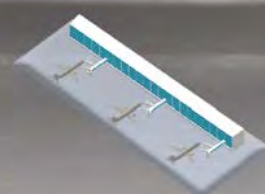




OGD Development-Feasibility Study

Executive Summary for
Congressman Bishop
August 2015



Airline
Terminal



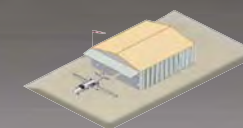
Cargo



MRO



Mixed-Use
Aviation



General
Aviation



Non-Aviation
Commercial
Development

Table of Contents

	Page No.
1 Study Objectives and Overview	3
1.1. Objectives.....	3
1.2. Next Steps, Short and Long-Term	3
2. Airfield Opportunities and Constraints	4
3. Commercial Development Findings.....	5
3.1 Market Overview: Employment Trends.....	5
3.2 Market Overview: Industrial and Office Market	6
3.3 Market Overview: Retail and Hotel Market	6
3.4 Supply Analysis: Industrial and Office.....	7
3.5 Supply Analysis: Retail	9
3.6 Supply Analysis: Hotel.....	9
3.7 Outside the Fence (OTF) Demand	10
3.8 Inside the Fence (ITF) Demand	11
3.9 Economic Impact Analysis.....	11
4. Scheduled Passenger Activity.....	13
4.1 Levels of Service; Minimum, Mid-Level, Max	14
4.2 Economic Results.....	16

	Page No.
5. Air Cargo Activity	17
6. Military Prospect.....	18
6.1 HAFBN.....	18
6.2 Scorpion.....	18
7. Alternatives Analysis for Facilities Siting	22
7.1 Potential Development Areas Generalized	23
7.2 Configuration A	24
7.3 Configuration B	25
7.4 Configuration C	26
7.5 Configuration D	27
7.6 Configuration E	28
7.7 Configuration F	29
8. Preferred Development Discussions	30
8.1. Minimum Level of Service	31
8.2. Mid Level of Service.....	32
8.3. Maximum Level of Service.....	33
9. Funding	34
10. Preliminary Configuration.....	36

1. STUDY OBJECTIVES AND OVERVIEW

- The Ogden-Hinckley Airport is 40 miles north of Salt Lake City International Airport. It has a primary catchment area of **750,777** residents and a total catchment area of over 1 million residents. The six counties in the primary market area account for 28.2% of the Salt Lake metro area population.

- The Ogden-Hinckley Airport is currently served by Allegiant Airlines. Passenger load factors have been very high at 90% for 2013 and 89%

1.1. OBJECTIVES

- **COMMERCIAL PASSENGER** - Increase Allegiant Airlines flights and add new service; Add new air service to key hub airports in the region; Add new air service to international markets; Have facilities available to accommodate more flights and increased passengers.
- **AIR CARGO** - Attract new air cargo service by FedEx and UPS; Attract new air cargo service by other contract air cargo carriers; Support belly cargo on scheduled flights.
- **GENERAL AVIATION** - Identify requirements to facilitate growth in corporate and general aviation; Provide airport improvements to meet the needs and help existing clients expand business; **Replace aging facilities with new facilities.**

- **NEW BUSINESS AVIATION AND NON-AVIATION** - Identify target aviation related companies that could locate at the Airport; Determine improvements required to meet needs of target companies; Recruit new aviation related business.

1.2. NEXT STEPS, SHORT AND LONG-TERM

In the near-term (2016-2020) - Work with **Allegiant Airlines** to further develop more passengers and **more flights** to **Phoenix-Mesa Airport.**

Discuss new nonstop service to Las Vegas, Los Angeles, and Oakland.

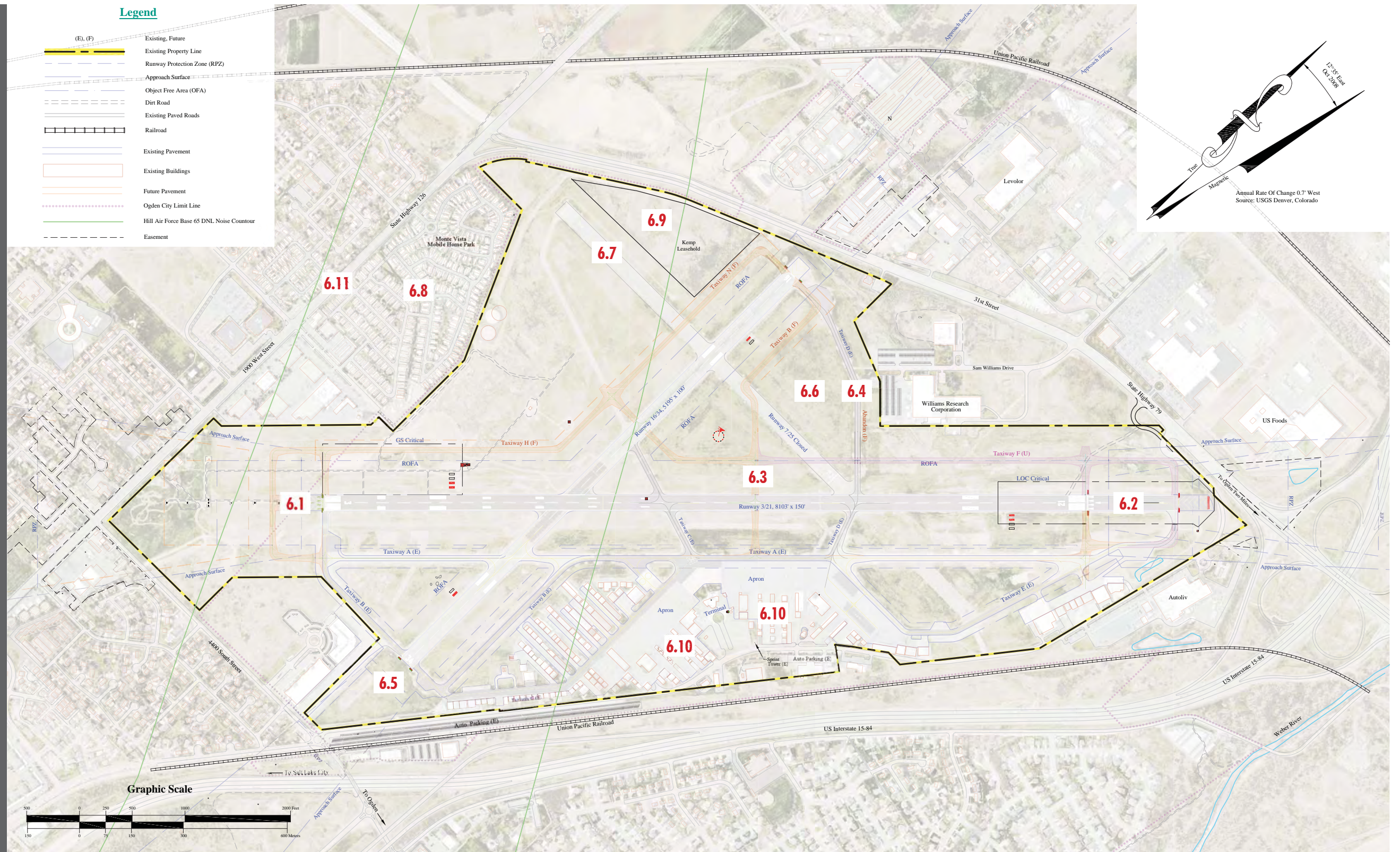
- Meet with **Alaska Airlines** to discuss **new nonstop service** to Los Angeles and Seattle similar to what they provide at Sonoma County Airport.
- Meet with American Airlines to discuss new nonstop regional jet service to Dallas/Ft. Worth and Phoenix-Sky Harbor Airport.

- Meet with Hawaiian Airlines to discuss new nonstop service to Honolulu.
- Meet with United Airlines to discuss new nonstop service to Denver and San Francisco.
- Meet with the Canada and Mexico airlines to discuss new service to these countries.
- Meet with the Delta Air Lines and Southwest Airlines to discuss alternate service.
- Work with Kemp Jet Services and Mountain Valley Aviation in getting additional corporate jets to domicile in Ogden.
- Identify new business opportunities and establish a Marketing Action Plan.

In the long-term (year 2020 and beyond)
Upgrade regional jet and prop service to narrow body aircraft; **Improve the facilities to meet increased number of passengers** from new and expanded air service; **Meet the needs of corporate and general aviation clients;** Have **revenue sufficient to cover the cost** of operation and expansion.

One of the purposes of this feasibility work is to use developed methods to objectively evaluate and assess the future needs and market opportunities from a reasonable use, development, and implementation perspective.

- 6.1 - Additional Take-Off Run for Runway 3
- 6.2 - Runway 21 End Constraints
- 6.3 - Taxiway Re-Configuration to Standards
- 6.4 - Taxiway D Closure and Land Availability
- 6.5 - RNAV Procedure to Runway 16 and 34
- 6.6 - Tower Line of Sight, RPZ, OFA and Critical Areas
- 6.7 - Closure of Runway 7-25
- 6.8 - Potential Disposition of Monte Vista Mobile Home Park
- 6.9 - Potential Disposition of On-Airport Kemp Leasehold
- 6.10 - Potential Disposition of Older Aircraft Hangars
- 6.11 - Road Access and Capabilities



3 COMMERCIAL DEVELOPMENT FINDINGS

- Up to **972,000 SF** of light industrial space could be developed.
- Up to **20,500 SF** of retail can be supported in the terminal building, and a 50,000 SF neighborhood retail center could also be developed.
- Hotel development is viable based projected growth, noise issues and an isolated location make it unsuitable.

3.1 Market Overview: Employment Trends

Recent employment trends and future projections are necessary to understand how growth in certain sectors may affect the potential demand for industrial and office space, as well as retail spending.

The figure to the right outlines the current employment numbers for the Ogden MSA as well as employment projections for the year 2022. As of Q4 2014, total amount of employees in the region was 207,806. The retail trade featured the highest number of employees (25,399). This was followed closely by healthcare/social (24,637), government (23,889), manufacturing (23,646), and education (20,282).

By the year 2022, employment is expected to increase by 17.4% to a total of 244,043. The highest number of employees is projected to be the healthcare/social sector (31,525). This will likely be followed by retail trade (29,349), government (26,673), manufacturing (25,715), and education (23,477).

Employment Projections	Q4 2014	2022 Projection	Growth
Retail Trade	25,399	29,349	15.6%
Healthcare/Social Assistance	24,637	31,525	28.0%
Government	23,889	27,673	15.8%
Manufacturing	23,646	25,715	8.7%
Education	20,282	23,477	15.8%
Accommodation/Food Services	15,413	18,379	19.2%
Construction	13,280	16,272	22.5%
Administration/Support	12,917	15,676	21.4%
Professional/Technical	11,576	15,270	31.9%
Transportation/Warehousing	6,983	7,586	8.6%
Wholesale Trade	5,994	7,340	22.5%
Finance/Insurance	5,990	7,080	18.2%
Other Services	5,918	7,099	19.9%
Arts/Entertainment/Recreation	5,280	5,125	(2.9%)
Information	2,370	2,211	(6.7%)
Real Estate/Rental/Leasing	2,291	2,618	14.2%
Management of Companies	1,250	1,323	5.8%
Utilities	684	325	(52.5%)
Total	207,806	244,043	17.4%

3.2 Market Overview: Industrial and Office Market

The industrial market has been the highest performing sector in the region over the past five years and this trend is expected to continue.

Industrial Inventory	Total SF	Available SF	Vacancy	Avg. Lease Rate	Avg. Sales Price
0 – 5,000 sf	1,140,967	43,332	3.8%	\$0.47	\$112.84
5,000 – 20,000 sf	9,531,231	364,586	3.8%	\$0.40	\$62.34
20,000 – 50,000 sf	10,323,858	672,600	6.5%	\$0.38	\$48.47
50,000 sf +	38,522,649	1,600,913	4.2%	\$0.30	\$45.00
Total	59,518,705	2,681,431	4.5%	\$0.43	\$68.08

Office Inventory	Total SF	Available SF	Vacancy	Avg. Low Rate	Avg. High Rate
Class A	2,155,523	373,344	17.3%	\$16.33	\$19.54
Class B	1,786,428	371,336	20.8%	\$12.13	\$16.15
Class C	838,772	139,295	16.6%	\$9.97	\$13.07
Total	4,780,723	883,975	18.5%	\$11.82	\$15.98

3.3 Market Overview: Retail and Hotel Market

Retail Market	Total SF	Available SF	Vacancy	Low Rate	High Rate
Regional Mall	1,476,729	93,825	6.4%	N/A	N/A
Regional Center	3,286,770	277,128	8.4%	\$16.00	\$24.00
Community Center	5,882,872	911,092	15.5%	\$9.77	\$17.03
Neighborhood Center	1,865,268	207,432	11.1%	\$11.12	\$15.59
Anchorless Strip	1,709,412	327,816	19.2%	\$10.66	\$15.58
Total	14,221,051	1,817,293	12.8%	\$10.48	\$16.51

Hotel Market	Total	Rooms	Avg. Rate	Low Occupancy	High Occupancy
2 Star Hotels	8	606	\$60	40%	70%
2.5 Star Hotels	4	418	\$109	45%	82%
3 Star Hotels	10	1,065	\$124	51%	86%
3.5 Star Hotels	1	193	\$140	55%	80%
Total	23	2282	\$105	47%	81%

3.4 Supply Analysis: Industrial and Office

The Ogden region includes three major industrial/office parks as well as numerous smaller scale professional plazas featuring clustered uses such as medical, legal, and financial services. The map on the next page summarizes the location and details of existing and upcoming industrial/office parks within the Ogden area.

Current Industrial Inventory: 59,518,705 sf

Planned Industrial: 12,863,000 sf

Current Office Inventory: 4,780,723 sf

Planned Office: 10,542,000 sf

1. Business Depot Ogden - Ogden's largest 1,118 acre master planned business park; Located approximately 15 minutes north (9 miles) of OGD by car; 6.5 million sf of industrial and office space with 1.8 million sf of available space.

2. Ogden Industrial and Commercial Park - Approximately 950 acres of industrial and distribution uses; Located just across the street

to the north of OGD.

3. Freeport Center - 680 acre manufacturing, warehousing, and distribution center; Located approximately 20 minutes (10 miles) south of OGD by car; 78 buildings totaling 7 million sf.

4. Kemp Gateway Properties (current and planned) - 47 acre business park with runway access located at OGD; 300,000 sf of occupied office and hanger space; 400,000 sf of land suitable for build-to-suit development with runway access.

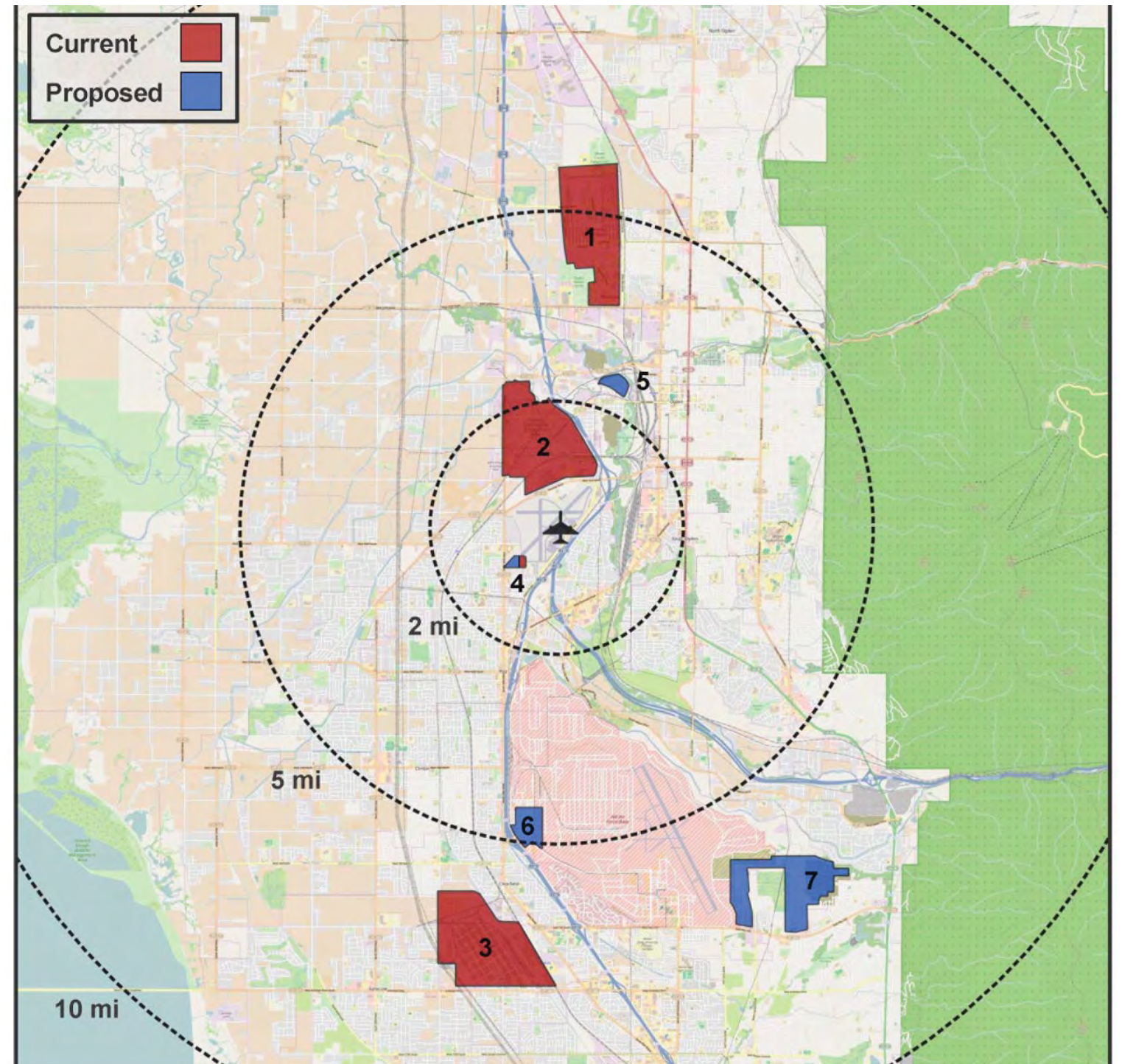
5. Business Exchange Ogden (upcoming) - 60 acre light manufacturing, industrial, and business park; Located approximately 5 minutes (3 miles) north of OGD by car; The project is expected to bring in 150-500 employees; Proposed master plan is designed to incorporate the surrounding Weber River by including a bike path and trail system that will facilitate connectivity.

6. Falcon Hill National Aerospace Research Park (upcoming) - 550 acre

mixed-use research park located at Hill Air Force Base, Located approximately 15 minutes (8 miles) south of OGD by car; 600,000 sf of proposed outside the fence industrial/office space; 650,000 sf of proposed inside the fence industrial/office space with runway access; 45,000 sf of retail space; Five story, 200 room hotel; Buildings will be designed to fully meet the Department of Defense ATFP standards.

7. Eastgate Industrial and Business Park (proposed) - 600 acres of developable land directly to the east of Hill Air Force Base; Located approximately 20 minutes (13 miles) from OGD by car; To facilitate this development, Hill Air Force Base is planning to construct a new east gate that will allow contractors direct access to and from the base.

3.4 Supply Analysis: Industrial and Office Map



3.5 Supply Analysis: Retail

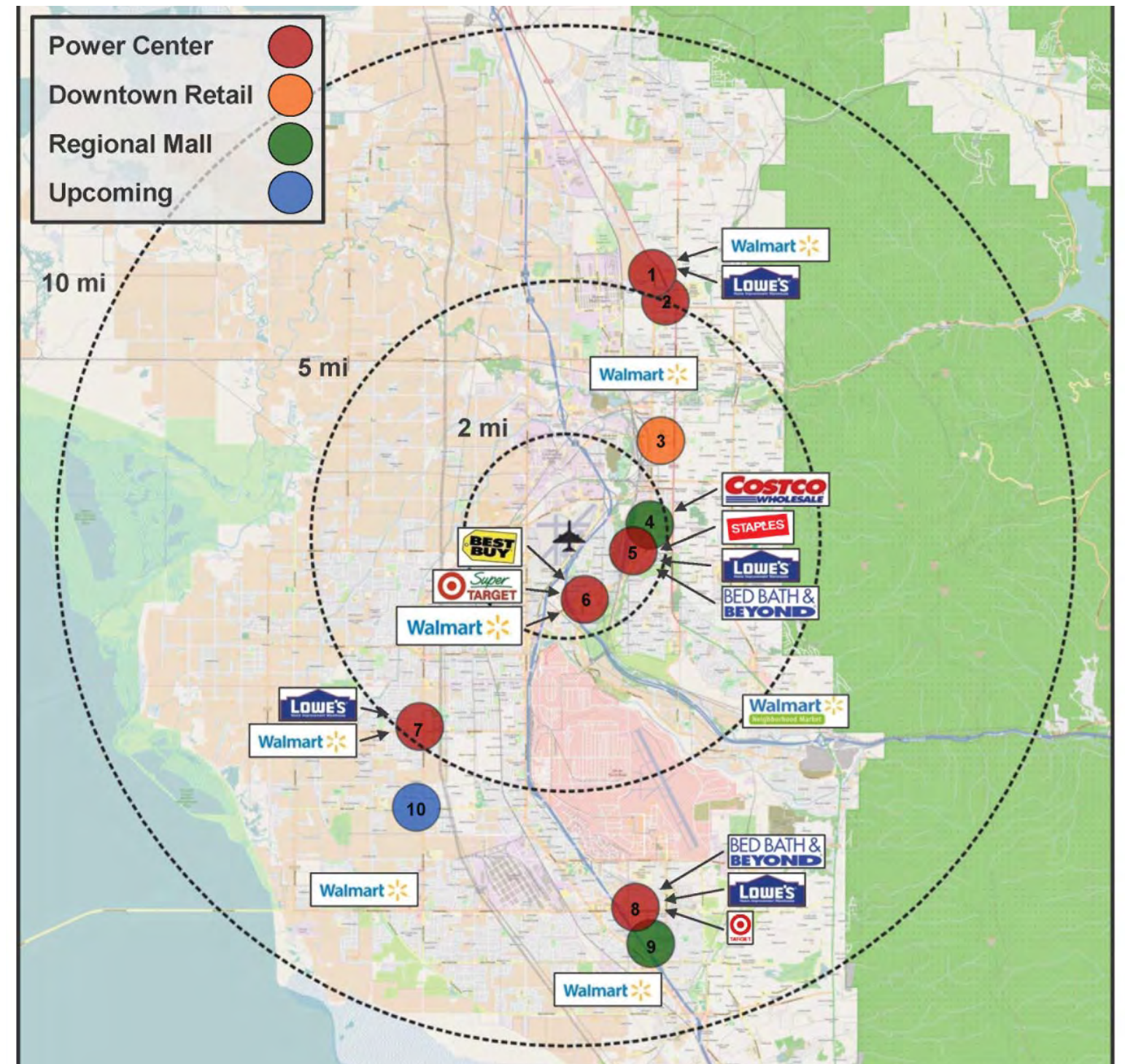
Current Retail Inventory: 14,221,051 sf

Planned Retail: 456,000 sf

- North Street Center
- The Family Center at Ogden 5-Points
- Downtown Ogden
- Newgate Mall
- Riverdale Shopping Center
- The Family Center at Riverdale
- Park Plaza
- Woodland Park Drive Center
- Layton Hills Mall
- West Point Marketplace (Proposed)

3.6 Supply Analysis: Hotel

The Ogden region has a total of 23 hotels and motels, including one 3.5-star hotel, ten 3-star hotels, four 2.5 star-hotels, and eight 2-star motels, adding up to a sum of 2,282 rooms.



3.7 Outside the Fence (OTF) Demand

- HAFB intends to hire approximately 240 graduates for on-base positions each year going forward.
- The number of off-base workers is expected to be double that figure, with 480 new office jobs created every year in Ogden and its surrounding area.
- With 480 jobs created yearly, 805,000 SF of office space will be required in addition to base demand.
- **An estimated 4,270,000 SF of office space will be occupied by 2022.**
- Assuming that the office market achieves a healthy vacancy rate of 10%, approximately 4,745,000 SF of office inventory will be required by 2022.
- Based on projections and regression models, 59,795,000 SF of industrial space is expected to be occupied in 2022.
- Industrial operations arising out of airport/air base activity may require runway access or adjacency.
- Demand for industrial space induced by activity at Hill Air Force Base or Ogden-Hinckley Airport has been considered as 'Inside the Fence'.
- Assuming that the industrial market remains strong and maintains a vacancy rate of 5%, approximately **62,941,000 SF** of office inventory will be required in 2022 to flexibly accommodate the 59.8 Million SF of demand.
- Projected floor space requirements in 2022 exceed current inventory levels by **3,450,000 SF**, which will need to be developed over the next 7 years.
- Ogden Business Exchange (OBE), Business Depot Ogden (BDO), and Eastgate Business Park (EBP) together offer a variety of price points and types of facilities that comprehensively cover the market, but no adjacently.
- Once projections for each employment category were applied to the various regression models, and the results were weighted for accuracy and share of employment, it was estimated that 13,530,000 SF of retail floor space will be occupied in 2022 (in the 'moderate' case).
- This represents an increase of 1,125,000 SF over 2014 levels (**+ 9.1%**).
- It was concluded that a sales performance target of **\$200 per square foot** would be appropriate for new retail, based on industry benchmarks and regional sales.
- In total, the Moderate case would warrant 15,087,000 SF of retail floor space in 2022, assuming a 10% vacancy rate.
- This floor space requirement exceeds current demand by **866,000 SF**.
- At present, up to 397,000 SF of retail space is planned and ready for development, leaving at least 469,000 SF of floor space demand unmet and requiring new development.
- Development opportunity exists in all cases (low, moderate, and

high), and in both the moderate and high cases, further development in addition to what is currently planned will be required.

- Several retail options were considered: Outlet or Regional Mall, Community Center or Strip Mall. **A locally-serving, convenience oriented neighborhood retail center in the magnitude of 50,000 SF is supportable along 4400 South Street or 1900 West Street.**
- Between 20,315 and 133,000 new visitors are projected annually, each of whom are expected to spend an average of 2.5 days (two nights) in the area.
- When combined with current demand in the base case, 2,397 hotel rooms are required, which surpasses the existing supply of 2,282 rooms and creates the opportunity to develop 115 additional rooms.

3.8 Inside the Fence (ITF) Demand

- Due to a number of new contracts at Hill Air Force Base, there is expected to be **sustained growth in demand for mixed office/industrial, some of which could be accommodated at OGD.**
- Hill AFB estimates that they will require approximately 240 new on-base workers each year going forward.
- 637,000 SF of new ITF or runway-accessible floor space will be required by 2022.
- **Defense, aerospace, and advanced composites (DAAC) firms** that require runway access and work on Air Force contracts have an incentive

to locate on or adjacent to OGD.

- With civilian runway access being a potential requirement of these operations, OGD Airport may capture some floor space demand created.
- 851,000 SF of light industrial space is supportable at the OGD Airport site.
- There is an overall demand for 10,300 SF of terminal retail space.

3.9 Economic Impact Analysis

- Hill AFB projections indicate that 480 off-base office jobs will be created annually to support its operations, for a total of 3,840 new full-time jobs through 2022.
- Assuming an economic multiplier of 1.66, as suggested by the Hill AFB Economic Impact Statement 2014, this translates to 6,374 new long-term, full-time jobs over the next eight years.
- Growing employment will stimulate 305,000 SF of office development and generate 96 full-time jobs lasting from 2015 through 2022 (the equivalent of 770 person-years of employment).
- **Active business development efforts could potentially secure tenants with unique needs on a case-by-case basis, which would create varying and unpredictable benefits for the Ogden employment market.**
- Based on US Green Building Council benchmarks, a full-time worker is required for every 463 SF of light industrial (TLOG) space; This equates to approximately 1,840 full-time jobs created at OGD Airport.

- Employees working in transportation and logistics generally present an economic multiplier of 1.70, implying that TLOG operations at OGD Airport would generate an estimated 3,128 long-term, full time jobs in the Ogden area.
- Assuming that a 50,000 SF neighborhood retail center and 10,300 SF of terminal retail is built, with a benchmark economic multiplier of 1.60 for retail employees, approximately 121 long-term, full-time equivalent jobs will be created.
- According to the State of Utah's Tourism, Travel, and Recreation Industry report, every \$58,000 of tourist spending (across all categories) generates one full-time job in the tourism and recreation industry.
- Tri-Star projections estimate that additional tourist traffic resulting from the expansion of OGD Airport will generate \$35,000,000 in additional revenue for the region annually (in the moderate case).
- These figures suggest that employment in the tourism and recreation industries will gain approximately 600 long-term, full-time jobs in response to increasing tourism.
- In summary, if **OGD Airport is fully developed, it could potentially create up to 4,172** long-term full-time jobs and an additional 2,425 person-years worth of full-time employment that otherwise would not be created.

4. SCHEDULED PASSENGER ACTIVITY

This chapter presents the passenger and flight forecast for the Ogden-Hinckley Airport. The objective of the forecast is to identify the long-term trends for the types and levels of aviation activity that could trigger the need for Airport facility expansion or improvement.

This chapter presents a long-term projection of Airport activity through the year 2035. Since Ogden-Hinckley

Airport has had commercial passenger air service for a relatively short period of time, alternate forecast scenarios will be developed to give us a range of forecast for the airport.

The primary passenger market includes **six counties** in the **northern part of Utah** and accounts for over **757,000 people**. The secondary passenger market includes eight counties in the southern part of Idaho and accounts for over 274,000 people.

The **population growth for the 2000 to 2014 time period showed an increase of 31.0% for the primary market** and 14.0% for the secondary market. The total catchment area had an overall increase of 26.6%.

In **September of 2012, Allegiant Airlines started service between Ogden and Mesa Arizona with two flights per week**. Passenger demand at Ogden and Provo has provided Allegiant with good passenger demand and high load factors.

In 2014, Allegiant Airlines had 24,767 origin and destination passengers at Ogden. Ogden experienced a 68.5% increase in passengers from

2013 to 2014.

Experience in other metro markets has shown that passengers located in suburban areas will use their local airport if it is **more convenient and if the flights and fares are comparable**.

The Ogden-Hinckley Airport conducted a Market Assessment Analysis and Leakage Study in early 2015. Based on this analysis, the Ogden catchment area is generating 25% of the passenger bookings for Salt Lake City International Airport.

The best opportunity for new air service will be on Allegiant Airlines. Later, air service to special markets might be considered.

In 2014, there were 125 flights (2.4 flights per week) with an outbound load factor of 89.1%. For the twelve months ending December 31, 2014 the enplaned and deplaned passengers in the Ogden-Phoenix/Mesa market is reported by the Ogden-Hinckley Airport to be 36,035.

A review of the scheduling practices of Allegiant Airlines and the major airlines was undertaken in order to develop a sample flight schedule for

flights at Ogden-Hinckley Airport.

Ogden-Hinckley Airport is estimated to have **five aircraft** remaining overnight (**RON**) and a need for **three gates in the morning**. The **midday turns** will also require 3 gates.

4.1 ESTIMATED LEVELS OF SERVICE; MINIMUM, MID-LEVEL OR MAXIMUM

The following analysis will include estimated expenditures by new visitors using the new passenger air service, new revenue to the Airport, and expenditures for the new air service.

Levels of Passenger Service

- **Minimum Service** — Air service by **Allegiant Airlines** from **Ogden to Phoenix/Mesa Airport, Las Vegas International Airport, Los Angeles International Airport, and Oakland International Airport.**
- **Mid Level Service** — The air service listed above for **Allegiant** and new air service by **Alaska Airlines** to **Los Angeles International Airport** and **Seattle/Tacoma International Airport.** New air service to **Phoenix/Sky Harbor International Airport** by **American Airlines.**
- **Maximum Service** — The air service listed as **mid level service and** new service by **United Airlines to Denver International Airport** and

San Francisco International Airport. New nonstop service to **Honolulu by Hawaiian Airlines.** Additional service by **American Airlines** with flights to **Dallas/Ft. Worth Airport.**

MINIMUM SERVICE

AIRLINE	MARKET	AIRCRAFT	ANNUAL FLIGHTS	ANNUAL SEATS	ENPLANED PASSENGERS
Allegiant	AZA	A-319	260	40,560	18,250
	LAS	A-319	312	48,672	21,900
	LAX	A-319	208	32,448	13,790
	OAK	A-319	208	32,448	13,790
Total			988	154,128	67,730

AIRLINE	MARKET	DEPLANED PASSENGERS	PERCENT VISITORS	ESTIMATED VISITORS
Allegiant	LAS	21,900	32.7%	7,160
	LAX	13,790	46.6%	6,425
	OAK	13,790	48.6%	6,730
Total		49,480		20,315

Airport Related Revenue					
Airline Payroll	Number of Airlines Passengers	1	Estimated Jobs in the Travel/Hospitality Industry Created by new Air Service at OGD		
	Number of Employees	8			
	Annual Payroll	\$240,000			
Fuel Purchases	Annual New Flights	365	Daily Flight Arrivals		1
	Gallons of Fuel	284,700	Estimated Jobs Required		
	New Fuel Expenditure	\$711,750	Airline		8
Airport Revenue	Landing Fees	\$82,125	Rental Car		21
	Into Plane Fuel Fee	\$19,929	Hotel/Motel		24
	Passenger Facility Charge	\$222,660	Restaurant/Entertainment		20
	Terminal Rent and Charges	\$13,800	Other		5
	Total Airport Revenue	\$338,514	Total		78
Visitor Expenditures Generated by New Air Service			Total Revenue Impact of New Air Service		
Daily Flight Arrivals		1.00	Visitor Expenditures		\$9,080,885
Estimated Visitors		20,135	Airline Payroll		240,000
Average Visit		2.2 days	Fuel Expenditures		711,750
Estimated Visitor Days		44,297	Airport Revenue		338,574
Avg. Daily Expenditures		\$205	Total Revenue		\$10,371,149
Total Visitor Expenditures		\$9,080,885	Output Multiplier		2.5
			Total Revenue Impact		\$25,927,872

MID LEVEL SERVICE

AIRLINE	MARKET	AIRCRAFT	ANNUAL FLIGHTS	ANNUAL SEATS	ENPLANED PASSENGERS
Allegiant	AZA	A-319	260	40,560	18,250
	LAS	A-319	312	48,672	21,900
	LAX	A-319	208	32,448	13,790
	OAK	A-319	208	32,448	13,790
Alaska	LAX	Q-400	1,352	102,752	38,500
	SEA	Q-400	730	55,328	20,750
American	PHX	CRJ-700	1,352	86,528	32,450
Total			4,422	398,736	159,430

AIRLINE	MARKET	DEPLANED PASSENGERS	PERCENT VISITORS	ESTIMATED VISITORS
Allegiant	LAS	21,900	32.7%	7,160
	LAX	13,790	46.6%	6,425
	OAK	13,790	48.6%	6,730
Alaska	LAX	38,500	46.6%	17,940
	SEA	20,750	50.5%	10,480
American	PHX	32,450	49.1%	15,930
Total		141,180		64,665

Airport Related Revenue			Estimated Jobs in the Travel/Hospitality Industry Created by new Air Service at OGD	
Airline Payroll	Number of Airlines Passengers	3	Daily Flight Arrivals	6
	Number of Employees	24	Estimated Jobs Required	
	Annual Payroll	\$720,000	Airline	24
Fuel Purchases	Annual New Flights	2,082	Rental Car	30
	Gallons of Fuel	1,734,114	Hotel/Motel	72
	New Fuel Expenditure	\$4,335,285	Restaurant/Entertainment	54
Airport Revenue	Landing Fees	\$275,287	Other	15
	Into Plane Fuel Fee	\$121,388	Total	195
	Passenger Facility Charge	\$635,310	Total Revenue Impact of New Air Service	
	Terminal Rent and Charges	\$52,500	Visitor Expenditures	\$29,163,915
	Total Airport Revenue	\$1,031,985	Airline Payroll	720,000
Visitor Expenditures Generated by New Air Service			Fuel Expenditures	4,335,285
Daily Flight Arrivals		6.00	Airport Revenue	1,031,985
Estimated Visitors		64,665	Total Revenue	\$35,251,185
Average Visit		2.2 days	Output Multiplier	2.5
Estimated Visitor Days		142,263	Total Revenue Impact	\$88,127,962
Avg. Daily Expenditures		\$205		
Total Visitor Expenditures		\$29,163,915		

MAXIMUM SERVICE

AIRLINE	MARKET	AIRCRAFT	ANNUAL FLIGHTS	ANNUAL SEATS	ENPLANED PASSENGERS
Allegiant	AZA	A-319	260	40,560	18,250
	LAS	A-319	312	48,672	21,900
	LAX	A-319	208	32,448	13,790
	OAK	A-319	208	32,448	13,790
Alaska	LAX	Q-400	1,352	102,752	38,500
	SEA	Q-400	730	55,328	20,750
American	PHX	CRJ-700	1,352	86,528	32,450
	DFW	CRJ-700	1,352	86,528	32,450
Hawaiian	HNL	A-321	730	138,700	59,000
United	DEN	CRJ-700	1,460	93,184	34,950
	SFO	CRJ-700	1,248	79,872	29,950
Total			9,212	797,020	315,780

AIRLINE	MARKET	DEPLANED PASSENGERS	PERCENT VISITORS	ESTIMATED VISITORS	Estimated Jobs in the Travel/Hospitality Industry Created by new Air Service at OGD	
Allegiant	LAS	21,900	32.7%	7,160	Daily Flight Arrivals	12.7
	LAX	13,790	46.6%	6,425	Estimated Jobs Required	
	OAK	13,790	48.8%	6,730	Airline	40
Alaska	LAX	38,500	46.6%	17,940	Rental Car	42
	SEA	20,750	50.5%	10,480	Hotel/Motel	170
American	PHX	32,450	49.1%	15,930	Restaurant/Entertainment	102
	DFW	32,450	55.5%	18,010	Other	33
Hawaiian	HNL	59,000	28.2%	16,640	Total	387
United	DEN	34,950	53.1%	18,560	Total Revenue Impact of New Air Service	
	SFO	29,950	50.5%	15,125	Visitor Expenditures	\$59,983,000
Total		297,530		133,000	Airline Payroll	1,200,000

Airport Related Revenue				
Airline Payroll	Number of Airlines Passengers	5	Estimated Jobs in the Travel/Hospitality Industry Created by new Air Service at OGD	
	Number of Employees	40		
	Annual Payroll	\$1,200,000		
Fuel Purchases	Annual New Flights	4,477	Daily Flight Arrivals	12.71
	Gallons of Fuel	4,594,814	Estimated Visitors	133,000
	New Fuel Expenditure	\$11,487,835	Average Visit	2.2 days
Airport Revenue	Landing Fees	\$613,162	Estimated Visitor Days	292,600
	Into Plane Fuel Fee	\$321,636	Avg. Daily Expenditures	\$205
	Passenger Facility Charge	\$1,338,885	Total Visitor Expenditures	\$59,983,000
	Terminal Rent and Charges	\$87,000		
	Total Airport Revenue	\$2,360,683		

4.2 ECONOMIC RESULTS

Estimate of New Visitors - The forecast of new visitors is based on the estimate of the deplaned passengers at Ogden-Hinckley Airport for each city pair market then factored by the per cent of passengers originating at another airport other than Ogden-Hinckley Airport.

New Visitor Expenditures

In analyzing the financial impact of new air service in Ogden, the **three levels** of service are utilized. The **minimum service** is estimated to produce approximately **20,315 new annual arriving visitors**, the **mid level service** is estimated to produce approximately **64,665 new annual arriving visitors**, and the **maximum service** is estimated to produce **133,000 new annual arriving visitors**.

The **average daily expenditure is estimated to be \$205 per day**. These air service levels are estimated to produce between \$9.0 million and \$59.9 million in visitor expenditures to the Ogden catchment area.

New Jobs - More jobs and staff in the hospitality industry will be required to support the new visitors to the Ogden area.

It is estimated that the **three levels of air service** can require between **78 and 387 jobs** to support the visitors that will arrive at the Airport. The total jobs that may evolve from the air service would make this one of the largest new job providers in the County.

Airport Revenue - Other revenue from the new air service includes airline payroll, fuel purchases, and fees to the Airport. Based on the **three levels of service**, it is estimated that each of the airlines will employ an average of eight full time-equivalent employees and a maximum of 40 for five airlines at Ogden Airport.

The **total revenue impact for Ogden for new air service is estimated to be between \$10.3 million and \$75 million**.

The "Airport Impact Model" indicates that there is a **multiplier effect of money** in the community. The multiplier **can range as high as 10 times**, however, an average multiplier utilized for

Ogden will be 2.5. **Based on the impact of the multiplier, the total revenue impact to Ogden area for the new air service is estimated to be between \$25 and \$187 million.**

5. AIR CARGO FORECAST

General Background

Transportation is a major factor for businesses choosing to build or relocate their business to the Salt Lake City area. Air Cargo is carried by all cargo airlines and in the bellies of the passenger airlines. The all cargo airlines account for 90% of the airfreight at SLCIA with the passenger airlines carrying approximately 10%. Fedex is the largest all cargo carrier at Salt Lake City International Airport. In 2014, Fedex loaded 93,514,900 lbs of airfreight, or 55% of the total.

UPS may be a target for Ogden-Hinckley Airport. UPS is always looking for the lowest cost alternative. Other contract air cargo carriers could also be targets for Ogden.

The primary catchment area has an average percentage share of 26.9% of the total Wasatch Front.

UPS averages 41,700 pounds of air cargo per flight at SLCIA. If UPS were to operate at OGD, the projected air cargo can support 870 departures per year or 3.3 departures per day on a B-757 or B-767 aircraft. It is estimated that there will be six feeder flights per day on either B-1900 or Cessna Caravan aircraft.

The remaining 18% of outbound air cargo would be available for the passenger airlines at Ogden.

Allegiant Airlines does not carry any air cargo or mail. It is assumed that this restriction will continue.

If Ogden-Hinckley Airport only has passenger air service, the air cargo at the airport will be insignificant. The real contributor to air cargo at

Ogden-Hinckley will be service by UPS. Without UPS, there may be some limited contract service.

Estimate of Air Cargo Demand for OGD Based on Economic Share of the Wasatch Front

Total SLC Air Cargo	328,611,000 lbs
OGD Share of the Wasatch Front	26.9%
Estimated Potential Air Cargo	88,400,000 lbs.
Estimated Outbound Air Cargo	44,200,000 lbs.

Forecast of Air Cargo Based on Airline Flights

MARKET	AIRLINE	AIRCRAFT	ANNUAL DEPARTURES	CARGO/ FLIGHT	ANNUAL AIR CARGO
Passenger Airlines					
OGD-AZA	Allegiant	A-319	130	0	0
OGD-DFW	American	CRJ-700	676	4 lbs	2,704
OGD-DEN	United	CRJ-700	730	11 lbs	8,030
OGD-HNL	Hawaiian	A-321	365	300 lbs	109,500
OGD-LAS	Allegiant	A-319	156	0	0
OGD-LAX	Allegiant	A-319	104	0	0
OGD-LAX	Alaska	Q-400	676	3 lbs	2,028
OGD-OAK	Allegiant	A-319	104	0	0
OGD-PHX	American	CRJ-700	676	4 lbs	2,704
OGD-SFO	United	CRJ-700	624	11 lbs	6,864
OGD-SEA	Alaska	Q-400	365	3 lbs	1,095
Total			4,606		132,925
All Cargo Airlines					
OGD-Oakland	UPS	B-767	260	40,000 lbs	10,400,000
OGD-Louisville	UPS	B-767	520	42,000 lbs	21,840,000
OGD-Feeder Mrkt.	Feeders	Caravan	1,560	500 lbs	780,000
Total			2,340		33,020,000
Grand Total			6,946		33,152,925

6. MILITARY

Several opportunities were explored in the context of business development for the Ogden Airport. A series of consultations with current and former leadership at Hill Air Force Base (HAFB) along with continuing work by *Strategic Outcomes* revealed some potential synergies with Hill for several platforms.

6.1 HAFB-N

1. The Hill Air Force Base (HAFB) North concept would relocate specific Maintenance, Repair, Overhaul (MRO) activities from HAFB to the Ogden Municipal Airport. It is driven by an Air Force need for additional MRO capacity to provide corrosion control for 3rd, 4th, and 5th Generation Fighters and to also maintain a capability to repaint C-130 aircraft. It is based on direct discussions with Air Force representatives from the Hill AFB North team
 2. The relocation of the 151st Utah Air National Guard Refueling Wing to HAFB. Information on this concept is from news sources and a brief discussion with the 151st Air National Guard Public Affairs Officer.
- The 309th Maintenance Squadron at Hill AFB is presently in a position of declining workload for C-130 aircraft due to a lack of paint facility hangar space for this size of aircraft.
 - There are **viable options** for expanding HAFB capacity through an **off-base** maintenance facility located at the Ogden Municipal Airport.

- A feasibility study was funded in support of a possible future move to Hill AFB by the 151st Air National Guard Air Refueling Wing from Salt Lake City Air National Guard Base, Salt Lake City. Perhaps a **similar effort** could be accomplished supporting Hill AFB North.
- Discussions have been held within the Air Force to consider relocating some of this workload to other Air Force maintenance Complexes.
- In order to maintain current HAFB workloads and to also position to accept new workload assignments, a growth in capacity must occur with emphasis on corrosion/reversion control.
- Given existing constraints on military construction money (there is no money), **leasing facilities at OGD offers an attractive option** for needed facilities expansion by the Air Force. The reasons are: 1- The needs of the Air Force have been validated for the type of facilities required; 2- The military can be provided with a cost effective alternative to MILCON funding which is now non-existent; 3- Both efforts could realize a significant

improvement in their operational efficiencies; 4- The economy of the state will be enhanced by increased stability in the workforce; 5- The facilities and their associated operations fit all of the requirements of the model for Ogden Municipal Airport expansion.

- An ideal situation would be to position for future growth in both the commercial and defense industry sectors. Innovation will drive business model adjustments to accommodate industry trends to survive and thrive in a business environment with ever changing economic trends.
- Potential economic impacts are summarized at the conclusion of this section, section six.

6.2 SCORPION

- A unique situation is unfolding within the Air Force that addresses aircraft selection for conducting the Close Air Support (**CAS**) mission. Current developments in this process could lead to a opportunity for CAS aircraft manufacturing at the Ogden Municipal Airport.

- To save overall costs, efforts are being made to shift the CAS mission of the A-10 Fighter to other aircraft and then retire the A-10 Fighter fleet.
- A new commercially developed Fighter aircraft, the **Scorpion**, has gained the attention of Gen. Hawk Carlisle, the commander of Air Combat Command, and Gen Mark A. Welch, Chief of Staff of the Air Force.
- The resultant need to manufacture a **U.S. Air Force variant** would create an opportunity for pursuing site development of manufacturing facilities as part of Ogden Municipal Airport expansion planning.
- Due to its proximity to Hill Air Force Base (HAFB), the home of the A-10 Fighter Program Office, and the Utah Test and Training Range (UTTR), the Ogden Municipal Airport has a solid argument for co-location of Fighter aircraft program assets.
- From 2-6 March 2015, an Air Combat Command summit was held at the Pentagon. During discussions Gen. Carlisle mentioned that procurement of a new plane is constrained as long as the Budget Control Act remains in force and we “may need more capacity at a lower cost.” The Scorpion platform may fill the bill.
- Since there is a **critical need** for the CAS role as performed by the A-10, a gap is developing for a viable, low cost (relative to other CAS capable platforms) solution. Given the comments made by Gen Carlisle at this year’s CAS summit, the Scorpion has the attention of Air Force leadership and appears to be a contender given its low acquisition and operational costs, and its capability to perform a CAS Fighter.
- **Planning should begin at the earliest convenience to prepare for the possibility of a future Air Force contract award for a new CAS aircraft, and manufacture of the aircraft at the Ogden Municipal Airport.** Preparation should include a full review for any needed updates of present State tax and bonding options that would result in an incentive package for securing Textron Airland, or other system as the case may be, as an Ogden Municipal Airport tenant.
- Taxes, Incentives and the like are summarized near the conclusion of this narrative, potential economic impacts from Scorpion manufacturing at OGD are summarized at the conclusion of this section six, and information about the aircraft follows this page.



VISION | VERSATILITY | VALUE

Scorpion is a jet like no other. With the ability to perform countless diverse missions, the Scorpion offers one-of-a-kind ISR/strike capabilities and an unmatched value.

The Scorpion is the first affordable, U.S.-built, tactical aircraft in decades and will benefit U.S. and partner nations requiring a modern, economical aircraft to address a multitude of threats.



AIRCRAFT FEATURES


The Scorpion has an all-composite airframe powered by twin turbofan engines with a tandem cockpit, retractable sensor mounts, internal payload bay, and external stores carriage for precision and non-precision munitions. Its modular architecture allows unencumbered future integration of multiple sensors and weapons, minimizing non-recurring expenses.




Aircraft Length	43 ft 6 in
Wingspan	47 ft 4 in
Height	14 ft 0 in
Standard Empty Weight	11,800 lbs
Max Takeoff Weight	21,250 lbs
Max Internal Fuel Load	6,000 lbs
Max Internal Payload Bay	3,000 lbs
Thrust	~8,000 lbs
Max Speed	450 KTAS
Service Ceiling	45,000 ft
Ferry Range	2,400 NM

MISSIONS


The Scorpion is designed for versatility. Its ability to carry internal loads, power a wide variety of sensor and communications packages, and employ a wide range of scaled munitions makes it the ideal fit for permissive military and homeland security environments.




AEROSPACE
CONTROL ALERT




BORDER
SECURITY




COUNTER
NARCOTICS



HUMANITARIAN ASSISTANCE /
DISASTER RESPONSE



IRREGULAR
WARFARE SUPPORT



MARITIME
SECURITY

TEXTRON AIRLAND

ScorpionJet.com



© 2013 Textron AirLand, LLC. All registered trademarks are the property of their respective owners. The information herein is general in nature and may vary with conditions. Individuals using this information must exercise their independent judgment in evaluating product selection and determining product appropriateness for their particular purpose and requirements. For performance data and operating limitations for any specific mission, reference must be made to the approved flight manual. Textron AirLand, LLC, makes no representations or warranties, either expressed or implied, including without limitation any warranties of merchantability or fitness for a particular purpose with respect to the information set forth herein or the product(s) and service(s) to which the information refers. Accordingly, Textron AirLand, LLC, will not be responsible for damages (of any kind or nature, including incidental, direct, indirect, or consequential damages) resulting from the use of or reliance on this information. Textron AirLand, LLC, reserves the right to change product designs and specifications without notice. 92013

Total Impact: HAFB-N

Impact Type	Employment	Labor Income	Value Added	Output
Direct Effect	7.61	\$495,119	\$499,166	\$1,000,000
Indirect Effect	1.76	\$98,932	\$161,263	\$336,731
Induced Effect	4.04	\$160,265	\$284,231	\$520,913
Total Effect	13.41	\$754,316	\$944,660	\$1,857,644

*Above figures represent a baseline dollar amount per facility to construct one facility. Total Effect for one facility will be a direct multiple of the actual number of dollars spent per million of dollars to complete construction.

Total Impact: SCORPION

Impact Type	Employment	Labor Income	Value Added	Output
Direct Effect	29.56	\$1,999,916	\$4,008,525	\$20,000,000
Indirect Effect	39.55	\$2,397,885	\$3,436,428	\$7,782,335
Induced Effect	29.88	\$1,186,521	\$2,104,325	\$3,856,622
Total Effect	98.99	\$5,584,323	\$9,549,278	\$31,638,958

*Linear model for quantity (1) production aircraft with sales value of \$20Mil. Any given fleet size number is a direct multiplier of dollar values shown.

7. ALTERNATIVES ANALYSIS FOR FACILITIES SITING

Six potential Configurations, lettered A through F are conceptualized for purposes of an alternatives analysis. The tables to the right on this page identify types of development:

AT Airline Terminal
C Cargo
MRO Maintenance, Repair and Overhaul
MU Mixed-Use Aviation
GA General Aviation
CD Non-Aviation Commercial Development

For each development area as visualized on the next page as Potential Development Areas, Generalized:

BP- Existing Business Park
MV- Monte Vista Development (Potential)
NW – Northwest Development Area
W – West Development Area
K- On-Airport Kemp Leasehold
DC – Taxiway D Closure Development Area
TE – Taxiway E Development Area
NT – North Terminal Re-Development Area
ST - South Terminal Re-Development Area
ET - East Terminal Re-Development Area
EW – East of Williams Area (Potential)

The intent of this analysis is to consider and select the highest and best land use for aviation development for each area in an unconstrained financial environment.

Configuration A:

This development maximizes Cargo, and Mixed-Use, and Non-Aviation Commercial Development and minimizes Air Terminal, MRO and General

Aviation relative to upcoming configurations.

Configuration B:

This development maximizes MRO, Cargo, and General Aviation uses, and minimizes Air Terminal, Non-Aviation Commercial Development and Mixed-Use uses relative to other configurations. Note that for purposes herein Cargo and MRO are essentially interchangeable with this and most upcoming configurations.

Configuration C:

This development maximizes Air Terminal and Non-Aviation Commercial Uses and minimizes MRO, Cargo, and General Aviation and Mixed-Use uses relative to others.

Configuration D:

This development does not maximize any particular land use; they are intended to balance somewhat, with the exception of Mixed-Use.

Configuration E:

This configuration is somewhat similar to both configuration C and D. This development maximizes MRO and Air Terminal uses, while somewhat minimizing the Non-Aviation Commercial Uses,

General Aviation and Mixed-Use uses relative to other configurations.

Configuration F:

This development maximizes Mixed Use, Cargo and Air Terminal while minimizing MRO, Non-Aviation Commercial, and General Aviation uses relative to other configurations.

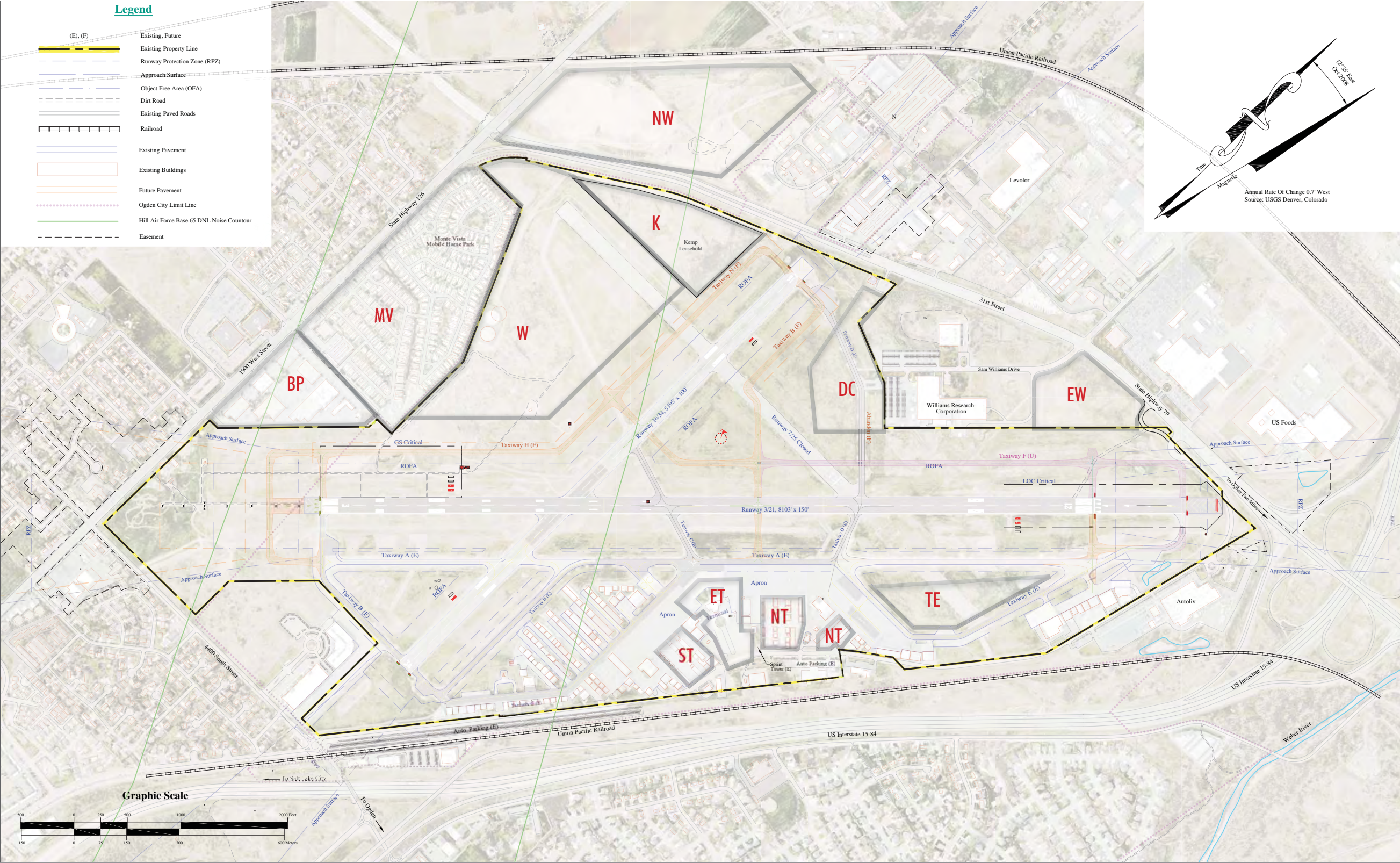
Location of proposed developed area

AREAS AND USES	Existing Terminal Area Building Area (ET)	South Terminal Re-Development (ST)	North Terminal Re-Development (NT)	Taxiway E Development Area (TE)	North of Williams Area (Potential) (NW)	Taxiway D Closure Development Area (DC)	On-Airport Kemp Leasehold (K)	West Development Area (W)	Northwest Development Area (NW)	Monte Vista Development (Potential) (MV)	Existing Business Park Development Area (BP)
Configuration A	--	MU	MU	MRO	--	--	C	C/AT	--	CD	CD
Configuration B	AT	--	--	GA	MU	MRO	C	C/MRO	--	--	CD
Configuration C	--	GA	GA	MU	MRO	MRO	AT	AT	AT	CD	CD
Configuration D	--	GA	GA	MRO	--	MRO	--	C/AT	--	C/AT	CD
Configuration E	AT	MU	MRO	--	--	MRO	--	MRO/AT	AT	MRO/AT	CD
Configuration F	AT	MU	MU	MU	MU	MU	C	C/AT	--	AT	CD

Acres of proposed developed area

± Acres	AT	C	MRO	MU	GA	CD
Configuration A	±48	±40	±10	±9	--	±77
Configuration B	±7	±40	±62	±12	±10	±17
Configuration C	±136	--	±27	±10	9	±77
Configuration D	±77	±52	±24	--	9	±17
Configuration E	±107	--	±97	±4	--	±17
Configuration F	±116	±40	--	±41	--	±17

Potential Development Areas
Generalized



BP - Existing Business Park Development Area
MV - Monte Vista Development (Potential)
NW - Northwest Development Area
W - West Development Area
K - On-Airport Kemp Leasehold
DC - Taxiway D Closure Development Area

TE - Taxiway E Development Area
NT - North Terminal Re-Development Area
ST - South Terminal Re-Development
ET - Existing Terminal Area Building Area
EW - East of Williams Area (Potential)

AT – Airline Terminal area includes Terminal building, auto and apron areas. Terminal will accommodate passenger check-in, lobbies, concessions, circulation checkpoint, restrooms, TSA and tenant retail and offices, gate lounges, baggage receiving/retrieval areas. Auto parking area includes primary arterial access, circulation and queue, long & short-term parking, rental car/charter, tenant, and employee parking and queuing. Apron includes apron sufficient to service narrow-body equipment, including area for one RON, along with an exterior/covered baggage receiving/retrieval areas.

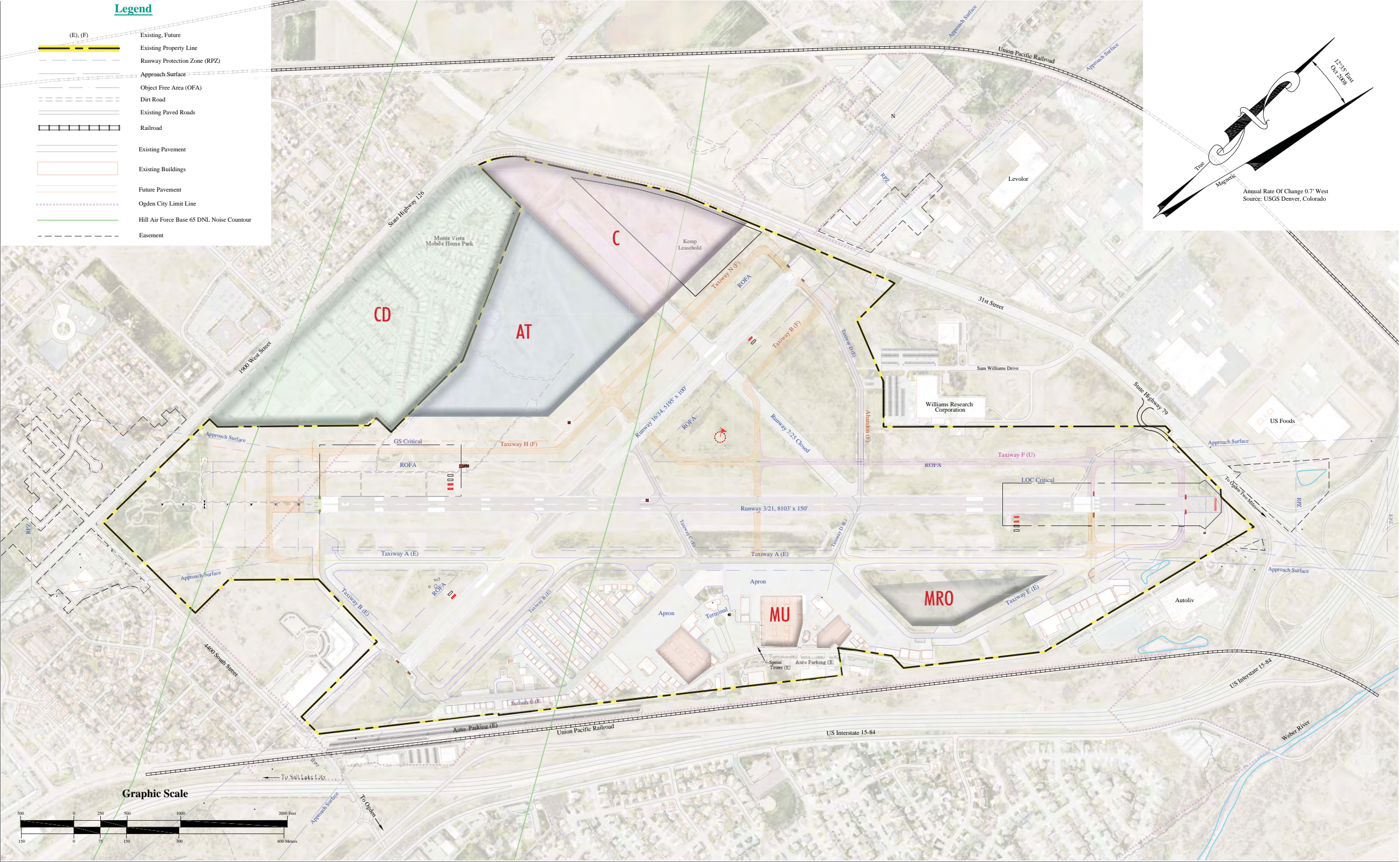
C – Cargo area includes apron sufficient to service narrow-body equipment, including stand-alone sort building and administrative offices. Belly cargo activity accommodated within the AT area. Cargo auto parking area includes primary arterial access, truck queue/parking and tenant parking. Cargo apron sufficient to service narrow-body equipment.

MRO – The Maintenance, Repair and Overhaul area accommodates a wide variety of large aircraft. Hangar with attached office uses are anticipated. MRO auto parking area includes primary arterial access, truck queue/parking and tenant parking. MRO apron sufficient to service equipment of various sizes.

MU – The Mixed Use area accommodates a wide variety of potential small, larger, and perhaps the largest of aircraft. Hangar with attached office uses are anticipated. MU auto parking area includes primary arterial access and tenant/vendor parking. MU apron includes apron sufficient to service equipment of various sizes.

GA – The General Aviation area accommodates a wide variety of users: FBO, and other specialized businesses including flight training, and ground-leased or City aircraft storage. Stand-alone hangar and hangar with attached office uses are anticipated. GA auto parking area includes primary arterial access and tenant/visitor/vendor parking. GA apron sufficient to service equipment of various sizes, both hangar frontage and traditional apron.

CD – The Non-Aviation Commercial Development area accommodates a variety of superficially or clearly non-related aviation uses, to be accommodated on existing or potential properties unencumbered with FAA grant assurances. Hotel, defense contractor/industrial campus, community mixed-use or large-scale retail, light or heavy manufacturing are potential uses. CD auto parking area includes primary arterial access, circulation/queuing and tenant/visitor/vendor parking.



AT – Airline Terminal area includes Terminal building, auto and apron areas. Terminal will accommodate passenger check-in, lobbies, concessions, circulation checkpoint, restrooms, TSA and tenant retail and offices, gate lounges, baggage receiving/retrieval areas. Auto parking area includes primary arterial access, circulation and queue, long & short-term parking, rental car/charter, tenant, and employee parking and queuing. Apron includes apron sufficient to service narrow-body equipment, including area for one RON, along with an exterior/covered baggage receiving/retrieval areas.

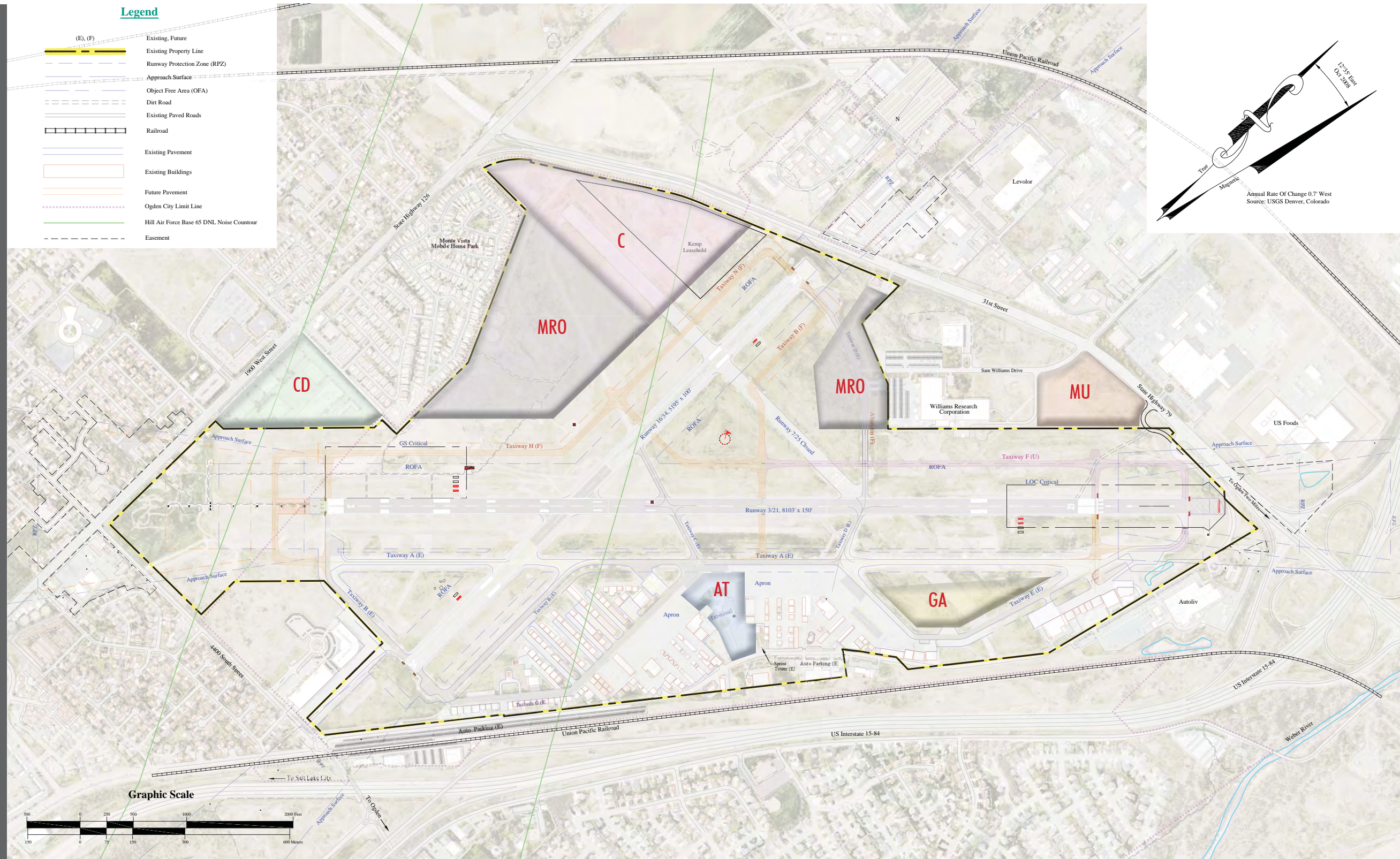
C – Cargo area includes apron sufficient to service narrow-body equipment, including stand-alone sort building and administrative offices. Belly cargo activity accommodated within the AT area. Cargo auto parking area includes primary arterial access, truck queue/parking and tenant parking. Cargo apron sufficient to service narrow-body equipment.

MRO – The Maintenance, Repair and Overhaul area accommodates a wide variety of large aircraft. Hangar with attached office uses are anticipated. MRO auto parking area includes primary arterial access, truck queue/parking and tenant parking. MRO apron sufficient to service equipment of various sizes.

MU – The Mixed Use area accommodates a wide variety of potential small, larger, and perhaps the largest of aircraft. Hangar with attached office uses are anticipated. MU auto parking area includes primary arterial access and tenant/vendor parking. MU apron includes apron sufficient to service equipment of various sizes.

GA – The General Aviation area accommodates a wide variety of users: FBO, and other specialized businesses including flight training, and ground-leased or City aircraft storage. Stand-alone hangar and hangar with attached office uses are anticipated. GA auto parking area includes primary arterial access and tenant/visitor/vendor parking. GA apron sufficient to service equipment of various sizes, both hangar frontage and traditional apron.

CD – The Non-Aviation Commercial Development area accommodates a variety of superficially or clearly non-related aviation uses, to be accommodated on existing or potential properties unencumbered with FAA grant assurances. Hotel, defense contractor/industrial campus, community mixed-use or large-scale retail, light or heavy manufacturing are potential uses. CD auto parking area includes primary arterial access, circulation/queuing and tenant/visitor/vendor parking.



AT – Airline Terminal area includes Terminal building, auto and apron areas. Terminal will accommodate passenger check-in, lobbies, concessions, circulation checkpoint, restrooms, TSA and tenant retail and offices, gate lounges, baggage receiving/retrieval areas. Auto parking area includes primary arterial access, circulation and queue, long & short-term parking, rental car/charter, tenant, and employee parking and queuing. Apron includes apron sufficient to service narrow-body equipment, including area for one RON, along with an exterior/covered baggage receiving/retrieval areas.

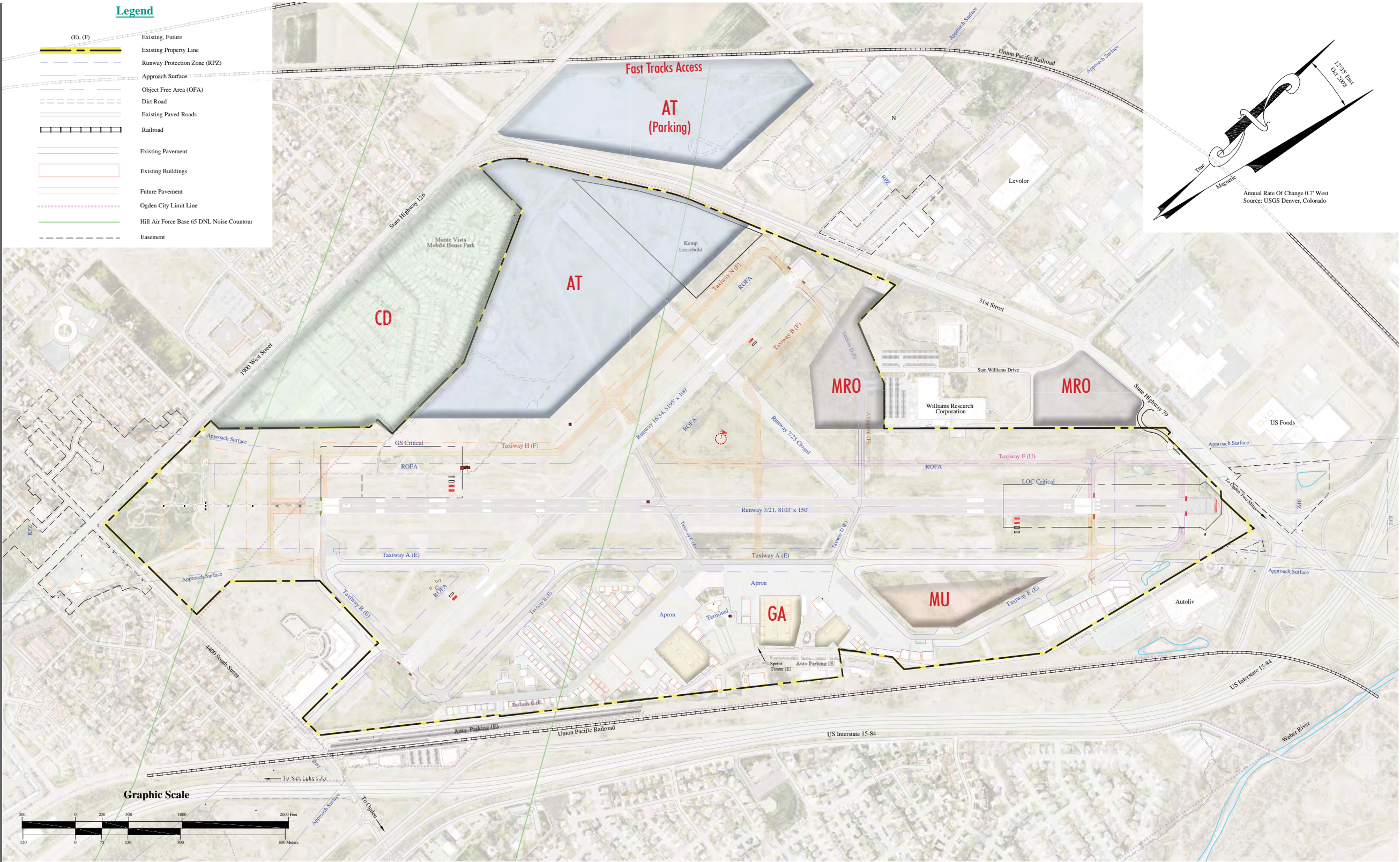
C – Cargo area includes apron sufficient to service narrow-body equipment, including stand-alone sort building and administrative offices. Belly cargo activity accommodated within the AT area. Cargo auto parking area includes primary arterial access, truck queue/parking and tenant parking. Cargo apron sufficient to service narrow-body equipment.

MRO – The Maintenance, Repair and Overhaul area accommodates a wide variety of large aircraft. Hangar with attached office uses are anticipated. MRO auto parking area includes primary arterial access, truck queue/parking and tenant parking. MRO apron sufficient to service equipment of various sizes.


MU – The Mixed Use area accommodates a wide variety of potential small, larger, and perhaps the largest of aircraft. Hangar with attached office uses are anticipated. MU auto parking area includes primary arterial access and tenant/vendor parking. MU apron includes apron sufficient to service equipment of various sizes.

GA – The General Aviation area accommodates a wide variety of users: FBO, and other specialized businesses including flight training, and ground-leased or City aircraft storage. Stand-alone hangar and hangar with attached office uses are anticipated. GA auto parking area includes primary arterial access and tenant/visitor/vendor parking. GA apron sufficient to service equipment of various sizes, both hangar frontage and traditional apron.

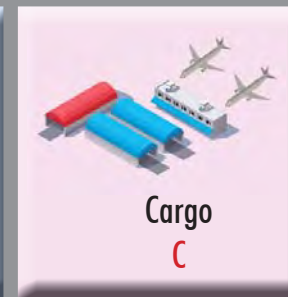
CD – The Non-Aviation Commercial Development area accommodates a variety of superficially or clearly non-related aviation uses, to be accommodated on existing or potential properties unencumbered with FAA grant assurances. Hotel, defense contractor/industrial campus, community mixed-use or large-scale retail, light or heavy manufacturing are potential uses. CD auto parking area includes primary arterial access, circulation/queuing and tenant/visitor/vendor parking.




Configuration C



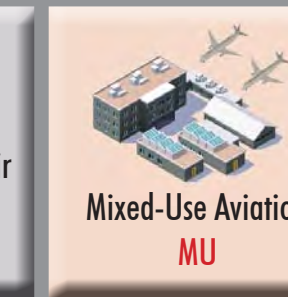
Airline Terminal
AT



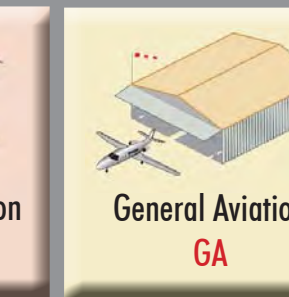
Cargo
C




Maintenance, Repair
and Overhaul
MRO



Mixed-Use Aviation
MU



General Aviation
GA



Non-Aviation
Commercial
Development - **CD**

AT – Airline Terminal area includes Terminal building, auto and apron areas. Terminal will accommodate passenger check-in, lobbies, concessions, circulation checkpoint, restrooms, TSA and tenant retail and offices, gate lounges, baggage receiving/retrieval areas. Auto parking area includes primary arterial access, circulation and queue, long & short-term parking, rental car/charter, tenant, and employee parking and queuing. Apron includes apron sufficient to service narrow-body equipment, including area for one RON, along with an exterior/covered baggage receiving/retrieval areas.

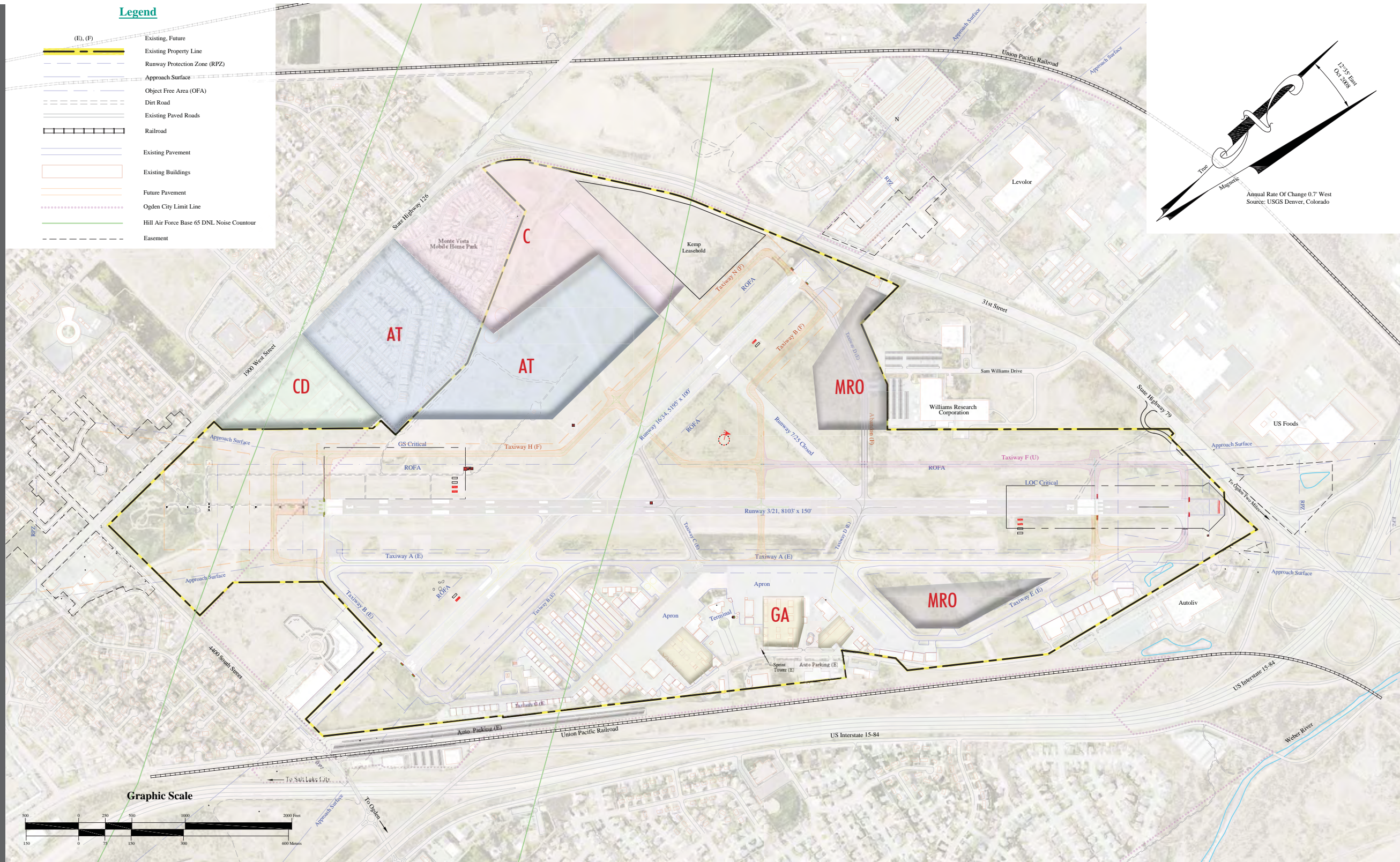
C – Cargo area includes apron sufficient to service narrow-body equipment, including stand-alone sort building and administrative offices. Belly cargo activity accommodated within the AT area. Cargo auto parking area includes primary arterial access, truck queue/parking and tenant parking. Cargo apron sufficient to service narrow-body equipment.

MRO – The Maintenance, Repair and Overhaul area accommodates a wide variety of large aircraft. Hangar with attached office uses are anticipated. MRO auto parking area includes primary arterial access, truck queue/parking and tenant parking. MRO apron sufficient to service equipment of various sizes.

MU – The Mixed Use area accommodates a wide variety of potential small, larger, and perhaps the largest of aircraft. Hangar with attached office uses are anticipated. MU auto parking area includes primary arterial access and tenant/vendor parking. MU apron includes apron sufficient to service equipment of various sizes.

GA – The General Aviation area accommodates a wide variety of users: FBO, and other specialized businesses including flight training, and ground-leased or City aircraft storage. Stand-alone hangar and hangar with attached office uses are anticipated. GA auto parking area includes primary arterial access and tenant/visitor/vendor parking. GA apron sufficient to service equipment of various sizes, both hangar frontage and traditional apron.

CD – The Non-Aviation Commercial Development area accommodates a variety of superficially or clearly non-related aviation uses, to be accommodated on existing or potential properties unencumbered with FAA grant assurances. Hotel, defense contractor/industrial campus, community mixed-use or large-scale retail, light or heavy manufacturing are potential uses. CD auto parking area includes primary arterial access, circulation/queuing and tenant/visitor/vendor parking.



AT – Airline Terminal area includes Terminal building, auto and apron areas. Terminal will accommodate passenger check-in, lobbies, concessions, circulation checkpoint, restrooms, TSA and tenant retail and offices, gate lounges, baggage receiving/retrieval areas. Auto parking area includes primary arterial access, circulation and queue, long & short-term parking, rental car/charter, tenant, and employee parking and queuing. Apron includes apron sufficient to service narrow-body equipment, including area for one RON, along with an exterior/covered baggage receiving/retrieval areas.

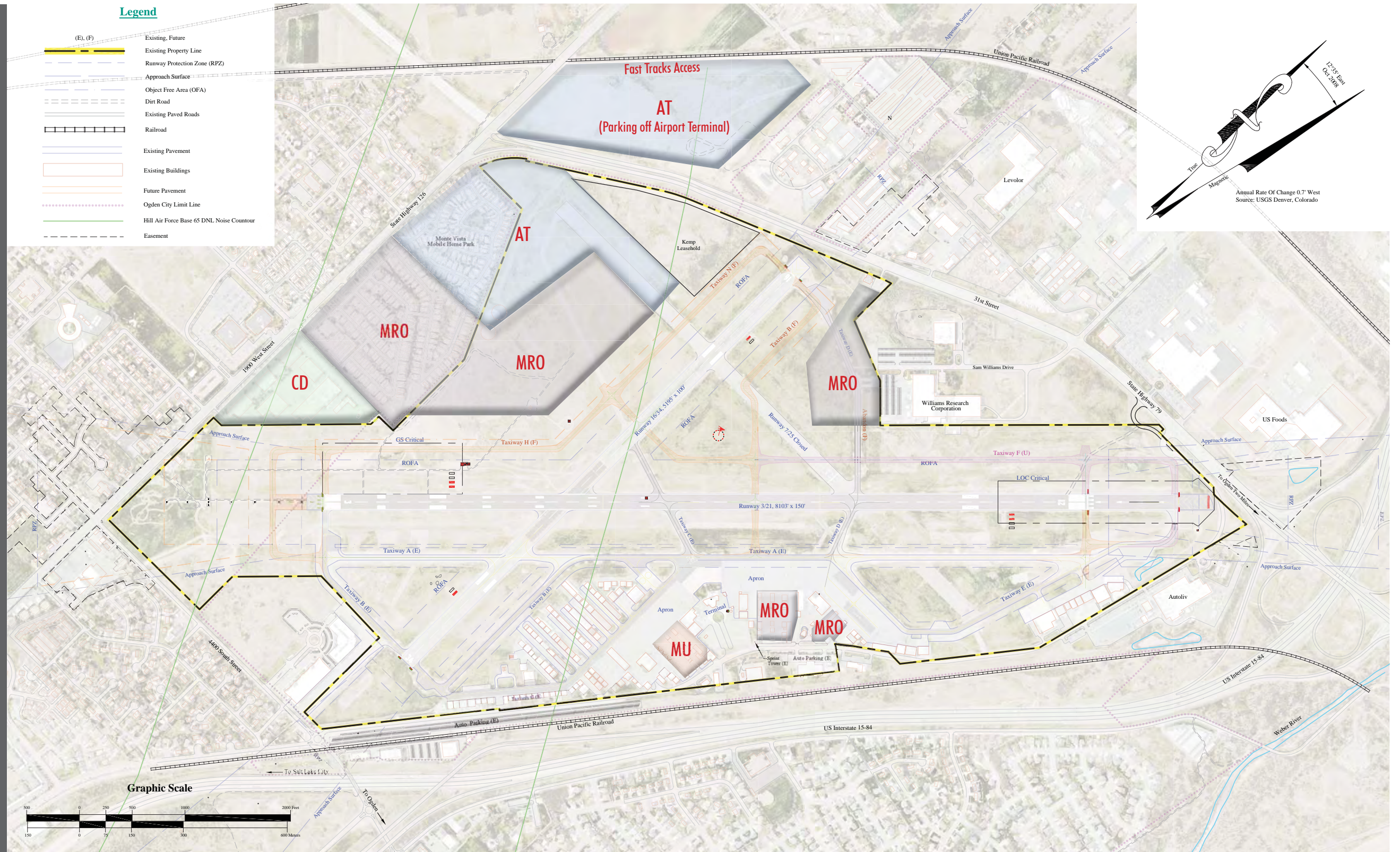
C – Cargo area includes apron sufficient to service narrow-body equipment, including stand-alone sort building and administrative offices. Belly cargo activity accommodated within the AT area. Cargo auto parking area includes primary arterial access, truck queue/parking and tenant parking. Cargo apron sufficient to service narrow-body equipment.

MRO – The Maintenance, Repair and Overhaul area accommodates a wide variety of large aircraft. Hangar with attached office uses are anticipated. MRO auto parking area includes primary arterial access, truck queue/parking and tenant parking. MRO apron sufficient to service equipment of various sizes.

MU – The Mixed Use area accommodates a wide variety of potential small, larger, and perhaps the largest of aircraft. Hangar with attached office uses are anticipated. MU auto parking area includes primary arterial access and tenant/vendor parking. MU apron includes apron sufficient to service equipment of various sizes.

GA – The General Aviation area accommodates a wide variety of users: FBO, and other specialized businesses including flight training, and ground-leased or City aircraft storage. Stand-alone hangar and hangar with attached office uses are anticipated. GA auto parking area includes primary arterial access and tenant/visitor/vendor parking. GA apron sufficient to service equipment of various sizes, both hangar frontage and traditional apron.

CD – The Non-Aviation Commercial Development area accommodates a variety of superficially or clearly non-related aviation uses, to be accommodated on existing or potential properties unencumbered with FAA grant assurances. Hotel, defense contractor/industrial campus, community mixed-use or large-scale retail, light or heavy manufacturing are potential uses. CD auto parking area includes primary arterial access, circulation/queuing and tenant/visitor/vendor parking.



AT – Airline Terminal area includes Terminal building, auto and apron areas. Terminal will accommodate passenger check-in, lobbies, concessions, circulation checkpoint, restrooms, TSA and tenant retail and offices, gate lounges, baggage receiving/retrieval areas. Auto parking area includes primary arterial access, circulation and queue, long & short-term parking, rental car/charter, tenant, and employee parking and queuing. Apron includes apron sufficient to service narrow-body equipment, including area for one RON, along with an exterior/covered baggage receiving/retrieval areas.

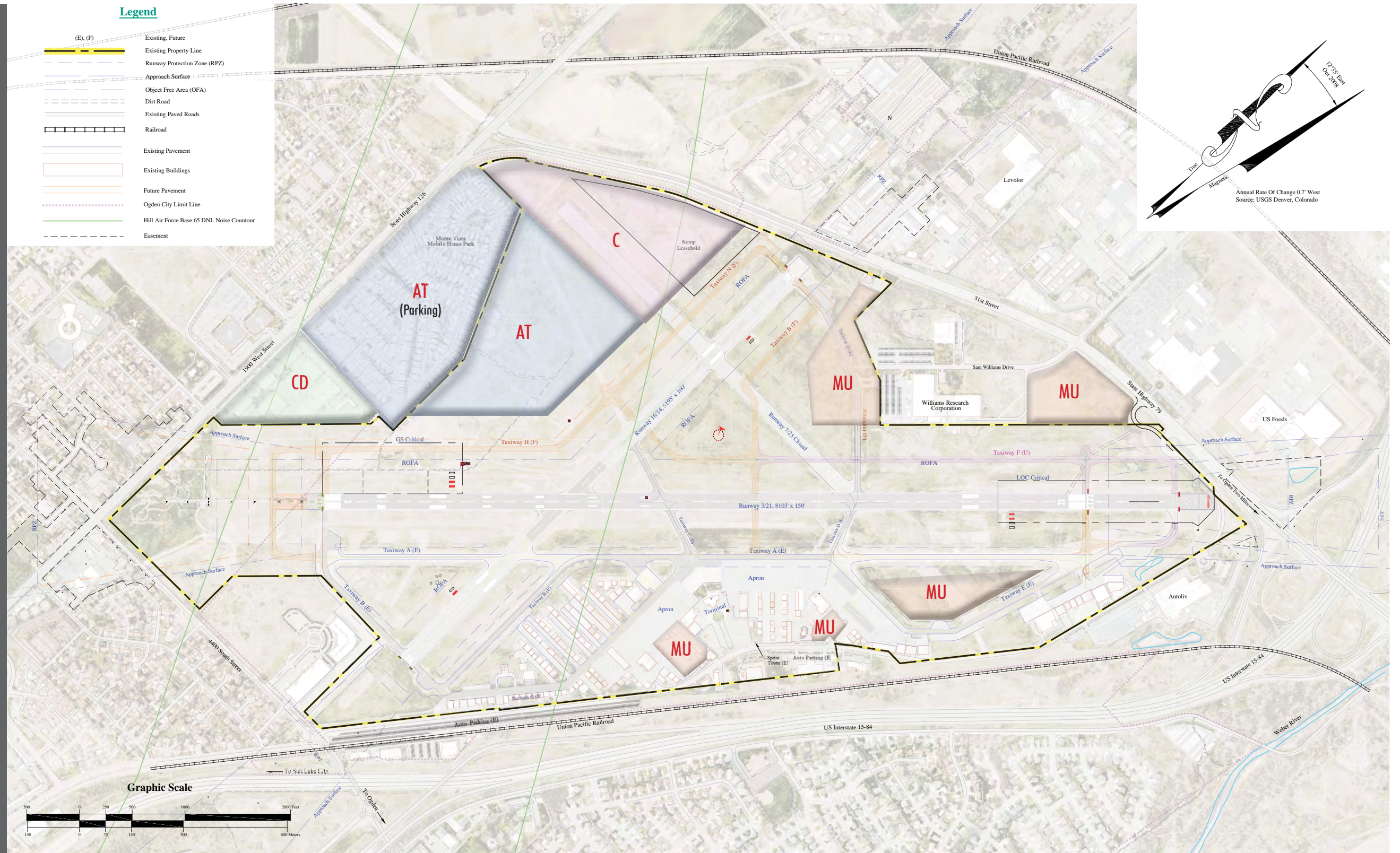
C – Cargo area includes apron sufficient to service narrow-body equipment, including stand-alone sort building and administrative offices. Belly cargo activity accommodated within the AT area. Cargo auto parking area includes primary arterial access, truck queue/parking and tenant parking. Cargo apron sufficient to service narrow-body equipment.

MRO – The Maintenance, Repair and Overhaul area accommodates a wide variety of large aircraft. Hangar with attached office uses are anticipated. MRO auto parking area includes primary arterial access, truck queue/parking and tenant parking. MRO apron sufficient to service equipment of various sizes.

MU – The Mixed Use area accommodates a wide variety of potential small, larger, and perhaps the largest of aircraft. Hangar with attached office uses are anticipated. MU auto parking area includes primary arterial access and tenant/vendor parking. MU apron includes apron sufficient to service equipment of various sizes.

GA – The General Aviation area accommodates a wide variety of users: FBO, and other specialized businesses including flight training, and ground-leased or City aircraft storage. Stand-alone hangar and hangar with attached office uses are anticipated. GA auto parking area includes primary arterial access and tenant/visitor/vendor parking. GA apron sufficient to service equipment of various sizes, both hangar frontage and traditional apron.

CD – The Non-Aviation Commercial Development area accommodates a variety of superficially or clearly non-related aviation uses, to be accommodated on existing or potential properties unencumbered with FAA grant assurances. Hotel, defense contractor/industrial campus, community mixed-use or large-scale retail, light or heavy manufacturing are potential uses. CD auto parking area includes primary arterial access, circulation/queuing and tenant/visitor/vendor parking.



8. PREFERRED DEVELOPMENT DISCUSSIONS

The **intent of this analysis** is to consider and select the highest and best land use for aviation development for each area in an constrained financial environment.

Minimum Level of Service:

This depiction shows accommodation of 80,000 or so enplanements. This depiction shows improvement of the existing terminal area to accommodate more commercial traffic, highest and best use redevelopment of the general aviation area, new GA development in the Taxiway E infield and MRO uses due south of Williams.

Mid-Level Service:

This depiction shows accommodation of 160,000 or so enplanements. This depiction shows a new terminal area on the west side of the airport, highest and best use redevelopment of the general aviation area, no mobile home park acquisition, no Kemp leasehold development, large scale and large aircraft MRO in the Taxiway E infield with a relocated tower and mixed uses north of Williams targeting defense contractor office leasing, among other uses.

Maximum Service Level:

This depiction is a perhaps a best-case, most-robust, ultimate development protection type of configuration. This depiction continues to show

GA redevelopment, MRO and tower relocation, and mixed-use north of Williams. Given an enplanement level of 300,000 some portion of the commercial terminal facilities will be constrained on the mid-level service property envelope. This depiction shows Fast Trax access via acquisition of a piece of property north of Highway 79 and auto parking and/or an off-airport terminal thereon. Tunneling provides airfield access under Highway 79 along with West 400 South. A regional UPS facility is sited within the Kemp lease area.

Acres	Minimum Level of Service	Mid-Level Service	Maximum Level of Service
Airline Terminal	7.2	73	81.1
Cargo	0	0	32.5
Maintenance, Repair and Overhaul	14.5	24.5	24.5
Mixed-Use Aviation	0	12.2	12.2
General Aviation	9.1	9.1	9.1
Non-Aviation Commercial Development	0	17.7	77.9

AT – Airline Terminal area includes Terminal building, auto and apron areas. Terminal will accommodate passenger check-in, lobbies, concessions, circulation checkpoint, restrooms, TSA and tenant retail and offices, gate lounges, baggage receiving/retrieval areas. Auto parking area includes primary arterial access, circulation and queue, long & short-term parking, rental car/charter, tenant, and employee parking and queuing. Apron includes apron sufficient to service narrow-body equipment, including area for one RON, along with an exterior/covered baggage receiving/retrieval areas.

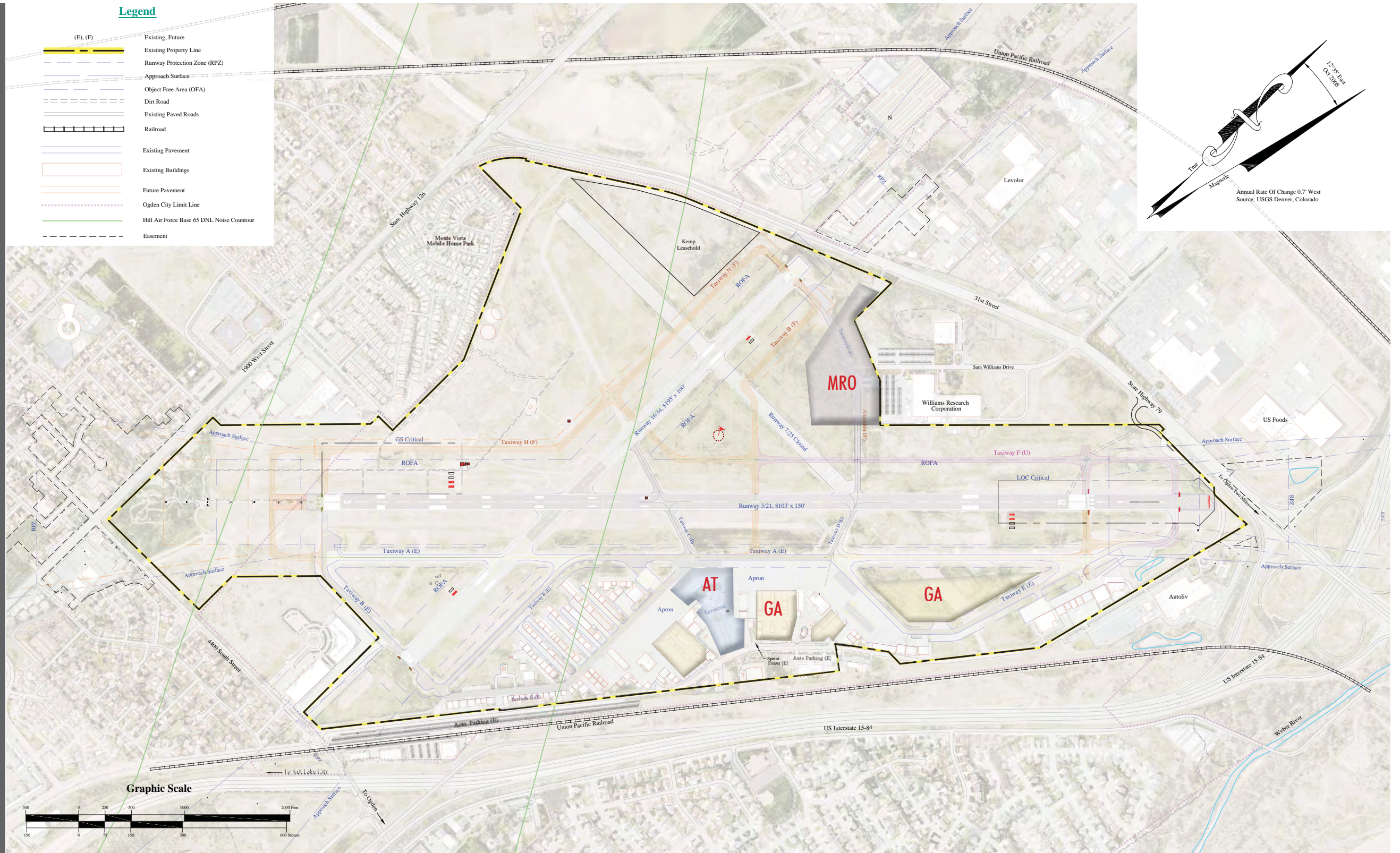
C – Cargo area includes apron sufficient to service narrow-body equipment, including stand-alone sort building and administrative offices. Belly cargo activity accommodated within the AT area. Cargo auto parking area includes primary arterial access, truck queue/parking and tenant parking. Cargo apron sufficient to service narrow-body equipment.

MRO – The Maintenance, Repair and Overhaul area accommodates a wide variety of large aircraft. Hangar with attached office uses are anticipated. MRO auto parking area includes primary arterial access, truck queue/parking and tenant parking. MRO apron sufficient to service equipment of various sizes.

MU – The Mixed Use area accommodates a wide variety of potential small, larger, and perhaps the largest of aircraft. Hangar with attached office uses are anticipated. MU auto parking area includes primary arterial access and tenant/vendor parking. MU apron includes apron sufficient to service equipment of various sizes.

GA – The General Aviation area accommodates a wide variety of users: FBO, and other specialized businesses including flight training, and ground-leased or City aircraft storage. Stand-alone hangar and hangar with attached office uses are anticipated. GA auto parking area includes primary arterial access and tenant/visitor/vendor parking. GA apron sufficient to service equipment of various sizes, both hangar frontage and traditional apron.

CD – The Non-Aviation Commercial Development area accommodates a variety of superficially or clearly non-related aviation uses, to be accommodated on existing or potential properties unencumbered with FAA grant assurances. Hotel, defense contractor/industrial campus, community mixed-use or large-scale retail, light or heavy manufacturing are potential uses. CD auto parking area includes primary arterial access, circulation/queuing and tenant/visitor/vendor parking.



AT – Airline Terminal area includes Terminal building, auto and apron areas. Terminal will accommodate passenger check-in, lobbies, concessions, circulation checkpoint, restrooms, TSA and tenant retail and offices, gate lounges, baggage receiving/retrieval areas. Auto parking area includes primary arterial access, circulation and queue, long & short-term parking, rental car/charter, tenant, and employee parking and queuing. Apron includes apron sufficient to service narrow-body equipment, including area for one RON, along with an exterior/covered baggage receiving/retrieval areas.

C – Cargo area includes apron sufficient to service narrow-body equipment, including stand-alone sort building and administrative offices. Belly cargo activity accommodated within the AT area. Cargo auto parking area includes primary arterial access, truck queue/parking and tenant parking. Cargo apron sufficient to service narrow-body equipment.

MRO – The Maintenance, Repair and Overhaul area accommodates a wide variety of large aircraft. Hangar with attached office uses are anticipated. MRO auto parking area includes primary arterial access, truck queue/parking and tenant parking. MRO apron sufficient to service equipment of various sizes.

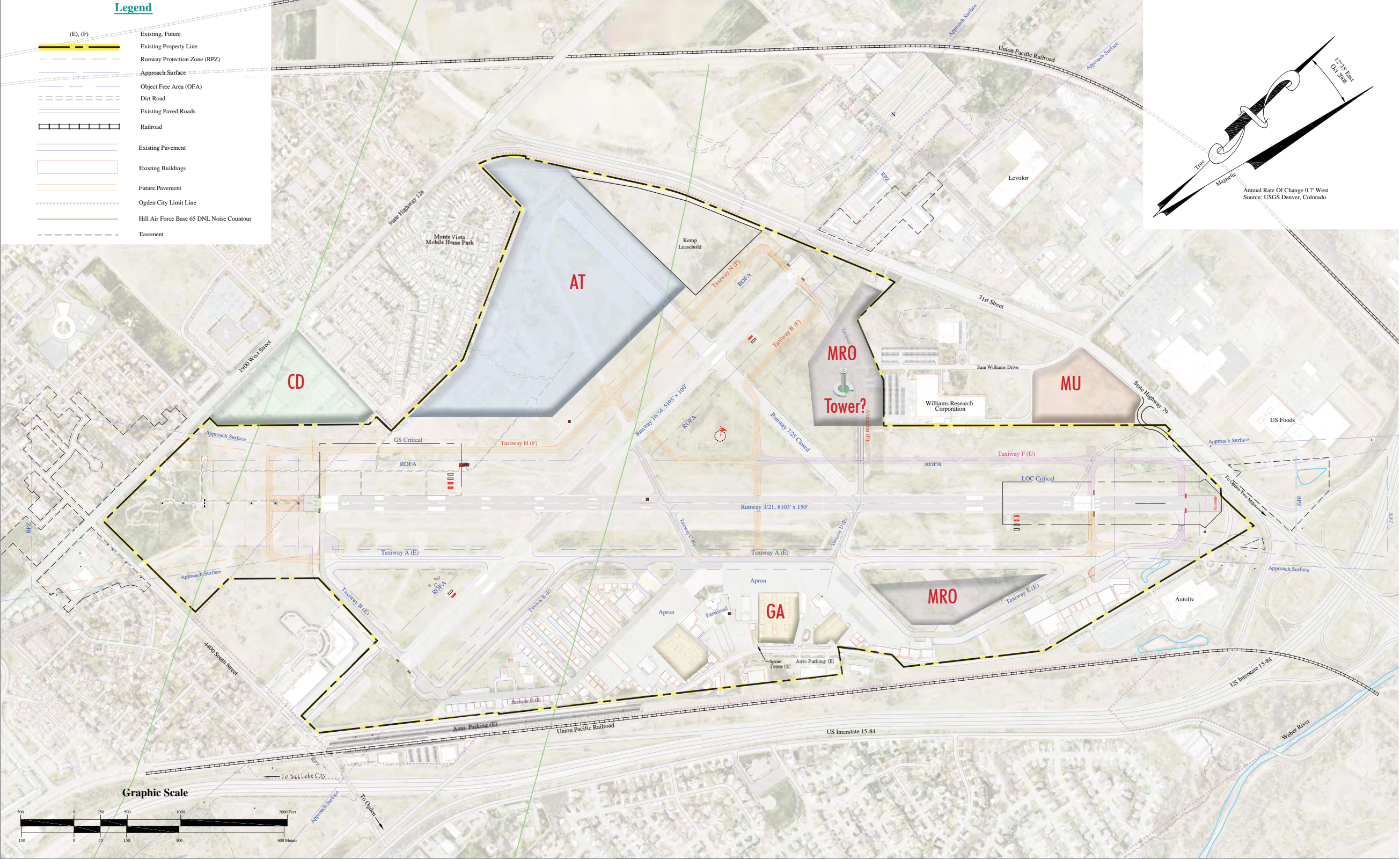
MU – The Mixed Use area accommodates a wide variety of potential small, larger, and perhaps the largest of aircraft. Hangar with attached office uses are anticipated. MU auto parking area includes primary arterial access and tenant/vendor parking. MU apron includes apron sufficient to service equipment of various sizes.

GA – The General Aviation area accommodates a wide variety of users: FBO, and other specialized businesses including flight training, and ground-leased or City aircraft storage. Stand-alone hangar and hangar with attached office uses are anticipated. GA auto parking area includes primary arterial access and tenant/visitor/vendor parking. GA apron sufficient to service equipment of various sizes, both hangar frontage and traditional apron.

CD – The Non-Aviation Commercial Development area accommodates a variety of superficially or clearly non-related aviation uses, to be accommodated on existing or potential properties unencumbered with FAA grant assurances. Hotel, defense contractor/industrial campus, community mixed-use or large-scale retail, light or heavy manufacturing are potential uses. CD auto parking area includes primary arterial access, circulation/queuing and tenant/visitor/vendor parking.

Legend

(E), (F)	Existing, Future
---	Existing Property Line
---	Runway Protection Zone (RPZ)
---	Approach Surface
---	Object Free Area (OFA)
---	Dirt Road
---	Existing Paved Roads
---	Railroad
---	Existing Pavement
---	Existing Buildings
---	Future Pavement
---	Ogden City Limit Line
---	Hill Air Force Base 65 DNL Noise Contour
---	Easement



Mid Level Service



AT – Airline Terminal area includes Terminal building, auto and apron areas. Terminal will accommodate passenger check-in, lobbies, concessions, circulation checkpoint, restrooms, TSA and tenant retail and offices, gate lounges, baggage receiving/retrieval areas. Auto parking area includes primary arterial access, circulation and queue, long & short-term parking, rental car/charter, tenant, and employee parking and queuing. Apron includes apron sufficient to service narrow-body equipment, including area for one RON, along with an exterior/covered baggage receiving/retrieval areas.

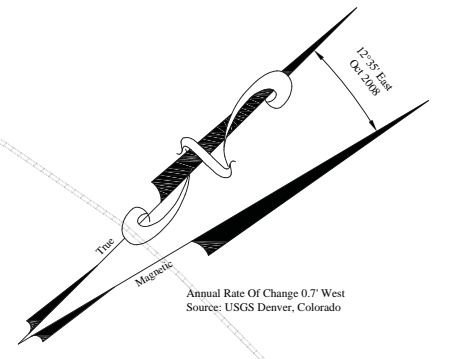
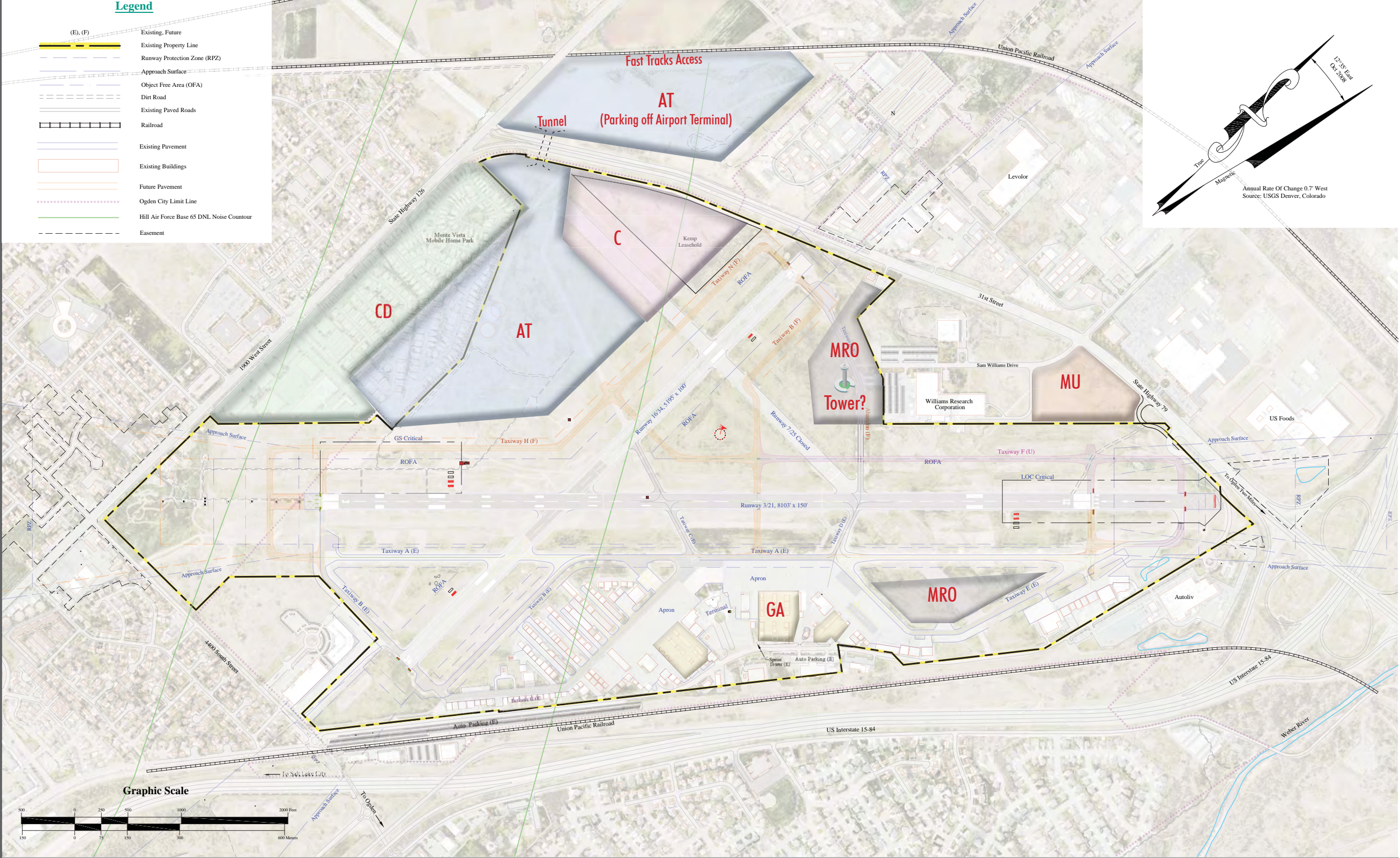
C – Cargo area includes apron sufficient to service narrow-body equipment, including stand-alone sort building and administrative offices. Belly cargo activity accommodated within the AT area. Cargo auto parking area includes primary arterial access, truck queue/parking and tenant parking. Cargo apron sufficient to service narrow-body equipment.

MRO – The Maintenance, Repair and Overhaul area accommodates a wide variety of large aircraft. Hangar with attached office uses are anticipated. MRO auto parking area includes primary arterial access, truck queue/parking and tenant parking. MRO apron sufficient to service equipment of various sizes.

MU – The Mixed Use area accommodates a wide variety of potential small, larger, and perhaps the largest of aircraft. Hangar with attached office uses are anticipated. MU auto parking area includes primary arterial access and tenant/vendor parking. MU apron includes apron sufficient to service equipment of various sizes.

GA – The General Aviation area accommodates a wide variety of users: FBO, and other specialized businesses including flight training, and ground-leased or City aircraft storage. Stand-alone hangar and hangar with attached office uses are anticipated. GA auto parking area includes primary arterial access and tenant/visitor/vendor parking. GA apron sufficient to service equipment of various sizes, both hangar frontage and traditional apron.

CD – The Non-Aviation Commercial Development area accommodates a variety of superficially or clearly non-related aviation uses, to be accommodated on existing or potential properties unencumbered with FAA grant assurances. Hotel, defense contractor/industrial campus, community mixed-use or large-scale retail, light or heavy manufacturing are potential uses. CD auto parking area includes primary arterial access, circulation/queuing and tenant/visitor/vendor parking.



9. FUNDING

Airport Improvement Program (AIP)

AIP is a user-based **funding mechanism** that ensures airport upgrade projects in support of the national system. Dollars are appropriated annually by from the Airport and Airway Trust Fund and are distributed by FAA, which assigns the **funds to specific airports via formulae**. In 2015, that amount totaled about \$3.35 billion, a number that has remained essentially flat for years. Funds are made available via revenues from taxes on domestic and international travel, domestic cargo transported by air, and noncommercial aviation fuel.

Passenger Facility Charges (PFC)

Since their inception in 1990 PFC have become a **foundation of airport capital investment**, funding projects that benefit their local communities and meet airline and passenger demands to accommodate future growth and improve levels of service. The charge is currently allowable up to the \$4.50 level per enplaned passenger, per flight segment.

Revenue/General Obligation Bonds (R/GO)

Since the 1960's, airport revenue bonds have been the major financing mechanism for capital improvements at large, medium, and some small hub airports. These financial instruments pledge the **airport's revenue streams to repay bond holders**.

Industrial Revenue Bonds (IRB) / Industrial Development Bonds (IDB) - Counties and municipalities issue IRB's/IDB's to **promote** industrial development and manufacturing facilities in the State of Utah. Funds must be used for manufacturing facilities.

Enterprise Zone Tax Credits

An enterprise zone comprises an area identified by local elected and economic development officials and designated by the state. Certain types of businesses locating or expanding in a designated zone **may claim state income tax credits**.

Commercialization of Public Airport Assets

Commercialization of airport assets is a potential revenues source. For example, at Pittsburgh International Airport, a private terminal operator

has **increased** non-aeronautical **revenues** (food/beverage, retail and duty-free) at the airport from \$23 million in 1991 to \$66 million a number of years ago, while simultaneously receiving praise for customer service.

Tax Increment Financing (TIF)

Cities and counties may award incentives to companies locating in Economic Development Areas (EDA), Urban Renewal Areas (URA) or Community Development Areas (CDA). The city or county determines EDA/URA/CDA areas on a local level. Incentive dollars are generated through the creation of new **"property tax increment" that a development will generate**.

Revolving Loan Funds (RLF)

Numerous RLF programs have been established in the state to promote economic development within Utah. RLF's are a **gap financing measure** used primarily for development and expansion of small businesses. Communities in Utah offer RLF's to provide access to a flexible source of capital to be used in combination with more conventional sources. Often RLF's act as a bridge between the amount a borrower can obtain

through private market funding and the amount needed.

State Infrastructure Bank (SIB)

The purpose of the State Infrastructure Bank (SIB) Loan Fund is to provide loans and assistance to improve transportation infrastructure in the State of Utah. The program is intended to be an **innovative financing tool** that will offer financing options not previously available in meeting infrastructure needs.

Transient Room Tax (TRT)

Utah counties may impose a 4.25% TRT tax on the rental of rooms in hotels, motels, inns, etc. The maximum rate of TRT increased to 4.25% as of October 1, 2006. The county legislative body controls utilization of the TRT, with advice provided by the county Tourism Tax Advisory Board (TAB). Up to 100% of TRT may be used to establish and promote recreation, tourism, film production and conventions, **perhaps on- or adjacent to airport property**. There are other taxes similar to the TRT imposed on tourists to include: Municipality Transient Room Taxes and Tourism Transient Room Tax.

Ogden City (OC)

Traditional revenues from City coffers may be used for/at OGD as directed by the Mayor and Council.

Airport Revenues (AP)

OGD has relatively substantial property holdings, some of which are being leased. These lease leases include aeronautical, non-aeronautical, agricultural and concession. Various fees and charges are levied depending upon the activity and use.

10. PRELIMINARY CONFIGURATION

The **Exhibit** following this page and concluding this narrative depicts the preliminary configuration and **planning-levels** costs by phases:

- Short-Term Future; 0-7 years,
- Long-Term Future; 8-15 years, and
- Ultimate; 16-30 years **and beyond**.

It is important to note that these costs **do not include any tenant or lessee improvements costs**.

The preliminary configuration is intended to be flexible enough to accommodate demand **as, or if**, it may materialize.

Airline Terminal (**AT**)

Airlines are expected to be accommodated at the current terminal location while the market matures, demand is realized and planning and financing for long-term locations is finalized.

The long-term future location then moves across the airfield to a traditional terminal/concourse, while the ultimate configuration shows a relatively new **off-airport terminal concept** allowing easy and convenient **intermodal** access.

The terminal building and function is found on the other side of Highway 79 adjacent to Wasatch Front rail access. Screened passengers would leave the terminal building, travel to dedicated concourse building for boarding. A tunnel under Highway 79 provides access.

MRO

Extensive MRO use is found across the field. In the context of this planning MRO could very well be the traditional function or aircraft manufacturing or cargo and/or a host of other **mostly large-aircraft** aviation-only uses.

GA Redevelopment

Select "older" areas within the current hangar area are identified for reinvigoration. The condition of hangars in these areas is not an appropriate "front door" for Ogden citizens. Replacement hangars, perhaps some with related mixed-use office space is depicted.

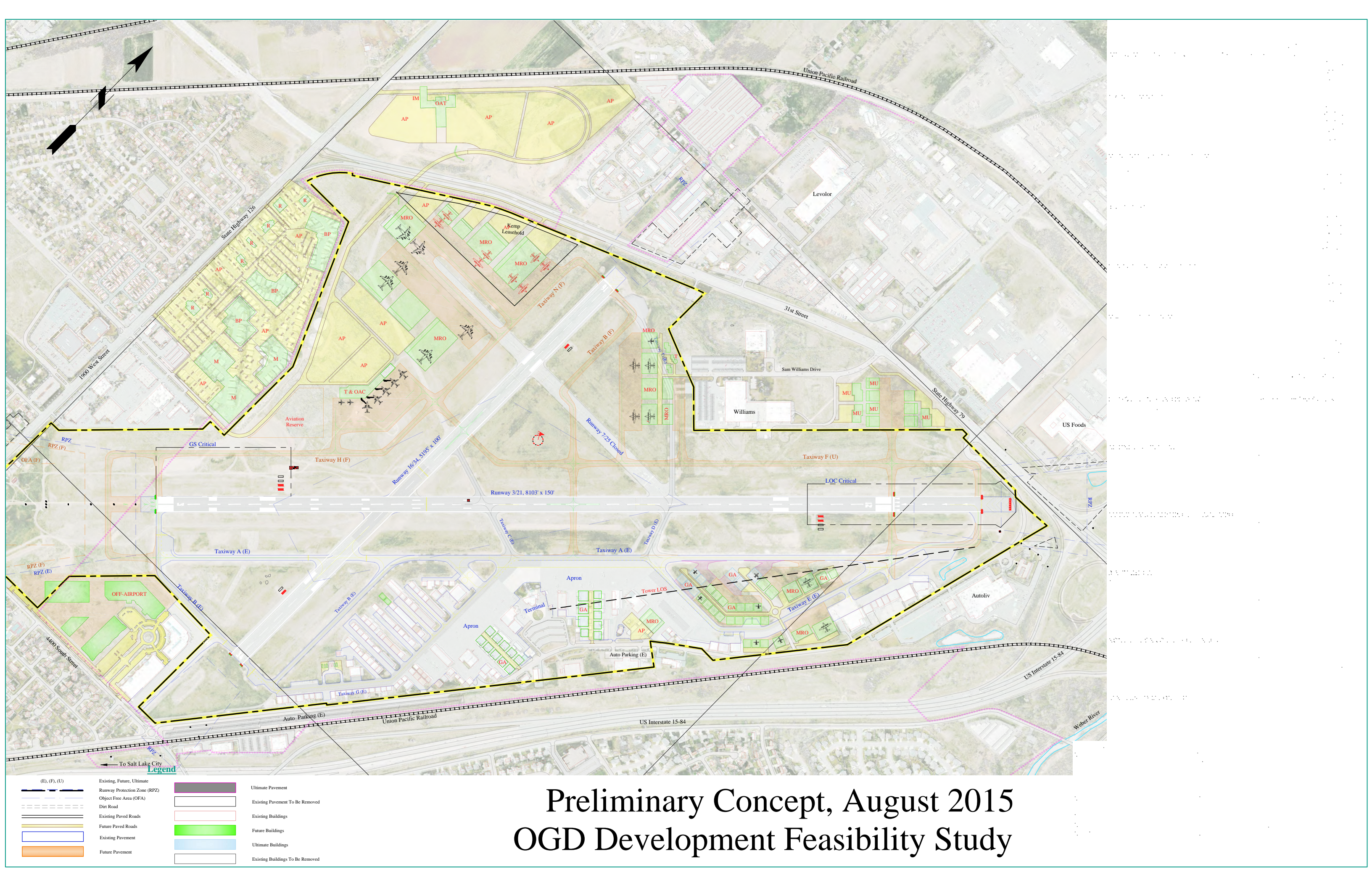
Mixed-Use

Future mixed uses are shown within current or potentially non-obligated property, that is, property not required to have an aviation use, per FAA grant assurances.

Non Aviation Commercial Development

Acquisition and redefinition of the Monte Vista Mobile Home Park is a defining feature of this preliminary configuration. One of the purposes of this effort is to estimate a highest and best use for select aviation and adjoining properties. This reporting **demonstrates a future need for formal retail, manufacturing, business park** uses complementary, but set apart from the Airport. This non-aviation development has the potential to **redefine the airport area** and generate substantial direct and indirect economic benefits not only for Ogden but for adjoining communities. Smaller-box retail is found along S 1900 W and retail, manufacturing, business park or other more intensive uses are found between the road and the airport.

Summarily, a **large amount of land is available** for aviation and non-aviation development. A **large amount of opportunity** is also available. **Funds are insufficient "across the board"** to make a concept a reality. Wheels are turning to try secure funding and **leadership "across the board"** is needed to make it happen.



Preliminary Concept, August 2015

OGD Development Feasibility Study