Dawson Community Airport (GDV) – Glendive, MT

Airport Master Plan Kickoff Meeting – December 19, 2024

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Agenda

- Introductions
- Airport Master Planning
- Roles & Responsibilities
- Planning Considerations
- Existing Conditions
- Key Issues
- Open Discussion





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Introductions

- Project Team
  - Aviation Planners – (Office)
    - Senior Aviation Planner - Kent Penney – (Rapid City)
    - Aviation Planner – Keith Kaspari – (Remote)
  - Airport Engineer – Justin Zindell - (Billings)
- Dawson County & Airport Board
- Agencies Involved
  - FAA – Carol Strizich, Planner (Helena, ADO)
  - FAA – Tracy Stoner, Project Manager (Helena ADO)
  - MT-DOT Aeronautics Division
- Planning Advisory Committee (PAC)
  - Craig L. Hostetler, GDV Airport Manager
  - Craig Stebbins, Chair, GDV Airport Board
  - Joe Sharbono, GDV, County Commissioner
  - Sean Bonato, Pilot
  - Tacee DeSaye, Executive Director, Glendive Chamber of Commerce
  - Todd Opp, Safety Manager, Glendive Medical Center

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Roles & Responsibilities

KLJ Planning Team
- Manage Study, Complete Technical Work, Provide Overall Analysis, Alternatives and Recommendations

Planning Advisory Committee
- Identify Airport Community Wants & Needs
- Ask Questions & Review Analysis
- Provide Feedback & Recommendations

Dawson County
- Provide Guiding Principles, Make Decision(s), Review and Approve Planning Documents & ALP

FAA / MT-DOT Aeronautics Division
- Provide Technical Guidance, Approve Aviation Forecasts, Review & Provide Consensus of AMP and Approve ALP



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Airport Master Plan

What is it?

"Road Map" for meeting aviation needs

Preserves flexibility to respond to future demands

Allows airport to cost-effectively keep pace with aviation growth

Considers environmental and socioeconomic impact of development

Components



AIRPORT MASTER PLAN NARRATIVE REPORT



AIRPORT LAYOUT PLAN



RUNWAY SAFETY AREA INVENTORY



EXHIBIT A AIRPORT PROPERTY MAP



AERONAUTICAL SURVEY

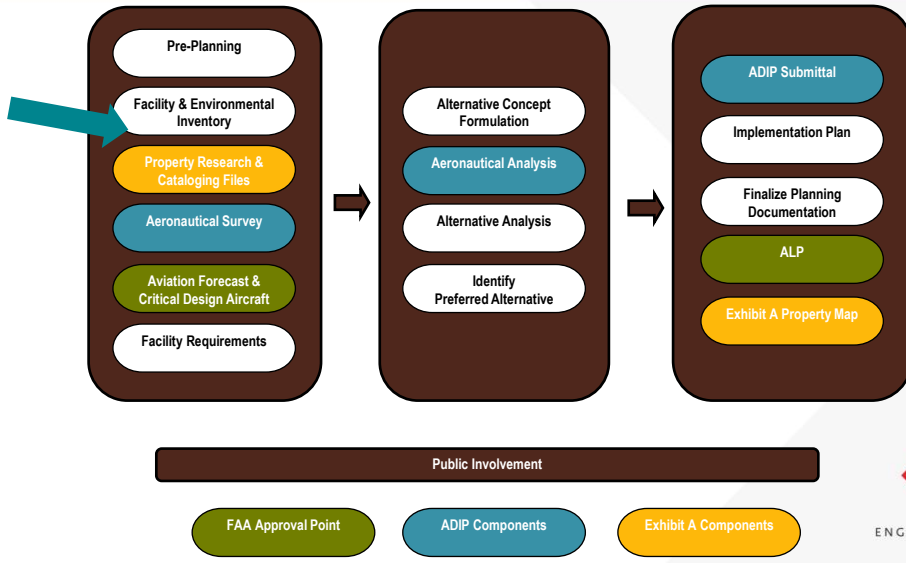
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Why is Airport Planning Needed Now?

- Update the Airport Layout Plan (ALP) from 2008 to current FAA design standards
- Develop short-, mid-, long-term year (5-20) Airport Capital Improvement Plan (ACIP)
- Examine the current runway capabilities
- Examine areas for future hangar development
- Examine the land use controls (ownership, easements, etc.)

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Project Workflow



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Dawson Commuinity Airport - Master Plan Update

Project Tasks	2024						2025												2026						
	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul
Study Design																									
Facility & Environmental Inventory																									
Critical Design Aircraft/Forecasts																									
Facility Requirements																									
Alternatives Analysis																									
Implementation Plan																									
Aeronautical Survey																									
Exhibit A																									
Airport Layout Plan & eALP																									

Agency Review

Project Meeting(s)
Public Involvement
FAA and/or MT Approval
Completed Tasks

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Updated December 2024

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ALP Approval Timeline

18 to 30 months

FAA ADO Review

- ALP sent to the FAA for ADO review
- 18-24 months for review
- FAA will closely limit any development during this time unless it conforms with previous ALP

OE/AAA Filing

- KLJ to edit ALP based on FAA comments
- As approved by FAA, the ALP will be filed in OE/AAA
- All branches of FAA will review
- 60-90 days for review

Route for Signatures

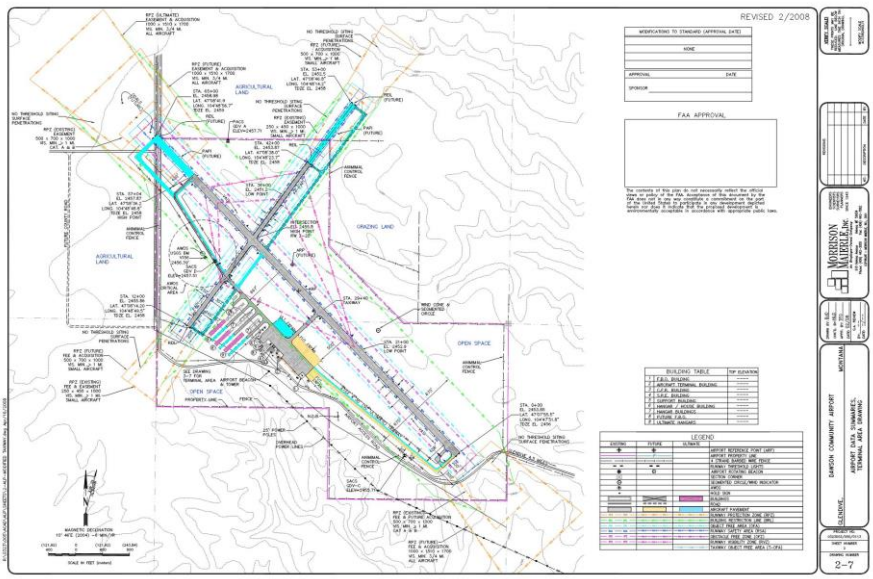
- After OE/AAA approval, the ALP is routed for signatures to the Sponsor, State and FAA
- Can take another 4-6 months before final FAA letter and signatures are completed

Typically, after OE/AAA filing, then projects can begin. It is also important to note that environmental for any project can add 6-12 months.

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Current Glendive Airport Layout Plan (ALP) - CY-2008



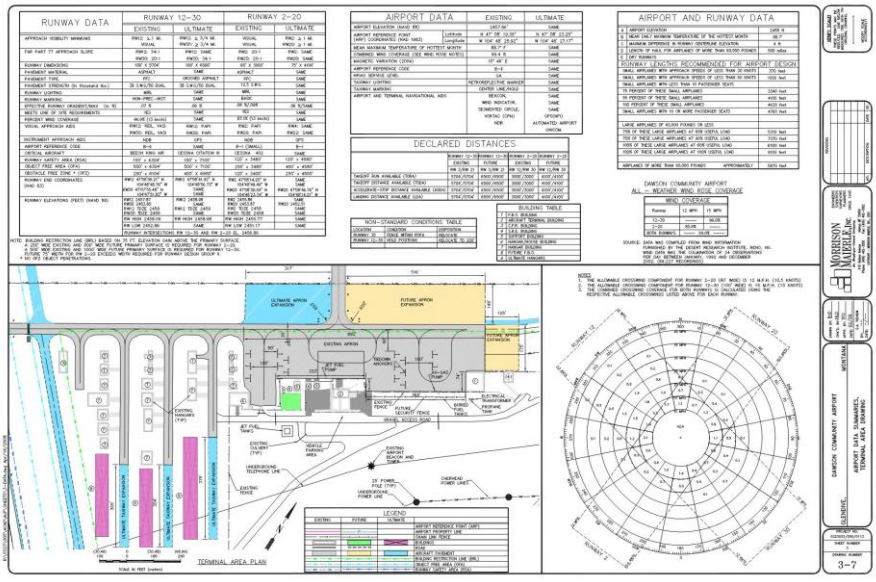
- R/W 12/30 Existing: 5,704' x 100'
- ARC: B-II
- R/W 12/30 Future: 6,500' x 100'
- ARC: B-II

- R/W 2/20 Existing: 3,000' x 60'
- ARC: B-I (Small)
- R/W 2/20 Future: 4,100' x 75'
- ARC: B-I

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Airport Layout Plan – Terminal Area



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Weather Analysis

ALL-WEATHER WIND COVERAGE			
CONFIGURATION	CROSSWIND COMPONENT		
	10.5 KNOTS	13 KNOTS	16 KNOTS
RUNWAY 12-30	91.10%	96.53%	98.89%
RUNWAY 2-20	81.69%	88.77%	93.93%
	-	-	-
COMBINED	97.70%	99.15%	99.78%
SOURCE: KGDV AWOS (2014-2023, HOURLY) FROM NATIONAL CLIMATIC DATA CENTER			
85,773 TOTAL OBSERVATIONS			

INSTRUMENT FLIGHT RULES (IFR) WIND COVERAGE			
CONFIGURATION	CROSSWIND COMPONENT		
	10.5 KNOTS	13 KNOTS	16 KNOTS
RUNWAY 12-30	80.30%	90.95%	96.97%
RUNWAY 2-20	-	-	-
	-	-	-
COMBINED	80.30%	90.95%	96.97%
SOURCE: KGDV AWOS (2014-2023, HOURLY) FROM NATIONAL CLIMATIC DATA CENTER			
4,518 TOTAL OBSERVATIONS			
IFR = VISIBILITY LOWER THAN 3 MILES OR CEILING LOWER THAN 1,000 FEET			

Weather Condition	Percentage	Days Per Year	Hours Per Year
VMC	94.73%	345.8	8,299
Usable IMC	4.26%	15.5	373
Usability	**98.99%**	**361.3**	**8,672**
Below Weather Minimums	1.01%	3.7	88
Total	**100.00%**	**365.0**	**8,760**

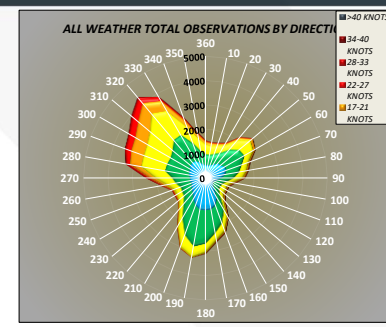


Table B-1. Allowable Crosswind Component per Runway Design Code (RDC)

RDC	Allowable Crosswind Component
A-I and B-I *	10.5 knots
A-II and B-II	13 knots
A-III, B-III, C-I through D-III D-I through D-III	16 knots
A-IV and B-IV, C-IV through C-VI, D-IV through D-VI	20 knots
E-I through E-VI	20 knots

Note: * Includes A-I and B-I small aircraft.

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Existing Airfield

- Current ADG: Design Group A/B-II
- Primary Runway 12-30 at 5,704’ x 100.’
  - Asphalt / Grooved / In “Good” Condition
  - RNAV / GPS Approach both ends
  - Runway Marking – Non-precision
    - REILs and VASIs on both ends
    - 3-Step Runway Edge Lights
- Crosswind Runway 2-20 at 3,002’ x 60.’
  - Asphalt in “Good” Condition
  - Runway Markings – Visual
    - PAPI on both ends
    - 3-Step Runway Edge Lights



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Terminal & Apron Area

- Apron
  - 23,000 SY of paved area.
  - 15 tiedowns (ADG-I)
- Terminal & SRE Buildings
- Fuel – Above and Under Ground Storage Tanks
  - Jet A
  - AvGas



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Hangars

- 20 aircraft storage hangars
- Taxilanes are 30’ wide
- Gate access



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Based Aircraft & Operations

- Based Aircraft
  - 20 Single Engine Aircraft
- Operations
  - 5,400 Total Itinerant
  - 3,700 Total Local
  - 9,100 Total Air Traffic Operations
- FAA Change in Use of Forecasts







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Critical Design Aircraft

Aircraft Approach Category B

- Represents speed that aircraft approaches runway
- 91 to 121 Kts

Airplane Design Group II

- Represents wingspan and height of aircraft
- 49’ to 79’ wingspan

Taxiway Design Group 2A

- Represents pavement width and turning clearance needed by aircraft
- Main Gear Width – 15’ to 20’
- Cockpit to Main Gear – 20’ to 40’



Based on Cargo Aircraft

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Verified Operations

ID	Make	Model	Type	AAC	ADG	TDG	MTOW (lbs.)	10-Year Ops	2023 Ops
B190	Beechcraft	1900D	Turboprop	B	II	2-A	17,120	144	74
BE20	Beechcraft	King Air 200	Turboprop	B	II	2-A	12,500	3,787	278
BE99	Beechcraft	Airliner 99	Turboprop	B	I	1-A	10,900	3,889	342
BE9L	Beechcraft	King Air C90	Turboprop	B	II	1-A	10,100	580	47
C402	Cessna	402	Piston	B	I	2-A	6,850	8,399	371
C414	Cessna	414A		B	I	2-A	6,750	471	43
C560	Cessna	Citation Ultra		D	II	2-A	16,630	219	41
C56X	Cessna	Citation Excel	Turbojet	D	II	2-A	20,200	55	4
CL35	Bombardier	Challenger 350	Turbojet	C	II	1-B	40,600	10	4
CL60	Bombardier	Challenger 650	Turbojet	C	II	1-B	43,100	67	6
GLF5	Gulfstream	G-V	Turbojet	D	III	2-B	90,500	8	2
P212	Tecnam	P-2012	Piston	B	I	1-A	8,113	1,193	887
PC12	Pilatus	PC-12	Turboprop	A	II	2-A	10,450	652	89
Various				A/B	I				43
Various				A/B	II				19

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Open Discussion / Talking Points

- Daily Airport Users / Airport Events
- Airfield Capabilities
- Landside Challenges
- Terminal / Hangar / Equipment
- Demand for Hangars/Operators
- Any over-the-horizon challenges?



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Next Steps

- Complete Airport Inventory
- Outreach to Stakeholders (Mary Lynch)
- Draft Aviation Forecasting
- Draft Facility Requirements

- Next Meeting: Facility Requirements & Airfield Alternatives

- **Website: https://inputcentral.com/gdv-airportplan**

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Questions/Comments

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