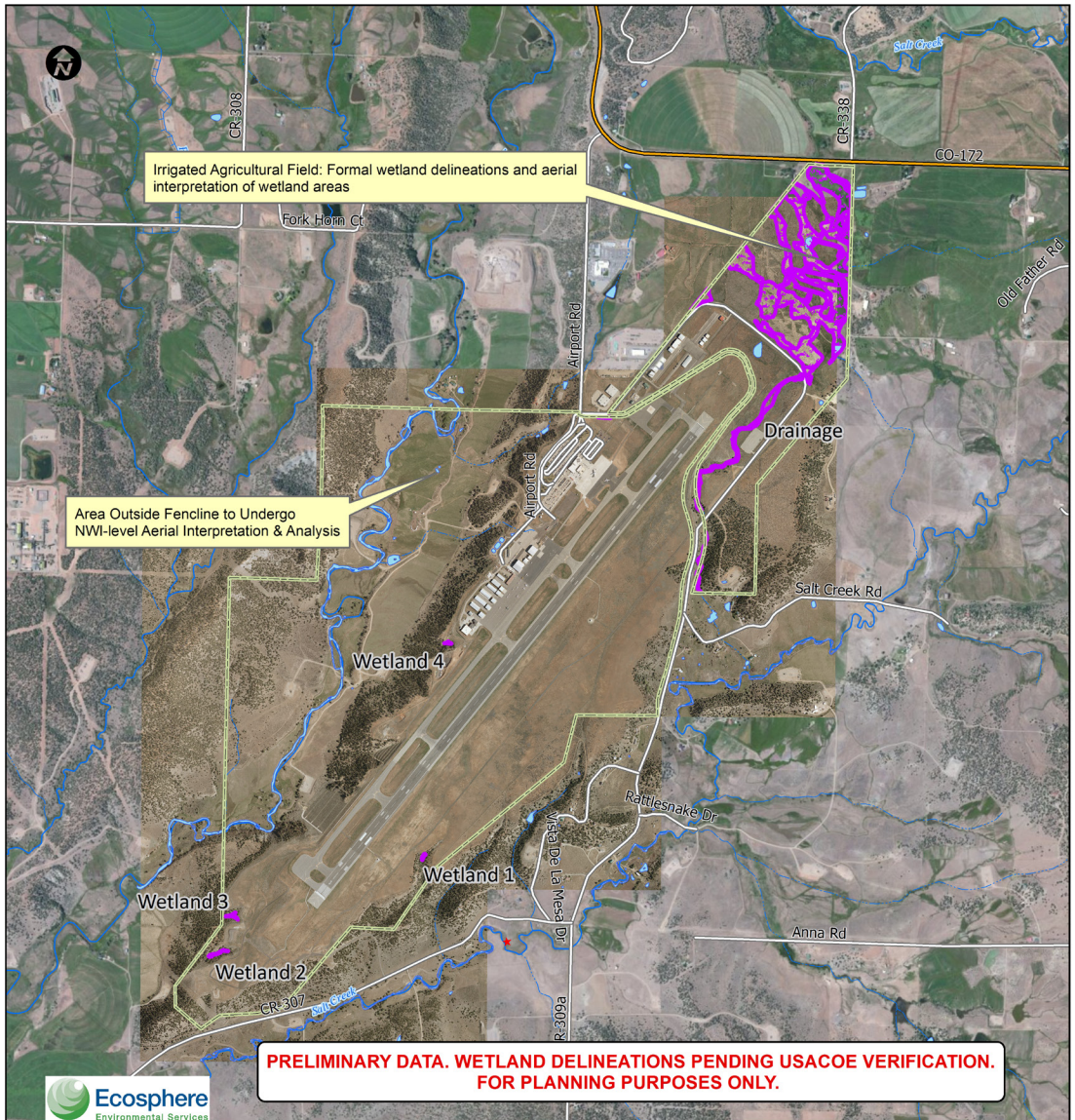
Golden Eagle



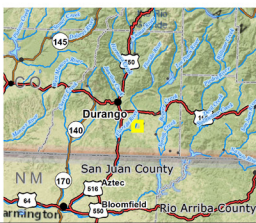
Unknown Raptor Nest



Preliminary Wetland Delineation



PRELIMINARY DATA. WETLAND DELINEATIONS PENDING USACOE VERIFICATION. FOR PLANNING PURPOSES ONLY.



DRO Airport Boundary	Major Road
Gaging Station	Streets
Jurisdictional Wetland	Lake/Pond
	Canal
	Intermittent Stream
	Perennial Stream/River

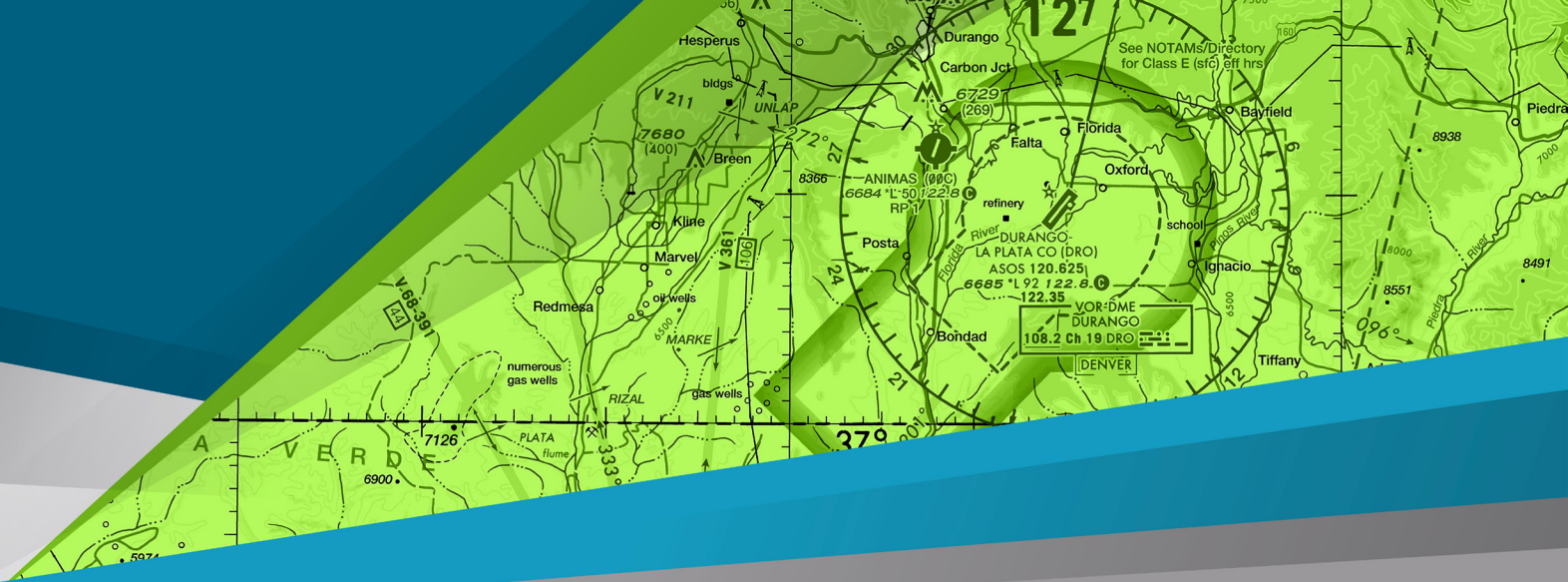
0 0.125 0.25 0.5 Miles

1:24,000 Date: 9/11/2014
Coordinate System: NAD 1983 UTM Zone 13N

Prepared for Jviation, Inc.
Durango-La Plata County
Airport Master Plan

Preliminary Map of Wetland
Determinations
Subject to US Army Corps of
Engineers Verification

La Plata County, CO



» Terminal Alternatives

Criteria for Evaluation of Alternatives –

The overarching goal of this evaluation is *to enhance the long-term viability of DRO within its current boundaries.*

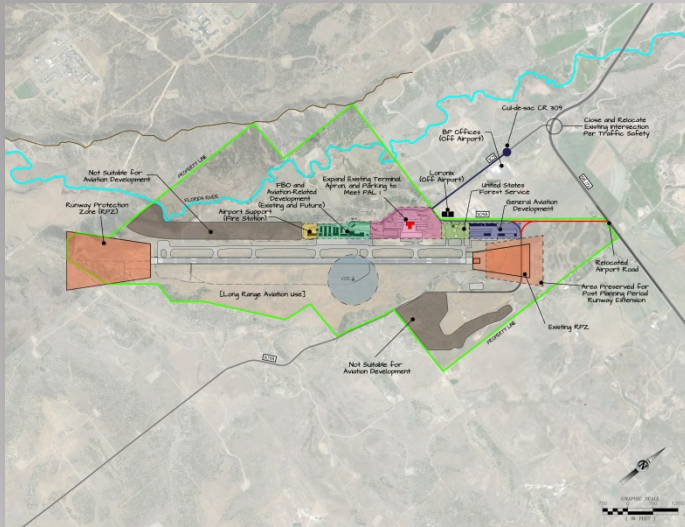
Quantitative

- Complies with FAA **safety** and **design standards**
- Maximizes operational **efficiency**
- **Meets** the 20 year facility **requirements** as defined in the Master Plan, plus has **room to grow**
- **Balances** benefits with costs

Qualitative

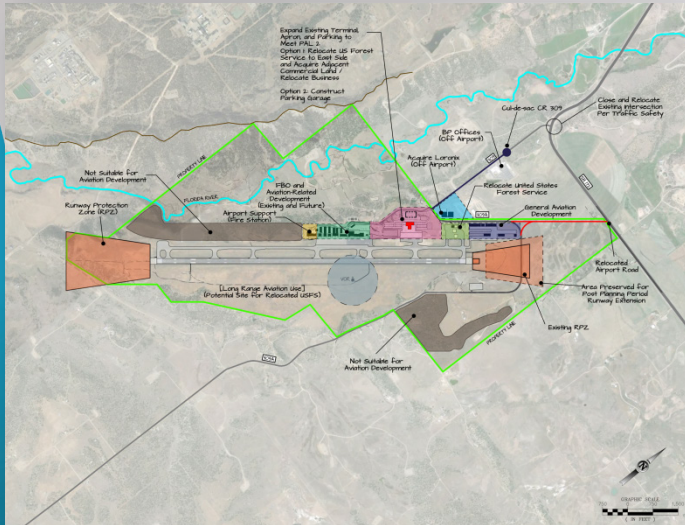
- Promotes **safety** and **efficiency** of airport operations
- Enhances **security** of airport and airline operations
- Improves **customer satisfaction/convenience**
- Fosters Durango/Four Corners' **Image**
- **Minimizes** construction **phasing impacts** to tenants and users
- Incorporates **sustainable design** elements where appropriate
- Sensitive to **environmental** resources

Alternative 1 Expand and Remodel Existing Terminal, Apron Area, and Parking



PAL 1 Project Elements – 2025 Requirements

- ✓ Expand and remodel existing terminal building by 70,000 SF for a total of 110,000 SF
- ✓ Install 5 passenger loading bridges
- ✓ Remove temporary departure lounge
- ✓ Reconstruct, strengthen, and expand aircraft parking apron to accommodate a total of 6 parking positions, 1 deicing position, and maneuvering area for airline ground service equipment (GSE)
- ✓ Reconfigure terminal roadways and interior parking to add/replace 1000 parking stalls and pave overflow lot
- ✓ Reconfigure CR 309 (Airport Road) to connect to relocated intersection (by CDOT)



PAL 2 Project Elements – 2035 Requirements

- ✓ Expand terminal by 30,000 SF for a total of 140,000 SF
 - ✓ Add two gates plus passenger loading bridges
 - ✓ Expand aircraft parking apron to accommodate two new gate positions, 1 additional Remain Over Night (RON) position and additional area for GSE
 - ✓ Reconfigure terminal roadways and add/replace 500 parking stalls
- Option 1 – Relocate USFS to East side of Airport, acquire adjacent commercial parcel and relocate business to expand with surface parking
 - Option 2 – Construct parking structure to accommodate new and displaced parking stalls

Advantages

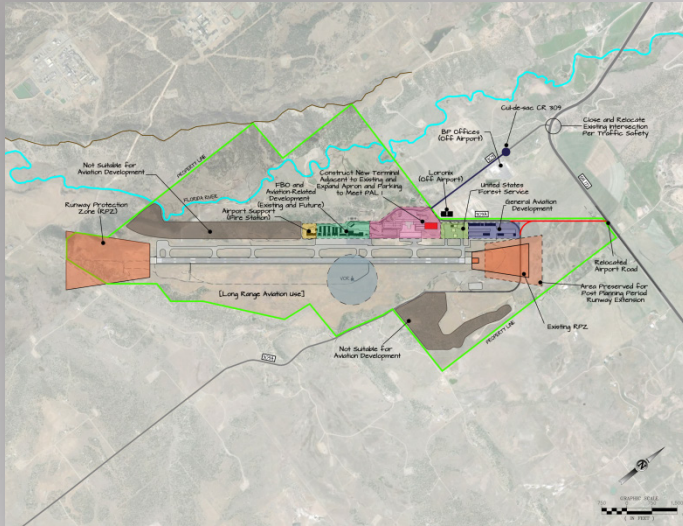
- Allows for the limited re-use of existing infrastructure
- Can be implemented in phases to meet funding requirements or meet a lower Level of Service if desired
- Completely develops remaining land prior to moving to undeveloped land on east side
- East side airfield infrastructure not required in PAL 1
- Costs are somewhat lower in PAL 1 than other alternatives

Disadvantages

- Re-use of existing facilities limited to those that are cost effective to incorporate into design
- The age, construction and layout of the existing terminal makes it difficult to adapt within significant expansion
- Significant phasing extends the construction period and unit costs compared to new construction
- Extensive phasing disrupts normal operations and causes passenger and tenant inconvenience
- Because of the terrain drop off to the west, expansion to meet PAL 2 is significantly more expensive with land acquisition, USFS relocation to the east side of airport, and roadway reconfiguration
- PAL 2 landside option is to construct a parking structure which temporarily displaces hundreds of parking spaces and cost many millions of dollars; ineligible for grant funding assistance
- Expansion beyond PAL 2 will require development of east side or airport relocation

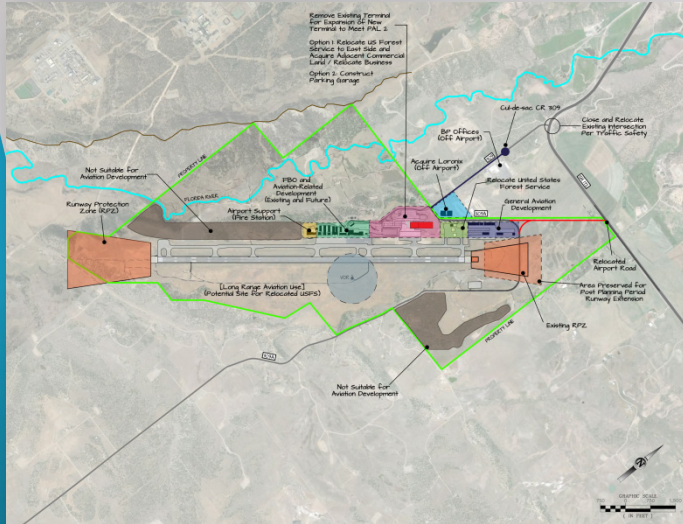
Alternative 2

Construct New Terminal Next to Old Terminal, Apron Area, Parking



PAL 1 Project Elements – 2025 Requirements

- ✓ Construct 110,000 SF terminal building adjacent to the existing terminal building
- ✓ Install 5 passenger loading bridges
- ✓ Reconstruct, strengthen, and expand aircraft parking apron to accommodate a total of 6 parking positions, 1 deicing position, and maneuvering area for airline ground service equipment (GSE)
- ✓ Reconfigure terminal roadways and parking to serve the new terminal location and add/replace 1000 parking stalls and pave overflow lot
- ✓ Remove or lease former terminal building
- ✓ Reconfigure CR 309 (Airport Road) to connect to relocated intersection with SH 172 (by CDOT)



PAL 2 Project Elements – 2035 Requirements

- ✓ Expand terminal by 30,000 SF for a total of 140,000 SF
- ✓ Add two gates plus passenger loading bridges
- ✓ Expand aircraft parking apron to accommodate two new gate positions, 1 additional Remain Over Night (RON) position and additional area for GSE
- ✓ Reconfigure terminal roadways, remove former terminal building, and add/replace 500 parking stalls
- ✓ Option 1 – Relocate USFS to East side of Airport, acquire adjacent commercial parcel and relocate business to expand with surface parking
- ✓ Option 2 – Construct parking structure to accommodate new and displaced parking stalls

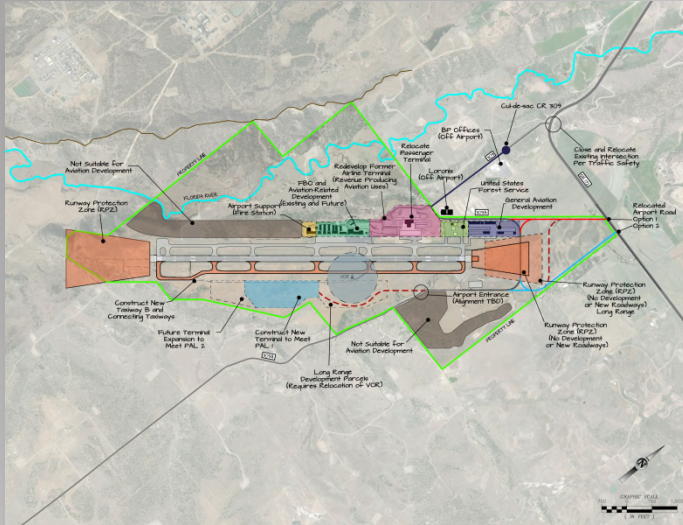
Advantages

- Allows for the limited re-use of existing infrastructure
- New construction allows less phasing during building construction and changeover compared to Alternative 1
- New construction provides significant sustainability opportunities
- Completely develops remaining land prior to moving to undeveloped land on east side
- East side airfield infrastructure not required in PAL 1
- Landside development costs are somewhat lower in PAL 1 than the east side alternative (Alternative 3)
- Reduces environmental disturbance in PAL 1 by not developing east side

Disadvantages

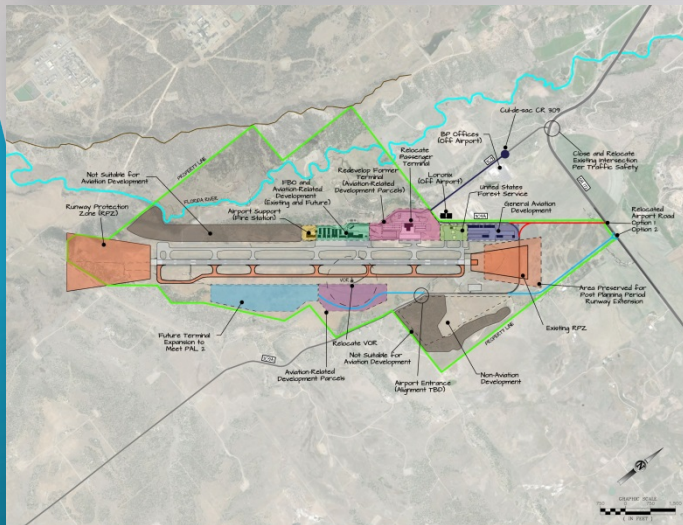
- Significant landside phasing extends the construction period and unit costs as the new terminal displaces parking and roadway infrastructure
- Phasing disrupts normal operations and causes passenger and tenant inconvenience
- Because of the terrain drop off to the west, expansion to meet PAL 2 is significantly more expensive with land acquisition, USFS relocation to the east side of airport, and roadway reconfiguration
- PAL 2 landside option is to construct a parking structure which temporarily displaces hundreds of parking spaces and costs many millions of dollars; ineligible for grant funding assistance
- Expansion beyond PAL 2 will require development of east side or airport relocation

Alternative 3 Construct New Terminal Facilities on the East Side of Airport



PAL 1 Project Elements – 2025 Requirements

- ✓ Construct 110,000 SF terminal building on east side
- ✓ Install 5 passenger loading bridges
- ✓ Construct aircraft parking apron to accommodate a total of 6 parking positions, 1 deicing position, and maneuvering area for airline ground service equipment (GSE)
- ✓ Construct terminal roadways and parking to PAL 1 with room within the loop to add parking to meet PAL 2
- ✓ Remove or lease former terminal building
- ✓ Construct new access road to east side terminal area, connecting to CR 309A
- ✓ Reconfigure CR 309 (Airport Road) to connect to relocated intersection with SH 172 (by CDOT)



PAL 2 Project Elements – 2035 Requirements

- ✓ Expand terminal by 30,000 SF for a total of 140,000 SF
- ✓ Add two gates plus passenger loading bridges
- ✓ Expand aircraft parking apron to accommodate two new gate positions, 1 additional Remain Over Night (RON) position and additional area for GSE
- ✓ Add 500 parking stalls within loop road

Optional Additional Development

- ✓ Relocate VOR (navigational equipment) to an off-airport location
- ✓ Prepare parcels for revenue-producing aviation uses on former terminal site and adjacent to new terminal

Advantages

- Opens up the airport-owned land on the east side of the airport for development and revenue production, effectively enlarging the airport
- No phasing, passenger/tenant inconvenience required – immediate changeover once completed
- New construction offers significant sustainability opportunities
- While development costs are higher in PAL 1, expansion to meet PAL 2 is significantly reduced with the ability to feasibly expand beyond the planning horizon
- Avoids the need for parking structure, tenant displacement, or land acquisition
- New site and terminal allows for greater opportunity to express the theme and vision for the Durango region to travelers and residents
- The availability of former terminal site and apron allows for the recruitment of aviation-related uses, which promotes additional revenue diversification and economic development

Disadvantages

- Significant costs related to new airfield facilities on the east side of the airfield
- Higher PAL 1 development costs compared to west side alternatives due to new infrastructure required on east side of airport
- New roadway and intersection with State Highway 172 will require coordination with CDOT and potential costs to project
- Environmental concerns will require additional study and possible mitigation
- Increased traffic on CR 309A, especially at intersection with new airport road



Next Steps

- Continued development of alternatives
- Identify Preferred Alternative
- Develop Airport Layout Plan drawing set
- Development of the Financial Implementation Plan
- On-going public outreach

Questions and Comments

To learn more about the Airport Master Plan visit:

www.flydurango.com

Select *Airport Master Plan*

Contact Information:

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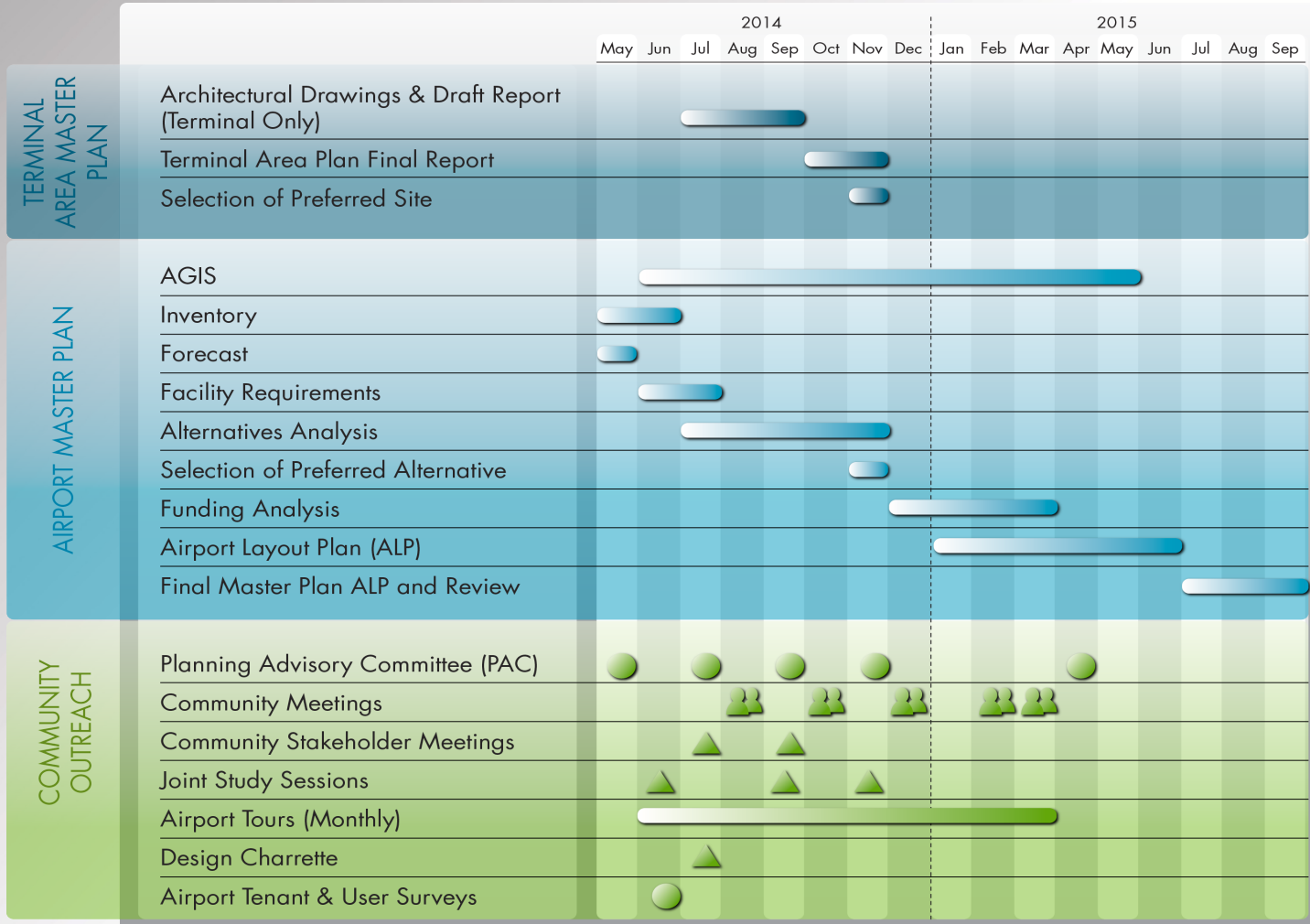
Dave Nafie, Aviation Planning Manager

Dave.Nafie@jviation.com

303.524.3027



Project Timeline



Public Involvement Efforts

Public Engagement and Education

Meetings & Engagement

- ✓ Surveys (Passengers, Tenants & Users)
- ✓ Airport Tours (General Public)
- ✓ Open Houses (General Public)
- ✓ Stakeholder Meetings (Targeted Audience)
- ✓ Joint Study Sessions (Targeted Audience)
- ✓ Public Advisory Committee (PAC)

Communication & Education

- ✓ Airport Website
- ✓ Media outreach (PSA's & Display Ads)
- ✓ Brochures
- ✓ Informational Video (upcoming)

Social Media

DESTINATION DRO WEBSITE:

www.flydurango.com

Select *Airport Master Plan* for project related documents

DURANGO AIRPORT AIRFARE CLUB:

Sign up at www.flydurango.com



VIRTUAL CITY HALL:

www.durangogov.org/virtualcityhall



TWITTER:

<https://twitter.com/DROAirport>



FACEBOOK:

www.facebook.com/DROAirport



Airport Tours

Destination:
DRO



GO WHERE YOUR BAGS GO!

TOURS ARE FREE TO THE PUBLIC.

Space is limited, so please RSVP to reserve a slot. Please remember to specify which date you'd like to take the tour!

SIGN UP HERE:
<http://sites.jviation.com/dro/airport-tours.html>

Tours will be held on the 1st Thursday of each month at 2:30P.M.

- September 4th
- October 2nd
- November 6th
- December 4th

