



Appendix C

**LAND USE
COMPATIBILITY**

Appendix C

LAND USE COMPATIBILITY

Land use planning in the area surrounding Caldwell Executive Airport (EUL) occurs through regulatory and non-regulatory means. The primary regulatory tool for directing land use is the zoning ordinance, which limits the type, size, and density of land uses in various locations. Examples of land use types include residential, commercial, industrial, and agricultural. Non-regulatory means of land use controls include the comprehensive or strategic land use plan. These documents can be adopted for the greater municipality or for specific areas.

It is important to note the distinction between primary land use concepts used in evaluating development with the airport environs and existing land use, comprehensive plan, and zoning land use. Existing land use refers to property improvements as they exist today, according to county records.

The comprehensive plan land use map identifies the projected or future land use, according to the goal and policies of the locally adopted comprehensive plan. This document guides future development within the city and county planning area and provides the basis for zoning designations.

Zoning identifies the type of land use permitted on a given piece of property, according to the city and county zoning ordinances and maps. Local governments are required to regulate the subdivision of all lands within their corporate limits. Zoning ordinances should be consistent with the general plan, where one has been prepared. In some cases, the land use prescribed in the zoning ordinance or depicted in the general plan may differ from the existing land use.

The following sections describe the applicable land use policies for the area within the vicinity of the Airport. Specifically, these sections pertain to the lands within the 65 day-night noise level metric (DNL) contours and the Part 77 Approach Surface out to one mile from the end of the runways. For the purposes of this analysis, a study area consisting of a one-mile buffer from the airport boundary was established, encompassing 5,935.5 acres, including the airport. The airport encompasses approximately 532 acres, equivalent to nine percent of the study area.

EXISTING LAND USE

The Caldwell Executive Airport is located within the City of Caldwell, Idaho. The airport is bounded by State Highway 84 on the west and East (E.) Ustick Road to the south. Undeveloped land, used for agricultural purposes, borders the airport to the east. To the north are low-density residential, light industrial, and office uses. West of Interstate 84 is a manufactured housing development and a storage facility. The downtown business district for the City of Caldwell is approximately three miles northwest of the airport.

COMPREHENSIVE PLAN

The comprehensive plan is a general policy document used by government agencies to identify and describe a community’s characteristics, articulate goals and policies, and explore alternative plans for future growth, which is used to form subdivision regulations and zoning ordinances to carry out the plan’s goals. Often, a municipality will include goals and policies for their airport, and typically contained in a separate policy document from an Airport Master Plan. Comprehensive plans aid local decision-makers during the development process. The most current comprehensive plans within the study area include:

- City of Caldwell – *2040 Caldwell Comprehensive Plan for the City of Caldwell* (2020)¹
- Canyon County – *Canyon County 2020 Comprehensive Plan* (2011)²

For this study, specific land use classifications in the two jurisdictions around the Airport have been re-categorized into generalized future land use designations. **Table C1** represents the future land use classifications for each jurisdiction and how the land use classifications are organized into a generalized future land use category.

TABLE C1 | Generalized Classification of Future Land Use Districts

Generalized Future Land Use Category	City of Caldwell	Canyon County
Low-Density Residential	Low-Density Residential	Residential
Medium-Density Residential	Medium-Density Residential	N/A
High-Density Residential	High-Density Residential	N/A
Commercial	Commercial and Service, Business	N/A
Industrial	Industrial, Manufacturing and Production	Industrial
Public/Quasi-Public	Institutional, Public	N/A
Open Space	Open Space, Environmental Sensitive	N/A
Rail Facilities	Rail Facilities	N/A

N/A: Not Applicable

Sources: *City of Caldwell Planning and Zoning; Canyon County Planning and Zoning; Coffman Associates analysis.*

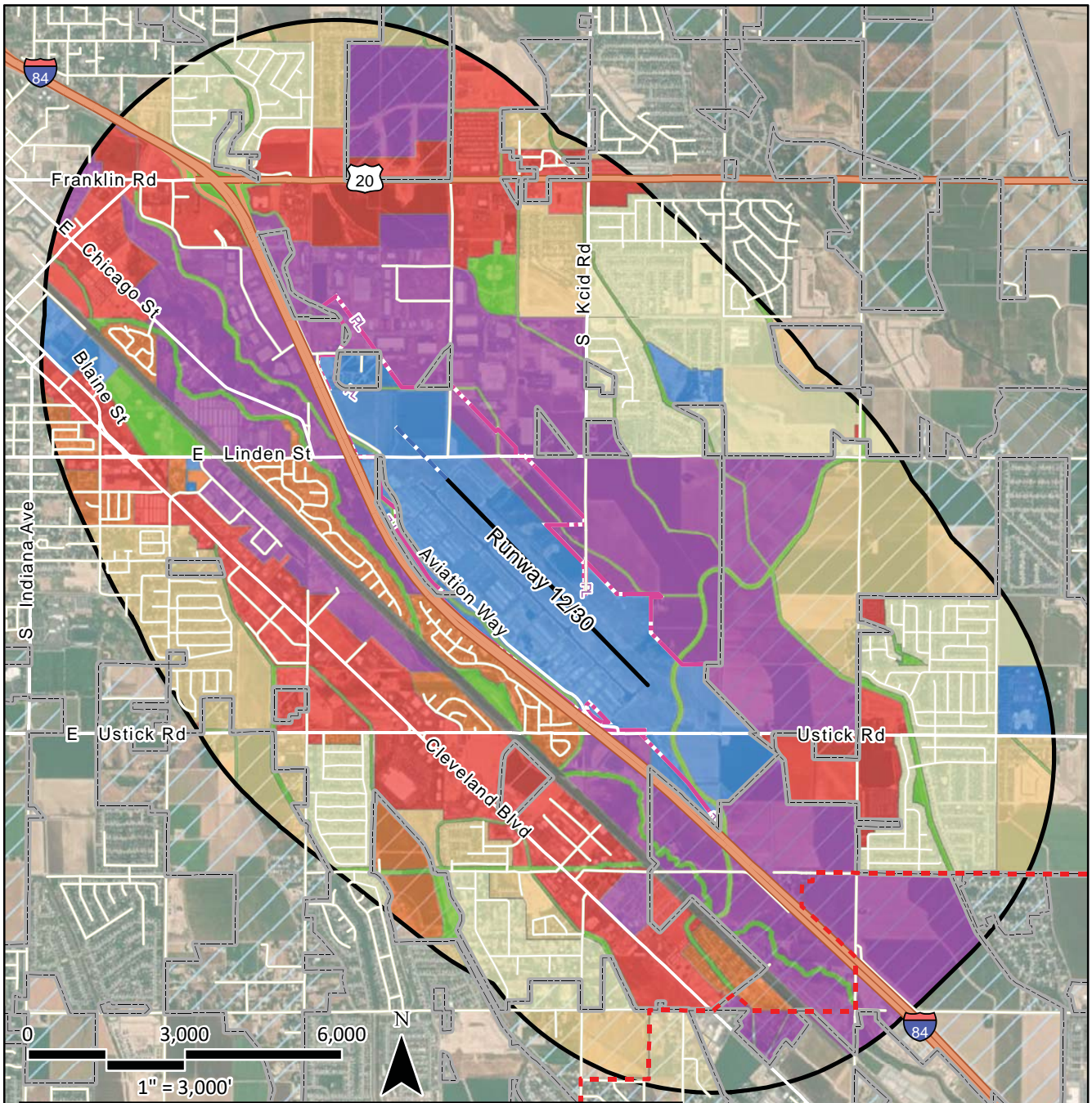
As shown on **Exhibit C1** and summarized in **Table C1**, general land use classifications within the study area include low-, medium-, and high-density residential, commercial, industrial, and public/quasi-public, and open space.

A large portion of the study area under the Canyon County jurisdiction falls within the “City of Caldwell Impact Area.” Per the *Canyon County 2020 Comprehensive Plan*, the Impact Area is defined as land beyond a city’s boundaries where future city growth may occur and is usually annexed after development occurs. Impact areas are typically negotiated between city and county officials and defined on a map. In this case, the Caldwell Impact Area is delineated on the City’s Future Land Use map in the comprehensive plan. While the Impact Area is reflected on the City’s Future Land Use map, those parcels will remain under the authority of the county until annexation occurs. Canyon County *Code of Ordinances* (CCCO) § 09-01-15³ limits lands available for annexation by the City of Caldwell to within the Impact Area, unless expressly requested by the property owner. The Caldwell Impact Area is reflected on **Exhibit C1**.

¹ City of Caldwell Planning and Zoning, *2040 Caldwell Comprehensive Plan for the City of Caldwell* (February 3, 2020) (<https://www.cityofcaldwell.org/departments/planning-and-zoning>)

² Canyon County Planning and Zoning, *Canyon County 2020 Comprehensive Plan* (2011) (<https://www.canyonco.org/elected-officials/commissioners/development-services/planning-zoning/>)

³ Canyon County Planning and Zoning, *Canyon County Code of Ordinances, Chapter 9 – Areas of City Impact* (https://codelibrary.amlegal.com/codes/canyoncountyvid/latest/canyoncounty_id/0-0-0-4355#JD_09-01-09)



Existing Runway	Medium-Density Residential
Ultimate Runway Extension	High-Density Residential
Airport Property	Commercial
1-Mile Airport Buffer	Industrial
Municipal Boundary	Public/Quasi-Public
County/Unincorporated Land	Open Space
Caldwell Area of Interest	Rail Facilities
Future Land Use	No Data
Low-Density Residential	

Future Land Use	
Land Use Type	Acres
Low-Density Residential	959.8
Medium-Density Residential	775.1
High-Density Residential	294.0
Commercial	1,068.8
Industrial	1,708.5
Public/Quasi-Public	613.7
Open Space	343.4
Rail Facilities	90.8
No Data	81.4
Total	5,935.5

Source: ESRI Basemap Imagery 2020, Canyon County, City of Caldwell

Table C2 identifies the primary general land use within the study area is Industrial, accounting for approximately 28.8 percent of the planned land use within the study area. Commercial general land use accounts for an additional 18.0 percent of planned land use. Other prominent general land uses include Low-Density Residential (16.2 percent), Medium-Density Residential (13.1 percent), and Public/Quasi-Public (10.3 percent). Other general plan land uses include Open Space (5.8 percent) High-Density Residential (5.0 percent), and Rail Facilities (1.5 percent).

It should be noted approximately 1.4 percent of the study area is labeled as “No Data,” which is property under the county land use jurisdiction and outside the Caldwell Impact Area (**Table C2**).

TABLE C2 | General Plan Land Use Classification Study Area Summary

General Land Use Designation	Acreage	Percent of Study Area ¹
Caldwell Executive Airport	532.0	9.0%
Low-Density Residential	959.8	16.2%
Medium-Density Residential	775.1	13.1%
High-Density Residential	294.0	5.0%
Commercial	1,068.8	18.0%
Industrial	1,708.5	28.8%
Public/Quasi-Public	613.7	10.3%
Open Space	343.4	5.8%
Rail Facilities	90.8	1.5%
No Data	81.4	1.4%
Study Area Total	5,935.5	100.0%

¹ Percentage totals may differ slightly due to rounding of numbers.

Sources: City of Caldwell Planning and Zoning; Canyon County Planning and Zoning; Coffman Associates analysis.

ZONING

Zoning regulations divide land into districts, or zones, to regulate land use activities in those districts, specify permitted uses, intensity and density of each use, and the bulk sizes of each building. Traditional zoning ordinances separate land into four basic uses: residential, commercial (including office), industrial, and agricultural. Both the City of Caldwell and the Canyon County created sub-categories under each basic land use based on intensity, density, and community impact. For the purpose of this analysis, specific zoning districts in both jurisdictions around the airport have been recategorized into generalized zoning designations. **Table C3** represents the zoning districts for each jurisdiction and how those zoning districts fit into a generalized zoning land use category.

TABLE C3 | Generalized Classification of Zoning Districts

Generalized Zoning Category	City of Caldwell	Canyon County
Single-Family Residential	R-1	N/A
Medium-Density Residential	R-2	R-2
High-Density Residential	R-3	N/A
Commercial	C-1, C-2, C-4	C-2
Light Industrial	M-1, I-P	M-1
Heavy Industrial	N/A	M-2
Airport District	A-D	N/A
N/A: Not Applicable		

Sources: City of Caldwell Planning and Zoning; Canyon County Planning and Zoning; Coffman Associates analysis.

City of Caldwell

Chapter 10 of the City of Caldwell *City Code*⁴ (C.C.C.) focus on zoning and land division requirements for the city. The following zoning districts are within the study area around the Airport within the city's jurisdiction:

Residential Districts. There are three residential districts within the study area under the City's jurisdiction. Per C.C.C. § 10-01-03(1)(A), each residential district is intended to provide housing opportunities by zoning procedures in accordance with the comprehensive plan. Description of each residential zoning district is as follows:

- **Low-Density Residential (R-1).** The R-1 district is meant to preserve and enhance low-density, single-family residential neighborhoods, and should have a full range of urban services available.
- **Medium-Density Residential (R-2).** The R-2 district is generally located in older neighborhoods close to shopping, recreational, or cultural land uses.
- **High-Density Residential (R-3).** The High-Density Residential district provides a buffer or as a transitional land use between commercial uses and lower density residential, offering high-density residential in selected neighborhoods.

Commercial Districts. There are three commercial districts within the study area under the City's jurisdiction. Per C.C.C. § 10-01-03(1)(B), all commercial districts are meant to provide commercial needs in accordance with the comprehensive plan. The zoning designation dictates the intensity of the use.

- **Neighborhood Commercial (C-1).** The Neighborhood Commercial zoning district is designed to provide local service needs at the perimeter of low-density residential neighborhoods.
- **Community Commercial (C-2).** The C-2 district fulfills general shopping, retail, and professional services.
- **Freeway Commercial (C-4).** Freeway Commercial is located within the vicinity of freeway interchanges and frontage access roads for providing travel-related services to highway users.

Industrial Districts. There are two industrial districts within the study area under the City's jurisdiction. Per C.C.C. § 10-01-03(1)(C), the industrial districts are intended to provide industrial needs in accordance with the comprehensive plan.

⁴ City of Caldwell, ID Planning and Zoning – City of Caldwell *City Code*, Chapter 10 - *Zoning Regulations* (<https://www.cityofcaldwell.org/departments/planning-and-zoning>)

- **Light Industrial (M-1).** The M-1 district encourages the grouping of light industrial uses. This zoning district considers the location, building appearance, and treatment of land so they are unobtrusive and not detrimental to surrounding commercial or residential uses.
- **Industrial Park (I-P).** The Industrial Park provides for industrial park development containing manufacturing and related establishments in an open and attractive setting, generally appropriate in located near major rights-of-way, freeways, and other suitable places.

Airport District (A-D). Per C.C.C. § 10-01-03(1)(D)(1), the A-D district is intended to provide for the safe, efficient, convenient, and economical operation of the the Airport or other similar facility. The A-D district supports airport operations, services to airport users, and protect the public interest and investment.

Canyon County

Chapter Seven of the CCCO⁵ outlines zoning and land division requirements for the county. The following four zoning districts are within the study area around the Airport under county jurisdiction:

Combined Medium-Density Residential (R-2). According to CCCO § 7-10-25(4), the R-2 district is intended to provide medium-density residential development which have a full range of community services and facilities available or projected for establishment.

Service Commercial (C-2). The Service Commercial district is intended to provide commercial service uses (CCCO § 7-10-25[6]).

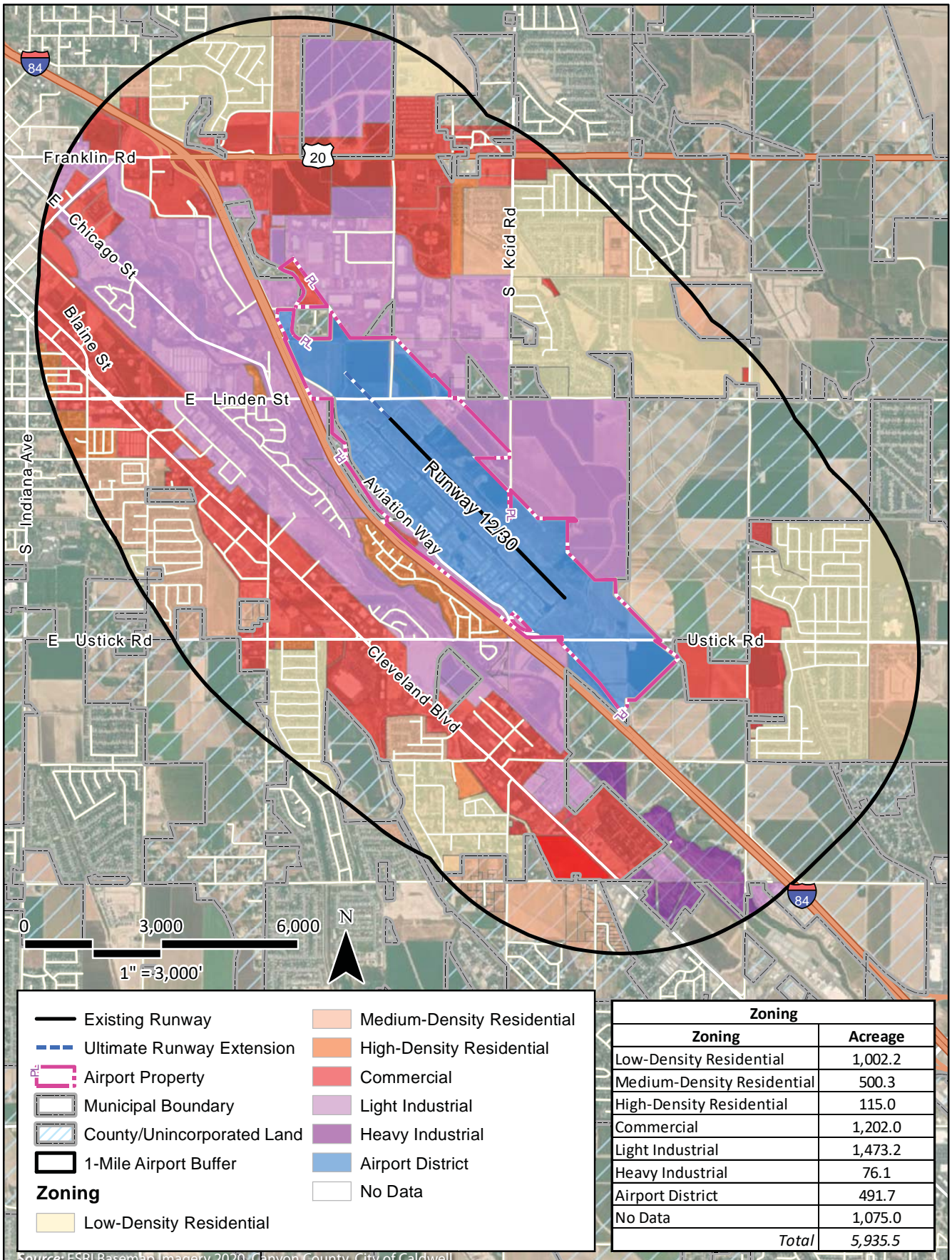
Light Industrial (M-1). The Light Industrial encourages the grouping of lighting industrial uses, considering the location and appearance of buildings and treatment of land so they are unobtrusive and not detrimental to surrounding commercial or residential uses (CCCO § 7-10-25[7]).

Heavy Industrial (M-2). Per CCCO § 7-10-25(8), the M-2 district encourages industries to locate in and provide for suitable areas for heavy industrial uses may be established, substantially free of residential land uses, light industrial, or commercial activities which interferes with heavy industrial development and operations.

STUDY AREA LAND USE SUMMARY

Applying zoning maps available from both the City of Caldwell and Canyon County, the zoning districts within the study area are summarized in **Table C4** and depicted on **Exhibit C2**.

⁵ Canyon County Planning and Zoning, *Canyon County Code of Ordinances, Chapter 7 – Zoning Regulations* (<https://www.canyonco.org/elected-officials/commissioners/development-services/planning-zoning/>)



Existing Runway	Medium-Density Residential
Ultimate Runway Extension	High-Density Residential
Airport Property	Commercial
Municipal Boundary	Light Industrial
County/Unincorporated Land	Heavy Industrial
1-Mile Airport Buffer	Airport District
Zoning	No Data
Low-Density Residential	

Zoning	
Zoning	Acreage
Low-Density Residential	1,002.2
Medium-Density Residential	500.3
High-Density Residential	115.0
Commercial	1,202.0
Light Industrial	1,473.2
Heavy Industrial	76.1
Airport District	491.7
No Data	1,075.0
Total	5,935.5

Source: ESRI Basemap Imagery 2020, Canyon County, City of Caldwell

Residential land uses (single-, medium-, and high-density residential combined) account for 27.2 percent of the study area (16.9 percent, 8.4 percent, and 1.9 percent respectively). Industrial land uses (both light and heavy combined) accounts for approximately 25.1 percent of the study area (24.8 percent and 1.3 percent respectively). Other zoning districts include Commercial (20 percent) and Airport District (8.3 percent) of the study area. Note that approximately 18 percent of the study area does not have any zoning data assigned.

Table C5 summarizes the minimum lot areas, maximum density unless otherwise noted, and maximum height, known as bulk standards, for each zoning district within the study area.

TABLE C4 | General Zoning Study Area Summary

General Land Use Designation	Acreage	Percent of Study Area ¹
Caldwell Executive Airport	532.0	9.0%
Single-Family Residential	1,002.2	16.9%
Medium-Density Residential	500.3	8.4%
High-Family Residential	115.0	1.9%
Commercial	1,202.0	20.3%
Light Industrial	1,473.2	24.8%
Heavy Industrial	76.1	1.3%
Airport District	491.7	8.3%
No Data	1,075.0	18.1%
Study Area Total	5,935.5	100.0%

¹ Percentage totals may differ slightly due to rounding of numbers.

Sources: City of Caldwell Planning and Zoning; Canyon County Planning and Zoning; Coffman Associates analysis.

TABLE C5 | Zoning Ordinance Summary Bulk Standards

Zoning District	Minimum Lot Area	Maximum Density (Percentage of Lot Coverage)	Maximum Height (feet)
City of Caldwell			
Low-Density Residential (R-1)	8,000 sf ¹ – interior lots 9,500 sf – corner lots	N/A ²	25 ft ^{3*}
Medium-Density Residential (R-2)	6,000 sf – interior lots 7,500 sf – corner lots	N/A	35 ft*
High-Density Residential (R-3)	5,000 sf – interior lots 6,500 sf – corner lots	N/A	45 ft*
Neighborhood Commercial (C-1)	None	N/A	45 ft*
Community Commercial (C-2)	None	N/A	None
Freeway Commercial (C-4)	None	N/A	None
Light Industrial (M-1)	None	N/A	None
Industrial Park (I-P)	None	N/A	None
Airport District (A-D)	None	N/A	**
Canyon County			
Combined Medium-Density Residential (R-2)	0.5 Acre	N/A	35 ft
Service Commercial (C-2)	None	85%	50 ft
Light Industrial (M-1)	None	85%	75 ft
Heavy Industrial (M-2)	None	85%	75 ft

* Per C.C.C. § 10-02-03, the maximum height may be exceeded by approval of a special use permit. Regardless of the zoning district, if a new structure is built immediately adjacent to a single-family dwelling or a duplex, the maximum height shall be 25 feet, unless allowed to exceed the maximum height by special use permit.

** Per C.C.C. § 10-02-03, new structures in the A-D district shall comply with height restrictions listed in 7640 issued by the FAA.

Notes:

¹ sf – square feet

² N/A – Not Applicable

³ ft – feet

Sources: City of Caldwell Planning and Zoning; Canyon County Planning and Zoning

SUBDIVISION REGULATIONS

Subdivision regulations are legal devices employed to administer the division of land into two or more lots, parcels, or sites for the building and location, design, and installation of supporting infrastructure. The subdivision regulations are one of two instruments commonly employed to carry out the goals and policies outlined in the comprehensive plan.

Subdivision regulations can be used to specify requirements for airport-compatible land development by requiring developers to plat and develop land to minimize noise impacts or reduce noise exposure to new development. Subdivision regulations can also be used to protect the airport proprietor from litigation for noise impacts at a later date. The most common requirement is the dedication of a noise or aviation easement to the airport sponsor by the land developer as a condition of the development approval. Easements typically authorize overflights of property, with noise levels attendant to such operations.

City of Caldwell City Code: Chapter 11, Subdivisions

The subdivision regulations outlined in C.C.C. Chapter 11 does not address land division standards in relation to the airport. However, C.C.C. § 10-11-07 contains conditions for aviation easements during the land subdivision process.

“Rezoning applications, annexation applications, building permit applications for new construction and/or for additions of more than two hundred (200) square feet of enclosed space to existing construction, special use permit applications, and/or subdivision platting applications in both the APO-1 (Land Use Limitation) and APO-2 (Noise Abatement) Zone require grant of an aviation easement to the City, in substantially the form attached to ordinance 2457 as Appendix B, as may be amended, on file in the City by all property owners as a condition of application approval and prior to recordation of applicable rezone or annexation ordinances, issuance of applicable permanent certificates of occupancy or the City Engineer's signature on a final plat.”^{6, 7}

Canyon County Code of Ordinances: Chapter 7 Zoning Regulations, Article 17 Subdivisions

CCCO Chapter 7, Article 17 codify the county’s minimum requirements regarding the subdivision and design of land. The subdivision regulations safeguard existing land uses or new developments will be established in an orderly manner and ensure adequate utility and public infrastructure are in place, and that development will be consistent with the county’s comprehensive plan. The county’s subdivision regulations do not address the subdivision of land in relation to the airport.

BUILDING CODE

Building codes were established to provided minimum standards to safeguard life, limb, health, and public welfare by regulating and controlling the design, construction, quality of materials, use and occupancy, location, and maintenance of all buildings and structures. Building codes may be required to provide sound insulation in new residential, office, and institutional buildings when warranted by existing or potential high aircraft noise levels.

⁶ City of Caldwell City Code, § 10-11-07 0 - APO-2 Noise Abatement Zone. Ordinance 2895, Approved March 19, 2012.

⁷ The APO-1 (Land Use Limitation) and APO-2 (Noise Abatement) zones are discussed in further detail in an upcoming section.

The City of Caldwell adopted the 2015 International Building Code into the *City of Caldwell Code of Ordinances*.⁸ Separate from the building codes, the City of Caldwell instituted noise mitigation requirements on new residential structures within the Industrial Airport Overlay Noise Abatement Zone (C.C.C. § 11.10.07).⁹ These specifications are the minimum construction standard to reduce noise levels, which include airtight, masonry exterior walls, caulked or grouted exterior penetrations, and double door construction for all exterior doors. These guidelines are in addition to the adopted building codes of the city and only apply to construction projects in the Airport Overlay Zone.

Canyon County adopted the 2015 International Building Code into the *Canyon County Code of Ordinances*; however, aircraft noise attenuation is not currently enforced.¹⁰

NON-COMPATIBLE DEVELOPMENT ANALYSIS

Areas with the potential for non-compatible development, when compared to the noise exposure contours and height restrictions within the Part 77 approach surfaces out to one mile, have been evaluated. Further discussion of these areas can be found in Chapter One. This was accomplished by evaluating city- and county-adopted land use plans and zoning designations for those parcels encompassed by the noise contours to determine if noise-sensitive land uses could be developed in those areas. Both the noise contours and height restrictions within the Part 77 approach surface area are addressed below.

Noise Exposure Contours

The standard methodology for analyzing noise conditions at airports involves the use of a computer simulation model. The purpose of the noise model is to produce noise exposure contours that are overlain on a map of the airport and vicinity to graphically represent aircraft noise conditions. When compared to land use, zoning, and general plan maps, the noise exposure contours may be used to identify areas that are currently or have the potential to be exposed to excessive aircraft noise.

To achieve an accurate representation of an airport's noise conditions, the noise model uses a combination of industry-standard information and user-supplied inputs specific to the airport. The software provides noise characteristics, standard flight profiles, and manufacturer-supplied flight procedures for aircraft which commonly operate at the Airport. As each aircraft has different design and operating characteristics (number and type of engines, weight, and thrust levels), each aircraft emits different noise levels. The most common way to spatially represent the noise levels emitted by an aircraft is a noise exposure contour.

Airport specific information, including runway configuration, flight paths, aircraft fleet mix, runway use distribution, local terrain and elevation, average temperature, and numbers of daytime and nighttime operations, are also used in modeling inputs.

⁸ City of Caldwell *Code of Ordinances*. Chapter 12 - *Building Policies*. Article 1 – *Building Regulations*. Ordinance 3127, December 18, 2017. (https://codelibrary.amlegal.com/codes/caldwellid/latest/caldwell_id/0-0-0-19469)

⁹ City of Caldwell Planning and Zoning *Noise Mitigation Measures in Airport Overlay Zone* (<https://www.cityofcaldwell.org/departments/planning-and-zoning>)

¹⁰ Canyon County Code of Ordinance. Chapter 6 - *Building Regulations* (<https://www.canyonco.org/elected-officials/commissioners/development-services/building-department/>)

The noise model calculates average 24-hour aircraft sound exposure within a grid covering the airport and surrounding areas. The grid values, representing the DNL at each intersection point on the grid, signify a noise level for that geographic location. To create noise contours, an isoline similar to those on a topographic map is drawn connecting points of the same DNL noise value. In the same way that a topographic contour represents the same elevation, the noise contour identifies areas of equal noise exposure.

DNL is the metric currently accepted by the FAA, U.S. EPA, and Department of Housing and Urban Development (HUD) as an appropriate measure of cumulative noise exposure. These three agencies have each identified the 65 DNL noise contour as the threshold of incompatibility.
















The guidelines summarized on **Exhibit C3** indicate that all land uses are acceptable in areas below 65 DNL. At or above the 65 DNL threshold, residential land uses without acoustic treatment, mobile homes, and transient lodging are all incompatible. The exhibit notes that homes of standard construction and transient lodging may be considered compatible where local communities have determined these uses are permissible; however, acoustic treatment of these structures is recommended to meet noise level reduction thresholds when comparing the outdoor noise level to the indoor noise level. Schools and other public use facilities are also generally considered to be incompatible with noise exposure above 65 DNL. As with residential development, communities can make a policy decision that these uses are acceptable with appropriate sound attenuation measures. Hospitals and nursing homes, places of worship, auditoriums, and concert halls are structures which are generally compatible if measures to achieve noise level reduction are incorporated into the design and construction of structures. Outdoor music shells and amphitheatres are not compatible and should be prohibited within the 65 DNL noise contour. Additionally, agricultural uses and livestock farming are generally considered compatible except for related residential components of these uses, which should incorporate sound attenuation measures.

Noise exposure contours were prepared for the Airport for a baseline condition (2019) and a long-range condition (2039) based on operational forecasts presented in Chapter Two. The resulting contours are shown on **Exhibit C4** and **Exhibit C5**. As depicted on **Exhibit C4** for existing conditions, the 65 DNL noise contour expands off airport property east of Runway 12-30, and to the west crossing Interstate 84. The noise contours create a bulb west of Runway 12-30 due to helicopter activity adjacent to Taxiway C, projecting the 65 DNL contour over Interstate 84, affecting three single-family residential structures off Bannock Drive.

As illustrated on **Exhibit C5**, the forecasted noise contours expand around Runway 12-30, responding to the increase in runway length and airport operations. The recommended concept plan (Exhibit 5A) shows property acquisition east of Runway 12-30, north of the Canyon Hill Lateral. Due to the property acquisition, the 65 DNL contour would remain on airport property east of the runway. However, west of the airport across Interstate 84, eight single-family structures along Bannock Drive are affected.

Height Restrictions

Using a similar process to the non-compatible development analysis for noise contours, the zoning and future land use within the Part 77 approach surface area out to one mile from the end of the runways were evaluated. Future land use designations are not included in this analysis, as both the City of Caldwell's *Comprehensive Land Use Plan* and Canyon County's *Comprehensive Land Use Plan* does not specify height limitations for future land uses. The comprehensive plans for City of Caldwell or Canyon County

LAND USE		Yearly Day-Night Average Sound Level (DNL) in Decibels					
		Below 65	65-70	70-75	75-80	80-85	Over 85
Residential							
	Residential, other than mobile homes and transient lodgings	Y	N ¹	N ¹	N	N	N
	Mobile home parks	Y	N	N	N	N	N
	Transient lodgings	Y	N ¹	N ¹	N ¹	N	N
Public Use							
	Schools	Y	N ¹	N ¹	N	N	N
	Hospitals and nursing homes	Y	25	30	N	N	N
	Churches, auditoriums, and concert halls	Y	25	30	N	N	N
	Government services	Y	Y	25	30	N	N
	Transportation	Y	Y	Y ²	Y ³	Y ⁴	Y ⁴
	Parking	Y	Y	Y ²	Y ³	Y ⁴	N
Commercial Use							
	Offices, business and professional	Y	Y	25	30	N	N
	Wholesale and retail-building materials, hardware and farm equipment	Y	Y	Y ²	Y ³	Y ⁴	N
	Retail trade-general	Y	Y	25	30	N	N
	Utilities	Y	Y	Y ²	Y ³	Y ⁴	N
	Communication	Y	Y	25	30	N	N
Manufacturing and Production							
	Manufacturing, general	Y	Y	Y ²	Y ³	Y ⁴	N
	Photographic and optical	Y	Y	25	30	N	N
	Agriculture (except livestock) and forestry	Y	Y ⁶	Y ⁷	Y ⁸	Y ⁸	Y ⁸
	Livestock farming and breeding	Y	Y ⁶	Y ⁷	N	N	N
	Mining and fishing, resource production and extraction	Y	Y	Y	Y	Y	Y
Recreational							
	Outdoor sports arenas and spectator sports	Y	Y ⁵	Y ⁵	N	N	N
	Outdoor music shells, amphitheaters	Y	N	N	N	N	N
	Nature exhibits and zoos	Y	Y	N	N	N	N
	Amusements, parks, resorts, and camps	Y	Y	Y	N	N	N
	Golf courses, riding stables, and water recreation	Y	Y	25	30	N	N

The designations contained in this table do not constitute a federal determination that any use of land covered by the program is acceptable under federal, state, or local law. The responsibility for determining the acceptable and permissible land uses and the relationship between specific properties and specific noise contours rests with the local authorities. FAA determinations under Part 150 are not intended to substitute federally-determined land uses for those determined to be appropriate by local authorities in response to locally-determined needs and values in achieving noise compatible land uses.

See other side for notes and key to table.

KEY

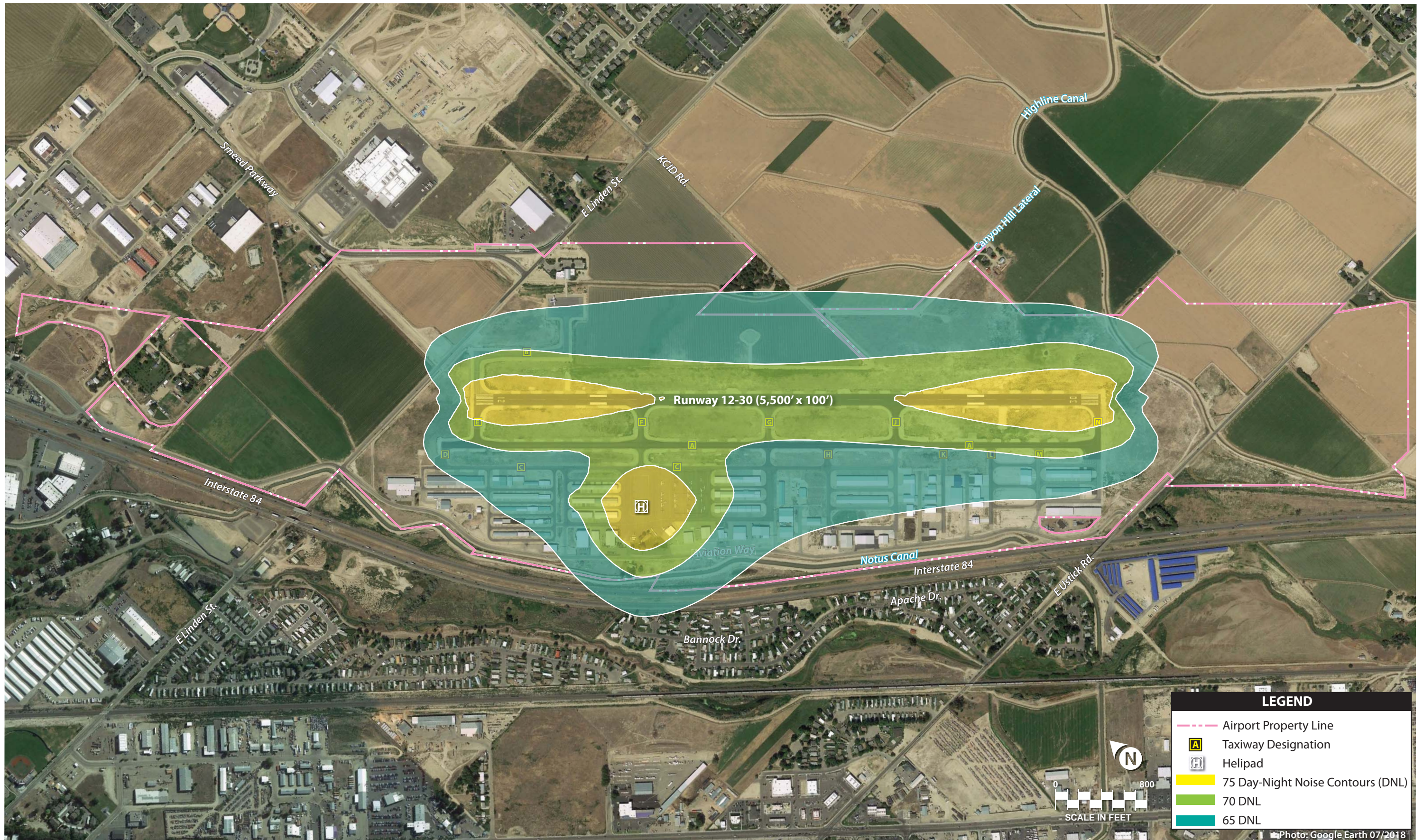
Y (Yes)	Land Use and related structures compatible without restrictions.
N (No)	Land Use and related structures are not compatible and should be prohibited.
NLR	Noise Level Reduction (outdoor-to-indoor) to be achieved through incorporation of noise attenuation into the design and construction of the structure.
25, 30, 35	Land Use and related structures generally compatible; measures to achieve NLR of 25, 30, or 35 dB must be incorporated into design and construction of structure.

NOTES

1. Where the community determines that residential or school uses must be allowed, measures to achieve outdoor-to-indoor Noise Level Reduction (NLR) of at least 25 dB and 30 dB, respectively, should be incorporated into building codes and be considered in individual approvals. Normal residential construction can be expected to provide an NLR of 20 dB; thus, the reduction requirements are often stated as 5, 10, or 15 dB over standard construction and normally assume mechanical ventilation and closed windows year round. However, the use of NLR criteria will not eliminate outdoor noise problems.
2. Measures to achieve NLR of 25 dB must be incorporated into the design and construction of portions of these buildings where the public is received, office areas, noise-sensitive areas, or where the normal noise level is low.
3. Measures to achieve NLR of 30 dB must be incorporated into the design and construction of portions of these buildings where the public is received, office areas, noise-sensitive areas, or where the normal noise level is low.
4. Measures to achieve NLR of 35 dB must be incorporated into the design and construction of portions of these buildings where the public is received, office areas, noise-sensitive areas, or where the normal noise level is low.
5. Land use compatible provided special sound reinforcement systems are installed.
6. Residential buildings require an NLR of 25.
7. Residential buildings require an NLR of 30.
8. Residential buildings not permitted.

Source: **14 CFR Part 150**, Appendix A, Table 1.

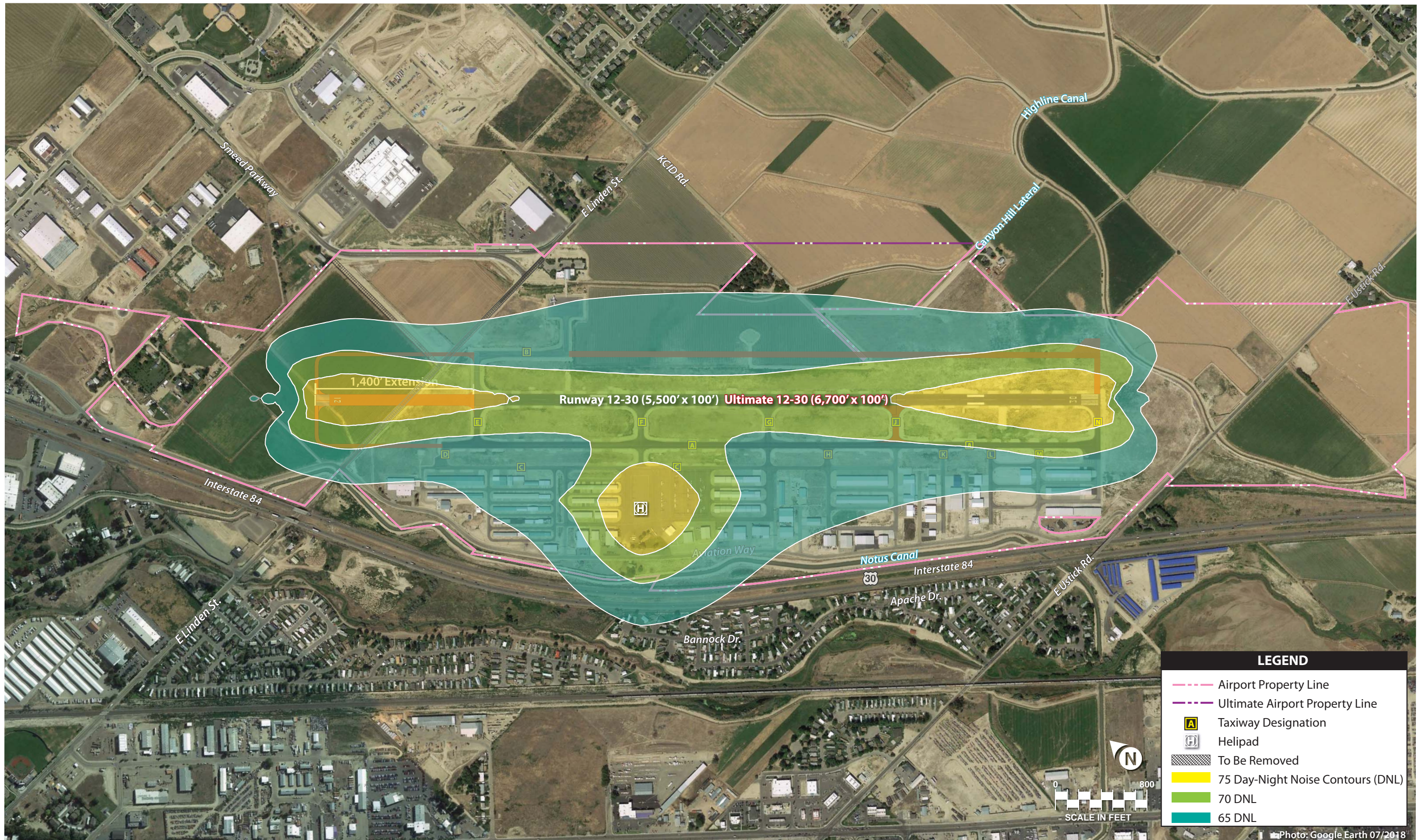
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LEGEND

- Airport Property Line
- A Taxiway Designation
- H Helipad
- 75 Day-Night Noise Contours (DNL)
- 70 DNL
- 65 DNL

Photo: Google Earth 07/2018



do not specify height limitations for future land uses. However, the comprehensive plan set the policy for future land use within the approach surface areas. As depicted on **Exhibit C6**, the future land use within the approach surface areas outside of the airport boundary include low-density residential, industrial, commercial, and open space.

As identified on **Exhibit C7**, zoned parcels within the Part 77 approach surface area out to one mile of the runway ends are include Airport District, Low-Density Residential, Commercial, and Industrial. As noted in **Table C5** above, for parcels located in the City, the maximum height limit for the residential districts is 25 ft for Low-Density Residential and 45 ft for High-Density Residential. If the residentially zoned parcel is located within Canyon County, and maximum height is 35 ft. For those parcels located under the City’s jurisdiction, there is no maximum height limit if the parcels are zoned either Community Commercial, Freeway Commercial, or

Per C.C.C. § 10-02-03, new structures in the A-D district must comply with the height restrictions listed in the 7640 issued by the FAA.

Airport Overlays and Height Protection Zones

Both the City of Caldwell and Canyon County have established zoning requirements to protect the airport from incompatible land uses in the surrounding environment. The primary goal of these regulations is to reduce the consequences of accidents related to aviation and to ensure land use compatibility related to noise, pollution, and height.

City of Caldwell

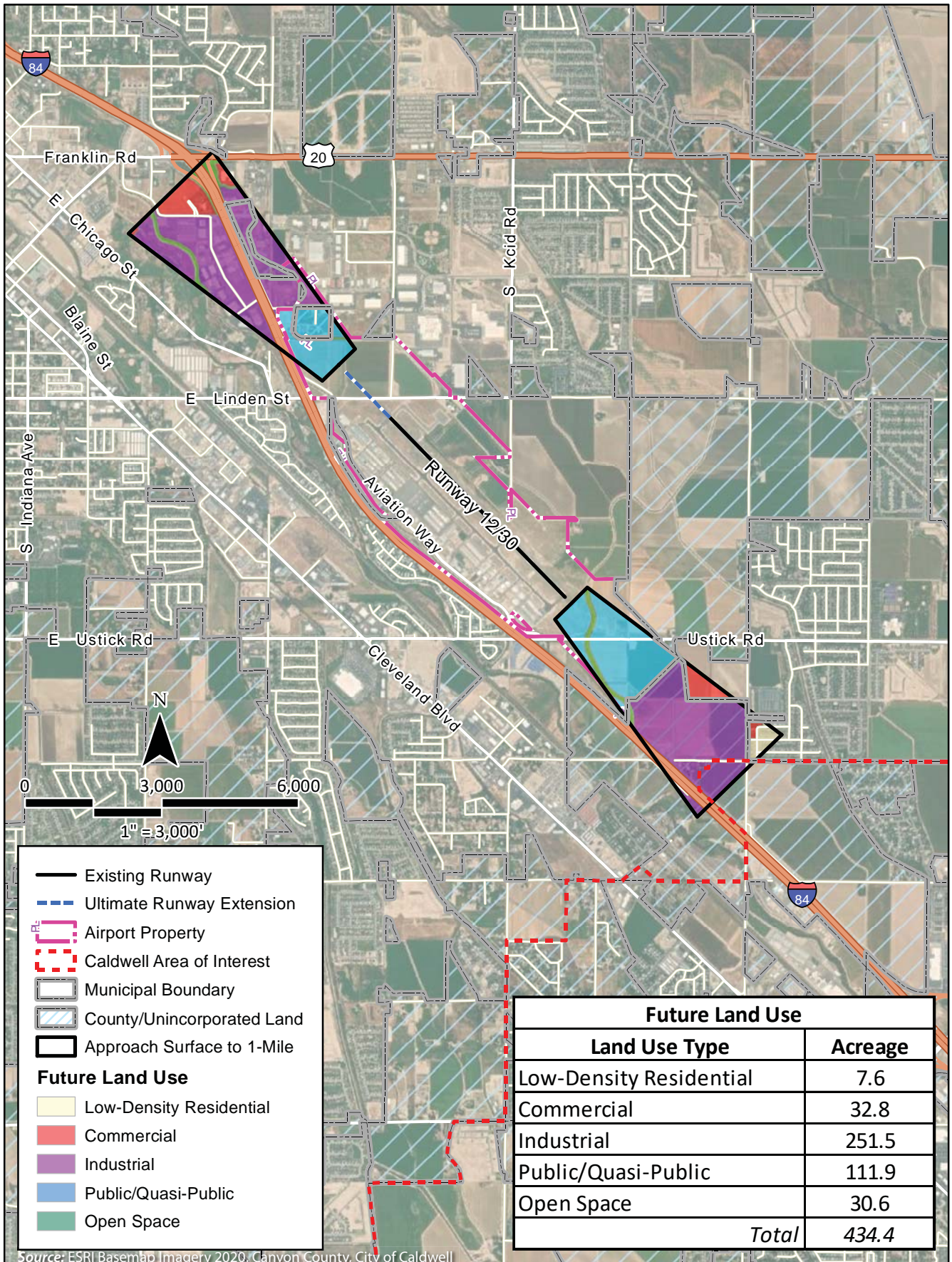
C.C.C. Chapter 10, Article 11 is also known as the *Caldwell Industrial Airport Overlay Zone (APO)*.¹¹ Originally discussed in Chapter One, the APO is in place to ensure the safe operation of the airport, encourage orderly and compatible development, and for future airport expansion. The code provides standards to encourage the airport’s economic viability.

The APO is divided into two subzones, described as follows.

Land Use Limitation Zone (APO-1). The zone closest to the runway defined as a rectangular area around the airport’s boundary and is the zone closest to the airport (C.C.C. § 10-11-06). The APO-1 zone includes use limitations to ensure development is compatible with the existing and future use of the airport. Parcels within the APO-1 zone should comply with restrictions and requirements of the Noise Abatement Zone (discussion to follow). Noise-sensitive land uses, such as all forms of residential, schools, places of worship, daycare centers, and hospitals are prohibited in the APO-1 zone. Special circumstances may allow some noise-sensitive land uses in the APO-1 zone, but only with the approval of a special use permit.

Noise Abatement Zone (APO-2). Per C.C.C. § 10-11-07, this subzone may experience some effects from aircraft overflight, which include noise, light, vibrations, fumes, or exhaust. Development within the APO-2 district is required to adhere to notification procedures, noise abatement construction (discussed in a previous section) practices, and aviation easements. The APO-2 zone is

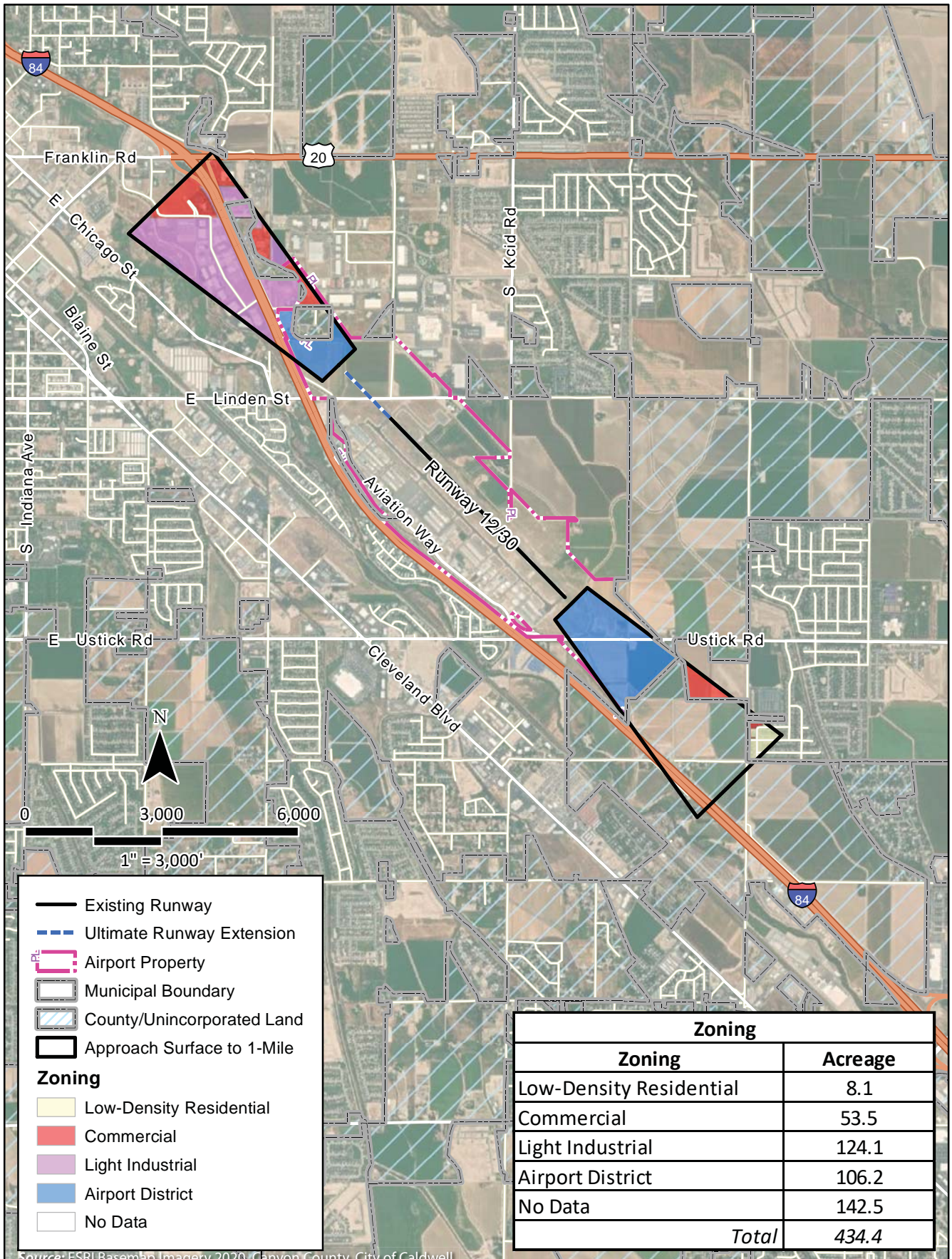
¹¹ *City of Caldwell Code of Ordinances, Chapter 10 – Zoning Regulations, Article 11, Caldwell Industrial Airport Overlay Zone* (December 20, 2004, Ordinance 2457)



— Existing Runway
 - - - Ultimate Runway Extension
 [Pink Dashed Box] Airport Property
 [Red Dashed Box] Caldwell Area of Interest
 [Grey Box] Municipal Boundary
 [Blue Hatched Box] County/Unincorporated Land
 [Black Box] Approach Surface to 1-Mile
Future Land Use
 [Yellow Box] Low-Density Residential
 [Red Box] Commercial
 [Purple Box] Industrial
 [Blue Box] Public/Quasi-Public
 [Green Box] Open Space

Future Land Use	
Land Use Type	Acreage
Low-Density Residential	7.6
Commercial	32.8
Industrial	251.5
Public/Quasi-Public	111.9
Open Space	30.6
Total	434.4

Source: ESRI Basemap Imagery 2020, Canyon County, City of Caldwell



— Existing Runway
 - - - Ultimate Runway Extension
 [Pink Outline] Airport Property
 [Dashed Grey] Municipal Boundary
 [Hatched Grey] County/Unincorporated Land
 [Black Outline] Approach Surface to 1-Mile
Zoning
 [Yellow] Low-Density Residential
 [Red] Commercial
 [Purple] Light Industrial
 [Blue] Airport District
 [White] No Data

Zoning	
Zoning	Acreage
Low-Density Residential	8.1
Commercial	53.5
Light Industrial	124.1
Airport District	106.2
No Data	142.5
Total	434.4

Source: ESRI Basemap Imagery 2020, Canyon County, City of Caldwell

a rectangular area northeasterly edge of the APO-1 zone, extending one-half mile further north-east for the full length of the APO-1 zone. Permitted uses in the APO-2 zones include those permitted in the base zoning district; however, may be subjected to further conditions due to the overlay district.

The location of the APO district was originally depicted on Exhibit 1J in Chapter One. Height limitations in the APO district are established by the Title 14 Code of Federal Regulations (CFR) Part 77 imaginary surface above the primary airport elevation, as provided in the airport's master plan.

Per C.C.C. § 10-11-09, prohibited uses within both the APO-1 and APO-2 include:

- Any use which creates an electrical interference with navigational aids or radio communication between the airport and aircraft;
- Make it difficult to distinguish between airport lights and others;
- Results on the glare in the eyes of pilots using the airports;
- Impair the visibility in the vicinity of the airport;
- Create bird strike or other wildlife hazards;
- Endanger or interfere with the landing, takeoff, or maneuvering of aircraft intending to use the airport; and
- Potentially cause detriment to the airport operations by emission of fumes, dust, smoke, and/or creation of other negative influences.

Avigation easements, as previously discussed, are required during the land subdivision process in the APO.

Per C.C.C. § 10-11-11, all development applications, including annexation applications, wholly or partially located within the APO are submitted to the airport commission for comment as part of any action by the City's planning and zoning director, planning commission, or city council.

Canyon County

CCCO Chapter Seven, Article 10B addresses the *Airport Overlay Zone (AP)*.¹² Uses within the AP zone are typically airport-related, open spaces, and agricultural which are compatible with the airport. Places of congregation, such as auditoriums, places of worship, schools, and hospitals, should be avoided in the AP overlay district.

Structure height in the AP zone is based on the maximum height permitted in the base zoning district. For example, for parcels with a residential zoning designation, the maximum height is 35 feet (ft), while parcels with an industrial zoning designation have a maximum height of 75 ft (**Table 5C5** above). Exceptions to these regulations are given to certain land uses, such as utility transmission poles/lines, telecommunication towers, or agricultural facilities/operations, where the maximum height is 100 ft; or a church steeple/spire where there is no height limit. In these cases, these structures are permitted to their maximum height, as permitted by an Airspace Obstruction Evaluation by the Federal Aviation Administration. If the parcel is in the Caldwell Impact Area, the height limitation by the City of Caldwell will supersede the height permitted by the CCCO (Article 7-10-21[3] and Article 7-10-23).

¹² Canyon County Code of Ordinance, Chapter 7 – Zoning Regulations, Article 10B – Airport Overlay Zone (August 30, 2019; Ordinance 19-038)

Idaho Department of Transportation *Idaho Airport Land Use Guidelines*

The *Idaho Airport Land Use Guidelines*¹³ (IALUG) provides airport sponsors and their host communities a resource document setting guidelines addressing land use compatibility issues and to protect airports. Recognizing the importance of maintaining safe operational environments for both the airport and the surrounding community to determine the primary factor for how land use compatibility relates to land uses around the airport. The FAA or Idaho Transportation Department Division of Aeronautics does not control land use around the airport or mandate the land use compatibility zones. Land use restrictions occur at the local level based on the land use needs and the airport's size and capability. Effective land use compatibility planning around an airport would address airspace, safety, and noise considerations. Factors to be considered include:

- Encroachment of incompatible development;
- Safety and quality of life;
- Economic benefit;
- Knowledge of airport operations and impacts;
- Sponsor obligation and grant assurances;
- Jurisdiction;
- Protection of local, State, and Federal investment; and
- Risk of inverse condemnation.

In order to address these considerations, an airport and host community may coordinate an airport land use compatibility plan (ALUCP) to encourage appropriate development around the airport. The IALUG recommends seven land use compatibility zones: Runway Protection Zone, Lateral (or side) Safety Zone, Critical Zone, Airport Traffic Pattern Area, Airport Influence Area, and Impact Coordination Zone. Aside from the RPZ, the IALUG does not include specific dimensions for the zones. The ALUCP would provide general land use compatibility guidance for each of the zones.

RECOMMENDATIONS

Based on the information presented above and the non-compatible development analysis, the following recommendations are provided to maintain airport land use compatibility in the vicinity of the Airport.

As growth the airport increases, consider adopting an Airport Land Use Compatibility Plan (ALUCP). Currently, there is limited development east of Highway 84 with a substantial opportunity for growth. Before the airport is restricted by surrounding development, the airport and City of Caldwell should consider adopting an ALUCP in coordination with Canyon County, to ensure compatible development is approved around the airport, especial in overflight areas north and south of the runway.

Both the City of Caldwell and Canyon County consider updating their airport overlay districts based on the revised Part 77 Imaginary Surface Map derived from the Airport Master Plan update. The recommended master plan concept (**Exhibit 5A**) proposes a 1,400 ft extension of Runway 12-30 to the north, and the Part 77 Imaginary Surface Map would reflect this change. Therefore, it is recommended both the City and County review the updated Part 77 Imaginary Surface Map to ensure their respective airport overlay districts coincide.

¹³ Idaho Department of Transportation – Division of Aeronautics. *Idaho Airport Land Use Guidelines* (July 2016). (<https://itd.idaho.gov/aero/>)

Adopt Fair Disclosure Requirements for Real Estate Transactions within the Vicinity of the Caldwell Executive Airport at Caldwell. Fair disclosure regulations in real estate transactions are intended to ensure that prospective buyers of property are informed that the property is or will be exposed to potentially disruptive aircraft noise or overflights. It is not uncommon, around even the busiest airports, for newcomers to report having bought property without having been informed about airport noise levels. At the most formal level, fair disclosure can be implemented through a city and county ordinance requiring a deed notice for property within the vicinity based on an existing boundary, such as the Part 77 Horizontal Surface. The following is an example of a disclosure statement notifying potential property owners of the proximity of an airport and expectations for living in the vicinity of the airport. A model disclosure statement is included in the IALUG. Sample language would include:

Proximity to the Airport

The subject parcel, located in Section ___ Township ___ Range ___, is located within the _____ Municipal Airport Influence Area as defined in Chapter ___, Title ___, of the City Code of _____. As result, the subject property is located in the airport’s Federal Aviation Regulation Part 77 Airspace and one of seven land use zones Airplanes may fly at low elevations over the parcel as they operate to, from, or at the airport. The airport is operational 24 hours per day. Flights may occur at all hours of the day or night.

Airspace

The subject parcel property lies under the Airport’s FAR Part 77 Airspace and is subject to Federal law and Chapter ___, Title ___ of the City Code of _____, Idaho. As such, it may be necessary to clear and keep clear the Airspace of any portions of buildings, structures, or improvements of any and all kinds, and of trees, vegetation, or other objects. This includes reserving the right of the City to; remove or demolish those portions of such buildings, structures, improvements, trees or any other objects which extend into the Airspace; cut to the ground level and remove any trees which extend into the Airspace; the right to mark and light, or cause or require to be marked or lighted, as obstructions to air navigation, any and all buildings, structures, or other improvements, and trees or other objects now upon, or that in the future may be upon, said Parcel, and which extend into the Airspace.

The disclosure would to be signed by the potential purchaser and would be attached to the final sales agreement.