

Envision Sandy 2050 Comprehensive Plan

April 2024



Letter from the Mayor



Dear Sandy Community,

As Sandy's Mayor, it is my honor to present to you our updated Comprehensive Plan, "Envision Sandy 2050." Our city last adopted a comprehensive plan nearly three decades ago in 1997, when I was a member of our high school Shadow Council. Since that time Sandy has grown from 5,000 residents to over 13,000. This update is a singular opportunity to affirm our priorities and chart a course for our continued success in the decades to come.

Sandy is a truly wonderful place to call home. Building on the pioneering spirit of those who first settled here, Sandy has blossomed into a resilient and prosperous town full of community pride. As the gateway to Mt. Hood, our breathtaking natural scenery, thriving small businesses, and safe neighborhoods provide a quality of life found nowhere else in Oregon. With small-town roots and top-flight amenities, there is simply no better place to live, work, and raise a family. Envision Sandy 2050 was developed to ensure that all the things we cherish about Sandy will live on far into this century.

Envision Sandy 2050 represents our collective vision for the future of our town. This new plan is the product of two years of dedication and commitment from members of our Community Advisory Committee, City staff, Planning Commissioners, and City Council members. Importantly, the plan includes extensive input and feedback received directly from Sandy residents. To everyone who participated in this critical planning effort, you have my sincere thanks.

On behalf of the Sandy City Council, we look forward to working together with our neighbors to put this plan into action. With our combined efforts, I have no doubt that we will achieve our shared dreams for our community – for this generation, and many generations to come.

Let's keep Sandy wonderful,

Stan Pulliam

Mayor of Sandy

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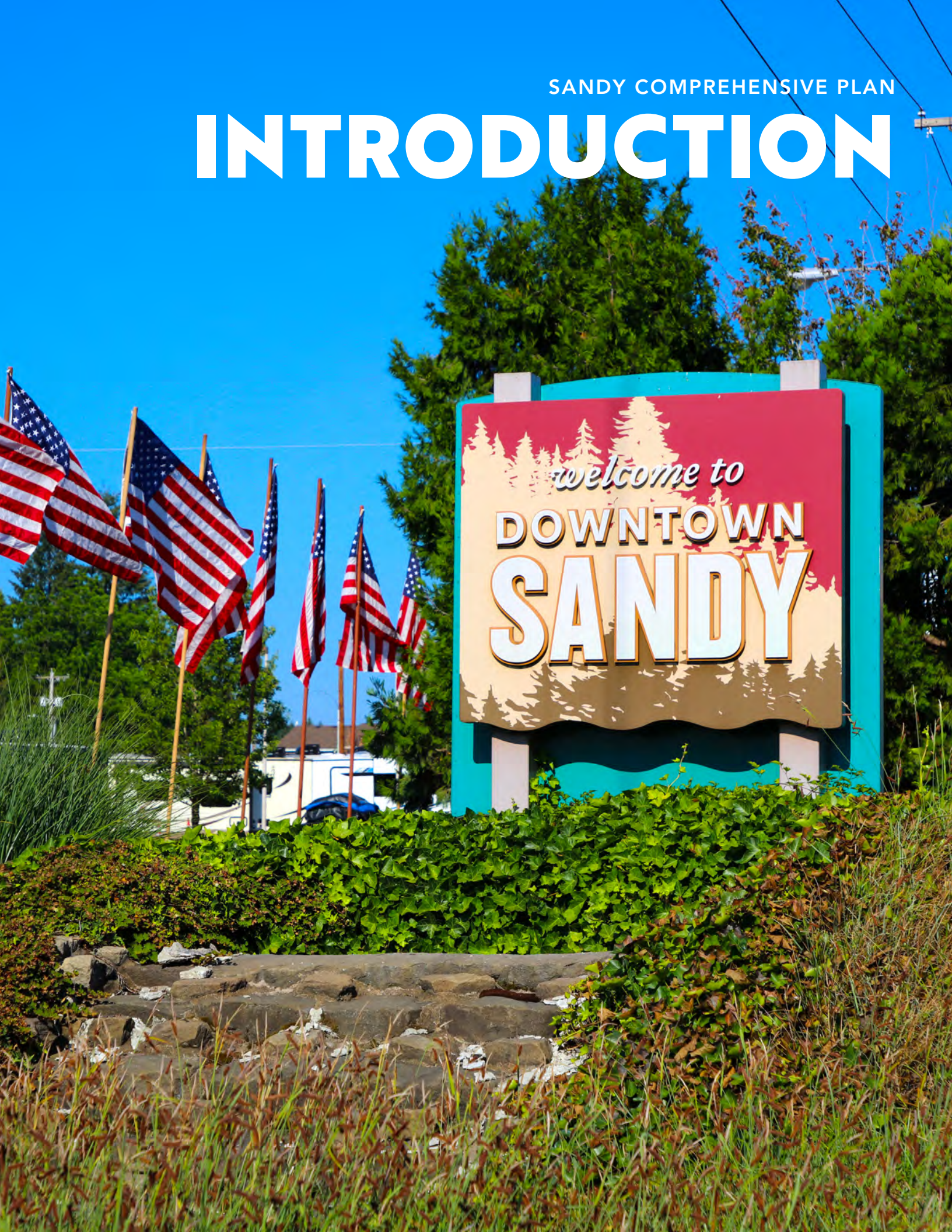
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INTRODUCTION





About this Plan

The Comprehensive Plan guides how Sandy will plan for and manage future growth and development through 2050. It directs all activities related to land use and the future of built systems and services in Sandy. It also has an important purpose as the primary means for realizing the community's vision for the future.

The Comprehensive Plan establishes a policy framework rooted in a factual basis that helps inform other critical planning documents and implementing tools that together serve as a coordinated, overarching strategy for the City. This approach establishes the structure for how the City works and provides services, and the types of services that it provides. Ultimately, the Comprehensive Plan outlines the direction that the City will take when planning for land use and informs all of its land use decisions and actions, including how land is developed and services are provided.

The Plan is designed to be accessible to everyone who participates in the City's land use planning process – not just government agencies, elected officials, Planning Commission, and builders and developers, but also neighborhood and community groups, and community members representing all interests.



A Brief Overview of Oregon’s Land Use Planning Requirements

Comprehensive planning in Oregon was mandated by the 1973 Legislature with the adoption of Senate Bill 100 (ORS Chapter 197). Under this Act, the Land Conservation and Development Commission (LCDC) was created and directed to adopt Statewide Planning Goals and Guidelines. These Goals and Guidelines were adopted by LCDC in December 1974 and became effective January 1, 1975.

To date, Oregon has adopted nineteen Statewide Planning Goals, and all Oregon cities and counties are required to have a Comprehensive Plan that is consistent with these Goals. Statewide Planning Goals include topics such as land use planning, citizen involvement, housing supply, economic development, transportation systems, natural resources management, recreation, and more. Each Statewide Planning Goal includes a set of guidelines that, in conjunction with community priorities, help direct the content within comprehensive plans. Once adopted, all of a City or County’s community and area plans, zoning codes, permits, and public improvements are required to be consistent with the Comprehensive Plan. This structure ensures that cities implement the State’s policy goals first through the comprehensive plan, and then by more detailed supporting and implementing documents.

Twelve of the nineteen Statewide Planning Goals apply to Sandy. These include:

- Goal 1:** Citizen Involvement
- Goal 2:** Land Use Planning
- Goal 5:** Natural Resources, Scenic and Historic Areas, and Open Spaces
- Goal 6:** Air, Water, and Land Resource Quality
- Goal 7:** Areas Subject to Natural Hazards
- Goal 8:** Recreational Needs
- Goal 9:** Economic Development
- Goal 10:** Housing
- Goal 11:** Public Facilities
- Goal 12:** Transportation
- Goal 13:** Energy Conservation
- Goal 14:** Urbanization

How are Comprehensive Plans used?

Zoning and development code serve as the major implementation mechanism of the Comprehensive Plan. The City's zoning map shows the type, location and density of land development and redevelopment permitted in the future and may be updated to reflect the policy framework established by the Comprehensive Plan. The Comprehensive Plan is also implemented through area-specific and topic-specific plans, which guide public investments.

Area-specific planning efforts take place for a smaller part of the city, like a district or neighborhood, such as the Bornstedt Village Plan. Sandy also adopts plans that are topic or infrastructure-specific, such as Transportation, Sanitary Sewer, and Water Master Plans. These plans contain many components, such as background information, assessment of existing conditions or system deficiencies, overarching goals or evaluation criteria, potential capital improvement projects, as well as policies, code amendments, land use or zoning map changes. These plans should follow the ethos of the Comprehensive Plan and should not contradict its goals. The components of area-specific or topic-specific plans either can be adopted by ordinance or resolution. They can also result in an amendment to the Comprehensive Plan or its implementation tools to ensure they stay current over time. Area or topic-specific plans direct the work of a City's departments, like Planning, Public Works and Parks and Recreation, through action plans and departmental budgeting.

Elements of a Comprehensive Plan

In addition to goals and policies for a broad range of topics, Comprehensive Plans are required to include other components. This includes technical analyses and background research to help set the policy framework, as well as implementing plans that provide detailed guidance for specific systems and geographies. While these analyses and background documents are generally incorporated in a Comprehensive Plan by reference, they provide a foundation for the development of goals and policies.

In addition to referencing a factual basis and establishing goals and policies, a Comprehensive Plan also includes a comprehensive plan map that spatially designates residential, employment, and mixed-use development and resource lands in a way that best implements the goals and policies included in the Comprehensive Plan.

Developing Goals and Policies

The heart of the Comprehensive Plan is the community's vision for the future. The goals and policies are a direct expression of the desires of the community, as captured through the City's community-wide visioning process, Envision Sandy 2050.

Utilizing the framework of the Envision Sandy 2050 Vision Statement and information from the factual base, the goals and policies of the Comprehensive Plan describe the long-term outcomes and direction on how the City will achieve the intended work of the Plan. Specifically:

- Goals are long-term outcomes the City hopes to achieve by implementing the Comprehensive Plan. They are aspirational, expressing community members collective desires and values.
- Policies set preferred direction and describe what must be done to achieve these broad goals. They are specific enough to help determine whether a proposed project or program would advance the values expressed in the goals.

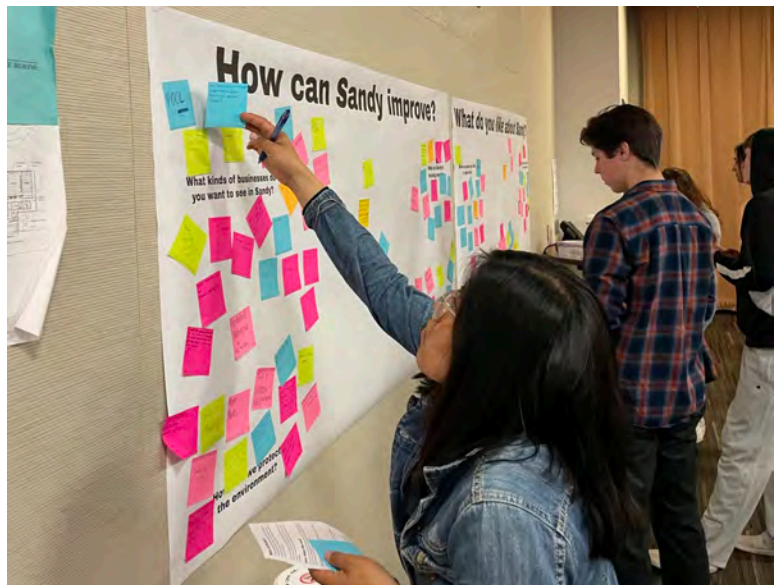
Why update the Plan?

The City's current Comprehensive Plan was adopted in 1997. Since that time, Sandy has experienced rapid population growth and shifts in demographics. Although some of the recommendations of the current Plan still hold value, the fundamental data and trends used to establish the recommendations are outdated. The updated Plan needs to reflect updated data and trends and community priorities regarding livability; infrastructure; transportation; economy; resilience to natural hazards; growth management; housing and housing affordability; and parks and trails. In conjunction with major updates the City's Housing Capacity Analysis (HCA), Economic Opportunities Analysis (EOA), Transportation Systems Plan (TSP), and other factual bases, the Envision Sandy 2050 process established a new vision for the future and reset the policy framework of the Comprehensive Plan.



COMMUNITY ENGAGEMENT & PLAN UPDATE PROCESS







In spring 2022, the City of Sandy launched “Envision Sandy 2050,” a citywide engagement effort to update the Sandy Comprehensive Plan. The first step in the process was to create a community vision that reflects what community members enjoy and want to preserve about Sandy, and what they would like to see changed in the future.

Over the course of nearly two years, City staff led outreach and engagement efforts to better understand the community’s vision and priorities related to Sandy’s future. As of July 2032, the Envision Sandy 2050 process touched more than 1,000 community members through Community Conversations, community events, online surveys and the Sandy Speaks webpage. Activities were designed to identify common themes around the aspirations and concerns of a community, which are a key piece to the development of a community-wide Vision Statement for the Comprehensive Plan.

Community Advisory Committee

To guide the Envision Sandy 2050 process, a volunteer Community Advisory Committee (CAC) was convened to represent a broad cross-section of Sandy residents, business owners and community leaders. Membership to the CAC was appointed through an open application process. The CAC reviewed materials, acted as liaisons to various constituencies and interest groups and hosted outreach events and activities. The CAC was instrumental in advancing community priorities to craft the vision and develop policies.





Community Conversations

To reach a wide spectrum of Sandy community members, project staff and members of the Community Advisory Committee (SAC) facilitated community conversations with local groups, clubs, committees, and organizations in Sandy. Over the course of five months, twelve community conversations were conducted with the following groups, engaging approximately 85 community members in Sandy:

- Chamber of Commerce
- AntFarm Youth Services
- Parks and Trails Advisory Board
- Economic Development Advisory Board
- Sandy Police Department
- SandyNet Advisory Board
- Library Advisory Board
- Planning Commission
- Group of Sandy High School staff
- Group of local developers
- Group of Spanish speakers

In addition, multiple community conversations were held with Sandy High School classes, including Leadership and Advisory classes. These events engaged over 250 students in group discussions and interactive polling. Students learned about civic engagement, community development, and the City’s land use planning system, and shared their ideas for Sandy’s future.





Community Events

Throughout the summer of 2022 and 2023, the project team staffed an Envision Sandy 2050 booth at multiple Farmers’ Markets, the Longest Day Parkway event, and the Sandy Mountain Festival. Tabling at community events provided a unique opportunity to reach many people in one place. Materials for tabling were designed to gather community ideas, and activities included intercept surveys in English and Spanish.

Online Engagement

The City of Sandy maintained an active project website on Sandy-Speaks web platform with information about the project and ways to get involved. Online surveys were promoted through the Sandy Source newsletter, social media, community listservs, as well as through business flyers and door direct mailers that reached all Sandy residents within the UGB.

Outreach to Spanish Speakers

Outreach to Sandy’s Spanish-speaking community was conducted through a grassroots process that leaned on wide-reaching social media posts, informal gatherings at the Vista Apartments, St. Michael’s Catholic church, and community members connected to a variety of services and programs in Sandy. This included Spanish speakers from NW Family Services, AntFarm’s Nuevo Futuro program, Todos Juntos and Olga Sanchez at the School District.





Future Fest

At a key milestone in the Envision Sandy 2050 process, a community meeting was held to report back on the outreach and engagement activities, vet and refine the draft Envision Sandy 2050 Vision Statement, and identify priorities and opportunities for achieving the vision. The Future Fest event helped lay the groundwork for developing goals and policies for the Comprehensive Plan.

More than 40 community members participated in the event at the Wippersnappers Kids' Play Place, where free kids' play, food and beverage were provided. A wide range of participants included residents, business owners, families with children, and elected officials.

Discussions were robust and collaborative, resulting in dozens of community ideas and feedback on the draft vision statement. Key issues included wildfire mitigation, parks maintenance, and pacing infrastructure with development. This feedback from the community was incorporated in the new Sandy Comprehensive Plan policy framework.



Natural Hazards and Resiliency Planning Workshops

As part of the comprehensive planning process, the City of Sandy undertook a process to develop policies and actions related to expanding resilience to changing conditions and extreme weather events. This process involved two stakeholder workshops where city staff, local experts, and residents came together to identify vulnerabilities related to changing conditions and develop cross-sector strategies to address them.

At the first workshop, participants reviewed the information regarding accelerating trends related to extreme heat, drought, water availability, snowpack, wildfire, and other climate patterns to

identify vulnerabilities to the City of Sandy. This effort resulted in the vulnerability assessment included in the Sandy Comprehensive Plan Appendix. In the second workshop, participants came together to identify strategies and related actions, and gather information relative to the co-benefits, tradeoffs, relative cost, effectiveness, and responsible party. Some of these strategies were developed into policies included in the Sandy Comprehensive Plan. Detailed information about all strategies developed in this process is included in the Appendix to help guide implementation of resilience-related policies included in the Comprehensive Plan or undertaken through other local government processes.

Workshop participants included:

- Gianna Alessi, Clackamas County Disaster Management
- Greg Brewster, City of Sandy – SandyNet
- Jevra Brown, Oregon Department of State Lands
- Shelby Butcher, Rural Community Assistance Corporation
- Rukshana Chand, Clackamas Workforce
- Bill Conway, Clackamas County Public Health
- Suzi Cloutier, Soil and Water Conservation District
- Jerry Crosby, Planning Commission
- Matthew Degner, Sandy Public Works
- April Dobson, Todos Juntos
- Aeris Eaton, Sandy High School
- Thomas Fisher, City of Sandy
- Aryka Hanto, Clackamas County Disaster Management
- Andi Howell, City of Sandy
- Kirsten Ingersoll, Clackamas County Health, Housing, and Human Services
- Khrys Jones, Chamber of Commerce
- Joe Johansen, City of Sandy
- Clair Klock, Clackamas Soil and Water Conservation District
- Chelsea Lincoln Lane, Oregon Trail School District
- Evelyn Lawyer, Sandy High School
- Emily Meharg, City of Sandy
- Heather Michet, Iris Healing Arts
- Julia Monteith, Oregon Trail School District
- Casie Morris, Todos Juntos
- Kirsten Pitzer, Action Center
- Kelly Reid, Department of Land Conservation and Development
- David Snider, City of Sandy
- Michelle Valencia, Sandy High School
- John Wallace, Sandy Parks & Recreation
- Jay Wilson, Clackamas County Disaster Management



SANDY COMPREHENSIVE PLAN
ABOUT SANDY





History of Sandy

INDIGENOUS PEOPLE

The first documented inhabitants of the Sandy area were local bands of Kalapuya Native Americans. The Kalapuya lived throughout Oregon's Willamette Valley and subsisted primarily on fish, game animals, camas root, fern, and local berries. Indigenous people would move about following food sources as they changed seasonally, thriving until the introduction of external diseases in the early 1800s. It is estimated that approximately 75 percent of the local Kalapuya population was lost to smallpox, the measles, influenza, and venereal diseases by 1832. The remaining indigenous population in the area and the five tribes of the Willamette Valley moved to the Grand Ronde Reservation.

The indigenous name for Mount Hood is Wy'east. The name originated with the Multnomah tribe of the Columbia river valley. The name Wy'east has been associated with Mount Hood for more than a century, but no evidence suggests that it is a genuine name for the mountain in any indigenous language.

PIONEERS

Sandy was named for the nearby Sandy River which was originally identified as the “Quicksand River” by Lewis and Clark; however, the name “Quicksand” gradually evolved into “Sandy”.

1845

In **1845**, Samuel K. Barlow, a pioneer emigrant from Kentucky, blazed a road (known as the Barlow Road) from The Dalles around the south side of Mt. Hood to Eagle Creek, thus completing the last leg of the famous Oregon Trail that began in Independence, Missouri. There he faced the dangers of rafting and the struggles of portaging through the treacherous Columbia River and the Gorge. Barlow had hoped to find an old trail created by indigenous people around the south of Mount Hood, and he did. These 80 to 90 miles of difficult terrain became known as the Barlow Road. In 1845, Barlow petitioned the Provisional Government (then in Oregon City) for authority to build and collect toll from Tygh Valley to Oregon City. He was granted the rights in short order naming the road Mt. Hood Road, but it has always been commonly known as the Barlow Road.



1850

Virtually all of Sandy’s land claims were made after the **1850** Donation Land Claim Act. The offer of free land caused many people to make the arduous overland journey to the Oregon territory during the **mid to late-1800s**. The Act designated parcel sizes to be 320 acres (640 for a married couple) and required they be rectangular in shape, which influenced the development and population growth pattern the City would ultimately take. The greatest influx of early settlers to Sandy occurred in **1852 and 1853**.

When the first settlers arrived in the area of Sandy, they found most of it covered in a thick forest primarily composed of Douglas fir and cedar trees. Some of the trees were noted to be from 6-10ft. in diameter. In between sections of forest were flat grasslands with intermittent trees, mostly oak. The grassland areas were the first sections of land to be claimed and settled, as they were the easiest to build and farm on. Once the grassland areas became scarce, forestlands were claimed, cleared, and settled. Later, people came primarily for the trees and the profits to be made in timber, and subsequently people settled on the cleared land.

1853

Sandy's first settlers, the Francis Revenue family, arrived in **1853** and soon opened a trading post on the Barlow Road which served thousands of pioneers who traveled through on their way to the Willamette Valley. John and Francis Revenue started building a log schoolhouse and in 1870 the Revenue School District, No. 6 was formed. In 1874 Francis Revenue built the Revenue Hotel. It was Sandy's first hotel.



1894

SANDY'S ECONOMY

According to local historians, there is no question that Sandy's heritage was founded on logging and sawmilling. Early residents used to say, "there was a sawmill behind every stump". Sandy's rugged terrain did not attract farming, but it was blessed with a thick cover of beautiful old growth timber. The harvesting and processing sustained the area's economy for many years. At one time or another there were more than 60 sawmills in the area. In addition, there were many logging camps to supply the sawmills with logs. This industry not only brought money to the area but also employed many of the residents.



As more and more sawmills opened up, additional specialty shops and tradesmen were needed. Robert Jonsrud started a blacksmith shop in Sandy in **1894** when he was 21 years old. His shop was on the north side of present Pioneer Blvd. between Shelly and Straus Avenues. His specialty was horseshoeing and wagon-repair work.

The primary way logs would be "yarded" out of the woods was by a team of horses. One of the largest sawmills in the area was the Sandy Fir Lumber Company. The sawmill was located just outside of Sandy on Tickle Creek and was owned by John Straus and W.A. Proctor.

1900

BUILDING A TOWN

In the early 1900's, Sandy was a tough primitive village with mostly muddy, unplanked roads, no public water system, no public sewer system, no city government or constable, no electricity, and no doctor.

Most of the growth in the early 1900's has been attributed to what was going on in the Bull Run area; building of a diversion dam, flumes, tunnels, an artificial lake (Roslyn Lake), and an electric generating plant. At one time there were between 200 and 300 people employed on these projects. The village of Sandy (population just under 200) supplied many of the daily needs for these workers, including a place to go on Saturday nights.



1913

The little village of Sandy was trying to incorporate as a city for a number of years. The trouble was a requirement of a minimum population of 200. Sandy's population hovered just below that for quite some time. Finally, the population requirement was met and on **August 11, 1911**, the village of Sandy incorporated as a city, and on **November 14, 1913**, the voters approved the city's charter. The first act of the new city council was to hire L.A. Davis as Town Marshal.

In October 1913, the city experienced a major fire which destroyed numerous buildings and businesses, including a restaurant, livery stable, and saloon, all located on the south side of the Main Street (now known as Proctor Boulevard). A concrete replacement of the restaurant and saloon was subsequently erected, marking the first concrete building in the city.



1919





In 1911, A.L. and M.A. Deaton opened Clackamas County Bank (CCB) in a portion of H.S. Eddy's real estate office. In 1912, W.A. Proctor was taken in as a stockholder. In just a few years, the tiny bank was able to construct its own building. In 1918, Proctor bought controlling interest in the bank. CCB survived the Great Depression and is going strong today. It's the oldest community bank in Oregon. The CCB corporate offices are now located on Proctor Boulevard and have been there since the 1950s.

1919

ERA OF THE AUTOMOBILE

In 1919, the State Highway Department accepted Barlow Road and proceeded to build a new Mt. Hood Highway from Gresham to Mt. Hood going through Sandy. In the mid 1920's, the State completed the Mt. Hood Loop Road from Government Camp to Hood River. That opened up the whole area which boosted commerce and all sorts of automobile excursions.

Ludwig Hoffmann constructed this building for his new business, the Sandy Meat Market. The attached house next door was also built by Ludwig, where he and his family lived. With horse-drawn wagons he delivered to homes, sawmills, and the many camps in the outlying areas. The business flourished and began to include grocery items.



This photo is Main Street in 1917 which is modern day U.S. Route 26.

1920

In the 1920s Ludwig added trucks to his fleet and expanded their delivery area out to 75 miles of rough road to the other side of Mt. Hood.

Logging and sawmilling in the 1920's benefited the most from the introduction of the truck. By 1920, cars and trucks had displaced wagons and it was no longer necessary to rely on horsepower. Although the early truck started out as primitive, trucks had been improved so much that they could be used to transport logs to the sawmills. Previously, unless the logs could be moved by rail or water, the sawmills were forced to move to the timber sites. Now trucks could transport lumber a far greater distance. When automobiles began replacing horses and wagons, carriage repair shops were adapted to garages.

In 1910, R.S. "Bob" Smith and his brother worked as blacksmiths. They mostly did horseshoeing and repair of wagons and buggies. In 1915, R.S. bought his brother out and the property next door and built a garage to sell and repair automobiles. He also sold Standard gasoline. **In 1935**, R.S. built the Spanish Revival building with Art Deco shapes, colors, and motifs woven into the architecture. R.S. served a term as mayor in 1929 and councilman from 1941-44. The Smith family business lasted for 86 years.



1962

POST WAR ERA

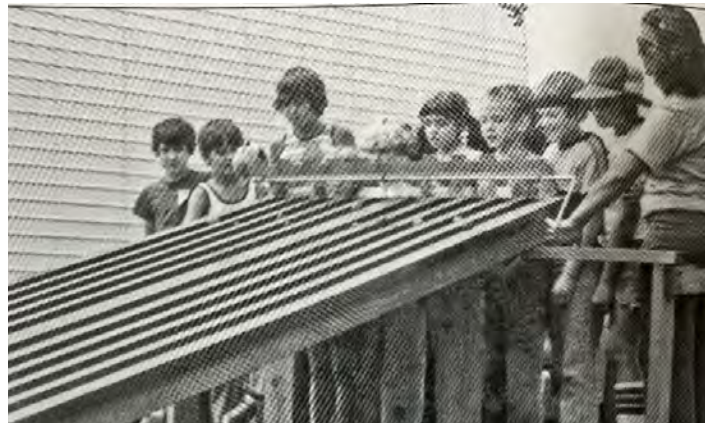
After World War II, Sandy's main economy continued to specialize in mills for the purpose of processing timber. The Bittner Mill in Sandy operated from **1940 until 1956**, when it closed. It produced millions of alder plugs for paper mills where they were used to plug and stabilize the open ends of paper rolls, such as newsprint.

In 1962, Oja Lumber Company acquired an existing sawmill on Tupper Road where it now meets Dubarko Road. Between the 1960s and 1980s, Olaf Oja employed over 20 people to mill logs, truck them to the main location in Sandy, and finish them into boards. As small mills began disappearing around the Sandy area, Oja Lumber began working with Vanport Manufacturing in Boring. The Oja Lumber Company remained open until 2016 when it was demolished for the construction of the local Goodwill Superstore and the Wendy's restaurant.



1973

The Mountain Festival started in **1973** and has grown to be one of the largest annual events in Clackamas County. In 1976, the festival committee took advantage of the short-lived pet rock fad to stage pet rock races.



1974

Tollgate Inn was established in **1973**.

Joe's Donut Shop was established in **1974**.



1984

Sandy's second female Mayor, Ruth Loundree, presented the key to the City of Sandy to William "Bill" Johnson, the gold medalist in downhill skiing at the 1984 Winter Olympics in Sarajevo, Yugoslavia. Bill attended Sandy High School and got his early training in the downhill event while skiing in the Mount Hood area.



2008

MILLENNIAL

The Sandy Style architectural standards were established in 2008. After adoption of the Sandy Style, the City established a facade improvement grant program through the Urban Renewal Agency which transformed the city's downtown over the last few decades. The standard is meant to celebrate Sandy as the Gateway to Mount Hood by adapting elements of Cascadian architecture popular between 1915-1940.



2012

The new Sandy High School on Bell Street opened in the fall of 2012 replacing the 90-year-old facility on Bluff Road. This 310,000-square-foot building employed a broad range of sustainable-design strategies that reduced the school's carbon footprint and tied it to the natural beauty of the Pacific Northwest.



Where We Are Today

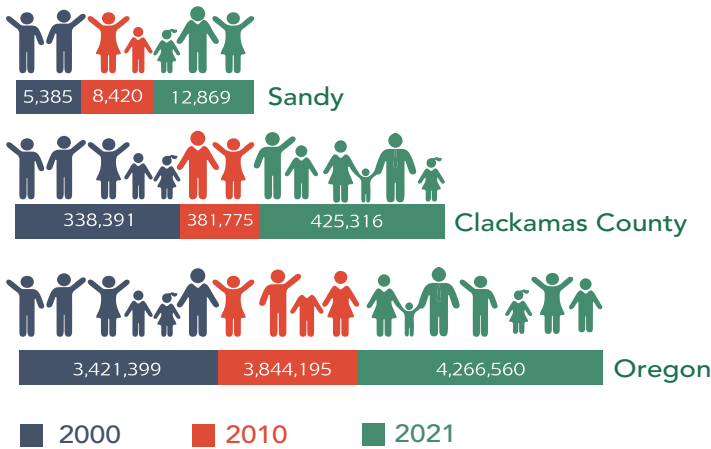
Envision Sandy 2050 Community Snapshot

Sandy 2050 will guide how Sandy will plan for and manage future growth and development through 2050. It directs all activities related to land use and the future of built systems and services in Sandy.

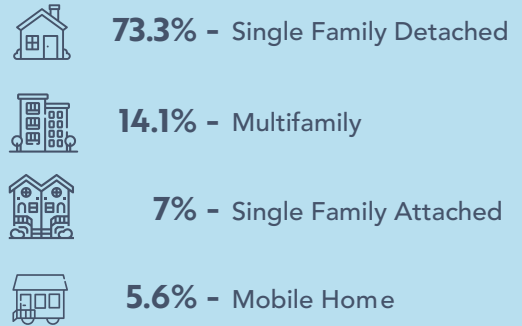
It also has an important purpose as the primary means for realizing the community’s vision for the future.

To envision the future of Sandy, this community profile provides a shared understanding of Sandy as it exists today.

Who We Are



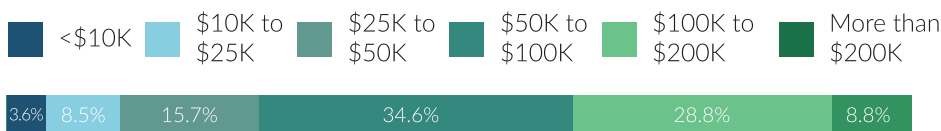
Where We Live



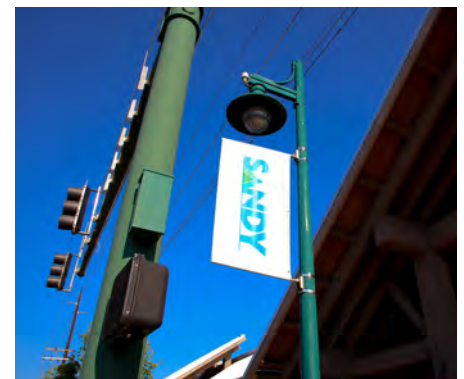
The population of Sandy is forecasted to grow by 7,788 people between 2020 and 2045 to include a total estimate of 20,657 people! Sandy’s Hispanic/Latino population increased between 2000 and 2015–2019 from 4% to 10%, and Sandy’s households are larger with nearly half of households consisting of 3 or more people.

The median gross rent in Sandy over the 2015-2019 period was \$1,228. About 33% of Sandy’s households are cost burdened, compared with the county average of 32%. Median home sales prices have escalated over the last ten years increasing from almost \$200,000 in 2012 to almost \$500,000 in 2022.

What We Earn



Between 1999 and 2019, Sandy’s median household income increased from about \$42,000 to about \$73,000 per year. However, Sandy’s median household income is about \$7,000 less than Clackamas County.



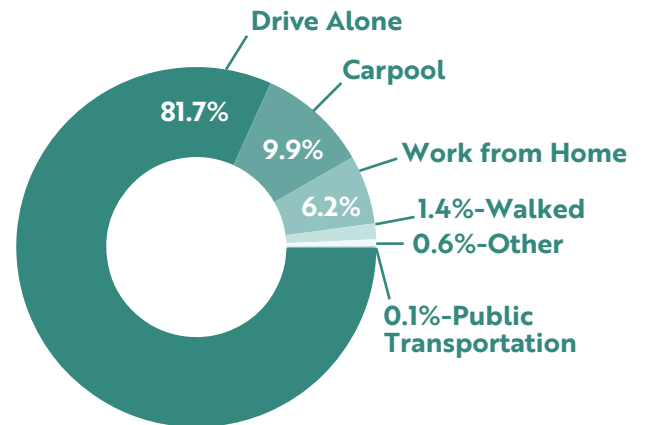
Commuting Flows



80% of the workers commute into Sandy from other areas, most notably Gresham. More than 5,000 residents of Sandy commute out of the city for work, most of them traveling to Portland (27%). About 20% of all people who work in Sandy also lived in Sandy. About 13% of Sandy residents who are employed, work and live in Sandy.

How We Get to Work

Modes of Transportation:



Where We Work

Top five sectors in Sandy:



Between 2008 and 2019, employment in Sandy increased by about 695 employees (23%), at about a 1.9% average annual growth rate. Sandy has a higher labor force participation rate (69%) relative to Clackamas County (65%) and Oregon overall (62%).

Parks & Recreation



Wildfire

Extreme wildfire danger averaged **11 days per year** across Clackamas County in the 1990s and is expected to increase to **19 days per year** by the middle of this century.



The threat of wildfire is real for residents of Sandy. As fires continue to worsen, smoke becomes a hazard to human health, especially for residents with underlying health conditions and those who are unable to protect themselves by accessing clean indoor air.

Sources

U.S. Census Bureau, American Community Survey 2015–2019 5-Year Estimates
 U.S. Census Bureau, American Community Survey 2020–2025 5-Year Estimates
 Portland State University Population Estimates, 2021
 Oregon Employment Department, Quarterly Census of Employment and Wages

City of Sandy 2021 Parks and Trails Master Plan
 Future Climate Dashboard web tool. Climate Toolbox (<https://climatetoolbox.org/>)
 Data USA: Sandy, OR (<https://datausa.io/profile/geo/sandy-or>)



Land Use Gallery

Regulated by the Comprehensive Plan, Development Code, Parks and Trails Master Plan, and the Transportation System Plan, Sandy has taken on a physical form that defines the experience of anyone who lives, works, or visits Sandy. The resulting development pattern provides the stage on which daily life takes place. This section of the Comprehensive Plan explores these development patterns, revealing the relationship between the system of land use regulations, parks and trails, transportation, and the underlying landform.

While the Comprehensive Plan provides policy guidance for the general and long-term location, type, density, and timing of new growth and development, the zoning districts outlined in the Development Code enacts detailed regulations and use standards for the development of land. Comprehensive plan land use categories ensure an adequate supply of land for residential, commercial, and industrial development purposes ensuring the development of a complete community.




The following land use categories have been developed for use in the Comprehensive Plan Map.

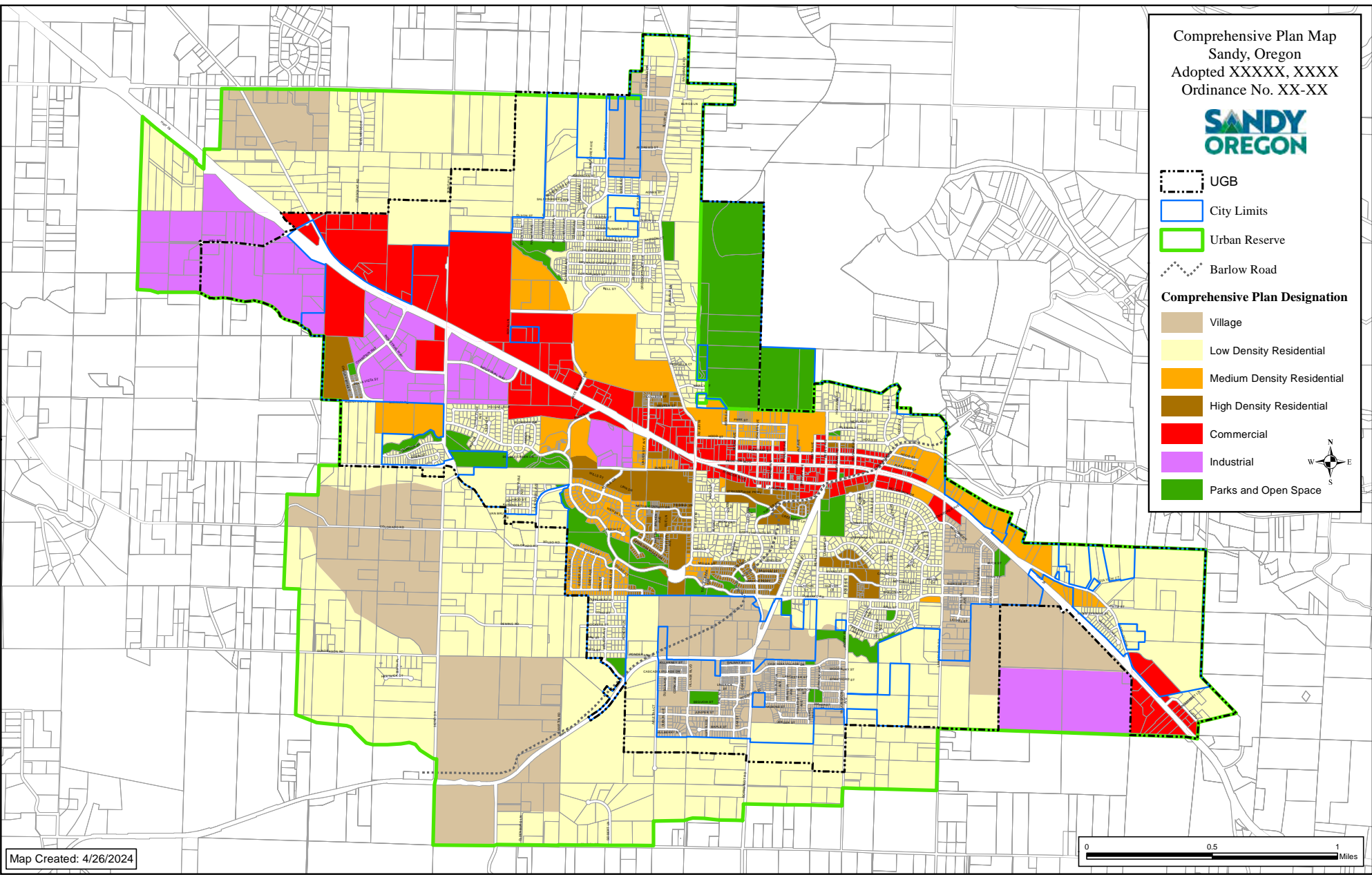
The Comprehensive Plan Map is a key element of the Comprehensive Plan and a controlling instrument that directs future growth by illustrating the location and types of uses within Sandy. The Comprehensive Plan Map includes land use designations establishing the intended urban pattern and the general use and intensity of development, as well as land use boundaries illustrating the Urban Growth Boundary (UGB), City limits, and community plan areas.

Zoning districts, which must be consistent with the Comprehensive Plan, translate the broad land use designations as defined in the Comprehensive Plan into detailed land use classifications that are applied to individual parcels. A clear relationship between land use designations and zoning districts is important to ensure that the goals and policies of the Comprehensive Plan are consistently carried out through administration of the City Development Code and corresponding Zoning Map.

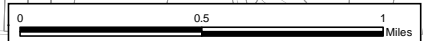
Comprehensive Plan Map
Sandy, Oregon
Adopted XXXXX, XXXX
Ordinance No. XX-XX



-  UGB
-  City Limits
-  Urban Reserve
-  Barlow Road
- Comprehensive Plan Designation**
-  Village
-  Low Density Residential
-  Medium Density Residential
-  High Density Residential
-  Commercial
-  Industrial
-  Parks and Open Space



Map Created: 4/26/2024



Central Business District

The Central Business (C-1) district is intended to provide the community with a mix of civic, retail, personal services, offices and residential needs of the community in the city’s historic commercial core. While the district does not permit new low density housing types, the district allows dwelling units in buildings containing commercial activities.

The district is a smaller, more intimate, and is intended to be pedestrian oriented. Vehicular parking is mostly provided on the street, in smaller parking lots, and in public parking lots. The goal is to continue to develop this district into a high-quality streetscape that provides a safe and

comfortable pedestrian experience. The central business district also provides the backdrop for some of the most significant community events.

The city has design standards effective for all commercial buildings. Known as the “Sandy Style,” the design guidelines apply to new construction, major additions, and exterior alterations other than general maintenance. Sandy Style is an architectural style developed by the City of Sandy, modeled after the Cascadian Architectural style by adapting elements of the English Arts and Crafts and Oregon Rustic styles.



General Commercial

The General Commercial (C-2) district is intended to provide for a wide range of commercial activities at a community shopping center scale, including for commercial uses and businesses which require large land areas for structures, parking facilities, and direct automobile access.

This highway oriented commercial use dominates the experience for people passing through the west end of Sandy. This development pattern in Sandy was historically of the typical “big box” and “strip mall” variety, with buildings setback from the highway to make space for ample surface parking lots.

This type of development provides space for retail shopping and restaurants serving many of the daily needs and services of Sandy residents. Sandy Style design is required for all new construction and redevelopment of property in this district, including modifications to the historic development pattern to reduce the visibility of surface parking lots.

The established general commercial district creates barriers to pedestrian and bicycle access. The goals and policies reflected in this Comprehensive Plan support bike and pedestrian pathways to these areas, and safe crossings along various points of Highway 26.



Village Commercial

The Village Commercial (C-3) district is primarily designed to serve residents of the immediately surrounding residential area. Village Commercial is intended to help form the core of the villages designated in different locations of Sandy. The village district was designed and implemented concurrently with the 2040 Comprehensive Plan that was adopted in 1997. Allowing a mixture of residential uses beside and/or above commercial uses is intended to help create a mixed-use environment which integrates uses harmoniously and provides for convenient access to commercial uses close to housing.

The orientation of the uses in this zoning district should integrate pedestrian access and provide linkages to adjacent residential areas, plazas and/or parks, and other amenities. The village designation is intended to provide flexibility in developing specific area plans. Permitted land use designations in a village district includes low density residential, medium density residential, high density residential, and village commercial.



Industrial Park

The Industrial Park (I-1) district is intended to allow desirable and beneficial mixing of light industrial and commercial uses totally enclosed within buildings on large landscaped sites that blend harmoniously with their surroundings and adjacent land uses. This zone closely matches the General Commercial (C-2) district.

Commercial uses located in this district include activities that are compatible with industrial uses, those uses which supplement and support

surrounding industrial activity and uses that support the needs of the employees of nearby businesses.

This land use category is intended to promote development that provides jobs in key industries in Sandy as identified by the City's Economic Development Strategic Plan. The land use pattern typically includes small and medium-sized parcels that can accommodate small and mid-sized industrial and commercial businesses.



Light Industrial

The Light Industrial (I-2) district is intended to provide locations for light manufacturing and warehousing business which have minimal impact on their surroundings and do not produce noise, light, smoke, odor, or other pollutants in excess of average levels preexisting at the boundary of the site.

Light Industrial is intended for a variety of lower intensity industrial operations, such as light manufacturing and assembly, research,

technology, and industrial offices. Additionally, a goal of the district is to provide opportunities for incubator space for smaller start-up businesses.

Because building design standards are less restrictive in this zone than in other zones, buildings (regardless of use) shall be screened from view from arterial streets and highways. It is the intent of this district to provide locations and uses that do not depend on high visibility.



General Industrial

The General Industrial (I-3) district is intended to provide locations for higher intensity industrial uses, such as manufacturing, major assembly of products, truck terminals, distributions facilities, and other similar uses. Because of the type of land uses and their potential conflicts, this

zoning district is intended to include larger sites that are typically more isolated and removed from residential uses. The entirety of this land use type is currently located in the northwestern part of the city, adjacent to Highway 26.



Images: US Metal Works Inc.

High Density Residential

The High Density Residential (R-3) district is intended for high density residential development at 10 to 20 dwelling units per net acre. Intended uses are apartments, row houses, duplexes, single attached zero lot line, and manufactured dwelling parks.

Grouping of homes are typically closer together and usually in multi-story buildings. Common open spaces and interior parks are often required to provide room for play and recreation.

High Density Residential (HDR) areas are generally located immediately adjacent to commercial zoning, arterial and collector streets, and public facilities such as schools or parks. The HDR Comprehensive Plan designation encompasses one zoning district designation.



Medium Density Residential

The Medium Density Residential (R-2) district is intended primarily for medium density residential development at 8 to 14 dwelling units per net acre. Intended uses are apartments, duplexes, row houses, manufactured dwelling parks, and single family detached and attached residential dwellings. Commercial development, with the exception of home businesses and other uses as defined as conditional uses, is not considered appropriate for this designation.

Medium Density Residential (MDR) districts are often used as a transitional use technique to buffer HDR to low density residential uses. Lots for single family homes and duplexes are typically smaller than in the low-density residential designation and homes are located somewhat closer to each other. The resulting neighborhood character is still decidedly suburban. The MDR Comprehensive Plan designation encompasses one zoning district designation.



Low Density Residential and Single Family Residential

The Low Density Residential (R-1) district is intended for 5 to 8 dwelling units per net acre. Intended uses are duplexes, manufactured dwelling parks, and single family detached and attached residential dwellings. The Single Family Residential (SFR) district is intended for 3 to 5.8 dwelling units per net acre. Intended uses are duplexes and single family detached residential dwellings. Low Density Residential (LDR) districts are typically located outside on the periphery of the commercial districts and have a traditional neighborhood design with various architectural styles and building elements. All future residential development should be carefully designed to integrate with

established neighborhoods in terms of density and house design.

Street patterns in the LDR district are characterized by curvilinear alignments and cul-de-sacs because of the topography in Sandy. The public streetscape is a major defining element of an LDR district neighborhood. This land use designation relies on the car for most trips, and on the school bus for getting to and from school. This development pattern remains popular with families in Sandy for the generously sized private yards and quiet streets. The LDR Comprehensive Plan designation encompasses two zoning district designations.



Parks and Open Space

This designation is intended to recognize those publicly owned lands designated or proposed for parks and open spaces as identified in the Parks and Open Space Master Plan. Parks and Open Space (POS) include publicly developed parks and undeveloped park land where typical uses include active and passive outdoor recreation activities, trails, open space, cultural activities, park buildings and structures, concessions, general park operations and maintenance, and storm drainage facilities. Open space includes publicly developed and undeveloped lands and sensitive areas such as wetlands, steep slopes, forested areas, and stream corridors.

Natural open space is a key element of the form and character of Sandy. As described in the landform analysis, Sandy neighborhoods are nestled between creeks, wetlands, and steep slopes with forest. Several creeks in Sandy have carved out corridors that are filled with lush vegetation. Most of these corridors are accessible through a vast network of trails. Access to nature is one of the key elements in the unique quality of life in Sandy.





Sandy Style

On April 2, 2008, the City of Sandy adopted design standards effective for all commercial, industrial park, and non-residential (school, church, and civic) buildings. Known as the “Sandy Style,” the design guidelines apply to new construction, major additions, and exterior alterations other than general maintenance.

Sandy Style is an architectural style developed by the City of Sandy, modeled after the Cascadian Architectural style by adapting elements of the English Arts and Crafts and Oregon Rustic styles.

The intent of the new standards is not to require all buildings to look the same, but rather to require buildings to contain certain design elements in common to create a more unified overall appearance. Some elements of the style include:

- Steeply pitched roofs and gables.
- Strong base materials using stone, block, or brick.
- Exposed heavy timbers or natural wood beams, posts, and trim.
- Warm earth-tone paint colors and/or brick.
- Articulated building facades with prominent covered entries.
- Windows to allow viewing into the building.
- Public gathering spaces.
- Pedestrian focused site layout, parking, and vehicle access.





Facade Improvement Grants

The City of Sandy Façade Improvement Program is a matching grant program funded by the Sandy Urban Renewal Agency and was approved by the Urban Renewal Board in May 2009. This program sets aside a portion of the City’s urban renewal funds to assist building owners with upgrades to their buildings designed to incorporate Sandy Style elements to buildings.

Permanent Covered Structures Grant

The Permanent Covered Structures grant program was a subsection of the Façade Improvement Grant Program, a grant program offered by the City of Sandy Urban Renewal Agency. Additional outdoor seating in Sandy had been a desired amenity for many years and this program was introduced during the



2020 pandemic as a way to help businesses when inside seating was limited. The Urban Renewal Agency provided 100 percent of the upfront funding to construct the permanent outdoor covered structures And applicants only had to pay back 20 percent of the construction costs.



SANDY COMPREHENSIVE PLAN

ENVISION SANDY 2050 VISION STATEMENT

Envision Sandy 2050 Vision Statement



Community and Culture

In 2050, Sandy retains its small-town feel through a celebration of community and place. Downtown Sandy is a clean, walkable, and vibrant place to dine, shop, and gather. The beautification of downtown showcases public art, honors Sandy's history, and celebrates its location as "The Gateway to Mt. Hood." Public amenities and facilities provide places to play, grow, and learn for residents of all ages. Sandy supports events like the Sandy Mountain Festival that bring people together and promote a spirit of inclusivity. Non-profit and volunteer organizations offer meaningful services to the community and provide opportunities for civic engagement.



Transportation and Infrastructure

In 2050, Sandy boasts modern and reliable public facilities and services that support carefully planned growth. The City invests in infrastructure that provides clean drinking water, treats wastewater while protecting our watersheds, and mitigates the effects of stormwater runoff. The expansion, operation, and maintenance of public services is supported through sustainable and balanced funding sources. SandyNet continues to provide reliable, fast and state-of-the-art internet service to the City's residents. Sandy's transportation system prioritizes safety, connectivity, and accessibility, with an emphasis on local street connections to reduce reliance on arterial roads such as Highways 26 and 211 for local trips. Safe, efficient, high-quality transit service, as well as a network of sidewalks and bike facilities, provides an alternative to private automobile use, supporting efficient use of roadways and reducing air pollution and energy use.



Natural Hazards and Resiliency

In 2050, Sandy is resilient in the face of natural hazards. As stewards of clean air, water, and land resources for future generations, Sandy guides the design of the built environment to protect, enhance, and be integrated with natural systems. The threat of natural hazards like wildfire and earthquakes is mitigated through emergency preparedness, education, and proactive planning. Sandy collaborates with local agencies, including Fire Districts, Clackamas County, and regional partners to plan for actions that can lessen the impact of natural hazards, ensuring the City and its partners have long-term strategies for protecting the community.



Parks, Trails and Natural Resources

In 2050, Sandy's natural and scenic landscape is an extension of the community. Clean rivers, healthy trees, and wildlife habitats are carefully conserved to promote biodiversity. Forested areas within the City are protected as parks, trails and natural open space. Sandy preserves the unique character and charm of beloved assets like Meinig Memorial Park, Sandy River Park, the Tickle Creek Trail, and Jonsrud Viewpoint. The City continues to develop recreation programs and a diverse and accessible park and trail system that is clean, safe, and functional, serving the needs of residents.



Governance and Growth Management

In 2050, Sandy is proactive in managing and planning for growth. Sandy is an innovative community that addresses change through thoughtful planning and effective governance. Growth and development are guided by community values, fiscal responsibility, and strategic investments in services and infrastructure. Premier fire, police and emergency response services ensure safety for residents. Regulatory tools and practices are consistently updated to address new issues, and new development contributes to the expansion of public utilities. Leadership and residents engage with one another in decision-making processes so new opportunities benefit the community while preserving Sandy's small-town feel.









Economy & Housing

In 2050, Sandy is home to desirable neighborhoods and a strong workforce. Thriving commercial and industrial districts provide balanced employment opportunities at all levels. A variety of businesses meet the daily needs of residents and contribute to Sandy's sense of place. A strong tourism industry provides opportunities for businesses and supports the local economy. Sandy's workers have access to a variety of housing choices that allow residents to move in, move up or age in place, ensuring families can live, work, and thrive in Sandy across multiple generations. Balanced housing choices contribute to safe, walkable, family-friendly neighborhoods that connect residents to nearby parks, trails, businesses and key destinations.

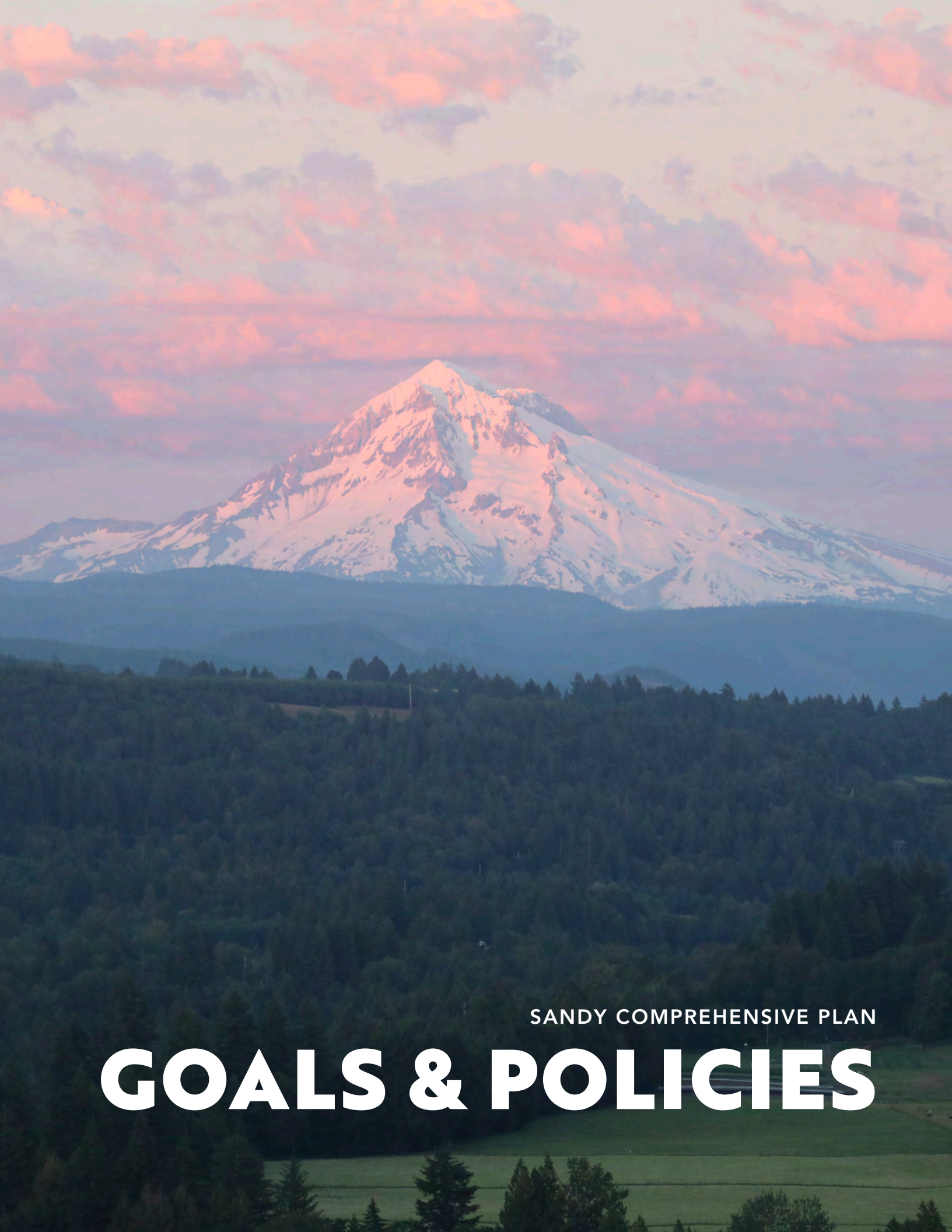
Organization of Envision Sandy 2050 Vision Themes to Comprehensive Plan Chapters

The Envision Sandy 2050 Vision Statement provides a framework for the Comprehensive Plan. Each chapter of the Comprehensive Plan is organized by the thematic areas of the vision. The table below identifies the applicable statewide planning goals for each theme.

Vision Theme/Comprehensive Plan Chapter	Applicable Statewide Planning Goals
 Community and Culture	Goal 1: Citizen Involvement
	Goal 5: Cultural and Historic Resources
 Transportation and Infrastructure	Goal 12: Transportation
	Goal 11: Public Facilities and Services
	Goal 13: Energy Conservation
 Parks, Trails and Natural Resources	Goal 8: Recreational Needs
	Goal 5: Natural Resources and Open Space
 Natural Hazards and Resiliency	Goal 7: Natural Hazards
	Goal 6: Air, Water and Land Resource Quality
	Goal 13: Energy Conservation
 Housing and Economy	Goal 9 Economic Development
	Goal 10: Housing
 Governance and Growth Management	Goal 14: Urbanization
	Goal 2: Land Use Planning
	Goal 1: Citizen Involvement

Some statewide planning goals are repeated given their applicability to more than one Vision Theme.





SANDY COMPREHENSIVE PLAN

GOALS & POLICIES



COMMUNITY & CULTURE



BACKGROUND

PUBLIC INVOLVEMENT

The Sandy Development Services Department, which includes the Planning Division and Building Division, conducts numerous public involvement activities including:

- Public notification of land use applications. ORS 197 dictates Land Use notification requirements that includes the following: notice to adjacent parcels , publication in a local newspaper, site posting, and posting in public locations.
- Meetings and events for various planning projects, including the formation of community advisory committees and outreach activities catered to the specific needs of the project.
- Providing public information available at the counter, on the City's website, and on social media.
- Conducting research and producing reports to understand how the city is growing and how to involve the public in guiding that growth.

City Council

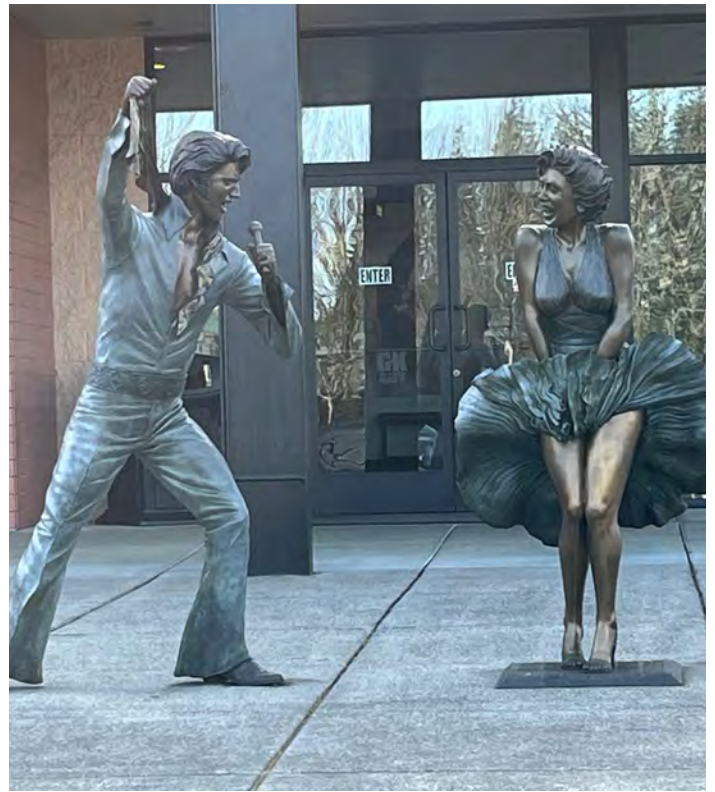
The Council consists of the mayor and six City Council members. City voters elect council members. The mayor serves a two-year term, and the Council members serve four-year terms. Sandy uses a "council-manager" form of government. The City Council members are unpaid volunteers who typically hold full-time jobs. They are responsible for city policies, legislation, and budget. The City Council appoints the city manager, who has the responsibility of day-to-day operation of the city.

Planning Commission

The Sandy Planning Commission is a volunteer body of seven Sandy residents and/or business owners that "advises the City Council on long-range, comprehensive planning, and land use issues within city limits." The Planning Commission reviews all amendments and updates to the Comprehensive Plan, recommends policy direction for land use rules and regulations, and helps City staff ensure that Sandy is aligning within the framework of Oregon's land use goals.

VOLUNTEERING

Sandy offers a variety of community engagement opportunities, primarily through volunteer activities. Places to volunteer include the Sandy Senior Center, Sandy Community Action Center, Sandy Chamber of Commerce, Friends of the Sandy Library, and the Sandy Historical Society. The youth of Sandy are encouraged to volunteer with the Sandy Actors Theater, AntFarm Youth Services, and the Sandy Public Library. The City also offers seasonal event volunteering opportunities as well as at the Christmas Tree Lighting Ceremony.



PUBLIC, CIVIC, AND CULTURAL SPACES

There are few regulations which govern the provision of public, civic, and cultural spaces from a land use planning perspective. This includes education, arts, government, civic and cultural centers, of which these facilities are not addressed in statewide planning goals. Other public facilities, such as police and fire services, utilities, and infrastructure (transportation, water, sanitary sewer, stormwater) are mandated by Statewide Planning Goal 11: Public Facilities and Services and discussed in separate background reports. However, many of these public, civic, and cultural facilities are planned for as best practice through infrastructure master plans, community concept plans, and transportation system plans.

Education facilities are an exception as school districts are required by the state to create a school facility plan covering a period of at least 10 years. School facility plans must include identification of desirable school sites, financial plans to meet school needs, site acquisition schedules, and an analysis of land supply within the UGB that is suitable for school facilities. Should the analysis conclude that an inadequate land supply exists within the UGB, the school district, in coordination with affected jurisdictions, is required to identify and take the necessary actions to remedy the deficiency.

Sandy owns and operates many government buildings and civic facilities, and is home to many more community, cultural, and arts facilities outside of those spaces which the City owns or operates. In addition, the community benefits from other public and private amenities, as well as events, festivals, and activities that lend to the quality of life and sense of community. Popular community events include the Mountain Festival, Solve Sandy, Noah's Quest Benefit Walk, Longest Day Parkway, Summer Sounds & Movies in the Park, Corn Cross Mountain Bike Race, Winterfest, and a Holiday Tree Lighting event.

Key civic, arts, and cultural spaces include, but are not limited to, the following:

- **Sandy Senior Center** – provides activities and services for adults 60 years and above. This includes meals, health-related clinics, help with medical insurance, and exercise classes.
- **Sandy Public Library** – supported by Friends of Sandy Library; a volunteer organization dedicated to the long-term needs of the library.
- **Sandy Community Action Center** – a hunger relief agency that serves residents of the Oregon Trail School District. Funded by donations and operated by a volunteer Board of Directions and professional staff.
- **Sandy Historical Society** – a nearly 100-year-old group that serves as a repository for artifacts and history of the Sandy area within the entire Oregon Trail School District.
- **AntFarm Youth Services** – an organization that owns a local café and bakery which provides younger people kitchen, coffee, and customer service skills. Additionally, they host an educational assistance center, a learning garden, senior citizen services, arts classes, and recreation programs.
- **Sandy Actors Theater** – a nonprofit 501(c)(3) community theater, whose mission is to develop and nurture interest in theater by providing affordable, live theater performances, mentoring and workshops. SAT provides opportunities to participate in all aspects of community theater for all ages, from business to acting to production.
- **Sandy Historical Museum** – The museum was constructed in 2007 and is placed directly on the Oregon Trail. Home of the Sandy Historical Society since 1926, the museum is the key to preserving Sandy’s history through artifacts and information collection. A Downtown Historical Walking Tour stops by key historical sites found in Sandy.

Sandy residents find a sense of community through many mediums and across a variety of gathering spaces, like parks, sports fields, churches, coffee shops, etc. across the city.



Sandy Historical Society



Sandy Actors Theater



Sandy Historical Museum

Community Events

The second week of every July marks the Sandy Mountain Festival. The festivities kick off with a popular parade through downtown Sandy, and events throughout the weekend include a large arts & crafts sale in Meinig Park, concerts in Centennial Plaza, a carnival, and more. Sandy also hosts a popular Winterfest event every holiday season, which includes lights and decorations in Meinig Park, neighborhood trolley rides, a tree lighting ceremony, and more.



Mountain Festival



Sandy Winterfest

Community Garden

Nestled within Bornstedt Village is a master planned park that includes ballfields, paths, a playground, a splash pad, and community garden boxes. Bornstedt Park is home to a Community Garden where you can reserve up to two raised garden beds (if space is available). There are Sixty-nine (69) garden beds available for rental every year. Sixty-seven (67) of the garden beds are 4 foot by 8 foot and there are even two ADA accessible garden beds.





FUTURE TRENDS AND DRIVERS OF CHANGE

PUBLIC INVOLVEMENT

The face of public involvement is changing rapidly as technology and demographics are shifting. Technology plays a critical role in engagement, and as COVID-19 forced a pivot to virtual platforms, Sandy has sought to extend the capabilities of their online presence by integrating more interactive tools, such as discussion forums, online surveys, interactive maps, and more multilingual content. Expanding the technical capacity of the department is also critical to sustaining youth engagement. Harnessing the participation of youth leaders in the governance process could lend an important and innovative perspective to existing public involvement efforts.

Other key opportunities and trends around the practice of public involvement by jurisdictions includes:

- **Collaborative Community Engagement.**

Local governments are beginning to turn to a more collaborative approach to community engagement, particularly for projects that need to focus on outreach to historically underrepresented communities in order to be successful, or where the broadest possible involvement throughout a community is

desired. In a collaborative arrangement, the City partners with existing organizations performing outreach to the target communities, providing subject-matter expertise, resources, and sometimes even funding to the partner organization, who then coordinates the outreach activities.



- **Youth Engagement.** There are over 1,400 high school students enrolled at Sandy High School. Harnessing the participation of youth leaders on project-based and standing advisory committees, or even in governing bodies themselves, could lend an important and innovative perspective to existing public involvement efforts. Some cities have included youth-specific events and materials in their public involvement for long-term planning projects, including working with local schools to engage students and their families about cities and community planning. Other cities have expanded youth participation beyond project-based engagement and into the governing bodies themselves, in both voting and advisory capacities.
- **Web and Mobile Technologies.** Sandy, like most cities, maintains a website to provide access to meeting agendas, ordinances, application forms, maps, and other information. While the City website is well-used, offering enhanced web services bolsters communication, community engagement, public information, and innovation. Cities seeking to extend the capabilities of their

websites have also integrated more interactive tools such as games and discussion forums, online surveys, streaming video of meetings or other presentations, and multilingual content. Recently, the City of Sandy invested in EngagementHQ, an online community engagement platform for key City initiatives including the Envision Sandy 2050 process.

- **Open Data and Civic Technology.** Open data multiplies the effectiveness of the City's technology investment by enabling interested community members to use City public data to build new tools and applications that can address issues in the community. These grassroots public-private partnerships with "civic technologists" can yield innovative and scalable solutions that the City is unlikely to be able to efficiently implement on its own. Data sets could include land use applications, natural resource inventory information or long-range plan data. The department also could publish data that it is already collecting internally – population growth, demographics, and development history are just some examples. Even small steps toward open data are beneficial.

PUBLIC, CIVIC, AND CULTURAL SPACES

- Service Planning and Delivery.** With an array of special districts, private franchises, and various service providers, the City must ensure effective collaboration and planning. Many facilities, utilities, and services are subject to state and federal regulations and must maintain compliance with these requirements. While public facilities like water, sanitary sewer, and stormwater are described in more detail in a subsequent background report, the City can benefit from collaborative planning between these types of service providers for new and expanding civic, institutional, and cultural services. Colocation of infrastructure and facilities, such as underutilized school fields being made available to the public through a park department, can increase capacity and address the need for more civic and community facilities.
- School District Coordination.** Coordination between the City and Oregon Trail School District is critical to successful facilities planning. Procedures should be implemented to allow the school district to become aware of large developments which may impact school capacity and/or provide opportunities for siting new school facilities. The City also should consider the location of actual or planned major capital investments by the school district when making its own infrastructure investments in order to complement and leverage these projects. To keep up with projected increases in enrollment numbers, coupled with rising land costs, school districts may need to employ new approaches. For example, they may find it necessary to reevaluate assumptions about space and land needs, education delivery methods, and district/agency partnerships. The City should be prepared to assist school districts in planning for new and expanded facilities as needed, including long-term forecasting, evaluating UGB expansion options, and creating detailed growth strategies.
- Expanding the scope of a Public Facilities Plan.** Although the state requires only a select set of public services to be addressed in a Public Facilities Plan (PFP), the City may choose to expand the scope to include others such as schools, parks, library, and civic buildings for better service planning and delivery. The City may consider developing the PFP as a tool to align community goals with future investments and as a means to balance maintenance with new construction needs.
- Demand for flexible community space.** There is anticipated continued demand for working and gathering space in the community. For example, the role of the library as a community gathering space is even more essential as the ability to access information online increases. Both in Sandy and in communities across the country, libraries remain a key place for community members to meet, work, and connect. As telecommuting becomes a way of life for workers in Sandy, key community spaces like the library may consider capturing that interest and expand services to include dedicated work desks and study space.



Community and Culture

GOALS AND POLICIES

In 2050, Sandy retains its small-town feel through a celebration of community and place. Downtown Sandy is a clean, walkable, and vibrant place to dine, shop, and gather. The beautification of downtown showcases public art, honors Sandy’s history, and celebrates its location as “The Gateway to Mt. Hood.” Public amenities and facilities provide places to play, grow, and learn for residents of all ages. Sandy supports events like the Sandy Mountain Festival that bring people together and promote a spirit of inclusivity. Non-profit and volunteer organizations offer meaningful services to the community and provide opportunities for civic engagement.

COMMUNITY

Civic Engagement

GOAL 1: Implement and maintain a culture of public involvement by providing a broad array of inclusive engagement opportunities for all Sandy community members.

Policy 1.1 Support the Planning Commission as the lead body responsible for facilitating community involvement in the land use planning process.

Policy 1.2 Provide information and public notice to the residents of Sandy regarding land use projects and processes in transparent, easy-to-understand formats, including multiple languages where appropriate.

Policy 1.3 Continue to monitor and improve the City’s website and engagement platforms to provide access to information, services, news, and databases.

Policy 1.4 Promote Sandy’s network of service and volunteer-based organizations, clubs, and groups.

Policy 1.5 Seek opportunities to develop and enhance relationships with community-based organizations working in Sandy and the region.

Policy 1.6 Create opportunities for youth to be engaged in civic affairs and public decision-making processes through advisory boards, committees, and other activities.

Public Amenities and Facilities

GOAL 2: Provide public amenities and facilities to help meet the education, recreation, and civic use needs of the community.

Policy 2.1 Coordinate the siting of public facilities and services with other agencies or districts such as the fire district, post office, school district, and other partner agencies.

Policy 2.2 Collaborate with private and public entities such as schools, businesses, and recreation providers to facilitate the co-location of community facilities, especially in underserved neighborhoods.

Policy 2.3 Provide City services for senior activities and programming.

Policy 2.4 Pursue the development of a new aquatic facility and community center for Sandy area residents of all ages.

Policy 2.5 Work with Clackamas County to expand library services, programs, and facilities to meet the needs of the Sandy and Hoodland Library Service Area.

CULTURE

History and Heritage

GOAL 1: Honor Sandy's history and heritage through the public realm.

Policy 1.1 Inventory, preserve, and enhance distinctive historical and cultural features to create a sense of place and reflect Sandy's heritage.

Policy 1.2 Utilize the City's Urban Renewal Plan and programs to implement targeted improvements that encourage private investment, preserve and enhance historical and cultural elements of the built environment, and increase prosperity and vitality in Sandy's downtown and surrounding commercial areas.

Policy 1.3 Improve the physical characteristics of Downtown Sandy to reflect its history and character through installation of wayfinding signage, gateway elements, public art, lighting, street furniture, and other treatments.

Policy 1.4 Develop long-term strategies and plans to cultivate art in Sandy and encourage donations, grants, and other support to expand access to the arts in the community.

Policy 1.5 Support City events, activities, and festivals to promote a sense of community among Sandy residents and businesses.



TRANSPORTATION & INFRASTRUCTURE





CURRENT ASSETS, PRACTICES AND CONDITIONS

PUBLIC UTILITIES AND SERVICES

Water

The City of Sandy has three water sources. During the spring, fall, and winter, approximately 50% of the City's supply is purchased from the Portland Water Bureau. The remainder of the supply comes from Brownell Springs (a city-owned natural spring on Lenhart Butte) and Alder Creek (a small tributary of the Sandy River). During the summer when demand increases, each source provides approximately one-third of the total supply.

Wastewater

Sandy's sanitary sewage is treated at a plant off Jarl Road. Sandy currently operates under a permit issued by the Oregon Department of Environmental Quality (DEQ) to discharge its treated wastewater, or effluent, into Tickle Creek, a tributary of the Clackamas River that runs just west and south of town. The permit limits not only the volumes of those discharges but also when they can occur—only between November and April. During the summer, Sandy's treated wastewater is sent to a nearby nursery for irrigation use. The treatment plant was placed into service in 1998 and can treat 1.25 million gallons per day during dry weather and up to 4 million gallons per day during wet weather.

In 2018, the City developed the Wastewater System Facilities Plan to help guide the City in addressing the near capacity of the existing wastewater treatment plant. The plan reviews the existing conditions of the collection methods and treatment systems and makes recommendations for improvements and facility needs to accommodate population growth and regulatory requirements. In 2021, the City embarked on an expansive overhaul of its wastewater system. The multi-year project will reduce peak flows by relining and replacing miles of mainline and lateral line piping, along with expanding the existing treatment plants capacity. This rehabilitation project will precede the potential construction of a new facility to better handle current and future wastewater treatment and disposal needs.

Stormwater

The City of Sandy manages stormwater in order to reduce runoff and thereby reduce capital and maintenance costs to the City and improve the water quality of streams in and around Sandy. The City last updated its Stormwater Management Plan in 2001.

The City requires all new developments to treat and detain stormwater from the 2, 5, 10, and 25-year storm events to pre-development conditions, as prescribed by the City of Portland Stormwater Management Manual and in the City's Development Code. In addition, the City administers an incentive plan to encourage property owners to reduce or mitigate for impervious pavement on commercial, industrial, and multi-family residential properties.

Additional Services

The City of Sandy is one of a few cities in the state that provides broadband service as a public utility. SandyNet is owned by the citizens of Sandy with the purpose of closing the digital divide as well as fostering economic growth. SandyNet operates as a fiber-to-the-x (FTTX) where fiber is used to provide voice and data to homes, businesses, and city infrastructure. Fixed wireless systems are used outside of city limits to provide broadband service to those outside of SandyNet's fiber footprint, covering various locations throughout the rural Sandy/Boring area.



SandyNet



Police & Fire

The Sandy Police Department manages criminal investigations, traffic control/enforcement, and school resource functions. In addition to the Police Chief, current staffing consists of one lieutenant, two sergeants, eight patrol officers, one traffic officer, and two School Resource officers. There are additional programs ran by the department specific to Sandy:

Gunlocks – a program to help facilitate responsible gun ownership by providing gunlocks free of charge to anyone who requests them.

Unwanted Firearms and Ammunitions – a collection service to offer the acceptance of firearms and ammunition for proper disposal.

The City of Sandy is serviced by the Sandy Fire District No. 72, which protects the City of Sandy as well as 77 square miles of rural area.

The district provides fire protection, emergency medical service, fire prevention, and fire investigation services. The district is composed of one Fire Chief, one Division Chief, 12 union firefighters, and 27 volunteers. The district offers additional community programs such as:

- **PulsePoint** – a large system in which Sandy participates that allows citizens to provide life-saving assistance to victims of sudden cardiac arrest through a mobile app.
- **First-Aid Classes** – a 5-hour course that covers general first aid and adult CPR.
- **Child Safety Seats** – an inspection program to educate parents on proper installation of car seats.
- **Helmet Program** – helmets for all sports, with proper type and fitting at the main station.

TRANSPORTATION SYSTEM

Sandy is bifurcated by US 26, which serves as a major east/west transportation and freight route between the Portland Metro Area, Mt. Hood, and Central Oregon resorts and recreation. The highway also serves as the City’s “main street” through the downtown couplet of Pioneer and Proctor Boulevards. Pioneer and Proctor Boulevards, from Bluff Road to Ten Eyck Road, are home to local businesses as well as civic and community spaces, and connect parks to residential areas.

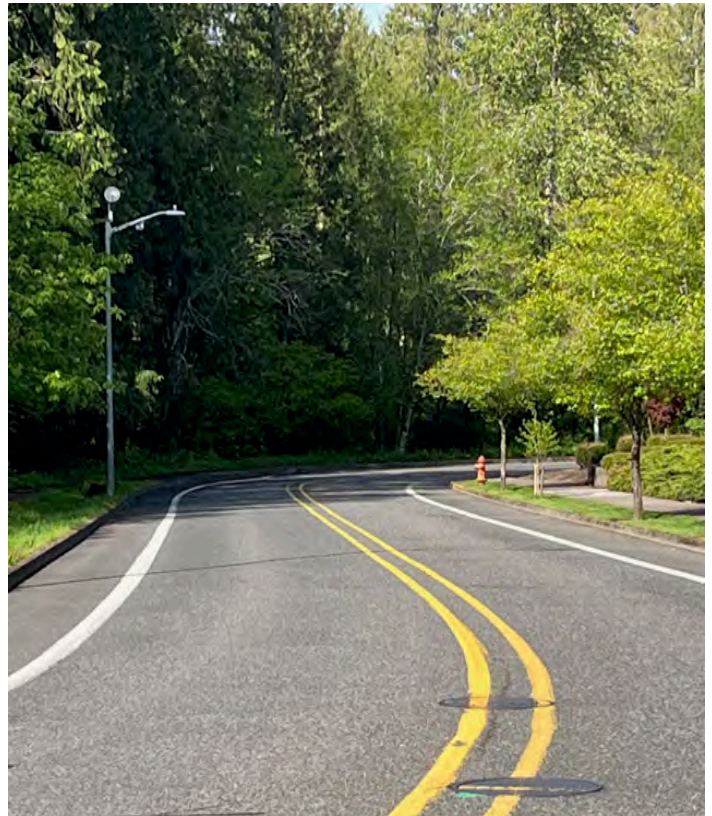
A majority of the households in Sandy are south of US 26 where there is good connectivity between areas provided by the minor arterials and collectors that intersect with Dubarko Road, the main east-west arterial. The newer residential areas west of Bluff Road have good local street connectivity but are relatively isolated from the rest of the city. Bluff Road is currently the only north-south street in the city that connects the north and south neighborhoods.

Sidewalk Network

The existing pedestrian network in Sandy is composed of sidewalks, paved paths and unpaved trails, and is fairly well developed. Most local streets in Sandy were developed with sidewalks incorporated into the design. Although many areas have sidewalk coverage, a few do not have complete sidewalks on one side of the street, or even on both sides. Based on the City of Sandy’s 2022 Transportation System Plan (TSP), these gaps are most significant along the following roads:

- US 26 east of SE Ten Eyck Road/Wolf Drive – On some stretches of highway, particularly in rural areas, wide shoulders provide a substitute for sidewalks. On this segment, eight feet is the minimum appropriate shoulder width. The existing shoulders range between five and seven feet wide.
- Meinig Avenue between Barker Court and OR 211 – Pedestrians in the southeastern residential area destined for the central business district of Sandy must use Wolf Drive or OR 211 via Meinig Avenue. For households, where Meinig Avenue provides a more direct connection the only way to avoid walking in the road is to detour through Meinig Memorial Park.
- Sandy Heights Street between Nettie Connet Drive and Tupper Road – Most of this segment has sidewalk on at least one side but Sandy Heights Street is the only through east-west connection from Meinig Avenue to Dubarko Road and provides important pedestrian access to the commercial area on the west side of the city.





Bicycle Network

The bicycle network in Sandy is composed of bike lanes, roadway shoulders, shared roadways, and bicycle paths.

- Bike lanes are portions of the roadway designated specifically for bicycle travel via a striped lane and pavement stencils. In Sandy, significant segments of continuous bicycle lanes exist along US 26, Bluff Road, Bell Street, Jewelberry Avenue, and Dubarko Road. In downtown Sandy, there are narrow parking lanes along US 26 (Proctor Boulevard and Pioneer Boulevard) which result in parked cars partially blocking the bike lane and pushing cyclists into the vehicle lane.
- Shoulder bikeways are paved with striped shoulders wide enough for bicycle travel. The bike lane along US 26 in Sandy could be considered a shoulder bikeway west of Champion Way due to the lack of pavement markings.
- Shared roadways include those on which bicyclists and motorists share the same travel lane. Most local roadways in the City are considered shared roadways, but do not have signs or pavement markings distinguishing them as sharrows.
- Bicycle paths can serve both recreational and transportation needs. They include shared use paths, which allow for citywide pedestrian and bicycle travel, and short path segments providing accessways between disconnected streets or localized recreational biking opportunities. They can be separated or adjacent to the streets right-of-way and provide linear park facilities for bicycle travel.



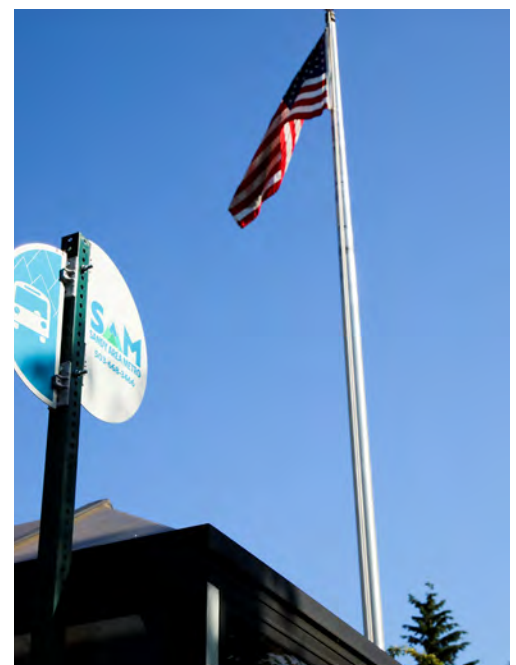
Transit Network

Sandy Area Metro (SAM) provides transit service in Sandy via four fixed bus routes including two local shopper routes and two regional routes connecting the City with downtown Gresham and Estacada. Clackamas County operates an additional fixed route service to multiple outdoor recreation and visitor destinations on Mount Hood.

Sandy Transit’s SAM Rides is a dial-a-ride and paratransit service that provides public transportation to persons with disabilities who are unable to use regular fixed route buses and members of the general public. While federal guidelines require that service be provided within 3/4 mile of fixed route service, SAM Rides service is provided for any trip that starts and ends within three miles of Sandy’s Senior Center, free of cost. Demand for the service is high, and with 3.5 passengers per hour it is approaching the limit of what is physically possible for an on-demand service.

The City’s 2020 Transit Master Plan guides Sandy Transit’s major decisions and includes two hypothetical scenarios for three fiscal years referenced as the “Bloom” and “Gloom” scenarios. The Transit Master Plan emphasizes that the City of Sandy can support highly productive transit by placing dense and active land uses (such as apartments, schools, senior housing and medical services) in areas that are:

- Contiguous and proximate (rather than separated by low-density uses).
- On the way to other busy places, along major transit-operable streets (rather than at the ends of cul-de-sacs or loops).
- Walkable, with well-connected streets or paths.



FUTURE TRENDS AND DRIVERS OF CHANGE

PUBLIC UTILITIES AND SERVICES

Water System

The City of Sandy's 2022 Water Master Plan provides updated information regarding water management and forecasted demand needs. Sandy's connection to the Portland Water Bureau will be deemed out of compliance with EPA mandated treatment standards in the fall of 2027. Portland's proposed water treatment facility will be located downstream of Sandy's current connection, requiring Sandy to build a treatment facility at the current connection, or build a pipeline to the new Portland facility.

Sandy's Public Works Department is studying other water options including groundwater, or the Salmon River (Sandy has existing rights up to 16.3cfs). Sandy's Alder Creek Water Treatment Plant is scheduled to have long overdue upgrades performed over the next few years which will maximize Sandy's ability to keep up with water demands as Sandy grows.



Sanitary Sewer

Sandy's wastewater system has serious and long-standing challenges. For years, the City's wastewater treatment plant has not been able to consistently treat the high volume of sewage and stormwater that flows to the plant, especially during wet weather. This leads to permit violations and intermittent pollution of Tickle Creek.

In 2022, a development moratorium was put in place due to the limited capacity of its wastewater infrastructure. Building capacity in Sandy's wastewater system will be essential in meeting the housing needs of future residents, but this will take time.

In 2023, the Sandy Clean Waters program embarked on a deep dive analysis to determine alternative outfall options including expanded irrigation capacities, effluent piping to neighboring communities, and alternate discharge waters. With expanded inflow and infiltration reduction efforts, Sandy's collection system will better convey only designed wastewater to the treatment plant, allowing more control over discharge and more effluent options.

Transportation

With continued population growth and increases in traffic flow, issues of safety, mobility, and accessibility will continue to affect pedestrians, drivers, and cyclists. The City’s 2022 TSP update identified several areas of focus and key deficiencies across the City’s transportation network:

Pedestrian Network

Sidewalk gaps along Sandy Heights Street reflect poor east-west connections for the neighborhood south of US 26. Infill of these missing sidewalk gaps will improve the quality of the pedestrian network.

Sidewalk gaps along US 26 east of SE Ten Eyck Road isolate pedestrians in the Sandy Vista Apartments, sidewalk connecting the apartments with downtown Sandy is needed.



Bicycle Network

Improved north-south and east-west connections are needed in the neighborhood south of US 26. Important connections without bike lanes or with gaps include Bluff Road, OR 211, Meinig Road, Sandy Heights Street, and Tupper Road.

Bicycle network gaps along US 26 east of SE Ten Eyck Road isolate people who bike from or to the Sandy Vista Apartments; bike lanes connecting the apartments with downtown Sandy are needed.

Transit Network

Improved connections between the regional fixed route service and local fixed route service are needed to provide a better “last mile” connection for transit trips that start or end in Sandy.

The dial-a-ride/paratransit STAR system is approaching capacity and operational changes or additional vehicles will be needed to address that.



Road Network

Four intersections exceed mobility targets or have reoccurring safety issues.

- US 26 and Orient Drive – safety and mobility targets.
- US 26 and 362nd Drive – safety and mobility targets.
- US 26 and Ruben Lane – safety.
- OR 211 and Dubarko Road – safety.

With direction from Sandy City Council, the Public Works Department hired contracts to complete the northern expansion of 362nd Drive and the western extension of Bell Street. This project will provides a needed connection from the northern neighborhoods of Sandy to the western edge of the commercial corridor.



Transit

Potential service and capital investments, as outlined in the 2020 Transit Master Plan, include additions to local services, such as adding fixed routes, expanding flexible services (such as additional STAR service), and acquiring electric buses.



Transportation and Infrastructure **GOALS AND POLICIES**

In 2050, Sandy boasts modern and reliable public facilities and services that support carefully planned growth. The City invests in infrastructure that provides clean drinking water, treats wastewater while protecting our watersheds, and mitigates the effects of stormwater runoff. The expansion, operation, and maintenance of public services is supported through sustainable and balanced funding sources. SandyNet continues to provide reliable, fast and state-of-the-art internet service to the City's residents. Sandy's transportation system prioritizes safety, connectivity, and accessibility, with an emphasis on local street connections to reduce reliance on arterial roads such as Highways 26 and 211 for local trips. Safe, efficient, high-quality transit service, as well as a network of sidewalks and bike facilities, provides an alternative to private automobile use, supporting efficient use of roadways and reducing air pollution and energy use.

TRANSPORTATION

Mobility & Connectivity

GOAL 1: Provide a transportation system that prioritizes mobility and connectivity for all users.

Policy 1.1 Maintain the livability of Sandy through well connected transportation facilities.

Policy 1.2 Improve the safety and accessibility of transit amenities.

Policy 1.3 Improve the vehicular/pedestrian interface along all arterial and collector streets.

Policy 1.4 Ensure sufficient capacity to accommodate future travel demand (auto, transit, bicycle, pedestrian, etc.) to, within, and through the City of Sandy.

Policy 1.5 Emphasize local street connections and minimize access along the City's arterials to reduce reliance on US 26 and OR 211 for local trips.

Capital Investments and Funding

GOAL 2: Promote cost effective investments in the transportation system.

Policy 2.1 Optimize the use, performance, and value of existing facilities while planning for future infrastructure.

Policy 2.2 Seek opportunities to combine transportation, other infrastructure, and environmental mitigation projects.

Policy 2.3 Maximize the use of state and federal funds for transportation capital, operating, and service improvements.

Policy 2.4 Maintain a capital improvement plan that identifies construction priorities and funding.

Community Needs

GOAL 3: Provide a transportation system that supports specific community needs.

-
- Policy 3.1** Coordinate the siting of public facilities and services with other agencies or districts such as the fire district, post office, school district, and other partner agencies.
-
- Policy 3.2** Collaborate with private and public entities such as schools, businesses, and recreation providers to facilitate the co-location of community facilities, especially in underserved neighborhoods.
-
- Policy 3.3** Provide City services for senior activities and programming.
-
- Policy 3.4** Pursue the development of a new aquatic facility and community center for Sandy area residents of all ages.
-
- Policy 3.5** Work with Clackamas County to expand library services, programs, and facilities to meet the needs of the Sandy and Hoodland Library Service Area.

System Management

GOAL 4: Promote traffic management to achieve the efficient use of transportation infrastructure.

-
- Policy 4.1** Balance local access to US 26 with the need to serve regional and statewide traffic, while supporting adjacent land uses.
-
- Policy 4.2** Plan for a transportation system that supports projected population and employment growth and maximizes travel options by providing efficient routes for all modes of transportation.
-
- Policy 4.3** Coordinate with ODOT to ensure traffic signals, crossings and other Highway 26 infrastructure are designed to balance local and regional needs.

Environmental

GOAL 5: Minimize environmental impacts on natural resources and encourage carbon neutral or efficient transportation alternatives.

Policy 5.1 Avoid or mitigate motorized transportation project impacts to environmental resources including creeks and wetlands, cultural resources, and wildlife corridors.

Policy 5.2 Support energy conservation by supporting public transit, transportation demand management, transportation system management, and a multi-modal transportation system.

Policy 5.3 Encourage transportation facility construction methods and green infrastructure to reduce environmental impacts.

Transit

GOAL 6: Provide safe, efficient, high-quality transit service that gives Sandy residents, businesses and visitors more freedom to meet their needs within the city, region, and state, and offers an alternative to private vehicle use to support efficient use of roadways and reduce air pollution and energy use.

Policy 6.1 Provide service that is safe, comfortable, and useful for all users.

Policy 6.2 Collaborate with other transportation agencies and support user-friendly connections between transit systems.

Policy 6.3 Improve accessibility to transit services for people arriving by foot, bicycle, or with a mobility device.

Policy 6.4 Increase public awareness of Sandy Transit (SAM) and its connectivity to other transit systems and transportation modes.

Safety

GOAL 7: Promote a safe transportation system for all users.

Policy 7.1 Encourage traffic safety through education, enforcement, and engineering.

Policy 7.2 Identify high accident locations and implement specific counter measures to reduce their occurrence.

Policy 7.3 Provide safe pedestrian and bicycle routes between residential areas, schools, and public facilities.

Policy 7.4 Provide transportation design standards that encourage appropriate traffic volumes, speeds, and pedestrian safety.

Policy 7.5 Improve emergency service response time and evacuation routes through connectivity.

Policy 7.6 Review, revise and adopt speed limits and other traffic calming approaches to ensure safer streets and neighborhoods.

Equity

GOAL 8: Support an equitable transportation system and provide transportation choices to all users.

Policy 8.1 Ensure the transportation system provides equitable access to underserved, disadvantaged, and vulnerable populations and is easy to use and accommodating to travelers of all ages.

Policy 8.2 Ensure that pedestrian and bike facilities are designed clear of obstacles and obstructions (e.g., utility poles, grates) and meet ADA requirements.

Health

GOAL 9: Support options for exercise and healthy lifestyles to enhance the quality of life.

Policy 9.1 Develop multi-use walking and biking routes to access employment, schools, shopping, and transit routes.

Policy 9.2 Provide pedestrian facilities that are physically separated from auto traffic on all arterial and collector streets.

Policy 9.3 Apply traffic calming measures to support neighborhood livability.

INFRASTRUCTURE

Water

GOAL 1: Seek the most efficient and economic means for constructing, operating, and maintaining the City’s water supply, treatment, storage, and distribution system while meeting state and federal standards for potable water systems.

Policy 1.1 Build, operate, and maintain adequate reservoir capacity to provide all equalization, operational, emergency, and fire flow storage required for the City’s distribution system.

Policy 1.2 Plan, operate, and maintain the water system for all current and anticipated City residents within the Urban Growth Boundary and plan strategically for future expansion areas as detailed in the City’s Water System Master Plan.

Policy 1.3 Collaborate with Portland Water Bureau, wholesale water customers, and the regional water consortium to ensure an adequate water supply, treatment, storage and distribution system is maintained for residents.

Policy 1.4 Implement a systematic, planned replacement program for pipe improvements and water meters to ensure reliable system operation and minimize expensive emergency repairs associated with failing pipeline infrastructure.

- Policy 1.5** Explore smart technology applications for water supply management such as smart metering, leakage detection, and water distribution management and planning.
- Policy 1.6** Implement and regularly update the City’s Water Systems Master Plan in order to evaluate capital investment, prioritize needs for the water system, and document a long-term water service strategy.
- Policy 1.7** Collaborate with the Planning Division to educate and promote water conservation and winter wet/summer dry landscaping and vegetation in developments, right of water, parks, and open lands to promote summer water conservation, and provide wildlife habitat, cooling, and oxygenated greenspace for Sandy residents.
- Policy 1.8** To the greatest extent possible, incorporate energy resiliency into water system designs to maintain adequate levels of service during disruptions due to power outages, fires, and extreme storms.
- Policy 1.9** Coordinate with Mt. Hood National Forest, Bureau of Land Management, Clackamas County, timber company representatives, and private landowners that own and manage lands within Sandy’s watershed, to protect drinking water.

Community Needs

GOAL 2: Invest in wastewater system improvements to build infrastructure redundancy and protect the environment.

- Policy 2.1** Pursue the study and development of expanded or new wastewater treatment plants and alternative discharges to manage the expected growth of Sandy.
- Policy 2.2** Assess discharge alternatives to protect the health of Tickle Creek and the Sandy River.
- Policy 2.3** Pursue funding sources and financing programs to maintain affordable sewer rates.
- Policy 2.4** Monitor and assess system development charges to support the expansion and improvement of the wastewater system.
- Policy 2.5** Explore the use of technology to optimize wastewater treatment processes and lower lifecycle costs of the system.

Stormwater

GOAL 3: Seek the most efficient and economical means available for construction, operating and maintaining the City’s stormwater management system while protecting the environment and meeting regional, state, and federal standards for protection and restoration of water resources and fish and wildlife habitat.

Policy 3.1

Provide Stormwater Management Services and monitor, report, and evaluate success of services consistent with National Pollutant Discharge Elimination System (NPDES) permit requirements.

Policy 3.2

Maintain existing drainageways in a natural state for maximum water quality, water resource preservation, and aesthetic benefits.

Policy 3.3

Identify opportunities for innovative stormwater management techniques and Low-Impact Development approaches in new growth areas.

Policy 3.4

Provide education and programming to encourage property owners to reduce or mitigate for impervious pavement on commercial, industrial, and multi-family residential properties.

Policy 3.5

Coordinate among City departments, Clackamas County, the Department of Environmental Quality, and other entities to protect, treat and improve water quality in and around Sandy.

Policy 3.6

Plan, operate, and maintain the stormwater management system for all current and anticipated city residents within the existing Urban Growth Boundary and plan strategically for future expansion.

Policy 3.7

Integrate the stormwater system with water conservation plans and seek opportunities for beneficial reuse of treated stormwater for irrigation.

Municipal Broadband

GOAL 4: Expand municipal broadband services to meet Sandy’s existing and future needs.

Policy 4.1

Develop a SandyNet Master Plan to expand sustainable fiber services.

Policy 4.2

Collaborate with regional partners to increase broadband affordability and promote equity by closing the digital divide.

Policy 4.3 Periodically study, plan, implement and review technologies and other services or amenities that positively impact the community, local economy, and City.

Energy

GOAL 5: Promote resource efficiency and energy conservation in the built environment.

Policy 5.1 Promote infill development and land use patterns that locate activities and destinations in close proximity to reduce vehicle trips.

Policy 5.2 Ensure responsive development code and standards that encourage energy-efficient design and energy-conserving features, including energy generation and storage, in new development, redevelopment and retrofit.

Policy 5.3 Deploy electric vehicle (EV) charging infrastructure to meet current and future demand.

Policy 5.4 Encourage the use of mass transit as a commuter service connection to the metropolitan area.

Policy 5.5 Utilize smart technology applications to monitor and conserve energy use across public utilities and facilities.

Policy 5.6 Coordinate with utility companies to expand renewable energy and provide robust, redundant infrastructure and service delivery.



NATURAL HAZARDS & RESILIENCY



CURRENT CONDITIONS

Sandy has already begun experiencing more extreme weather events. Increases in average temperature, extreme heat, drought, and wildfire danger, coupled with reduced snowpack, are altering the context within which the City of Sandy provides services as well as the lives of its residents.

The effects of extreme weather events and climate impacts in Sandy and the surrounding area go far beyond hotter temperatures, lower snowpack, and more wildfire and smoke.

Some potential impacts include:

- Heat-related illness and mortality
- Spread of vector-borne and water-borne disease
- Declining air quality from smoke and ground level ozone formation
- Drought emergencies limiting drinking and irrigation water
- Water resources affected by wildfire
- Warmer and lower streamflow impacting fish populations
- Loss of tourism related to lower snowpack, heat, and wildfire impacts to forests
- Health and safety impacts to outdoor workers (yard care, construction, etc.) increasingly impacted by smoke and heat

Temperature

Sandy's climate is described as Mediterranean, with warm (but generally not hot) summers and cold winters. Most precipitation occurs October through May. November through January are the wettest months.

Warming has been documented throughout Oregon. The Oregon Climate Change Research Institute (OCCRI) found that statewide, Oregon has warmed by 2.8°F since 1895¹. Long term weather records were not available specific to Sandy, Oregon, so records from the Portland International Airport (PDX) were assessed (Fig. 1). While average temperature and precipitation is different in Sandy than at PDX, the overall trends, including the magnitude of change, are likely to be quite similar for warming to date. Projected future conditions, on the other hand, come from global climate models downscaled to local scales and are geographically specific to Sandy.



¹ Dalton, M., and E. Fleishman, editors. 2021. Fifth Oregon Climate Assessment. Oregon Climate Change Research Institute, Oregon State University, Corvallis, Oregon. <https://blogs.oregonstate.edu/occri/oregon-climate-assessments/>.

If emissions of greenhouse gases continue as they are trending, average annual temperature in Sandy is expected to increase by 9°F (range from 5-13°F) by the end of this century, as compared to 1951-80. If emissions are substantially reduced, average warming could likely be limited to 5°F (range from 2-8°F) higher than 1951-80. Summer maximum temperature is expected to increase by 13°F, on average, if current emissions continue, and by 7°F if emissions are reduced.

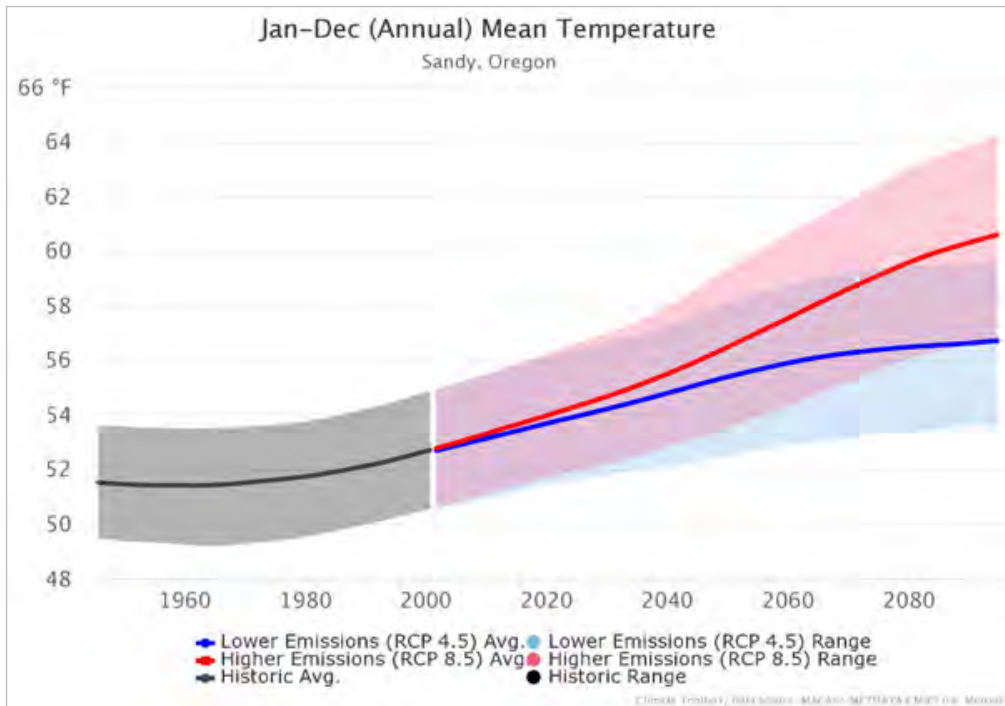


Figure 1. Average temperature in Sandy, Oregon has increased since 1950 and is expected to continue to increase. If global emissions are reduced (RCP4.5) warming can be limited to about 5°F (range 2-7°F) by late century. If global emissions continue on the business-as-usual trajectory (RCP8.5), Sandy is expected to warm by 9°F (range 4-12°F) by 2100.²

Records from PDX show a steady increase in extreme maximum temperature from 1950-2021, with a sudden spike in the summer of 2021 from the heat dome that enveloped much of the Pacific Northwest. Similarly, the number of days per year above 90°F has increased by about 10 days (from about 8 days per year to 18 days per year) between 1950 and 2021. In Sandy, the number of days per year with temperatures over 90°F was historically quite low. As warming accelerates, more frequent days of high heat are expected (Table 1).³

Years	> 90°F	> 100°F	> 105°F
1990s	4	0	0
2025s	10	1	0
2055s	25	4	2
2085s	51	15	7

² Hegewisch, K.C., Abatzoglou, J.T., 'Future Time Series' web tool. Climate Toolbox (<https://climatetoolbox.org/>) accessed on 30 March 2022.

³ Hegewisch, K.C., Abatzoglou, J.T., 'Future Climate Dashboard' web tool. Climate Toolbox (<https://climatetoolbox.org/>) accessed on 30 March 2022.

FUTURE TRENDS AND DRIVERS OF CHANGE

Precipitation

Precipitation varies substantially from year to year, making it more difficult to identify trends over time. At PDX, precipitation has fluctuated with potentially more year-to-year variation but no discernable trend. Even without a change in precipitation, however, warmer temperatures lead to overall drier conditions, including more extreme drought.

Precipitation projections for Sandy, Oregon range all the way from a potential increase of 40% to a decline of 30%. Average change is projected to be close to 0, but uncertainty in the projections is quite high.

Wildfire

Wildfire is and always has been an integral part of Western Forest ecosystems. Many species are highly reliant on wildfire and burned areas experience bursts in diversity as they recover after fire. Thus, while wildfire is a very real threat to human development and safety, it is not inherently a negative occurrence for forest ecosystems. Management that supports healthy and resilient ecosystems, including protecting fire-resistant mature forests and prescribed burning in previously harvested areas, can help reduce the risk of catastrophic fire.

The area burned by wildfire in Oregon has increased in the last century and is expected to continue to increase with hotter temperatures and more drought. Extreme wildfire danger averaged 11 days per year across Clackamas County in the 1990s and is expected to increase to 19 days per year by the middle of this century.⁴

Wildfire smoke is also of concern to the residents of Sandy. As fires continue to become more frequent, smoke becomes an increasing hazard to human health, especially for residents with underlying health conditions and those who are unable to protect themselves by accessing clean indoor air.



⁴ Hegewisch, K.C., Abatzoglou, J.T., and Chegwidan, O., 'Future Climate Dashboard' web tool. Climate Toolbox (<https://climatetoolbox.org/>) accessed on 30 March 2022.



Natural Hazards and Resiliency

GOALS AND POLICIES

In 2050, Sandy is resilient in the face of natural hazards. As stewards of clean air, water, and land resources for future generations, Sandy guides the design of the built environment to protect, enhance, and be integrated with natural systems. The threat of natural hazards like wildfire and earthquakes is mitigated through emergency preparedness, education, and proactive planning. Sandy collaborates with local agencies, including Fire Districts, Clackamas County, and regional partners to plan for actions that can lessen the impact of natural disasters, ensuring the City and its partners have long-term strategies for protecting the community.

COMMUNITY PREPARATION

GOAL 1: Prepare Sandy residents and business owners for wildfire and volcano risk.

Policy 1.1

Work with Clackamas Fire District 1, Clackamas County Disaster Management, and other community partners to engage with Sandy residents, especially those with disabilities, so they are enrolled in the emergency alert system and ready to evacuate using the Ready, Set, Go readiness framework.

Policy 1.2

Work with Clackamas Fire District 1 to educate the public and business owners about how to reduce wildfire risk to their homes and businesses, providing direct assistance to low-income residents.

Policy 1.3

Adopt state level Wildfire Hazard Mitigation regulatory requirements and building codes that reduce fire risk for new construction.

Policy 1.4

Work with Clackamas County and the State of Oregon to enforce OSHA rules regarding wildfire smoke and provide equitable access to education and protective gear for local businesses.

Policy 1.5

Help residents address wildfire smoke through education, assistance with indoor filtration, and the identification of public facilities that can serve as smoke shelters during smoke events.

Policy 1.6

Work with Clackamas County Disaster Management to further develop and educate the public regarding evacuation procedures.

Policy 1.7

Work with PGE, the Oregon Trail School District, and other community partners to develop and implement a plan for extended power outages caused by Public Safety Power Shutoffs to address wildfire risk for all City managed facilities and infrastructure.

GOAL 2: Prepare Sandy residents and business owners for earthquakes, floods, landslides, and other extreme weather events.

Policy 2.1

Implement public education and training programs so that residents are capable of sheltering in place for at least 14 days in an emergency with little to no outside assistance.

Policy 2.2

Develop and implement a plan for extended power outages caused by extreme weather events for all City managed facilities and infrastructure.

Policy 2.3

Collaborate with Clackamas County, community-based organizations, and state agencies to educate and enforce health and safety measures during extreme heat and cold events.

Policy 2.4 Partner with community organizations to identify facilities that can act as air quality shelters during smoke events and inclement weather shelters during extreme cold events.

Policy 2.5 Explore participation in the National Flood Insurance Program’s Community Rating System.

COMMUNITY RESILIENCE

GOAL 1: Protect public and physical assets of the community from natural hazards.

Policy 1.1 Assess public buildings and City managed facilities, utilities, open spaces, and park lands for wildfire, drought, flooding, earthquake, severe winter storms, and landslide risk.

Policy 1.2 Implement risk reduction projects beginning with structures that are needed for emergency sheltering, and essential emergency services.

Policy 1.3 Partner with PGE, the Oregon Trail School District, and other community-based organizations to disseminate communications regarding evacuation procedures.

Policy 1.4 Promote and protect the use of naturally flood prone open space or wetlands as flood per the Sandy Development Code.

Policy 1.5 Restrict development in high-risk areas through the Sandy Development Code and educate residents and businesses about the risk of property investment in these areas.

Policy 1.6 Promote innovative site and building designs that create defensible space and reduce the adverse impacts of development on steep slopes and in other natural hazard areas.

Policy 1.7 Designate and map areas of steep slopes (25% or greater) and other known hazard areas in the 2017 urban growth boundary expansion area.

Policy 1.8 Monitor and mitigate blowdown that blocks natural flow patterns in creeks or creates fuel loading hazard for adjacent areas.

GOAL 2: Partner and coordinate regionally to reduce risk from natural hazards.

Policy 2.1 Regularly update the City’s emergency response plan.

Policy 2.2 Actively participate in Clackamas County’s Natural Hazard Mitigation Plan (NHMP) updates and plan implementation processes to ensure that the changing resilience needs of Sandy residents are reflected in revised plans.

Policy 2.3 Engage with other communities across the region to implement the Clackamas Community Wildfire Protection Plan.

Policy 2.4 Coordinate with Clackamas County Disaster Management to ensure that emergency management and community plans are well understood by residents, are produced in multiple languages, and the City is clear about its role in implementing those plans regarding known hazards.

Policy 2.5 Engage with PGE and Clackamas County Disaster Management to ensure the City understands the utility’s approach for Public Safety Power Shutoffs to reduce wildfire risk, the County’s plan to address emergencies that will arise from those shutoffs, and the City’s role in such situations.

Policy 2.6 Engage with the U.S. Forest Service and Oregon Department of Forestry regarding updates to forest management and timber harvest plans to ensure consideration of the needs of Sandy residents and strengthen relationships ahead of natural disasters, particularly wildfire.

GOAL 3: Build community resilience to increasingly frequent natural disasters and other chronic stressors.

Policy 3.1 Implement water conservation measures at City facilities and encourage and support water conservation efforts among residents and local businesses to reduce the strain of more frequent and severe droughts.

Policy 3.2 Encourage and support the local agriculture economy to reduce vulnerability to climate change-driven disruptions.

Policy 3.3 Work with the Chamber of Commerce and other local organizations to assess risks and plan for chronic environmental stressors to protect the viability of local festivals and celebrations.

Policy 3.4

Work with the Chamber of Commerce to support local businesses in developing natural disaster resilience plans and ensuring that they are adequately insured in the event of an emergency.

Policy 3.5

Partner with community organizations to attract more health care providers and services to Sandy to prevent the community's healthcare system from being overwhelmed by increasingly frequent and severe natural disasters.

Policy 3.6

Work with the State of Oregon, Clackamas County, and community partners to improve access to mental health care services, and help residents understand how natural disaster risk is changing and what they can do to protect themselves and their property.

Policy 3.7

Partner with community organizations to provide opportunities for youth to volunteer and engage in the community as a means of reducing anxiety about natural disasters and other chronic stressors.



PARKS, TRAILS, & NATURAL RESOURCES





CURRENT ASSETS, PRACTICES AND CONDITIONS

PARKS AND TRAILS

Organization and Partnerships

The City of Sandy includes a Parks and Recreation Department that maintains and makes improvements to the city's parks, open spaces, public spaces, and public buildings. These facilities are maintained by three full-time employees and a seasonal worker employed during the summer months. Parks maintenance staff also perform minor building maintenance for City facilities.

Policy for Sandy's parks system is overseen by the City Council with assistance from a seven-person Parks & Trails Advisory Board. One City Council member is assigned as a liaison between the Parks & Trails Advisory Board and the Sandy City Council. The Parks & Trails Advisory Board is a volunteer board that supports planning and advocacy for the parks system.

In addition, the City maintains several community partnerships to assist with maintenance, funding, and access to parks, trails, and other outdoor amenities, including:

- **Oregon Trail School District (OTSD)** - The City occasionally provides funding for sports fields and court improvements, and the district rents out facilities for youth and adult recreation sport leagues, summer camps, parades, pet shows, and other community events.
- **AntFarm** - AntFarm is a non-profit dedicated to serving community youth including job and environmental skills training through hands-on volunteer work. The City has partnered with AntFarm and its YouthCore Crew to construct trails at Sandy River Park and a community garden at Bornstedt Park.

- **Mt Hood Athletic Club** - The City occasionally partners with the Mt. Hood Athletic Club for special events including fun runs and senior activities.
- **Non-profit and For-profit organizations** - The City is finalizing a permit process that includes an application, fee structure, insurance requirements, and permits to formalize the use of City parks and trails for fundraisers and other organizational events.
- **Volunteers** - Sandy has a long history of parks related volunteerism, including a 100-person effort to construct the Fantasy Forest Playground in Meinig Park, fundraising for dog parks and other improvements, and service day outings such as SOLVE in Sandy. However, there is no coordinated parks and trails volunteer organization to provide consistent operations and maintenance assistance.



Image: Mt Hood Athletic Club

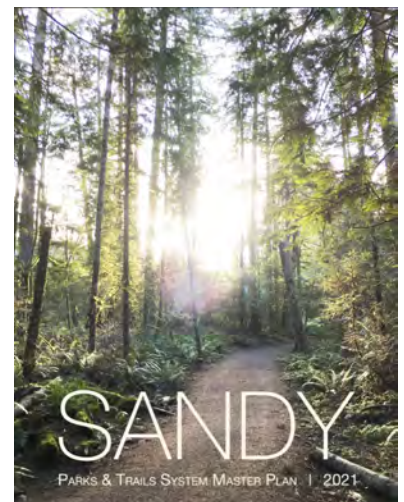


Bee City USA Affiliate Status

In 2021, Sandy became a Bee City USA affiliate city. Bee City USA is a designation bestowed by The Xerces Society for Invertebrate Conservation on cities throughout the United States that have committed to protecting and increasing pollinator habitat on public and private land as well as to educating the public about the importance of pollinator species.

2022 Parks and Trails Master Plan

In 2021, the City of Sandy updated their Parks and Trails Master Plan, which describes the City’s current parks, trails and open spaces, and identifies strategies for future development and improvement based on forecasts, trends and community priorities. This master plan is being revised and readopted in 2022. These updates replace the 1997 Parks Master Plan and were undertaken to address the city’s steady population growth, recent expansion of the Urban Growth Boundary (UGB), and completion of many of the projects outlined in the 1997 Plan. The plan provides guidance for managing continued growth through 2035, and envisions that:



“Future parks will be designed to incorporate amenities, features, and practices which prioritize a diverse, inclusive, accessible, and sustainable park system that incorporates public art where possible.”

Existing Parks and Trails

Per the Parks and Trails Master Plan, Sandy classifies its park facilities into five primary classifications:

- **Mini parks** provide basic recreation opportunities on small lots, within residential areas serving an area within 5-minute walking time (approximately ¼ mile) from neighbors. Sandy currently has six mini parks, all of which are developed. This includes Barlow Ridge Park, Cascadia Park Tot Lot, Hamilton Ridge Park, Knollwood Park Tot Lot, Salmon Estates Park, and Timberline Ridge Park.
- **Neighborhood parks** provide close-to-home recreation opportunities, primarily for passive and non-organized recreation activities. They are found within approximately 5–10-minute walking time (approximately ¼ - ½ mile) from local residences, without crossing major roads and/or other structures that can be considered barriers for safe and easy walking and biking. Sandy currently has seven neighborhood parks, with four developed parks and three undeveloped parcels. These include Bornstedt Park, Cascadia Park, Champion Way Park, Deer Point Park, Ponder Lane, Sandy Bluff Park, and Tupper Park.
- **Community parks** are typically larger in size and serve a broader purpose than neighborhood parks. Their focus is on meeting the recreation needs of several neighborhoods or large sections of the community, as well as preserving unique landscapes and open spaces. Sandy's two community parks include the Community Campus and Skate Park, and the Meinig Memorial Park.

- **Natural areas and open space lands** are set aside for preservation of significant natural resources, remnant landscapes, open space, and for visual buffering. They may preserve or protect environmentally sensitive areas, such as wildlife habitats, wetlands, riparian corridors, and/or endangered plant species. Sandy currently has six natural areas, four of which include trails and other passive recreational uses. These natural areas include Knollwood Park, Sandy River Park, Sandy Community Campus, and Tickle Creek Park, as well as open space parcels.
- **Special use** areas refer to parks that include waterfront parks, boat ramps, memorials, historic sites, waysides, sites with significant geologic or scenic features, and single purpose such as dedicated sports complexes, dog parks, skate parks, display gardens. Sandy currently has four special use areas: Jonsrud Viewpoint, Centennial Plaza, the Community/Senior Center, and Veterans Memorial Square.

Trails include both hard and soft surface trails and paths to accommodate a variety of activities such as walking, running, biking, dog walking, rollerblading, skateboarding, and horseback riding. There are approximately 5.76 miles of path/trail within parks, and 4.20 miles outside of parks within Sandy.

Other Park Providers

Just beyond City limits, numerous parks and trail systems exist throughout Metro and County lands, as well as the Mt. Hood National Forest. Below are some significant parks and natural areas managed by other providers within a ten-mile radius of Sandy.

Bureau of Land Management (BLM)

- Sandy Ridge Trail System – 15+ miles of singletrack mountain biking trails approximately 10 miles east of Sandy.
- Wildwood Recreation Area -- This 550-acre forest park located 15 minutes to the east of Sandy features Cascade Streamwatch and Wetland Boardwalk interpretive trails and offers access to the pristine Salmon-Huckleberry Wilderness. The site also provides group picnic sites, a playground, and multiple ball fields.



Image: BLM

United States Forest Service (USFS)

- Mt. Hood National Forest – the USFS manages the Mt. Hood National Forest, which encompasses 1.1 million acres and includes large areas of designated wilderness. Mt. Hood National Forest offers year-round recreation opportunities and its watersheds provide drinking water to the greater Portland area. The Clackamas River Ranger District is the Mt. Hood National Forest Headquarters and moved its offices to the City of Sandy in 2020.



Image: USFS

Oregon Parks and Recreation District (OPRD)

- Milo McIver State Park – 2,000-acre park with developed campgrounds, river recreation and fishing access, hiking and equestrian trails, and disc golf. Situated along the Clackamas River near Estacada.
- Bonnie Lure State Recreation Area – 150-acre passive day use nature park along the Clackamas River near Eagle Creek.



Image: ORPD

METRO

- Oxbow Regional Park – 2,000-acre park with developed campgrounds, river recreation and fishing access, hiking and biking trails, playgrounds, and wildlife viewing. Situated along the Sandy River east of Gresham.
- Clackamas County Parks
- Boring Station Trailhead –Transition point between the Springwater Corridor and the Cazadero Trail. Small park in Boring with a playground, restroom, and picnic shelter.
- Eagle Fern Park – 360-acre day-use park with hiking, creek access, fishing, and picnic shelters, situated to the south of Sandy.
- Barton Park – 300-acre park with developed campgrounds, hiking, multiple day use and event amenities, and a variety of river recreation opportunities. Situated along the Clackamas River.
- Barlow Wayside Park – 180-acre passive day use nature park with trails near the Sandy River and BLM Sandy Ridge Trail System.



Image: METRO

Portland Water Bureau

- Dodge Park – Day use river recreation, fishing, playground, and picnic facilities situated along the Sandy River north of Sandy.

NATURAL RESOURCES

The City of Sandy is home to a wide range of natural resources, including open space, wetlands, riparian corridors, floodplains, wildlife habitat and forests. The City takes pride in its natural assets and protects these resources and the quality of air, land and water through regulatory tools such as the City’s 1997 Local Wetland Inventory and development code standards. These provisions shape development in a way that protects the function of these resources.

In 2022, the Oregon Department of Environmental Quality (DEQ) and the U.S. Environmental Protection Agency (EPA) mandated improvements to the City’s wastewater infrastructure in order to comply with the EPA’s Clean Water Act, which establishes the basic structure for regulating discharges of pollutants into waterways and regulating quality standards for surface waters. In response, Sandy established the Sandy Clean Waters project in 2023 to protect water quality in Tickle Creek and the Sandy River.

FUTURE TRENDS AND DRIVERS OF CHANGE

While Sandy has made much progress growing its parks and trail system and preserving natural resources and open space, there are various trends in Sandy that will affect future demand for these amenities and approaches to maintaining natural areas, open space, and scenic and historic areas.

PARKS AND TRAILS

The following trends were identified in the 2022 Parks and Trails Master Plan Needs Assessment:

- Residents have various priorities for the future of Sandy’s parks and recreation system. Priorities identified from the community engagement process include:
 - » Bike pump track and a progressive skills complex for both bike and skate
 - » Sports fields for pick up sports, such as soccer and baseball
 - » Sports complex with lights and synthetic turf
 - » Trails and trail connections (Tickle Creek to Cazadero, connect with Timberline Trail, add trail at Sandy Vista, Sandy River rustic trails, incorporate Tickle Creek trail, connect with Springwater). Trails and connections could loop around the City, utilize powerline corridors, and should include safer road crossings as well as wayfinding signage.
 - » More programming/amenities for disabled individuals, such as: sensory gardens, raised beds for community gardens, improved surface trails, accessible trails, universal designed playground.
 - » Standing Wave/Whitewater Park
 - » Pickleball facilities
 - » Outdoor basketball hoops
 - » Dog park trail system with natural features
 - » Restrooms and covered shelters/ multipurpose spaces
 - » Family oriented facilities with activities for a range of age groups such as open fields, picnic areas and BBQ’s.
 - » Improved geographic distribution of facilities, such as a community garden and basketball court for the north side of town, and a dog park and large field for the south side of town.



- Sandy’s existing park system and amenities are aging. Deferred maintenance over a long period of time can result in unusable amenities when perceived as unsafe or undesirable by park patrons. In addition, Sandy is experiencing limited staff resources and a very low parks maintenance staff to population ratio to ensure routine maintenance and longevity of facilities.
- Natural barriers (such as rivers) and developed barriers (such as major highways) impact the expansion or improvement of recreational amenities.
- As population growth continues, geographic distribution of parks and trails should be equitable and responsive to barriers that disrupt service areas. Non-standard amenities, such as skate spots, splash pads, dog parks, nature trails, etc., should also be distributed equitably across the system. This will likely require redevelopment of aging, existing facilities to add or expand amenities to avoid desirable public space clustering around new development.
- Given the recent spike in interest and participation in outdoor recreation, special urgency should be given to the development of community parks to meet demand for amenities like sport courts, sport fields, and other active use spaces like disc golf and off-road cycling.
- Sandy has recently renewed its planning efforts focused on assessing the City’s current and future aquatic program needs. Options have been explored to address the physical and program deficiencies of the outdated Olin Y. Bignall Aquatic Center by either renovating the facility or constructing a new aquatic facility. After detailed analysis and evaluation, a City-led task force recommended against renovating and/or expanding the existing Aquatic Center, in favor of developing a new indoor swimming facility. The City is currently exploring options to leverage the existing Middle School Annex Building to develop a combined aquatics and community center facility.



NATURAL RESOURCES

In the years ahead, Sandy will continue to emphasize strong protections for fish and wildlife habitat, watersheds and urban forest through an efficient and balanced regulatory framework, as well as improvements to the City's infrastructure to preserve and enhance air, land and water quality. The following trends will direct future efforts in natural resource management:

- Recent, large-scale investments in infrastructure will continue to improve water quality in local streams and ensure compliance with state and federal standards.
- The City's inventories of significant natural resources are out of date. As development pressures grow, additional funding will need to be secured to update these inventories, specifically the City's 1997 Local Wetland Inventory.
- As the protection of natural resources become more complex in the face of changing environmental conditions, increasing natural hazards, and development pressures, the City will look to collaborative approaches with public and private partners to expand community awareness and stewardship of natural resources.





Parks, Trails and Natural Resources

GOALS AND POLICIES

In 2050, Sandy's natural and scenic landscape is an extension of the community.

Clean rivers, healthy trees, and wildlife habitats are carefully conserved to promote biodiversity. Forested areas within the City are protected as parks, trails and natural open space. Sandy preserves the unique character and charm of beloved assets like Meinig Memorial Park, Sandy River Park, the Tickle Creek Trail, and Jonsrud Viewpoint. The City continues to develop recreation programs and a diverse and accessible park and trail system that is clean, safe, and functional, serving the needs of residents.

PARKS AND TRAILS DEVELOPMENT

GOAL 1: Develop parks, amenities, and recreation opportunities that are equitably distributed across the city.

Policy 1.1 Fill service area gaps so that all residential areas are served based on the Parks and Trails Master Plan’s (PTMP) levels of service.

Policy 1.2 Develop a new community park with multi-purpose sports fields.

Policy 1.3 Improve geographic distribution of key amenities such as dog parks, community gardens, and splash pads.

Policy 1.4 Improve existing undeveloped park land such as Champion Way, Deer Point, Ponder Lane, and the Sandy Community Campus.

Policy 1.5 Revitalize parks, including Tupper Park, Sandy Bluff Park, and Meinig Park, by renovating outdated equipment such as playgrounds, sport courts, and paths.

Policy 1.6 Prioritize inclusive and universally accessible playground upgrades that cater to various mobility types, special needs, and age groups as parks and amenities are developed or improved.

Policy 1.7 Prioritize the development of parks that include unique amenities not currently offered in the City parks system such as a pump track, pickleball courts, a disc golf course, sensory gardens, nature play areas, sports field(s), and other features.

Policy 1.8 Prioritize the development of neighborhood and community park types instead of mini parks when land is available and minimize acquisition and development of mini parks to only highly constrained areas and small service area gaps without options for larger park types.

Policy 1.9 Evaluate and incorporate natural areas, wildlife habitat, and native pollinator gardens into parks where appropriate.

GOAL 2: Create a looped network of trails connecting parks, neighborhoods, and natural open spaces that provides opportunities for alternative transportation and recreation throughout the city.

Policy 2.1 Improve trail connections and pedestrian transportation outlined in the PTMP to connect neighborhoods with key destinations including schools, other parks, and commercial areas.

Policy 2.2 Provide safe pedestrian crossings on busier streets such as Highway 26, Highway 211, and Bluff Road through signalization and over-or-under-passes.

Policy 2.3 Renovate existing paths and trails throughout the city to provide accessible routes to parks and amenities in accordance with the Americans with Disabilities Act Standards for Accessible Design.

Policy 2.4 Pursue a public access easement with the Oregon Trail School District to allow access to future public trails south of the high school.

Policy 2.5 Connect natural open spaces through multi-purpose trails identified in the PTMP.

GOAL 3: Secure funding for land acquisition, recreation development, operations, and maintenance.

Policy 3.1 Regularly update the System Development Charge Methodology and the fee in lieu calculations to optimize funding from these sources.

Policy 3.2 Ensure methods for acquisition of community park land, such as fee-in-lieu and system development charges (SDCs) are regularly updated to reflect current land and development costs.

Policy 3.3 Study the implementation of a General Obligation/Revenue Bond to help fund park development and major renovation projects identified in the Capital Improvement Plan (CIP).

Policy 3.4 Study the implementation of a Parks Utility Fee to help fund park maintenance and operations.

Policy 3.5

Study the application of stormwater user fees to maintain stormwater facilities that reside in parks.

Policy 3.6

Develop an asset management program that includes a detailed inventory and assessment of existing city-wide parks infrastructure and amenities to help plan for and prioritize life-cycle renovation and replacement for these systems.

Policy 3.7

Evaluate the cost efficiency and effectiveness of balancing contract services with increased staffing levels, including additional volunteer coordinator positions, to match system growth.

Policy 3.8

Support non-profits and volunteers to acquire land, obtain donations, secure grants, and engage local groups and residents to help build and maintain parks and trails.

Policy 3.9

Advocate for fuel reduction funding to support proactive measures that mitigate wildfire risks, ensuring community safety and the preservation of Sandy's parks, trails, and natural resources.

NATURAL RESOURCES

GOAL 1: Protect forest, river, and wetland ecosystems and the native species they support.

Policy 1.1

Partner with the Oregon Department of Fish and Wildlife, US Forest Service, and other large landowners to improve forest and watershed health ahead of impacts due to extreme heat, reduced snowpack, wildfire, and drought.

Policy 1.2

Safeguard natural waterways by utilizing water conservation measures and programs that limit water demand from the City of Sandy, its residents, and local business owners, particularly during late summer when natural flows are the lowest of the year.

Policy 1.3

Partner with the Oregon Department of Fish and Wildlife, the Soil and Water Conservation District, and other local organizations to develop projects to protect native species at risk due to increased pests and species migration driven by changing climate conditions.

Policy 1.4

Favor the use of natural drainage systems and other non-structural methods to treat, convey, and dispose of rainwater runoff.

Policy 1.5 Update the 1997 Wetlands Inventory and mapping of approximate areas of known stream corridors, wetlands, and associated buffers.

Policy 1.6 Where feasible, preserve natural vegetation resource sites through public acquisition, conservation easements, or other available methods to permanently limit development.

GOAL 2: Protect and sustain Sandy’s urban forest.

Policy 2.1 Update the City urban forestry code to integrate consideration of changing climate conditions and invasive species.

Policy 2.2 Develop an urban forestry plan that provides direction for the maintenance and improvement of Sandy’s urban tree canopy.

Policy 2.3 Adopt procedures for City properties and rights-of-way that promote the use of drought tolerant, native trees and plants.

Policy 2.4 Educate residents regarding how to address invasive species, implement drought and fire-resistant plants, and protect tree health on their property.

Policy 2.5 Develop incentives to encourage the preservation of significant trees.

GOAL 3: Protect and conserve open space.

Policy 3.1 Identify and inventory open space corridors within the Sandy urban growth area. Open space shall include lands useful for fish and wildlife habitat, trails, public access to natural resource lands and water, and protection of environmentally sensitive areas.

Policy 3.2 Employ development regulations to preserve and protect open space and environmentally sensitive lands, integrate the natural environment of Sandy into project designs, minimize the creation of impervious surface, and incentivize the protection of native trees and other vegetation.

Policy 3.3 Wherever possible, establish native growth protection areas along Highway 26 at both the east and west entries to the city. These areas are intended to provide a pleasant entry to the city, screen industrial uses from the highway, and provide a buffer between the highway and other land uses.

Policy 3.4 Where appropriate, connect public open space or private protected open space to other open space corridors established by other agencies and by private development.

Policy 3.5 Work with property owners and developers to preserve open space along Tickle Creek as part of the Tickle Creek Greenway.

Policy 3.6 Where feasible, restore and maintain the system of parks and open space in the city to serve the habitat and migratory needs of fish and wildlife in the Sandy River and Clackamas River basins.

Policy 3.7 Develop forest vegetation management plans for City-owned open space along Sandy River and Tickle Creek to address noxious weeds, mitigate blowdown, and support drought-tolerant vegetation.

Policy 3.8 Employ fuel mitigation measures to reduce wildfire risks, protect lives and property, and preserve natural landscapes for future generations.

GOAL 4: Ensure ecologically sound development.

Policy 4.1 Maintain environmental quality by guiding future development and land use activities such that allowed activities will not significantly deteriorate the existing high quality of air, water, and land resources.

Policy 4.2 Notify applicable state and federal natural resource protection agencies of development proposals potentially impacting important natural features.

Policy 4.3 Identify and inventory significant natural features during the development process to preserve natural features or mitigate losses by placing conditions upon development using city, state, and federal government regulations to achieve this objective.

Policy 4.4 Promote innovative site and building designs which reduce the adverse impacts of development on stream corridors by encouraging projects that protect, maintain, enhance, and restore the natural functions and values of stream corridors.

Policy 4.5 Require development and construction projects to minimize disturbance of and adverse impacts to native tree stands and other areas of significant vegetation and promote innovative site and building designs to meet these objectives.

Policy 4.6 Require appropriate reforestation efforts in open space areas to help mitigate the adverse impacts of development.

Policy 4.7 Prioritize and encourage both infill development and brownfield development to protect the environment and promote urban revitalization.

Policy 4.8 Advocate for the use of xeriscaping as a water-wise landscaping practice that conserves water, reduces maintenance needs, and enhances sustainability.



GOVERNANCE & GROWTH MANAGEMENT





CURRENT ASSETS, PRACTICES AND CONDITIONS

Urbanization in Oregon is a multi-faceted topic which deals with the availability of land within an Urban Growth Boundary (UGB) to accommodate forecasted residential and employment growth, the transition of land from rural to urban uses, the provision of public services to urbanizing land, and the long-term governance of already urbanized unincorporated land by cities. Local governments approach urbanization through land use planning mechanisms such as Comprehensive Plans, Zoning, and Development Code.

COMPREHENSIVE PLAN

Sandy’s previous Comprehensive Plan was adopted in 1997 and amended in 2012. Similar to the previous (1997) Comprehensive Plan, the updated (2024) Comprehensive Plan includes a Comprehensive Plan Map, which applies broad, conceptual land use designations that are further defined on the City’s zoning map. A unique feature of the 1997 Comprehensive Plan was the establishment of Urban Reserve areas outside the Urban Growth Boundary (UGB). See Appendix I. Comprehensive Plan Map and Zoning Map.

ZONING AND DEVELOPMENT

The Zoning Map details zoning districts (also known as “zones”), overlays (such as the Flood Slope Hazard and Bornstedt Village Overlay), and other details pertinent to planning in Sandy. Zoning regulations describe how land will be used for residential, commercial, industrial, or parks/open space needs and how the land can be used (also known as “uses”) in a given zone. All these zoning regulations are specified in the City’s Development Code, which determines if a use is permitted, conditional, or not permitted. Sandy’s mix of land uses and acreage are listed in Table 1 and described in the Land Use Gallery of the Comprehensive Plan.

Zone	Acreage
Parks and Open Space (POS)	309.6
Low Density Residential (SFR, R1)	3000.9
Medium Density Residential (R2)	463.7
High Density Residential (R3)	251.9
Commercial (C1, C2, C3)	489.3
Industrial (I1, I2, I3)	396.1

Table 1. Sandy Land Uses by Zoning Districts

URBAN GROWTH BOUNDARY EXPANSION

In 2017, Sandy expanded the City's UGB by 668 gross acres, based on the land needs in the 2015 Urbanization Study.¹ Prior to this expansion, Sandy's UGB had accommodated housing, employment, park and school needs for nearly 20 years. The last time the UGB had been amended was in 1997 when the Bornstedt Village area south of Highway 211 and west of Bornstedt Road was brought into the UGB.

In 2001, the City of Sandy entered an Urban Growth Management Agreement (UGMA) with Clackamas County. The UGMA coordinates the management of land brought in by modifications to the UGB or Urban Reserve Areas (URA) through amendments to the City and County's Comprehensive Plans.



¹ City of Sandy UGB Expansion Analysis, Table 3.11. February 2017. <https://www.ci.sandy.or.us/sites/default/files/fileattachments/planning/page/6751/66339.pdf>

FUTURE TRENDS AND DRIVERS OF CHANGE

POPULATION AND EMPLOYMENT GROWTH

Sandy has experienced explosive population growth over the last two decades, more than doubling in residents between 2000 and 2021. Based on the City's 2024 Housing Capacity Analysis (HCA), Sandy's UGB is forecast to grow from 13,877 people in 2023 to 20,227 people in 2043, an increase of 6,350 people. This population growth will occur at an average annual growth rate of 1.9%, which is slower than in the past.

Population growth has also resulted in a growth of jobs in Sandy. Based on the 2024 Economic Opportunities Analysis (EOA), Sandy's employment base is 5,514 employees in 2023. Sandy is forecast to have 8,037 employees by 2043, an increase of 2,523 jobs over the planning period. These forecasts have implications for the type and amount of land Sandy will need in order to accommodate more housing and jobs:



- Based on population projections in the 2024 HCA, Sandy has sufficient land to accommodate population growth over the twenty-year planning period. The forecasted growth of 6,350 people will result in the demand for 2,424 new dwelling units over the twenty-year planning period, averaging 121 new dwelling units annually. While Sandy has sufficient land in all plan designations to meet projected growth, the R-2 zone is low on capacity.
- Based on employment projections in the 2024 EOA, the forecast for land needed to accommodate employment growth in Sandy shows that the growth of 2,523 new employees will result in demand for about 154 gross acres of commercial and industrial employment lands. Sandy has sufficient land to accommodate demand for commercial employment in the Sandy UGB, but it does not have sufficient land to accommodate demand for industrial employment. Based on land demand, Sandy is forecast to have a 52-gross-acre surplus of commercial land and a 9-gross-acre deficit of industrial land.

Key infrastructure barriers limit Sandy's ability to accommodate projected growth. In 2023, a development moratorium was put in place due to the limited capacity of Sandy's wastewater infrastructure. Building capacity in the City's wastewater system is essential in meeting the housing needs of future residents, but this will take time. In 2023 the City began an analysis to determine how much capacity is available for development over the next few years.

STATEWIDE LEGISLATION

Population growth has affected nearly all communities in Oregon, driving up land and housing prices, among many other factors. In response to the statewide housing crisis, as well as rising energy costs and the prevalence of more extreme natural hazards affecting Oregon communities, the State is undertaking new legislation aimed at strengthening Oregon’s administrative rules about transportation and housing planning.

House Bill 2001

In 2019, the Oregon Legislature passed a bill to address rapidly rising housing costs by increasing the supply of more diverse and affordable housing choices. HB 2001 effectively eliminated single-family zoning by requiring cities across the state with a population of greater than 10,000 people to allow the development of duplexes in all zones that allow single family homes. Cities outside of Metro were required to amend their zoning codes to allow for the provision of HB 2001 by June 2021. Sandy adopted the code changes in 2021. However, the transformation of housing choices is expected to be relatively gradual, and its implications on whether and how this development will occur remains uncertain. Future land use decisions and urbanization strategies for Sandy will need to reflect both the desire for increased employment and the need for additional housing.



PLANNING FOR RESILIENCY

In response to the increasing prevalence of natural hazards that affect both Oregon and the greater Pacific Northwest, there is a general, emerging trend for incorporating natural hazards and resiliency planning across multiple Comprehensive Plan sections. Energy efficiency, renewable energy, and the reduction of non-renewable energy overlap with urbanization when accommodating projected population and employment growth, the orderly and efficient transition of land from rural to urban use, and the extension of public facilities and services. Pursuing energy efficiency, renewable energy, and the reduction of non-renewable energy when urbanizing new areas

and extending public facilities and services can support climate resilience and adaptation measures. For local planning in unincorporated non urbanized areas on the edge of the UGB and in unincorporated urbanized areas, greenhouse gas emission reduction from cars and light-duty trucks can be achieved through multi-modal connectivity, an active public realm, and an urban built environment where access to daily needs are integrated into neighborhoods. These concepts are being more readily incorporated and codified into Comprehensive Plans to address the pressures of urbanization and the opportunity to develop more resilient communities.



Governance and Growth Management **GOALS AND POLICIES**

In 2050, Sandy is proactive in managing and planning for growth. Sandy is an innovative community that addresses change through thoughtful planning and effective governance. Growth and development are guided by community values, fiscal responsibility, and strategic investments in services and infrastructure. Premier fire, police and emergency response services ensure safety for residents. Regulatory tools and practices are consistently updated to address new issues, and new development contributes to the expansion of public utilities. Leadership and residents engage with one another in decision-making processes so new opportunities benefit the community while preserving Sandy's small-town feel.

URBANIZATION

GOAL 1: Promote efficient development within Sandy’s Urban Growth Boundary (UGB) to accommodate long-range population and employment growth, minimize the cost of providing public services and infrastructure, and protect resource land.

Policy 1.1 Periodically evaluate and update the City’s 20-year land supply to meet short term and long-term employment, housing, park, and infrastructure needs.

Policy 1.2 Maintain Sandy’s designated Urban Reserve Area (URA) to guide longer-term development and to be considered for inclusion within the UGB when land needs are identified that cannot be accommodated with zone changes inside the existing UGB.

Policy 1.3 Facilitate infill development of vacant or underutilized land within the UGB consistent with Comprehensive Plan land use designations.

Policy 1.4 Direct urban growth and land annexation in a generally contiguous, orderly, and coordinated manner that is consistent with the City’s ability to maintain and extend cost-effective and resilient public services and facilities.

Policy 1.5 Consider infrastructure capacity and costs, including ongoing maintenance and the redundancy of facilities, when balancing infill and redevelopment opportunities with the potential need for land annexation or a UGB expansion.

Policy 1.6 Prior to annexation, require areas with 20 or more acres of contiguous land to complete community-level plans, like concept plans, master plans, and specific area plans, to designate and integrate specific land uses and transportation elements through broad local community engagement.

Policy 1.7 Consider the needs of parks and open space and natural hazards, specifically wildfire and flooding risks, when evaluating the capacity of Sandy’s UGB and UGR.

Policy 1.8 Advance resource efficiency, renewable energy, and reduction of nonrenewable energy use when areas are urbanized or are being redeveloped at higher densities.

GOAL 2: Engage in good governance by coordinating with local, regional and statewide agencies and partners to provide services commensurate with urban growth.

Policy 2.1 Maintain a Comprehensive Plan and associated implementation tools, consistent with the Oregon Statewide Planning Goals, and applicable state and federal regulations.

Policy 2.2 Exercise home rule authority in matters of local concern to the fullest extent allowed by state rules and legislation.

Policy 2.3 As required by State policy, work with the State of Oregon to develop strategies that encourage the production of housing without negatively impacting infrastructure in Sandy.

Policy 2.4 Pursue cooperative agreements with other governmental agencies to facilitate the implementation of the Comprehensive Plan and as a mechanism to jointly or cooperatively plan, finance, construct, and/or administer related projects.

Policy 2.5 Refine and update procedures established by the Urban Growth Management Agreement (UGMA) with Clackamas County, to coordinate the management of unincorporated lands within the UGB and URA.

Policy 2.6 As established by the UGMA, maintain the City’s lead role in designating planned land uses and densities and coordinating public facility planning for incorporated and unincorporated lands within the UGB and URA.

Policy 2.7 As established by the UGMA, maintain the County’s lead role in applying county zoning and processing land use applications for unincorporated lands within the UGB and URA until annexation to the City of Sandy.

Policy 2.8 Preserve and protect the rural and natural character of the Highway 26 Green Corridor that separates Sandy from the Portland Metro Area through the existing agreement with Clackamas County, Metro, and ODOT.

Policy 2.9 Monitor and evaluate police, fire, and emergency management resources to ensure service levels are commensurate with the city’s population and maintain a high level of public health, safety, and community preparedness.

LAND USE PLANNING

GOAL 1: Maintain a process and policy framework for land use planning and ensure an adequate factual base for land use decisions and actions.

Policy 1.1

Provide a technical foundation that documents and evaluates existing conditions, such as analyses and inventories related to economic development, housing, and natural resources, in order to inform and refine Comprehensive Plan policies and provide a foundation for future updates.

Policy 1.2

Periodically update City Master Plans and Zoning Map to respond to current and future conditions and ensure alignment with the Comprehensive Plan.

Policy 1.3

Ensure that land use and plan administration procedures consider relevant agreements with other local jurisdictions and plans by other local jurisdictions, and comply with regional, state, and federal plans and regulations.

Policy 1.4

Periodically update Comprehensive Plan policies to account for changes in public policy, community priorities, state and federal law, and demographic, environmental, economic, natural hazard, or other conditions in order to ensure that the Plan is an accurate and effective guide for future growth.

Policy 1.5

Periodically review and revise the Development Code to ensure that the City is able to implement new best practices in construction, and that code provisions are adequate to address the goals and policies of the City Master Plans and Comprehensive Plan.

Policy 1.6

Effectively communicate and engage partner organizations, residents, property owners, and businesses when revising the Comprehensive Plan and Development Code.

Policy 1.7

Ensure the City Council considers the Comprehensive Plan goals and policies during its annual goal setting process and during budgeting and other policy-making processes.

Policy 1.8

Advance resource efficiency, renewable energy, and reduction of nonrenewable energy use when areas are urbanized or are being redeveloped at higher densities.



ECONOMY & HOUSING





CURRENT CONDITIONS

The demographic characteristics of Sandy residents provide a basis for understanding housing and economic development trends and the factors that may affect future growth in Sandy.

POPULATION GROWTH

Sandy’s population growth will drive future demand for housing and employment in the city. Sandy’s population more than doubled between 2000 and 2021. Sandy’s population was 13,877 in 2023. Since 2000, Sandy’s population grew by 7,484 people at an average annual growth rate of 4.2%.¹ Based on the City’s 2024 Housing Capacity Analysis (HCA), Sandy is forecast to grow by 6,350 people through 2043, at an average annual growth rate of 1.9%.

AGE CHANGE

Over the last twenty years, the working-aged population (25-64 years) had the most substantial increases. Sandy’s population is younger than the state and county with lower shares of seniors over age 60 and higher shares of residents 39 years or younger. However, the median age in Sandy has increased by almost four years to 36.2 years in 2019.

By 2040, Clackamas County is expected to have a larger share of residents 40 years and older than it does today. The share of residents 60 years and older will likely account for 29% of Clackamas County’s population, compared to 27% in 2020. Similarly, the share of residents between the ages of 40 and 59 is expected to slightly increase from 27% to 28%.



¹ Portland State University Population Estimates, 2021.

RACE AND ETHNICITY

Sandy has become more diverse with an increased share of people of color and substantial growth in the Hispanic/Latino population. However, the city is less racially diverse than the state overall. Sandy's Hispanic/Latino population increased between 2000 and 2015–2019 from 4% to 10%. The share of people of color in Sandy was 9%, compared with the county average of 12% and statewide average of 16%. Clackamas County and Sandy are less ethnically diverse than the state overall, even with their increases from 2000 to 2015-2019.

HOUSEHOLD COMPOSITION

In comparison to the county and state, Sandy's households are on average larger with nearly half of the households consisting of 3 or more people. Sandy has a higher percentage of households with children than the county and state. Sandy's average household size is larger than both Clackamas County and the state. Sandy also has a greater share of households with children than the county or state. Approximately 40% of households in Sandy have children compared to 28% in the county and 25% in the state.

INCOME AND EDUCATION

Sandy's median household income increased between 1999 and 2019 from \$42,115 to \$73,443 per year² (approximately a 74% increase). The median household income in Sandy was 9.6% below Clackamas County's median household income but 14.5% above Oregon's median household income.

The share of Sandy residents who have a bachelor's degree or a professional degree falls below both the state and Clackamas County (2015-2019 averages by almost 15%.



² City of Sandy Urbanization Study (CSUS, 2015). January 2015. Ordinance 2015-01.



FUTURE TRENDS AND DRIVERS OF CHANGE

The city has experienced tremendous growth, more than doubling in size since 2000 to support almost 13,000 residents, earning a reputation as one of the fastest growing cities in Oregon with an annual growth four times the State of Oregon's rate. While Sandy is still forecasted to grow to approximately 20,227 people by 2043, this population growth will occur at a slower rate than in the past. Historical population growth led to a high demand for housing. The limited supply of housing combined with population growth, and continuously rising housing costs, led to an increase in cost burden for residents particularly those renting. This has implications for Sandy's workforce and general employment trends.

MAJOR HOUSING TRENDS

Based on the City's 2024 Housing Capacity Analysis (HCA), Sandy needs to plan for 2,424 new dwelling units or about 121 new dwelling units per year to accommodate the city's forecasted population growth of 6,350 people over the twenty-year planning period. The housing mix for this growth is expected to consist of 60% single-family detached homes, 7% townhouses, 5% duplexes, triplexes, and quadplexes, and 28% multi-dwelling housing with five or more units in each structure.

This housing mix aligns with Sandy's anticipated need for a broader range of housing types at a wider range of price points than is currently

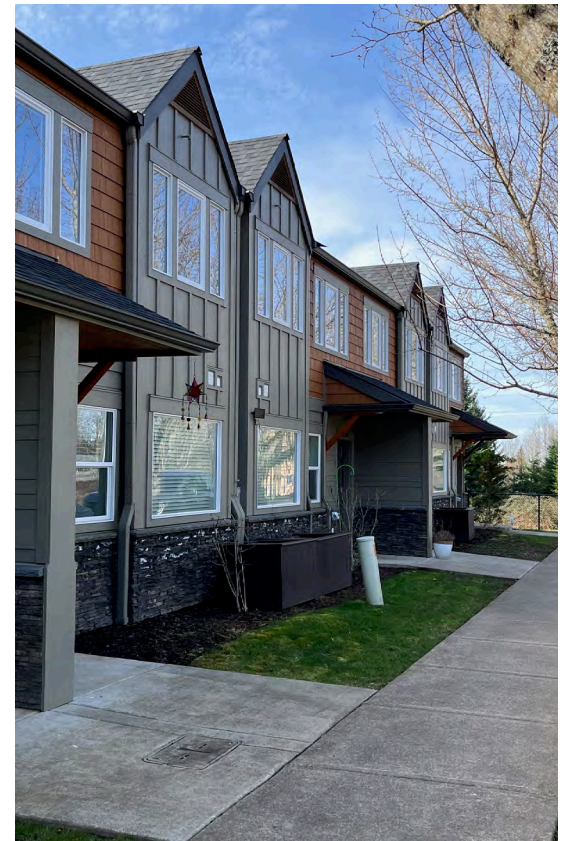
available in Sandy's housing stock, which is predominantly (79%) single-family detached homes. In particular, if Sandy wants to provide opportunities for people to live and work in Sandy, there needs to be more housing that is affordable to people with jobs in Sandy.

Fortunately, Sandy has sufficient land to accommodate population growth over the twenty-year planning period. The forecasted growth of 6,350 people will result in the demand for 2,424 new dwelling units over the twenty-year planning period, averaging 121 new dwelling units annually. While Sandy has sufficient land in all plan designations to meet projected growth, the R-2 zone is low on capacity.

The 2024 HCA identified the following trends and key housing needs in Sandy over the next twenty years:

- Demographic changes suggest a shift in housing demand toward smaller, more affordable housing for both rent and ownership. Sandy’s existing housing mix is predominately single-family detached. However, key demographic and socioeconomic trends that will affect Sandy’s future housing needs are increasing housing costs and housing affordability concerns for millennials, Generation Z, and Latino populations as well as an aging population. The implications of these trends are increased demand for affordable housing for families, both for ownership and rent as well as increased demand from smaller, older (often single person) households.

» Sandy needs more affordable housing types for homeowners. Housing sales prices increased in Sandy over the last seven years. Between 2015 and 2022, the median sales price in Sandy increased by \$211,000 (80%). A household earning 100% of Clackamas County’s median family income (\$114,400) could afford a home valued between about \$315,000 and \$372,000, which is less than Sandy’s median home sales price of \$475,000. A household can start to afford median home sales prices in Sandy at about 128% (\$146,000) of Clackamas County’s median family income (MFI). Average wages in Sandy are also not high enough to pay for the median home sales price of \$475,000. In 2021, the overall average wage for people working at a business located in Sandy was \$43,856. Even two-worker households with relatively high- wage jobs cannot afford the median home sales price. Between 2015 and 2020, the median household income increased 33%. Between 2015 and 2022 the median home sales price rose by 80%.



» Sandy needs more affordable housing types for renters. To afford the average asking rent of a multi-dwelling unit of \$1,840 (which includes basic utilities), a household would need to earn about \$73,600 or 64% of the region’s Median Family Income (MFI). About 44% of Sandy’s households earn less than \$73,600 and cannot afford these rents. In addition, about 17% of Sandy’s households have incomes of less than \$34,320 (30% of MFI) and are at risk of becoming houseless. Households need to have at least two people working average-wage jobs (or above) to afford the average asking rent plus utilities. In 2021, the overall average wage for people working at a business located in Sandy was \$43,856. Single-worker households or two-worker households with lower-wage jobs cannot afford this rent. Between 2015 and 2020, the median household income for renter households decreased 10%. Between 2015 and 2022, the average asking rent increased 41%.

MAJOR ECONOMIC TRENDS

Based on the City's 2024 Economic Opportunities Analysis (EOA), Sandy's employment base is 5,514 employees in 2023. Sandy is forecast to have 8,037 employees by 2043. This is an increase of 2,523 jobs over the planning period.

Most new employment will require commercial and industrial lands, accounting for over 90% of new employment growth (2,339 employees) over the 2023 and 2043 planning period. Sandy will accommodate new government employees (184 of the 2,523 employees) in existing government buildings and areas designated for public use.

The forecast for land needed to accommodate employment growth in Sandy shows that the growth of 2,523 new employees will result in demand for about 154 gross acres of commercial and industrial employment lands.

Sandy has sufficient land to accommodate demand for commercial employment in the Sandy UGB, but it does not have sufficient land to accommodate demand for industrial employment. Based on land demand, Sandy is forecast to have a 52-gross-acre surplus of commercial land and a 9-gross-acre deficit of industrial land.

The 2024 EOA identifies Sandy's primary competitive advantages to be:

- The city's proximity to both outdoor recreation and urban amenities in Greater Portland make Sandy an attractive place to live and grow businesses.
- The city's plans for investment along Pleasant Street could help encourage pedestrian activity, which could have a positive effect on downtown businesses.
- SandyNet (Municipal Broadband) offers access to high-speed internet, which is an increasingly high priority for most businesses.
- Sandy's location along Highway 26 and proximity to the Portland region provide opportunities for relatively easy freight movement and allow businesses in Sandy to attract workers from across the region.
- SandyNet could also help attract remote workers who may not work for a business in Sandy but want to live in Sandy, as well as new home-based businesses.

These factors make Sandy attractive to residents and businesses that want a high quality of life where they live and work.

The types of businesses that have potential for growth in Sandy include (but are not limited to) manufacturers (particularly food and beverage processing and outdoor equipment manufacturing), professional service companies, service for residents (such as retail, restaurants, medical services, or childcare services), and services for visitors (such as hotels, restaurants, specialty retail, and experiences).



Economy and Housing GOALS AND POLICIES

In 2050, Sandy is home to desirable neighborhoods and a strong workforce.

Thriving commercial and industrial districts provide balanced employment opportunities at all levels. A variety of businesses meet the daily needs of residents and contribute to Sandy's sense of place. A strong tourism industry provides opportunities for businesses and supports the local economy. Sandy's workers have access to a variety of housing choices that allow residents to move in, move up or age in place, ensuring families can live, work, and thrive in Sandy across multiple generations. Balanced housing choices contribute to safe, walkable, family-friendly neighborhoods that connect residents to nearby parks, trails, businesses, and key destinations.

ECONOMIC DEVELOPMENT

GOAL 1: Promote efficient development within Sandy’s Urban Growth Boundary (UGB) to accommodate long-range population and employment growth, minimize the cost of providing public services and infrastructure, and protect resource land.

- Policy 1.1** Coordinate economic development efforts with other jurisdictions and agencies such as Clackamas County, the Port of Portland, the Oregon Economic Development Department, Travel Oregon, and the Oregon Department of Transportation to identify and support expansion of existing industries and attraction of new industries to the community.
- Policy 1.2** Foster entrepreneurship and new business creation by leveraging investments in technology, strengthening economic development partnerships, and connecting businesses to resources.
- Policy 1.3** Attract businesses offering jobs that pay higher than Clackamas County's average wage, to provide opportunities for people to live and work in Sandy, focusing on industries such as metals fabrication, outdoor tools manufacturing, and related professional services.
- Policy 1.4** Partner with local and regional organizations such as Mount Hood Community College, Clackamas Community College, AntFarm Youth Services, Oregon Trail School District, and Clackamas Workforce Partnership to support workforce development, especially for youth and disadvantaged workers, aligning with Sandy’s economic development goals and the needs of local businesses.
- Policy 1.5** Promote access to healthcare, childcare, job training, and support systems for Sandy residents.

Commercial

GOAL 2: Foster vibrant commercial zones with a mix of retail options that serve the needs of regional residents and enhance destination appeal.

- Policy 2.1** Invest in the development of a lively, walkable downtown to support a mixture of professional services, hospitality and food services, and retail uses.
- Policy 2.2** Support and encourage infill and redevelopment, particularly in downtown along Pioneer Boulevard, Proctor Boulevard, and Pleasant Street, as a way to use land and existing infrastructure more efficiently.
- Policy 2.3** Use large undeveloped commercial areas to support a range of retail businesses, with an emphasis on ensuring the availability of space for large retailers integrated with smaller commercial uses.

Policy 2.4 Encourage and support a variety of retail, restaurant, lodging, and recreational services to draw visitors and enhance community well-being for residents through strategic investments in hospitality, place-based tourism, and community development.

Policy 2.5 Monitor land development and update the buildable lands inventory on a regular basis to ensure that there is enough vacant commercial land to accommodate expected growth.

Industrial

GOAL 3: Promote sustainable and non-polluting industrial growth that diversifies Sandy’s economic base, supports high-wage job creation, and cultivates innovation.

Policy 3.1 Ensure that Sandy has sufficient industrial land to provide industrial growth opportunities, with a variety of characteristics and sizes and with adequate access to transportation and utility facilities, but avoiding conflicts with incompatible adjacent uses.

Policy 3.2 Preserve and protect industrial lands in locations with direct access to the highway, particularly parcels 10 acres and larger, so that this land is more likely to be used for traded-sector industrial uses. Limit commercial development in industrial areas to uses which are clearly ancillary and subordinate to industrial development.

Policy 3.3 Work with economic development partners to support the development of metals fabrication and related industries in Sandy and to establish Sandy as a hub for metals fabrication.

Policy 3.4 Encourage collaboration between businesses and innovators in specialty food and beverage industries to strengthen Sandy’s food storage and processing sector.

Policy 3.5 Monitor industrial land development and update the buildable lands inventory on a regular basis to ensure that there is enough vacant industrial land to accommodate expected growth.

Infrastructure

GOAL 4: Ensure that Sandy has sufficient infrastructure capacity to support a variety of employment opportunities, ensuring that land can be developed within a reasonable time period.

Policy 4.1 Coordinate capital improvement planning with economic development planning to ensure infrastructure availability to employment lands.

Policy 4.2 Coordinate with providers of infrastructure not provided by the City, such as electricity and natural gas, to ensure service is available when needed.

Policy 4.3 Invest in SandyNet and other resources and infrastructure that support and attract a home-based workforce.

HOUSING

GOAL 1: Maintain an adequate supply of developable land to allow for the development of a balance of diverse housing types, providing opportunities for people to live and work in Sandy and meet the forecast of population growth over the next 20 years.

Policy 1.1 Ensure that there is sufficient land in each residential plan designation to meet the land needs identified in the Housing Capacity Analysis, as required by Statewide Planning Goal 10.

Policy 1.2 Continue to meet State requirements for supporting housing development while maintaining a balance of densities.

Policy 1.3 Ensure there are opportunities for public input on proposed housing development per the City's land use review procedures.

Policy 1.4 Allow for development of a range of housing types both for ownership and rental, that allow people to live and work in Sandy.

Policy 1.5 As required by State legislation, identify barriers to private sector housing development for a range of housing types, including affordable housing, and develop policies to reduce development barriers.

Policy 1.6 Coordinate capital improvements and funding with housing planning to ensure infrastructure availability to residential land.

Policy 1.7 Implement public-private development agreements to recover initial costs of infrastructure and maintenance obligations, when appropriate.

GOAL 2: Provide residential districts that allow diverse housing types, including opportunities for mixed-use development.

Policy 2.1

As required by State legislation, identify, and remove barriers to developing needed housing types according to where they are allowed.

Policy 2.2

Maintain mixed-use village plan designations at Bornstedt Village and at Highway 26 / Dubarko Road, with development around a commercial center or other focal point and residential densities that generally decrease with distance from the commercial center.

Policy 2.3

Reclassify the mixed-use village plan designation at Kelso Road / Bluff Road to eliminate commercial and promote additional housing.

Policy 2.4

Locate multifamily housing near commercial development, schools, and planned transit routes to reduce automobile travel.

Policy 2.5

Ensure that permitted housing types are appropriately related to site conditions, including slopes, potential hazards, and natural resources.

GOAL 3: Provide opportunities for and support development of housing at prices that meet the needs of current and future residents of Sandy.

Policy 3.1

Consistent with State requirements, identify barriers to development of both income-restricted affordable housing and middle-income affordable housing and develop policies to reduce development barriers.

Policy 3.2

Maintain a balance of low, medium, and high-density zones to provide housing at a range of costs and allow for housing choice.

Policy 3.3

Support development of income-restricted housing through partnering with Clackamas County Housing Authority, and other non-profit or for-profit developers of low-income affordable housing.

Policy 3.4

Identify approaches to support development of affordable housing by using tools that reduce development or operational costs as part of the state required Housing Production Strategy.

*thank you
for visiting*







ENVISION SANDY 2050
COMPREHENSIVE PLAN

Appendix












I. Comprehensive Plan Map and Zoning Map

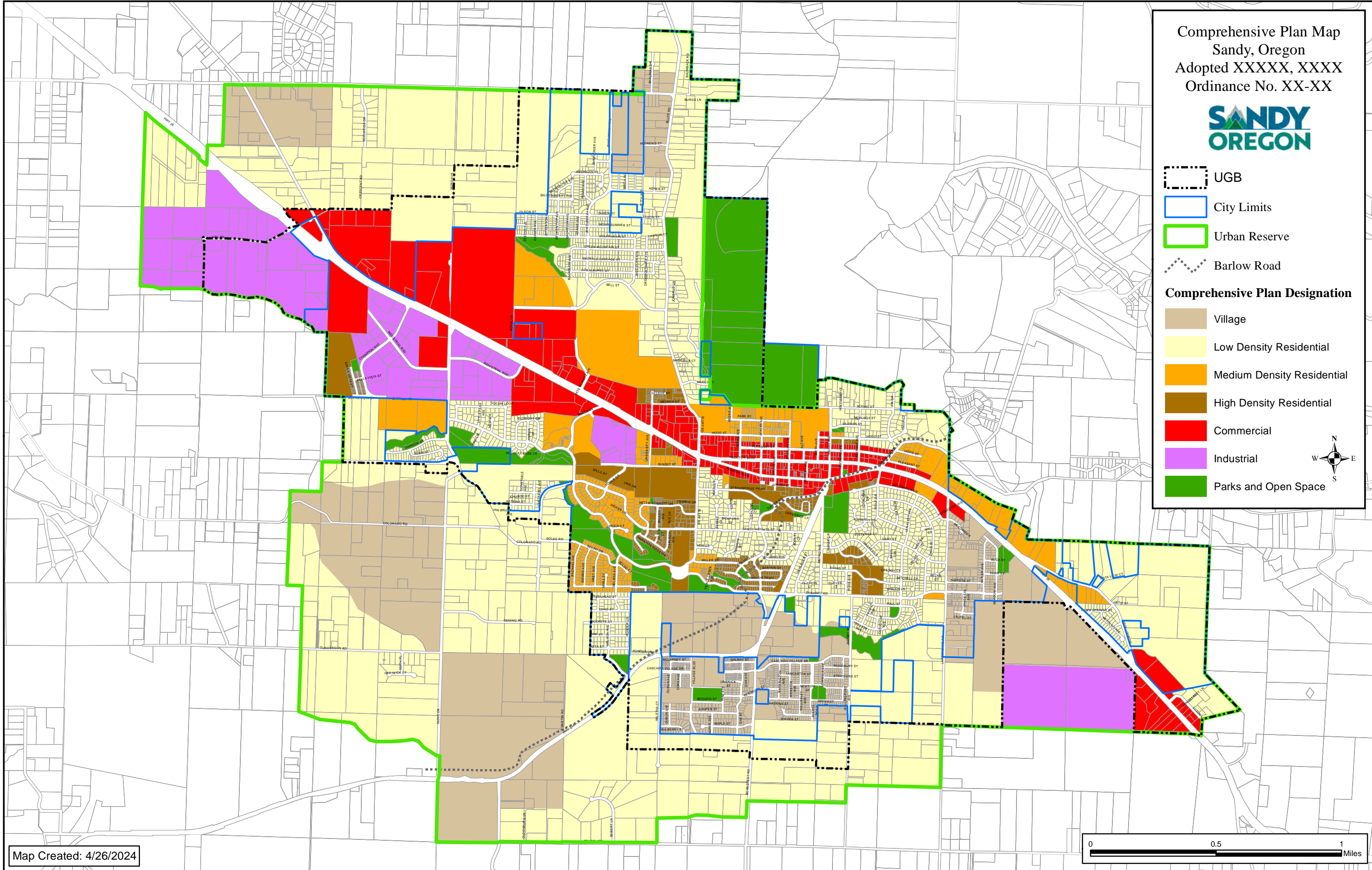
II. Reference Documents

III. Vulnerability Assessment Report and
Resiliency Action Plan

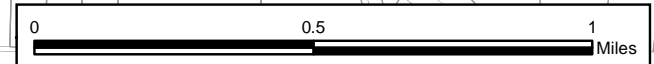
Comprehensive Plan Map
Sandy, Oregon
Adopted XXXXX, XXXX
Ordinance No. XX-XX



-  UGB
-  City Limits
-  Urban Reserve
-  Barlow Road
- Comprehensive Plan Designation**
-  Village
-  Low Density Residential
-  Medium Density Residential
-  High Density Residential
-  Commercial
-  Industrial
-  Parks and Open Space






















Map Created: 4/26/2024

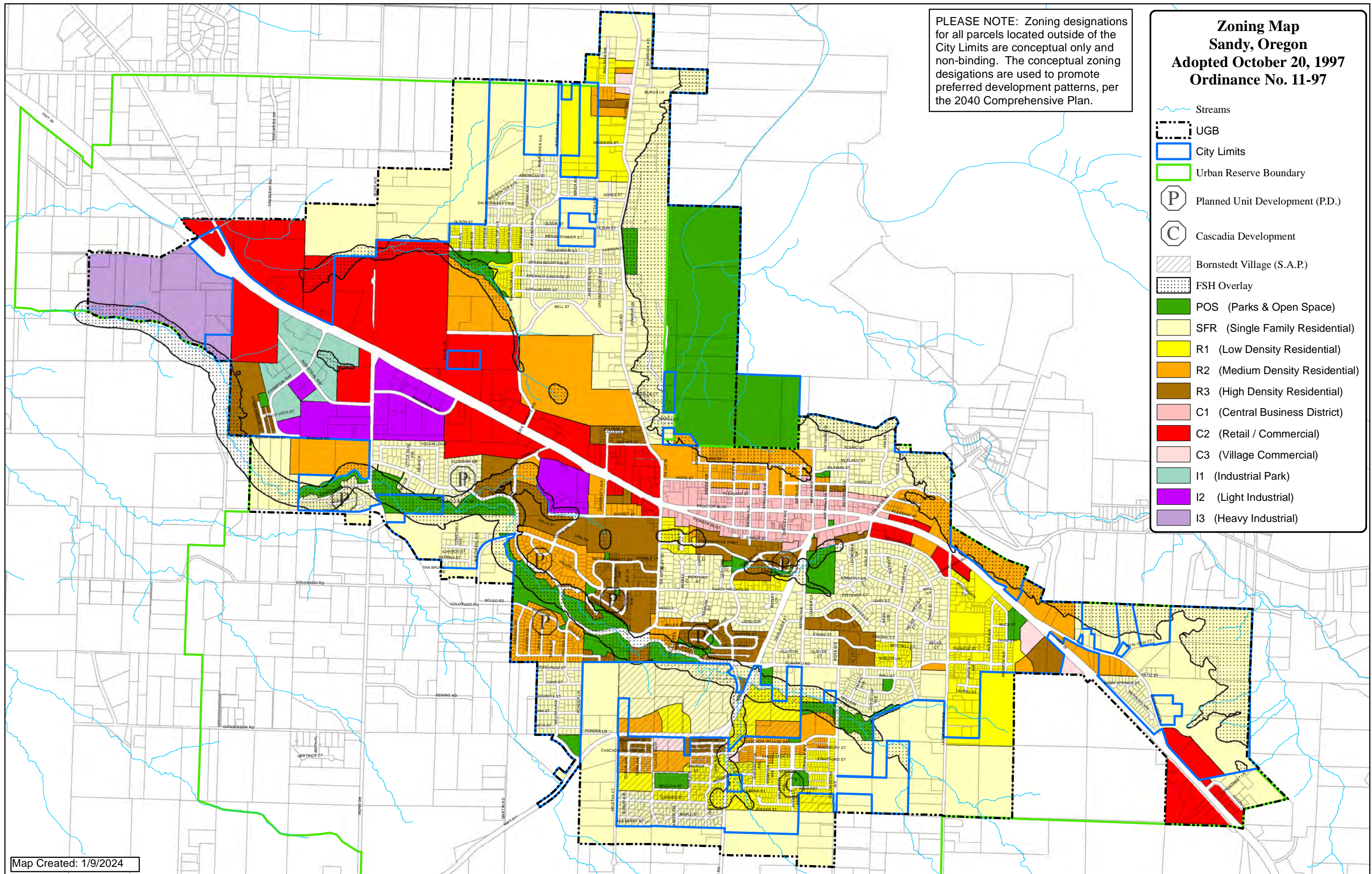


Comprehensive Plan Map

PLEASE NOTE: Zoning designations for all parcels located outside of the City Limits are conceptual only and non-binding. The conceptual zoning designations are used to promote preferred development patterns, per the 2040 Comprehensive Plan.

**Zoning Map
Sandy, Oregon
Adopted October 20, 1997
Ordinance No. 11-97**

-  Streams
-  UGB
-  City Limits
-  Urban Reserve Boundary
-  Planned Unit Development (P.D.)
-  Cascadia Development
-  Bornstedt Village (S.A.P.)
-  FSH Overlay
-  POS (Parks & Open Space)
-  SFR (Single Family Residential)
-  R1 (Low Density Residential)
-  R2 (Medium Density Residential)
-  R3 (High Density Residential)
-  C1 (Central Business District)
-  C2 (Retail / Commercial)
-  C3 (Village Commercial)
-  I1 (Industrial Park)
-  I2 (Light Industrial)
-  I3 (Heavy Industrial)



Map Created: 1/9/2024

Zoning Map

REFERENCE DOCUMENTS

- 1997 IGA on Green Corridor and Rural Reserve (adopted by signature)
- 2001 Urban Growth Management Agreement (adopted by signature)
- 2002 Locally Significant Wetlands Determination (Ordinance No. 2002-18)
- 2003 Bornstedt Village Specific Area Plan (Ordinance No. 2003-09)
- 2012 Downtown Parking Management Study (adopted by motion)
- 2017 Urban Growth Boundary Expansion Analysis (Ordinance No. 2017-02)
- 2020 Transit Master Plan (Resolution No. 2020-07)
- 2021 Parks and Trails Master Plan (Ordinance No. 2021-26)
- 2022 Water System Master Plan (Ordinance No. 2023-06)
- 2023 Transportation System Master Plan (Ordinance No. 2023-24)
- 2023 Economic Development Strategic Plan (adopted by motion)
- 2024 Economic Opportunity Analysis (Ordinance No. 2024-02)
- 2024 Housing Capacity Analysis (Ordinance No. 2024-03)



Vulnerabilities to Changing Conditions in Sandy, Oregon

Photo by nrthoorterritory.com (CC BY 2.0)

A summary report

Prepared by the Geos Institute

April 2024

GEOS
INSTITUTE

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City of Sandy

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Shelley Denison, AICP, Associate Planner

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David Snider, City of Sandy (Economic Development)

Michelle Valencia, Sandy High School

John Wallace, Sandy Parks & Recreation

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Introduction

On December 12, 2022, local leaders and community stakeholders in Sandy, Oregon participated in a workshop to identify vulnerabilities related to changing conditions within five community systems: Infrastructure, Economy, Natural Systems, Health and Emergency Services, and Local Culture. The workshop began with participants answering the question “What words describe Sandy?” (See Fig. 1)

After reviewing past and expected future climate conditions, participants moved into sector-specific breakout groups. Each group worked to identify vulnerabilities specific to their community system that would be caused, or made worse by, these changing conditions. These current and future impacts were ranked by their potential impact to the Sandy community, their expected timeframe, and the community’s existing capacity to respond.



Photo by Tonya Graham

At the conclusion of the breakout sessions, participants prioritized the vulnerabilities across all sectors. Both the sector-specific descriptions of the vulnerabilities and the full group prioritization are included in this report.

Figure 1. Word cloud representing participant responses to the question “What words describe Sandy?”



Changing Conditions

Climate conditions in Sandy are already changing. Increases in average temperature, extreme heat, drought, and wildfire danger, coupled with reduced snowpack, are altering the context within which the City of Sandy provides services as well as impacting the lives of its residents.

Average temperature has increased by 2.8°F since 1895 in Oregon.¹ If the global community collectively reduces greenhouse gas emissions, warming in Sandy could be limited to 2-8°F. If emissions are not reduced, warming could reach 4-13°F by 2100, on average, and continue to increase.²

Days with extreme heat are expected to become more common.³ Summer maximum temperature is expected to increase by 13°F, on average, by the 2080s if current emissions continue, and by 7°F if emissions are reduced.⁴

Precipitation projections for Sandy range all the way from a potential increase of 40% to a decline of 30%.⁵ Average change is projected to be close to 0%, but uncertainty in the projections is quite high. Even without a change in precipitation, warmer temperatures lead to overall drier conditions, including more extreme drought.⁶

Snowpack has already declined in Oregon by about 15-20% since the middle of the 20th century.⁷ Across Clackamas County, average April 1 snowpack is expected to decline from 13 inches to 1 inch by the end of this century.⁸

Streamflow is expected to change significantly on the Sandy River, with hydrology shifts similar to those projected on the Clackamas River. The historical pattern of two major pulses in winter and spring is projected to be replaced with a higher winter pulse and much lower spring and late summer flows.⁹

¹ Dalton, M., and E. Fleishman, editors. 2021. Fifth Oregon Climate Assessment. Oregon Climate Change Research Institute, Oregon State University, Corvallis, Oregon. <https://blogs.oregonstate.edu/occri/oregon-climate-assessments/>.

² Hegewisch, K.C., Abatzoglou, J.T., 'Future Time Series' web tool. Climate Toolbox (<https://climatetoolbox.org/>) accessed on 30 March 2022.

³ Hegewisch, K.C., Abatzoglou, J.T., 'Future Climate Dashboard' web tool. Climate Toolbox (<https://climatetoolbox.org/>) accessed on 30 March 2022.

⁴ Hegewisch, 'Future Time Series' (see footnote 2)

⁵ Hegewisch, 'Future Time Series' (see footnote 2)

⁶ Hegewisch, K.C., Krosby, M. "Historical Drought Stripes" web tool. Climate Toolbox (<https://climatetoolbox.org/>) accessed on 30 March 2022.

⁷ Dalton, Fifth Oregon Climate Assessment (see footnote 1)

⁸ Hegewisch, K.C., Krosby, M. "Future Boxplots" web tool. Climate Toolbox (<https://climatetoolbox.org/>) accessed on 30 March 2022.

⁹ Hegewisch, K.C., Abatzoglou, J.T., and Chegwidde, O., 'Future Streamflows' web tool. Climate Toolbox (<https://climatetoolbox.org/>) accessed on 30 March 2022.

Forests are also expected to change, and the prevalence of wildfires will continue to increase. The dominant vegetation of Sandy and surrounding areas will shift as conditions change, resulting in less cool needleleaf forest and more mixed temperate forests and woodlands.¹⁰ Much of this shift is projected to be facilitated by wildfire.

Changing conditions are expected to lead to more extremes, including more severe drought as well as larger and more damaging storms.

Workshop participants noted the following changes already apparent in Sandy:

- * *Infrastructure is stressed.*
- * *There are higher water temperatures in streams.*
- * *Summers are drier.*
- * *It is harder to keep new trees alive.*
- * *Western red cedars are dying.*
- * *Older housing with no air conditioning has a harder time in heat events.*
- * *There is decreased rainfall and snowpack, which affects water use.*
- * *Wildfire smoke is increasing.*
- * *Wildfire threat is increasing.*
- * *Life is becoming more stressful in Sandy. It is hard to think well.*
- * *The local healthcare system is stressed.*
- * *More people are migrating to Oregon and to Sandy.*
- * *Increasing development of forest and agricultural land.*
- * *Insurance coverage is costing more money.*
- * *Political polarization is increasing as stress levels rise.*
- * *Challenges in the education system, including increased class sizes and lack of childcare, affect children and make it hard for parents to focus on larger issues.*



Photo by Geoff Weaver

¹⁰ Hegewisch, K.C., Krosby, M. "Future Vegetation" web tool. Climate Toolbox (<https://climatetoolbox.org/>) accessed on 30 March 2022.

Identifying Vulnerabilities

Breakout groups collected the following information for each vulnerability:

Exposure	The specific trend or projection that is already causing or is expected to cause the impact
Timeframe	When the impact is expected to occur in Sandy → Near-term = current to 2030s → Mid-term = 2040s to 2060s → Long-term = 2070s to 2090s and beyond
Sensitivity (High, Medium, or Low)	Given our understanding of the specific sector for each given impact, how great of an impact is expected (e.g., how disruptive is it, how serious are the consequences, and how much overall change is expected?)
Adaptive Capacity (High, Medium, or Low)	The level of existing resources, programs, or policies in place to protect people or to respond to the changes with little disruption
Focal Populations	The specific neighborhoods, populations, areas, or categories of resources or people that are expected to be especially affected by the impact, as well as any that are expected to be buffered due to special circumstances
Other Stressors	Additional and ongoing non-climate stressors to the populations or resources to be affected by climate related hazards
Secondary Vulnerabilities	Other potential responses to or effects related to changing conditions that are likely to affect the impact under consideration

In-Migration

Note that the term “in-migration” appears throughout this document. Sandy has been growing rapidly for many years due to its natural beauty, access to outdoor recreation opportunities, and proximity to the Portland metro area. In addition to these growth pressures, people seeking refuge from changing conditions in other parts of the

country, particularly the southwest, are likely to add to this growth pressure. We call this combination of growth pressures generally “in-migration.”

In-migration pressure in Sandy can take two forms: continually escalating growth pressure over time or punctuated growth in the wake of natural disasters, such as flood and wildfire, destroying homes in nearby communities. These can happen concurrently. The impact on community systems because of general growth pressure vs. climate-driven growth pressure is the same. But changing conditions will significantly amplify vulnerabilities related to population growth, so it is called out as a specific risk in this report.

Earthquakes and Changing Conditions

While it is clear from scientific studies that changing climate conditions can affect earthquakes, research efforts are not far enough along to help us understand those relationships in great enough detail to assist in local planning. However, many of the vulnerabilities identified in this process related to natural disasters apply to earthquakes as well as disruptions that clearly have a nexus with changing conditions. Therefore, while earthquake specific vulnerabilities are not noted here, earthquakes are listed as a potential hazard impacting a vulnerability where it makes sense to do so.

Vulnerabilities by Sector

Note that in the following sections, vulnerabilities are listed in the priority order determined within each sector-specific breakout group. The vulnerability is considered community-wide unless information regarding specific populations or resources at particularly high risk is included.

Infrastructure

- ▶ **Strain on water supply and reduction in raw water quality due to extreme heat, snowpack loss, larger storms, wildfire, and drought.** Alder Creek water rights are an important element in this discussion. Larger storms make raw water entering the water treatment system more turbid, which costs more to treat and can, at certain thresholds, require the facility to close temporarily, forcing water curtailment or boil water advisories.
- ▶ **Aging infrastructure (water, sewer, roads, equipment, playgrounds, culverts, etc.) overburdened by in-migration.** While this impacts the entire community, the older areas of town are at greater risk. Those areas typically coincide with where lower-income residents live. The environment (creeks and fish populations

in particular) is also vulnerable to infrastructure failures.

- ▶ **Lack of adequate local government staffing for ongoing operations and equipment as disruptions increase.** This lack of capacity increases stress for current staff, creates risk of regulatory and infrastructure failure, inhibits the City's ability to keep up with code adoptions required by state law, and negatively affects emergency services and response in compound situations with multiple concurrent events.
- ▶ **Public buildings and utility infrastructure at risk due to wildfire.** Sandy's water and wastewater systems are at particularly high risk, whereas public buildings within the city limits are at medium risk.
- ▶ **Strain on wastewater treatment system due to increasing temperatures, drought, and reduced snowpack.** Lower stream flows in the late summer will make mixing in Tickle Creek (and possibly the Sandy River in the future depending on the location of the outfall) more challenging. This primarily affects rate payers, developers/builders, and cold-water ecosystems.
- ▶ **Overburdening of electric system due to extreme events and in-migration.** The City of Sandy does not manage the electric utility that serves its residents, but it is responsible for addressing health and public safety impacts when power outages happen. At particular risk are residents with medical conditions that require refrigeration or machines (such as oxygen machines) to manage health conditions. The City's water and communication systems are also vulnerable to power outages.
- ▶ **Strain on water treatment system due to public safety power shutoffs.** While related to the vulnerability listed above, there is an important distinction in that the timing of public safety power shutoffs is more predictable and they will happen in the late summer or early fall, rather than the winter, which brings different public safety and health challenges related to heat, air quality, and mental stress.
- ▶ **Increased traffic congestion due to in-migration.** As more people move to Sandy to avoid negative impacts caused by changing conditions elsewhere, the City's existing road system is expected to experience greater wear, increasing the need to invest in maintenance and re-builds over time. It also increases the likelihood of dangerous road conditions for motorists, transit, pedestrians, and cyclists.

Economy

- ▶ **Loss of access to services, amenities, and goods during a major emergency event, such as wildfire or earthquake.** This includes challenges caused by the inability to bring goods into the community for some time. Residents most affected include the elderly, isolated individuals, and those with low income, limited mobility, and disability. The Pleasant Street area and Vista Apartments have been identified as particularly high-risk areas. The City Senior Center may be of particular concern as residents are likely to turn to them for help.
- ▶ **Reduction in recreation/tourist economy due to snowpack loss.** The hotel industry, equipment rental businesses, food and beverage services, and gas stations are at particular risk of business loss due to fewer winter visitors. Note that while snowpack is declining, the initial risks to businesses are likely to be punctuated disturbances caused by particularly bad snow years. Over time, the winter sports season will likely become shorter – starting later in the fall and ending earlier in the spring.
- ▶ **Lost productivity of outdoor workers due to heat and wildfire smoke.** People who work outside for a living in industries such as construction, agriculture, landscaping, and recreation, are at increasing health risk due to extreme heat and wildfire smoke. When environmental conditions limit the ability of workers to perform job functions, that loss of productivity is felt in the local economy.
- ▶ **Lost productivity due to evacuation caused by wildfire.** Wildfire evacuations will happen in the summer, at a critically important time for local farmers who may lose crops if they are required to evacuate and cannot irrigate and/or harvest. Government facilities and retail establishments left unattended during an evacuation may also be vulnerable to looting.
- ▶ **Strain on local businesses and City facilities due to planned and unplanned power outages.** Potential electrical outages due to extreme events, or planned shutoffs to reduce wildfire risk, require more robust contingency plans for City operations and the business community. This adds strain to these organizations and is likely to worsen over time.
- ▶ **Impacts to agricultural production due to heat, drought, wildfire, and snowpack loss.** The combination of increasing heat, drought, and snowpack loss may create significant water supply challenges for local agricultural producers,

such as nurseries, hayfields, Christmas tree farms, and cattle and alpaca ranches.

- ▶ **Higher utility and insurance costs for businesses due to all accelerating hazards.** The need for more redundancies and upgrades to utilities are expected to increase utility rates while changing risk profiles are expected to increase insurance premiums. Small businesses and local nonprofit organizations are at particularly high risk, particularly those with small margins.
- ▶ **Inability to house service workers due to in-migration driving up housing costs.** Housing prices have been increasing in Sandy for several years and that trend is likely to continue regardless of what happens with the cost of housing at a state or national level. Lower income renters and first-time home buyers who work in Sandy may find it difficult to find adequate housing that they can afford. This may motivate these workers to move elsewhere, creating a labor market challenge for local businesses, particularly outdoor recreation and tourism-based enterprises.
- ▶ **Reduction in summer tourist economy due to heat, wildfire, and smoke.** Visitors come to Sandy in the summer to take advantage of outdoor recreation opportunities. This has already been impacted by wildfire smoke and the threat of wildfire, and to a lesser degree extreme heat. Expected increases in all three hazards may reduce the number of visitors the city receives in the summer months. Of particular concern will be active fires in or near the Highway 26 corridor. This also depends on how residents of other communities in the region experience climate change impacts. Because Sandy's tourist economy is primarily regional during the summer, a loss may not happen if conditions are more extreme in other parts of the region.
- ▶ **Business costs of mass evacuation of people and farm animals due to wildfire.** Businesses that must evacuate will experience significant business disruption and potential loss of equipment, structures, and inventory.

Natural Systems

- ▶ **Impacts to stream, riparian, and wetland ecosystems due to wildfire, larger storms, heat, drought, wildfire, and snowpack loss.** These hazards are accelerating simultaneously, magnifying the impact of any one of them. While wildfire will cause a significant disruption, the combined impact of increasing heat, drought, and snowpack loss on water supply in late summer is expected to cause profound changes in stream and riparian ecosystems around Sandy. Wildfire followed by larger precipitation events can cause significant erosion, damaging soil and aquatic ecosystems. This in turn, will stress native species, such as salmon, salamander, frogs, aquatic macroinvertebrates, and others. At particular risk are temperature-limited species that can only persist in narrow temperature ranges.



Photo by BLM Oregon, CC BY 2.0

- ▶ **Forest lands at risk due to wildfire, heat, drought, and reduced snowpack.** Impacts to forests are similar to those identified for stream and riparian habitat. While forest lands in the region are adapted to wildfire, increases in the acres of land burned and potential increase in wildfire intensity over time will create greater disruption. That, combined with generally more extreme conditions, will change what will grow in the area over time. Historical fire regime, wildlife species, and soil health are at risk as is the region's ability to sequester carbon through its forests.
- ▶ **Loss of native species due to increased pests and species migration caused by higher temperatures, drought, reduced snowpack, and wildfire.** Some species of plants, animals, and fungi adapted to existing climate conditions in this region will be strained by changing conditions.
- ▶ **Conversion of natural areas to developed and agricultural purposes due to in-migration.** The land use pressure from ongoing development to accommodate new residents will further impact the health of natural areas while those areas are already experiencing impacts due to changing conditions. In addition, degradation of natural resources may result in those resources losing vital protections in the Sandy Development Code. Examples include large trees no longer able to serve as retention trees because of poor tree health, perennial streams becoming intermittent, and losing setback protections in the City due to

state legislation, etc.

- ▶ **Threats to urban tree canopy due to extreme heat, drought, invasive pests, and snowpack loss.** Sandy's urban tree canopy is at risk due to changing conditions that threaten the viability of trees inside the city limits. City parks, especially areas close to Tickle Creek and the Sandy River, may be at particular risk. This will also affect the birds, insects, and other species those trees support.
- ▶ **Greater strain on natural systems due to in-migration and more visitors.** Residents and visitors alike enjoy the outdoor recreation opportunities offered in and around the Sandy community. Increasing numbers of residents, and potentially visitors, are expected to add strain to the natural systems that support recreational activities.

Health and Emergency Services

- ▶ **More frequent evacuation and displacement for residents due to wildfires.** Evacuation and displacement are difficult for all residents, but elderly, disabled, low income, non-English speakers, medically fragile, houseless, and low-technology households are at particularly high risk in the event of an evacuation or long-term displacement. Rural residents in Sandy that have farm animals and equipment also have high risk in these situations. Evacuation and displacement cost residents money, interrupt employment, and cause emotional stress.
- ▶ **Health impacts to residents due to electric outages caused by extreme events and public safety power shutoffs implemented to reduce wildfire risk.** The increasing likelihood of planned and unplanned power outages will impact the health of residents, particularly those who are elderly, medically fragile, disabled, or non-native English speakers.
- ▶ **Housing supply challenges for lower wage workers due to rising housing costs caused by in-migration.** Higher housing costs are typical in areas, like Sandy, that are experiencing increasing housing demand relative to existing housing stock. Low-income and fixed-income households are at risk, as are seasonal workers. Young families are often more economically challenged as well and are likely to have difficulty securing housing they can afford. As housing prices rise, the likelihood of increasing numbers of unhoused people also rises. In addition, escalating costs of food and other supplies due to supply chain disruptions can add to the challenges these residents face.

- ▶ **Lack of personal planning and preparedness made worse by multiple accelerating hazards.** In the event of a natural disaster, the resilience of a community is directly related to the resilience of individual residents. A general lack of personal planning and preparedness among Sandy residents will bring increasing risk as wildfires, extreme heat, and severe storms increase over time. This is especially true for low-income people who do not have the financial resources to care for themselves and their families in an emergency, as well as elderly and disabled residents. Non-native English speakers and those who live in low-technology households may not have adequate access to information about what they should be doing to prepare.



Photo by Clyde Robinson (CC BY 2.0)

- ▶ **Mental health impacts due to multiple accelerating hazards.** Both punctuated, short-term disruptions, such as wildfire and extreme storms, as well as long-term stressors, such as extended drought, degradation of natural systems, and in-migration will add strain to the mental health of residents. Those who already struggle with mental health, first responders, healthcare workers, and children and youth will be particularly at-risk. Young people are increasingly feeling less hopeful about the future as climate impacts continue to escalate. In addition, loss of some outdoor recreation opportunities is likely to have a negative impact on the mental health of residents. More frequent disruptions will also negatively impact the mental health and personal resilience of residents, first responders, and public safety personnel.
- ▶ **Food insecurity due to wildfire, power loss, drought, and floods.** Changing conditions will have a global impact on food production, shipping, and cost with consequences to communities worldwide. Local agriculture supplies little of the food purchased in Sandy, so local food insecurity is likely to be correlated with punctuated events caused by natural disasters as well as chronic disruptions in other parts of the world. The most vulnerable residents are those who have low or fixed incomes and/or are not prepared to manage through food shortages.
- ▶ **Health impacts to outdoor workers due to wildfire smoke and extreme heat.** Air quality challenges due to extreme heat and wildfire smoke threaten the health of outdoor workers in fields such as construction, landscaping, facilities maintenance, public safety, transportation, and wildlife restoration. These risks are exacerbated for workers who are older, have low incomes, and/or

experience challenges accessing health care.

- ▶ **Emergency services overburdened by extreme heat, more severe storms, landslides, wildfire, and in-migration.** Local emergency services that have been designed to meet the past needs of Sandy residents are not prepared to address larger and more frequent disruptions. The increasing strain on these systems is likely to put Sandy residents and emergency service personnel at risk over time and increase tax rates, further impacting low-income residents.
- ▶ **Health care system overburdened by heat, smoke, extreme events, and in-migration.** More extreme weather events increase demand for health care services when the health care sector is already under-staffed. Residents in more rural, outlying areas, like Sandy, are expected to be at particularly high risk, along with residents who are medically fragile, elderly, disabled, or homeless. Other at-risk populations include tourists, non-native English speakers, low-income families, and emergency responders.
- ▶ **Decreased quantity and quality of drinking water due to drought, extreme heat, wildfire, and flooding.** Drinking water regulations ensure that water provided to residents meets a certain safety threshold. Water treatment plants are continually updated to meet the latest standards, but Sandy's drinking water system is already strained due to continued population growth. Residents who live outside the drinking water service area and rely on wells are at particular risk in the event of extended drought.
- ▶ **Impact to school activities due to reduced air quality caused by extreme heat and wildfire smoke.** Reduced outdoor air quality can impact indoor air quality if adequate mechanical systems are not in place. These issues tend to present themselves in late summer and early fall when sports are underway and students are walking and bicycling to school. In certain circumstances, air quality may be low enough to cancel outdoor activities. Students, volunteers, and school staff are most at-risk.

Vulnerabilities to Changing Conditions in Sandy, Oregon

► **Increased illness in residents due to extreme heat.**

Danger from extreme heat is often greatest in areas where the summer climate is mild, and people tend not to have air conditioning. Areas like Sandy can experience severe health impacts from extreme heat at significantly lower temperatures than in southern states where extreme heat is more common and air conditioning more prevalent. Populations at particular risk include the elderly, very young, disabled, medically fragile, and homeless populations. People with low- or fixed-incomes are more likely to not have air conditioning – or may not be able to afford to turn it on for prolonged heat events.

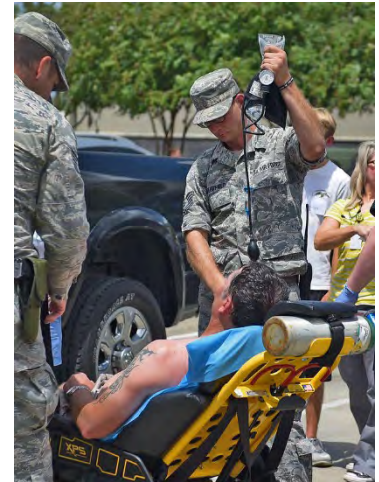


Photo by Master Sgt. Dan Farrell (CC BY 2.0)

- ### ► **Increased illness in residents due to wildfire smoke.** Wildfire smoke is particularly dangerous for people who have underlying medical conditions that put them at greater risk as well as the elderly, infants, and homeless populations. Low-income residents are less likely to have the means to protect their indoor air quality.

Local Culture

- ### ► **Loss of community identity caused by the downward trend of middle- and lower-income residents due to increased cost of housing caused by in-migration.** As housing prices rise, fewer people will be able to afford to live in Sandy, which will reduce the diversity of the community in terms of age, income, and potentially race or ethnic background. Rapid in-migration also threatens Sandy's small-town identity and the viability of local businesses as lower wage workers have difficulty living in Sandy.
- ### ► **Growing pressure on the younger generation due to all accelerating hazards.** Rapidly changing climate conditions are potentially impacting the childhood experiences of youth in Sandy. This is expected to worsen over time. Restrictions on recreational opportunities, added stress from more frequent disruptions, and general uncertainty are a concern for the youth population.
- ### ► **Impacts to local festivals, celebrations, and outdoor recreation opportunities due to extreme heat, wildfire risk, and smoke.** Events that are potentially at risk include Sandy Mountain Festival, Music Fair & Feast, the summer concert series in Meinig Park, the Mount Hood Farmer's Market, Movies in the Park, and

the Longest Day Parkway. Local vendors and residents may experience the loss of these local traditions and Sandy's nature-based culture.

Prioritized Vulnerabilities

The vulnerabilities listed below are based on the cross-sector dot voting exercise completed by the participants, but this is not a final prioritization. It is simply a way to help understand the relative priority of vulnerabilities across the community in preparation for developing strategies. Note that some similar vulnerabilities have been combined for the purpose of this list.

Higher Community Priority

Impacts to stream, riparian, and wetland ecosystems due to wildfire, larger storms, heat, drought, wildfire, and snowpack loss

Forest lands at risk due to wildfire, heat, drought, and reduced snowpack

Loss of native species due to increased pests and species migration caused by higher temperatures, drought, reduced snowpack, and wildfire

Strain on water supply and reduction in raw water quality due to extreme heat, snowpack loss, and drought

Impacts to agricultural production due to heat, drought, wildfire, and snowpack loss

Lack of personal planning and preparedness made worse by multiple accelerating hazards

Aging infrastructure (water, sewer, roads, equipment, playgrounds, culverts, etc.) overburdened by in-migration

Loss of access to services, amenities, and goods during a major emergency event, such as wildfire or earthquake

Mental health impacts due to multiple accelerating hazards

Growing pressure on the younger generation due to all accelerating hazards

Health care system overburdened by heat, smoke, extreme events, and in-migration

Loss of community identity caused by the downward trend of middle- and lower-income residents due to increased cost of housing caused by in-migration

Strain on local businesses and city facilities due to planned and unplanned power outages

Decreased quantity and quality of drinking water due to drought, extreme heat, wildfire, and flooding

Vulnerabilities to Changing Conditions in Sandy, Oregon

Lower Community Priority

Conversion of natural areas to developed and agricultural purposes due to in-migration

Impacts to local festivals, celebrations, and outdoor recreation opportunities due to extreme heat, wildfire risk, and smoke

More frequent evacuation and displacement due to wildfires

Threats to urban tree canopy due to extreme heat, drought, invasive pests, and snowpack loss

Food insecurity due to wildfire, power loss, drought, and floods

Lack of adequate local government staffing for ongoing operations and equipment as disruptions increase

Strain on wastewater treatment system due to increasing temperatures, drought, and reduced snowpack

Higher utility and insurance costs for businesses due to all accelerating hazards

Health impacts to residents due to electric outages caused by extreme events and public safety power shutoffs implemented to reduce wildfire risk

Housing supply challenges for lower wage workers due to rising housing costs caused by in-migration

Overburdening of electric system due to extreme events and in-migration

Increased traffic congestion due to in-migration

Lost productivity of outdoor workers due to heat and wildfire smoke

Reduction in summer tourist economy due to heat, wildfire, and smoke

Health impacts to outdoor workers due to wildfire smoke and extreme heat

Impact to school activities due to reduced air quality caused by extreme heat and wildfire smoke

Increased illness in residents due to extreme heat

Increased illness in residents due to wildfire smoke

Public buildings and utility infrastructure at risk due to wildfire

Reduction in recreation/tourist economy due to snowpack loss

Other potential vulnerabilities identified, but not prioritized:

- ▶ Lost productivity due to evacuation caused by wildfire
- ▶ Inability to house service workers due to in-migration driving up housing costs
- ▶ Business costs of mass evacuation of people and farm animals due to wildfire
- ▶ Emergency services overburdened by extreme heat, more severe storms, landslides, wildfire, and in-migration
- ▶ Strain on water treatment system due to public safety power shutoffs
- ▶ Greater strain on natural systems due to in-migration and more visitors


Meeting these Challenges

At the end of the workshop, participants identified the characteristics of Sandy that can be brought to bear on these challenges. Each participant wrote their answer on a piece of paper and folded it into a paper airplane. After launching the paper airplanes across the room, each participant picked one up paper airplane and read the written response aloud. The following list of community characteristics resulted from that exercise:

- | | | |
|-----------------------|------------------------|--------------------------------------|
| * <i>Unity</i> | * <i>Innovative</i> | * <i>Grit</i> |
| * <i>Networks</i> | * <i>Nature-loving</i> | * <i>Persistence</i> |
| * <i>Cooperation</i> | * <i>Adaptable</i> | * <i>Generous</i> |
| * <i>Perseverance</i> | * <i>Rooted</i> | * <i>Passionate</i> |
| * <i>Tenacity</i> | * <i>Strong</i> | * <i>Planning</i> |
| * <i>Teamwork</i> | * <i>Motivated</i> | * <i>We take care of each other.</i> |
| * <i>Dedicated</i> | * <i>Exploratory</i> | |



Photo by Tonya Graham



Resiliency Action Plan: Policy Implementation Guidance to Address Changing Conditions

Policy Development Process

As part of the comprehensive planning process, the City of Sandy undertook a process to develop policies and actions related to expanding resiliency to changing conditions and extreme weather events. This process involved two stakeholder workshops where City staff, local experts, and residents came together to identify vulnerabilities related to changing conditions and develop cross-sector strategies to address them. Participants reviewed and discussed information regarding accelerating trends related to extreme heat, drought, water availability, snowpack, wildfire, and other climate patterns to identify vulnerabilities to the City of Sandy. This effort resulted in the Vulnerability Assessment Report, included as part (a) to this appendix.

The participants then came together for a second workshop where strategies and related actions were identified, and information was gathered relative to the co-benefits, tradeoffs, relative cost, effectiveness, and responsible party. Some of these strategies were developed into policies included in the comprehensive plan. Detailed information about all strategies developed in this process are included in this appendix to help guide implementation of resilience-related policies included in the Comprehensive Plan or undertaken through other local government processes.



History and Heritage

Strategy: Work with the Sandy Area Chamber of Commerce and others to assess risks and determine necessary changes needed for local festivals, celebrations, and outdoor recreation opportunities due to extreme heat, wildfire risk, and wildfire smoke

Actions:

- Create more indoor recreation activities for kids and adults
- Consider resiliency policies in planning for new festivals
- Build shade structures over Centennial Plaza, possibly combined with urban tree canopy programs
- Install splash pads and misters especially in public gathering spaces like Centennial Plaza

Co-Benefits: More community events will create economic activity and increasing indoor opportunities will help provide recreation opportunities in winter weather.

Tradeoffs: More traffic and parking problems if summer events are more comfortable to attend. Indoor recreation reduces the connection to nature and outdoors.

Responsible Parties: Parks and Recreation Department, Sandy Area Chamber of Commerce, Sandy Mountain Festival Committee

Relative Cost: Low to High (depends on amount of construction/investment needed)

Effectiveness: High

Notes: Equity concerns about the cost to access indoor recreation and the potential use of tiered fees based on residency in Sandy city limits.



Transportation and Infrastructure

Transportation

Strategy: Utilize mixed-use zoning to reduce vehicle demand and address increased traffic congestion due to in-migration

Action: Modify the development code to incentivize, promote, and support mixed use development

Co-Benefits:

- Reduced traffic congestion by reducing trips
- Support for development of middle housing options
- Deeper sense of community and small-town feel
- Stronger local economy with increased revenue and small business opportunities
- Reduced energy demand for transportation
- More people likely to become transit users

Tradeoffs:

- May not be popular initially among residents, business owners, and developers – community education on the benefits is necessary
- Possible land use conflicts

Responsible Parties: City Council, Planning Commission, Development Services

Relative Cost: Low cost to the City, but potentially higher costs to developers if there is difficulty recruiting businesses or obtaining financing

Effectiveness: Potentially high over time

Water

Strategy: Implement a water conservation plan to reduce strain on the water treatment system due to increasing temperatures, drought, and reduced snowpack

Actions:

- Educate residents on importance of water conservation and how to conserve water
- Modify municipal codes related to water use in homes and businesses to require conservation
- Implement pipe improvement and replacement to reduce loss from leakage
- Investigate a tiered rate system to encourage conservation
- Explore rainwater catchment possibilities for residents and businesses

Co-Benefits:

- Financial benefit to utility ratepayers and local businesses
- Issue of decreased quantity and quality of drinking water due to drought, extreme heat, wildfire, and flooding also addressed with this strategy
- Transparency for developers
- Greater ecosystem health by reducing amount of water taken from waterways

Tradeoffs:

- Cost of upgrading infrastructure and providing incentives
- Possible economic disruption initially

Responsible Party: Public Works Department

Relative Cost: High

Effectiveness: High

Notes: Misinformation among ratepayers may create opposition to implementation.

Energy

Strategy: Develop a plan for extended planned and unplanned power outages for all City managed facilities and infrastructure

Actions:

- Require backup power, such as generators, for critical facilities and infrastructure
- Identify baseline repercussions of extended outages to measure progress over time
- Advocate for PGE to improve infrastructure to decrease planned outages

Co-Benefits:

- Health and safety of Sandy residents
- Less city employee stress and public confusion

Tradeoffs:

- Adding stress to the backup power system with more use will require more maintenance
- Reliance on non-renewable sources of fuel for backup power runs counter to emissions reduction goals
- Noise pollution
- Uses limited staff capacity
- Initial cost to purchase generators

Responsible Parties: City Manager, Public Works Department, Pacific Gas & Electric

Relative Cost: Low-High depending on what is implemented in the plan

Effectiveness: Medium-High



Other Infrastructure

Strategy: Develop electronic, cloud-based asset management system for all city facilities to address aging infrastructure (water, sewer, roads, equipment, playgrounds, culverts, etc.) overburdened by in-migration

Action:

- Purchase software and train employees on how to input data and use the software in decision-making

Co-Benefits:

- Reduction in overall cost and need for staff intervention
- Increased efficiency, safety, and customer satisfaction

Tradeoff: Initial cost (software and training)

Responsible Party: Public Works

Relative Cost: Initially high but lower over time once established

Effectiveness: High



Natural Hazards and Resiliency

Community Preparation

Strategy: Public education and training programs to address the lack of personal planning and preparedness made worse by multiple climate hazards

Action:

- Create a city-wide multi-stakeholder committee to oversee preparedness education

Co-Benefits:

- Additional space for regional collaboration
- Increased capacity for emergency response
- Expanded preparedness capabilities
- Opportunity to build community
- Lower anxiety in residents as they take action

Tradeoffs: It takes time to develop a committee, and the process could potentially be overly-bureaucratic

Responsible Party: City Council

Relative Cost: Low

Effectiveness: Medium

Notes: Cost is low, but the time that must be invested to implement is high.

Strategy: Evacuation route planning to address increasing threat of wildfire

Action: Use GIS to identify where people should go, where vulnerable populations are, where to take trailers with animals, etc.

Co-Benefits:

- Understanding of road capacity needed for everyone to evacuate safely
- Less panic during wildfire event
- Greater community conversations and action around preparedness
- Plan can be used for other natural hazards that require evacuation

Tradeoffs:

- Some may resist the process
- Possible increase in the City's liability

Responsible Parties: Public Works Department (connect with County's GIS resources), City Attorney (to determine liability), Development Services Department

Relative Cost: Low unless new roads need to be constructed

Effectiveness: High

Notes: Requires careful communications and significant community engagement

Strategy: Outreach and engagement with the Ready, Set, Go! readiness campaign to reduce risk to residents from wildfire and other major disruptions that require evacuation

Actions:

- Conduct workshops on evacuations and wildfire preparedness, including how to harden a structure against fire
- Develop and support a Community Emergency Response Team (CERT) program
- Development of information for City website
- Interagency coordination between the City of Sandy and Clackamas County to ensure seamless delivery of evacuation preparedness programs

Co-Benefits:

- Multifaceted preparedness
- Reduced mental stress

Tradeoffs: None identified

Responsible Parties: Fire District, County Emergency Management

Relative Cost: Low

Effectiveness: Medium

Notes: Consider equity in preparedness capabilities and livestock needs.

Strategy: Public education to help businesses and homeowners reduce wildfire risk

Actions:

- Provide technical, financial, and resource support for firescaping property
- Enforce municipal codes related to wildfire risk
- Implement fuels reduction program with local partners

Co-Benefits:

- Erosion control and water quality protection due to better design of landscaping
- Potentially lower insurance rates

Tradeoffs: None identified

Responsible Parties: Fire District, Clackamas County Disaster Management, City Manager, Nonprofit Partners

Relative Cost: Low

Effectiveness: Medium

Notes: Consider renters vs homeowners in terms of equity concerns related to cost of fire mitigation actions being passed on via higher rents in an already unaffordable housing situation.

Strategy: Assess public buildings and City managed facilities, utilities, open spaces, and park lands and implement projects to reduce risk of wildfire

Actions:

- Implement facility wildfire risk assessment, develop strategies to reduce risk, and connect those strategies to the asset management strategy
- Improve forest management for wildlife and fire risk
- Buffer (remove vegetation) around infrastructure, water tanks, water treatment plant, etc.
- Implement fire mitigation codes on new construction

Co-Benefits:

- Maintained services and access to utilities in the event of a wildfire
- Reduced loss of business and residential property due to wildfire

Tradeoffs: Diversion of funding

Responsible Parties: Public Works Department, Parks and Recreation Department, Oregon Trail School District, Local agencies

Relative Cost: High

Effectiveness: High

Natural Systems

Strategy: Work with Oregon Department of Fish & Wildlife and other agencies to improve forest health ahead of impacts from extreme heat, drought, and reduced snowpack

Actions:

- Communicate City goals to partner agencies and identify how the City can assist with the effort to improve forest health

- Identify appropriate preventative measures (thinning, plantings, defensible space, erosion control, etc.) and develop agreements to implement the measures

Co-Benefits:

- Healthier ecosystems
- Improved water quality
- Greater regional collaboration and better operational alignment between agencies
- More opportunity for win-win solutions for the City and other agencies

Tradeoffs:

- Possibility of conflicting priorities between the City and potential agency partners regarding decisions that prioritize human needs or one species over another
- Bureaucratic processes can slow progress and make collaboration difficult
- Potential lack of ownership of projects leading to poor implementation
- Risk of overharvesting

Responsible Party: City Manager, Development Services Department, Public Works Department, Parks and Recreation Department

Relative Cost: Low

Effectiveness: Low

Notes: Cost effectiveness for these projects may improve due to city leverage.

Strategy: Update City urban forestry code to address threats to urban tree canopy due to extreme heat, drought, invasive pests, and snowpack loss

Action:

- Review and update native species list, spacing guides, planting standards, street design, and retention requirements

Co-Benefits:

- Better air quality
- Improved quality of stormwater for natural systems
- Greater habitat value, particularly for birds
- More shade which lowers cooling bills related to air conditioning
- Reduced watering demand

Tradeoffs:

- Decreased flexibility for design of yards
- Modified planting lists will change the habitat created by the plantings
- Increased code enforcement responsibility

Responsible Party: Development Services Department

Relative Cost: Medium (mostly staff time)

Effectiveness: Medium-High

Notes: Stricter codes may increase development costs. Effectiveness is high only if developers and property owners care for trees and other plantings after they go into the ground - mainly watering consistently and planting in fall rather than late spring.

Strategy: Focus on and protect riparian areas to address impacts to stream, riparian, and wetland ecosystems due to wildfire, larger storms, heat, drought, wildfire, and snowpack loss

Actions:

- Conserve and/or protect existing riparian areas and wetlands by zoning to include riparian areas and providing stronger protection in the development code to proactively protect natural areas before they are lost
- Restoration planting after wildfire
- Fuels reduction in riparian zone
- Provide funding for conservation work

Co-Benefits:

- Less erosion
- Lower stream temperatures
- More wildlife corridors for species on the move

Tradeoffs:

- With development restricted in areas, it will lower incoming development revenue

Responsible Party: Development Services Department

Relative Cost: High

Effectiveness: High

Notes: Consider utilizing partner organizations to implement protection of riparian areas.

Strategy: Broad use of land efficiency measures to address conversion of natural areas to developed and agricultural purposes due to in-migration

Actions:

- Gather land use data and best practices before any Urban Growth Boundary expansion
- Increase protection of natural areas in the development code by instituting greater setback requirements for streams and wetlands

Co-Benefits:

- Managed environmental footprint

- Enhanced community feel
- Improved habitat connectivity
- Trails in more densely developed areas of town will likely reduce reliance on vehicles

Tradeoffs:

- Increased density of housing is generally unpopular
- Problems of increased urbanization related to traffic, parking, and waste

Responsible Party: Development Services Department, State Agencies, conservation organizations/partners

Relative Cost: Medium-High

Effectiveness: High

Notes: Community education should incentivize incremental change, increase regional coordination, and encourage more conservation of habitats over individual trees in developments.

Strategy: Work with Oregon Department of Fish & Wildlife (ODFW), conservation district, and local organizations to plan and implement projects in the community and watershed to address loss of native species due to increased pests and species migration caused by higher temperatures, drought, reduced snowpack, and wildfire

Actions:

- Implement education, technical assistance, and funding programs to private landowners to help them conserve habitat for native species
- Develop more protective land use and development code requirement and consistently enforce those regulations

Co-Benefits:

- Lower fire risk
- Improved habitat value
- Better water quality and community resilience

Tradeoffs:

- Less developable land will be available if land use requirements become more strict

Responsible Party: ODFW, local conservation groups, City Manager

Relative Cost: High

Effectiveness: High

Notes: Cost is higher for any funding programs, and lower for modifying code. Consider the need for community buy-in, education, and ensuring equitable outcomes related to code changes.

Strategy: Develop program to educate residents on tree health to address loss of native species due to increased pests and species migration caused by higher temperatures, drought, reduced snowpack, and wildfire

Actions:

- Partner with tree care service for low-cost and no-cost help to residents
- Develop materials and information with Friends of Trees and other programs to educate residents, especially through local events (such as the Longest Day Parkway), the City newsletter, and workshops for homeowners

Co-Benefits:

- Better air quality
- Improved bird and wildlife habitat
- More shade linked to greater water retention and carbon sequestration

Tradeoffs: None identified

Responsible Party: Public Works Department and Development Services Department

Relative Cost: Low-Medium

Effectiveness: Low-Medium

Notes: It will be important to help residents get the right tree in the right place and plant during the optimal time of year for effective tree growth. Education only efforts are likely to be less effective than education combined with tree care services.

Strategy: Work with agencies and stakeholders to reduce wildfire risk in forest lands

Actions:

- Advocate with forest management agencies to create a quality control advisory committee with city, county, federal and community partners to sustain ecological health by ensuring best practices are followed
- Greater public education so residents know how they can help

Co-Benefits:

- Community engagement that can be built upon for other wildfire risk reduction efforts
- Reduction in landslide risks
- Greater trust in government
- Stronger community relationships



Tradeoffs:

- Lead organization would need to give up some level of autonomy
- Using limited available time on an issue that the City does not control

Responsible Party: Fire Districts, City Manager, Oregon Department of Forestry, participating agencies and partners

Relative Cost: Medium

Effectiveness: High

Notes: It is important to ensure the opportunity to participate is inclusive.



Governance and Growth Management

Strategy: Ensure the municipal staffing needed for ongoing operations and equipment as disruptions increase

Actions:

- Assess existing and needed staff roles, identify most efficient role allocations, and determine baseline required staffing
- Determine why there is a lack of adequate staffing at the City of Sandy to meet the City's obligations through efforts such as a compensation study and assessment of work environment
- Identify ways to modernize, automate, or mechanize certain systems to streamline processes and gain efficiency, explore additional external contracts and volunteer programs, such as the Adopt-a-Park program and federally funded research internships

Co-Benefits:

- Increased budget and operations efficiency for taxpayers and utility ratepayers
- Improved employee morale
- Increased local business activity with potential contractors

Tradeoffs: None identified

Responsible Party: City Manager, Public Works Department

Relative Cost: Medium-Low

Effectiveness: Medium-Low

Notes: Effectiveness is based on the implementation of recommendations that come from the assessment exercise. Difficult decisions on tax and utility rates and other revenue sources may be needed.

Health and Community Wellness

Strategy: Ensure equitable access to education, protective gear, and enforcement of Occupational Safety and Health Agency (OSHA) rules to address health impacts to outdoor workers due to wildfire smoke

Actions:

- Train and develop community led advocacy teams to educate employers and workers and distribute personal protective equipment (PPE)

- Ensure education and training is accessible, including translation into other languages

Co-Benefits:

- Improved work conditions and productivity
- Increased worker engagement and empowerment

Tradeoffs:

- Potential retaliation when workers assert their need for PPE and enforcement of the rules
- Potential to increase and decrease trust as some residents will see this as government helping protect health and others may see it as an overreach

Responsible Party: Todos Juntos and other local nonprofits, OSU Extension Service, Clackamas County Health Department

Relative Cost: Medium

Effectiveness: High

Notes: Consider underserved communities and documentation status to ensure that all workers who need it have access to education, equipment, and training. Northwest Forest Worker Center has a similar program that may serve as a model.

Strategy: Assess school run outdoor activities and develop plans for alternate activities during times of reduced air quality caused by wildfire smoke and extreme heat

Actions:

- Develop programs to ensure indoor physical activities by creating indoor recess space and/or partnering with athletic clubs for additional spaces for sports activities
- Provide PPE for students traveling to and from school

Co-Benefits:

- Improved overall student health and reduced rates of acute asthma incidents
- Overall impact to health systems as fewer children need care during times of poor air quality
- Improved school performance and competitiveness

Tradeoffs:

- Loss of teaching space as more indoor space is used for activities

Responsible Party: Oregon Trail School District, Parks and Recreation Department, local youth sports clubs

Relative Cost: Low to High

Effectiveness: Medium

Notes: Costs are low for partnering, but high for developing new indoor spaces and programs. It will be important to ensure equitable access to masks for students during wildfire smoke events. Misinformation and family pressures could prevent PPE from being used by all students.

Strategy: Invest with the Oregon Trail School District to ensure HVAC systems are up to date so that school facilities protect students from extreme heat and wildfire smoke and can be used for community sheltering in those circumstances and during public safety power outages

Actions:

- Update the existing school facility assessment
- Develop HVAC upgrade plan
- Secure funding through bond measure or other source

Co-Benefits:

- Lower utility costs for the school district
- Lower hospital emergency room utilization during poor air quality events
- Lower impact to medical system
- Overall health improvement related to respiratory and cardiovascular conditions
- Increased community shelter capacity for poor air quality events
- Improved education environment and outcomes
- Improved energy efficiency

Tradeoffs:

- Refocusing of funds prioritizes this effort over other district needs

Responsible Parties: Oregon Trail School District, City Manager

Relative Cost: High

Effectiveness: High

Notes: None

Strategy: Provide education and assistance with air filtration to address increased illness in residents due to wildfire smoke

Actions:

- Educate the community about the risks of breathing wildfire smoke and how to limit exposure
- Provide assistance to low-income residents so they can have appropriate filtration systems in their homes
- Provide clean air shelters for both extreme heat and wildfire smoke

- Adjust building codes to encourage or require appropriate filtration

Co-Benefits:

- Lower utility costs
- Lower emergency department utilization
- Lower impact to medical system
- Overall health improvement
- Clean air shelters can also be used when there is a public safety shut off of electricity due to extreme wildfire weather

Tradeoffs: None identified

Responsible Party: Oregon Health Authority, Clackamas County Health and Disaster Management Departments, City Manager

Relative Cost: Medium

Effectiveness: Medium

Notes: City of Sandy's role would be to influence state and county level health programs and building codes. It will be important to focus attention on renters and residents in manufactured homes ensuring that cost, access for low-income and non-English speaking residents, and qualifications for funding are addressed. There may also be limited local capacity to complete weatherization projects. The City of Ashland's SmokeWise program may be a good model for this effort.

Strategy: Educate residents on action steps and how to be prepared to address mental health impacts due to multiple escalating hazards

Action:

- Partner with local nonprofits, the Sandy Post, churches, the Green Club at the high school, and/or other youth programs to create a mental health resilience program

Co-Benefits:

- Stronger community resilience due to strengthening individual resilience
- Improved mental health for residents of all ages

Tradeoffs: None identified

Responsible Party: AntFarm Youth Services, Other Local Nonprofits, City Manager

Relative Cost: Low-Medium

Effectiveness: Medium

Notes: Cost is determined by the scope of the program and effectiveness requires partnering with local organizations. The City's role is as convener and there will be a need to ensure

language accessibility. Consider the programs offered by the International Transformational Resilience Coalition.

Strategy: Provide opportunities for youth to help and engage in the community to counter the growing pressure on younger generations due to all escalating hazards

Actions:

- Promote and expand existing efforts, such as AntFarm Youth Services
- Educate youth about changing conditions so they understand the challenge
- Connect with general education strategies at the Oregon Trail School District
- Create a youth committee in local government
- Consider creating a youth seat on City Council
- Provide resilience centered mental health services focused on addressing accelerating disruptions
- Engage parents to encourage community-mindedness and service with their children

Co-Benefits:

- Education of parents and family members in the process of educating the children
- Tangible results in the community inspire other residents
- Long-term civic engagement and development of future leaders
- Workforce development for careers needed to address the larger resilience challenge

Tradeoffs: None identified

Responsible Party: AntFarm Youth Services, Oregon Trail School District, Todos Juntos, City Manager

Relative Cost: Low

Effectiveness: Medium-High

Strategy: Attract more healthcare providers and services to strengthen the local healthcare system which will be overburdened by heat, smoke, extreme events, and in-migration

Actions:

- Identify potential sites and develop a 24/7 urgent care facility, possibly using incentives
- Expand existing services at Adventist Health or develop alternative facilities
- Create community paramedic program to reduce non-emergency use of emergency services
- Attract more Emergency Medical Technicians and transportation providers based in the area

Co-Benefits:

- Improvement of general public health

- Removal of barriers to seeking healthcare

Tradeoffs:

- Competition with existing facilities may create conflict

Responsible Party: Economic Development Department, Clackamas County Health Department

Relative Cost: Medium

Effectiveness: High

Notes: Incentives will increase cost. Developers need to be able to cover their costs to build a facility and recruiting healthcare businesses is difficult without population size to support it, so an initial assessment showing the demand is, or will soon be, in Sandy may be an important first step.

Strategy: Encourage local food production to address food insecurity due to disrupted supply chains, wildfire, drought, and floods

Actions:

- Encourage residents to grow extra food for community food distribution programs
- Expand community gardens
- Expand farmers markets in size and/or duration
- Host at-home gardening education workshops

Co-Benefits:

- Improved health for residents
- Stronger community relationships
- Improves resilience and preparedness, particularly if combined with food preservation and storage education
- Supports pollinators

Tradeoffs:

- Increased water use during the summer when supplies will be lowest
- Changing conditions, especially extreme heat, may affect the growing season

Responsible Party: Parks and Recreation Department (community gardens), OSU Extension Service (education), Oregon Trail School District (community gardens), Ant Farm Youth Services (farmers market), Library (seed giveaway)

Relative Cost: Low

Effectiveness: Medium-High

Notes: It would be helpful to include teaching about new recipes and how to use/cook locally grown food. Due to existing clay soils, some areas of town may need help with soil amendments to facilitate successful food production.

Strategy: Work with Clackamas County and community organizations to educate employers and employees (especially outdoor workers) about protection during heat events

Actions:

- Enforce Occupational Safety and Health Agency (OSHA) guidelines
- Develop alternative work schedules to avoid/mitigate the hottest time of the day
- Identify point-person to address questions from employers and employees
- Develop materials with consideration for different levels of messaging, and identify appropriate communication channels

Co-Benefits:

- Decreased hospital visits
- Safe employment practices within Sandy for employers
- Greater accountability for health outcomes

Tradeoffs:

- Possible feeling of government overreach
- Possible negative impacts to work/life balance with new schedules

Responsible Party: Economic Development Department, Sandy Area Chamber of Commerce, Occupational Safety and Health Administration

Relative Cost: Low

Effectiveness: Medium-High

Notes: An education program for employers and outdoor workers about extreme heat may be combined with wildfire smoke program to leverage resources. The City of Sandy could consider leading this effort by using the program related to its own outdoor workers.

Strategy: Work with Clackamas County and community organizations to educate residents about how to stay safe during extreme heat events

Actions:

- Develop materials and key messaging, including translation of materials into other languages spoken in Sandy
- Identify organizational roles, point people, and communication channels in the community to share information when extreme heat is predicted

Co-Benefits:

- Relationship building
- Broader education and buy-in
- Leadership opportunities for residents and organizations

Tradeoffs:

- Management of the system and updating of information will take time
- Too many different audiences to effectively communicate to all of them
- Overburdening of community organizations

Responsible Party: Clackamas County Health Department, City Manager, local healthcare providers, community organizations, and business owners

Relative Cost: Low

Effectiveness: Medium

Notes: Cost reflects not re-inventing the wheel and instead relying on existing information and materials. Consider PublicAlerts.org.

Economic Development

Strategy: Work with the Sandy Area Chamber of Commerce and the Mt. Hood Economic Alliance to diversify recreational offerings to avoid a reduction in the recreation/tourist economy due to snowpack loss

Actions:

- Build a better transit hub and support SAM to access recreation opportunities
- Ensure City of Sandy representation in ski area expansion efforts
- Market recreation offerings
- Implement Public Transit Master Plan

Co-Benefits:

- Maintained revenue for City services
- More recreation opportunities
- Improved traffic management
- More revenue for the forest service and other government agencies

Tradeoffs:

- Maintaining or improving recreational economy means more traffic and greater greenhouse gas emissions and larger human impacts on forests and other natural areas.

Responsible Party: Economic Development Department, Parks and Recreation Department, Public Works Department

Relative Cost: Low

Effectiveness: Medium

Strategy: Work with partner nurseries to support agriculture operations in adapting to hotter, drier summer and fall seasons with less available water

Actions:

- Identify and leverage agriculture focused partnerships
- Survey nurseries to understand needs of agricultural sector
- Develop toolbox of solutions (new crops, etc.) that will help local agricultural producers adapt to changing conditions
- Provide incentives for nurseries to grow and sell more plants that are better suited to future growing conditions

Co-Benefits:

- Stronger local economy, including Farmers Markets
- City infrastructure needs supported and decreased strain on existing systems
- City will be more efficient and can leverage more grant opportunities

Tradeoffs:

- Potential for inappropriate scaling of operations and preferential crop and business treatment
- Potential oversaturation of market of agriculture/nursery businesses

Responsible Party: Economic Development Department, Public Works Department, Cooperative Extension Service

Relative Cost: Low

Effectiveness: High

Notes: City support is seasonal (effluent is discharged to nurseries in the summer).

Strategy: Refocus tourist season later into fall and/or earlier into spring to accommodate increasing heat, wildfire, and smoke

Actions:

- Invest in off-season activities and infrastructure
- Communicate relevant seasonal shifts to Destination Marketing Organizations that serve Sandy
- Partner with ski resort, outdoor recreation outfitters, and also with local organizations that can organize community festivals in shoulder seasons

Co-Benefits:

- Diversification of businesses

- Reduction in water use due to a lower number of people in town during the late summer when water supplies are lowest
- Increased livability for Sandy residents by balancing the tourist seasons
- Increased revenue for vacation rentals and other visitor economy businesses in the shoulder seasons

Tradeoffs:

- Potential for shifts in the timing of the need for seasonal workers could disrupt local economic systems that are attuned to the current schedule.

Responsible Party: Economic Development Department, Sandy Area Chamber of Commerce, Travel Oregon

Relative Cost: High

Effectiveness: High

Notes: Consider a possible increase in vacation rentals and potential for inequitable impacts to the community, particularly if additional effort in this area simply increases the tourist economy rather than shifting the focus in terms of the late summer season.

Strategy: Work with the Sandy Area Chamber of Commerce to help businesses weatherize their structures and take action to reduce insurance premiums where possible to address higher utility and insurance costs for businesses due to all hazards

Actions:

- Share information about weatherization programs with local businesses and provide application assistance
- Offer educational materials about how local businesses can take actions that will protect the insurability of their structures and address premium increases

Co-Benefits:

- Reduced draw on power grid
- Reduced energy costs for businesses

Tradeoffs:

- Costs must often be frontloaded by the business, even if there are incentives available
- Physical improvements can disrupt business operations

Responsible Party: Sandy area Chamber of Commerce, Economic Development Department

Relative Cost: Medium

Effectiveness: High

Notes: Costs are low for education, and higher for actual improvements. The Inflation Reduction Act provides many incentives for increasing energy efficiency and electrification that could be useful for a program like this.

Housing

Strategy: Encourage construction of workforce housing to address loss of community identity caused by the loss of middle-income and lower-income residents due to increased cost of housing caused by in-migration

Actions:

- Create a housing production strategy as required by HB 2003
- Update zoning and development standards to incentivize development of workforce housing
- Update System Development Charges and tax policies
- Inventory City-owned property and partner with housing nonprofits to build subsidized housing for local workers, such as teachers, city employees, and seasonal farm workers
- Provide incentives to landlords and property owners to provide lower cost rentals

Co-Benefits:

- Businesses have the workers they need, which strengthens the local economy and labor force
- Reduced transportation costs, congestion, and greenhouse gas emissions due to less commuting in and out of Sandy
- Stronger community connection as workers can live in the community and are more invested in Sandy
- Reduction in homelessness
- Young families can access starter homes and elderly residents can age in place

Tradeoffs:


- Limited land availability for single-family housing construction
- Negative affect on City revenues as incentives needed to encourage affordable development may offset tax and fee revenue for some period of time
- Greater demand for public services
- Increased density may impact other efforts related to wildfire and threaten the small town feel of Sandy if not done thoughtfully

Responsible Party: Development Services Department

Relative Cost: Medium

Effectiveness: High

Notes: Cost are generally low (mostly staff time) for policy changes, but high for housing development. The City of Sandy will need to educate and engage the community to avoid



neighborhood concerns around the development projects and will likely need to obtain state support to address infrastructure capacity needs. There is significant funding through the Bipartisan Infrastructure Law at the federal level and state funding coming available over the next several years that may be leveraged to address infrastructure needs.