### CHAPTER 3. NATURAL AND HISTORIC CONTEXT

Downtown Juneau is located on Gastineau Channel. Sheltered from the Pacific Ocean by a belt of islands, it is nestled at the base of Mount Roberts and Mount Juneau, which rise from the water's edge to more than 3,500 feet. Development is linear due to the geographic constraints.

Juneau's climate, Pacific Temperate Rainforest, is influenced primarily by the North Pacific Ocean and secondarily by the high, mountainous interior regions of northern British Columbia and the Yukon Territory. Much of the time, wet weather systems from the North Pacific are carried on westerly breezes through the waterways and across the islands of the Inside Passage. At times, high pressure systems in northern Canada bring strong winds, typically fair skies, and colder air in winter, warmer air in summer.

Normal summer temperatures are in the 50s and 60s Fahrenheit, occasionally hitting the 70s, and rarely the 80s. Normal winter temperatures are in the 20s and 30s, sometimes dipping into single digits or lower on wintry blasts from the interior.

Average annual precipitation is around 55 inches, with about 95 inches of snow annually, but microclimates are ubiquitous, resulting in significant increases or decreases in both temperature and precipitation within very short distances. For example, downtown Juneau is influenced by the ocean and gets warmer temperatures and more rain than the Mendenhall Valley, just six miles away, which is influenced by the Mendenhall glacier. On average, the driest months of the year are April and May and the wettest is October, with the warmest being July and the coldest January and February.

On summer solstice, the sun rises before 4 AM and sets after 10 PM for more than 18 hours of daylight. On winter solstice, the sun rises at nearly 9 AM and sets shortly after 3 PM for just over 6 hours of daylight. In the spring, Juneau gains more half an hour of sunlight each week, and fall brings equally rapid change as sunlight diminishes at the same pace.

Juneau's culture and economy have long been molded by its remote location, weather patterns, and proximity to ocean and rainforest. Downtown has molded itself to the area's steep topography, with streets that become staircases and homes perched on the sides of Mt. Roberts and Mt. Juneau.

# **Historic Context**

Although there were no known Tlingit villages in the study area, the Áak'w Kwaan did have a village across the channel at the mouth of Fish Creek and the Taku had their main village in Taku Inlet. Both the Áak'w and Taku fished this area of the Gastineau Channel often. After gold was discovered in Dzantik'I Heeni, present day Gold Creek, many Áak'w and Taku were encourage to move downtown and work for money in the mines. In 1881, the US Navy engineered the move of Tlingit people from downtown Juneau to an area just outside the original Townsite, in the area known today as the Áak'w Village District. Although greatly changed, this neighborhood remains in the same location today.

After the discovery of gold, construction proceeded at a steady pace. The downtown business district (Juneau Townsite) developed almost immediately. Cabins for miners began to appear in the working class neighborhood of Starr Hill and by 1893, the Chicken Ridge neighborhood was being settled. The neighborhoods surrounding the original Juneau Townsite are reflective of the socioeconomic character of

its historic residents. Chicken Ridge, the neighborhood of doctors, lawyers, business leaders and top mining personnel, features larger more ornate representations of the popular styles. The neighborhood is predominately Craftsman style. Other styles include Colonial and Tudor Revivals, Prairie School and Queen Ann.

The Starr Hill neighborhood historically housed the blue collar workers of the community. The homes are generally smaller Craftsman Style constructed of wood with sparse detailing. Many were constructed from the same floor plan as the Fries Miner's Cabins on Kennedy Street. Similar building styles are evident along Gastineau Avenue which extends to the east of Starr Hill.

The Casey Shattuck neighborhood was subdivided into small residential lots in 1913 on the site of Juneau's original dairy farm. The residential buildings are predominately Craftsman Style. The unique features of the Casey Shattuck neighborhood is that it is relatively level ground compared to the other neighborhoods of Juneau. This allowed a typical grid layout of the streets and alleys.

- The neighborhoods
  - When they were first platted
  - Interesting facts
    - How Chicken Ridge got its name. The story goes that when miners first arrived in Juneau they mistook the numerous ptarmigan in the area for chickens and began calling this part of town Chicken Ridge and the name stuck.
    - Casey Shattuck was a dairy farm and Juneau first suburb. Before it was channeled, Gold Creek was prone to flooding. The numerous floods over the centuries flatted the ground under the neighborhood known as The Flats, and before this the area was a dairy farm.
- Prominent buildings in the study area
  - What is special about them
  - Elks Hall/Rockwell Building In 1912, Alaska was granted Territorial status and the first territorial legislature was convened in the Elks Hall Building. The first action that the territorial government took was to give non-Native women the right to vote.
- Commercial activity of the past in Downtown
  - The tie to mining, fishing and government
  - Laundry, hardware store, clothing stores, restaurants, movie theatre
- WWII, Mines shutting down, Automobile boom in the 60s How these changed downtown
- The growth of tourism
- Current preservation & revitalization efforts
  - Downtown attracting young entrepreneurs
  - o Main Street
  - o Renovated buildings

# EVOLUTION OF DOWNTOWN JUNEAU (this will be a graphic)

- Initial Development Era of neighborhoods
  - Chicken Ridge 1893-1911
  - Casey Shattuck early 1913-1930 developed by William Casey and brothers Henry and Allen Shattuck a flat patch of land; a rare find in Juneau, made these affordable and created a building boom in Juneau that lead to a shortage in building materials with many land owners waiting months to begin construction while new materials were shipped in.
  - Starr Hill 1912-1920 this neighborhood was home to many 0 of Juneau's mine workers because of its close proximity to the Last Chance Mine.
  - Juneau Townsite
  - Downtown Historic District 1900-1938 boundaries were 0 established in 1983.
- First "permanent" building was constructed in 1880 sited at about Front and Main Street. About a dozen other cabins were raised that winter, along with the first hotel, the Franklin House.
- First street construction
  - 0 Basin Road aka Basin Wagon Road was first construction in 1885
- District Court moved from Sitka to Juneau in 1900
- First Alaska Territorial Legislature convenes in Juneau in 1913. The Legislature meet in what is now called the Elks Hall; one of downtown Juneau's best preserved buildings. The first bill signed in to law gave women the right to vote.
- Court House construction year
- Governor's Mansion construction year
- **First City Hall** •
- Current City Hall
- **Big mining events**
- When Juneau city limits extended to encompass all of what is now downtown
- When tidelands were filled
- First and last ferry between Juneau and Douglas •
- When utilities were buried •
- When current capital building was constructed
- First cruise ships arrived in Juneau •
- Construction of Federal Building 1964-1966

Juneau possesses a wealth of historic resources. Current documentation lists 479 buildings that were built before or during the first quarter of the 20th century. Many of these historic buildings make up a key part of Downtown's character and represent tangible links to the past. Downtown's sense of place

The following policies from the 2013 Comprehensive Plan are particularly relevant to historic resources and the Blueprint Downtown Plan:

Identify, preserve and protect Juneau's diverse historic and cultural resources, and to promote historic preservation and accurately represent Juneau's heritage through publications, outreach, and historic tourism.

Preserve and protect the unique culture of Juneau's Native peoples, including buildings, sites, artifacts, totems, traditions, lifestyles, languages, and histories.

Promote responsible heritage tourism that accurately represents Juneau's unique -history, while protecting the resources from over use or harm.

relies, to a large extent, on its historic buildings and landscapes. These assets attract tourists, shoppers, businesses and residents. Many historic buildings have been lost, making those that remain even more important if Downtown is to keep a link to its past.

The values associated with the preservation of historic resources include:

- Providing a link with the past;
- Establishing a distinct market image;
- Quickly making a building available for occupancy;
- Providing an attractive image;
- Supporting heritage tourism strategies;
- Supporting goals for sustainability by conserving resources; and
- Reinforcing Downtown's character.

#### **Natural Resources**

Intro paragraph

#### Mass wasting

Avalanches and landslides are discussed together because of their many similarities. Snowslides, or avalanches, are more likely to occur on moderately steep slopes. When vegetation is taller than the snow is deep, it can help prevent avalanches, but is of little help when the snow is deep. Landslides, or mudslides, also typically start in moderately steep areas with little to no vegetation, or where previously disturbed root systems are unable to hold the underlying material in place.

Avalanches and landslides pose a serious threat to public safety and essential infrastructure in downtown Juneau, due to the combination of extreme topography and high precipitation This challenge is compounded by scarcity of developable land. The 2013 State of Alaska All Hazards Mitigation Plan identified \$1.17 billion in facilities located in high hazard avalanche areas statewide, with \$563 million (48 percent) located within Juneau. In addition to state facilities, downtown Juneau has 62 homes, a hotel, and boat harbor located in an avalanche area. In the last century over 72 buildings have been damaged or destroyed by avalanches. According to the Swiss Institute for Snow and Avalanche Research, Juneau has the greatest potential for a catastrophic urban avalanche in the world. In addition, Juneau has approximately 4-5 times more landslide zones than avalanche zones. A 1936 landslide in downtown Juneau resulted in 15 deaths and dozens of destroyed or damaged structures.

The following policies from the 2013 Comprehensive Plan are particularly relevant to mass wasting and Blueprint Downtown Plan:

Eliminate from long and short-range development plans any public facilities that would have the effect of concentrating people in hazard areas.

Designate all public lands located in hazard areas on the Comprehensive Plan Maps. Include all CBJ owned land in hazard areas in the Parks and Open Space/Natural Area plan.

The CBJ government, should, to the greatest extent practical, acquire properties lying within areas designated as having high mass wasting or avalanche potential. Those owned by CBJ should remain undeveloped.

Compared to the 93 critical facilities in avalanche zones, CBJ has over 157 critical facilities located in landslide zones.

CBJ's hazard maps, adopted in 1987 for downtown Juneau, are based on maps created in the 1970s. These low-resolution maps combine landslide and avalanche areas into a single map which identifies moderate and severe hazard areas. A second hazard analysis was conducted in 1992 for a more limited area, and was not adopted. CBJ's adopted maps, along with other hazard maps and studies, may be found at: http://www.juneau.org/cddftp/GeophysicalHazards.php.

The need for a detailed avalanche/landslide hazard analysis is documented in the 2013 Comprehensive Plan and in a 2018 CBJ Assembly resolution. In addition, CBJ development of the new area plan for downtown Juneau requires accurate identification of hazards to promote appropriate land use regulations and ensure public safety. In July 2018, CBJ received a grant from the Federal Emergency Management Update to update the hazard maps. The update would provide separate hazard maps for landslide and avalanche areas, supported by a technical engineering report. At this writing, a contractor has not been selected and has completed a round of fieldwork. If grant timelines remain as expected, the first draft of the maps and report will be available to the public in approximately November 2020.

# Flood

Flooding occurs with regular frequency in Juneau. This natural event is only problematic when it threatens public health, safety, and the built environment. Downtown Juneau is at greatest risk of coastal flooding, when high winds coincide with high tides creating storm surges and wave run-ups. The Federal Emergency Management Agency (FEMA) released new Borough-wide flood maps for public review in 2018. The maps are still undergoing review, with an expected final adoption date of Spring 2020. Much of the downtown waterfront area lies within a high hazard Velocity flood zone. In the 2018 draft maps, some properties had minor reductions to the flood zone boundary while no properties were added. Current and proposed flood maps may be found at this link:

# https://msc.fema.gov/portal/advanceSearch#searchresultsanchor

Additional updates will be available periodically on the Community Development Department website, http://www.juneau.org/cddftp/

Construction in velocity flood zones has specific building requirements that are -implemented by both Title 49, the zoning code, and Title 19, the building code. These requirements comply with FEMA's regulations and allow property owners to maintain eligibility in the National Flood Insurance Program. Additionally, the regulations ensure that development in the flood zone is constructed so as to minimize danger and reduce financial impacts from flooding.

### Identify and map subareas

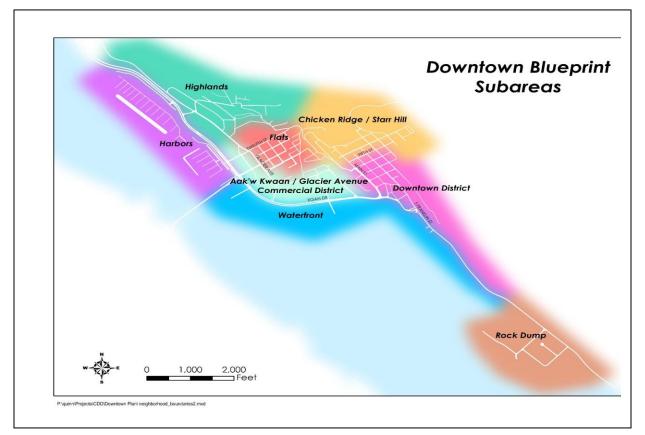
The study area for the Blueprint Downtown Subarea Plan (the Plan) extends beyond boundaries previously studied. The expansion reflects the relevance of areas located north and south of current boundaries to the economic vitality of, and synergy with what is traditionally considered the Downtown. The planning area is incredibly diverse, ranging from industrial, to a compact business district, highly sought after compact residential neighborhoods, mixed use areas, neighborhoods in transition and a working waterfront. Recognizing this diversity, the planning area has been divided into "subareas".

The downtown blueprint subarea boundaries generally follow the boundaries of historic neighborhoods, historic subdivisions, and areas of similar zoning, development The following policies from the 2013 Comprehensive Plan are particularly relevant flooding and Blueprint Downtown Plan:

Prohibit residential, commercial, and industrial development in floodways, regulate development in floodplains, and maintain a program of education, assistance, and information in order to maintain eligibility for the National Flood Insurance Program for the benefit of local property owners and the lending industry.

Work to protect the interests of the community by taking an active role in developing mapping and policy changes at the state and federal level.

characteristics, and land uses. The **Downtown District** on the subarea map is generally defined by the downtown historic district boundary, and the adjacent mixed use portions of the Juneau Townsite. The **Chicken Ridge/Starr Hill** subarea boundary is generally defined by the historic Starr Hill and Chicken Ridge neighborhoods and the residential portions of the adjacent Juneau Townsite. The **Flats** subarea boundary is generally defined by residential areas of the historic Casey-Shattuck Subdivision and is characterized by single family homes on relatively small lots. The **Highlands** subarea is generally defined by the residential areas of the historic Casey-Shattuck Subdivision and is characterized by residential areas of the historic Highlands Subdivision and is characterized by residential use and lots that are relatively larger than the adjacent Flats subarea. The **Aak'w Kwaan / Glacier Avenue Commercial District** is generally defined by the recently adopted Aak'w Village District boundary and the commercial areas adjacent to Glacier Avenue. The **Waterfront** subarea boundary is generally defined by the waterfront area south of the Juneau-Douglas Bridge and extending to the Rock Dump subarea. The Waterfront subarea uses are primarily related to the Cruise ship industry, government, and recreation. The **Harbors** subarea generally includes the area encompassing Harris Harbor and Aurora Basin. The **Rock Dump** subarea is generally defined by the tailings area along Thane Road that extends into Gastineau Channel and is characterized primarily by industrial uses.



The downtown subareas have distinct characteristics. The following descriptions of the districts illustrate their uniqueness.