

# Sandpoint Comprehensive Plan Update

## Airport Technical Component MEMO

Sandpoint Airport (SZT) is classified as a general aviation airport that supports economic development in and around the Sandpoint community, as well as emergency response services, tourism, and recreational users. While it is located within the city limits of Sandpoint, it is owned and operated by Bonner County. This report identifies the major regulatory and geographic constraints that currently influence the Airport and surrounding area. For more information on existing conditions and technical descriptions of the airport facilities, operations and regulations please refer to the 2015 Airport Master Plan.

The requirement for cities, and other “political subdivisions,” to address airports in their comprehensive plans is included in Idaho code §67-6508, effective as of July 2014. This is referred to as section “q” (Figure 1) in the comprehensive plan and is aimed at requiring more proactive land use compatibility planning around Idaho airports by cities and counties. In addition, Idaho Code §67-6511 requires cities to also have zoning regulations that align with the policies established in the adopted comprehensive plans. The Sandpoint Comprehensive Plan, as adopted in 2009, does not meet the section “q” requirement, however there is an airport-specific goal and associated policies within Chapter 6: Transportation.

*Public Airport Facilities — An analysis prepared with assistance from the Idaho transportation department division of aeronautics, if requested by the planning and zoning commission, and the manager or person in charge of the local public airport identifying, but not limited to, facility locations, the scope and type of airport operations, existing and future planned airport development and infrastructure needs, and the economic impact to the community.*

*Figure 1 - ID Code §67-6508 Section (q)*

The FAA also requires all public-use airports to have an airport master plan as a condition of receiving federal grant funds. These master plans are expected to be updated at least every 10 years. The current Sandpoint Airport Master Plan was adopted in 2015.

### Current Sandpoint Comprehensive Plan Goal and Policies

#### Goal T-5: Airport

*Maintain Sandpoint Airport as a viable and safe part of the community.*

#### Policies

- A. Ensure surrounding land uses are compatible with continued aircraft operations.
- B. Work with Bonner County to be aware of airport activity and respond to needs if appropriate.
- C. Provide for safe air navigation by approving appropriate safeguards to ensure that airport operations are conducted in a safe efficient manner.



- D. Promote appropriate land uses adjacent to the airport which would be both compatible and beneficial to the airport and the community
- E. Aid in the reduction of noise impact from aircraft.

## Technical Requirements

Within the Airport property, the facilities, infrastructure, and operations are regulated by state and federal standards. This also extends to a series of safety zones surrounding the runways, requiring additional height and clearance standards outside of the Airport property.

14 Code of Federal Regulation (CFR) Part 77 requires the protection of airport airspace including safe, efficient use, and preservation of the navigable airspace, which is required for all public-use airports. It provides the basis for airspace protection requirements at public-use airports at the federal level by identifying and defining critical airspace surfaces around airports. Airspace requirements are determined by the weight of the aircraft that predominantly operate at an airport and the type of instrument approach, existing or planned. The following requirements are highlighted in CFR Part 77:

- Anyone proposing development at a certain height above the ground or within a certain proximity to the airport is required to submit a notification to the FAA (Form 7460-1) for determination that such development will not adversely impact airspace or the safety of aircraft operators.
- A required aviation easement and/or disclosure notification for the new or substantial redevelopment of lots, buildings, structures and activities near the airport. The easement and disclosure should notify that the property is both near an airport and may experience low overhead flights, noise, and other aviation impacts.
- Airspace surfaces defined in the approved ALP identifies in ordinance or code and requires that no object penetrate these airspace surfaces as a result of development.
- Anyone proposing development at a certain height above the ground or within a certain proximity to the airport is required to submit FAA Form 7460-1 to the FAA for determination that such development will not adversely impact airspace or the safety of aircraft operators.

The City Code Title 9, Chapter 12, Airport Overlay Zone District (Airport Overlay) regulates height restrictions according to zone, which mirrors the Federal Aviation Regulation Part 77. This was enacted in 1976 by Bonner County and, after the airport's annexation in 1988, it was established by the City of Sandpoint in 2000. It addresses aircraft noise disturbances, hazards to air navigation, and the risks to the health, safety, and welfare of those in the air and on the ground.

## Land Use Compatibility

According to Idaho Transportation Department (ITD), the City is expected to restrict the use of land adjacent to or in the immediate vicinity of the airport to activities and purposes compatible with normal airport operations, to the extent reasonable. Land use regulations around public airports are typically under the exclusive authority of the local jurisdiction, regardless of whether that



jurisdiction is the public airport sponsor. However, certain federal requirements apply, and different states contain varying guidelines and requirements. The objective of zoning land on and around the airport is to assure that future uses of the land are compatible with airport operations to protect and preserve the long-term sustainability of the airport, ability to evolve with the community, support airport related businesses and industries, and the public investment in the airport. According to the FAA, incompatible uses generally include the following:

- Residential and other noise-sensitive uses
- Congregations of people in approach and departure areas to protect people and property on the ground adjacent to the airport
- Man-made and natural structures that can interfere with flight
- Uses which may be affected by vibration or fumes from aircraft operations
- Uses of land on the airport that interfere with areas needed for aviation-related activities

ITD also suggests establishing land use compatibility zones around the airport. These are not mandated by either the FAA or ITD Aero, with the exception of the Runway Protection Zones, but are considered best practices addressing compatibility and safety. The City has discretion on the need, size, and composition of these additional compatibility zones, taking into consideration the local land use planning needs and the size and capability of the airport. ITD recommends the following land use compatibility zones:

- Runway Protection Zones (RPZ) – these dimensions and configuration is defined and mandated for protection by FAA and ITD Aero.
- Lateral (or side) Safety Zone (LSZ)
- Critical Zone(s)
- Airport Traffic Pattern Area (TPA)
- Airport Influence Area (AIA)
- Impact Coordination Zone (ICZ)

ITD also provides a clear process for future development beginning with validation of compatibility with the airspace and existing/future land uses. This process continues with the evaluation of heights, FAA requirements, Avigation Easements and other assurances with CFRs, FAA, ITD, Idaho Code and the Airport Master Plan.

### **Runway Protection Zone (RPZ)**

FAA and ITD Aero define these zones at ground level beyond the runway end that “are maintained clear of incompatible objects and activity in order to enhance the safety and protection of people and property on the ground.” Generally, airport sponsors are recommended to control the RPZs through acquisition to keep the area clear of roads and structures of any kind. The RPZ for Sandpoint Airport is already in place and referenced in the 2015 Airport Master Plan.<sup>1</sup>

### **Lateral Safety Zone (LSZ)**

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<sup>1</sup> Idaho Airport Land Use Guidelines, ITD Aero, July 2016, pg 43



This zone can vary in size, but generally extends a certain distance from either side of the runway centerline and no more than 200' past the end of the runway. ITD recommends this zone to "enhance the protection of people and property on the ground adjacent to the sides of the runway. The City should consider the location of existing airport facilities and land use around the airport in determining the dimensions of the LSZ.<sup>2</sup>

### **Critical Zone(s)**

Critical zones are designed to encompass areas where, statistically, most aircraft accidents and incidents occur during landing and takeoff. Generally, they are located off the ends of the runway beyond the RPZ. By defining one or two Critical Zones, the City can limit incompatible uses in these flight corridors and thus ensure additional protection to both aircraft operators and people on the ground. For airports with instrument approach procedures, such as Sandpoint Airport, a second Critical Zone is recommended. While no specific width of the primary Critical Zone is recommended by ITD, the second Critical Zone is recommended to be no less than 1,000' in width and between 3,000-5,000' long from the end of the first Critical Zone.<sup>3</sup>

### **Traffic Pattern Area (TPA)**

The Traffic Pattern Area generally represents an area where aircraft are commonly landing and taking off. The standard airfield traffic pattern is rectangular in shape and typically uses left-hand turns. In determining this area, the City needs to coordinate closely with the airport and its pilots to understand the typical flight paths, and may consider using roads or geographic boundaries to define this area.<sup>4</sup>

### **Airport Influence Area (AIA)**

The ITD indicates that this area is an important land use planning tool, especially to help coordinate between jurisdictions if the airport is not owned and operated by the city it is located. The dimensions of this area can vary significantly based on the airport size, traffic patterns, and whether it's an instrument approach or visual approach airport.<sup>5</sup>

### **Impact Coordination Zone (ICZ)**

This zone is not considered a required land use zone. Its use and need are dependent on location conditions and intergovernmental agreements with the Area of City Impacts and neighboring jurisdictions. The recommended dimensions of the Impact Coordination Zone will depend on the airport location, however, ITD suggests that this zone would align at some level with the outer boundary of the Traffic Pattern Area and Critical Zones. This zone can establish additional land use restrictions in order to protect people and property on the ground.<sup>6</sup>

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<sup>2</sup> Idaho Airport Land Use Guidelines, ITD Aero, July 2016, pg 45

<sup>3</sup> Idaho Airport Land Use Guidelines, ITD Aero, July 2016, pg 46

<sup>4</sup> Idaho Airport Land Use Guidelines, ITD Aero, July 2016, pg 48

<sup>5</sup> Idaho Airport Land Use Guidelines, ITD Aero, July 2016, pg 49

<sup>6</sup> Idaho Airport Land Use Guidelines, ITD Aero, July 2016, pg 51

**Airport Land Use Compatibility Table 1**  
**General Land Use Recommendations in the Land Use Zones**

Land Use	1 Runway Protection Zone	2 Lateral Safety Zone	3 Inner Critical Zone	4 Outer Critical Zone	5 Traffic Pattern Area	6 Airport Influence Area	7 Impact Coordination Zone
<b>Residential</b>							
Single-family, nursing homes, multi-family, apartments, condominiums, mobile home parks	Red	Red	Red	Yellow	Yellow	Yellow	Yellow
Transient lodging (i.e. hotels and motels)	Red	Red	Red	Yellow	Yellow	Yellow	Yellow
<b>Public</b>							
Schools, libraries, churches	Red	Red	Red	Red	Yellow	Yellow	Yellow
Parking and cemeteries	Red	Green	Yellow	Yellow	Green	Green	Green
<b>Commercial/Industrial</b>							
Offices, retail trades, light industrial, general manufacturing, utilities, extractive industry	Red	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow
Airport revenue-producing enterprises	Red	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow
<b>Agricultural and Recreational</b>							
Cropland	Green	Green	Green	Green	Green	Green	Green
Livestock breeding, zoos, golf courses, riding stables, water recreation	Red	Red	Yellow	Yellow	Yellow	Green	Yellow
Outdoor spectator sports, parks, playgrounds	Red	Red	Red	Yellow	Yellow	Yellow	Yellow
Amphitheaters	Red	Red	Red	Red	Yellow	Yellow	Yellow
Open space	Green	Green	Green	Green	Green	Green	Green
<b>Bird and Wildlife Attractants</b>							
Sanitary Landfills	Red	Red	Red	Red	Red	Yellow	Red
Water treatment plants, water impoundments	Red	Red	Red	Red	Red	Yellow	Red
Wetlands Mitigation	Red	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow
	Red	Yellow	Yellow	Green	Yellow	Yellow	Yellow
	Prohibited		Allowed with conditions		Allowed		
<b>Conditions typically include:</b>							
<ul style="list-style-type: none"> <li>- Require Fair disclosure Statement as a condition of development</li> <li>- Limit residential density to low-density and avoid high-density development</li> <li>- Limit commercial uses to low-density and avoid high intensity commercial uses such as large retail box stores</li> <li>- Locate development as far as possible from extended centerline, if no reasonable alternative exists</li> <li>- Be mindful of bird and wildlife attractant and consider proximity of the airport as well as potential negative impact before development. Refer to FAA AC 150/5200-33 and 150/5200-34, as amended, for guidance</li> </ul>							



## Surrounding land uses and development

The City of Sandpoint has zoned the Airport property as General Industrial. Zoning classifications for land surrounding the Airport are Industrial Technology Park east of the Airport and west of Boyer Avenue. Single Family Residential zoning is generally applied between Boyer Avenue and the city limits to the east. South of the Airport, south of Baldy Mountain Road is Industrial Business Park and Multi-Family Residential zoning. North of the Airport, a mixture of Single Family Residential, Rural Residential, Multi-Family Residential, and Professional Office zoning is applied. The Airport Overlay Zone District, described previously, overlays the entire Airport and the surrounding area within the Sandpoint City Limits and the unincorporated areas of Bonner County.

Long-term compatibility issues with the surrounding allowed land use potentially exist with the zoning of residential uses in close proximity to Runway 19. There is residential development adjacent to the Runway End 19 Approach RPZ; however no residential structures are currently located inside the RPZ. The RPZ overlays the backyard of one residential property and satellite imagery shows storage sheds and vehicles within the RPZ. There are no inhabited residential structures within the Runway End 19 Approach RPZ.

The City of Ponderay is located north of the Airport. While the City of Ponderay does not have jurisdiction over properties immediately adjacent to the Airport, it does sit beneath the flight path for departures from Runway End 1 and approaches on Runway End 19. The City of Ponderay has not adopted an airport overlay zoning district.

Bonner County has adopted land use zoning regulations and districts for the unincorporated areas of the County. Suburban zoning is applied to the land west of the Airport, west of the Sandpoint City Limits to promote the development of residential uses.

Key existing developments and proposed zoning are not in alignment with ITD guidance and poses potential conflict with key zones such as the lateral safety zones and critical safety zones. Continued residential and other non-compatible development in this area has the potential to impede airport-related employment uses and increase airport conflicts. The continuation of key land uses that are not compatible with existing and future airport operations will exacerbate conflicts. Site plans and design criteria will help reduce these issues.

## Existing Runway End 1 Approach RPZ Condition

Land uses within the Runway End 1 Approach RPZ include a right-of-way for the Burlington Northern Santa Fe Railroad, a right-of-way owned by the City of Sandpoint for an extension of Ebbett Way and an undeveloped area of land covered in trees. A storage unit facility intersects the RPZs southeast corner.

The Burlington Northern Santa Fe Railroad right-of-way is a limiting factor in this RPZ, as the relocation of this feature would be prohibitively expensive and impact a far larger area than the RPZ itself. The right-of-way for Ebbett Way extends through the RPZ, theoretically to connect the east and west sides of the Airport at some point in the future. The tree-covered area south of Runway End 1 is not controlled by the Airport.



## **Existing Runway End 19 Approach RPZ Condition**

Land uses within the existing Runway End 19 Approach RPZ include the existing right of ways for Schweitzer Cutoff Road and North Boyer Avenue. Seven acres in the Runway End 19 Approach RPZ are not controlled by the Airport. The eastern edge of the RPZ encompasses flood plains associated with Sand Creek. There is a bike lane along the east side of North Boyer Avenue. The westside bike lane runs from the Schweitzer Cutoff Road into downtown Sandpoint. The eastside bike lane stops 1,300 feet short of the intersection of North Boyer Avenue and the Schweitzer Cutoff Road.

## **Schweitzer Cutoff Road**

Schweitzer Cutoff Road is a two-lane road that connects the Airport to US Highway 2/95 to the east. It intersects North Boyer Road at the Bonner County Fairgrounds and US Highway 2/95 which provide access to airport facilities and businesses. The Schweitzer Cutoff Road cuts across the northernmost corner of the RPZ in its existing alignment.

## **North Boyer Avenue**

North Boyer Avenue is a minor arterial that runs parallel to the northern third of Runway 1/19, then turns south through residential and business development. North Boyer Avenue provides primary access to the Airport via Airport Way and runs through the RPZ beyond the approach end of Runway 19.

## **Schweitzer Cutoff Road and North Boyer Avenue Intersection**

The existing Schweitzer Cutoff Road and North Boyer Avenue intersection is a roundabout-controlled intersection located just north of the RPZ. There are existing pedestrian and bicycle facilities on Schweitzer Cutoff and North Boyer Avenue. The addition of a roundabout is currently anticipated to eliminate or at least delay the need for a traffic signal for at least 20 years. In addition to the roundabout, a pedestrian and bicycle lane is provided from Schweitzer Cutoff Road extending 1,300 feet south along the west side of North Boyer Avenue where it connects with the existing pedestrian and bicycle lane.

## **Geographic and Cultural Constraints**

### **Surface water and wetland features and floodplains or floodways**

Sand Creek, a perennial watercourse, is located ½ mile to the east of the Airport and flows parallel to the airport property approximately. Portions of the stormwater system at the Airport drain to Sand Creek. A field survey to study environmental conditions in and around the Airport identified 3.4 acres of PEM1C (palustrine, emergent, persistent, seasonally flooded) and PSS1C (palustrine, scrub-shrub, broad-leaved deciduous, seasonally flooded) wetlands on or near airport property. These wetlands are primarily associated with Sand Creek. Changes to the airport layout may impact the wetlands and require mitigation.

The Airport property is in Flood Zone C and is an area of minimal flood potential (500-plus year flood) per FIRM produced through the NFIP for Bonner County.

## **Cultural resources**

The one potentially eligible historic site has been identified near the northeastern limits of the airport property. An archaeological monitor should be utilized for any proposed future developments within 100 feet of the site's boundary to ensure that no buried historic archaeological features are damaged or destroyed without professional documentation.

## Tools and Strategies

According to the Idaho Transportation Department, cities have the following regulatory tools and authority to ensure airport compatibility with the surrounding area:

1. Prohibit new residential development and public assembly uses within the Runway Protection Zone (RPZ)
2. Prohibit and/or adopt standards through zoning for residential development and public assembly uses within the ITD recommended safety zones.
3. Control the height of buildings, structure, towers and other objects in a manner consistent with 14 CFR Part 77
4. Limit the establishment of uses within a noise impact boundary consistent with the levels identified in Title 14 Code of Federal Regulations (14 CFR) Part 150
5. Prohibit the siting of new industrial uses and the expansion of existing industrial uses where, as a part of regular operations, would cause emissions of smoke, dust or steam that would obscure visibility within airport approach corridors
6. Limit outdoor lighting for new industrial, commercial, or recreational uses or the expansion of such uses to prevent light from projecting directly onto an existing runway or taxiway or into existing airport approaches except where necessary for safe and convenient air travel
7. Prohibit the establishment of new landfills near airports, consistent with Federal Aviation Administration
8. Require, at the expense of the owner of the land or structure, the removal, lowering, or other change or alteration of any structure or tree, or a change in use, not conforming to the regulations after adoption or amendment
9. Require a property owner to permit the city at its own expense to install, operate, and maintain on the property such markers and lights as necessary to indicate to operators of aircraft the presence of an airport hazard
10. Provide that pre-existing nonconforming structure, tree, or use, shall not be replaced, rebuilt, altered, allowed to grow higher, or replanted, so as to constitute a greater airport hazard than it was when the airport zoning regulations or amendments to the regulations were adopted