

## **Master Plan**

Planning Advisory Committee July 17, 2014



### Planning Advisory Committee – PAC Welcome

Welcoming Comments
 Kip Turner, DRO Airport Manager

 Introductions
 Planning Advisory Committee (PAC) members
 DRO Staff

 Jviation staff





### **Meeting Expectations**

PAC members will leave with:

- Insight into general perceptions and future needs regarding the Airport and its facilities
- Knowledge of the inventory and forecasting work-to-date
- Understanding of airport terminal facility requirements
- An awareness of next steps



## **Meeting Ground Rules**

- Start on time, end early
- One person speaks at a time
- Honor diversity of opinions
- Be hard on the issue, not the person
- Participate fully
- No sidebar conversations
- Stay focused and on point
- Disclose financial interests related to the airport
- Turn cells phones off/vibrate
- Use humor!



### **Master Plan Process**

	INVESTIGATION	SOLUTIONS	IMPLEMENTATION							
	Pre-Planning	Alternatives	<b>Financial Planning</b>							
	Inventory	Analysis	Improvement Plan							
MASTER	Forecasts and	Contingency	(CIP) Final Master Plan Documentation Airport Layout Plan (ALP) DOCUMENTATION							
PLAN PROCESS	Planning Activity Levels	Development								
	Facility Requirements	Identification of Preferred Alternatives								
	PREPARATION	EVALUATION								
	PUBLI	C O U T R	ЕАСН							

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# Public Engagement & Education



Welcome

DRO

Durango, CO 8 970) 382-605

Ely Durango

GE

Back to Tos



Durango, CO 81303 (970) 382-6050 Fly Durango

MASTER PLAN

fB

Home

News

Documents

Schedule

(PAC)

Meetings "Go Where Your Bag Goes"

Airport Tours

Helpful Links

Comments Contact Us

1000 Airport Rd

FAQs

Planning Advisory Committee

Destination: DRO



Meetings

· Meeting Minutes

· Presentation

Joint Study Session, June 10, 2014:

#### Go Where Your Bag Goes

Docum

Schedul (PAC Meeting "Go Where Your Bag Go

Airport Tours Helpful Links

FAQs

Comments

Contact Us

#### **Airport Tours**

Take a behind-the-scenes look at Durango-La Plata County Airport! These tours will give you an inside look into the complex and fast-paced operations of our airport. See where your bags go, take a look at our state-of-the-art emergency response equipment, and get a glimpse of what it takes to move all that snow off our 10,000 foot runway! Tours are free to the public. Space is limited, so please call to reserve a slot.

Dates and times will be posted soon!

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MASTER PLAN

nber 9 or 18, 2014 ber 15, 2014 ber 10, 2014

ber 20, 2014 er 18, 2014

19. 2015



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## Postcard, Surveys, PAC



- ✓ 1<sup>st</sup> City Council/County Commissioners briefing complete
- ✓ Airport tours for PAC complete
- Outbound passenger surveys complete
- Tenants & users surveys being distributed
- ✓ Focus groups to follow
- ✓ Video production to begin



1. DRO is a vital gateway to visitors who arrive by air, and it is important to present the DRO image to them through our terminal facilities.



2. The past 8 years have seen strong growth in the region, and it will continue to grow at least a moderate pace into the foreseeable future.



3. Any new investment in terminal facilities should place a high value in sustainable development.



4. Major investments in public facilities should meet current and projected needs for at least 40 years.



5. The growth of airline service is straining existing facilities, but also presents a unique opportunity to build community support for a long term solution.



 Maintaining an aging facility is worth the increased operation and maintenance costs.



7. Airport owned land located opposite the terminal (on the east side of the airfield) should be developed for aviation use.



8. Modern amenities (such as high speed WiFi, charging stations, interactive advertising, food and travel concessions) in airport terminals enhance passenger spending and traveler satisfaction.



9. The demand for reliable air service in Durango and the Four Corners region will continue to increase over time from current levels.



10. The Airport should be sensitive to environmental resources and concerns (i.e., air, noise, water, lighting) when considering future development.



11. Corporate General Aviation is an important element of the Airport, and future growth areas should be preserved and enhanced.



12. Enhancing revenue opportunities from nonairline business activity and from non- aviation tenants is vital to the future economic health of the Airport and the community.



## **Outbound PAX Feedback**

- Conducted on July 16, 2014
- > 52 in-person interviews completed
- Questions covered residence, purpose of travel, issues of airfare, convenience, reliability, ratings of quality of experience, amenities & services, concessions, parking, etc.
- Respondents were a mix of local and visitors (50/50); recreation and business travelers (60/40)
- Local PAX from DRO, ABQ, FMN, Aztec, Pleasanton, Hesperus, Del Norte, Cortez
- Most noted items for future planning: air fares are too high, need a direct Houston flight, more external roadway signage, wait time for bags too long, lack of food service/concessions in secured hold, additional charging stations/amenities needed in secured hold





# >> Inventory

### **Airport Overview**





### **Inventory Elements**

- 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



### **Pavements**

ltem	Description
Runway 3/21	9,201 feet by 150 feet
	25 foot Paved Shoulders
	Consists of Dense Graded Grooved Asphalt
	Published Strength: 95,000 lb Single Wheel Gear (SWG), 150,000
	lb Dual Wheel Gear (DWG), 210,000 lb Dual Tandem Wheel
	Gear (DTG)
Taxiways	Parallel Taxiway A
	Connector Taxiways A1 through A9 and C
Aprons	Commercial: 25,168 square yards
	General Aviation (GA) / Fixed Base Operator (FBO): 53,724 square
	yards
	North GA: 25,263 square yards
	U.S. Forest Service: 21,780 square yards



#### PCI = Pavement Condition Index



# Parking

Lot		Number of Spaces	Number of Handicap Spaces
	Main Lot	388	8
	Credit Card Lot	276	3
	Overflow Lot	142	0
	Rental Car Lot	219	0
	South Employee	15	0
	North Employee	60	0





## **Environmental Overview**

#### Wetlands





#### Noise



Historic



Hazardous Materials



### **Endangered Species**





# >> Aviation Forecast

### **Forecasting Sources and Methods**

- FAA Terminal Area Forecast (TAF) 2014
- FAA Form 5010-1, Airport Master Record
- > Woods & Poole Economics
- FAA Aerospace Forecasts, FY 2014–2034
- CDOT Aeronautics' State Aviation System Plan
- FAA Advisory Circular 150/5070-6B, Airport Master Plans
- Forecasting Aviation Activity by Airport, GRA, Inc.



# Strong Enplanement Growth DRO Enplanements 2000 – 2013



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### **Passenger Enplanements**

**Per Day Each Way (PDEW) 2004 – 2012** 



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### Passenger Enplanements – Forecast Comparisons and Methods Used





### Preferred Enplanement Forecast -DRO Enplanements 2000 - 2035





### Historic Commercial Operations 2002 – 2013

Year	Commercial Operations
2002	18,726
2003	18,888
2004	18,875
2005	18,950
2006	19,088
2007	19,240
2008	11,960
2009	11,960
2010	11,960
2011	11,921
2012	11,883
2013	11,784



## **Commercial Operations**

Derivative Forecast of Enplanements

- Assumptions about Average Seats per Departure
- Assumptions about Load Factor Over 80%

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

Compound Annual Growth Rate – 0.8%



### **GA Forecast Summary**

### GA Operations -

- Sources for Historical Data
- Growing at 1.4% Annually
- From 35,693 in 2015 to 47,135 in 2035
- Local vs. Itinerant Operations Percentage

### Based Aircraft -

- Growing at 1.9% Annually
- From 71 aircraft in 2015 to 90 aircraft in 2035
- Includes 3 based jets, none currently based at DRO

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### Critical Aircraft and Airport Reference Code (ARC)

- Most demanding aircraft or family of aircraft that account for at least 500 annual operations.
- Currently: Airbus A319 (Frontier)
  - ARC C-III
- Also: Firefighting Aircraft, up to C-130J
  - ARC C-IV
- Also: Business Jets with higher approach speeds
  - ARC D-II, D-III
- Future: Maintain the current ARC of D-IV



### Critical Aircraft AIRPORT REFERENCE CODE (ARC)



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## **Overall Forecast Summary**

- Passenger Enplanements
  - 3.5% Average Annual Growth Rate
  - Projected to handle over 400,000 enplanements by 2035
- Commercial Operations
  - 0.8% Average Annual Growth Rate
  - More seats per departure, maintain Load Factors above 80%
- General Aviation
  - Operations: Very modest growth overall at 1.4%
  - Stronger in the Business Aviation category
  - Based Aircraft: Adding about 1 new airplane per year
  - Includes jets based at DRO and associated hangars, flight departments
- Airport Reference Code remains at D-IV





# Commercial Terminal Facility Requirements





## **Existing Floor Plan**



- Temporary Departure Lounge (4,500 sf) Departure Lounge (2,812 sf)
  Departure Lounge (2,812 sf)
  Baggage Claim (2,516 sf)
  Outbound Baggage & Operations (4,139 sf)
  Ticketing Space (12,700 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

N





Existing Terminal Floor Plan





**Existing Deficiencies** 







### **Existing Deficiencies**





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**Existing Deficiencies** 







**Existing Deficiencies** 







#### **Passenger Enplanement Forecast**



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### **Daily Commercial Flight Departures: 2013**



### **Daily Commercial Flight Departures: 2024**



### **Daily Commercial Flight Departures: 2034**



## **Industry Reference Standards**

Federal Aviation Administration (FAA)

- Advisory Circular 150/5300-13A
- Recommended Security Guidelines for Airport Planning, Design and Construction
- International Air Transport Association (IATA)
  - Airport Development Reference Manual

### Transportation Security Administration (TSA)

• Security Screening Space Requirements

### Transportation Research Board (TRB)

• Airport Cooperative Research Program Reports











### **Passenger Level of Service (LOS)**

LOS "A"

LOS "C"

LOS "F"



*Pedestrian Planning and Design*, John J. Fruin, Metropolitan Association of Urban Designers and Environmental Planners, 1971 Excellent LOS, free flow, no delays and excellent level of comfort

Very good level of service. LoS C and C+ is the norm in the industry

Unacceptable LOS, cross flow, long delays and unacceptable level of comfort

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## LOS & Terminal Size

	Existing	2014	2024
PAX	150 (pre 9/11)	263	340
LOS	"C"	"C"	"C"
Area (SF)	37,000/ 41,500	82,100	110,800



MASTER PLAN TERMINAL FACILITIES REQUIREMENTS												
	Existing	_	Planning Activity Levels									
Description	2013	3	2014	2024	2034							
Annual Enplaned Passangers	105 000		195 000	290.000	410 000							
	195,000		263	200,000	475							
Number of Gates	203		203	540	423							
Tatal Tarminal Area (Daundad)	44 500 66			110 000 of	107.000 of							
Total Terminal Area (Rounded)	41,500 Sf		82,100 St	110,800 Sf	137,600 St							
AIRLINE SPACE												
Airline Space	12,700 sf	Ŧ	26,924 sf	34,131 sf	42,758 sf							
Ticket Counter Length	48 lf		90 lf	114 lf	135 lf							
Ticket Counter Area	556 sf	:	900 sf	1,140 sf	1,350 sf							
Ticket Counter Active Area	556 sf	:	900 sf	1,140 sf	1,350 sf							
Ticket Counter Queuing	1,414 sf		2,250 sf	2,850 sf	3,375 sf							
Ticket Offices and Administration	639 sf		2,700 sf	3,420 sf	4,050 sf							
Outbound Baggage Area	3,430 st		3,200 st	3,200 st	4,000 st							
Baggage Claim Length	50 lf		139 lf	1/9 lf	224 lt							
Baggage Claim Area	2,516 Sf		4,070 sf	5,247 Sf	6,567 ST							
Operations Facilities	709 SI	:	2,000 SI	3,200 SI	4,100 SI							
Passenger Departure Lounges	2 812 of	:	1,000 SI	2,300 SI	3,000 SI							
Temporary Space (Tent)	2,012 SI 4,500 sf	:	9,044 SI Ν/Δ	N/A	Ν/Δ							
	4,000 31		14/7 (	14/7 (	14/7 (							
	0.500		44.000	10.000	40 504							
ISA Spaces	2,500 Sf		14,830 st	16,080 sf	19,524 Sf							
Security Screening Checkpoint	1,377 SI		8,150 SI	8,700 SI	11,384 SI							
Radada Scrooper Area	504 of	:	4,090 SI	4,690 SI	5,110 SI 1,500 of							
Dayyaye Scieener Area Baggage Inspection Support Eacilities	504 SI	:	930 SI	1,200 SI	730 of							
Administration offices (TSA)	597 sf	:	400 SI	700 sf	730 SI 800 sf							
	557 51		000 31	100 31	000 31							
CONCESSIONS	4.000		0.500	5 000	7.000							
Concessions	4,200 st		3,500 st	5,600 st	7,200 st							
News/Gifts/Sundry	1,254 Sf		400 sf	600 sf	800 sf							
Other Deverage	1,640 Sf		1,400 sf	2,200 sf	2,800 sf							
Other Revenues	235 ST		1,000 sf	1,600 sf	2,100 sf							
Ground Transportation	1,021 SI		700 SI	1,200 SF	1,500 SI							
PUBLIC SPACE												
Public Space	13,500 sf		28,160 sf	44,560 sf	56,230 sf							
Public Circulation	12,263 sf		24,500 sf	40,000 sf	50,700 sf							
washrooms	1,159 Sf		3,660 st	4,560 ST	5,530 st							
AIRPORT ADMINISTRATION*												
Total Airport Administration	2,400 sf	F	5,000 sf	5,000 sf	5,000 sf							
UTILITIES												
Utilities Space	1,900 sf	F	3,686 sf	5,376 sf	6,804 sf							

MASTER PLAN TERMINAL FACILITIES REQUIREMENTS										
	Planning Activity Level									
Description	2013	2014	2024							
Annual Enplaned Passengers TPH Enplaned	195,000 263	195,000 263	290,000 340							
Number of Gates	4 41 500 sf	4 82 100 cf	5 110 800 sf							



**Ticket Counter Queuing** 

**Baggage Claim Area** 

2,516 4,070 5,247

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MASTER PLAN TERMINAL FACILITIES REQUIREMENTS										
	Existing	Planning Activity Level								
Description	2013	2014	2024							
Annual Enplaned Passengers TPH Enplaned	195,000 263	195,000 263	290,000 340							
Number of Gates Total Terminal Area (Rounded)	4 <b>41,500 s</b> f	4 <b>82,100 sf</b>	5 <b>110,800 sf</b>							



**Security Screening Checkpoint** 

**1,377 4,070 5,247** 

Passenger Departure Lounge

**2,812 9,044 11,554** 

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## **Comparable Terminals: PIER**



Newport News Williamsburg International Airport (PHF) 2012 Enplanements: 314,138 Number of Gates: 9



Springfield -Branson National Airport (SGF) 2012 Enplanements: 364,689 Number of Gates: 10





Eugene Airport (EUG) 2012 Enplanements: 407,124 Number of Gates: 8



Northwest Florida Beaches International Airport (ECP) 2012 Enplanements: 422,750 Number of Gates: 7

Durango - La Plata Airport (DRO) 2012 Enplanements: 186,567 Number of Gates: 4





## **Comparable Terminals: LINEAR**



Great Falls International Airport 2012 Enplanements: 186,790 Number of Gates: 5



Montgomery Regional Airport (MGM) 2012 Enplanements: 182,313 Number of Gates: 4



Bozeman Yellowstone International Airport (BZN) 2012 Enplanements: 434,038 Number of Gates: 8



Asheville Regional Airport (AVL) 2012 Enplanements: 318,395 Number of Gates: 7



Durango - La Plata Airport (DRO) 2012 Enplanements: 186,567 Number of Gates: 4





## **Comparable Terminals: REGIONAL**



Grand Junction Regional Airport (GJT) 2012 Enplanements: 217,369 Number of Gates: 4



Missoula International Airport (MSO) 2012 Enplanements: 303,886 Number of Gates: 6



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



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



Durango - La Plata Airport (DRO) 2012 Enplanements: 186,567 Number of Gates: 4



























# » Questions, Comments?





# » Next Steps

## **Project Timeline**

ANNA

					20	14				-				2015				
		May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
ASTER	Architectural Drawings & Draft Report (Terminal Only)			_	_	_	,											
LAN M	Terminal Area Plan Final Report								)									
AREA	Selection of Preferred Site																	
	AGIS														,			
Z	Inventory	_		)														
PLZ	Forecast																	
TER	Facility Requirements																	
MAS	Alternatives Analysis							_	)									
RT /	Selection of Preferred Alternative								)									
C C C C C C C C C C C C C C C C C C C	Funding Analysis												)					
A	Airport Layout Plan (ALP)															)		
	Final Master Plan ALP and Review															_		
~ _	Planning Advisory Committee (PAC)				,		,		,				0					
	Community Meetings				33		22		33		2	22						
	Community Stakeholder Meetings																	
	Joint Study Sessions																	
	Airport Tours (Monthly)												)					
	Design Charrette																	
	Airport Tenant & User Surveys		C	)														

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### Next Steps & Phase II Deliverables\*\*

### Working Paper #1 Comments - due by August 1, 2014

Complete Tenant/User Surveys
 Facility Requirements & Alternatives
 Stakeholder/Focus Group Meetings
 Joint Study Session – September 9th
 PAC Meeting – September 18th

**\*\*Pending FAA Grant** 





# » Questions, Comments?





# >>> Thank You!

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