PLANNING COMMISSION MEETING

Monday, February 26, 2024 at 6:30 PM
via Zoom

AGENDA

NOTICE: DUE TO INCLEMENT WEATHER, THIS MEETING IS ONLY BEING OFFERED VIRTUALLY

TO ATTEND THE MEETING ONLINE VIA ZOOM:

Please use this link: https://us02web.zoom.us/j/84152405947

Or by phone: (253) 215-8782; Meeting ID: 841 5240 5947

ROLL CALL

APPROVAL OF MINUTES

1. Approval of Minutes for January 22, 2024

REQUESTS FROM THE FLOOR - CITIZEN COMMUNICATION ON NON- AGENDA ITEMS

The Commission welcomes your comments at this time. Please see the instructions below:

-- If you are participating online, click the "raise hand" button and wait to be recognized.

-- If you are participating via telephone, dial *9 to "raise your hand" and wait to be recognized.

DIRECTOR'S REPORT

Next Planning Commission meeting: **April 22, 2024**

COUNCIL LIAISON AND PLANNING COMMISSIONER DISCUSSION

NEW BUSINESS

2. HCA and EOA Public Hearing before the Planning Commission

ADJOURN

Americans with Disabilities Act Notice: Please contact Sandy City Hall, 39250 Pioneer Blvd. Sandy, OR 97055 (Phone: 503-668-5533) at least 48 hours prior to the scheduled meeting time if you need an accommodation to observe and/or participate in this meeting.

Sandy Planning Commission
Regular Meeting
Monday, January 22, 2024

Chair Crosby called the meeting to order at 6:32 p.m.

1. MEETING FORMAT NOTICE: Instructions for electronic meeting

2. ROLL CALL

Commissioner Wegener – Present
Commissioner Poulin – Present
Commissioner Weinberg – Present
Commissioner Ramseyer – Present
Commissioner Myhrum – Present
Commissioner Vincent – Present
Chair Crosby – Present

Council Liaison Mayton – Present

Others present: Development Services Director Kelly O'Neill Jr., Executive Assistant Rebecca Markham, Senior Planner Patrick Depa, City Attorney Josh Soper

3. SELECTION OF CHAIR AND VICE CHAIR
Commissioner Wegener nominated himself as Chair and Commissioner Weinberg as Vice Chair. Commissioner Ramseyer seconded the motion. The new positions will take effect at the next Planning Commission hearing on February 26, 2024.

Motion: Motion to appoint Commissioner Wegener as Chair and Commissioner Weinberg as Vice Chair.
Moved by: Commissioner Wegener
Seconded by: Commissioner Ramseyer
Yes votes: All Ayes
No votes: None
Abstentions: None

4. APPROVAL OF MINUTES – November 27, 2023
Chair Crosby asked for any edits to the draft minutes. With no requested edits, Crosby declared the minutes approved.

5. REQUESTS FROM THE FLOOR – CITIZEN COMMUNICATION ON NON-AGENDA ITEMS:
None

6. DIRECTOR'S REPORT
Development Services Director Kelly O'Neill Jr. reminded the Commission of the next Planning Commission hearing on the 26th of February to discuss the Economic Opportunity Analysis and the Housing Capacity Analysis; both requiring a recommendation to City Council.

O'Neill also updated the Commission on the last steps to finalizing the Comprehensive Plan and mentioned they will most likely cover "Block 3" at a work session in April, with a final draft most likely ready sometime in May or June.

O'Neill completed his report with an update on the moratorium and said the City is still negotiating with DEQ and the EPA and stated it has been a very time consuming process.

7. CITY COUNCIL LIAISON REPORT
City Council Liaison Chris Mayton gave a brief update on the Sandy Community Campus Park project and the demolition progress to date.

Mayton also congratulated new Chair Wegener and Vice Chair Weinberg on their new positions with the Commission.

8. NEW BUSINESS:

8.1. Library Support Letter
Chair Crosby read a letter to the Commission from Library Director Sarah McIntyre. In the letter, McIntyre asked the Commissioners for a letter of support, showing the community is behind their public outreach efforts. McIntyre's letter explained that the library is looking for funding that would assist in paying for the necessary items to "outfit" their new public outreach vehicle.

Crosby suggested staff could draft a letter and each Commissioner could sign it.

Motion: Motion asking staff to draft a letter of support for the library and their public outreach efforts with signatures from each of the Commissioners.
Moved by: Commissioner Weinberg
Seconded by: Commissioner Wegener
Yes votes: All Ayes
No votes: None
Abstentions: None

8.2. Clear and Objective Audit Public Hearing
Chair Crosby opened the public hearing on File No. 23-046 DCA at 6:49 p.m. Crosby called for any abstentions, conflicts of interest, ex-parte contact, challenges to the jurisdiction of the Planning Commission, or any challenges to any individual member of the Planning Commission. No challenges were made, and no declarations were made by the Planning Commission.

Staff Report:
O'Neill provided a brief background on the efforts to start the Clear and Objective audit. He explained that over the last 4- 6 years, the City had a few legal challenges that had to do with our existing development code language and a few of those applications were appealed to LUBA (the Land Use Board of Appeals). In reaction to those challenges, the City hired MIG to assist with these code updates. He explained that the project has been a long and complicated process of scrutinizing over 300 pages of code language, and ensuring the language is "clear and objective".

Presentation:
Kate Rogers
Senior Planner
MIG, Inc.
506 SW 6th Ave #400,
Portland, OR 97204

Rogers went through her presentation that included information on "what it means to be clear and objective", the project purpose, state statutes, and other proposed amendments such as

recently passed affordable housing legislation. She also mentioned the audit includes the dark sky ordinance, exceptions for tree removal permits for the Parks Department, the TSP implementation, and the food and beverage cart updates. Rogers finished the presentation with analysis on the one public comment that staff received.

Commissioner Weinberg advised staff that additional housing bills will likely be passed sometime in February or March and asked if those updates could still be incorporated into this clear and objective audit. O'Neill explained that it wouldn't happen through these updates since it's towards the end of the project, but instead, staff plans to be more proactive in reviewing legislation moving forward. Rogers explained that even if the city code wasn't updated to align with new legislation, the state statue would still apply and supersede the city code if the city code wasn't updated to reflect new legislation.

Public Testimony:

Peggy Sheehan
Vice President Housing Development
Prestige Development
psheehan@prestigedev.com

Ms. Sheehan stated that Prestige Development is very excited about the affordable housing bills and would like to know how they would go about developing affordable multi family housing when they are not a religious organization and do not have a non-profit status.

Motion: Motion to close the public hearing at 7:16 p.m.
Moved By: Commissioner Wegener
Seconded By: Commissioner Ramseyer
Yes votes: All Ayes
No votes: None
Abstentions: None

Discussion:

The Commission went through the Development Code and discussed dozens of code provisions. Each of the Commissioners had questions or suggestions. During the discussion, City Attorney Josh Soper and MIG consultants Kate Rogers and Catherine Corliss answered questions and provided additional clarification on the proposed updates. The Commissioners also found a few formatting errors that were also noted for revision.

Note: Commissioner Weinberg had to leave the meeting at 8:57pm.

O'Neill explained that staff will go through the list of changes mentioned during the discussion and include those edits as an "exhibit" so that the City Council may easily follow the modifications that the Commission recommended.

Motion: Motion to approve and recommend to City Council, File No. 23-046 DCA with the mentioned changes, recommendations, and discussion points.
Moved By: Commissioner Wegener
Seconded By: Commissioner Ramseyer
Yes votes: All Ayes
No votes: None
Abstentions: None

9. ADJOURNMENT
Chair Crosby adjourned the meeting at 9:20 p.m.

_____
Chair Darren Wegener

Attest:

_____ Date signed:_____
Kelly O'Neill Jr.,
Development Services Director

SANDY
WHERE INNOVATION MEETS ELEVATION

39250 Pioneer Blvd
Sandy, OR 97055
503-668-5533

STAFF REPORT/FINDINGS OF FACT
TYPE IV COMPREHENSIVE PLAN AMENDMENTS

DATE OF HEARING:	February 26, 2024
NATURE OF APPLICATION:	Adoption of the Housing Capacity Analysis (HCA) and the Economic Opportunity Analysis (EOA) reports as support documents to the City of Sandy's Comprehensive Plan (Envision Sandy 2050)
APPLICATION TYPE:	Type IV Review – Legislative Amendments
APPLICABLE CRITERIA:	SMC Section 17.24 – Comprehensive Plan Amendments Procedures
APPLICANT:	City of Sandy
STAFF CONTACT:	Kelly O'Neill Jr, Development Services Director Patrick Depa, Senior Planner
FILE NO.:	23-049 CPA

BACKGROUND

In late 2021 the City of Sandy applied for and received a Technical Assistance Grant from the Department of Land Conservation and Development (DLCD) for $50,000. The grant helped fund the updates to the City's Comprehensive Plan. The City applied some of the grant money to contract with ECONorthwest, a planning and economics consultant firm, to develop a Housing Capacity Analysis (HCA) and Economic Opportunities Analysis (EOA).

In early 2023, City staff assembled a Technical Advisory Group for the purposes of reviewing the consultant's work and to have multiple opportunities for input in helping define and shape the findings their analysis revealed. The group consisted of staff, the executive director at the chamber of commerce, and a few local business owners. Over the course of several meetings, the Technical Advisory Group discussed the reports and their intended purpose, as well as the development of an action plan to implement the housing and economic policies.

In October 2023, the City held a joint City Council/Planning Commission meeting to discuss and provide input on a draft of the Economic Opportunities Analysis (EOA) report and in December 2023, a similar meeting was held to provide input on the Housing Capacity Analysis (HCA) report. In addition, the reports were presented and discussed at the December 6, 2023, Economic Development Advisory Board meeting.

SUMMARY

The Housing Capacity Analysis (HCA)

The Housing Capacity Analysis (HCA) report is intended to identify issues with residential land use and unmet housing needs. The HCA addresses the specific requirement of Oregon's Statewide Planning Goal 10 and the Goal 10 administrative rules at OAR 660-008.

The HCA evaluates whether the City of Sandy has enough land to accommodate 20 years of population and housing growth. It provides the factual basis for an update to the City's Comprehensive Plan Housing Element, as well as the development of an action plan to implement the housing policies. This report will be one of the guiding documents in any future decision to rezone or annex specific property. The report involves three major components:

- Residential Buildable Land Inventory (BLI). In Oregon, cities have Urban Growth Boundaries (UGBs) which must accommodate residential, employment, and other land needs for the next 20 years. The Residential Buildable Land Inventory identifies how much land within the UGB is already developed and how much remains available to meet future housing needs. The City of Sandy developed and adopted its latest Residential Buildable Lands Inventory in 2015. This HCA includes an update that shows lands that have been developed since 2015.

- Housing Capacity Analysis (HCA). The HCA is based on an official population forecast and identifies the number of households and the characteristics of households the city needs to plan for today and in future years. Furthermore, it identifies the different types of housing needed for households of different income levels. Based on this information, the report identifies how much land is needed to accommodate a variety of different housing types. Comparing the capacity of the current residential buildable land supply in the UGB to the identified residential land need will clarify if current plans and policies will meet these needs.

- Housing Strategy. The Housing Strategy will identify "how" to address identified housing needs. House Bill 2003 requires cities to develop a Housing Production Strategy (HPS) to promote development within the city to address housing needs identified under ORS 197.296 (6). The HPS will include recommended policies to meet the identified needs in ways that will provide housing choice for Sandy's residents. The City will start work on its HPS in 2024, after the HCA and Comprehensive Plan amendments have been adopted.

Economic Opportunities Analysis (EOA)

The Economic Opportunities Analysis (EOA) report is intended to identify issues pertaining to commercial and industrial land use and unmet economic needs. The Economic Opportunities Analysis (EOA) addresses the specific requirement of Oregon's Statewide Planning Goal 9 and the Goal 9 administrative rules at OAR 660-009.

The project goals of the report are to establish a clear economic development direction that identifies the city's strengths and opportunities, and its position in the broader Mt. Hood and east Clackamas County region. This project will identify employment opportunities and job creation in Sandy by identifying industrial/employment land needs and developing a catalog of prospective industries. The EOA report presents an analysis of land availability and capacity for employment uses and the employment forecast for Sandy, as well as an analysis of potential growth industries in Sandy.

The HCA and EOA documents will be crucial in the review of the existing goals and policies in the Comprehensive Plan update and will be the foundation in the development of new policies and goals for Envision Sandy 2050. The City of Sandy last amended the majority of its existing Comprehensive Plan housing and economic policies in 1997.

The purpose of this hearing is to review and consider the adoption of these reports to act as the supporting documents in the development of new and updated comprehensive plan policies and goals. Furthermore, the Commission's review should determine if the reports and recommendations made by ECONorthwest are sufficient to address their intended purpose and use and arrive at a recommendation to the City Council.

EXHIBITS

Exhibit A. Draft Housing Capacity Analysis (HCA)

Exhibit B. Draft Economic Opportunities Analysis (EOA)

Exhibit C. Draft Ordinance Nos. 2024-02 and 2024-03

GENERAL FINDINGS OF FACT

1. The City of Sandy's Housing Capacity Analysis deadline for adoption by the Department of Land Conservation and Development (DLCD) for Oregon cities is 2025.

2. By updating and adopting this Housing Capacity Analysis (HCA), the City of Sandy will adhere to Oregon House Bill 2003 (2019) and ORS 197.296.

3. Notice was provided to the Department of Land Conservation and Development on November 30, 2023. No comments were received from any state or federal agency.

4. The Housing Capacity Analysis (HCA) and the Economic Opportunities Analysis (EOA) reports (legislative amendments) have been reviewed for conformance to their applicable Statewide Planning goals:
    a) HCA – Goals 1, 2, 10, 11, and 12.
    b) EOA – Goals 1, 2, 9, 11, and 12.

DECISION CRITERIA

SMC Chapter 17.24 provides the criteria for Type IV Comprehensive Plan legislative amendments. The recommendation by the Planning Commission and the decision by the City Council shall be based on consideration of the following factors. The decision-making criteria and findings are as follows.

Section 17.24.70. Review criteria.

Comprehensive Plan amendments shall be reviewed to assure consistency with the purposes of this chapter, policies of the Comprehensive Plan, and any other applicable policies and standards adopted by the City Council. Amendments shall be approved only when the following findings are made:

A. The change being proposed is the best means of meeting the identified public need; and

The findings for criteria A are addressed for both the HCA & EOA.

5. City governments are responsible for the development of local comprehensive plans. The City is addressing the "Plan Amendment and Update Polices" of the Comprehensive Plan by considering the adoption of a new Housing Capacity Analysis (HCA) and an Economic Opportunities Analysis (EOA) report. Development Services staff believe that these technical reports are the best means of meeting the requisite for a comprehensive, up-to-date plan for developing and maintaining the City's housing and economic development needs. As Sandy is anticipated to continue to grow in population and employment, these plans appropriately address forecasted needs using industry best practices in assessments and recommendations.

Conclusion: Criteria met.

B. The change conforms to all applicable Statewide Planning Goals.

The findings for criteria B pertaining to the HCA & EOA are evaluated separately as analyzed in findings 6 through 15.

The Housing Capacity Analysis (HCA)

Goal 1: Citizen Involvement

6. Public involvement is a required part of land use planning in Oregon. This requirement is one of the things that make Oregon's land use planning program unique. The requirement for public participation is written in the first goal of nineteen in the statewide land use planning system.

   Goal 1 calls for "the opportunity for citizens to be involved in all phases of the planning process."

Findings: The City has discussed this topic openly at multiple joint City Council/ Planning Commission meetings and the City will hold public hearings before both the Planning Commission and City Council to afford the public the opportunity to be involved. Notice of the two hearings was posted in multiple public places, published in the Sandy Post, posted on the City's website, and promoted in the monthly City Newsletter. Notice was provided to the Department of Land Conservation and Development on November 30, 2023. The City created a Technical Advisory Group for the purpose of reviewing the consultant's work and to have multiple opportunities for input. Besides staff, the group consisted of the executive director at the chamber of commerce and a few local business owners. Goal 1 public involvement requirements related to the HCA are met.

Goal 2: Land Use

7. Goal 2 requires each local government in Oregon to have and follow a comprehensive land use plan and implementing regulations. Cities and counties must build their comprehensive plans on a factual base and follow their plan when making decisions on appropriate zoning.

   Findings: The proposed Housing Capacity Analysis (HCA) report will create policy that will remove uncertainty surrounding specific housing development needs while maintaining desired community outcomes. The HCA assists the City in compiling strong policies in the comprehensive land use plan and implementing regulations. The completion of the HCA report fulfills Statewide Land Use Planning Goal 2 by building the City's comprehensive plan on a factual base where the City can follow their plan when making decisions on appropriate zoning.

   Following OAR 660-025-0010, the City of Sandy completed the HCA report fulfilling the periodic review obligation and to ensure that the comprehensive plan and land use regulations remain in compliance with the statewide planning goals adopted pursuant to ORS 197.230, the commission's rules and applicable land use statutes.

   This will assist in creating comprehensive plan policies that are consistent with State law and will have the long-term effect of providing housing options that meet the needs of all Sandy residents. Goal 2 land use requirements related to the HCA are met.

Goal 10: Housing

8. ORS 197.295-314 and 197.475-490 and Oregon Administrative Rule (OAR) 660-008 implement Goal 10, and the OAR requires that cities analyze housing needs to ensure opportunity for the provision of adequate numbers of needed housing units, the efficient use of buildable land within urban growth boundaries (UGBs), and to provide greater certainty in the development process so as to reduce housing costs.

Findings: As housing supply is a critical part of the solution to meeting future housing demand, the Housing Capacity Analysis (HCA) will be analyzed as part of the upcoming Comprehensive Plan review to evaluate the degree to which Sandy's land use plan can meet the housing needs identified by the HCA.

Furthermore, recommendations in the HCA report will be analyzed for inclusion into a housing-specific section of an updated Comprehensive Plan to provide specific housing policy guidance for Sandy going forward.

As detailed in Exhibit 1 in the HCA, Sandy's population within its urban growth boundary (UGB) is expected to grow by around 6,350 people between 2023 and 2043, at an average annual growth rate of 1.9%.

Exhibit 1. Forecast of Population Growth, Sandy UGB, 2023 to 2043
Source: ECONorthwest based on US Decennial Census 2000, and Portland State University, Population Research Center 2020.

13,877	20,227	6,350	46% increase
Residents in 2023	Residents in 2043	New Residents 2023 to 2043	1.9% AAGR

To accommodate the city's forecasted population growth of 6,350 people, Sandy needs to plan for 2,424 new dwelling units or about 121 new dwelling units per year 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.

The City will add additional goals and policies relating to housing in the Envision Sandy 2050 Comprehensive Plan. The HCA has a range of strategies and action items that the City may consider that are consistent with the findings in the HCA report and will incorporate them into the Comprehensive Plan.

House Bill 2003 requirements stipulate that an HCA must be updated every eight (8) years. Keeping the HNA up to date will allow the City to periodically take stock of housing demand and supply in the community, undertake a critical review of housing policy with those factors in mind, and adjust accordingly. Goal 10 housing requirements related to the HCA are met.

Goal 11: Public Facilities

9. This goal is to establish policies to plan and develop a timely, orderly, and efficient arrangement of public facilities and services to serve as a framework for urban and rural development.

Findings: The City's comprehensive plan contains an acknowledged Goal 11 element that contains policies to ensure sufficient and adequate public services are available (or will be available as appropriate) to serve lands within the UGB.

Sandy will need to address wastewater system deficiencies to support future employment growth. To meet projected demand, Sandy has plans to fix aging sewer pipes, upgrade Sandy's existing treatment plant, and expand Sandy's wastewater system capacity, including potentially establishing an alternative discharge location. Sandy's plans for its wastewater system upgrades will allow Sandy to accommodate the types and amounts of growth forecast in the HCA. Goal 11 public facility requirements related to the HCA are met.

Goal 12: Transportation

10. This goal is to establish policies to provide and encourage a safe, convenient, and economic transportation system.

Findings: The City's Comprehensive Plan with respect to Goal 12, its transportation system plan, and its standards governing transportation and transportation-related facilities are not affected by this decision. The City's comprehensive plan contains an acknowledged Goal 12 element that contains policies to ensure sufficient and adequate transportation facilities and services are available (or will be available as appropriate) to serve lands within the UGB. It should be noted that the TPR is triggered when a post acknowledgment amendment "significantly affects" a transportation facility. The City finds that the HCA does not meet the definition of a "significant effect" pursuant to OAR 660-012-0060(1)(a) - (c) because it will not: (1) change the functional classification of an existing or future facility; (2) change the standards implementing the functional classification system; or (3) result in any of the effects listed in 0060(1)(c)(A)-(C). Goal 12 transportation requirements related to the HCA are met.

The Economic Opportunities Analysis (EOA)

Goal 1: Citizen Involvement

11. Public involvement is a required part of land use planning in Oregon. This requirement is one of the things that make Oregon's land use planning program unique. The requirement for public participation is written in the first goal of nineteen in the statewide land use planning system.

Goal 1 calls for "the opportunity for citizens to be involved in all phases of the planning process."

Findings: The City has discussed this topic openly at multiple joint City Council/ Planning Commission meetings and the City will hold public hearings before both the Planning

Commission and City Council to afford the public the opportunity to be involved. Notice of the two hearings was posted in multiple public places, published in the Sandy Post, posted on the City's website, and promoted in the monthly City Newsletter. Notice was provided to the Department of Land Conservation and Development on November 30, 2023. The City created a Technical Advisory Group for the purpose of reviewing the consultants work and to have multiple opportunities for input. Besides staff, the group consisted of the executive director at the chamber of commerce and a few local business owners. Goal 1 public involvement requirements related to the EOA are met.

Goal 2: Land Use

12. Goal 2 requires each local government in Oregon to have and follow a comprehensive land use plan and implementing regulations. Cities and counties must build their comprehensive plans on a factual base and follow their plan when making decisions on appropriate zoning.

    Findings: The proposed Economic Opportunities Analysis (EOA) report will create policy that will remove uncertainty surrounding specific economic development needs while maintaining desired community outcomes. The EOA assists the City in compiling strong policies in the comprehensive land use plan and implementing regulations. The completion of the EOA report fulfills Statewide Land Use Planning Goal 2 by building the City's comprehensive plan on a factual base where the City can follow their plan when making decisions on appropriate zoning.

    This will assist in creating comprehensive plan policies that are consistent with State law and will have the long-term effect of providing economic development options that meet the needs of all Sandy residents. Goal 2 land use requirements related to the EOA are met.

Goal 9: Economy

13. The purpose of Goal 9 planning is to make sure cities and counties have enough land available to realize economic growth and development opportunities. Commercial and industrial development takes a variety of shapes and leads to economic activities that are vital to the health, welfare, and prosperity of Oregon's citizens. To be ready for these opportunities, local governments perform Economic Opportunity Analyses based on a 20-year forecast of employment growth.

    Findings: Sandy's Economic Opportunities Analysis (EOA) report is consistent with the requirements of statewide planning Goal 9 and the Goal 9 administrative rules (OAR 660-009). Goal 9 describes the EOA as "an analysis of the community's economic patterns, potentialities, strengths, and deficiencies as they relate to state and national trends" and states that "a principal determinant in planning for major industrial and commercial developments should be the competitive advantage of the region within which the developments would be located."

The primary goals of the EOA are to (1) project the amount of future employment growth within the Sandy city limits and employment land areas in the Urban Growth Boundary (UGB) between 2023 and 2043, (2) evaluate the existing employment land supply within Sandy to determine if it is adequate to meet that need, and (3) to fulfill state planning requirements for a twenty-year supply of employment land. The proposed EOA updates the following:

1) Employment Forecast for the planning period (2023-2043);
2) Employment and Land Demand; and,
3) The Buildable Lands Inventory.

Employment Forecast

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.

Employment and Land Demand

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 Buildable Lands Inventory

The buildable lands inventory is intended to identify commercial and industrial lands that are available for development for employment uses within the Sandy UGB. The inventory is sometimes characterized as supply of land to accommodate anticipated employment growth. Population growth and employment growth both drive demand for land.

Land Base

The land base for the Sandy employment Buildable Lands Inventory (BLI) includes all tax lots in the Urban Growth Boundary (UGB) in plan designations that allow for

employment. Some tax lots in these plan designations are in zones that do not currently permit commercial or industrial development, such as Single-Family Residential (SFR), Parks & Open Space (POS), and High Density Residential (R-3). These tax lots were still designated as eligible for development due to development status being applied based on the comprehensive plan designation.

Exhibit 14 in the EOA shows the land base by plan designation in the UGB.

Exhibit 14. Employment Land Base by Plan Designation, Sandy UGB, 2022

Plan Designation/Zone	Number of taxlots	Percent	Total taxlot acreage	Percent (total acreage)
Commercial	**364**	**83%**	**384**	**65%**
Central Business District (C-1)	231	53%	54	9%
General Commercial (C-2)	130	30%	329	56%
Parks & Open Space (POS)	2	0%	0	0%
SFR - Single Family Residential (SFR)	1	0%	0	0%
Industrial	**65**	**15%**	**195**	**33%**
Industrial Park (I-1)	17	4%	39	7%
Light Industrial (I-2)	33	8%	76	13%
General Industrial (I-3)	14	3%	80	14%
High Density Residential (R-3)	1	0%	0	0%
Village Commercial	**7**	**2%**	**9**	**2%**
Village Commercial (C-3)	7	2%	9	2%
Total	**436**	**100%**	**588**	**100%**

Source: ECONorthwest analysis, City of Sandy, Clackamas County

Buildable Area Status

Exhibit 15 in the EOA shows the total acres of commercial and industrial tax lots classified by development status. The EOA uses a rule-based classification to define an initial development status. Development status was confirmed through a series of reviews by ECONorthwest and City staff, based on local knowledge and review of aerial maps.

Exhibit 15. Employment Acres by Classification and Plan Designation, Sandy UGB, 2022

Plan Designation/Zone	Total Acres	Committed Acres	Constrained Acres	Buildable Acres Unconstrained Vacant & Partially Vacant
Commercial	**384**	**168**	**84**	**132**
Central Business District (C-1)	54	48	6	1
General Commercial (C-2)	329	120	78	131
Industrial	**195**	**92**	**49**	**54**
Industrial Park (I-1)	39	26	9	4
Light Industrial (I-2)	76	57	11	8
General Industrial (I-3)	80	9	29	42
Village Commercial	**9**	**3**	**1**	**6**
Village Commercial (C-3)	9	3	1	6
Total	**588**	**263**	**134**	**191**

Source: ECONorthwest analysis, City of Sandy, Clackamas County Note: The POS, SFR, and R3 zones are not shown because they accounted for only fractions of an acre and no buildable acreage. Additionally, values are rounded to the nearest whole number. Therefore, value sums may appear to be off by a value of one.

Vacant Buildable Land

Exhibit 18 in the EOA shows buildable acres (i.e., acres in tax lots after constraints are deducted) for vacant and partially vacant land by plan designation. It should be noted that tax lots shown as partially vacant do not distinguish the part of the tax lot that is unavailable for development.

Exhibit 18. Buildable Acres in Vacant/Partially Vacant Tax Lots by Plan Designations, Sandy UGB, 2022

Plan Designation/Zone	Total Buildable Acres	Buildable Acres on Vacant Lots	Buildable Acres on Partially Vacant Lots
Commercial	**132**	**51**	**81**
Central Business (C-1)	1	-	1
General Commercial (C-2)	131	51	81
Industrial	**54**	**23**	**30**
Industrial Park (I-1)	4	4	-
Light Industrial (I-2)	8	2	5
Heavy Industrial (I-3)	42	17	25
Village Commercial	**6**	**2**	**3**
Village Commercial (C-3)	6	2	3
Total	**191**	**76**	**115**

Source: ECONorthwest analysis, City of Sandy, Clackamas County Note: The POS, SFR, and R3 zones are not shown because they contained no buildable acres. Additionally, values are rounded to the nearest whole number. Therefore, value sums may appear to be off by a value of one.

Comparing this inventory to the 20-year forecast of employment land needs generated earlier in this analysis indicates that the City of Sandy's UGB does have the adequate land capacity to accommodate its forecasted needs over the planning horizon of 2023-2043 for commercial development. The overall projected demand for employment land in aggregate industrial land over the planning horizon exceeds the estimated developable inventory by 9 acres.

Some of this anticipated industrial land deficit can be met on commercial land, assuming the manufacturing or production use does not produce significant levels of noise or odor. Sandy has few opportunities for midsized and larger industrial opportunities, which may create barriers to growth of manufacturing and related uses. This anticipated industrial deficit can also be accommodated through increases in land use efficiency within the existing UGB.

The City will add additional goals and policies relating to Economic Development in the Envision Sandy 2050 Comprehensive Plan. The BLI has a range of strategies and action items that the City may consider that are consistent with the findings in the EOA report

and may add all or most of them into the Comprehensive Plan. Goal 9 economy requirements related to the EOA are met.

Goal 11: Public Facilities

14. This goal is to establish policies to plan and develop a timely, orderly, and efficient arrangement of public facilities and services to serve as a framework for urban and rural development.

Findings: The City's comprehensive plan contains an acknowledged Goal 11 element that contains policies to ensure sufficient and adequate public services are available (or will be available as appropriate) to serve lands within the UGB.

Sandy will need to address wastewater system deficiencies to support future employment growth. To meet projected demand, Sandy has plans to fix aging sewer pipes, upgrade Sandy's existing treatment plant, and expand Sandy's wastewater system capacity, including potentially establishing an alternative discharge location. Sandy's plans for its wastewater system upgrades will allow Sandy to accommodate the types and amounts of growth forecast in the EOA. Goal 11 public facility requirements related to the EOA are met.

Goal 12: Transportation

15. This goal is to establish policies to provide and encourage a safe, convenient, and economic transportation system.

Findings: The City's Comprehensive Plan with respect to Goal 12, its transportation system plan, and its standards governing transportation and transportation-related facilities are not affected by this decision. The City's comprehensive plan contains an acknowledged Goal 12 element that contains policies to ensure sufficient and adequate transportation facilities and services are available (or will be available as appropriate) to serve lands within the UGB. It should be noted that the TPR is triggered when a post acknowledgment amendment "significantly affects" a transportation facility. The City finds that the EOA does not meet the definition of a "significant effect" pursuant to OAR 660-012-0060(1)(a)-(c) because it will not: (1) change the functional classification of an existing or future facility; (2) change the standards implementing the functional classification system; or (3) result in any of the effects listed in 0060(1)(c)(A)-(C). Goal 12 transportation requirements related to the EOA are met.

RECOMMENDATION

The Sandy Comprehensive Plan is a legislative regulatory guidebook intended to regulate development and guide growth for the city of Sandy. However, the Comprehensive Plan also needs to be amended by introducing revised supportive technical documents over time to respond to new case law and legislation. Staff believes that the new Housing Capacity Analysis (HCA) and Economic Opportunities Analysis (EOA) technical reports are in full compliance with all state statutes and administrative rules.

Staff recommends the Planning Commission review the proposed Housing Capacity Analysis (HCA) and Economic Opportunity Analysis (EOA) documents and recommend approval to the City Council.

City of Sandy
Housing Capacity Analysis

January 2024

Prepared for: City of Sandy

DRAFT Report

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Acknowledgements

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Executive Summary

The City of Sandy has changed considerably since it last conducted a housing capacity analysis (HCA) in 2015. Sandy grew from 9,570 people in 2010 to 12,991 people in 2022, an addition of 3,421 people or 36% growth. Between 2014 and May 2023, 852 new units were built in the City of Sandy, of which 69% were for single-family units and 31% for multi-dwelling units.

Sandy, much like Clackamas County and the broader Portland metro region, has witnessed a surge in housing costs. Median home sale prices increased 80% between December 2015 and December 2022, from $264,000 to $475,000. In 2020, 32% of all households in Sandy were cost burdened. Cost burden was most common among renters, with 60% of renters experiencing cost burden in 2020—33% of which were severely cost burdened.

Concerns about housing affordability affect people who live and work in Sandy. Many workers in Sandy cannot afford to live in Sandy. In 2021, the average worker's wage was $43,856. To cover the $1,840 average rent plus utilities, a household needs at least two people earning average or higher wages. The median home sales price reached $475,000 in December 2022, making it unaffordable even for higher-wage two-worker households, which would need to earn around $146,000 annually. This situation poses challenges for residents who have grown up in Sandy and are now forming their own households, as it is becoming increasingly unaffordable to rent and acquire starter homes.

This report presents Sandy's Housing Capacity Analysis for the 2023 to 2043 period. It considers these issues and is intended to comply with statewide planning policies that govern planning for housing and residential development, including Goal 10 (Housing) and OAR 660 Division 8. The methods used for this study generally follow the *Planning for Residential Growth* guidebook, published by the Oregon Transportation and Growth Management Program (1996).

This report focused on the technical analysis to understand Sandy's housing needs over the next twenty years. It presents information about buildable land and residential capacity in Sandy, as well as expected population and housing growth. It identifies key housing needs and provides information necessary to develop policy responses to Sandy's housing needs.

The technical analysis, which is the focus of this report, required a broad range of assumptions that influenced the outcomes. The City of Sandy and ECONorthwest solicited input about these assumptions from the City's Technical Advisory Committee, Planning Commission, City Council, and the public. Local review and community input were essential to developing a locally appropriate and politically viable housing capacity analysis that will feed into *Sandy's Housing Production Strategy* report.

How much population growth is Sandy planning for?

Sandy's population within its urban growth boundary (UGB) is expected to grow by around 6,350 people between 2023 and 2043, at an average annual growth rate of 1.9%.

Exhibit 1. Forecast of Population Growth, Sandy UGB, 2023 to 2043
Source: ECONorthwest based on US Decennial Census 2000, and Portland State University, Population Research Center 2020.

13,877	20,227	6,350	46% increase
Residents in 2023	Residents in 2043	New Residents 2023 to 2043	1.9% AAGR

How much housing will Sandy need?

To accommodate the city's forecasted population growth of 6,350 people, Sandy needs to plan for 2,424 new dwelling units or about 121 new dwelling units per year 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. In 2021, the average wage for people working in Sandy was $43,856. People earning this amount can afford monthly housing costs of about $1,100 or $2,200 for a two-worker household earning average wages.

This planning approach builds upon the findings of Sandy's 2015 Urbanization Study, which projected that 69% of new housing would be for single-family detached and attached units, while 31% would consist of duplexes, triplexes, quadplexes, and multi-dwelling units with five or more units per structure. To better address the increasing demand for affordable housing options in Sandy, this projection assumes that a larger percentage of duplexes, triplexes, quadplexes, and multi-dwelling units (5+) will be developed in Sandy over the 20-year period. Recent development trends in Sandy have also demonstrated a shift toward more multi-dwelling development, illustrating that changes in Sandy's housing market are underway.

How much buildable residential land does Sandy currently have?

Sandy has 657 acres of unconstrained vacant or partially vacant land, which can accommodate over 3,500 dwelling units (Exhibit 70). Sandy has approximately 449 acres available in the SFR zone, 93 acres in R-1, 68 acres in R-2, 28 acres in R-3, and 19 acres in C-2.[1]

What are the key housing needs in Sandy?

- **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

[1] Note: ECONorthwest reduced the "total unconstrained buildable acres" in the C-2 zone on the assumption that about 15% of vacant land in commercial areas will develop with housing, based on historical development in these plan designations.

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%.

What are the key findings of the Housing Capacity Analysis?

The key findings and conclusions of Sandy's Housing Capacity Analysis are that:

- **Sandy's population is forecast to grow slower than in the past.** 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%.
- **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.
- **Sandy's housing needs require an increase in affordable options for both renters and homeowners, including a greater variety of attached and multi-dwelling housing types.** Historically, around 79% of Sandy's housing consisted of single-family detached homes. While it is projected that 60% of new housing in Sandy will be single-family detached, the city must also create opportunities for the development of other housing types, including single-family attached homes (7% of new housing), duplexes, triplexes, and quadplexes (5% of new housing), and multi-dwelling structures with five or more units (28% of new housing).[2]
  - Several factors are driving this shift in housing demand in Sandy, including changing demographics and decreasing housing affordability. Household formations among millennials and Gen Zers, as well as the aging of baby boomers, will generate demand for both rental and owner-occupied housing, spanning a range of options from single-family detached homes to accessory dwelling units, townhouses, duplexes, triplexes, quadplexes, and multi-dwelling structures. Some millennials and Gen Zers along with aging baby boomers may prefer housing in walkable neighborhoods with convenient access to services. Moreover, some housing units must be spacious enough to accommodate growing families while remaining reasonably affordable.

[2] This housing mix aligns with Sandy's anticipated need for a broader range of housing types, catering to a wider spectrum of price points than currently available in Sandy's housing stock. This planning approach builds upon the findings of Sandy's 2015 Urbanization Study, which projected that 69% of new housing would be for single-family detached and attached units, while 31% would consist of duplexes, triplexes, quadplexes, and multi-dwelling units with five or more units per structure.

- Sandy complied with the requirements of House Bill 2001 to allow duplexes on lots where single-family detached housing is allowed. Enabling a broader range of housing options in more areas is expected to result in a shift in the housing mix developed over the next two decades, especially in regions with significant expanses of vacant buildable land.
- Failure to diversify housing types and provide housing options affordable to households with incomes below 80% MFI ($91,500), will perpetuate affordability challenges. About 32% of Sandy's households are cost burdened (paying more than 30% of their income on housing), including a cost burden rate of 60% for renter households. However, providing opportunities for housing affordable to households with incomes below 80% of MFI is likely to require more than zoning code changes, an issue that will be addressed in Sandy's Housing Production Strategy.

- **Sandy needs more housing options affordable to lower and middle-income households.** Sandy requires more housing options that cater to lower and middle-income households, encompassing those with extremely low incomes, very low incomes, individuals experiencing homelessness, and families with low to middle incomes. These housing needs encompass both the current unmet demands for housing (from those experiencing cost burden and homelessness) as well as the anticipated requirements for new households throughout the twenty-year planning duration.
  - About 32% of Sandy's households have extremely low incomes or very low incomes, with household incomes below $57,000. At most, these households can afford $1,430 in monthly housing costs. The average asking price for a multi-dwelling unit with utilities was $1,840 in 2022. Development of housing affordable to these households (either rentals or homes for sale) rarely occurs without government subsidy or other assistance. Meeting the housing needs of extremely low–income and very low–income households will be a significant challenge to Sandy.
  - About 47% of Sandy's households have low or middle incomes, with household incomes between $57,000 and $137,00. These households can afford between $1,430 and $2,860 in monthly housing costs. Households at the lower end of this income category may struggle to find affordable rental housing, especially with the growing costs of rental housing across Oregon. Some of the households in this group are part of the 32% of all households that are cost burdened. Development of rental housing affordable to households in this income category (especially those with middle incomes) can occur without government subsidy.
  - The need for these types of affordable housing has impacts on Sandy's economy when people who work in Sandy cannot find housing, much less affordable housing, in the city. People working in Sandy frequently commute from places like Gresham, Portland, and the communities by Mount Hood.
- **Sandy may want to consider opportunities to expand capacity in the R-2 zone.** There is currently limited land and capacity in the R-2 zone, which may limit opportunities for development of middle housing and smaller multifamily unit housing types. As the City

works to support the development of diverse housing types that meet needs across affordability levels, rezoning some land to allow for greater housing diversity may be an action the City wants to take. Evaluating this action and identifying opportunities for re-zoning land could be included as a part of the Housing Production Strategy.

- **Sandy should implement development code modifications to allow and support development of prefabricated housing.** The State is developing new model codes to support use of mass timber in newly built modular housing, a type of prefabricated housing. Sandy could implement this code to allow for development of these types of prefabricated housing, which can provide more affordable housing. ORS 197.314 requires prefabricated housing to be allowed on all land zoned to allow the development of single-family dwellings, the same as manufactured housing. Sandy will need to modify its development code to define prefabricated housing[3] and to allow for siting of prefabricated housing in manufactured home parks and where it allows single-unit housing. Sandy is currently pursuing a grant to support these changes.
- **Sandy should update the development code to remove special requirements for manufactured housing on lots.** ORS 197.314 requires that manufactured housing not be subject to development standards that are different from single-family housing. Sandy may need to modify its development code to remove requirements for unit size, roofs, and siding to be consistent with requirements for single-family units. Sandy is currently undergoing a Clear and Objective Code Audit which will address these requirements.
- **Key infrastructure barriers limit Sandy's ability to accommodate projected growth.** Sandy has a development moratorium 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. While the exact timeline of the moratorium is unknown, the City is conducting an analysis to determine how much capacity is available for development over the next few years. This analysis is expected to be completed in fall 2023.

The *Sandy Housing Production Strategy* will include recommendations for a wide range of policies to support the development of housing for people experiencing homelessness and housing for extremely low to middle-income households. The *Housing Production Strategy* will also include recommendations that are intended to improve equitable outcomes for housing development, as well as strategies to support the development of all types of housing.

[3] ORS 455.010 defines a prefabricated structure as "a building or subassembly that has been in whole or substantial part manufactured or assembled using closed construction at an off-site location to be wholly or partially assembled on-site."

In addition, ORS 197.286 (5) adds an additional qualifier for the purposes of land use planning, requiring prefabricated structures, as defined in ORS 455.010, to be relocatable, more than eight and one-half feet wide, and designed for use as a single-family dwelling.

1. Introduction

Sandy has emerged as an attractive residential destination, boasting easy access to outdoor recreational opportunities, a charming small-town atmosphere, and proximity to the bustling Portland metro region. Between 2000 and 2022, the city more than doubled in population, growing at a faster rate than both the county and the state. Sandy is home to a variety of industries, encompassing retail trade, manufacturing, and services catering to both residents and visitors. Need for affordable housing affects people who live and work in Sandy.

Sandy, much like Clackamas County and the broader Portland metro region, has witnessed a surge in housing costs. Median home sale prices increased 80% between December 2015 and December 2022, from $264,000 to $475,000. The average asking rent increased 41% over the same period. Between 2015 and 2020 Sandy's median household income increased 33%.[4]

Concerns about housing affordability affect people who live and work in Sandy. Many workers in Sandy cannot afford to live in Sandy. The average wage of a worker in Sandy was $43,856 in 2021. Households need to have at least two people working average-wage jobs (or above) to afford the average asking rent plus utilities of $1,840.[5] The median home sales price of a house in Sandy was $475,000 as of December 2022. Even two-worker households with relatively high-wage jobs cannot afford the median home sales price. Workers would need to earn approximately $146,000 annually to afford this sales price. In 2020, approximately 32% of households in Sandy were cost burdened by housing expenses. This cost burden was most prevalent among renters, with 60% experiencing cost burden, including 33% of renters who were severely cost burdened.[6]

This situation poses challenges for residents who have grown up in Sandy and are now forming their own households, as renting and acquiring starter homes becomes progressively unaffordable. Sandy also has a larger share of households with children (46%) than Clackamas County (29%) or Oregon (25%), suggesting a need for housing that can accommodate larger families.

Sandy last conducted a housing capacity analysis (HCA) in 2015 as part of a broader urbanization study that considered whether Sandy had enough land for both housing and employment over the 2014-2034 period. The study concluded that Sandy had a deficit of land zoned for low and medium-density residential and commercial development. In 2017 the City, Clackamas County, and the Department of Land Conservation and Development (DLCD)

[4] The median household income for *renter* households decreased 10% between 2015 and 2020.

[5] Average asking rent was about $1,590 in 2022 according to Costar. ECONorthwest assumed $250 per month for utilities for a total housing cost of $1,840.

[6] Households paying more than 30% of their income on housing experience "cost burden" and households paying more than 50% of their income on housing experience "severe cost burden."

approved an urban growth boundary expansion that added over 300 acres for residential development.

Continuing to plan for future growth, especially given increasing housing prices in the Portland region, make this a good time for Sandy to conduct an HCA to effectively plan for the city's housing needs over the next two decades. This report serves as a factual foundation for updating Sandy's Housing Element within the Comprehensive Plan and zoning code, as well as for guiding future planning initiatives aimed at addressing unmet housing needs. By providing up-to-date information on the housing market in Sandy, this analysis equips decision-makers with the necessary information to determine if the city has sufficient land to accommodate growth over the next twenty years. Additionally, the HCA aligns with statewide planning policies, including Goal 10 (Housing) and OAR 660 Division 8, ensuring compliance and enabling the development of targeted actions to effectively address Sandy's unmet housing needs.

Framework for a Housing Capacity Analysis

Housing is a bundle of services that people are willing to pay for, which includes shelter, proximity to other attractions (employment, shopping, recreation), amenities (type and quality of fixtures and appliances, landscaping, views), prestige, and access to public services (quality of schools). Because it is impossible to maximize all these services and simultaneously minimize costs, households must, and do, make trade-offs. What they can get for their money is influenced both by economic forces and government policy. Moreover, different households will value what they can get differently. They will have different preferences, which in turn are a function of many factors like income, age of household head, number of people and children in the household, number of workers and job locations, number of automobiles, and so on.

Most of the housing in the United States is built by the private market and, therefore, responds to economic and market factors. These economic and market forces have resulted in the production of units that have housed most of our nation’s households. But they have consistently left lower-income communities and communities of color with fewer housing options, forcing them to compete for a limited supply of affordable housing units. The last two decades have seen significant increases in housing costs with much slower growth in household income, resulting in an increasing unmet need for affordable housing.

This report provides information about how the choices of individual households and the housing market in Clackamas County and Sandy have interacted, focusing on implications for future housing need in Sandy over the 2023 to 2043 period. This report provides policy options that can influence future housing development, considering opportunities to increase access to affordable housing for lower-income communities and communities of color, as well as housing needs for all residents of Sandy.

Statewide Planning Goal 10

Oregon has long been a national leader in planning to accommodate growth. The state mandates local government compliance with 19 statewide planning goals, which include public engagement, planning for natural areas, planning for housing, and planning for adequate land to support economic development and industry growth, among others. Oregon's Goal 10 requires each city to develop a housing capacity analysis, which must tie twenty years of projected household growth to dwelling units of varying densities and then determine whether there is adequate land inside the city's urban growth boundary to accommodate those units. Goal 10 directs cities to plan for "housing that meets the housing needs of households of all income levels." Oregon's statewide land use planning system requires one of the most comprehensive approaches to planning for housing in the country.

Goal 10 provides guidelines for local governments to follow in developing their local comprehensive land use plans and implementing policies. At a minimum, local housing policies must meet the requirements of Goal 10 and the statutes and administrative rules that implement it (ORS 197.295 to 197.314, ORS 197.475 to 197.490, and OAR 600-008). Goal 10 requires incorporated cities, such as Sandy, to complete an inventory of buildable residential lands. Goal 10 also requires cities to encourage the development of housing units in price and rent ranges commensurate with the financial capabilities of its households. This can look like removing development code barriers or providing incentives for the development of certain housing types. Analysis of need for these types of policy changes will be discussed in development of Sandy's Housing Production Strategy.

Goal 10 defines needed housing types as "all housing on land zoned for residential use or mixed residential and commercial use that is determined to meet the need shown for housing within an urban growth boundary at price ranges and rent levels that are affordable to households within the county with a variety of incomes, including but not limited to households with low-incomes, very low-incomes and extremely low-incomes." ORS 197.303 defines needed housing types as:

(a) Housing that includes, but is not limited to, attached and detached single-family housing and multi-dwelling housing for both owner and renter occupancy.

(b) Government-assisted housing.[7]

(c) Mobile home or manufactured dwelling parks as provided in ORS 197.475 to 197.490.

(d) Manufactured homes on individual lots planned and zoned for single-family residential use that are in addition to lots within designated manufactured dwelling subdivisions.

(e) Housing for farmworkers.

Sandy must identify needs for all the housing types listed above, as part of the HCA. Through development of the Housing Production Strategy, the City must adopt policies that increase the

[7] Government-assisted housing can be any housing type listed in ORS 197.303 (a), (c), or (d).

likelihood that needed housing types will be developed. This Housing Capacity Analysis was developed to meet the requirements of Goal 10 and its implementing administrative rules and statutes.

Public Process

Development of the HCA was informed by feedback from a Technical Advisory Committee (TAC) composed of City staff. The TAC met three times and discussed:

- **Meeting 1:** introduction to an HCA
- **Meeting 2:** residential building lands inventory (BLI), preliminary results of the HCA
- **Meeting 3:** draft HCA

Public engagement occurred through the Sandy Comprehensive Plan project via the following:

- **Community Conversations.** To reach a wide spectrum of Sandy community members, project staff and members of the Community Advisory Committee (CAC) facilitated community conversations with local groups, clubs, committees, and organizations in Sandy, including targeted outreach to Spanish speakers and high school students. The discussions focused on what community members value about Sandy today and what could make it a better place in the future.
- **Community Events.** The project team engaged with the community at a variety of community events throughout 2022 and 2023, staffing an *Envision Sandy 2050* booth and conducting targeted outreach through intercept surveys in English and Spanish. Events included:
  - Farmers Markets (May-August, 2022-2023)
  - Longest Day Parkway (June 2022-2023)
  - Sandy Mountain Festival (July 2022-2023)
- **Stakeholder Workshops.** Two day-long workshops conducted with City staff, Community Advisory Committee members, and technical experts to identify natural hazard vulnerabilities in Sandy and develop cross-sector strategies to address those vulnerabilities in the Comprehensive Plan.
- **Surveys and Online Engagement.** Throughout the process, online surveys were conducted to gather community priorities and identify strategies for the future of Sandy. Surveys were provided in both English and Spanish, and paper copies were available at key locations around the city. Running concurrently with outreach through community conversations and community events, the first survey was live for six months in 2022 and received 137 responses. The second survey opened in April 2023 and received 24 responses at the time of writing *(September 2023).*
- **Community Meetings.** In September 2022, the project team held *Future Fest*, a community meeting to unveil the new *Envision Sandy 2050* Vision Statement and

provide Sandy community members an opportunity to share their ideas for achieving the vision. The open house format provided an opportunity for Sandy residents and business owners to engage with their neighbors face-to-face and share ideas for the Comprehensive Plan.

The Comprehensive Plan process also included 6 decision-maker work sessions to ensure that elected and appointed officials were engaged in the process and had the opportunity to provide input and direction.

Organization of This Report

The rest of this document is organized as follows:

- **Chapter 2. Residential Buildable Lands Inventory** presents the methodology and results of Sandy's inventory of residential land.
- **Chapter 3. Historical and Recent Development Trends** summarizes the state, regional, and local housing market trends affecting Sandy's housing market.
- **Chapter 4. Demographic and Other Factors Affecting Residential Development in Sandy** presents factors that affect housing need in Sandy, focusing on the key determinants of housing need: age, income, and household composition. This chapter also describes housing affordability in Sandy relative to the larger region.
- **Chapter 5. Housing Need in Sandy** presents the forecast for housing growth in Sandy, describing housing need by density ranges and income levels.
- **Chapter 6. Residential Land Sufficiency in Sandy** estimates Sandy's residential land sufficiency needed to accommodate expected growth over the planning period of 2023 to 2043.
- **Appendix A. Residential Buildable Lands Inventory Overview of the Methodology**
- **Appendix B. National and State Demographic and Other Trends Affecting Residential Development in Sandy**

2. Residential Buildable Lands Inventory

The steps in developing a buildable lands inventory (BLI) for Sandy are:

1. Calculate the gross vacant acres by plan designation, including fully vacant and partially vacant parcels.

2. Calculate gross buildable vacant acres by plan designation by subtracting unbuildable acres from total acres.

3. Calculate net buildable acres by plan designation, subtracting land for future public facilities from gross buildable vacant acres.

4. Calculate total net buildable acres by plan designation by adding redevelopable acres to net buildable acres.

The methods used for this study are consistent with many others completed by ECONorthwest that have been acknowledged by DLCD and LCDC. A detailed discussion of the methodology used in this study is provided in Appendix A.

The BLI for Sandy includes all residential land designated in the comprehensive plan within the Sandy UGB. From a practical perspective, this means that all lands within tax lots identified by the Clackamas County Assessor's Office that fall within the UGB were inventoried. ECONorthwest used the most recent tax lot shapefile from Clackamas County for the analysis. The inventory then builds from the tax lot–level database to estimate buildable land by plan designation.

Residential Buildable Lands Inventory Results

Land Base

The land base for the Sandy residential BLI includes all tax lots within the urban growth boundary (UGB) in residential plan designations or plan designations where housing development is allowed with clear and objective standards. Exhibit 2 shows the land base by comprehensive plan designation and zone in the UGB.

Exhibit 2. Land Base by Plan Designation, Sandy UGB, 2023
Source: Clackamas County, ECONorthwest analysis. Note: The number of tax lots represented is greater than the actual total number of tax lots in the analysis due to split plan designations.

Comprehensive Plan Designation/Zone	Number of tax lots	Percent	Total tax lot acreage	Percent
Low Density Residential (LDR)	**2,109**	**47%**	**1,154**	**51%**
Low Density Residential (R-1)	239	5%	31	1%
Medium Density Residential (R-2)	1	0%	0	0%
Single-Family Residential (SFR)	1,869	42%	1,123	49%
Medium Density Residential (MDR)	**491**	**11%**	**273**	**12%**
Medium Density Residential (R-2)	444	10%	262	12%
High Density Residential (R-3)	45	1%	11	0%
Single-Family Residential (SFR)	1	0%	0	0%
General Commercial (C-2)	1	0%	0	0%
High Density Residential (HDR)	**515**	**12%**	**135**	**6%**
High Density Residential (R-3)	515	12%	135	6%
Village (V)	**980**	**22%**	**331**	**15%**
Low Density Residential (R-1)	566	13%	202	9%
Medium Density Residential (R-2)	164	4%	29	1%
High Density Residential (R-3)	135	3%	23	1%
Single-Family Residential (SFR)	109	2%	69	3%
Village Commercial (C-3)	6	0%	8	0%
Commercial (C)	**365**	**8%**	**383**	**17%**
Central Business District (C-1)	231	5%	54	2%
General Commercial (C-2)	134	3%	328	14%
Total	**4,460**	**100%**	**2,277**	**100%**

Development Status

Exhibit 3 shows the total acres of residential tax lots classified by development status. We used a rule-based classification (described in Appendix A) to define an initial development status. We confirmed development status through a series of reviews by ECONorthwest and City staff, based on local knowledge and review of aerial maps. Committed acres includes developed land on tax lots that are fully developed or the portions of lots that are partially developed, as well as lands given a development status of public (see Appendix A: Residential Buildable Lands Inventory) which includes publicly owned land, churches, and cemeteries.

Exhibit 3. Residential Land by Development Status, Sandy UGB, 2023
Source: Clackamas County, ECONorthwest analysis.
Note: This table excludes the following zones, as they have less than 1 acre of land in tax lots: the R-2 zone in the Low Density Residential plan designation, and the SFR and C-2 zone in the Medium Density Residential plan designation.

Comprehensive Plan Designation/Zone	Total Acres	Committed Acres	Constrained Acres	Buildable Acres Unconstrained Vacant & Partially Vacant
Low Density Residential (LDR)	**1,154**	**421**	**314**	**420**
Low Density Residential (R-1)	31	26	4	2
Single-Family Residential (SFR)	1,123	395	310	418
Medium Density Residential (MDR)	**273**	**140**	**74**	**60**
Medium Density Residential (R-2)	262	134	68	60
High Density Residential (R-3)	11	5	6	0
High Density Residential (HDR)	**135**	**95**	**29**	**12**
High Density Residential (R-3)	135	95	29	12
Village (V)	**331**	**140**	**40**	**151**
Low Density Residential (R-1)	202	95	15	91
Medium Density Residential (R-2)	29	19	2	8
High Density Residential (R-3)	23	6	2	16
Single-Family Residential (SFR)	69	18	20	31
Village Commercial (C-3)	8	3	1	4
Commercial (C)	**383**	**178**	**76**	**128**
Central Business District (C-1)	54	51	3	1
General Commercial (C-2)	328	127	73	128
Total	**2,277**	**974**	**532**	**771**

Development Constraints

Constrained acres are land constrained by development constraints (e.g., floodplains), as described below and shown in Exhibit 4. The buildable lands inventory identifies the following conditions as constraints that prohibit development:

- Bonneville Power Administration (BPA) Right-of-Way
- FEMA Regulatory Floodway and 100-Year Floodplains
- Flood and Slope Hazard (FSH) Overlay Stream and Slope Setbacks
- Landslide Susceptibility "High" or "Very High"
- Locally Significant Wetlands
- Slopes Greater than 25 Percent

Exhibit 4. Development Constraints, Sandy UGB, 2023
Source: Clackamas County, ECONorthwest analysis
Note: The FSH Overlay is the Flood and Slope Hazard (FSH) Overlay Stream and Slope Setbacks

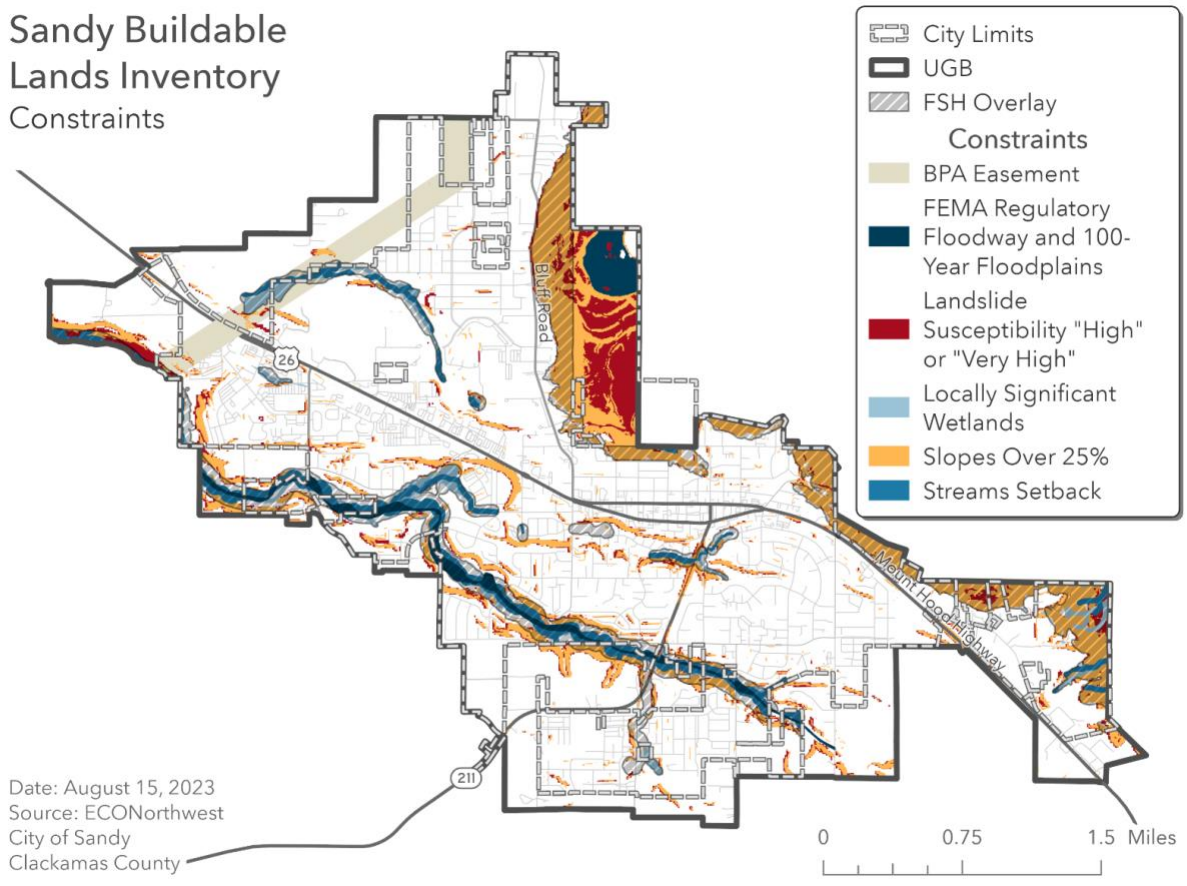
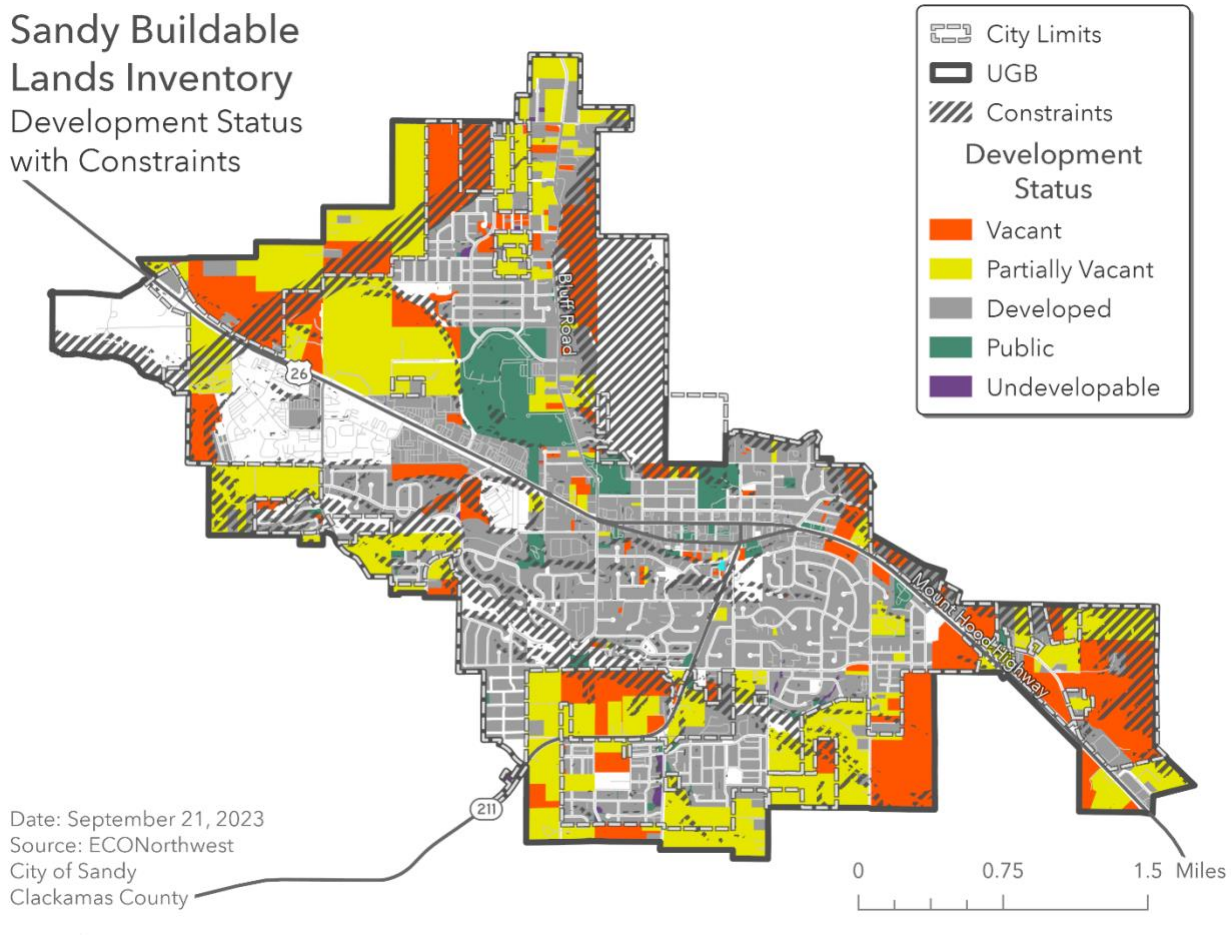


Exhibit 5 shows development status with constraints applied, resulting in buildable acres. Vacant or partially vacant land within these constraints is considered unavailable for development and was removed from the inventory of buildable land.

Exhibit 5. Development Status with Constraints, Sandy UGB, 2023
Source: Clackamas County, ECONorthwest analysis.



Vacant Unconstrained Buildable Land

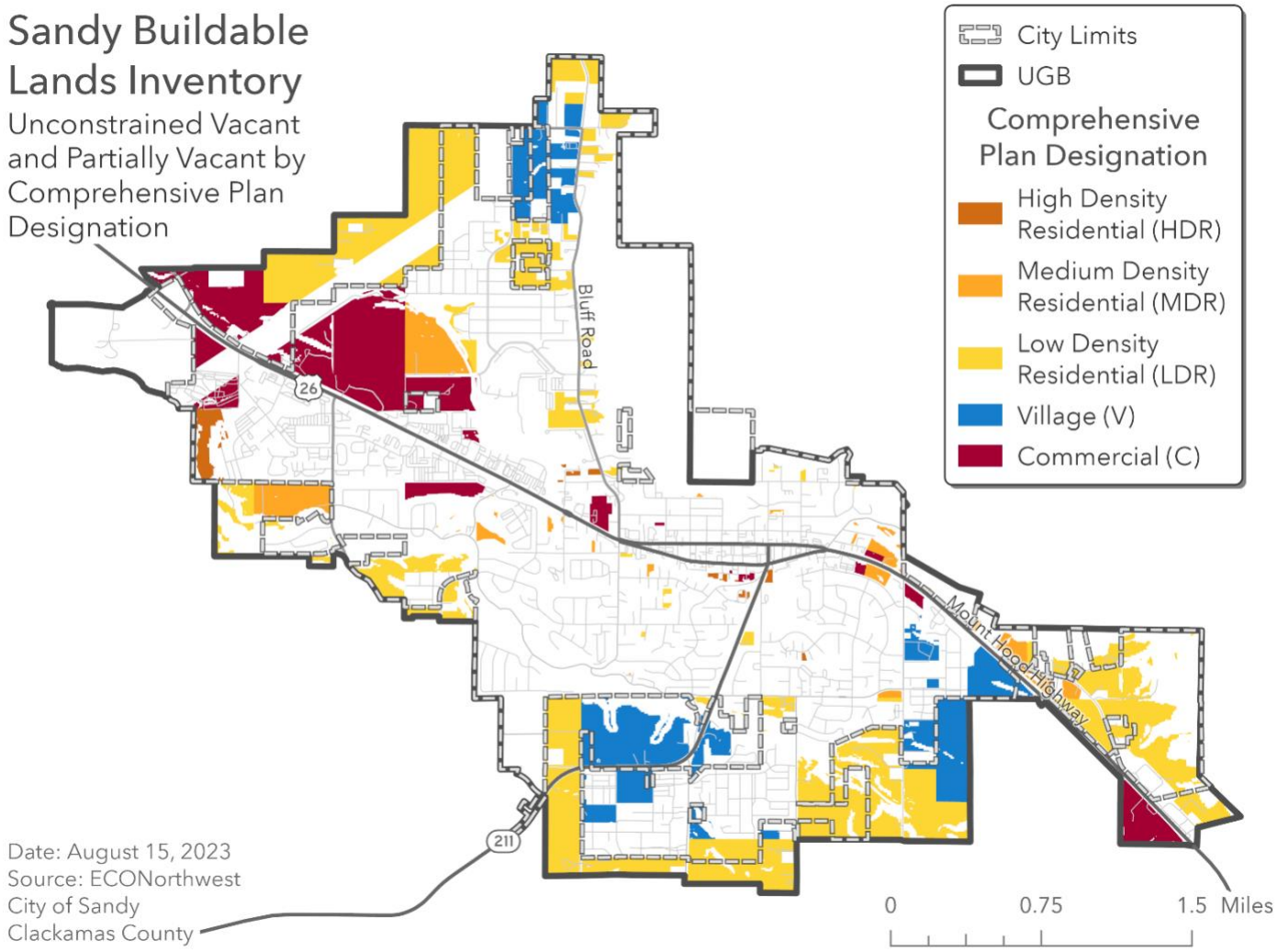
Exhibit 6 shows buildable acres (i.e., acres in tax lots after constraints are deducted) for vacant and partially vacant land by zone.

Exhibit 6. Buildable Acres in Vacant/Partially Vacant Tax Lots by Plan Designation, Sandy UGB, 2023
Source: Clackamas County, ECONorthwest analysis.

Comprehensive Plan Designation/Zone	Total Buildable Acres	Buildable Acres on Vacant Lots	Buildable Acres on Partially Vacant Lots
Low Density Residential (LDR)	**420**	**127**	**293**
Low Density Residential (R-1)	2	2	-
Single-Family Residential (SFR)	418	125	293
Medium Density Residential (MDR)	**60**	**24**	**36**
Medium Density Residential (R-2)	60	24	36
High Density Residential (R-3)	0.1	0	-
High Density Residential (HDR)	**12**	**11**	**0**
High Density Residential (R-3)	12	11	0
Village (V)	**151**	**71**	**80**
Low Density Residential (R-1)	91	34	58
Medium Density Residential (R-2)	8	8	-
High Density Residential (R-3)	16	14	2
Single-Family Residential (SFR)	31	15	17
Village Commercial (C-3)	4	1	3
Commercial (C)	**128**	**50**	**78**
Central Business District (C-1)	1	0	1
General Commercial (C-2)	128	50	78
Total	**771**	**283**	**488**

Exhibit 7 shows Sandy's buildable vacant and partially vacant residential land.

Exhibit 7. Unconstrained Vacant and Partially Vacant Residential Land, Sandy UGB, 2023
Source: Clackamas County, ECONorthwest analysis.



3. Historical and Recent Development Trends

Analysis of historical development trends in Sandy provides insight into the local housing market. In particular, the mix of housing types and densities are key variables in forecasting the capacity of residential land to accommodate new housing and to forecast future land need.

This Housing Capacity Analysis examines changes in Sandy's housing market from 2000 to 2020, as well as residential development from 2014 to 2021. We selected this period because (1) Sandy last adopted its Housing Needs Analysis in 2015; (2) the period provides information about Sandy's housing market before and after the national housing market bubble's growth, deflation, and the more recent increase in housing costs; and (3) data about Sandy's housing market during this period is readily available from sources such as the Census and the City building permit database.

For the purposes of this analysis, we grouped housing types based on (1) whether the structure is stand-alone or attached to another structure and (2) the number of dwelling units in each structure. The housing types used in this analysis are consistent with needed housing types as defined in ORS 197.303:[8]

- **Single-family detached** includes single-family detached units, manufactured homes on lots and in mobile home parks, and accessory dwelling units. Single-family detached also includes cottage cluster housing.
- **Single-family attached** are all structures with a common wall where each dwelling unit occupies a separate lot, such as row houses or town houses.
- **Multi-dwelling with 2 to 4 units** are attached structures such as duplexes, triplexes, and quadplexes. These units are referred to as "plexes" in this report.
- **Multi-dwelling with 5 or more units** are attached structures with five or more dwelling units per structure.

In Sandy, government-assisted housing (ORS 197.303[b]) and housing for farmworkers (ORS 197.303[e]) can be any of the housing types listed above. Sandy's development code does not mention prefabricated housing. ORS 197.314 requires prefabricated to be allowed on all land zoned to allow the development of single-family dwellings, the same as manufactured housing.[9] Analysis within this report discusses housing affordability at a variety of incomes, as required in ORS 197.303.

[8] ORS 197.303 defines needed housing as "all housing on land zoned for residential use or mixed residential and commercial use that is determined to meet the need shown for housing within an urban growth boundary at price ranges and rent levels that are affordable to households within the county with a variety of incomes."

[9] Sandy is currently undergoing a code audit that will address the requirements of ORS 197.314.

Data Used in This Analysis

Throughout this analysis (including the subsequent Chapter 4) we used data from multiple well-recognized and reliable data sources. One of the key sources for housing and household data is the US Census. This report primarily uses data from three Census sources:[10]

- The **Decennial Census**, which is completed every ten years and is a survey of *all* households in the United States. The Decennial Census does not collect more detailed household information, such as income, housing costs, housing characteristics, and other important household information.
- The **American Community Survey (ACS)**, which is completed every year and is a *sample* of households in the United States. The ACS collects detailed information about households, including demographics (e.g., number of people, age distribution, ethnic or racial composition, country of origin, language spoken at home, and educational attainment), household characteristics (e.g., household size and composition), housing characteristics (e.g., type of housing unit, year unit built, or number of bedrooms), housing costs (e.g., rent, mortgage, utility, and insurance), housing value, income, and other characteristics. The most up-to-date ACS data available for this report was for the 2016-2020 period.
- **Comprehensive Housing Affordability Strategy (CHAS**), which is custom tabulations of American Community Survey (ACS) data from the US Census Bureau for the US Department of Housing and Urban Development (HUD). CHAS data show the extent of housing problems and housing needs, particularly for low-income households. CHAS data are typically used by local governments as part of their consolidated planning work to plan how to spend HUD funds and for HUD to distribute grant funds. The most up-to-date CHAS data covers the 2015-2019 period, which is a year older than the most recent ACS data for the 2016-2020 period.

This report primarily uses data from the 2016-2020 ACS for Sandy and comparison areas. Where information is available and relevant, we report information from the 2000 and 2010 Decennial Census.[11] Among other data points, this report also includes data from Oregon's Housing and Community Services Department, the US Department of Housing and Urban Development, and the City of Sandy. The foundation of the HCA is the population forecast for Sandy from the

[10] The American Community Survey (ACS) is a national survey that uses continuous measurement methods. It uses a sample of about 3.54 million households to produce annually updated estimates for the same small areas (census tracts and block groups) formerly surveyed via the Decennial Census long-form sample. All ACS data are subject to sample variability or "sampling error" that is expressed as a band or "margin of error" (MOE) around the estimate.

This report uses Census and ACS data because, despite the inherent methodological limits, they represent the most thorough and accurate data available to assess housing needs. We consider these limitations in making interpretations of the data and have strived not to draw conclusions beyond the quality of the data.

[11] The 2020 Census was completed at the end of 2020 but was more limited than usual because of the COVID-19 pandemic. This report uses 2016-2020 ACS data, rather than 2020 Decennial Census data, for up-to-date information. Throughout the report for readability, information based on the 2016-2020 ACS will be reported as 2020.

Oregon Population Forecast Program. The forecast is prepared by the Portland State University Population Research Center.

Trends in Housing Mix

This section provides an overview of changes in the mix of housing types in Sandy and compares Sandy to Clackamas County and Oregon. These trends demonstrate the types of housing developed in Sandy historically. Key trends in Sandy's housing mix include:

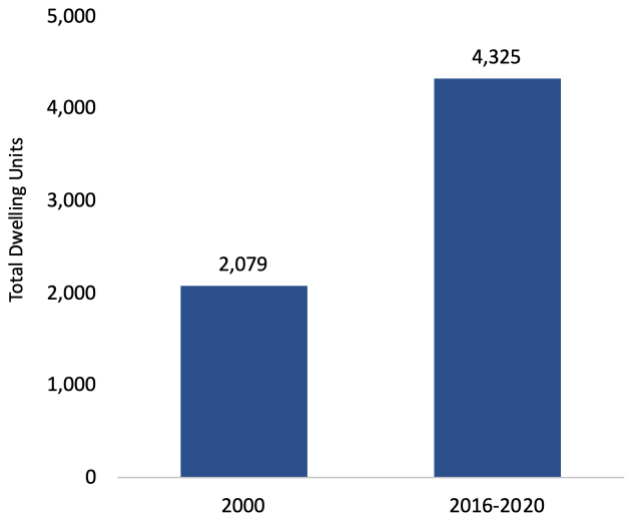
- **Since 2000, Sandy's housing stock has more than doubled.** Sandy's housing stock grew by about 108% (2,246 new units) between 2000 and 2020.
- **Sandy's housing stock is predominantly single-family detached housing units.** Seventy-nine percent of Sandy's housing stock is single-family detached; 10% is multi-dwelling (with five or more units per structure); 4% is duplexes, triplexes, and quadplexes; and 11% is single-family attached (e.g., town houses).
- **Single-family housing accounted for the majority of new housing built in Sandy between 2014 and May 2023.** About 69% were for single-family units and 31% for multi-dwelling units. Since 2019, 253 units of multi-dwelling housing were permitted.

Housing Mix

The total number of dwelling units in Sandy increased by 108% from 2000 to 2020.

Sandy added 2,246 new dwelling units since 2000.

Exhibit 8. Total Dwelling Units, Sandy, 2000 and 2016-2020
Source: US Census Bureau, 2000 Decennial Census, SF3 Table H030, and 2016-2020 ACS Table B25024.

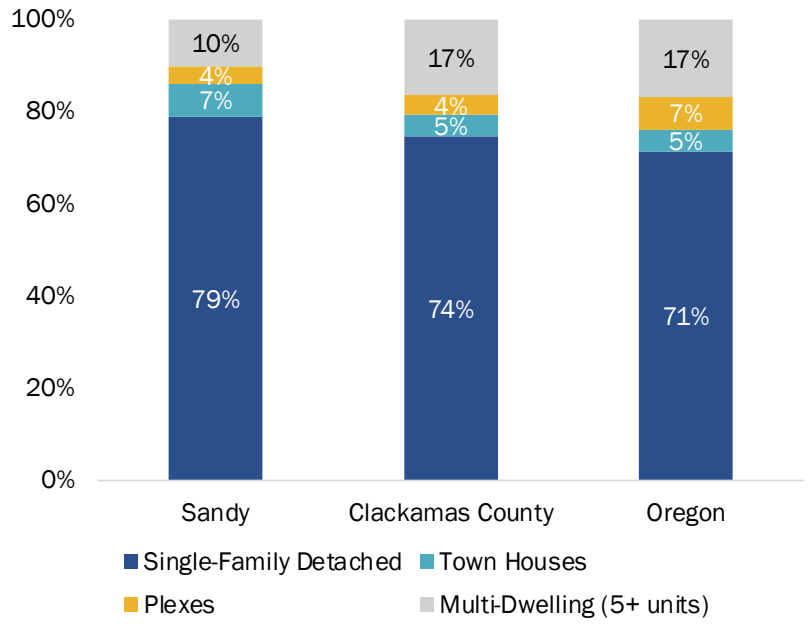


Seventy-nine percent of Sandy's housing stock was single-family detached.

Sandy had a smaller share of multi-dwelling housing (5+ units per structure) than Clackamas County and the state.

Exhibit 9. Housing Mix, Sandy, Clackamas County, and Oregon, 2016-2020

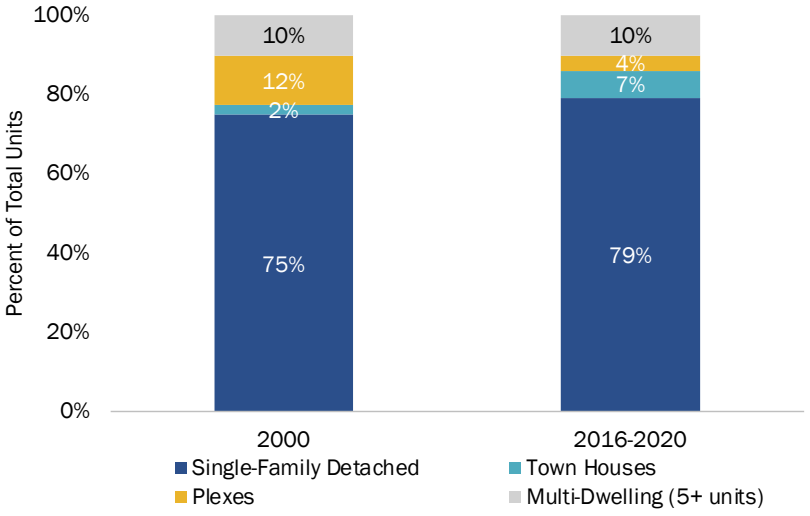
Source: US Census Bureau, 2016-2020 ACS Table B25024.
Note: Plexes are duplexes, triplexes, and quadplexes.



From 2000 to 2020, the share of single-family detached housing in Sandy increased.

Exhibit 10. Change in Housing Mix, Sandy, 2000 and 2016-2020

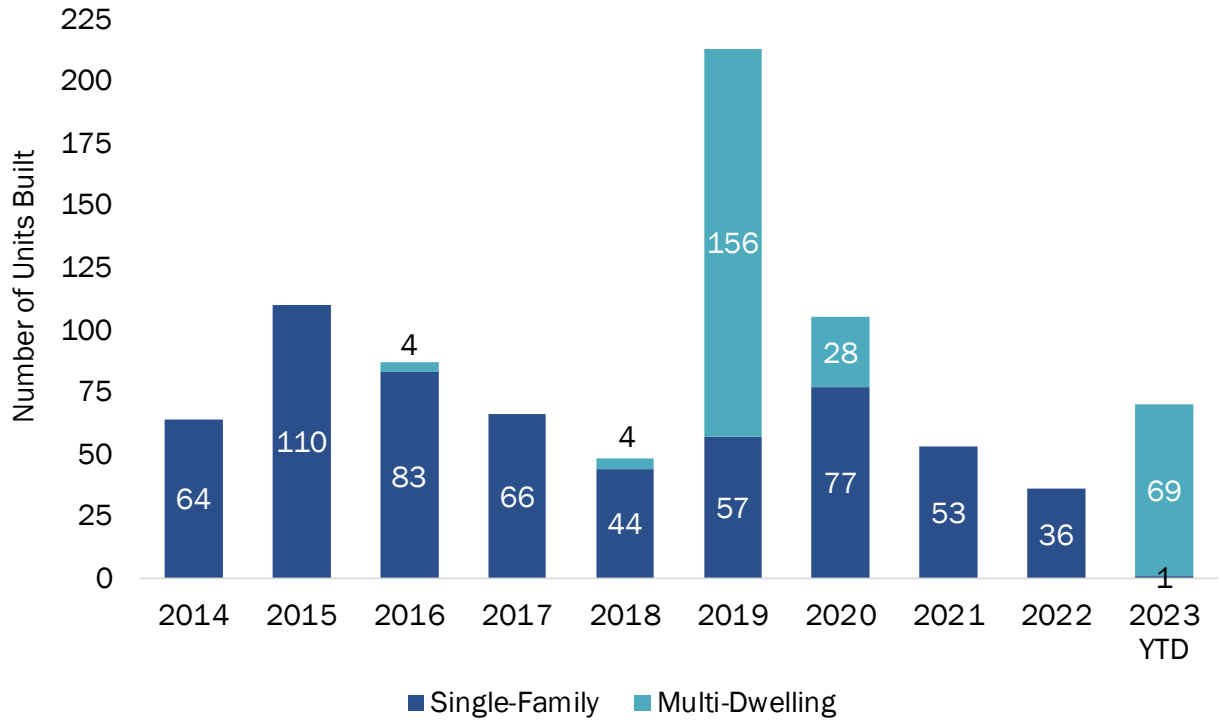
Source: US Census Bureau, 2000 Decennial Census, SF3 Table H030, and 2016-2020 ACS Table B25024.
Note: Plexes are duplexes, triplexes, and quadplexes.



Building Permits

Over the 2014 to May 2023 period, 852 units were built in the City of Sandy. Of the 852 units built, about 69% were for single-family units and 31% for multi-dwelling units.

Exhibit 11. Units Built By Structure Type, Sandy 2014 through May 2023
Source: City of Sandy, Permit Database.



In addition to the units built shown above, the City issued an additional five building permits prior to 2022 for a total of 67 units. These units have not been completed as of May 2023 and consist of 67 units as part of a condo development, two duplexes, and two single-family units. This data suggests a trend toward more multi-dwelling development in the City in recent years.

Trends in Tenure

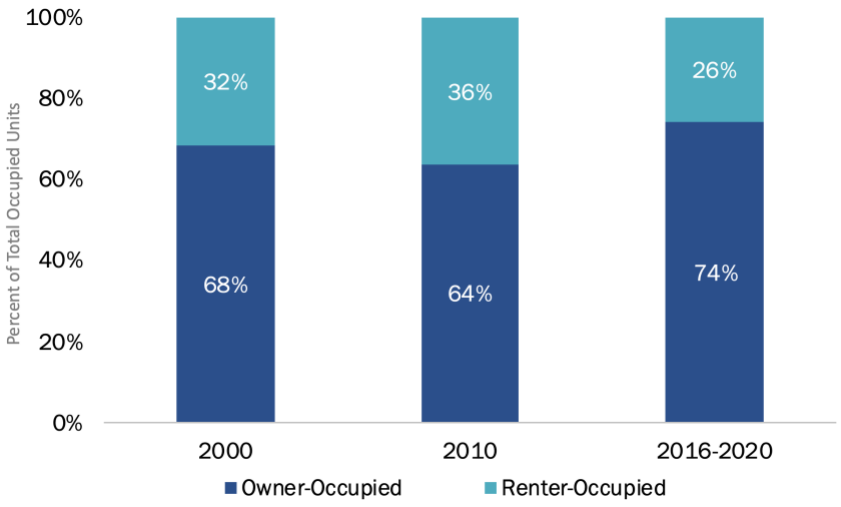
Housing tenure describes whether a dwelling is owner or renter occupied. This section shows:

- **Homeownership rates were slightly higher in Sandy than Clackamas County and Oregon.** About 74% of Sandy's households own their home. In comparison, 71% of Clackamas County households and 63% of Oregon households are homeowners.
- **Homeownership rates in Sandy increased between 2000 and 2020.** In 2000, 68% of Sandy households were homeowners. This increased to 74% in 2020.
- **Most of Sandy's homeowners (93%) live in single-family detached housing, while more than half of renters (55%) lived in multi-dwelling housing** (including units in duplexes, triplexes, quadplexes, and housing with five or more units per structure).

The implications for the forecast of new housing are that Sandy has an imbalance of opportunities for homeownership and renting. Relatively few multi-dwelling housing types (including duplexes) were owner occupied which, when combined with information about housing affordability in Chapter 4, may suggest a need for homeownership opportunities for a wider range of housing types such as town houses, cottage housing, duplexes, triplexes, quadplexes, and possibly multi-dwelling condominiums. In addition, broadening the types of rental housing may provide more opportunity for affordable rents.

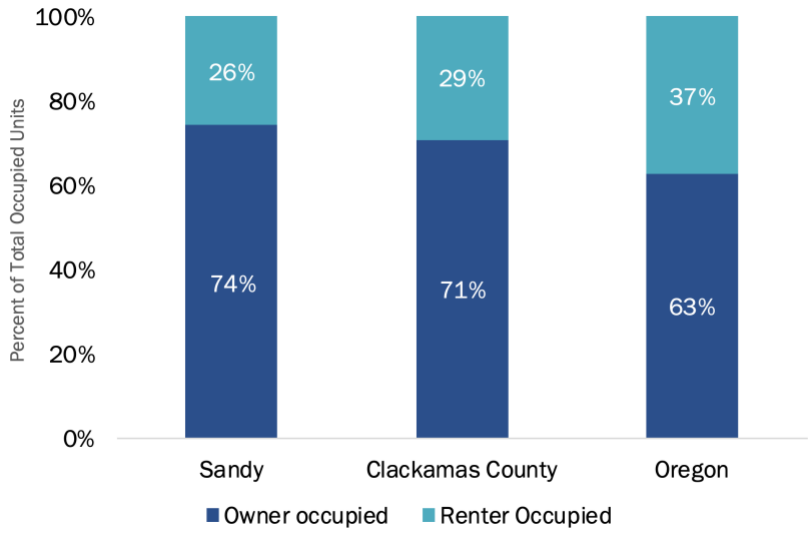
The homeownership rate in Sandy increased by 6% from 2000 to 2020.

Exhibit 12. Tenure, Occupied Units, Sandy, 2000, 2010, 2016-20
Source: US Census Bureau, 2000 Decennial Census SF1 Table H004, 2010 Decennial Census SF1 Table H4, 2016-2020 ACS Table B25003.



Sandy had a higher homeownership rate than Clackamas County and Oregon.

Exhibit 13. Tenure, Occupied Units, Sandy, Clackamas County, and Oregon, 2016-2020
Source: US Census Bureau, 2016-2020 ACS 5-Year Estimates, Table B25003.

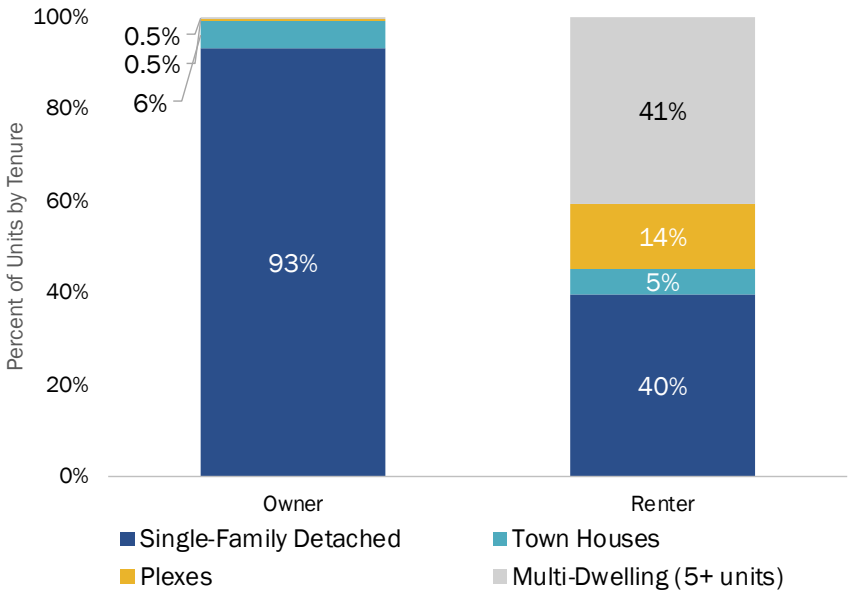


Nearly all of Sandy's homeowners (93%) lived in single-family detached housing.

In comparison, only 40% of Sandy households that rent lived in single-family detached housing.

About 14% of renters lived in duplex, triplex, or quadplex housing, and 41% lived in multi-dwelling housing with 5+ dwelling units.

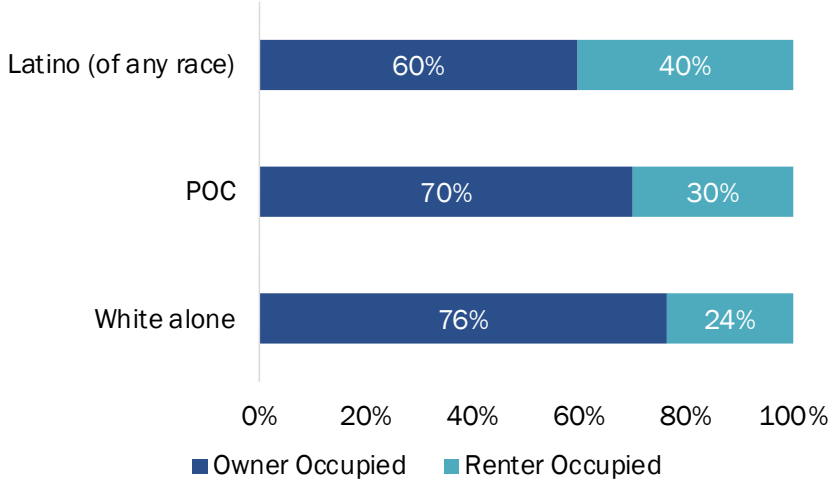
Exhibit 14. Housing Units by Type and Tenure, Sandy, 2016-2020
Source: US Census Bureau, 2016-2020 ACS Table B25032.



Latino and POC (people of color) households were more likely to be renters than White Alone households.

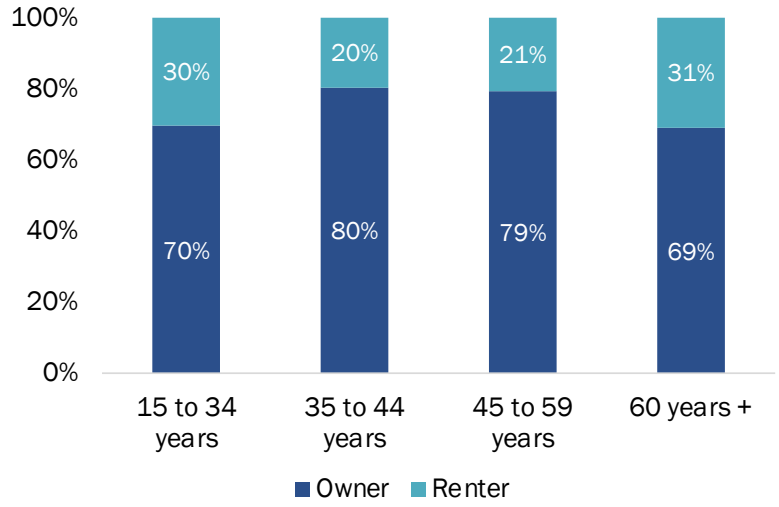
While about three-quarters of White Alone households owned their homes, about 70% of POC and 60% of Latinos were homeowners.

Exhibit 15. Tenure by Race and by Ethnicity, Sandy, 2016-2020
Source: US Census Bureau, 2016-2020 ACS Table B25003A-I.



The homeownership rate in Sandy is high across all age groups. However, the homeownership rate declined for households over 60.

Exhibit 16. Tenure by Age of the Head of Household, Sandy, 2016-2020
Source: US Census Bureau, 2016-2020 ACS Table B25007.



Vacancy Rates

Housing vacancy is a measure of housing that is available to prospective renters and buyers. It is also a measure of unutilized housing stock. The Census defines vacancy as "unoccupied housing units . . . determined by the terms under which the unit may be occupied, e.g., for rent, for sale, or for seasonal use only." The Census identified vacancy through an enumeration, separate from (but related to) the survey of households. Enumerators are obtained using information from property owners and managers, neighbors, rental agents, and others.

According to the 2016-2020 American Community Survey, the vacancy rate in Sandy was 5.0%, compared to 5.6% for Clackamas County and 8.2% for Oregon.

Government-Assisted Housing

Governmental agencies and nonprofit organizations offer a range of housing assistance to low and moderate-income households in renting or purchasing a home. There are six government-assisted housing developments in Sandy with a total of 142 dwelling units.

Exhibit 17. Government-Assisted Housing, Sandy, 2022
Source: Oregon Department of Health and Human Services, Affordable Housing Inventory in Oregon, July 2022.

Development Name	Total Units	Unit Size					
		SRO	Studio	1-bd	2-bd	3-bd	4-bd
Cedar Park Gardens	20	-	-	18	2	-	-
Country Garden Apts	10	-	-	10	-	-	-
Evans Streeet Senior	28	-	-	24	4	-	-
Hummingbird Apts	6	-	-	6	-	-	-
Sandy Vista I	30	-	-	10	8	12	-
Sandy Vista II	24	-	-	-	10	10	4
Timer Grove - Firwood Village	24	-	-	2	16	6	-
Total	**142**	**-**	**-**	**70**	**40**	**28**	**4**

The Clackamas County Continuum of Care (CoC) region has 181 emergency shelter beds, 54 transitional shelter beds, and 1,020 permanently supportive housing beds supporting persons experiencing houselessness in the Clackamas County region.

Exhibit 18. Facilities and Housing Targeted to Households Experiencing Houselessness, Clackamas County Continuum of Care Region, 2022
Source: HUD 2022 Continuum of Care Homeless Assistance Programs, Housing Inventory Report, Clackamas County CoC.

	Family Beds	Adult-Only Beds	Child-Only Beds	Total Yr-Round Beds	Subset of Total Bed Inventory		
					Chronic Beds	Veteran Beds	Youth Beds
Emergency Shelter	79	102	0	181	n/a	23	0
Transitional Housing	33	21	0	54	n/a	2	25
Permanent Housing	584	436	0	1,020	180	222	99
Total	**696**	**559**	**0**	**1,255**	**180**	**247**	**124**

Manufactured Homes

Manufactured homes provide a source of affordable housing in Sandy. They provide a form of homeownership that can be made available to low and moderate-income households. Cities must plan for manufactured homes—both on lots and in manufactured home parks (ORS 197.475-492).

Generally, manufactured homes in parks are owned by the occupants who pay rent for the space within the park. Monthly housing costs are typically lower for a homeowner in a manufactured home park for several reasons, including the fact that property taxes levied on the value of the land are paid by the property owner, rather than the manufactured homeowner, although some of this is likely passed on to the occupant of the manufactured homes in the form of rent. Unfortunately, the value of the manufactured home generally does not appreciate in the way a conventional home would. Manufactured homeowners in parks are also subject to the mercy of the property owner in terms of rent rates and increases. It is generally not within the means of a manufactured homeowner to relocate to another manufactured home park to escape rent increases. Homeownership in a manufactured home park is desirable to some people because it can provide a more secure community with on-site managers and amenities, such as laundry and recreation facilities. OAR 197.480(4) requires cities to inventory the mobile home or manufactured dwelling parks sited in areas planned and zoned or generally used for commercial, industrial, or high-density residential development.

As shown in Exhibit 19, Sandy has six manufactured home parks within its UGB. Within these parks, there are a total of 247 spaces (of which 7 spaces were vacant as of January 2023).

Exhibit 19. Inventory of Mobile/Manufactured Home Parks, Sandy UGB, 2023
Source: Oregon Manufactured Dwelling Park Directory, 2023

Name	Location	Type	Total Spaces	Vacant Spaces	Zone
Hood Chalet Mobile Estates	17655 Bluff Rd Sp 1	Family	82	0	R-3
Johnston Park	17805 Sue Ln	Family	16	7	R-3
Knollwood Mobile Estates	37600 Sunset St	Family	59	0	R-3
Swiss Meadow Village	38595 Strawbridge Pkwy	Family	50	0	R-3
Sandy Trailer Park	17340 University Ave	Family	7	unknown	C-2
Wunder Mobile Park	1900 SE Bornstedt Rd	Family	33	0	R-2
Total			**247**	**7**	

4. Demographic and Other Factors Affecting Residential Development in Sandy

Demographic trends are important for a thorough understanding of the dynamics of Sandy's housing market. Sandy exists in a regional economy; trends in the region impact the local housing market. This chapter documents demographic, socioeconomic, and other trends relevant to Sandy at the national, state, and regional levels.

Demographic trends provide a context for growth in a region; factors such as age, income, migration, and other trends show how communities have grown and how they will shape future growth. To provide context, we compare Sandy to Clackamas County and Oregon. We also compare Sandy to nearby cities where appropriate. Characteristics such as age and ethnicity are indicators of how the population has grown in the past and provide insight into factors that may affect future growth.

Demographic and Socioeconomic Factors Affecting Housing Choice[12]

Analysts typically describe housing demand as the preferences for different types of housing (e.g., single-family detached or apartment) and the ability to pay for that housing (the ability to exercise those preferences in a housing market by purchasing or renting housing; in other words, income or wealth).

Many demographic and socioeconomic variables affect housing choice. However, the literature about housing markets finds that age of the householder, size of the household, and income are most strongly correlated with housing choice.

- **Age of householder** is the age of the person identified (in the Census) as the head of household. Households make different housing choices at different stages of life. This chapter discusses generational trends, such as housing preferences of baby boomers (people born from about 1946 to 1964), millennials (people born from about 1980 to 1997), and Generation Z (people born after 1997).
- **Size of household** is the number of people living in the household. Younger and older people are more likely to live in single-person households. People in their middle years are more likely to live in multi-person households (often with children).
- **Household income** is probably the most important determinant of housing choice. Income is strongly related to the type of housing a household chooses (e.g., single-family

[12] The research in this chapter is based on numerous articles and sources of information about housing and adapted to Sandy's unique circumstances from a prior housing capacity analysis conducted by ECONorthwest.

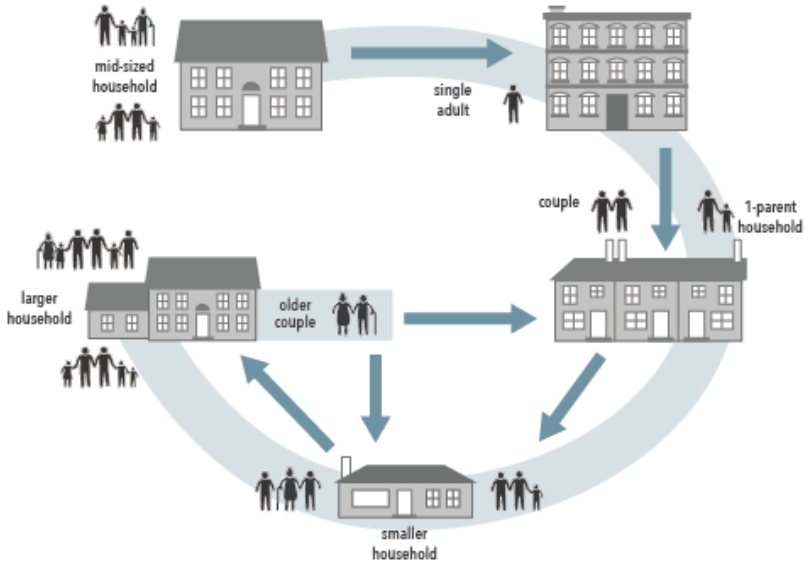
detached housing, duplexes, or buildings with five or more units and to household tenure (e.g., rent or own).

An individual's housing needs change throughout their life, with changes in income, family composition, and age, as shown in Exhibit 20. The types of housing needed by a twenty-year-old college student differ from the needs of a forty-year-old parent with children, or an eighty-year-old single adult. As Sandy's population ages, different types of housing will be needed to accommodate older residents. The housing characteristics by age data below reveal this cycle in action in Sandy.

Housing needs and preferences change in predictable ways over time, such as with changes in marital status and size of family.

Households of different sizes need different types of housing.

Exhibit 20. Effect of Demographic Changes on Housing Need
Source: ECONorthwest, adapted from Clark, William A.V. and Frans M. Dieleman. 1996. Households and Housing. New Brunswick, NJ: Center for Urban Policy Research.



Regional and Local Demographic Trends May Affect Housing Need in Sandy

Growing Population

Sandy's population growth will drive future demand for housing in the city over the planning period. Exhibit 21 shows that Sandy's population grew by 141% between 2000 and 2022, adding 7,606 new residents at an average annual growth rate of 4.1%. Sandy grew faster than both Clackamas County and Oregon.

Exhibit 21. Population, Sandy, Clackamas County, Oregon, U.S., 2000, 2010, 2022
Source: US Decennial Census 2000 and 2010, and Portland State University, Population Research Center.

				Change 2000 to 2022		
	2000	2010	2022	Number	Percent	AAGR
Oregon	3,421,399	3,831,074	4,278,910	857,511	25%	1.0%
Clackamas County	338,391	375,992	430,421	92,030	27%	1.1%
Sandy	5,385	9,570	12,991	7,606	141%	4.1%

The population forecast in Exhibit 22 is Sandy's official population forecast from the Oregon Population Forecast Program. Sandy must use this forecast as the basis for forecasting housing growth over the 2023 to 2043 period. Sandy is expected to add 6,350 new residents between 2023 and 2043.

Sandy's population within its UGB is projected to grow by about 6,350 people between 2023 and 2043, at an average annual growth rate of 1.9%.

Exhibit 22. Forecast of Population Growth, Sandy UGB, 2023 to 2043

Source: ECONorthwest based on US Decennial Census 2000, and Portland State University, Population Research Center 2020.

13,877	20,227	6,350	46% increase
Residents in 2023	Residents in 2043	New Residents 2023 to 2043	1.9% AAGR

Aging Population

This section shows two key characteristics of Sandy's population, with implications for future housing demand in Sandy:

- **Sandy has a larger proportion of younger working-aged people than Clackamas County and Oregon.** Sandy has a younger population than Clackamas County and the state, with a larger percentage of people under 39 years old and a smaller share of people over 60 years old. The fastest-growing group between 2010 and 2020 was people aged 20 to 39, with the group of people over 60 years old growing the slowest. Sandy's age distribution shows that the city is attracting working-age residents, and Exhibit 33 shows that Sandy has a larger percentage of households with children than Clackamas County or Oregon.

  Sandy is currently attracting millennials and Gen Zers. By 2045, millennials will be about 45 to 65 years of age and Gen Zers will be 33 to 48 years of age. The community's ability to continue to attract and retain people in this age group will depend, in large part, on whether the city has opportunities for housing that both appeals to and is affordable to millennials and Gen Zers, as well as jobs that allow younger people to live and work in Sandy. As they age and form their own households, their housing needs will contribute to housing needs in Sandy.

  In the near term, millennials and Gen Zers may increase demand for rental units. Some households in this age group will need housing that accommodates children. In the long term, surveys about housing preference suggest that millennials want affordable single-family homes in areas that offer transportation alternatives to cars, such as areas with walkable neighborhoods.[13] Recent growth in homeownership among millennials proves

[13] The American Planning Association, "Investing in Place; Two generations' view on the future of communities." 2014; Transportation for America, "Access to Public Transportation a Top Criterion for Millennials When Deciding Where to Live, New Survey Shows"; National Association of Home Builders International, "Survey Says: Home Trends and Buyer Preferences"

that millennials prefer to become homeowners, with the millennial homeownership rate increasing from 33% in 2009 to 43% in 2019.[14] While researchers do not yet know how Gen Zers will behave in adulthood, many expect they will follow patterns of previous generations.[15]

Growth in millennials and Gen Zers in Sandy will result in increased demand for both affordable single-family detached housing (such as small single-family detached units like cottages), as well as increased demand for affordable town houses, plexes (duplexes, triplexes, quadplexes, etc.), and multi-dwelling housing. Demand will be for both ownership and rental opportunities. There is potential for attracting new residents to housing in Sandy's commercial areas, especially if the housing is relatively affordable and located in proximity to services.

- **Growth in seniors and retirees.** Sandy currently has a smaller share of people over 60 years old than Clackamas County, but the Clackamas County forecast from Portland State University suggests that the population over 60 years old will grow at a faster rate than other age groups. The share of residents aged 60 years and older in Clackamas County is expected to account for 29% of the population in 2040 compared to 27% in 2020. It is reasonable to expect that Sandy's senior population will grow consistent with regional trends, which will increase demand for housing that is suitable for seniors.

  Demand for housing for seniors will grow over the planning period as baby boomers continue to age and retire and members of Gen X begin to retire. The impact of change in seniors in Sandy will depend, in part, on whether older people already living in Sandy continue to reside there as they retire. National surveys show that, in general, most retirees prefer to age in place by continuing to live in their current home and community as long as possible.[16]

  Growth in the number of seniors will result in demand for housing types specific to seniors, such as small and easy-to-maintain dwellings, assisted-living facilities, or age-restricted developments. Senior households will make a variety of housing choices, including remaining in their homes as long as they are able, downsizing to smaller single-family homes (detached and attached) or multi-dwelling units, or moving into group housing (such as assisted-living facilities or nursing homes) as they age. The challenges aging seniors face in continuing to live in their community include changes in health-care needs, loss of mobility, the difficulty of home maintenance, financial concerns, and increases in property taxes.[17]

[14] "Millennials and Housing: Homeownership Demographic Research." Freddie Mac Single-Family, 2021. https://sf.freddiemac.com/content/_assets/resources/pdf/fact-sheet/millennial-playbook_millennials-and-housing.pdf.

[15] "2021 Home Buyers and Sellers Generational Trends Report." National Association of Realtors, 2021. https://www.nar.realtor/sites/default/files/documents/2021-home-buyers-and-sellers-generational-trends-03-16-2021.pdf.

[16] A survey conducted by AARP indicates that 90% of people 50 years and older want to stay in their current home and community as they age. See http://www.aarp.org/research.

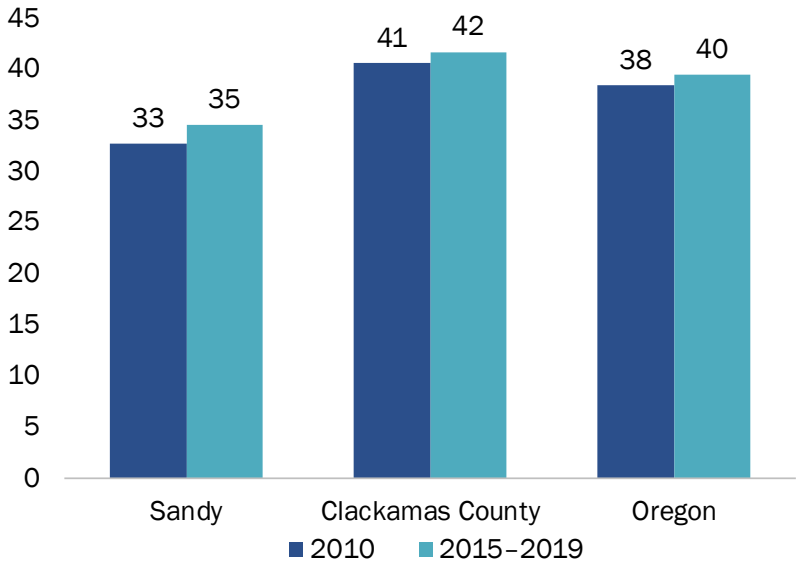
[17] "Aging in Place: A toolkit for Local Governments" by M. Scott Ball.

Sandy's median age is lower than the County or State averages.

From 2010 to 2020, Sandy's median age increased from 33 to 35 years old.

Exhibit 23. Median Age, Sandy, Clackamas County, and Oregon, 2010 to 2016-2020

Source: US Census Bureau, 2000 Decennial Census Table B01002, 2016–2020 ACS, Table B01002.



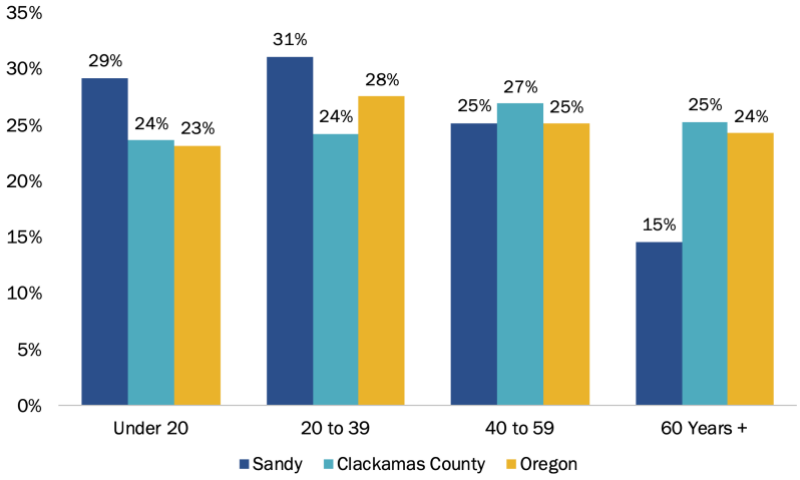
About 31% of Sandy's residents were between the ages of 20 and 39 years old.

Sandy had a lower share of people over the age of 60 years old when compared to Clackamas County and Oregon.

Almost a third of Sandy's population is under 20 years old.

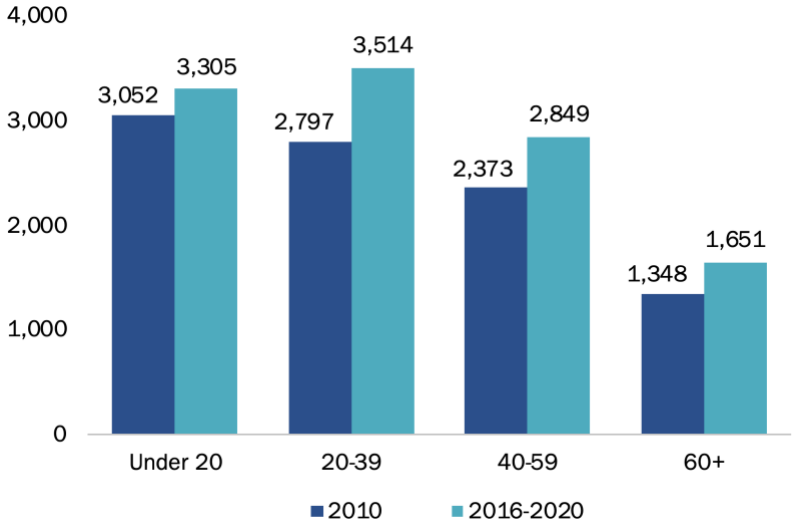
Exhibit 24. Population Distribution by Age, Sandy, Clackamas County, and Oregon, 2016–2020

Source: US Census Bureau, 2016–2020 ACS, Table B01001.



Between 2010 and 2020, all age groups in Sandy increased. The largest increase in residents were those aged 20-39 (growth of 717 people) followed by those aged 40-59 (growth of 476 people).

Exhibit 25. Population Growth by Age, Sandy, 2010, 2016–2020
Source: US Census Bureau, 2010 Decennial Census Table P012 and 2016–2020 ACS, Table B01001.



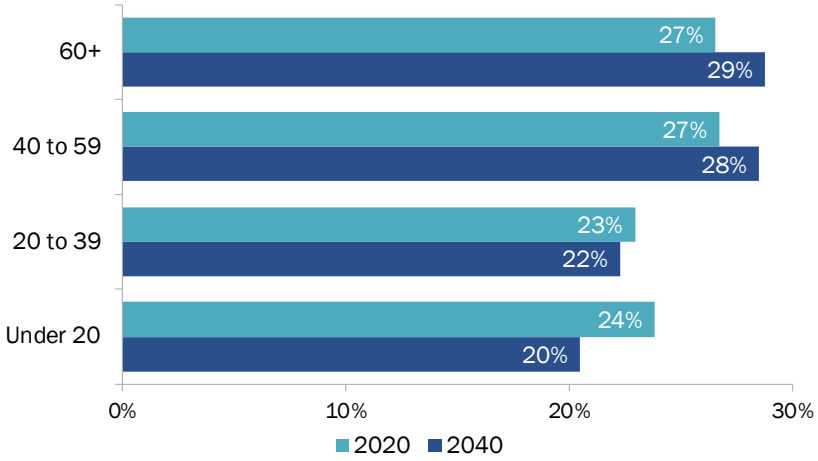
All age groups are expected to grow over the next two decades. People aged 60 and over are forecast to increase 31%, adding more than 34,500 new people. People aged 40 to 59 are forecast to grow by nearly as many, adding 32,500 people.

Exhibit 26. Fastest-Growing Age Groups, Clackamas County, 2020 to 2040
Source: PSU Population Research Center, Clackamas County Forecast, June 2020

Under 20	20-39 Yrs	40-59 Yrs	60+ Yrs
4%	18%	29%	31%
4,060	16,808	32,576	34,579
People	People	People	People

By 2040, Clackamas County residents aged 40 and older will make up to 57% of the county's total population, a 3% increase in share from 2020.

Exhibit 27. Population Growth by Age Group, Clackamas County, 2020 and 2040
Source: PSU Population Research Center, Clackamas County Forecast, June 2020.



Racial and Ethnic Diversity

Sandy has a similar racial and ethnic makeup as Clackamas County, with about 17% of Sandy residents identifying as a person of color (Asian, Black or African American, American Indian and Alaska Native, Some Other Race Alone, and Two or More Races) or Latino. Housing needs do not generally differ by race or ethnicity, but other characteristics of households that affect housing needs (and the housing choices available to these households) may vary by race or ethnicity. For example, Exhibit 37 shows a difference in income by race and ethnicity. These differences in income result in households making different choices (often by necessity) based on income and the availability of affordable housing. To the extent that characteristics of current housing situations for people of color are different from the overall average, these differences are more likely to reflect availability of affordable housing or the impact of housing discrimination from lending institutions, rather than different preferences by race or ethnicity.

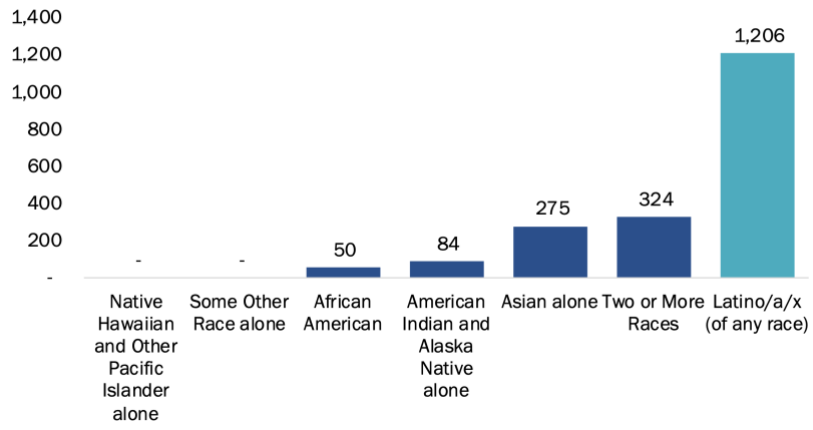
Exhibit 28 shows Sandy's population by race and ethnicity, excluding those who identified as White Alone. Sandy has a large population of Latino residents, almost four times the size of the second-largest racial or ethnic group.

In Sandy, about 1,939 people identified as a race or ethnicity other than White, non-Hispanic, accounting for about 17% of Sandy's population.

Not shown in the exhibit are the 9,380 people identifying as White, non-Hispanic in Sandy.

Exhibit 28. Number of People by Race and Ethnicity, Sandy, 2016-2020

Source: US Census Bureau, 2016-2020 ACS, Table B03002.



Sandy was less racially diverse than Clackamas County and Oregon.

Exhibit 29. Population by Race/Ethnicity as a Percent of Total Population, Sandy, Clackamas County, Oregon, 2016–2020
Source: US Census Bureau, 2016–2020 ACS Table B02001 and B03002.

	Sandy	Clackamas Co.	Oregon
White Alone	83%	81%	75%
Latino (of any race)	11%	9%	13%
Two or More Races	3%	4%	4%
Asian Alone	2%	4%	4%
American Indian and Alaska Native Alone	1%	0%	1%
Black or African American Alone	*	1%	2%
Native Hawaiian and Other Pacific Islander Alone	*	*	*
Some Other Race Alone	*	*	*

The number of residents that identified as Latino increased in Sandy by 322 people, from 884 people in 2010 to 1,206 people in 2020. The US Census Bureau forecasts that at the national level, the Latino population will continue growing faster than most other populations between 2020 and 2040. The Census forecasts that the Latino population will increase 93% from 2016 to 2060 and foreign-born Latino populations will increase by about 40% in that same time.[18]

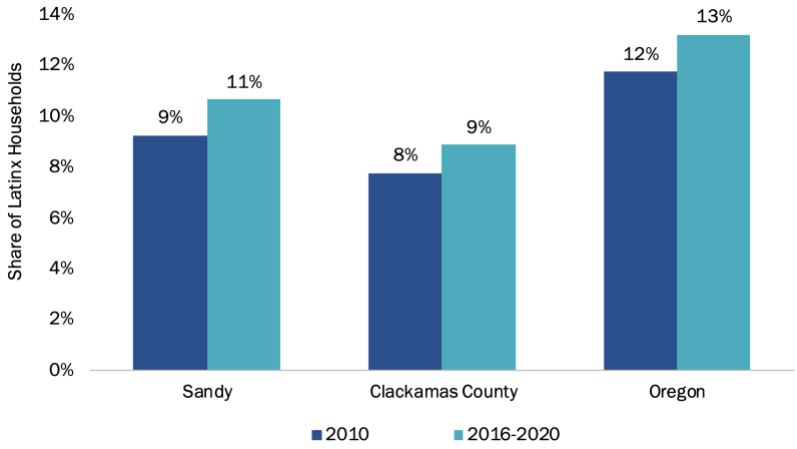
Continued growth in the Latino population will affect Sandy's housing needs in a variety of ways. Growth in first and, to a lesser extent, second and third-generation Latino immigrants will increase demand for larger dwelling units to accommodate the, on average, larger household sizes for these households. Latino households are twice as likely to include multigenerational households than the general populace.[19] As Latino households change over generations, household size typically decreases and housing needs become similar to housing needs for all households.

According to the *State of Hispanic Homeownership* report from the National Association of Hispanic Real Estate Professionals, the Latino population accounted for 29% of the nation's new household formation between 2017 and 2021.[20] The rate of homeownership for Latino households increased from 45.6% in 2015 to 48.4% in 2021. Latino homeownership growth has remained steady over the last decade and is at its highest rate since 2009.

[18] US Census Bureau, *Demographic Turning Points for the United States: Population Projections for 2020 to 2060.*
[19] Pew Research Center. (2013). *Second-Generation Americans: A Portrait of the Adult Children of Immigrants.* National Association of Hispanic Real Estate Professionals (2019). *2019 State of Hispanic Homeownership Report.*
[20] National Association of Hispanic Real Estate Professionals (2021). *2021 State of Hispanic Homeownership Report.*

Between 2000 and 2020 the share of Sandy's households that identified as Latino increased at a faster rate than both the county and the state.

Exhibit 30. Latino Population as Percent of Total Population, Sandy, Clackamas County, Oregon, 2010 and 2016–2020
Source: US Census Bureau, 2000 Decennial Census Table P008, 2016–2020 ACS Table B03002.



Household Size and Composition

On average, Sandy's households are larger than both Clackamas County and the state with a larger share of households with children, consistent with Sandy's age distribution.

Sandy's average household size was larger than both Clackamas County's and Oregon's.

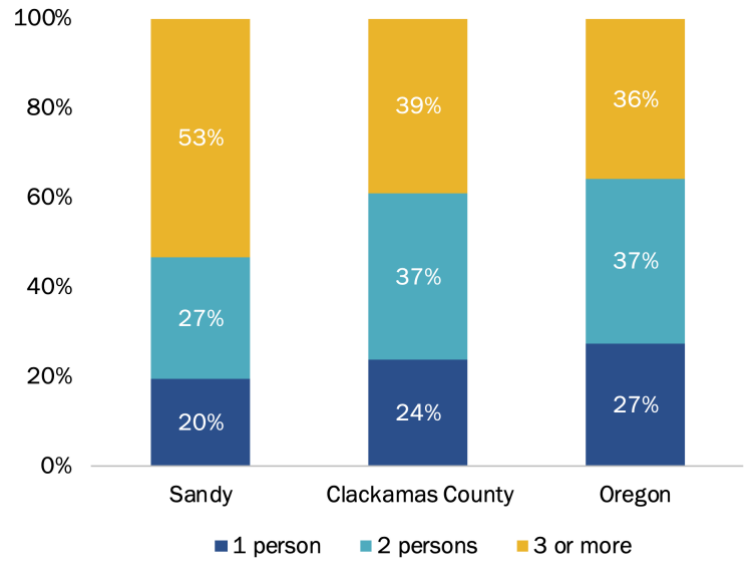
Exhibit 31. Average Household Size, Sandy, Clackamas County, Oregon, 2016-2020
Source: US Census Bureau, 2016-2020 ACS 5-Year Estimate, Table B25010.

2.75 Persons	2.59 Persons	2.49 Persons
Sandy	Clackamas County	Oregon

Sandy has a larger share of households with 3 or more people than Clackamas County and Oregon.

Exhibit 32. Household Size, Sandy, Clackamas County, Oregon, 2016-2020

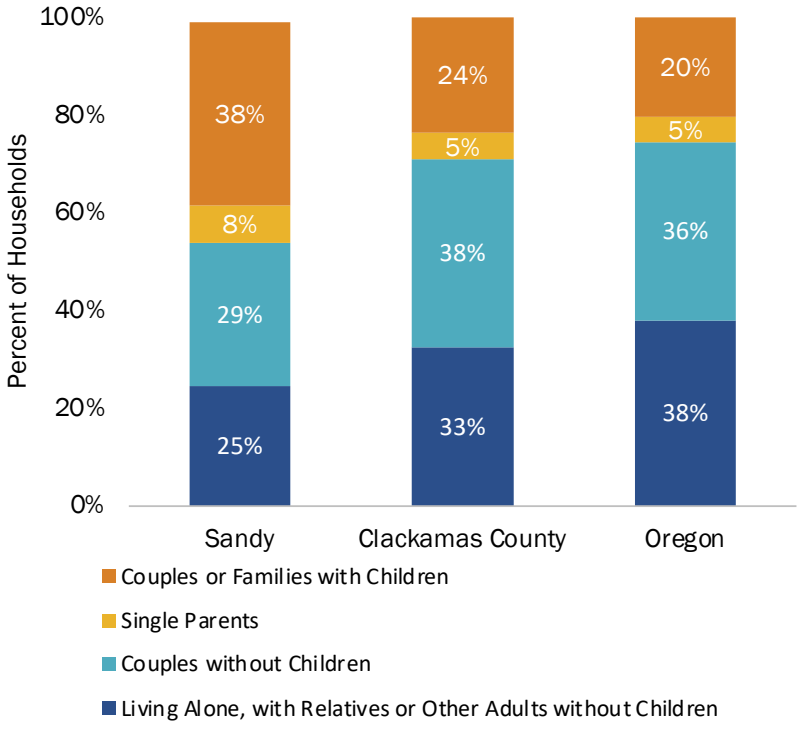
Source: US Census Bureau, 2016-2020 ACS 5-Year Estimate, Table B25010.



Sandy has a larger share of households with children (46%) than Clackamas County (29%) or Oregon (25%).

Exhibit 33. Household Composition, Sandy, Clackamas County, Oregon, 2016-2020

Source: US Census Bureau, 2016-2020 ACS 5-Year Estimate, Table DP02.

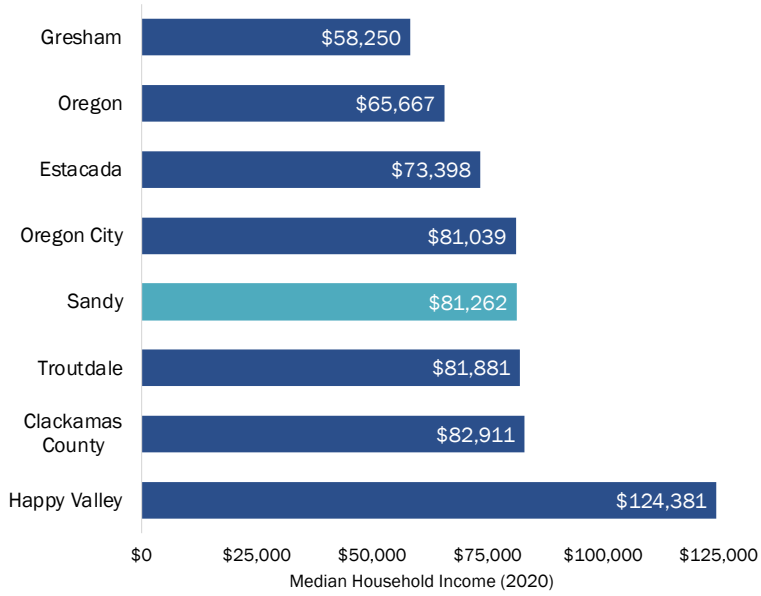


Income of Sandy Residents

Income is a key determinant in housing choice and households' ability to afford housing. Sandy's median household income was slightly lower than the Clackamas County median (less than $2,000 lower). Adjusted for inflation, Sandy's household income increased by 27% since 2000, eclipsing county and statewide growth trends. The increase in household income occurred at a time when rent and housing prices in Sandy (and the whole region) increased substantially.

Sandy's median household income was similar to that of Clackamas County and higher than the state's median household income.

Exhibit 34. Median Household Income, Sandy, Clackamas County, Oregon, Comparison Cities, 2016-2020
Source: US Census Bureau, 2016-2020 ACS 5-Year Estimate, Table B25119.

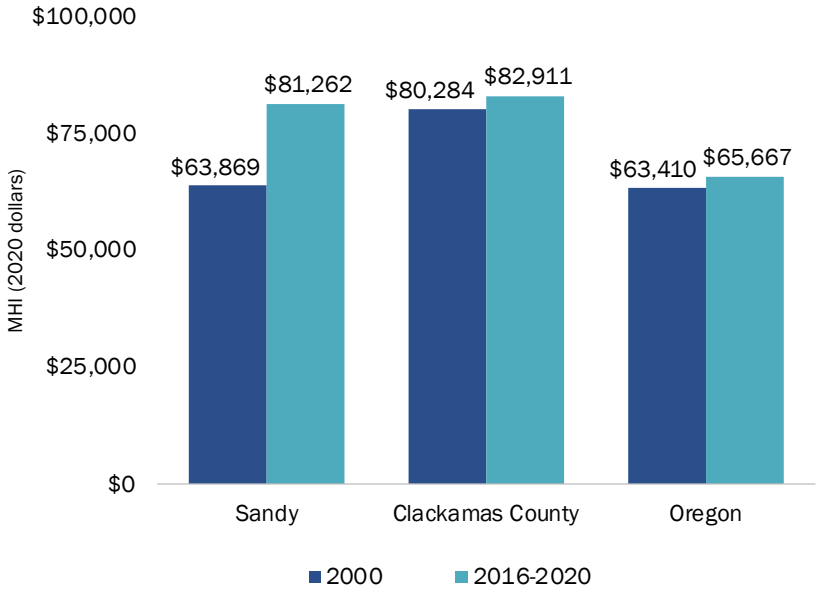


After adjusting for inflation, Sandy's median household income increased by 27% from 2000 to 2020.

Without adjusting for inflation, Sandy's median household income increased from about $41,000 in 2000 to $81,000 in 2020, an increase of 100%.

Exhibit 35. Change in Median Household Income, Sandy, Clackamas County, Oregon, 2000 to 2016-2020, Inflation-Adjusted (2020 dollars)

Source: US Census Bureau, 2000 Decennial Census, Table HCT012; 2016-2020 ACS 5-Year Estimate, Table B25119.

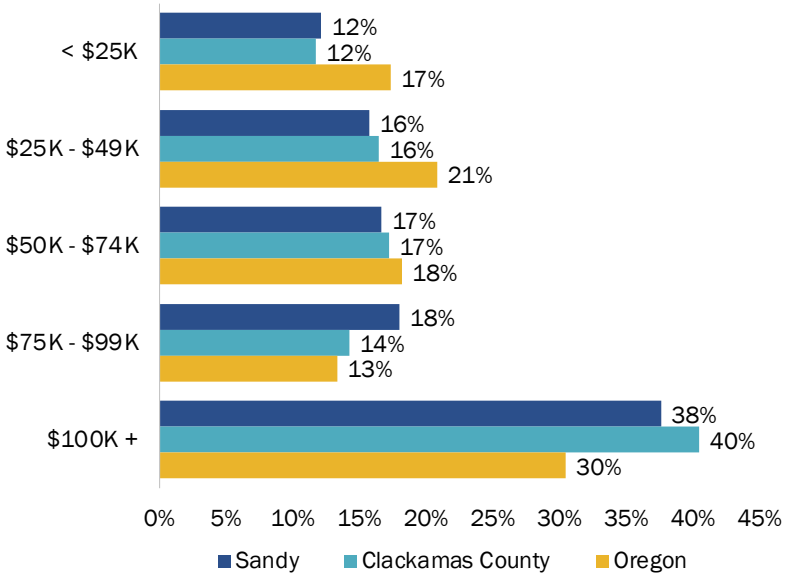


Just over half of all households in Sandy (56%) earned more than $75,000, compared to 54% of Clackamas County households and 43% of Oregon households.

Sandy has a smaller share of households earning less than $50,000 than the state.

Exhibit 36. Household Income, Sandy, Clackamas County, Oregon, 2016-2020

Source: US Census Bureau, 2016-2020 ACS 5-Year Estimate, Table B19001.

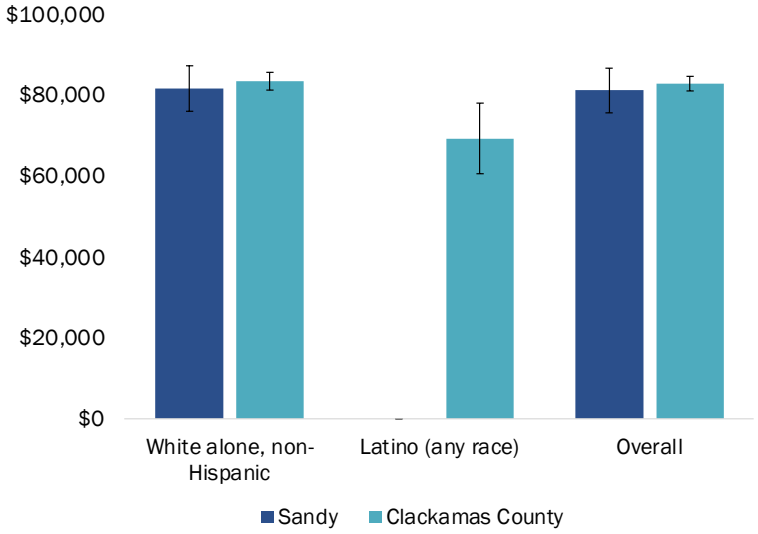


In Clackamas County, Latino households had median household incomes between $61,000 and $78,000, which was below the overall county median household income of about $83,000.

While City-level data had a high margin of error, it is reasonable to assume that Latino households may similarly have lower median household incomes than the City's overall median household income of $81,262.

Exhibit 37. Median Household Income by Race/Ethnicity of the Head of Household, Sandy, 2016-2020

Source: US Census Bureau, 2016-2020 ACS 5-Year Estimate, Table S1901.
Note: The black lines for each bar in this chart denote an estimate's margin of error. These are displayed because, when parsing Census survey data for a cross-section of data, there is more statistical noise when computing estimates. The inclusion of the bars indicates the range in which the true estimate likely lies (within a degree of statistical certainty). Note: Latino not included at the city level due to high margins of error.

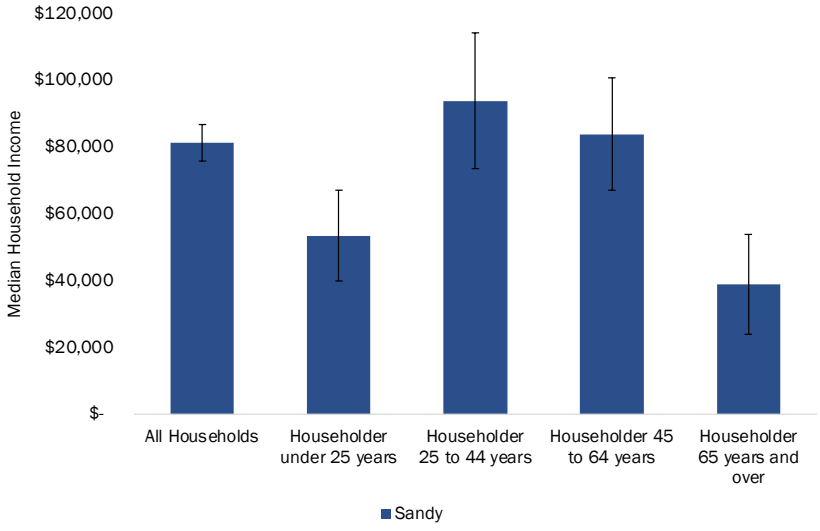


Senior households had median household incomes of approximately $39,000, which was below the overall city median household income of about $81,000.

Working-aged households (those 25 to 65 years old) had the highest median income, consistent with county and state data.

Exhibit 38. Median Household Income by Age of Householder, Sandy, 2016-2020

Source: US Census Bureau, 2016-2020 ACS 5-Year Estimate, Table B19049. Note: The black lines for each bar in this chart denote an estimate's margin of error. These are displayed because, when parsing Census survey data for a cross-section of data, there is more statistical noise when computing estimates. The inclusion of the bars indicates the range in which the true estimate likely lies (within a degree of statistical certainty).



Commuting Trends

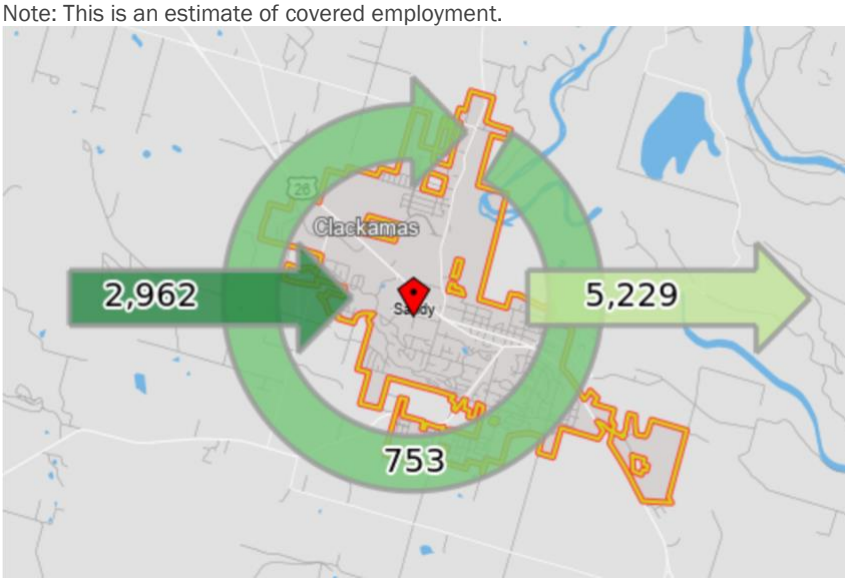
Sandy is part of the complex, interconnected economy within the Portland metro region. Of the 3,700 jobs in Sandy in 2019, 80% of workers commuted into Sandy from other areas, most notably from Gresham, Portland, and Mount Hood. About 5,200 residents of Sandy commuted out of the city for work, many of them to Portland, Gresham, and Beaverton.

About 3,700 people worked in Sandy in 2019. Most of these people commuted into Sandy for work.

About 750 people lived and worked in Sandy, accounting for 20% of jobs in Sandy.

About 5,200 people lived in Sandy but commuted outside of the city for work.

Exhibit 39. Commuting Flows, Sandy, 2019
Source: US Census Bureau, Census on the Map.
Note: This is an estimate of covered employment.



About 20% of Sandy's workforce lived in Sandy in 2019.

The remaining 80% commuted from Gresham, Portland, and other parts of the region.

Exhibit 40. Top Places where Sandy Workers Lived, 2019
Source: US Census Bureau, Census on the Map. Note: This is an estimate of covered employment.

20%	12%	8%	4%
Sandy	Gresham	Portland	Mount Hood

About 13% of Sandy residents worked in Sandy.

27% of Sandy residents commuted to Portland for work. The remaining 60% of residents who work commuted to other parts of the region.

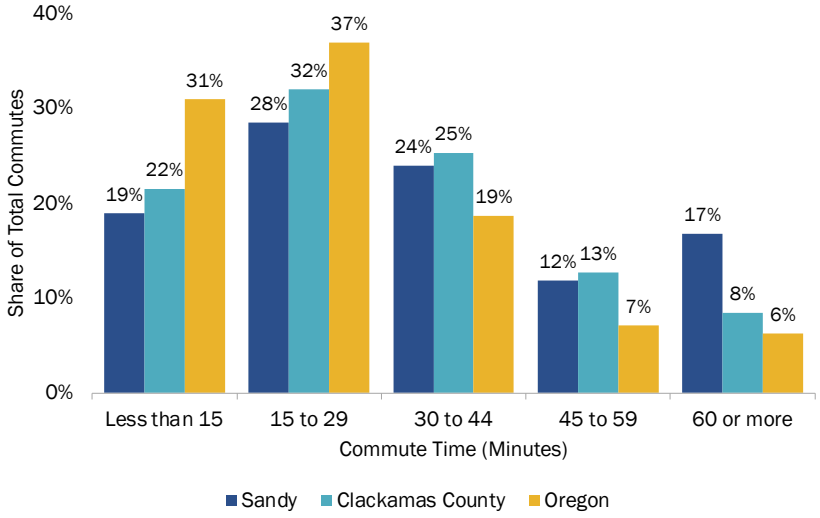
Exhibit 41. Top Places where Sandy Residents Were Employed, 2019
Source: US Census Bureau, Census On the Map. Note: This is an estimate of covered employment.

27%	13%	11%	2%
Portland	Sandy	Gresham	Beaverton

Sandy residents, on average, have a longer commute time than residents of Clackamas County and Oregon.

Just over half (53%) of Sandy residents have a commute time of greater than 30 minutes compared to 46% for Clackamas County and 32% for Oregon. About 17% of Sandy residents commute for over an hour to get to work.

Exhibit 42. Commute Time by Place of Residence, Sandy, Clackamas County, Oregon, 2016-2020
Source: US Census Bureau, 2016-2020 ACS 5-Year Estimate, Table B08303.



Populations with Unique Housing Needs

People Experiencing Houselessness

Gathering reliable data from individuals experiencing houselessness is difficult precisely because they are unstably housed. People can cycle in and out of houselessness and move around communities and shelters. Moreover, the definition of houselessness can vary between communities. Individuals and families temporarily living with relatives or friends are often insecurely housed, but they are often not included in houselessness data. Even if an individual is identified as lacking sufficient housing, they may be reluctant to share information. As a result, information about people experiencing houselessness in Sandy is limited. AntFarm Youth Services, a community partner that serves the houseless population in Sandy, estimated there are 10 adults (25 and older) and 40 youth (24 and younger) experiencing houselessness in Sandy as of 2023.[21]

Homelessness Data Sources

Point-in-Time (PIT) count: The PIT count is a snapshot of individuals experiencing homelessness on a single night in a community. The count records the number and characteristics of people who live in emergency shelters, transitional housing, rapid rehousing, Safe Havens, or PSH—as well as recording those who are unsheltered.

McKinney Vento data: This data records the number of school-aged children who live in shelters or hotels/motels and those who are doubled up, unsheltered, or unaccompanied. This is a broader definition of homelessness than that used in the PIT.

Although these sources of information are known to undercount people experiencing houselessness, they are consistently available for counties in Oregon.

[21] These numbers are for all of Sandy zip code and not necessarily within city limits.

According to HUD's 2022 Annual Homeless Assessment Report (AHAR), across the United States, the number of people experiencing homelessness increased slightly (less than one percent) between 2020 and 2022.[22] This increase reflects a 3% increase in people experiencing *unsheltered* homelessness, offset by a 2% decline in people experiencing *sheltered* homelessness. However, between 2021 and 2022, *sheltered* homelessness increased by 7%, possibly due to the easing of pandemic-related restrictions that resulted in fewer beds available and declines in the perceived health risks of staying in a shelter.

About 571 sheltered and unsheltered people were identified as experiencing houselessness in Clackamas County in 2022.

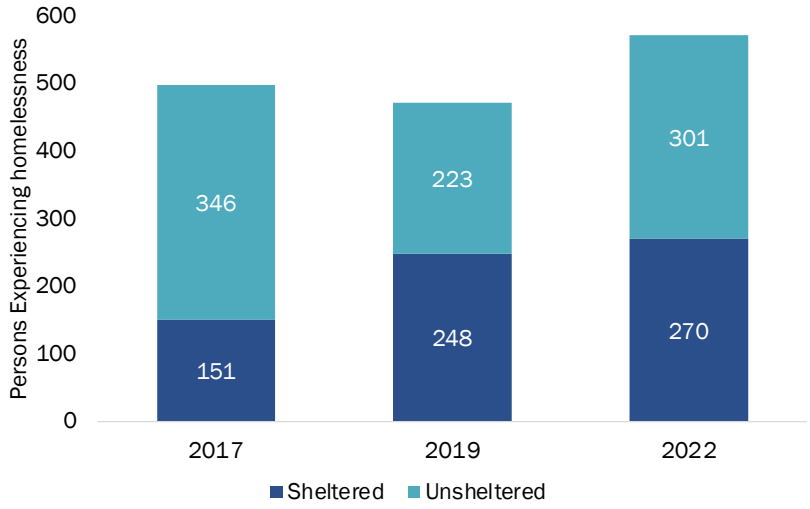
Exhibit 43. Number of Persons Homeless, Sheltered and Unsheltered, Clackamas County, Point-in-Time Count, 2017, 2019, and 2022
Source: Oregon Housing and Community Services.

497 Persons	471 Persons	571 Persons
2017	2019	2022

In 2022, 47% of people experiencing homelessness were sheltered (270 people) and 53% were unsheltered (301 people).

AntFarm, a nonprofit serving the houseless population in Sandy, estimated that there were 10 adults experiencing houselessness in Sandy in 2023.[23]

Exhibit 44. Number of Persons Homeless by Living Situation, Clackamas County, Point-in-Time Count, 2017, 2019, and 2022
Source: Oregon Housing and Community Services.



[22] From 2020 and 2022 the number of people in the US increased 0.6%. The proportion of people experiencing homelessness compared to the total US population stayed about the same.

[23] These numbers are for all of Sandy zip code and not necessarily within city limits.

In the 2019-2020 school year, 70 students were experiencing homelessness.

AntFarm, a nonprofit serving the houseless population in Sandy, estimated that there were 40 youths (24 and younger) experiencing houselessness in in Sandy 2023.[24]

Exhibit 45. Students Homeless by Living Situation, Oregon Trail School District, 2018–2019 and 2019–2020
Source: McKinney Vento, Houseless Student Data.

75 Students
2018-2019

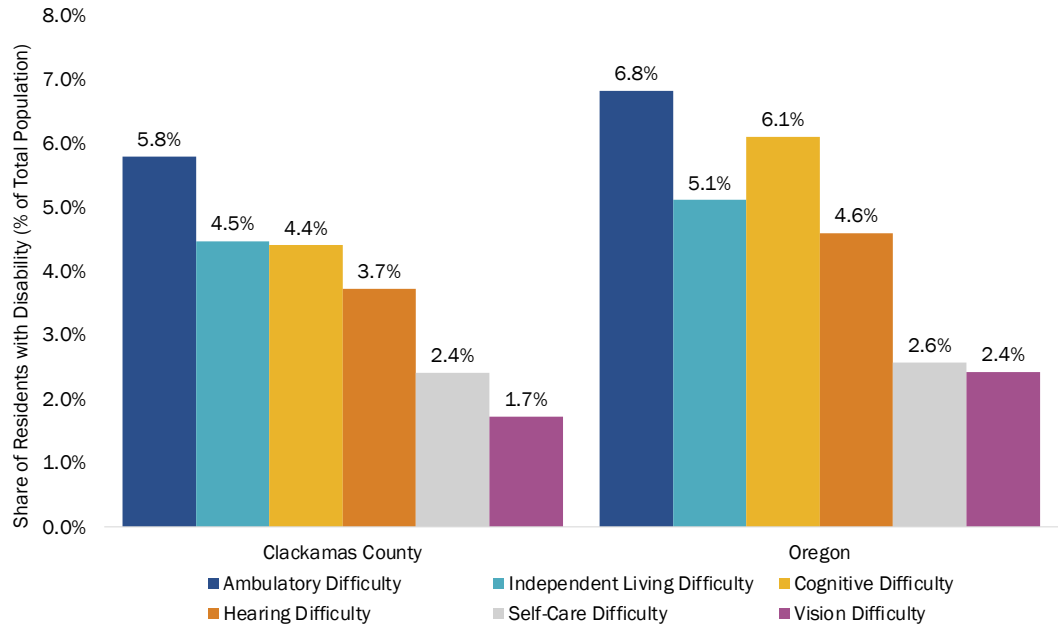
70 Students
2019-2020

People with Disabilities

Persons with disabilities often require housing accommodations such as single-story homes or ground floor dwelling units, unit entrances with no steps, wheel-in showers, widened doorways, visual alarms or alerts (like a fire alarm or doorbell), accommodations for service animals, and other accessibility features. Limited supply of these housing options poses additional barriers to housing access for these groups.

The sample size for Sandy is too small to have accurate persons with disabilities data, so instead, Exhibit 46 shows Clackamas County and Oregon disability data. About 12% of Clackamas County's population has one or more disabilities (about 49,032 people), slightly lower than the state average of 15%.

Exhibit 46. Persons Living with a Disability by Type and as a Percent of Total Population, Clackamas County, Oregon, 2016-2020
Source: US Census Bureau 2016-2020 ACS, Table K201803.



[24] These numbers are for all of Sandy zip code and not necessarily within city limits.

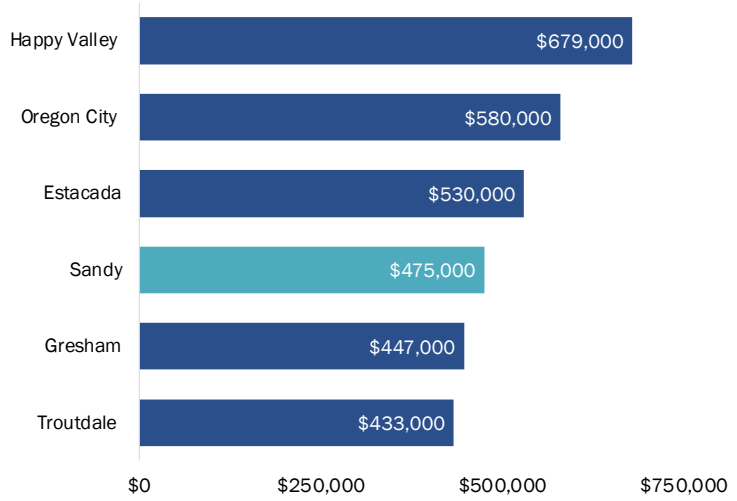
Regional and Local Trends Affecting Affordability in Sandy

This section describes changes in sales prices, rents, and housing affordability in Sandy and comparison areas. Overall, Sandy's median home sales price was about $475,000 at the end of 2022 (Exhibit 47).

Changes in Housing Costs

Sandy's median home sales price was $475,000 in December 2022.

Exhibit 47. Median Home Sales Price, Sandy and Comparison Cities, December 2022
Source: Redfin Data Center



Sandy's median home sales price increased by $211,000 (80%), from $264,000 in December 2015 to $475,000 in December 2022.

Exhibit 48. Median Sales Price, Sandy and Comparison Cities, Dec 2015 through Dec 2022
Source: Redfin Data Center

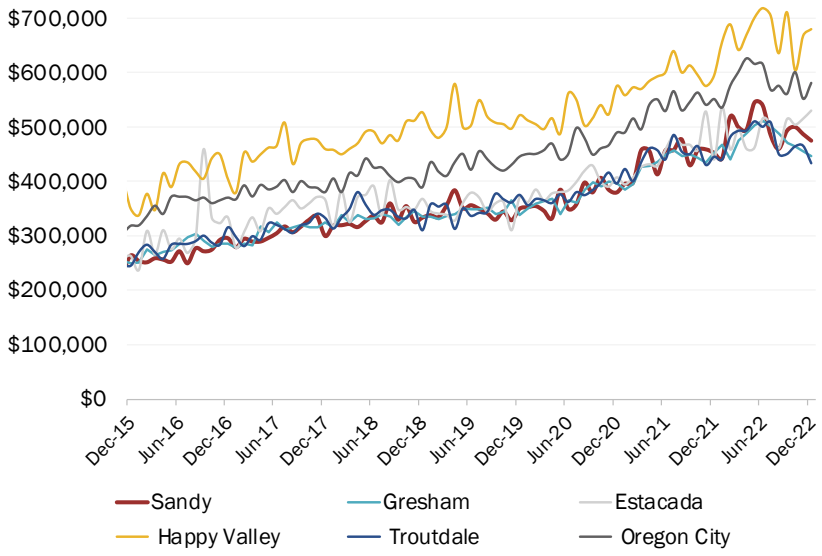
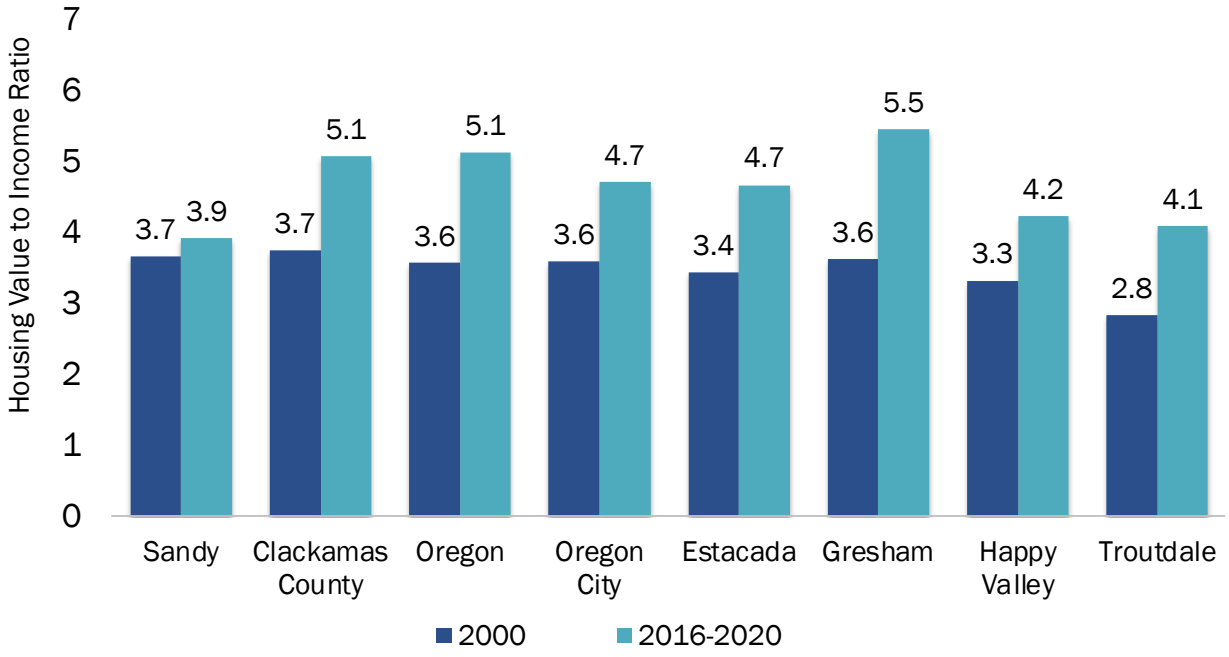


Exhibit 49 shows that, since 2000, housing costs in Sandy increased slightly faster than incomes. The household-reported median value of a house in Sandy was 3.7 times the median household income in 2000 and 3.9 times the median household income in 2020. Sandy's ratio of median housing value to median household income was lower than other comparison cities likely because Sandy's median household income grew faster. Sandy's median household income increased nearly 100% between 2000 and 2020, whereas Clackamas County's median household income increased by about 60% (not adjusted for inflation). This could be partly attributed to Sandy attracting more high-income residents.

Exhibit 49. Ratio of Median Housing Value to Median Household Income, Sandy, Comparison Counties, Oregon, and Comparison Cities, 2000 to 2016-2020
Source: US Census Bureau, 2000 Decennial Census (Table HCT012, H085); 2016-2020 ACS (Table B19013, B25077).



Rental Costs

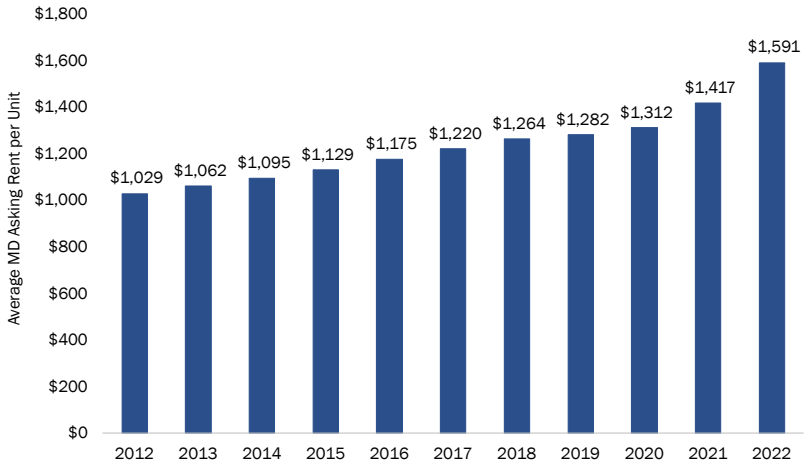
Multi-dwelling average asking rents were $1,591 per unit in 2022, not including cost of utilities. The asking rents in 2022 vary from $1,475 for a studio unit to $1,936 for a three-bedroom unit.

The average asking price per multi-dwelling unit in Sandy has increased steadily over the past decade.

Between 2015 and 2022, Sandy's average multi-dwelling asking rent increased by about $462 (41%), from $1,129 per month to $1,591 per month.

ECONorthwest surveyed three properties in February 2023 to better understand the current rental market. The cost of a two-bedroom apartment ranged from $1,399 to $1,965 across three properties surveyed.

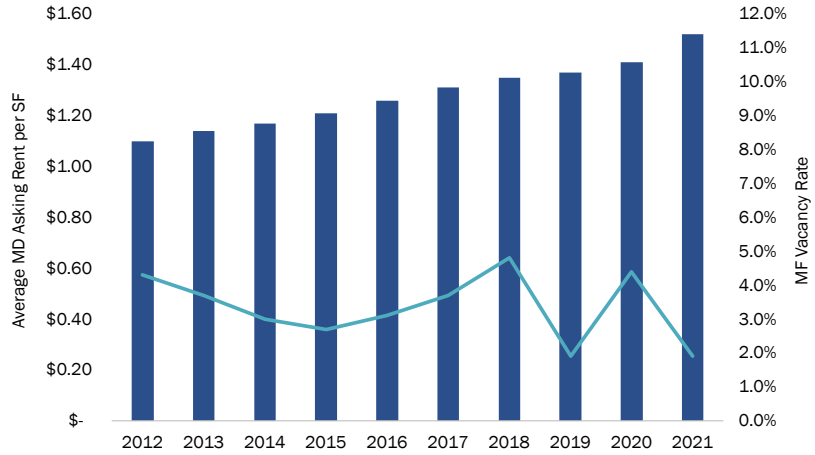
Exhibit 50. Average Multi-Dwelling Asking Rent per Unit, Sandy, 2012 through 2022
Source: CoStar.



In 2021, Sandy's average multi-dwelling asking rent was $1.52 per square foot, up from $1.21 per square foot in 2015, a 26% increase.

In this time, Sandy's multi-dwelling vacancy rate decreased from 2.7% in 2015 to 1.9% in 2021.

Exhibit 51. Average Multi-Dwelling Asking Rent per Square Foot and Average Multi-Dwelling Vacancy Rate, Sandy, 2012 through 2021
Source: CoStar.



Housing Affordability

A typical standard used to determine housing affordability is that a household should pay no more than a certain percentage of household income for housing, including payments and interest or rent, utilities, and insurance. The Department of Housing and Urban Development's guidelines indicate that households paying more than 30% of their income on housing experience "cost burden" and households paying more than 50% of their income on housing experience "severe cost burden." Using cost burden as an indicator is one method of determining how well a city is meeting the Goal 10 requirement to provide housing that is affordable to all households in a community.

For example, about 17% of Sandy's households have an income of less than $34,000 per year. In accordance with the Department of Housing and Urban Development's guidelines, these households can afford rent of less than $860 per month. Most, but not all, of these households are cost burdened.

While cost burden is a common measure of housing affordability, it does have some limitations. A household is defined as cost burdened if the housing costs exceed 30% of their income, regardless of actual income. The remaining 70% of income is expected to be spent on nondiscretionary expenses, such as food or medical care expenses. Households with higher incomes may be able to pay more than 30% of their income on housing without impacting the household's ability to pay for necessary nondiscretionary expenses.

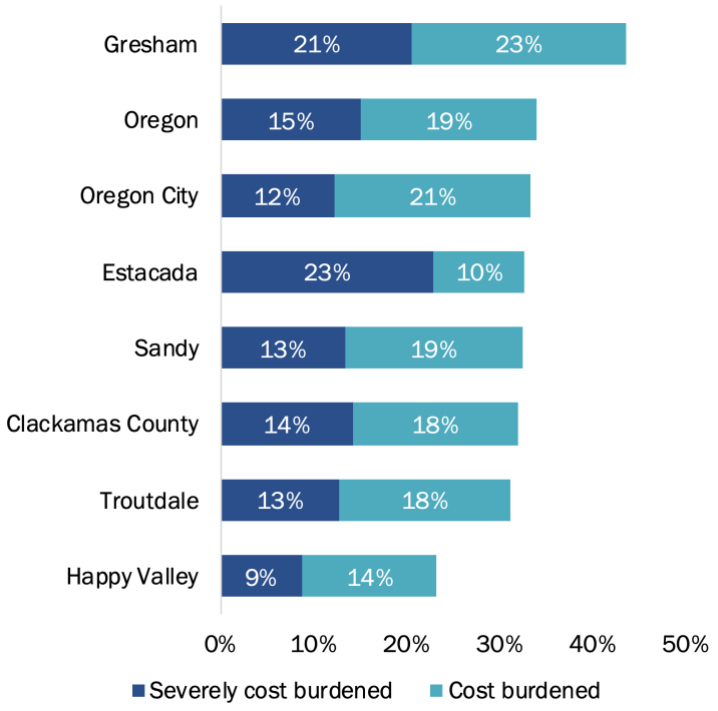
In addition, cost burden compares income to housing costs and does not account for accumulated wealth. As a result, the estimate of how much a household can afford to pay for housing does not include the impact of a household's accumulated wealth.

Cost burden also does not account for debts, such as college loans, credit card debt, or other debts. As a result, households with high levels of debt may be less able to pay up to 30% of their income for housing costs.

About 32% of Sandy's households were cost burdened in 2020 and 13% were severely cost burdened. In this period, about 60% of *renter* households were cost burdened or severely cost burdened, compared with 23% of homeowners. Sandy experienced similar cost burden rates to Clackamas County and Oregon.

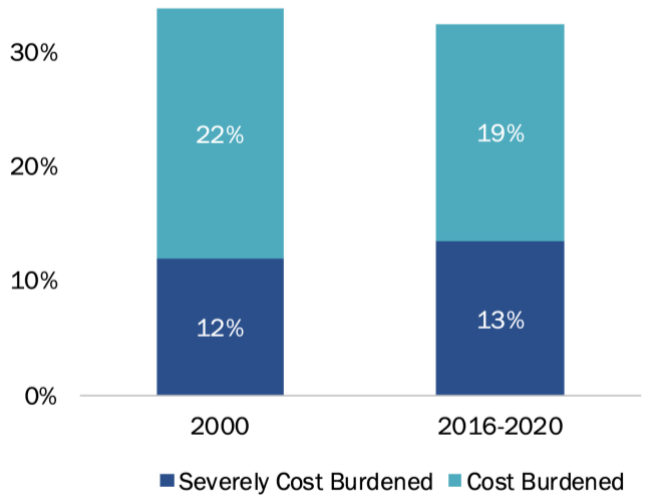
Overall, about 32% of all households in Sandy were cost burdened, similar to Clackamas County (32%) and slightly lower than Oregon (34%).

Exhibit 52. Housing Cost Burden, Sandy, Clackamas County, Oregon, Other Comparison Cities, 2016-2020
Source: US Census Bureau, 2016-2020 ACS Tables B25091 and B25070.



From 2000 to 2020 the number of cost-burdened households decreased slightly.

Exhibit 53. Change in Housing Cost Burden, Sandy, 2000 to 2016-2020
Source: US Census Bureau, 2000 Decennial Census, Tables H069 and H094 and 2016-2020 ACS Tables B25091 and B25070.

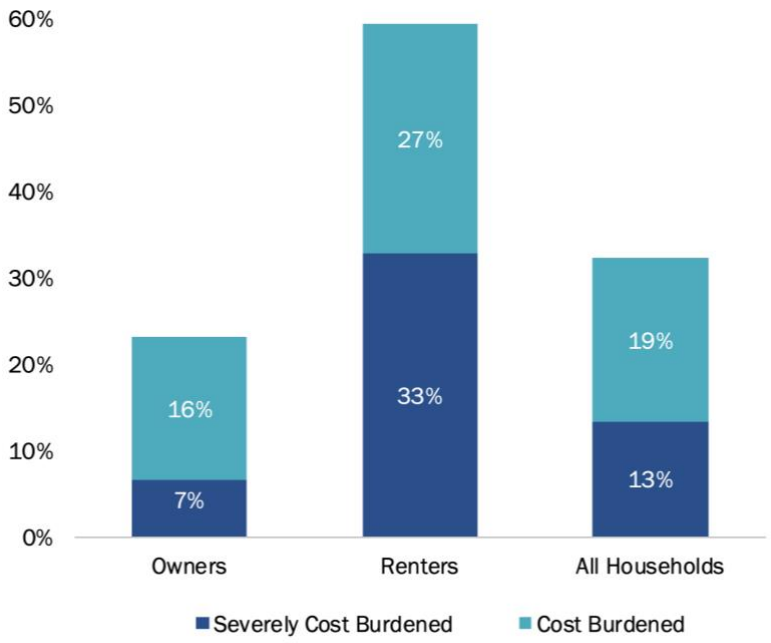


Renters are much more likely to be cost burdened than homeowners.

About 60% of Sandy's renters were cost burdened or severely cost burdened, compared to 23% of homeowners.

About 33% of Sandy's renters were severely cost burdened (meaning they paid more than 50% of their income on housing costs alone).

Exhibit 54. Housing Cost Burden by Tenure, Sandy, 2016-2020
Source: US Census Bureau, 2016-2020 ACS Tables B25091 and B25070.



Cost burden is highest for renter households with the lowest incomes. About 65% of Sandy's renter households have incomes below $50,000, compared with 15% of Sandy's owner households.

Most renter households earning less than $50,000 are cost burdened.

About 85% of renter households that earn less than $20,000 are severely cost burdened.

Exhibit 55. Cost-Burdened Renter Households, by Household Income, Sandy, 2016-2020
Source: US Census Bureau, 2016-2020 ACS Table B25074.

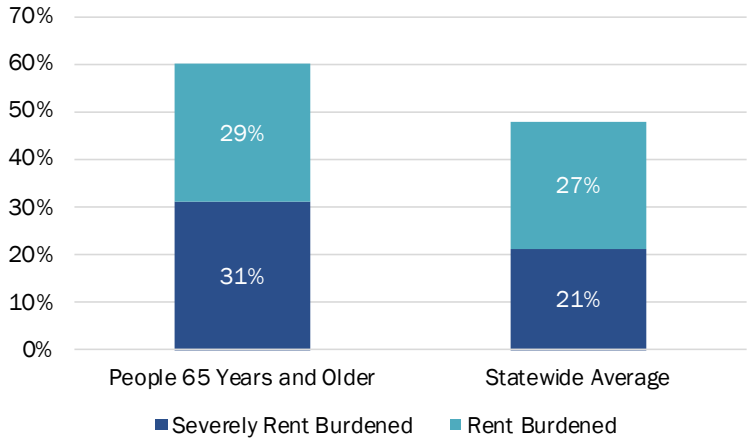
Exhibit 56 through Exhibit 58 show cost burden in Oregon for renter households for seniors, people of color, and people with disabilities.[25] This information is not readily available for a city with a population as small as Sandy, which is why we present statewide information. These exhibits show that these groups experience cost burden at higher rates than the overall statewide average.

Renters 65 years of age and older were disproportionately rent burdened compared to the state average.

About 60% of renters aged 65 years and older were rent burdened, compared with the statewide average of 48% of renters.

Exhibit 56. Cost-Burdened Renter Households, for People 65 Years of Age and Older, Oregon, 2018

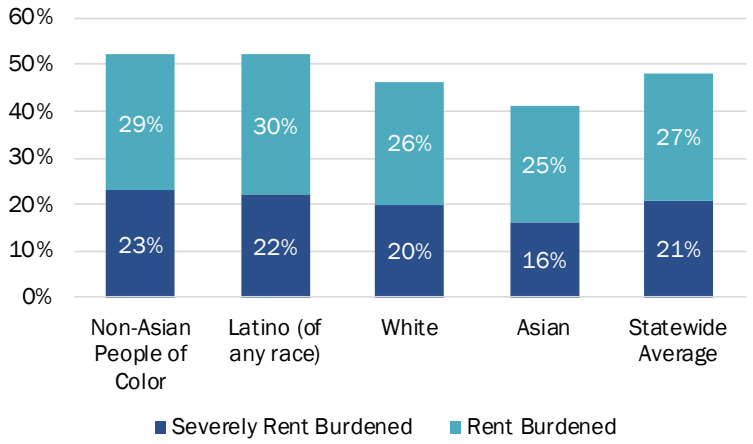
Source: US Census, 2018 ACS 1-Year PUMS Estimates. From the Report *Implementing a Regional Housing Needs Analysis Methodology in Oregon: Approach, Results, and Initial Recommendations* by ECONorthwest, August 2020.



Compared to the average renter household in Oregon, those that identified as a non-Asian person of color or as Latino/a/x were disproportionately rent burdened.

Exhibit 57. Cost-Burdened Renter Households, by Race and Ethnicity, Oregon, 2018

Source: US Census, 2018 ACS 1-Year PUMS Estimates. From the Report *Implementing a Regional Housing Needs Analysis Methodology in Oregon: Approach, Results, and Initial Recommendations* by ECONorthwest, August 2020.

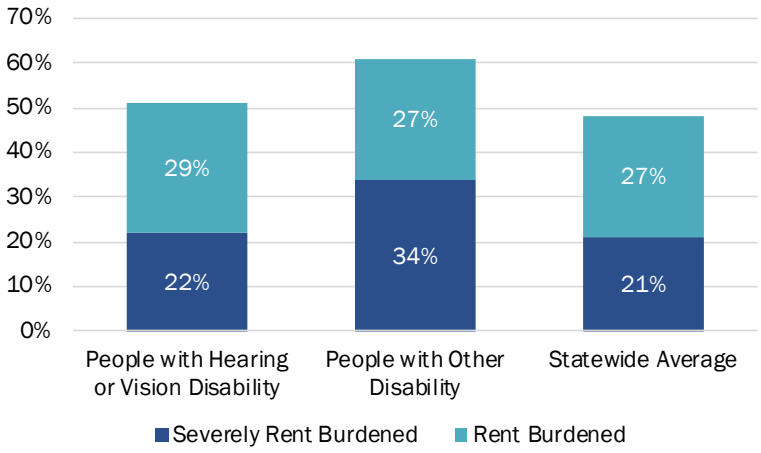


[25] From the report *Implementing a Regional Housing Needs Analysis Methodology in Oregon*, prepared for Oregon Housing and Community Services by ECONorthwest, March 2021.

Renters with a disability in Oregon were disproportionately cost burdened.

Exhibit 58. Cost-Burdened Renter Households, for People with Disabilities, Oregon, 2018

Source: US Census, 2018 ACS 1-Year PUMS Estimates. From the Report *Implementing a Regional Housing Needs Analysis Methodology in Oregon: Approach, Results, and Initial Recommendations* by ECONorthwest, August 2020.



Another way of exploring the issue of financial need is to review housing affordability at varying levels of wages and household income.

Fair Market Rent for a 2-bedroom apartment in Portland-Vancouver-Hillsboro, OR-WA MSA is $1,839.

ECONorthwest's research about the costs of a 2-bedroom apartment in Sandy showed that the costs range between $1,399 and $1,965.

Exhibit 59. HUD Fair Market Rent (FMR) by Unit Type, Portland-Vancouver-Hillsboro, OR-WA MSA, 2023

Source: US Department of Housing and Urban Development.

$1,500	$1,610	$1,839	$2,574	$2,995
Studio	1-Bedroom	2-Bedroom	3-Bedroom	4-Bedroom

A person must earn at least $35.37 per hour to afford two-bedroom Fair Market Rent ($1,839).

That is $73,560 for a full-time job. About 44% of Sandy's households have incomes below $73,600 per year.

Exhibit 60. Affordable Housing Wage, Portland-Vancouver-Hillsboro, OR-WA MSA, 2021

Source: US Department of Housing and Urban Development; Oregon Bureau of Labor and Industries.

$35.37 per hour

Affordable housing wage for two-bedroom unit in Portland-Vancouver-Hillsboro, OR-WA MSA

In 2021, the overall average wage for people working at a business located in Sandy was $43,856, compared to $71,512 in the Portland metro region. Households need to have at least two people working average-wage jobs (or above) to afford the average asking rent plus utilities of $1,840.[26] Single-worker households or two-worker households with lower-wage jobs cannot afford this rent. A household would need to have income of about $73,600 to afford these rents.

Average wages in Sandy are also not high enough to pay for the median home sales price of $475,000. Even two-worker households with relatively high-wage jobs cannot afford the median home sales price. Households would need to earn approximately $146,000 annually to afford this sales price.

Exhibit 61. Financially Attainable Housing for Workers in Sandy

Source: 2021 covered employment from confidential Quarterly Census of Employment and Wage (QCEW) data provided by the Oregon Employment Department; Redfin Data Center (2022), Costar (2022).

			Workers in Sandy can afford...		
			monthly housing costs of:	average asking rent?	median home sales price?
Can people who work in Sandy afford to live in Sandy? *Average Asking Rent (from Costar) plus $250 for utilities: $1,840* *Median Home Sales Price: $475,000*	Average Wage $43,856	Single-Worker Household: $43,856	$1,100	✗	✗
		Two-Worker Household: $87,713	$2,200	✓	✗
	Food Service Average Wage (low wage) $23,042	Single-Worker Household: $23,042	$580	✗	✗
		Two-Worker Household: $46,084	$1,200	✗	✗
	Manufacturing Average Wage (high wage) $64,470	Single-Worker Household: $64,470	$1,600	✗	✗
		Two-Worker Household: $128,940	$3,200	✓	✗
	Mixed (one high and one low-wage worker)	Two-Worker Household: $87,512	$2,200	✓	✗

[26] Average asking rent was about $1,590 in 2022 according to Costar. ECONorthwest assumed $250 per month for utilities for a total housing cost of $1,840.

Exhibit 62 shows housing affordability based on the regional median family income (MFI) for Clackamas County, which is used by HUD to understand the differences in housing affordability in different places across the nation. In Clackamas County (and the rest of the Portland region), the MFI for a family of four was $114,400 in 2023.

A household earning 100% of MFI ($114,400) could afford monthly housing costs of about $2,860 or a home roughly valued between $315,000 and $372,000, depending on the interest rate of the loan, the loan term, and the amount of down payment.

To afford the median home sales price of $475,000, a household would need to earn about $146,000 or 128% of MFI. About 20% of Sandy's households have income sufficient to afford this median home sales price in accordance with HUD guidelines.

A household would need to have income of about $73,600 (about 64% of MFI) to afford the average asking rent for multi-dwelling housing plus basic utilities like power, heat, and water of $1,840.[27] 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.

[27] Average asking rent was about $1,590 in 2022 according to Costar. ECONorthwest assumed $250 per month for utilities for a total housing cost of $1,840.

Exhibit 62. Financially Attainable Housing, by Median Family Income (MFI) for Clackamas County ($114,400), 2023

Source: U.S. Department of Housing and Urban Development, Portland MSA, 2023. Note: Note: The estimates of affordable home sales prices below are rough estimates. The affordable home sales prices will vary for each borrowing household, based on interest rates, loan term, down payment, and similar factors. These sales prices are illustrative estimates and do not make assumptions about specific interest rates (assumed 6.5% or more), amount of down payment, whether mortgage insurance will be required, or other factors that are unique to an individual household's mortgage.

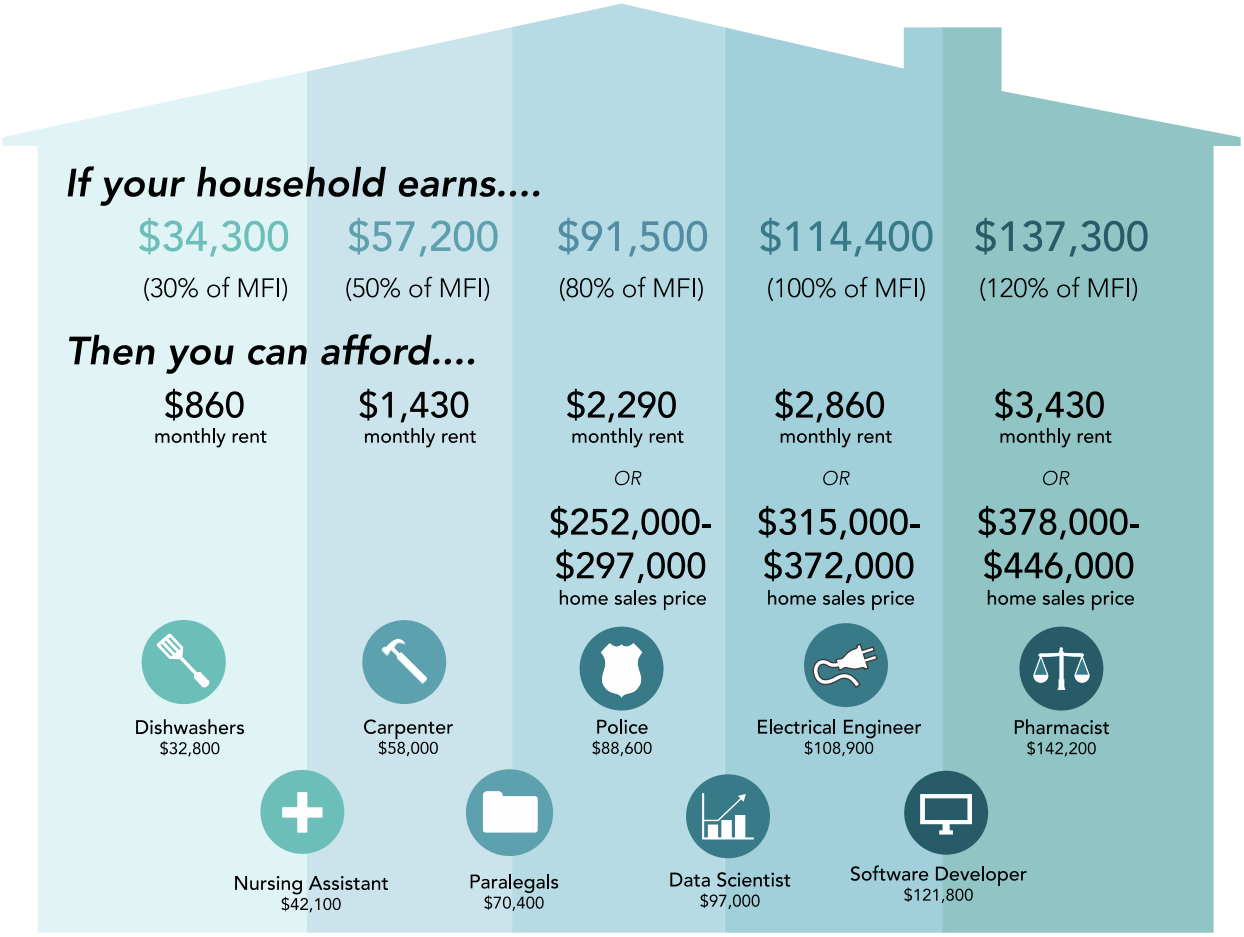


Exhibit 63. Share of Households by Median Family Income (MFI) for Clackamas County, Sandy, 2023
Source: US Department of HUD. US Census Bureau, 2016-2020 ACS Table 19001.

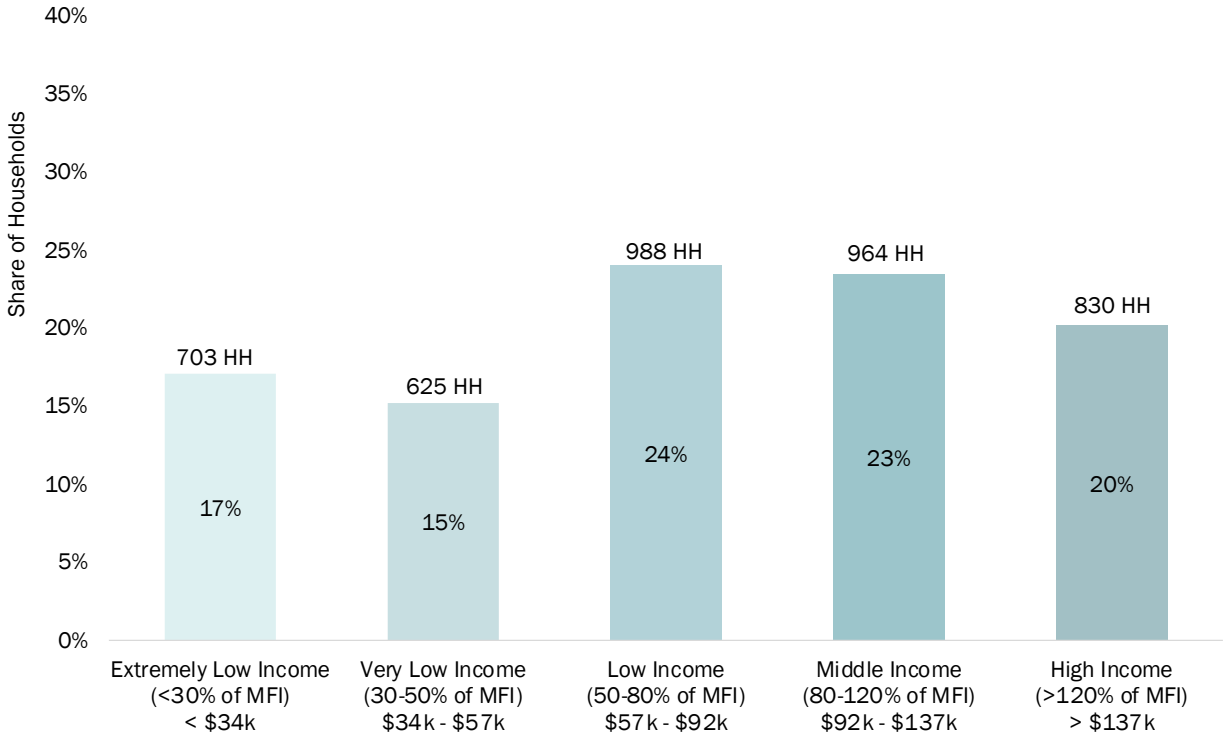
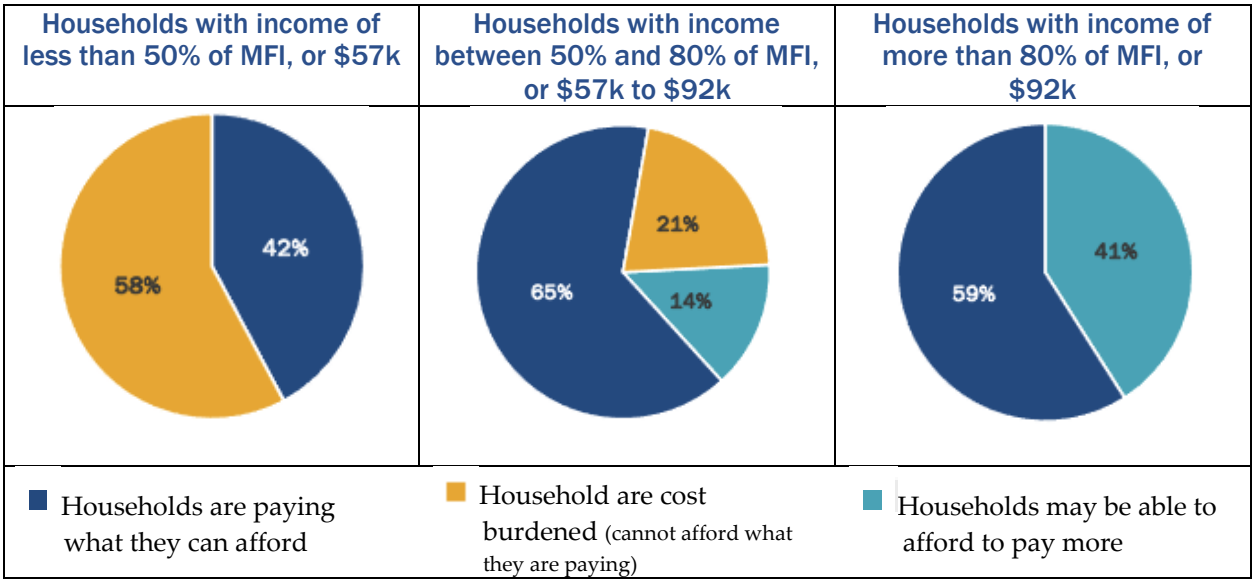


Exhibit 64 illustrates housing unit affordability based on information from HUD and the US Census about unit affordability and household income. It compares the amount that the household could pay for housing with the amount that they are paying for housing. Households can afford what they are paying (dark blue), could afford to pay more than they are paying (teal blue), or are cost burdened and cannot afford to pay as much as they are paying (yellow).

- Households with income of less than 50% of MFI (or $57,000) are most likely to be cost burdened. Only 42% of households in this income can afford their housing. Sandy has a deficit of about 610 units that are affordable to these households.
- Most households with income between 50% and 80% of MFI (or $57,000 to $92,000) can afford their housing costs. About 14% of these households may be able to afford to pay more than they do for their housing. And about 21% of households in this income group are cost burdened, accounting for 144 households.
- All households with income of more than 80% of MFI (or $92,000) can either afford their current housing or may be able to afford to pay more than they do for their housing.

Exhibit 64. Unit Affordability by Household Income, Sandy, 2015-2019
Source: CHAS, 2015-2019, Table 18.



Sandy currently has a deficit of housing units for households earning 0-50% of the MFI (less than $57,200 per year), resulting in cost burden of these households. This indicates a deficit of more affordable housing types (such as government-subsidized housing, existing lower-cost apartments, and manufactured housing). This finding is consistent with the other information presented in this section.

For households earning 50-80% MFI, some are cost burdened likely because they cannot find housing that is affordable. Some households earning 50-80% MFI and some earning over 80% MFI may be able to afford more than they are paying for housing, which means that they are occupying units affordable to lower-income households. These households could afford more expensive housing but either choose to live in less costly housing or cannot find higher-cost housing that meets their needs.

Summary of the Factors Affecting Sandy's Housing Needs

The following is a discussion of how demographic and housing trends are likely to affect housing in Sandy over the next twenty years:

- **The high cost of homeownership is a growing challenge in Sandy.** Housing affordability presents a challenge in Clackamas County and the broader Portland metro region. Sandy is affected by these regional trends. In Sandy, housing costs have increased faster than incomes. Between 2015 and 2022, home sales prices increased by about 80%. Between 2015 and 2020, the median household income increased 33%

  Many people who work in Sandy cannot afford to own a home in Sandy. The average wage of a worker in Sandy was $43,856 in 2021. The median home sales price in Sandy was $475,000 as of December 2022. Even two-worker households with relatively high-wage jobs cannot afford the median home sales price. Workers would need to earn approximately $146,000 annually to afford this sales price (assuming 6.5% interest rate or more).[28]

- **Finding affordable rental housing is becoming increasingly challenging in Sandy.** Between 2015 and 2022, rental costs increased by 41% in Sandy. Between 2015 and 2020, the median household income for *renter* households decreased by 10%. Sandy has a small supply of multi-dwelling housing (about 14% of the city's housing stock) which is likely contributing to increasing rents. Over half of renter households were cost burdened (60%) in 2020.

  Many people who work in Sandy cannot afford to rent in Sandy. The average wage of a worker in Sandy was $43,856 in 2021. Households need to have at least two people working average-wage jobs (or above) to afford the average asking rent plus utilities of $1,840.[29] Single-worker households or two-worker households with lower-wage jobs cannot afford this rent. A household would need to have income of about $73,600 to afford these rents.

- **Demographic trends will change Sandy's housing needs over the planning period.** Key demographic and economic trends that will affect Sandy's future housing needs are (1) the aging of millennials and Gen Zers, (2) the growth of the older adult population, and (3) the growth of the Latino population.

  - *Millennials and Gen Zers will continue to form households and make a variety of housing choices.* Sandy has a greater share of younger working-aged people than Clackamas County and Oregon. About 31% of Sandy's population is between 20 and 39 years

[28] The affordable home sales prices varies for each borrowing household, based on interest rates, loan term, down payment, and similar factors.

[29] Average asking rent was about $1,590 in 2022 according to Costar. ECONorthwest assumed $250 per month for utilities for a total housing cost of $1,840.

old, compared to 24% for Clackamas County, and 28% for Oregon. Sandy also has a larger percentage of households with children than the county and state.

This age group includes both millennials (who will be 45 to 65 years old by 2045) and Gen Zers (who will be 25 to 45 years old by 2045). The ability to retain current millennial and Gen Zer residents in Sandy as they age will depend on the City's availability of renter and ownership housing that is large enough to accommodate growing families while still being relatively affordable.

Homeownership is becoming increasingly common among millennials, but financial barriers to homeownership remain for some millennials and Gen Zers, resulting in the need to rent housing, even if they prefer to become homeowners. Housing preferences for Gen Zers are not yet known but are expected to be similar to millennials, with the result that they will also need affordable housing—both for rental and, later in life, for ownership. Some millennial and Gen Zer households will occupy housing that is currently occupied but will become available over the planning period, such as housing that is currently owned or occupied by baby boomers. The need for housing large enough for millennial and Gen Zer families may be partially accommodated by these existing units through future sales.

- *Growth in the senior population*. Fifteen percent of Sandy residents are aged 60 or older compared to Clackamas County (25%) or the state as a whole (24%). However, countywide projections suggest that older residents will make up a greater share of the population in the future. A rise in the number of Sandy's older adult population will result in an increased demand for housing types specific to this population, such as assisted-living facilities or age-restricted developments.
- *Latino population will continue to grow.* Latino population growth will be an important driver in growth of housing demand in Sandy, both for owner and renter-occupied housing. Growth in the Latino population, similar to regional and statewide trends, will drive demand for housing for families with children. Given the lower income for some Latino households, especially first-generation immigrants, growth in this group will also drive demand for affordable housing, both for ownership and renting.

In summary, increasing housing costs and changing demographics underscore the need for more affordable housing in a variety of housing types.

5. Housing Need in Sandy

Projected New Housing Units Needed in the Next Twenty Years

The results of the Housing Capacity Analysis are based on (1) the official population forecast for growth in Sandy over the twenty-year planning period, (2) information about Sandy's housing market relative to Clackamas County, Oregon, and nearby cities, and (3) the demographic composition of Sandy's existing population and expected long-term changes in the demographics of Clackamas County.

Forecast for Housing Growth

This section describes the key assumptions and presents an estimate of new housing units needed in Sandy between 2023 and 2043. The key assumptions are based on the best available data.

- **Population.** A twenty-year population forecast (in this instance, 2023 to 2043) is the foundation for estimating needed new dwelling units. Based on PSU's population forecast, Sandy's UGB is projected to grow from 13,877 persons in 2023 to 20,227 persons in 2043, an increase of 6,350 people.
- **Household Size.** According to the 2016-2020 American Community Survey, the average household size in Sandy was 2.75 people. **Thus, for the 2023 to 2043 period, we assume an average household size of 2.75 persons.**
- **Vacancy Rate.**[30] According to the 2016-2020 American Community Survey, Sandy's vacancy rate was 5%. **Thus, for the 2023 to 2043 period, we assume a 5% vacancy rate.**

[30] The Census defines vacancy as "unoccupied housing units [that] are considered vacant. Vacancy status is determined by the terms under which the unit may be occupied, e.g., for rent, for sale, or for seasonal use only."

Sandy will have demand for 2,424 new dwelling units over the 20-year period, with an annual average of 121 dwelling units.

Exhibit 65. Forecast of Demand for New Dwelling Units, Sandy UGB, 2023 to 2043
Source: Calculations by ECONorthwest.

Variable	New Dwelling Units (2023-2043)
Change in persons	6,350
Average household size	2.75
New occupied DU	2,309
times Vacancy rate	5.0%
equals Vacant dwelling units	115
Total new dwelling units	**2,424**
Annual average of new dwelling units	**121**

Housing Units Needed Over the Next Twenty Years

Exhibit 66 presents a forecast of new housing in Sandy's UGB for the 2023 to 2043 period. This section determines the needed mix and density for the development of new housing developed over this twenty-year period in Sandy.

Over the next twenty years, the need for new housing developed in Sandy will generally include a wider range of housing types and housing that is more affordable. This conclusion is based on the following information, found in the previous sections:

- Sandy's existing housing mix is predominately single-family detached. In 2020, 79% of Sandy's housing was single-family detached, 7% was single-family attached, 4% was multi-dwelling housing (with two to four units per structure), and 10% was multi-dwelling housing (with five or more units per structure). Over the 2014 to May 2023 period, 852 units were built in the City of Sandy. Of the 852 units built, about 69% were for single-family units and 31% were for multi-dwelling units.
- Demographic changes across Sandy suggest increases in demand for single-family attached housing and multi-dwelling housing. The key demographic and socioeconomic trends that will affect Sandy's future housing needs are increasing housing costs, housing affordability concerns for millennials and Gen Zers, need for housing for families with children, growth of the Latino population, and an aging population. The implications of these trends are increased demand for housing that is affordable for families and for smaller, older (often single person) households. Sandy has need for housing both for ownership and rent.
- Sandy's median household income was $81,262 in 2020, which is similar to Clackamas County's median household income. Since 2000, housing costs in Sandy have been increasing faster than incomes. When considering the income of residents, housing in Sandy is more affordable than comparison regions.

- About 32% of Sandy's households are cost burdened (paying 30% or more of their household income on housing costs). About 60% of Sandy's **renters** are cost burdened and about 23% of Sandy's **homeowners** are cost burdened. Cost burden rates in Sandy are similar to those in Clackamas County.
- Sandy needs more affordable housing types for renters. Between 2015 and 2022, rental costs increased by 41%. Between 2015 and 2020, the median household income for *renter* households decreased 10%. A household would need to have an income of $73,600 (about 64% of MFI) to afford the average asking rent for multi-dwelling housing plus utilities of $1,840. According to 2016-2020 ACS data 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.
- Sandy needs more affordable housing types for homeowners. In Sandy, housing costs have increased faster than incomes. Between 2015 and 2022, home sales prices increased by 81%. Between 2015 and 2020 the median household income increased 33%. To afford the median home sales price in Sandy of $475,000, a household would need to earn about $146,000 or 128% of MFI. About 20% of Sandy's households have income sufficient to afford this median home sales price.

These factors suggest that Sandy needs a broader range of housing types with a wider range of price points than are currently available in Sandy's housing stock. This includes providing opportunity for the development of housing types across the affordability spectrum, such as less expensive single-family detached housing (e.g., small-lot single-family detached units, cottages, and accessory dwelling units), town houses, duplexes, triplexes, quadplexes, and multi-dwelling buildings with five or more units.

Exhibit 66 shows the forecast of needed housing in the Sandy UGB during the 2023 to 2043 period. The projection is based on the following assumptions:

- The assumptions about the mix of housing (based on the discussion above) in Exhibit 66 are as follows. This represents Sandy's needed housing mix:
  - **About 60% of new housing will be single-family detached**, a category which includes manufactured housing, cottage housing, and accessory dwelling units. About 79% of Sandy's existing housing was single-family detached in 2020.
  - **About 7% of new housing will be single-family attached.** About 7% of Sandy's existing housing was town houses in 2020.
  - **About 5% of new housing will be duplexes, triplexes, and quadplexes.** About 4% of Sandy's existing housing was plexes in 2020.
  - **About 28% of new housing will be multi-dwelling housing (with five or more units per structure)**. About 10% of Sandy's existing housing was multi-dwelling in 2020.

Sandy is forecast to grow by 2,424 new dwelling units over the 20-year period, 28% of which will be multi-dwelling (5+ units).

Exhibit 66. Forecast of Demand for New Dwelling Units, Sandy, 2023 to 2043
Source: Calculations by ECONorthwest.

Variable	Preliminary Needed Mix
Needed new dwelling units (2023-2043)	**2,424**
Dwelling units by structure type	
Single-family detached	
Percent single-family detached DU	60%
Total new single-family detached DU	1,454
Single-family attached	
Percent single-family attached DU	7%
Total new single-family attached DU	170
Duplex, Triplex, Quadplex	
Percent duplex, triplex, quadplex	5%
Total new duplex, triplex, quadplex	121
Multi-dwelling (5+ units)	
Percent multi-dwelling (5+ units)	28%
Total new multi-dwelling (5+ units)	679
Total new dwelling units (2023-2043)	**2,424**

Exhibit 67 allocates needed housing to plan designations in Sandy. The allocation is based, in part, on the types of housing allowed in the zoning districts of each plan designation. It also considers the densities allowed and required in each designation. Exhibit 67 shows:

- **Single Family Residential (SFR)** allows single-family detached, duplexes, and accessory dwelling units. Density for development is a minimum of 3 dwelling units per net acre and a maximum of 5.8 units per net acre. The minimum single-family lot size is 7,500 square feet.
- **Low Density Residential (R-1)** allows single-family detached and attached, duplexes, and accessory dwelling units. The minimum density for development is 5 dwelling units per net acre and the maximum density is 8 units per net acre. Minimum lot size for single-family detached is 5,500 square feet. Other uses have no minimum lot size.
- **Medium Density Residential (R-2)** allows single-family detached and attached, duplexes, accessory dwelling units, and multi-dwelling. The minimum density for development is 8 dwelling units per net acre and the maximum density is 14 units per net acre. There is no minimum lot size.
- **High Density Residential (R-3)** allows single-family detached and attached, duplexes, accessory dwelling units, and multi-dwelling. The minimum density for development is 10 dwelling units per net acre and the maximum density is 20 units per net acre. There is no minimum lot size.

- **Village (SFR, R-1, R-2, R-3)** allows the uses according to the implementing zone as described above.
- **Commercial (C-2)** allows multi-dwelling over commercial uses with no minimum lot sizes. The City allows housing development in the C-1 and C-3 zoned but Exhibit 6 shows these zones have very little buildable land. If the City rezones land to these zones in the future, they may accommodate housing development as well.

Exhibit 67. Allocation of Needed Housing by Housing Type and Plan Designation and Zone, Sandy UGB, 2023 to 2043
Source: ECONorthwest.

Housing Type	Single Family Residential (SFR)	Medium Density Resdiential (R-2)	High Density Residential (R-3)	Village (SFR, R-1, R-2, R-3)	Commercial (C-2)	Total
Dwelling Units						
Single-family detached	654	436	-	363	-	1,453
Single-family attached	-	73	12	84	-	169
Duplex, triplex, quadplex	18	24	12	66	-	120
Multi-dwelling (5+ units)	-	48	145	151	333	677
Total	**672**	**581**	**169**	**664**	**333**	**2,419**
Percent of Units						
Single-family detached	27%	18%	0%	15%	0%	60%
Single-family attached	0%	3%	0%	3%	0%	7%
Duplex, triplex, quadplex	1%	1%	0%	3%	0%	5%
Multi-dwelling (5+ units)	0%	2%	6%	6%	14%	28%
Total	**28%**	**24%**	**7%**	**27%**	**14%**	**100%**

Exhibit 68 shows the assumed development densities in gross acres (accounting for land for rights-of-way) based on the following assumptions (Note: densities do not reflect middle housing allowances):

- **Low Density Residential (LDR):** 25% of land is in rights-of-way in areas with existing development. The densities in this plan designation average 4.9 dwelling units per net acre and 3.7 dwelling units per gross acre for the SFR zone and 7.2 dwelling units per net acre and 5.4 dwelling units per gross acre for the R-1 zone. Exhibit 68 assumes that housing in LDR will develop at 85% (for the SFR zone) to 90% (for the R-1 zone) of the maximum density allowed, consistent with recent development trends.
- **Medium Density Residential (MDR):** 23% of land is in rights-of-way in areas with existing development. The densities in this plan designation average 12.6 dwelling units per net acre and 9.7 dwelling units per gross acre for the R-2 zone and 19.0 dwelling units per net acre and 14.6 dwelling units per gross acre for the R-3 zone. Exhibit 68 assumes that housing in MDR will develop at 90% (for the R-2 zone) to 95% (for the R-3 zone) of the maximum density allowed, consistent with recent development trends.
- **High Density Residential (HDR):** 22% of land is in rights-of-way in areas with existing development. The densities in this plan designation average 19.0 dwelling units per net acre and 14.8 per gross acre. Exhibit 68 assumes that housing in HDR will develop at 95% of the maximum density allowed in the R-3 zone, consistent with recent development trends.

- **Village:** 29% of land is in rights-of-way in areas with existing development. The densities in this plan designation average 4.9 dwelling units per net acre and 3.5 dwelling units per gross acre for the SFR zone; 7.2 dwelling units per net acre and 5.1 dwelling units per gross acre for the R-1 zone; 12.6 dwelling units per net acre and 8.9 dwelling units per gross acre for the R-2 zone; and 19.0 dwelling units per net acre and 13.5 dwelling units per gross acre for the R-3 zone. Exhibit 68 assumes development at the same densities per zone as described above.
- **Commercial:** 13% of land is in rights-of-way in areas with existing development. Development densities in this plan designation average 20.0 dwelling units per net acre and 17.4 dwelling units per gross acre.

Exhibit 68. Assumed Densities (gross acres) for Needed Housing by Housing Type and Plan Designation, Sandy UGB, 2023 to 2043
Source: ECONorthwest

Plan Designation	Avg. Net Density (DU/net acre)	% for Rights-of-Way	Avg. Gross Density (DU/gross acre)
Low Density Residential			
SFR	4.9	25%	3.7
R-1	7.2	25%	5.4
Medium Density Residential			
R-2	12.6	23%	9.7
R-3	19.0	23%	14.6
High Density Residential			
R-3	19.0	22%	14.8
Village			
SFR	4.9	29%	3.5
R-1	7.2	29%	5.1
R-2	12.6	29%	8.9
R-3	19.0	29%	13.5
Commercial			
C-2	20.0	13%	17.4

Needed Housing by Income Level

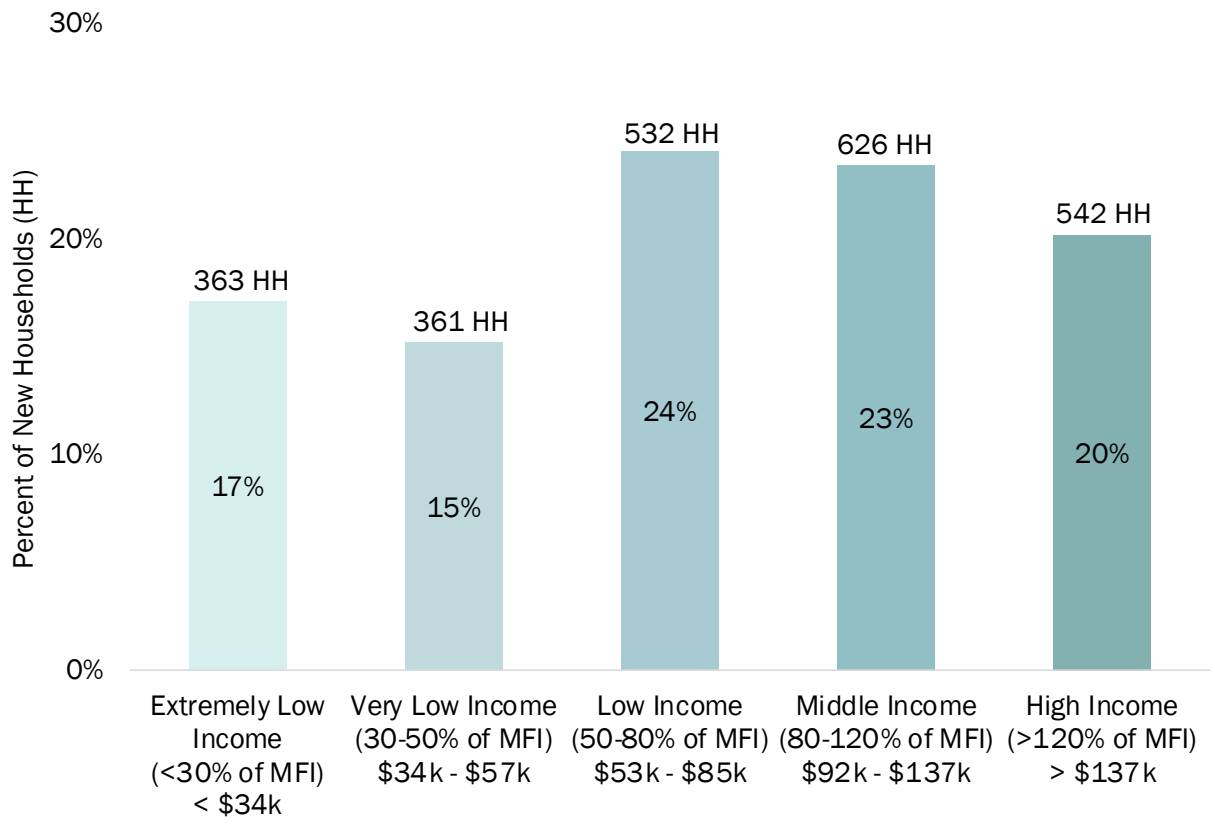
The next step in the Housing Capacity Analysis is to develop an estimate of housing need by income and housing type. This analysis requires an estimate of the income distribution of current and future households in the community. Estimates presented in this section are based on secondary data from the Census and analysis by ECONorthwest.

The analysis in Exhibit 69 is based on Census data about household income levels for existing households in Sandy. Income is distributed into market segments consistent with HUD income level categories, using Clackamas County's 2023 median family income (MFI) of $106,500. The exhibit assumes that approximately the same percentage of households will be in each market segment in the future.

Based on Exhibit 69, 32% of Sandy's future households will have income below 50% of Clackamas County's median family income (less than $53,000). About 47% will have incomes between 50% and 120% of the county's MFI (between $53,000 and $128,000). Exhibit 69 shows that, as Sandy's population grows, Sandy will continue to have demand for housing across the affordability spectrum.

Exhibit 69. Future (New) Households, by Median Family Income (MFI) for Clackamas County, Sandy, 2023

Source: US Department of HUD 2023. US Census Bureau, 2016-2020 ACS Table 19001.



Other Housing Needs

ORS 197.303, 197.307, 197.312, and 197.314 require cities to plan for government-assisted housing, farmworker housing, manufactured housing on lots and in manufactured home parks, and housing for people with disabilities and people experiencing homelessness.

- **Income-restricted and government-subsidized housing.** Government subsidies can apply to all housing types (e.g., single-family detached, multi-dwelling, etc.). Sandy allows development of government-assisted housing in all residential plan designations, with the same development standards for market-rate housing. Because government-assisted housing is similar in character to other housing (with the exception being the subsidies), it is not necessary to develop separate forecasts for government-subsidized housing.
- **Farmworker housing.** Farmworker housing can also apply to all housing types, and the City allows development of farmworker housing in all residential zones, with the same development standards as market-rate housing. Because it is similar in character to other housing (with the possible exception of government subsidies, if population restricted), it is not necessary to develop separate forecasts for farmworker housing.
- **Manufactured housing and prefabricated housing on lots.** Sandy allows manufactured homes in all of its residential plan designations and zoning districts.
  - Sandy's development code includes standards for manufactured homes that are different from single-family housing. House Bill 4064 requires that manufactured housing not be subject to development standards that are different from single-family housing. Sandy may need to modify its development code to remove requirements for unit size, roofs, and siding to be consistent with requirements for single-family units. Sandy is currently undergoing a Clear and Objective Code Audit which will address these requirements.
  - Sandy's development code does not mention prefabricated housing, an issue we recommend the City address to meet the requirements of House Bill 4064. Prefabricated housing is built piece by piece (generally in a factory) and is transported to the building site for assembly. Prefabricated housing includes housing built in panels or modules (called modular housing).
- **Manufactured housing in manufactured home parks.** Sandy allows manufactured homes in manufactured home parks in all of its residential zones except for Single Family Residential (SFR). OAR 197.480(4) requires cities to inventory the mobile home or manufactured dwelling parks sited in areas planned and zoned or generally used for commercial, industrial, or high-density residential development. According to the Oregon Housing and Community Services' Manufactured Dwelling Park Directory,[31] Sandy has six manufactured home parks within the city, with 247 spaces.

[31] Oregon Housing and Community Services, Oregon Manufactured Dwelling Park Directory, http://o.hcs.state.or.us/MDPCRParks/ParkDirQuery.jsp.

ORS 197.480(2) requires Sandy to project need for mobile home or manufactured dwelling parks based on (1) population projections, (2) household income levels, (3) housing market trends, and (4) an inventory of manufactured dwelling parks sited in areas planned and zoned or generally used for commercial, industrial, or high-density residential development.

- Exhibit 66 shows that Sandy will grow by 2,424 dwelling units over the 2023 to 2043 period. Analysis of housing affordability shows that about 30% of Sandy's new households will be considered very low or extremely low income, earning 50% or less of the region's median family income. One type of housing affordable to these households is manufactured housing. The households most likely to live in manufactured homes in manufactured home parks are those with incomes between $32,000 and $53,000 (30% to 50% of MFI), which includes 15% of Sandy's households. However, households in other income categories may live in manufactured homes in manufactured home parks.
- Manufactured home parks provide an important opportunity for affordable housing for homeownership. Preserving existing manufactured home parks and allowing smaller manufactured units in manufactured home parks are important ways to provide opportunities for affordable, lower-cost homeownership opportunities. Manufactured housing accounts for about 6.5% of Sandy's current housing stock.
- If the City has additional need for a new manufactured home park over the 2024-2044 period, it could be for up to about 158 new units (6.5% of new units) on 20 to 26 acres of land, with 6 to 8 dwelling units per acre. If an additional new manufactured home park were developed in Sandy, the City would have sufficient capacity to accommodate it in zones where manufactured housing is allowed. The housing forecast includes new manufactured homes on lots and in manufactured home parks in the category of single-family detached housing.
- Over the next twenty years (or longer), one or more manufactured home parks may close in Sandy. This may be a result of manufactured home park landowners selling or redeveloping their land for uses with higher rates of return, rather than lack of demand for spaces in manufactured home parks. Manufactured home parks contribute to the supply of low-cost affordable housing options, especially for affordable homeownership. The closure of manufactured home parks may be especially difficult in terms of availability of affordable housing, given the large need for affordable homeownership opportunities in Clackamas County and Sandy.
- While there is statewide regulation of manufactured home park closures designed to lessen the financial difficulties of closures for park residents,[32] the City has a role to play in ensuring that there are opportunities for housing for the displaced residents.

[32] ORS 90.645 regulates rules about the closure of manufactured dwelling parks. It requires that the landlord must give at least one year's notice of park closure and pay tenants between $5,000 and $9,000 for each manufactured dwelling park space, in addition to not charging tenants for demolition costs of abandoned manufactured homes.

The City's primary roles are to ensure that there is sufficient land zoned for new multi-dwelling housing and to reduce barriers to residential development to allow for the development of new, relatively affordable housing.

In addition to these required housing types, this section also addresses housing for people with disabilities and housing for people experiencing homelessness.

- **Housing for People with Disabilities.** Housing for people with disabilities can apply to all housing types, with the same development standards as market-rate housing. It can also apply to other residential/group living uses (such as nursing homes, residential care homes or facilities, or room and boarding facilities) as well as government-subsidized housing (including units that are population restricted). Broadly, housing options for people with disabilities include (1) living in housing independently (alone or with roommates/family), (2) living in housing with supportive services (e.g., with help from a live-in or visiting caregiver), or (3) living in housing in a supervised residential setting. Meeting the housing needs for people with disabilities will require addressing affordability issues, as well as ensuring that people with disabilities have access to housing that addresses their disability and that they have access to housing without discrimination.
- **Housing for People Experiencing Homelessness.** Meeting the housing needs of people experiencing homelessness ranges from emergency shelters, transitional housing, and permanent supportive housing (including supportive housing with services) and improved access to an affordable unit (including rent and utility assistance). Persons experiencing homelessness or those at risk of becoming homeless will require assistance with addressing individual, complex barriers to improve long-term housing stability.

6. Residential Land Sufficiency in Sandy

This chapter presents an evaluation of the sufficiency of vacant residential land in Sandy to accommodate expected residential growth over the 2023 to 2043 period. This chapter includes an estimate of residential development capacity (measured in new dwelling units) and an estimate of Sandy's ability to accommodate needed new housing units for the 2023 to 2043 period.

Capacity Analysis

The buildable lands inventory summarized in Chapter 2 provides a *supply* analysis (buildable land by type), and Chapter 5 provided a *demand* analysis (population and growth leading to demand for more residential development). The comparison of supply and demand allows the determination of land sufficiency.

There are two ways to calculate estimates of supply and demand into common units of measurement to allow their comparison: (1) housing demand can be converted into acres, or (2) residential land supply can be converted into dwelling units. A complication of either approach is that not all land has the same characteristics. Factors such as zone, slope, parcel size, and shape can affect the ability of land to accommodate housing. Methods that recognize this fact are more robust and produce more realistic results. This analysis uses the second approach: it estimates the ability of vacant residential lands within the UGB to accommodate new housing. This analysis, sometimes called a "capacity analysis,"[33] can be used to evaluate different ways that vacant residential land may build out by applying different assumptions.

[33] There is ambiguity in the term *capacity analysis*. It would not be unreasonable for one to say that the "capacity" of vacant land is the maximum number of dwellings that could be built based on density limits defined legally by plan designation or zoning and that development usually occurs—for physical and market reasons—at something less than full capacity. For that reason, we have used the longer phrase to describe our analysis: "Estimating how many new dwelling units the vacant residential land in the UGB is likely to accommodate." That phrase is, however, cumbersome, and it is common in Oregon and elsewhere to refer to that type of analysis as "capacity analysis," so we use that shorthand occasionally in this memorandum.

Sandy Capacity Analysis Results

The capacity analysis estimates the development potential of vacant residential land to accommodate new housing based on the needed densities by the housing type categories shown in Exhibit 67.

Exhibit 70 shows that **Sandy has 657 acres of vacant or partially vacant land to accommodate dwelling units**, based on the following assumptions:

- **Buildable residential land.** The capacity estimates start with the number of buildable acres in plan designations that allow residential uses outright, as shown in Exhibit 3. Exhibit 70 assumes that the commercial plan designations will be able to accommodate 333 dwelling units on about 15% of buildable commercial land, consistent with recent housing development in commercial areas.
- **Needed densities.** The capacity analysis assumes development will occur at needed densities. Those densities were derived from the needed densities shown in Exhibit 68. Based on these assumptions, Sandy's development capacity is 5.3 dwelling units per gross acre.

Exhibit 70. Estimate of Capacity on Buildable Land, Sandy UGB, 2023 to 2043
Source: Buildable Lands Inventory; Calculations by ECONorthwest. *Note: ECONorthwest reduced the "total unconstrained buildable acres" in the Commercial plan designations on the assumption that about 15% of vacant land in commercial areas will develop with housing, based on historical development in these plan designations.

Plan Designation	Total Unconstrained Buildable Acres	Density Assumption (DU/Gross Acre)	Capacity (Dwelling Units)
Low Density Residential			
SFR	418	3.7	1,545
R-1	2	5.4	9
Medium Density Residential			
R-2	60	9.7	582
R-3	0	14.6	1
High Density Residential			
R-3	12	14.8	172
Village			
SFR	31	3.5	109
R-1	91	5.1	465
R-2	8	8.9	74
R-3	16	13.5	214
Commercial			-
C-2	19	17.4	333
Total	**657**	**5.3**	**3,504**

Residential Land Sufficiency

The next step in the analysis of the sufficiency of residential land within Sandy is to compare the demand for housing by plan designation (Exhibit 67) with the capacity of land by plan designation (Exhibit 70).

Exhibit 71 shows that Sandy **has** sufficient land to accommodate housing development in each of its residential plan designations. Sandy has capacity for 3,504 dwelling units and demand for 2,419 dwelling units. The result is that Sandy has a surplus of capacity for housing, beyond the forecast of housing growth over the next twenty years of about 1,085 dwelling units. The largest surplus is in SFR. The R-2 zone has the smallest amount of surplus capacity.

Exhibit 71. Comparison of Capacity of Existing Residential Land with Demand for New Dwelling Units and Land Surplus or Deficit, Sandy UGB, 2023 to 2043
Source: Buildable Lands Inventory; Calculations by ECONorthwest.
*Note: ECONorthwest reduced the "total unconstrained buildable acres" in the Commercial plan designations on the assumption that not all vacant land in commercial areas will develop with housing, based on historical development in these plan designations.

Plan Designation	Total Capacity (Dwelling Units)	Demand (Dwelling Units)	Capacity less Demand (Dwelling Units)
Low Density Residential			
SFR	1,545	672	873
R-1	9	-	9
Medium Density Residential			
R-2	582	581	1
R-3	1	-	1
High Density Residential			
R-3	172	169	3
Village			
SFR	109	66	43
R-1	465	380	85
R-2	74	73	1
R-3	214	145	69
Commercial			
C-2	333	333	0
Total	**3,504**	**2,419**	**1,085**

Conclusions

The key findings and conclusions of Sandy's Housing Capacity Analysis are that:

- **Sandy's population is forecast to grow slower than in the past.** 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%.
- **Sandy has sufficient land to accommodate population growth over the twenty-year planning period.** The 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.
- **Sandy's housing needs require an increase in affordable options for both renters and homeowners, including a greater variety of attached and multi-dwelling housing types.** Historically, around 79% of Sandy's housing consisted of single-family detached homes. While it is projected that 60% of new housing in Sandy will be single-family detached, the city must also create opportunities for the development of other housing types, including single-family attached homes (7% of new housing), duplexes, triplexes, and quadplexes (5% of new housing), and multi-dwelling structures with five or more units (28% of new housing).[34]
  - Several factors are driving this shift in housing demand in Sandy, including changing demographics and decreasing housing affordability. Household formations among millennials and Gen Zers, as well as the aging of baby boomers, will generate demand for both rental and owner-occupied housing, spanning a range of options from single-family detached homes to accessory dwelling units, townhouses, duplexes, triplexes, quadplexes, and multi-dwelling structures. Some millennials and Gen Zers along with aging baby boomers may prefer housing in walkable neighborhoods with convenient access to services. Moreover, some housing units must be spacious enough to accommodate growing families while remaining reasonably affordable.
  - Sandy complied with the requirements of House Bill 2001 to allow duplexes on lots where single-family detached housing is allowed. Enabling a broader range of housing options in more areas is expected to result in a shift in the housing mix

[34] This housing mix aligns with Sandy's anticipated need for a broader range of housing types, catering to a wider spectrum of price points than currently available in Sandy's housing stock. This planning approach builds upon the findings of Sandy's 2015 Urbanization Study, which projected that 69% of new housing would be for single-family detached and attached units, while 31% would consist of duplexes, triplexes, quadplexes, and multi-dwelling units with five or more units per structure.

developed over the next two decades, especially in regions with significant expanses of vacant buildable land.

- Failure to diversify housing types and provide housing options affordable to households with incomes below 80% MFI ($91,500), will perpetuate affordability challenges. About 32% of Sandy's households are cost burdened (paying more than 30% of their income on housing), including a cost burden rate of 60% for renter households. However, providing opportunities for housing affordable to households with incomes below 80% of MFI is likely to require more than zoning code changes, an issue that will be addressed in Sandy's Housing Production Strategy.

- **Sandy needs more housing options affordable to lower and middle-income households.** Sandy requires more housing options that cater to lower and middle-income households, encompassing those with extremely low incomes, very low incomes, individuals experiencing homelessness, and families with low to middle incomes. These housing needs encompass both the current unmet demands for housing (from those experiencing cost burden and homelessness) as well as the anticipated requirements for new households throughout the twenty-year planning duration.

  - About 32% of Sandy's households have extremely low incomes or very low incomes, with household incomes below $57,000. At most, these households can afford $1,430 in monthly housing costs. The average asking price for a multi-dwelling unit with utilities was $1,840 in 2022. Development of housing affordable to these households (either rentals or homes for sale) rarely occurs without government subsidy or other assistance. Meeting the housing needs of extremely low–income and very low–income households will be a significant challenge to Sandy.

  - About 47% of Sandy's households have low or middle incomes, with household incomes between $57,000 and $137,00. These households can afford between $1,430 and $2,860 in monthly housing costs. Households at the lower end of this income category may struggle to find affordable rental housing, especially with the growing costs of rental housing across Oregon. Some of the households in this group are part of the 32% of all households that are cost burdened. Development of rental housing affordable to households in this income category (especially those with middle incomes) can occur without government subsidy.

  - The need for these types of affordable housing has impacts on Sandy's economy when people who work in Sandy cannot find housing, much less affordable housing, in the city. People working in Sandy frequently commute from places like Gresham, Portland, and the communities by Mount Hood.

- **Sandy may want to consider opportunities to expand capacity in the R-2 zone.** There is currently limited land and capacity in the R-2 zone, which may limit opportunities for development of middle housing and smaller multifamily unit housing types. As the City works to support the development of diverse housing types that meet needs across affordability levels, rezoning some land to allow for greater housing diversity may be an

action the City wants to take. Evaluating this action and identifying opportunities for re-zoning land could be included as a part of the Housing Production Strategy.

- **Sandy should implement development code to allow and support development of prefabricated housing.** The State is developing new model codes to support use of mass timber in newly built modular housing, a type of prefabricated housing. Sandy could implement this code to allow for development of these types of prefabricated housing, which can provide more affordable housing. ORS 197.314 requires prefabricated to be allowed on all land zoned to allow the development of single-family dwellings, the same as manufactured housing. Sandy will need to modify its development code to define prefabricated housing[35] and to allow for siting of prefabricated housing in manufactured home parks and where it allows single-unit housing. Sandy is currently pursuing a grant to support these changes.
- **Sandy should update the development code to remove special requirements for manufactured housing on lots.** ORS 197.314 requires that manufactured housing not be subject to development standards that are different from single-family housing. Sandy may need to modify its development code to remove requirements for unit size, roofs, and siding to be consistent with requirements for single-family units. Sandy is currently undergoing a Clear and Objective Code Audit which will address these requirements.
- **Key infrastructure barriers limit Sandy's ability to accommodate projected growth.** Sandy has a development moratorium in place due to the limited capacity of its wastewater infrastructure. Building capacity in Sandy's wastewater system will be essential to meeting the housing needs of future residents, but this will take time. While the exact timeline of the moratorium is unknown, the City is conducting an analysis to determine how much capacity is available for development over the next few years. This analysis is expected to be completed in fall 2023.

The *Sandy Housing Production Strategy* will include recommendations for a wide range of policies to support the development of housing for people experiencing homelessness related to unaffordable housing and housing for extremely low to middle-income households. The *Housing Production Strategy* will also include recommendations that are intended to improve equitable outcomes for housing development, as well as strategies to support the development of all types of housing.

[35] ORS 455.010 defines a prefabricated structure as "a building or subassembly that has been in whole or substantial part manufactured or assembled using closed construction at an off-site location to be wholly or partially assembled on-site."

In addition, ORS 197.286 (5) adds an additional qualifier for the purposes of land use planning, requiring prefabricated structures, as defined in ORS 455.010, to be relocatable, more than eight and one-half feet wide, and designed for use as a single-family dwelling.

Appendix A: Residential Buildable Lands Inventory

The buildable lands inventory uses methods and definitions that are consistent with Goal 10/OAR 660-008. This appendix describes the methodology that ECONorthwest used for this report based on 2020 data. The results of the BLI are discussed in Chapter 2.

Overview of the Methodology

Following are the statutes and administrative rules that provide guidance on residential BLIs:

OAR 660-008-0005(2):

"Buildable Land" means residentially designated land within the urban growth boundary, including both vacant and developed land likely to be redeveloped, that is suitable, available and necessary for residential uses. Publicly owned land is generally not considered available for residential uses. Land is generally considered "suitable and available" unless it:

(a) Is severely constrained by natural hazards as determined under Statewide Planning Goal 7;

(b) Is subject to natural resource protection measures determined under Statewide Planning Goals 5, 6, 15, 16, 17 or 18;

(c) Has slopes of 25 percent or greater;

(d) Is within the 100-year flood plain; or

(e) Cannot be provided with public facilities.

Inventory Steps

The BLI consists of several steps:

1. Generate UGB "land base"
2. Classify land by development status
3. Identify constraints
4. Verify inventory results
5. Tabulate and map results

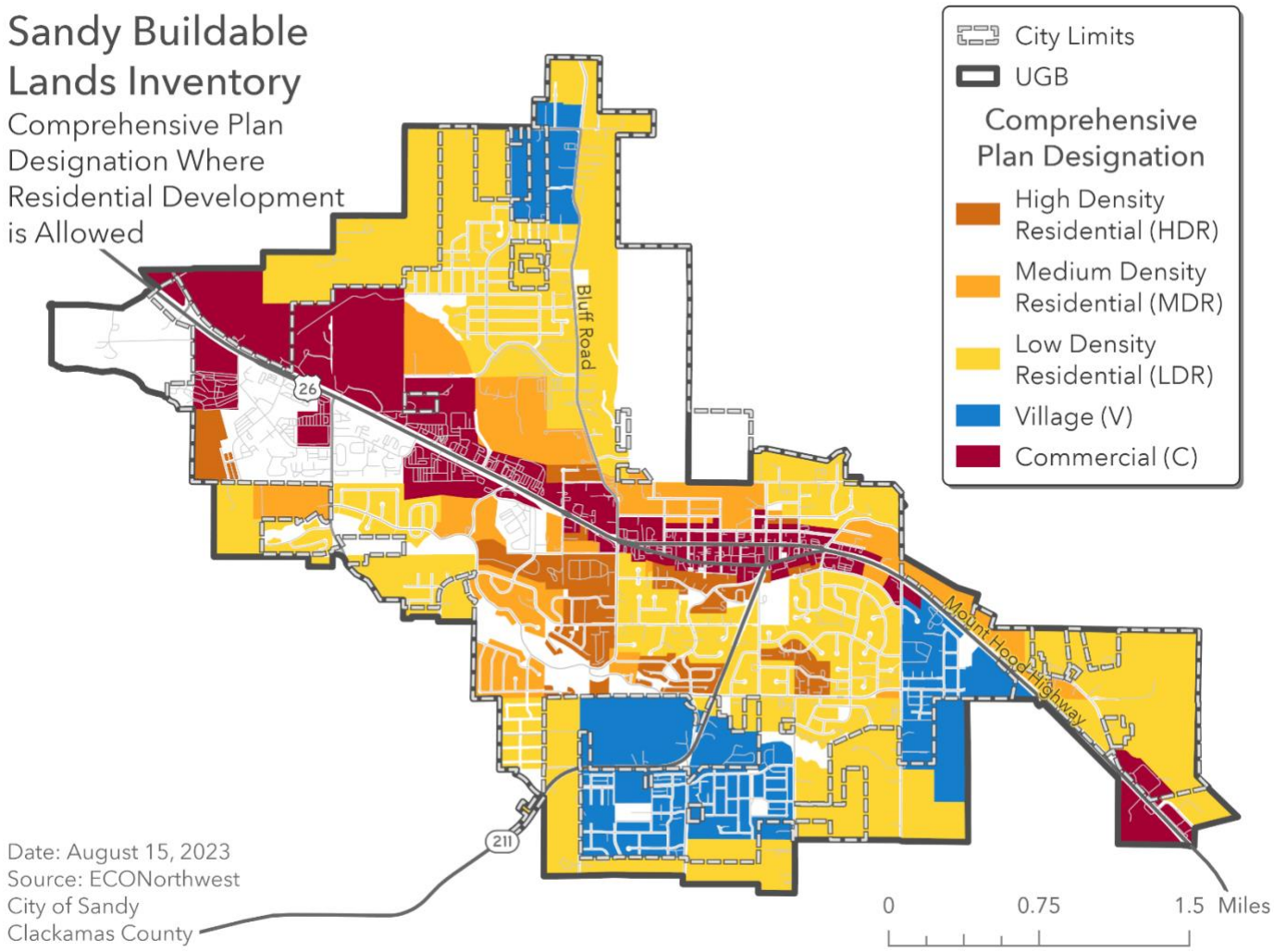
Step 1: Generate "land base"

Per Goal 10, this involves selecting all of the tax lots in the Sandy UGB with residential and other nonemployment plan designations. Plan designations and zones included in the residential inventory include:

- Low Density Residential (LDR)
- Medium Density Residential (MDR)
- High Density Residential (HDR)
- Village (V)
- Commercial (C)
  - Central Business District (C-1)
  - Retail/Commercial (C-2)

Exhibit 72 shows the residential plan designations included in the BLI.

Exhibit 72. Residential Land Base by Plan Designation, Sandy UGB, 2023
Source: Clackamas County, ECONorthwest



Step 2: Classify lands

In this step, ECONorthwest classified each tax lot with a plan designation that allows residential uses into one of five mutually exclusive categories based on development status:

- Vacant land
- Partially vacant land
- Undevelopable land
- Public land
- Developed land

ECONorthwest initially identified buildable land and classified development status using a rule-based methodology consistent with the DLCD Residential Lands Workbook and applicable administrative rules. The rules are described below in Exhibit 73.

Exhibit 73. Rules for Development Status Classification

Development Status	Definition	Statutory Authority
Vacant Land	Tax lots that have no structures or have buildings with very little improvement value. For this inventory, lands with improvement values of less than $10,000 will be considered vacant (not including lands that are identified as having mobile homes).	OAR 660-008-0006(2) (2) "Buildable Land" means residentially designated land within the urban growth boundary, including both vacant and developed land likely to be redeveloped, that is suitable, available, and necessary for residential uses. Publicly owned land is generally not considered available for residential uses.
Partially Vacant Land	Partially vacant tax lots can use safe harbor established in State statute: *The infill potential of developed residential lots or parcels of one-half acre or more may be determined by subtracting one-quarter acre (10,890 square feet) for the existing dwelling and assuming that the remainder is buildable land.* Tax lots with partially vacant land that is completely constrained are not designated as Partially Vacant.	OAR 660-024-0050 (2)(a)
Undevelopable Land	Vacant tax lots less than 3,000 square feet and with improvement values of less than $10,000 in size are considered undevelopable.	No statutory definition

Development Status	Definition	Statutory Authority
Public Land	Lands in public are considered unavailable for residential development. This includes lands in Federal, State, County, or City ownership. In addition, we recommend including land for cemeteries in this category.	OAR 660-008-0005(2) - Publicly owned land is generally not considered available for residential uses.
Developed Land	Land that is developed at densities consistent with zoning and improvements that make it unlikely to redevelop during the analysis period. Lands not classified as vacant, partially vacant, undevelopable, or public or exempt are considered developed.	No statutory definition

Step 3: Identify constraints

Consistent with OAR 660-008-0005(2) guidance on residential buildable lands inventories, ECONorthwest deducted certain lands with development constraints from the BLI. We used the following constraints, as listed in Exhibit 74.

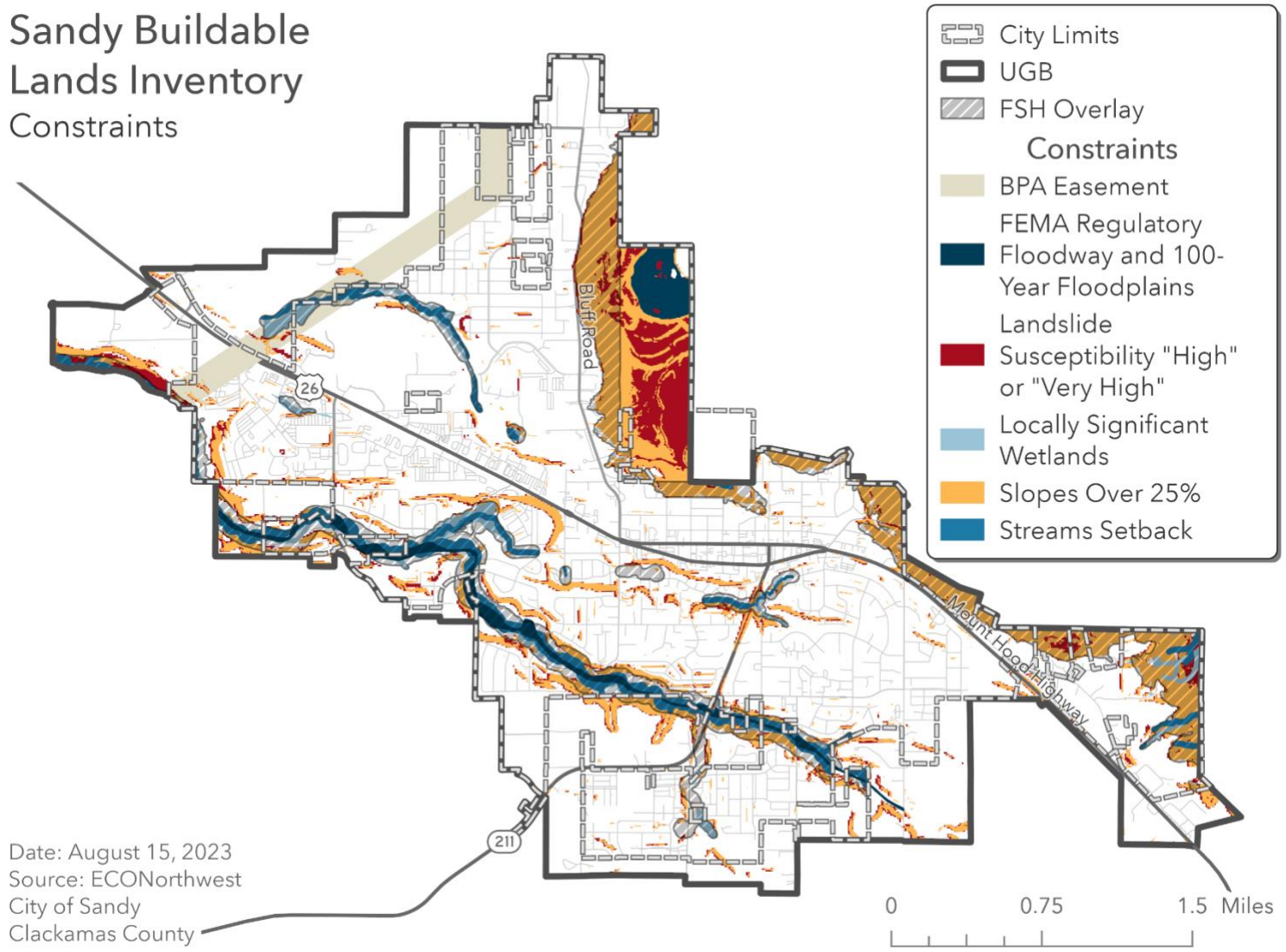
Exhibit 74. Constraints to be included in BLI

Constraint	Statutory Authority	Threshold	Source
Goal 5 Natural Resource Constraints			
Wetlands	OAR 660-015-0000(5)	Areas designated as locally significant	Oregon Department of State Lands
Flood and Slope Hazard (FSH) Overlay District	OAR 660-015-0000(5)	Wetlands, slopes greater than 25%, and perennial streams given setback lengths according to Sec. 17.60.30 of the City of Sandy Code of Ordinances.	City of Sandy
Natural Hazard Constraints			
Regulatory Floodway	OAR 660-008-0005(2a)	Lands within FEMA FIRM identified floodway	FEMA via National Map
100-Year Floodplain	OAR 660-008-0005(2d)	Lands within FEMA FIRM 100-year floodplain	FEMA via National Map
Steep Slopes	OAR 660-008-0005(2c)	Slopes greater than 25%	Oregon Department of Geology and Mining Industries
Landslide Hazards	OAR 660-008-0005(2a)	High or Very High Landslide Susceptibility	Oregon Department of Geology and Mining Industries

We treated these constrained areas as prohibitive constraints (unbuildable) as shown in Exhibit 75. All constraints were merged into a single constraint file, which was then used to identify the area of each tax lot that is constrained. These areas were deducted from lands that are identified as vacant or partially vacant.

Lack of access to water, sewer, power, road, or other key infrastructure cannot be considered a prohibitive constraint unless it is an extreme condition. This is because tax lots that are currently unserviced could potentially become serviced over the twenty-year planning period.

Exhibit 75. Residential Development Constraints, Sandy UGB, 2023
Source: Clackamas County, ECONorthwest analysis



Step 4: Verification

ECONorthwest used a multistep verification process. The first verification step involved a "rapid visual assessment" of land classifications using GIS and recent aerial photos. The rapid visual assessment involves reviewing classifications overlaid on recent aerial photographs to verify uses on the ground. ECONorthwest reviewed all tax lots included in the inventory using the rapid visual assessment methodology.

City staff and ECONorthwest performed multiple additional rounds of verification, such as the verification about partially vacant land described in Exhibit 73, which involved verifying the development status determination and the results of the rapid visual assessment. ECONorthwest amended the BLI based on City staff review and a discussion of the City's comments.

Step 5: Tabulation and mapping

The results are presented in tabular and map format. We included a comprehensive plan map, the land base by classification, vacant and partially vacant lands by plan designation, and vacant and partially vacant lands by plan designation with constraints showing.

Appendix B: National and State Demographic and Other Trends Affecting Residential Development in Sandy

National Trends[36]

This brief summary on national housing trends builds on previous work by ECONorthwest as well as Urban Land Institute (ULI) reports, conclusions from *The State of the Nation's Housing* report from the Joint Center for Housing Studies of Harvard University, and other research cited in this section. *The State of the Nation's Housing* report (2021) summarizes the national housing outlook as follows:

> Even as the US economy continues to recover, the inequalities amplified by the COVID-19 pandemic remain front and center. Households that weathered the crisis without financial distress are snapping up the limited supply of homes for sale, pushing up prices and further excluding less affluent buyers from homeownership. At the same time, millions of households that lost income during the shutdowns are behind on their housing payments and on the brink of eviction or foreclosure. A disproportionately large share of these at-risk households are renters with low incomes and people of color. While policymakers have taken bold steps to prop up consumers and the economy, additional government support will be necessary to ensure that all households benefit from the expanding economy.

The domestic housing market sees many interlocking challenges remaining as the world transitions from the COVID-19 pandemic. An extremely limited inventory of entry-level homes makes housing unaffordable for many Americans, especially younger ones. However, the conditions for homebuying are ripe for many, resulting in strong demand in the market and increasing home sales prices to record levels. Furthermore, the costs of labor and materials to build new homes increased steeply. While the current amount of new housing starts is robust, newly built homes will not make up the shortfall in residential housing in the near term, especially for single-family homes. The challenges and trends shaping the housing market are summarized below.

- **A continued bounce back in residential construction was led by an increase in single-family and multi-dwelling housing starts.** After a sharp comeback in summer 2020 led by single-family construction, single-family housing starts fell below a 700,000-unit annual rate in April 2020 due to the COVID-19 pandemic. Following that dip, housing

[36] These trends are based on information from (1) the Joint Center for Housing Studies of Harvard University's publication "The State of the Nation's Housing 2021," (2) Urban Land Institute's "2022 Emerging Trends in Real Estate," and (3) the US Census.

starts nearly doubled to a high of 1,315,000 new housing units in December 2020. It was the strongest month for single-family homebuilding in over 13 years, with a consistent annual rate of production since then ranging from 1,061,000 to 1,255,000 units—most recently hitting 1,215,000 in February 2022. Multi-dwelling unit starts followed similar trends, reaching a 33-year high in January 2020 of more than half a million buildings with 5 units or more, then hitting a 6-year low in April 2020 of a quarter million. Since that low, multi-dwelling starts have increased 47%, reaching 501,000 units in February 2022.

- **Strong construction numbers did not alleviate the shortage of existing homes for sale.** Inventories fell from three months in December 2019 to just under two months in December 2020, well below what is considered balanced (six months), with lower-cost and moderate-cost homes experiencing the tightest inventories. While *The State of the Nation's Housing* report cited the COVID-19 pandemic as sharing some blame for these tight conditions, the larger cause was the result of underproduction of new homes since the mid-2000s. Restrictive land use regulations, the cost and availability of labor, and the cost of building materials were also cited as constraints on residential development.
- **Homeownership rates slowly, but consistently, increased.** After years of decline, the national homeownership rate increased slightly from 64.4% in 2018 to 65.5% in late 2021. Trends suggest the recent homeownership increases are among householders of all age groups, with households under age 35 making up the largest proportions of this increase. About 88% of net new growth (2013 to 2019) was among households with incomes of $150,000 or more. Significant disparities also still exist between households of color and White households, with the Black-White homeownership gap being 28.1 percentage points in early 2021 and the Hispanic-White gap at 23.8 percentage points (a 1.8 percentage point decrease from 2019).
- **Housing affordability.** Despite a recent downward trend, 37.1 million American households spent more than 30% of their income on housing (the industry standard used for assessing affordability) in 2019, which is 5.6 million more households than in 2001. Renter households experienced cost burden at more than double the rate of homeowners (46% versus 21%) with the number of cost-burdened renters exceeding cost-burdened homeowners by 3.7 million in 2019. Affordability challenges were most likely to affect households with low incomes, as 60% of renters and nearly half of homeowners earning less than $25,000 were reported to be severely cost burdened[37] in 2019, as well as one in six renters and one in eight homeowners earning between $25,000 and $49,999. Households under the age of 25 and over the age of 85 had the highest rates of housing cost burden, as well as households of color.

  The Department of Housing and Urban Development's guidelines indicate that households paying more than 30% of their income on housing experience "cost burden" and households paying more than 50% of their income on housing experience "severe

[37] A household is considered cost burdened if they spent 30% or more of their gross income on housing costs. They are severely cost burdened if they spent 50% or more of their gross income on housing costs.

cost burden." Using cost burden as an indicator is one method of determining how well a city is providing housing that is affordable to all households in a community.

- **Long-term growth and housing demand.** The Joint Center for Housing Studies forecasts that, nationally, demand for new homes could total as many as 10 million units between 2018 and 2028 if current low immigration levels continue. Much of the demand will come from baby boomers, millennials, Gen Z,[38] and immigrants. The Urban Land Institute cites an increased acceptance of working from home as increasing demand in more suburban or rural environments over closer-in markets.
- **Growth in rehabilitation market.**[39] Aging housing stock and poor housing conditions are growing concerns for jurisdictions across the United States. With the median age of the US housing stock rising to 41 years in 2019 from 34 years in 2009, Americans are spending in excess of $400 billion per year on residential renovations and repairs. As housing rehabilitation becomes the primary solution to address housing conditions, the home remodeling market has grown nearly $20 billion in 2017, topping out at $433 billion in 2021.

  Despite trends showing growth in the rehabilitation market, rising construction costs and complex regulatory requirements pose barriers to rehabilitation. Lower-income households (who are more likely to live in older housing than higher-income households), or households on fixed incomes, may defer maintenance for years due to limited financial means, escalating rehabilitation costs. At a certain point, the cost of improvements may outweigh the value of the structure, which may necessitate new responses such as demolition or redevelopment. Regardless, there is a rising urgency with the aging housing stock, particularly with respect to increased disaster events caused by changes in climate. In 2019, spending on disaster repairs hit a record high of 10% of total rehabilitation spending and 2020 saw a record number of billion-dollar climate-related disasters.
- **Declining residential mobility.**[40] Residential mobility rates have declined steadily since 1980. Nearly one in five Americans moved every year in the 1980s, compared to one in ten Americans between 2018 and 2019. While residential mobility took a further dip in the initial stages of the COVID-19 pandemic, soon conditions emerged that encouraged homebuying, such as historically low mortgage rates, the normalization of working from home, and a growing number of first-time millennial buyers. Due to such conditions,

[38] According to the Pew Research Center, millennials were born between the years of 1981 to 1996 and Gen Zers were born between 1997 and 2012 (inclusive). Read more about generations and their definitions here: http://www.pewresearch.org/fact-tank/2018/03/01/defining-generations-where-millennials-end-and-post-millennials-begin/.

[39] These findings are copied from the Joint Center for Housing Studies. (2021). Improving America's Housing, Harvard University. Retrieved from: https://www.jchs.harvard.edu/sites/default/files/Harvard_JCHS_Improving_Americas_Housing_2019.pdf

[40] Frost, R. (2020). "Are Americans stuck in place? Declining residential mobility in the US." Joint Center for Housing Studies of Harvard University's Research Brief.

existing home sales rose by more than 20% year over year from September 2020 through January 2021. These optimal buying conditions have created competition that puts an additional squeeze on the nationwide housing shortage, likely further dampening residential mobility.

Other reasons for decline in residential mobility include factors such as demographics, housing affordability, and labor-related changes. For instance, as baby boomers and millennials age, mobility rates are expected to fall, as people typically move less as they age. Harvard University's Research Brief (2020) also suggests that increasing housing costs could be preventing people from moving if they are priced out of desired neighborhoods or if they prefer to stay in current housing as prices rise around them. Other factors that may impact mobility include the rise in dual-income households (which complicates job-related moves), the rise in work-from-home options, and the decline in company-funded relocations. While decline in mobility rates span all generations, they are greatest among young adults and renters, two of the more traditionally mobile groups.

- **Changes in housing demand.** Housing demand will be affected by changes in demographics, most notably the aging of baby boomers, housing preferences of millennials and Gen Zers, and growth of immigrants.
  - *Baby boomers.* In 2020, the oldest members of this generation were in their seventies and the youngest were in their fifties. The continued aging of the baby boomer generation will affect the housing market. In particular, baby boomers will influence housing preference and homeownership trends. Preferences (and needs) will vary for boomers moving through their sixties, seventies, and eighties (and beyond). They will require a range of housing opportunities. For example, "aging baby boomers are increasingly renters-by-choice, [preferring] walkable, high-energy, culturally evolved communities."[41] Many seniors are also moving to planned retirement destinations earlier than expected, as they experience the benefits of work-from-home trends (accelerated by COVID-19). Additionally, the supply of caregivers is decreasing as people in this cohort move from giving care to needing care, making more inclusive, community-based, congregate settings more important. Senior households earning different incomes may make distinctive housing choices. For instance, low-income seniors may not have the financial resources to live out their years in a nursing home and may instead choose to downsize to smaller, more affordable units. Seniors living in proximity to relatives may also choose to live in multigenerational households.

    Research shows that "older people in western countries prefer to live in their own familiar environment as long as possible," but aging in place does not only mean growing old in their own homes.[42] A broader definition exists, which explains that aging in place means "remaining in the current community and living in the

[41] Urban Land Institute. Emerging Trends in Real Estate, United States and Canada. 2019.

[42] Vanleerberghe, Patricia, et al. (2017). The quality of life of older people aging in place: a literature review.

residence of one's choice."[43] Some boomers are likely to stay in their home as long as they are able, and some will prefer to move into other housing products, such as multi-dwelling housing or age-restricted housing developments, before they move into a dependent-living facility or into a familial home. Moreover, "the aging of the US population, [including] the continued growth in the percentage of single-person households, and the demand for a wider range of housing choices in communities across the country is fueling interest in new forms of residential development, including tiny houses."[44]

- *Millennials.* Over the last several decades, young adults have increasingly lived in multigenerational housing—more so than older demographics.[45] However, as millennials move into their early thirties to mid-thirties, postponement of family formation is ending and they are more frequently becoming homeowners, frequently of single-family detached homes.

  Millennials only started forming their own households at the beginning of the 2007–2009 recession. The number of millennial homeowners has seen an uptick over the past few years. While the overall US homeownership rate slowly decreased from 2009 to 2019, the millennial homeownership rate increased from 33% in 2009 to 43% in 2019, with 6% of that growth since 2016. The age group of people 35 years old and younger accounted for about 15% of the annual household growth in 2019, up from about 10% in 2018. Older millennials (those age 35-44) also accounted for a growing share of growth in homeownership.[46] However, racial disparities also exist in millennial homeownership rates, with Non-Hispanic White homeowners accounting for 53%, Hispanic homeowners for 35%, and Black homeowners for 21%.[47]

  As this generation continues to progress into their homebuying years, they will seek out affordable, modest-sized homes. This will prove challenging, as the market for entry-level single-family homes has remained stagnant. Although construction of smaller homes (< 1,800 sq. ft.) increased in 2019, it only represented 24% of single-family units.

  Millennials' average wealth may remain far below boomers and Gen Xers, and student loan debt will continue to hinder consumer behavior and affect retirement savings. As of 2022, millennials comprised 43% of homebuyers while Gen Xers

[43] *Ibid.*

[44] American Planning Association. Making Space for Tiny Houses, Quick Notes.

[45] According to the Pew Research Center, in 1980, just 11% of adults aged 25 to 34 lived in a multigenerational family household, and by 2008, 20% did (82% change). Comparatively, 17% of adults aged 65 and older lived in a multigenerational family household, and by 2008, 20% did (18% change).

[46] The Joint Center for Housing Studies of Harvard University's publication "The State of the Nation's Housing 2021."

[47] "Millennials and Housing: Homeownership Demographic Research." Freddie Mac Single-Family, 2021. https://sf.freddiemac.com/content/_assets/resources/pdf/fact-sheet/millennial-playbook_millennials-and-housing.pdf.

comprised 22% and boomers 29%.[48] "By the year 2061, it is estimated that $59 trillion will be passed down from boomers to their beneficiaries," presenting new opportunities for millennials (as well as Gen Xers).[49]

- *Generation Z.* In 2020, the oldest members of Gen Z were in their early twenties and the youngest in their early childhood years. By 2040, Gen Z will be between 20 and 40 years old. While they are more racially and ethnically diverse than previous generations, when it comes to key social and policy issues, they look very much like millennials. Gen Z enters into adulthood with a strong economy and record-low unemployment, despite the uncertainties of the long-term impacts of the COVID-19 pandemic.[50]

  Gen Z individuals have only just started entering the housing market in the past few years, and with a maximum age range of 23 as of 2022, this age cohort is the smallest so far in terms of homebuyers and sellers, accounting for 2% of each type. While researchers do not yet know how Gen Z will behave in adulthood, many expect they will follow patterns of previous generations.[51] A segment is expected to move to urban areas for reasons similar to previous cohorts (namely, the benefits that employment, housing, and entertainment options bring when they are in close proximity). However, this cohort is smaller than millennials (67 million vs. 72 million), which may lead to slowing real estate demand in city centers.

- *Immigrants.* Research on foreign-born populations shows that immigrants, more than native-born populations, prefer to live in multigenerational housing. Still, immigration and increased homeownership among minorities could also play a key role in accelerating household growth over the next ten years. Current population survey estimates indicate that the number of foreign-born households rose by nearly 400,000 annually between 2001 and 2007, and they accounted for nearly 30% of overall household growth. Beginning in 2008, the influx of immigrants was staunched by the effects of the Great Recession. After a period of declines, the foreign-born population again began contributing to household growth, despite decline in immigration rates in 2019. The Census Bureau's estimates of net immigration in 2021 indicate that just 247,000 immigrants moved to the United States

[48] National Association of Realtors. (2020). 2020 Home Buyers and Sellers Generational Trends Report, March 2020. Retrieved from: https://www.nar.realtor/research-and-statistics/research-reports/home-buyer-and-seller-generational-trends

[49] PNC. (n.d.). Ready or Not, Here Comes the Great Wealth Transfer. Retrieved from: https://www.pnc.com/en/about-pnc/topics/pnc-pov/economy/wealth-transfer.html

[50] Parker, K. & Igielnik, R. (2020). On the cusp of adulthood and facing an uncertain future: what we know about gen Z so far. Pew Research Center. Retrieved from: https://www.pewsocialtrends.org/essay/on-the-cusp-of-adulthood-and-facing-an-uncertain-future-what-we-know-about-gen-z-so-far/

[51] "2021 Home Buyers and Sellers Generational Trends Report." National Association of Realtors, 2021. https://www.nar.realtor/sites/default/files/documents/2021-home-buyers-and-sellers-generational-trends-03-16-2021.pdf.

from abroad, down from a previous high of 1,049,000 between 2015 and 2016.[52] As noted in *The State of the Nation's Housing* 2020 report, "because the majority of immigrants do not immediately form their own households upon arrival in the country, the drag on household growth from lower immigration only becomes apparent over time."

- *Diversity.* The growing diversity of American households will have a large impact on the domestic housing markets. Over the coming decade, minorities will make up a larger share of young households and constitute an important source of demand for both rental housing and small homes. The growing gap in homeownership rates between White and Black/African American households, as well as the larger share of minority households that are cost burdened, warrants consideration. White households had a 74.4% homeownership rate in 2021 compared to a 43.1% rate for Black households.[53] This 30-percentage-point gap is the largest disparity since 1983. Although homeownership rates are increasing for some minorities, Black and Hispanic households are more likely to have suffered disproportionate impacts of the pandemic and forced sales could negatively impact homeownership rates. This, combined with systemic discrimination in the housing and mortgage markets and lower incomes relative to White households, leads to higher rates of cost burden for some groups of people. For example, of renters in arrears, Black renters account for 29% and Hispanic renters for 21%, compared to White renters at 11%. For low-income homeowners, 72% of Hispanics, 74% of Blacks and 84% of Asians faced cost burdens, compared to 68% of White households. As noted in *The State of the Nation's Housing (2020)* report, "the impacts of the pandemic have shed light on the growing racial and income disparities in the nation between the nation's haves and have-nots are the legacy of decades of discriminatory practices in the housing market and in the broader economy."

- **Changes in housing characteristics.** The US Census Bureau's Characteristics of New Housing Report (2020) presents data that show trends in the characteristics of new housing for the nation, state, and local areas. Several long-term trends in the characteristics of housing are evident from the New Housing Report:[54]

  - *Larger single-family units on smaller lots.* Between 2000 and 2020, the median size of new single-family dwellings increased by nearly 10% nationally, from 2,057 sq. ft. to 2,261 sq. ft., and 14% in the western region from 2,014 sq. ft. in 1999 to 2,279 sq. ft. in 2020. Moreover, the percentage of new units smaller than 1,400 sq. ft. nationally decreased by half, from 14% in 2000 to 7% in 2020. The percentage of units greater

[52] Jason Schachter, Pete Borsella, and Anthony Knapp (US Census, December 21, 2021), https://www.census.gov/library/stories/2021/12/net-international-migration-at-lowest-levels-in-decades.html.

[53] "Federal Reserve Economic Data: Fred: St. Louis Fed," Federal Reserve Economic Data (Federal Reserve Bank of St. Louis), accessed April 18, 2022, https://fred.stlouisfed.org/.

[54] US Census Bureau, Highlights of Annual 2020 Characteristics of New Housing. Retrieved from: https://www.census.gov/construction/chars/highlights.html

than 3,000 sq. ft. increased from 18% in 2000 to 23% of new single-family homes completed in 2020. In addition to larger homes, a move toward smaller lot sizes was seen nationally. Between 2010 and 2020, the percentage of lots less than 7,000 sq. ft. increased from 25.5% to 34.8% of lots.

Based on a national study about homebuying preferences that differ by race/ethnicity, African American homebuyers wanted a median unit size of 2,664 sq. ft., compared to 2,347 sq. ft. for Hispanic buyers, 2,280 sq. ft. for Asian buyers, and 2,197 sq. ft. for White buyers.[55] This same study found that minorities were less likely to want large lots.

- *Larger multi-dwelling units.* Between 2000 and 2020, the median size of new multi-dwelling units increased by 4.6% nationally. In the western region, the median size increased by 3.6%. Nationally, the percentage of new multi-dwelling units with more than 1,200 sq. ft. increased from 29.5% in 2000 to 32.8% in 2020 and increased from 23.3% to 25.2% in the western region.
- *Household amenities.* Across the United States since 2013, an increasing number of new units had air-conditioning (fluctuating year by year at over 90% for both new single-family and multi-dwelling units). In 2000, 93% of new single-family houses had two or more bathrooms, compared to 96.8% in 2020. The share of new multi-dwelling units with two or more bathrooms decreased from 55% of new multi-dwelling units to 42.6%. As of 2020, 92% of new single-family houses in the United States had garages for one or more vehicles (from 88% in 2000). Additionally, if work-from-home dynamics remain a more permanent option, then there may be rising demand for different housing amenities such as more space for home offices or larger yards for recreation.
- *Shared amenities*. Housing with shared amenities grew in popularity, as it may improve space efficiencies and reduce per-unit costs/maintenance costs. Single-room occupancies (SROs),[56] cottage clusters, cohousing developments, and multi-dwelling products are common housing types that take advantage of this trend. Shared amenities may take many forms and include shared bathrooms, kitchens, other home appliances (e.g., laundry facilities, outdoor grills), security systems, outdoor areas (e.g., green spaces, pathways, gardens, rooftop lounges), fitness rooms, swimming pools, tennis courts, and free parking.[57]

[55] Quint, Rose. (April 2014). *What Home Buyers Really Want: Ethnic Preferences.* National Association of Home Builders.

[56] Single-room occupancies are residential properties with multiple single-room dwelling units occupied by a single individual. From: US Department of Housing and Urban Development. (2001). *Understanding SRO*. Retrieved from: https://www.hudexchange.info/resources/documents/Understanding-SRO.pdf

[57] Urbsworks. (n.d.). Housing Choices Guidebook: A Visual Guide to Compact Housing Types in Northwest Oregon. Retrieved from: https://www.oregon.gov/lcd/Publications/Housing-Choices-Booklet_DIGITAL.pdf

Saiz, Albert and Salazar, Arianna. (n.d.). Real Trends: The Future of Real Estate in the United States. Center for Real Estate, Urban Economics Lab.

State Trends

In August 2019, the State of Oregon passed statewide legislation—Oregon House Bill 2001 and 2003. **House Bill 2001 (HB2001)** required many Oregon communities to accommodate middle housing within single-family neighborhoods. "Medium cities"—those with 10,000 to 25,000 residents outside the Portland metro area—are required to allow duplexes on each lot or parcel where a single-family home is allowed. "Large cities"—those with over 25,000 residents and nearly all jurisdictions in the Portland metro urban growth boundary (UGB)—must meet the same duplex requirement, in addition to allowing single-family homes and triplexes, fourplexes, townhomes, and cottage clusters in all areas that are zoned for residential use. Note that the middle housing types (other than duplexes) do not have to be allowed on *every* lot or parcel that allows single-family homes, which means that larger cities maintain some discretion.

Middle housing is generally built at a similar scale as single-family homes but at higher residential densities. It provides a range of housing choices at different price points within a community.

House Bill 2003 (HB2003) envisions reforming Oregon's housing planning system from a singular focus (on ensuring adequate available land) to a more comprehensive approach that also achieves these critical goals: (1) support and enable the construction of sufficient units to accommodate current populations and projected household growth and (2) reduce geographic disparities in access to housing (especially affordable and publicly supported housing). In that, HB 2003 required the development of a methodology for projecting *regional* housing need and required allocating that need to local jurisdictions. It also expanded local government responsibilities for planning to meet housing need by requiring cities to develop and adopt housing production strategies.

Oregon developed its *2021-2025 Consolidated Plan*, which includes a detailed housing needs analysis as well as strategies for addressing housing needs statewide. The plan concluded that the "state's performance in accomplishing past goals has been very strong, and project areas of focus remain consistent with the current needs identified in this new five-year plan. Tenant based rental assistance, in particular, has demonstrated strong demand, as has the ongoing need for rental units (including those newly developed) which meet fair market rent standards, and community facilities. The unusual events during 2020—the COVID-19 pandemic and historical wildfire activity—tilt current needs and priorities toward housing stability efforts, as well as community health care projects and access to telehealth services." It identified the following top needs in its Needs Assessment:[58]

- The most common housing problem in Oregon is cost burden. Nearly 390,000 households pay more than 30% of their incomes in housing costs, up by 7% since the last

[58] These conclusions are copied directly from the report, Oregon's 2021–2025 Consolidated Plan. Retrieved from: https://www.oregon.gov/ohcs/development/Documents/conplan/2021-2025%20Action%20Plan/State-of-Oregon-2021-2025-Consolidated-Plan-Final-with-appendices.pdf.

five-year Consolidated Plan. Renters are more likely to be cost burdened. About 27% of Oregon renters households were found to be severely cost burdened. This proportion increased significantly from 2000 (19%) and disproportionately falls on persons of color in the state: more than 50% of households with persons of color are cost burdened compared to 34% of White households.

- Cost burden largely affects those with lower incomes—especially extremely low and very low-income renters, who have cost burden rates of 70% and 76%, respectively.
- According to Oregon's Statewide Housing Plan for 2019-2023, more than 85,000 units affordable to extremely low-income households (making less than 30% AMI) are needed to meet demand and more than 26,000 units affordable to moderate-income households (making 50% to 80% AMI) are needed to meet demand. This is down from the previous gap of 102,500 units in the 2016-2021 Plan.

By income range and special need, the estimated needs of Oregon households include the following:

- Extremely low-income families—those earning incomes below the poverty level—total nearly 182,000 households in Oregon. Those with unmet housing needs will grow by 10,000 households over the next five years.
- Low-income families—those earning incomes between the poverty level and the median income—total 261,000 in Oregon. Their needs will grow by much less (8,300 additional households) over the next five years.
- Elderly households (62+) total nearly 905,381 and live in 526,675 households. Of these households, 23% have unmet housing needs. Those with unmet housing needs are expected to grow by 7,000 households by 2025. Many of these needs will take the form of home accessibility modifications, home repairs, and home health care, as seniors make up a large share of residents who live alone and who have disabilities. Frail elderly (defined as an elderly person who requires assistance with three or more activities of daily living) total 61,518 residents.
- Oregon residents with disabilities total 581,000 and occupy 428,000 households. By 2025, these households with needs are forecast to grow by nearly 12,000.
- More than 300,000 persons in Oregon struggled with substance abuse challenges before the COVID-19 pandemic occurred, and these needs grew during the pandemic. Oregonians who have ever had mental health challenges total 757,000, with 172,000 having serious mental health challenges.
- Approximately 178,000 residents 18 and older in Oregon have experienced some type of domestic violence, dating violence, sexual assault, and/or stalking by an intimate partner in the previous year. In the most severe cases, these victims must leave their homes—an estimated 4,200 residents who are victims of domestic violence in Oregon require housing services each year.

- Nearly 16,000 people were identified as experiencing houselessness in Oregon in 2019, an increase of 13% since 2017. Two in three people are unsheltered.
- Nearly 17,000 households live in substandard housing, based on Census surveys of housing units lacking complete plumbing or kitchen facilities. The number of households in substandard housing decreased by 4% compared to the 2021-2025 plan.
- Approximately 29,000 households live in units that are either overcrowded or severely overcrowded. The number of households in overcrowded conditions increased by 19% since the last plan.

As part of the Consolidated Plan's stakeholder perspective, activities to address urgent housing needs selected by the greatest number of respondents were:

- Housing activities that result in more rental units for households with income below 60% of AMI and households with incomes between 60% and 80% of AMI, emergency shelters for people who are houseless, and transitional housing for people moving out of houselessness.
- Repurposing vacant buildings for affordable housing.
- Affordable and accessible housing for people with disabilities.
- In 2022, minimum wage in Oregon59 was $12.75, compared to $14.00 in the Portland metro region and $12.00 for nonurban counties.

Oregon developed its *Statewide Housing Plan 2019-2023* in 2019.[60] The Plan identified six housing priorities to address in communities across the state over the 2019 to 2023 period (summarized below). In January 2022, Oregon Housing and Community Services (OHCS) released a summary of their progress.[61] The following section includes summaries and excerpts from their status report:

- **Equity and Racial Justice**. Advance equity and racial justice by identifying and addressing institutional and systemic barriers that have created and perpetuated patterns of disparity in housing and economic prosperity.

  OHCS continued to build relationships, tools, and connections to further its equity and racial justice focus. OHCS continued to update the Culturally Specific Organization (CSO) list, tracking funding received by CSOs. OHCS developed customized tools for

[59] The 2016 Oregon Legislature, Senate Bill 1532, established a series of annual minimum wage rate increases beginning July 1, 2016, through July 1, 2022. Retrieved from: https://www.oregon.gov/boli/whd/omw/pages/minimum-wage-rate-summary.aspx

[60] This section uses many direct excerpts from the OHCS Statewide Housing Plan 2019-2023. Oregon Statewide Housing Plan. https://www.oregon.gov/ohcs/Documents/swhp/SWHP-Report-Y1-Summary.pdf

[61] This section uses many direct excerpts from the OHCS Statewide Housing Plan, Year 3 Quarter 1 Update September 2021 Report to HSC. Oregon Statewide Housing Plan, Status Reports.https://www.oregon.gov/ohcs/Documents/swhp/01-07-2022-JAN-SWHP-Quarterly-Summary.pdf

equity and racial analysis and prepared to start equity and inclusion training for OHCS staff and committee chairs.

- **Houselessness.** Build a coordinated and concerted statewide effort to prevent and end houselessness, with a focus on ending unsheltered houselessness of Oregon's children and veterans.

  The Homeless Services Section (HSS) made progress in demonstrating increased Housing Stability with 26,940 households paid out via the Oregon Emergency Rental Assistance Program. Additional staffing and funding ($100 million) were secured to build a program of eviction prevention. OHCS developed a dashboard to provide transparency in processing, equity, and capacity issues related to houselessness. OHCS executed grant agreements with HSS providers to deliver strategic housing stability services.. Work is ongoing to enter more partnerships with new investments in eviction prevention.

- **Permanent Supportive Housing.** Invest in permanent supportive housing (PSH), a proven strategy to reduce chronic houselessness and reduce barriers to housing stability.

  OHCS funded and/or created 915 units, part of their target to create 1,000 PSH units. In addition, 416 of the 915 supportive home units were funded with PSH resources. Other accomplishments included developing a compliance and monitoring plan for PSH, distribution of service funds, outreach to partners to ensure PSH resource information is reaching tribal and rural partners, and a hiring staff to support the PSH program.

- **Affordable Rental Housing.** *Work to close the affordable rental housing gap and reduce housing cost burden for low-income Oregonians.*

  OHCS funded and/or created 18,329 affordable rental homes, part of their target to create 25,000 homes. OHCS developed internal tools, such as a reporting matrix for analysis of subcontracts and an incorporated Compliance Policy, and conducted community outreach with a tribal housing workgroup rules committee. OHCS also conducted a survey to get initial feedback on key program topics and projected changes, along with additional outreach on related issues.

- **Homeownership.** *Provide more low and moderate-income Oregonians with the tools to successfully achieve and maintain homeownership, particularly in communities of color.*

  OHCS assisted 1,187 households in becoming successful homeowners, part of its target to assist a total of 6,500 households. OHCS made strides by doubling the number of homeowners of colors in its homeownership programs. OHCS launched new programs to support homeownership, including lending programs. In order to align programs with the needs of communities of color, OHCS developed relationships with underrepresented organizations, maintained addressing the needs of communities of color as a focus in its programmatic frameworks, and regularly shared and encouraged training opportunities with its team.

- **Rural Communities.** Change the way OHCS does business in small towns and rural communities to be responsive to the unique housing and service needs and unlock the opportunities for housing development.

  OHCS focused on developing a better understanding of rural community needs and increasing rural capacity to build more affordable housing. OHCS hired a program manager for rural communities and delivered funding for multiple direct awards, increased funding for CSOs, and updated its Land Acquisition Program to include new funding amounts and set asides. OHCS funded and/or created 2,158 units in rural communities out of a total of 2,543 units in the five-year goal, or 85% of its target.

City of Sandy
Economic Opportunities Analysis

September 2023

Prepared for: City of Sandy

DRAFT Report

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Executive Summary

The City of Sandy is working on updating its Comprehensive Plan, the first complete update of the Plan since 1997. Sandy last conducted an EOA in 2015, which concluded that Sandy had a deficit of land for commercial uses and a small surplus of land for industrial uses. In 2017, Sandy addressed the commercial land need deficit through land use efficiency measures (such as re-zoning land to commercial uses) and expanding the UGB to include about 50 net acres of land for employment uses.

The broader update of the Sandy Comprehensive Plan provides the opportunity to re-examine Sandy's employment land needs considering the continued changes in the national and regional economy since 2017, which have implications for economic growth in Sandy.

The primary goals of the EOA are to (1) project the amount of land needed to accommodate the future employment growth within Sandy between 2023 and 2043, (2) evaluate the existing employment land supply within the city to determine if it is adequate to meet that need, (3) help the City understand its economic opportunities in the context of Sandy's comparative advantages and disadvantages, and (4) to fulfill state planning requirements for a twenty-year supply of employment land.

How much buildable employment land does Sandy currently have?

Sandy has 588 total acres in its commercial or industrial plan designations. Of these 588 acres, about 191 acres (32%) are unconstrained and buildable within its UGB. Of Sandy's buildable acres, 138 (72%) are designated for commercial uses and 54 (28%) are designated for industrial uses.

How much growth is Sandy planning for?

Goal 9 requires that cities provide for an adequate supply of commercial and industrial sites consistent with plan policies. To meet this requirement, Sandy needs an estimate of the amount of commercial and industrial land that will be needed over the 2023 to 2043 planning period.

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.

How much land will be required for employment?

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.

Does Sandy have enough land to accommodate employment growth?

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.

What are Sandy's growth opportunities?

Sandy's primary competitive advantages are:

- 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. 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.
- 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.

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).

Sandy's average wage of $37,318 is lower than the average of $54,802 for Clackamas County. Sandy's potential growth industries generally have above-average wages, except for certain types of services for residents and visitors, such as retail.

What are the key recommendations?

Following are ECONorthwest's recommendations for actions for Sandy based on the analysis and conclusions in this report.

- **Update the Economic Element of the Comprehensive Plan.** The Economy Element has not been updated in more than a decade. The new information in the EOA document provides a refreshed fact base for making future decisions.
- **Align the City's goals for economic development with planning for infrastructure development.** Aside from ensuring that there is sufficient land to support employment growth, one of the most important ways that the City can support economic development is through planning for and developing infrastructure (e.g., roads, water, sanitary sewer, and stormwater systems). We recommend that the City align its goals for economic development with infrastructure development through updates to the City's Capital Improvements Plan.
- **Monitor and replenish the supply of commercial and industrial land on a regular, periodic basis.** The buildable lands inventory identifies the existing development status of employment land in Sandy. While Sandy will not completely update the buildable lands inventory on an annual basis, City staff should still monitor the development status of these employment lands and replenish short-term supply when possible.
- **Sandy will need to address key infrastructure needs in the city.** Sandy will need to address wastewater system deficiencies to support future employment growth. To meet upcoming demand, Sandy has plans to fix aging sewer pipes, upgrade Sandy's existing treatment plant, and expand Sandy's wastewater system capacity, including establishing an alternative discharge location. Sandy's plans for its wastewater system upgrades will allow Sandy to accommodate the types and amounts of growth forecast in this report.
- **Determine whether and how to address the deficit of industrial land.** At the least, Sandy should consider whether there are opportunities to do a UGB land swap, moving industrial land that is difficult or unlikely to develop out of the UGB and bringing in land that is more likely to develop. Sandy should also evaluate whether there are land use efficiency measures, such as opportunity to re-zone land to allow more industrial development. In addition, Sandy might direct some types of industrial uses to commercial areas for manufacturing or other uses that are low odor or low noise and would be compatible with surrounding commercial (and possibly adjacent residential) uses. Finally, Sandy may want to consider a modest UGB expansion to meet its industrial needs, which might be most efficiently done if the City also implements a UGB land swap.
- **Support entrepreneurship and growing small businesses.** Small scale manufacturing sites could provide opportunities to create a business incubator or shared business space. The City should explore how this type of space could support entrepreneurs and small businesses as they start and grow their businesses.

- **Implement the Economic Development Strategy.** The City's Economic Development Strategy identifies the following six goals.
  - Improve systems to ensure broad and durable access to economic opportunity and maintain Sandy's high quality of life.
  - Leverage our investments in technology to maximize economic benefits.
  - Build on our assets in manufacturing to establish Sandy as a destination for metals fabrication and related activities.
  - Cultivate innovation in specialty food and beverage industries and align with the region's robust food storage and processing sector.
  - Invest in hospitality and place-based tourism to make Sandy the most active and vibrant basecamp for Mt. Hood area adventures.
  - Be a leader as both retail hub and heart of East Clackamas County.

  These goals align with the potential growth industries and economic advantages and disadvantages identified in the EOA. We recommend the City implement the actions in the Strategy to achieve these goals.

1. Introduction

This report presents an Economic Opportunities Analysis (EOA) for the City of Sandy. The purpose of an EOA is to develop information as a basis for policies that capitalize on Sandy's opportunities and help address the City's challenges. The EOA includes technical analysis to address a range of questions that Sandy faces in managing its commercial and industrial land. For example, the EOA includes an employment forecast that describes how much growth Sandy should plan for from 2023 to 2043 and identifies the amount and type of employment land necessary to accommodate growth in Sandy over that 20-year planning period. The EOA also includes an inventory of commercial and industrial land within Sandy's Urban Growth Boundary (UGB) to provide information about the amount of land available to accommodate employment growth.

This EOA complies with the requirements of Statewide Planning Goal 9, the Goal 9 Administrative Rule (OAR 660 Division 9), and the court decisions that have interpreted them. Goal 9 requires cities to identify the characteristics of sites needed to accommodate industrial uses and other employment uses (OAR 660-009-0025[1]) over the 20-year planning period. This approach could be characterized as a site-based approach that projects land need based on the forecast for employment growth, the City's economic development objectives, and the specific needs of target industries.

Background

The City of Sandy is working on updating its Comprehensive Plan, the first complete update of the Plan since 1997. Sandy last conducted an EOA in 2015, which concluded that Sandy had a deficit of land for commercial uses and a small surplus of land for industrial uses. In 2017, Sandy addressed the commercial land need deficit through land use efficiency measures (such as re-zoning land to commercial uses) and expanding the UGB to include about 50 net acres of land for employment uses.

The broader update of the Sandy Comprehensive Plan provides the opportunity to re-examine Sandy's employment land needs considering the continued changes in the national and regional economy since 2017, which have implications for economic growth in Sandy. The 2023 EOA accounts for recent employment trends and changes in economic conditions.

Sandy wants to develop an Economic Opportunities Analysis (EOA) to describe current conditions in the city and forecast potential future changes in economic activity in Sandy within the context of the Portland Metro region. In addition, the City is engaged in developing an economic development strategic plan as a separate yet parallel project. The EOA provides a factual base about current economic conditions and information necessary for updating the City's economic development Comprehensive Plan policies, as well as developing the economic development strategic plan. The EOA provides information that the City can use to identify and

capitalize on its economic opportunities. It also provides information essential to addressing the City's challenges in managing economic development.

The EOA draws on information from numerous data sources, such as the Oregon Employment Department, U.S. Bureau of Economic Analysis, U.S. Bureau of Labor Statistics, and the U.S. Census.

Framework for an Economic Opportunities Analysis

The content of this report is designed to meet the requirements of Oregon Statewide Planning Goal 9 and the administrative rule that implements Goal 9 (OAR 660-009). The analysis in this report is designed to conform to the requirements for an EOA in OAR 660-009 as amended.

1. *Economic Opportunities Analysis (OAR 660-009-0015)*. The Economic Opportunities Analysis (EOA) requires communities to identify the major categories of industrial or other employment uses that could reasonably be expected to locate or expand in the planning area based on information about national, state, regional, county, or local trends; identify the number of sites by type that are reasonably expected to be needed to accommodate projected employment growth based on the site characteristics typical of expected uses; include an inventory of vacant and developed lands within the planning area designated for industrial or other employment use; and estimate the types and amounts of industrial and other employment uses likely to occur in the planning area. Local governments are also encouraged to assess community economic development potential through a visioning process or some other public input–based process in conjunction with state agencies.
2. *Industrial and commercial development policies (OAR 660-009-0020)*. Cities are required to develop commercial and industrial development policies based on the EOA. Local comprehensive plans must state the overall objectives for economic development in the planning area and identify categories or particular types of industrial and other employment uses desired by the community. Local comprehensive plans must also include policies that commit the city or county to designate an adequate number of employment sites of suitable sizes, types, and locations. The plan must also include policies to provide necessary public facilities and transportation facilities for the planning area.
3. *Designation of lands for industrial and commercial uses (OAR 660-009-0025)*. Cities and counties must adopt measures to implement policies pursuant to OAR 660-009-0020. Appropriate implementation measures include amendments to plan and zone map designations, land use regulations, public facility plans, and transportation system plans. More specifically, plans must identify the approximate number, acreage, and characteristics of sites needed to accommodate industrial and other employment uses to implement plan policies and must designate serviceable land suitable to meet identified site needs.

Stakeholder Engagement Process

Development of the EOA was informed by feedback from a Technical Advisory Committee (TAC), composed of City staff and economic development professionals. The TAC met 3 times and discussed:

- **Meeting 1:** the buildable lands inventory and SWOT analysis
- **Meeting 2:** employment forecast, target industries, and land sufficiency
- **Meeting 3:** site needs, EOA report reviews, and economic development policies

Public engagement occurred through the Sandy Comprehensive Plan project via the following.

- **Community Conversations.** To reach a wide spectrum of Sandy community members, project staff and members of the Community Advisory Committee (CAC) facilitated community conversations with local groups, clubs, committees, and organizations in Sandy, including targeted outreach to Spanish speakers and high school students. The discussions focused on what community members value about Sandy today and what could make it a better place in the future.
- **Community Events.** The project team engaged with the community at a variety of community events throughout 2022 and 2023, staffing an *Envision Sandy 2050* booth and conducting targeted outreach through intercept surveys in English and Spanish. Events included:
  - Farmers Markets (May-August, 2022-2023)
  - Longest Day Parkway (June 2022-2023)
  - Sandy Mountain Festival (July 2022-2023)
- **Stakeholder Workshops.** Two day-long workshops conducted with City staff, Community Advisory Committee members, and technical experts to identify natural hazard vulnerabilities in Sandy and develop cross-sector strategies to address those vulnerabilities in the Comprehensive Plan.
- **Surveys and Online Engagement.** Throughout the process, online surveys were conducted to gather community priorities and identify strategies for the future of Sandy. Surveys were provided in both English and Spanish, and paper copies were available at key locations around the city. Running concurrently with outreach through community conversations and community events, the first survey was live for six months in 2022 and received 137 responses. The second survey opened in April 2023 and received 24 responses at the time of writing *(September 2023).*
- **Community Meetings.** In September 2022, the project team held *Future Fest*, a community meeting to unveil the new *Envision Sandy 2050* Vision Statement and provide Sandy community members an opportunity to share their ideas for achieving the vision. The open house format provided an opportunity for Sandy residents and

business owners to engage with their neighbors face-to-face and share ideas for the Comprehensive Plan.

The Comprehensive Plan process also included 6 decision-maker work sessions to ensure that elected and appointed officials were engaged in the process and had the opportunity to provide input and direction.

Organization of This Report

This report is organized as follows:

- **Chapter 2. Factors Affecting Future Economic Growth** summarizes historic economic trends that affect current and future economic conditions in Sandy, as well as Sandy's competitive advantages for economic development.
- **Chapter 3. Employment Growth and Site Needs** presents a forecast for employment growth in Sandy and describes potential growth industries and site needs for potential growth in industries.
- **Chapter 4. Buildable Lands Inventory** presents a summary of the inventory of employment lands.
- **Chapter 5. Land Sufficiency and Conclusions** compares the supply of and demand for buildable lands and presents key concluding recommendations for Sandy.

This report also includes two appendices:

- **Appendix A. National, State, and Regional and Local Trends**
- **Appendix B. Buildable Lands Inventory Methodology**

2. Factors Affecting Future Economic Growth

Sandy exists as part of the economy of the Portland Metro region, which includes Multnomah, Clackamas, and Washington Counties. It is a relatively small commercial center to the southeast of the Portland Metro area, serving eastern Clackamas County. Sandy is located along Highway 26 and is the largest incorporated city between the Portland Metro and Mt. Hood. Its proximity to the Portland Metro region provides opportunities for the City's residents and access to a larger labor pool for employers, especially from cities on the eastern side of the region. The economic focus of Sandy consists of an industry mix of retail trade, manufacturing, and services such as restaurants, healthcare, education, and government services. Sandy's location within eastern Clackamas County makes it an ideal destination for tourists visiting Mt. Hood and on their way to Central Oregon.

This chapter describes the factors affecting economic growth in Sandy within the context of national and regional economic trends. The analysis presents the City's competitive advantages for growing, attracting, and retaining businesses, which forms the basis for identifying potential growth industries in Sandy.

Factors that Affect Economic Development[1]

The fundamental purpose of Goal 9 (the Statewide Planning Goal for Economic Development) is to ensure that local governments plan for economic development. The planning literature provides many definitions of economic development, both broad and narrow. Broadly,

> "Economic development is the process of improving a community's well-being through job creation, business growth, and income growth (factors that are typical and reasonable focus of economic development policy), as well as through improvements to the wider social and natural environment that strengthen the economy."[2]

That definition acknowledges that a community's well-being depends in part on narrower measures of economic well-being (e.g., jobs and income) and on other aspects of quality of life (e.g., the social and natural environment). In practice, cities and regions trying to prepare an economic development strategy typically use a narrower definition of economic development; they take it to mean business development, job growth, and job opportunity. The assumptions are that:

- Business and job growth are contributors to and consistent with economic development, increased income, and increased economic welfare. From the municipal point of view,

[1] The information in this section is based on previous Goal 9 studies conducted by ECONorthwest, as well as "An Economic Development Toolbox: Strategies and Methods" published by the American Planning Association.

[2] An Economic Development Toolbox: Strategies and Methods, Terry Moore, Stuart Meck, and James Ebenhoh, American Planning Association, Planning Advisory Service Report Number 541, October 2006.

investment and the resulting increases in property tax are important outcomes of economic development.

- The evaluation of trade-offs and balancing of policies to decide whether such growth is likely to lead to overall gains in well-being (on average and across all citizens and businesses in a jurisdiction) is something that decision-makers do after an economic strategy has been presented to them for consideration.

That logic is consistent with the tenet of the Oregon land use planning program: all goals matter, no goal dominates, and the challenge is to find a balance of conservation and development that is acceptable to a local government and the State. Goal 9 does not dominate, but it legitimizes and requires that a local government focus on the narrower view of economic development regarding economic variables.

In that context, a major part of local economic development policy is about local support for business development and job growth; that growth comes from the creation of new firms, the expansion of existing firms, and the relocation or retention of existing firms. Specifically, new small businesses are accounting for a larger share of the job growth in the United States. This shift toward a focus on entrepreneurship, innovation, and small businesses presents additional options for local support for economic development beyond firm attraction and retention and is consistent with Sandy's Pioneer spirit. Thus, two key questions for economic development policy are addressed in depth in this document:

- What are the factors that influence business and job growth?
- What is the relative importance of each?

What factors matter?

Why do firms locate where they do? There is no single answer—firms choose their locations for different reasons. Key determinants of a location decision are a firm's factors of production. For example, a firm that spends a large portion of total costs on unskilled labor will be drawn to locations where labor is relatively inexpensive. A firm with large energy demands will give more weight to locations where energy is relatively inexpensive. In general, firms choose locations they believe will allow them to maximize net revenues: if demand for goods and services are held roughly constant, then revenue maximization is approximated by cost minimization.

The typical categories that economists use to describe a firm's production function are:

- **Labor.** Labor is often the most important factor of production. Other things being equal, firms look at productivity—labor output per dollar. Productivity can decrease if certain types of labor are in short supply, which increases costs by requiring either more pay to acquire the labor that is available, the recruiting of labor from other areas, or the use of less productive labor that is available locally.

- **Land.** Demand for land depends on the type of firm. Manufacturing firms typically need more space and tend to prefer suburban locations where land is relatively less expensive and less difficult to develop. Warehousing and distribution firms often need to locate close to interstate highways.
- **Local infrastructure.** An important role of government is to increase economic capacity by improving quality and efficiency of infrastructure and facilities, such as roads, bridges, water and sewer systems, airport and cargo facilities, energy systems, and telecommunications.
- **Access to markets.** Though part of infrastructure, transportation merits special attention. Firms need to move their product (either goods or services) to market, and they rely on access to different modes of transportation to accomplish this.
- **Materials.** Firms producing goods, and even firms producing services, need various materials to develop products that they can sell. Some firms need natural resources (i.e., raw lumber) and others may need intermediate materials (i.e., dimensioned lumber).
- **Entrepreneurship**. This input to production may be thought of as good management, or more broadly as a spirit of innovation, optimism, and ambition that distinguishes one firm from another, even though most of their other factor inputs may be quite similar. Entrepreneurial activity, even when unsuccessful, can offer information about the local market that other entrepreneurs can use in starting a new firm. Entrepreneurs are typically willing to take on more risk in uncertain markets, and a strengthened entrepreneurial environment can help to reduce that risk and uncertainty.[3] Entrepreneurs also tend to have more mobility than larger firms and are more likely to locate in areas with a strong entrepreneurial environment.[4] To some degree, local governments can promote the high quality of life in an area to attract entrepreneurs, in addition to adopting regulations with minimal barriers—or at least, clear guidelines—for new small businesses.

The supply, cost, and quality of any of these factors depend on market factors: on conditions of supply and demand locally, nationally, and even globally. But they also depend on public policy. In general, public policy can affect these factors of production through:

- **Regulation.** Regulations protect the health and safety of a community and help maintain quality of life. Overly burdensome regulations, however, can be disincentives for businesses to locate in a community. Simplified bureaucracies and straightforward regulations can reduce the burden on businesses and help them react quickly in a competitive marketplace.
- **Taxes**. Firms tend to seek locations where they can optimize their after-tax profits. Tax rates are not a primary location factor—they typically matter only after businesses have

[3] Tessa Conroy and Stephan Weiler. "Local and Social: Entrepreneurs, Information Network Effects, and Economic Growth" (2017). https://redi.colostate.edu/wp-content/uploads/sites/50/2017/05/gender_gia_Jun2017-2.pdf

[4] Emil E. Malizia and Edward J. Feser. *Understanding Local Economic Development.* (1999).

made decisions based on labor, transportation, raw materials, and capital costs. The costs of these production factors are usually similar within a region. Therefore, differences in tax levels across communities within a region are more important in the location decision than are differences in tax levels between regions.

- **Financial incentives**. Governments can offer firms incentives to encourage growth. In recent years in Oregon (especially the Portland region), incentives have been used more to attract business to consider locating in the Portland region, rather than substantially distinguishing between cities in the Portland region. For manufacturing industries with significant equipment costs, however, property or investment tax credit or abatement incentives can play a significant role in location decisions.

This discussion may make it appear that a location decision is based entirely on a straightforward accounting of costs, with the best location being the one with the lowest level of overall costs. Studies of economic development, however, have shown that location decisions depend on a variety of other factors that indirectly affect costs of production. These indirect factors include agglomerative economies (also known as industry clusters), quality of life, and innovative capacity.

- **Industry clusters**. Firms with similar business activities can realize operational savings when they congregate in a single location or region. Clustering can reduce costs by creating economies of scale for suppliers. For this reason, firms tend to locate in areas where there is already a presence of other firms engaged in similar or related activities.
- **Quality of life.** A community that features many quality amenities, such as access to recreational opportunities, culture, low crime, good schools, affordable housing, and a clean environment can attract people simply because it is a nice place to be. A region's quality of life can attract skilled workers, and if the amenities lure enough potential workers to the region, the excess labor supply pushes their wages down so that firms in the region can find skilled labor for a relatively low cost. The characteristics of local communities can affect the distribution of economic development within a region, with different communities appealing to different types of workers and business owners. Sometimes location decisions by business owners are based on an emotional or historical attachment to a place or set of amenities, without much regard for the cost of other factors of production.
- **Innovative capacity.** Increasing evidence suggests that a culture promoting innovation, creativity, flexibility, and adaptability is essential to keeping U.S. cities economically vital and internationally competitive. Innovation is particularly important in industries that require an educated workforce. High tech companies need to have access to new ideas typically associated with a university or research institute. In addition to innovations in research and development within firms or research institutions, firms may also draw on the innovative capacity of entrepreneurs in an area. These entrepreneurs may be former employees of the larger firm or businesses that relocated to an area because of the proximity to an industry cluster. Strong networks and

communication between firms, research institutions, and entrepreneurs are key components to leveraging innovative capacity in an area.[5] Local governments are well equipped to help foster these networks through supporting economic development tools such as small business assistance centers or incubation centers. Government can also be a key part of a community's innovative culture through the provision of services and regulation of development and business activities that are responsive to the changing needs of business.

How important are these factors?

To understand how changes in public policies affect local job growth, economists have attempted to identify the importance for firms with different locational factors. They have used statistical models, surveys, and case studies to examine detailed data on the key factors that influence the business location decision.

Economic theory says that firms locate where they can reduce the costs of their factors of production (assuming demand for products and any other factors are held constant). Firms locate in regions where they have access to inputs that meet their quality standards at a relatively low cost. Because firms are different, the relative importance of different factors of production varies both across industries and, even more importantly, across firms.

No empirical analysis can completely quantify firm location factors because numerous methodological problems make any analysis difficult. For example, some would argue simplistically that firms would prefer locating to a region with a low tax rate to reduce tax expenses. However, the real issue is the value provided by the community for the taxes collected. When competing jurisdictions have roughly comparable public services (type, cost, and quality) and quality of life, then tax rates (and tax breaks) can make a difference.

An important aspect of this discussion is that the business function at a location matters more than a firm's industry. A single company may have offices spread across cities, with headquarters located in a cosmopolitan metropolitan area, the research and development divisions located near a concentration of universities, the back office located in a suburban location, and manufacturing and distribution located in areas with cheap land and good interstate access.

Local governments can provide support for new and existing small businesses through policies and programs that support entrepreneurship and innovation. The National League of Cities suggests strategies for local governments, including strong leadership from elected officials; better communication with entrepreneurs, especially regarding the regulatory environment for businesses in the community; and partnerships with colleges, universities, small business

[5] Nancey Green Leigh and Edward Blakely. Planning Local Economic Development: Theory and Practice. 2013.

development centers, mentorship programs, community groups, businesses groups, and financial institutions.[6]

Local governments in Oregon also play a central role in the provision of buildable land through inclusion of lands in the Urban Growth Boundary (UGB), as well as through the determination of plan designations and zoning and the provision of public services. Typically, businesses need buildable land to locate or expand in a community. However, providing buildable land alone is not sufficient to guarantee economic development in a community—market conditions must create demand for this land, and local factors of production must be favorable for business activity. In the context of expected economic growth and the perception of a constrained land supply in Sandy, the provision of buildable land has the potential to strongly influence the level and type of economic development in the city of Sandy. The provision of buildable land is one of the most direct ways that Sandy can affect the level and type of economic development in the community.

Summary of the Effect of National, State, and Regional Trends on Economic Development in Sandy

This section presents a summary of the implications of national, state, and regional economic trends on economic growth in Sandy, which are presented in Appendix A.

- **County and local employment growth.** Employment has increased in Clackamas County since 2001, with a gain of about 24,884 employees between 2001 and 2020. The largest increases were in healthcare and social assistance and professional and business services. Jobs in Sandy accounted for about 2% of overall employment in Clackamas County in 2019. Employment in Sandy increased 23% between 2008 and 2019, growing by approximately 695 employees.
- **Increases in regional competitiveness.** The Greater Portland region (which includes Clackamas, Multnomah, and Washington Counties in Oregon and Clark County in Washington) continues to attract companies that operate on a global scale. Developing a skilled workforce and building efficient infrastructure remain critical elements to maintaining the region's competitive advantages. Industry sectors in computer and electronics, software, climate tech, design and media, food and beverage, apparel and outdoor, and metals and machinery are central to the region's success.[7] The increases in economic attractiveness of the Greater Portland region provide opportunities for the development of new businesses in Sandy.
- **Changes in manufacturing and concentration of manufacturing in Oregon.** Sandy's location in the Portland Metro region, the presence of existing manufacturing businesses, and access to a skilled workforce present opportunity for growth in

[6] National League of Cities "Supporting Entrepreneurs and Small Businesses" (2012).

[7] Greater Portland Comprehensive Economic Development Strategy (CEDS). Prepared by Bridge Economic Development. 2021.

manufacturing businesses. In 2019, manufacturing accounted for about 5% of Sandy's total covered employment and had an average wage of $56,224, higher than the city's average wage of $37,318.

Between 2008 and 2019, the manufacturing sector in Sandy shrank from 240 to 202 employees, a decrease of 38 employees. In Clackamas County, over the 2008 to 2019 period, manufacturing added 124 jobs (as well as maintaining existing jobs).

- **Increases in automation.** Businesses in both industrial and commercial industries will continue to respond to increases in automated processes, decreasing employment in some types of manufacturing processes and conversely increasing demand for workers with skills in computers and other high-tech sectors. While automation has been a factor in industrial sectors for decades (e.g., manufacturing), recent increases in automation have occurred for commercial industries, such as certain functions of retail or office jobs. Oregon's overall risk of automation is consistent with national trends, with lower and middle-wage jobs at higher risk of being automated. Jobs that are lower risk include those that provide personal services or experiences, such as food service or hospitality. Higher-wage jobs that are also considered at lower risk of automation include jobs that require social intelligence, perception, creativity, or fine motor skills.

  Most industrial sectors will continue to hire employees to complete certain tasks, though the types of skills required for these jobs may change as automation increases. Sandy's access to a skilled workforce is an advantage for businesses in Sandy if the educational opportunities in the region continue to align with the needs for industries that locate in Sandy.

- **Importance of small businesses in Sandy's economy.** The average business in Sandy has 10 employees, slightly less than the state average of 11 employees.[8] The creation of new businesses is vital to Oregon's (and Sandy's) economy as their formations generate new jobs and advance innovations into markets. Sandy's access to a relatively young workforce both within the city and from across the Portland Metro region presents opportunities for small businesses to grow in the city.

- **Changes in the retail sector.** Over the past two decades, the trend toward supercenters and e-commerce has steadily increased. While growth of shopping online, accelerated by the COVID-19 pandemic, is likely to persist, there will continue to be demand for the local purchase of retail goods. Consumers still prefer physical, brick-and-mortar stores for certain items, such as large furniture, home improvement goods, specialty goods, and groceries. Furthermore, consumer preferences have shifted to spending at restaurants and experience-focused business establishments (e.g., entertainment or recreation). One emerging retail trend, the convergence of technology and shopping, creates new opportunities for retail businesses to differentiate themselves and engage customers digitally in physical retail locations. While retail businesses that compete with online retailers may become less common in Sandy (and other cities), businesses

[8] 2019 QCEW data for the State of Oregon

providing experiences (including digital/physical shopping experiences) or goods that cannot be purchased online may grow and expand in Sandy. This presents opportunities for Sandy's retail industry to build on the city's high quality of life, providing experiences for residents and visitors.

- **Continued increase in demand for energy.** In 2022, energy prices, especially gasoline prices, increased sharply. Reasons for the increase include increased travel and international sanctions against Russia for the war in Ukraine, which results in less Russian fuel on the international market. Energy prices are forecasted to increase over the planning period, which, over the long-term, will likely affect the mode of commuting before it affects workers' willingness to commute. For example, commuters may choose to purchase a more energy-efficient car or carpool. Sandy also provides public transit options via the Sandy Area Metro (SAM), with routes to Gresham and Estacada along with stops throughout Sandy. Very large increases in energy prices may affect workers' willingness to commute to or from Sandy, especially workers living or working the farthest from Sandy or workers with lower-paying jobs. In addition, very large increases in energy prices may make shipping freight long distances less economically feasible, resulting in a slowdown or reversal of offshore manufacturing, especially of large, bulky goods.
- **A tight labor market and increasing labor costs.** In December 2021, the unemployment rate in Clackamas County was 3.3%, slightly lower than Oregon's rate of 3.6% and the national rate of 3.7%. After declining sharply during the COVID-19 pandemic, employment has mostly recovered with the national labor force participation rate slightly below pre-pandemic levels. Economic growth paired with a tight labor market pushed wages upwards with wages increasing nationally by 5.5% as of April 2022 year over year. For Sandy, the tight labor market could make it difficult for businesses to attract talent, especially given the relatively lower wages offered in the city relative to the broader Portland region.
- **Household income and average wages.** Sandy's median household income ($73,443) is lower than the county ($80,484) but higher than the state ($62,818). The average annual wage at private businesses in Sandy was about $37,318, which was lower than the Clackamas County average of $54,802 in 2019 and the state average of $55,019.[9] While household income data would suggest that some households may have higher disposable incomes to spend on goods and services, the relatively lower wages could make it difficult to attract talent, especially given the tight labor market.
- **Rising housing costs.** The rising cost of living, especially increases in housing costs, can impact the ability of local businesses to attract and retain talent, especially for low and middle-wage jobs. As of June 2022, the median home sales price was $523,000 in Sandy. The median gross rent in 2019 was $1,229.[10] Households would need to earn $120,000 per year to afford the median sales price and $50,000 per year to afford the median rent.

[9] Oregon Employment Department, Quarterly Census of Employment and Wages, 2019

[10] 2019 data is based on the 5-year ACS (2015-2019).

Unfortunately, the average annual wage in Sandy is $37,318 and the median household income is $73,443.

- **Availability of labor.** Availability of labor depends, in part, on population growth and in-migration. Sandy's population increased by 7,484 people between 2000 and 2021 at an average annual growth rate of 4.2%. Sandy is forecast to grow by 5,885 people between 2020 and 2040.[11]

  The current labor force participation rate is another important consideration in the availability of labor. The labor force in any market consists of the adult population (16 and over) who are working or actively seeking work. The labor force includes both the employed and unemployed. According to the 2015–2019 American Community Survey, Sandy had about 5,846 people in its labor force and Clackamas County had 214,622 people in its labor force. The labor force participation rate in Sandy (69%) was higher than Clackamas County (65%) and Oregon (62%). Nonparticipants in the labor force (the 31% of people not participating in Sandy's labor force) included students 16 years and older, retirees, and unemployed people not actively seeking work. A higher concentration of older residents in an area or a mismatch between the types of jobs available in an area and the types of skills of the labor force can contribute to low labor force participation rates.

  Commuting is common for residents and workers in Sandy. Twenty percent of workers at businesses in Sandy live in Sandy. About 12% of workers live in Gresham, 8% in Portland, and 4% around Mount Hood. Businesses in Sandy draw employees from across Multnomah, Clackamas, and Washington Counties. About 87% percent of residents of Sandy commute to work across the region, including 27% who work at businesses in Portland, 11% who work in Gresham, and 2% who work in Beaverton.

- **Education as a determinant of wages.** Sandy's population has a larger share (46%) of residents with some college or an associate's degree (as their highest level of education) than in Clackamas County (35%) and Oregon (34%). About 19% of Sandy's residents have a bachelor's degree or higher in comparison to 37% in Clackamas County and 34% in Oregon. Businesses that need employees with a bachelor's degree or higher may need to recruit employees from outside of the city.

- **Aging of the population and need for replacement workers.** While Sandy has a smaller percentage of residents 60 years and older (17%) relative to Clackamas County (25%) and Oregon (24%), Sandy's population is growing older. Sandy's median age, which was 32.6 in 2000, increased to 36.2 in 2019.[12] By comparison, Clackamas County's median age was 41.5, and Oregon's median age was 39.3 in 2019.[13]

[11] Portland State University, College of Urban & Public Affairs: Population Research Center, population forecast, 2020.

[12] 2019 data is based on the 5-year ACS (2015-2019).

[13] 2019 data is based on the 5-year ACS (2015-2019).

Clackamas County's population is expected to continue aging, with people 60 years and older increasing from 27% of the population in 2020 to 29% of the population in 2040, consistent with statewide trends.[14] As workers retire, businesses need to replace them with new workers. This need for replacement workers will continue to drive need for workers. With a relatively younger workforce, Sandy could be in a good position to replace retiring workers if workforce skills match job openings.

- **Increases in racial and ethnic diversity.** Overall, both the nation and Oregon are becoming more racially and ethnically diverse. Between 2000 and 2019, the Hispanic and Latino population in Oregon increased from 8% to 13%, while it increased in Sandy from 4% to 10%. The population of people of color has increased from 13% to 16% in Oregon since 2000 and from 6% to 9% in Sandy.[15]
- **Increase in work from home trends.** The pandemic facilitated a shift in many industries opening up opportunities for employees to work from home at levels never seen before. Due to the shift to working from home and concerns around the pandemic, many workers started moving away from urban centers in pursuit of more space. Work from home trends are likely to continue—full time for some workers or with options for a hybrid schedule for others. Sandy's proximity to recreational amenities and the Portland Metro region, along with access to high-speed internet, could make it particularly attractive to people who work from home full time or have a hybrid work arrangement in the Portland Metro region that requires them to be in the office a few times a week.
- **High rates of inflation.** For the last several decades, inflation rates have generally stayed below 3% in the United States of America. Inflation started to increase in 2021 and increased substantially in 2022 to its highest level in 40 years—around 9%. Inflation increased most quickly in June 2022 for energy, motor vehicles, food, and household furnishings.[16] The average hourly earnings for nonfarm employees increased slightly through April 2022, but inflation-adjusted real average hourly earnings declined slightly due to continued inflation.[17] Continued high rates of inflation may slow economic growth, further erode purchasing power, discourage savings, and lead to a national recession. Consumers may start decreasing spending on non-essentials, which could impact parts of Sandy's retail and tourism economy. However, Sandy's proximity to the Portland Metro region may result in the city getting more regional tourists as people choose to vacation locally to avoid high transportation costs.

[14] Portland State University, College of Urban & Public Affairs: Population Research Center, Population Forecast, 2020.

[15] 2019 data is based on the 5-year ACS (2015-2019).

[16] Bureau of Labor Statistics, U.S. Department of Labor, *The Economics Daily*. Consumer prices up 9.1 percent over the year ended June 2022, largest increase in 40 years at https://www.bls.gov/opub/ted/2022/consumer-prices-up-9-1-percent-over-the-year-ended-june-2022-largest-increase-in-40-years.htm (visited *July 25, 2022*).

[17] *New Inflationary Concerns: A US Macroeconomic Update*, IBISWorld, June 03, 2022. https://www.ibisworld.com/blog/new-inflationary-concerns-us-macroeconomic-update/1/1126/

Employment Trends in Sandy and Clackamas County

The national economy changed substantially between 2001 and 2022. These changes affected the composition of Oregon's economy, including Sandy's economy. At the national level, the most striking change was the shift from manufacturing employment to service-sector employment. The most important shift in Oregon during this period has been the shift from a timber-based economy to a more diverse service-based economy. This section of the EOA focuses on changes in the economy in Clackamas County and Sandy since 2001.

Employment Trends in Clackamas County

Exhibit 1 shows covered employment[18] in Clackamas County for 2001 and 2019. Employment increased by 35,329 jobs, or 26%, over this period. The sectors with the largest increases in numbers of employees were healthcare and social assistance (10,649 jobs), professional and business services (8,562 jobs), construction (4,856 jobs), and accommodation and food services (4,822 jobs). The average annual wage for employment in Clackamas County in 2019 was about $54,802.[19]

Exhibit 1. Covered Employment by Industry, Clackamas County, 2001–2019

Sector	2001	2019	Change 2001 to 2019		
			Difference	Percent	AAGR
Natural Resources and Mining	4,164	5,040	876	21%	1.1%
Construction	9,327	14,183	4,856	52%	2.4%
Manufacturing	18,172	18,296	124	1%	0.0%
Wholesale Trade	10,391	10,937	546	5%	0.3%
Retail trade	17,628	18,843	1,215	7%	0.4%
Transportation, Warehousing & Utilities	4,439	4,077	-362	-8%	-0.5%
Information	1,728	2,304	576	33%	1.6%
Financial Activities	8,294	7,866	-428	-5%	-0.3%
Professional and Business Services	13,301	21,863	8,562	64%	2.8%
Educational Services	1,112	2,026	914	82%	3.4%
Health Care and Social Assistance	12,038	22,687	10,649	88%	3.6%
Arts, Entertainment, and Recreation	1,680	2,655	975	58%	2.6%
Accommodation and Food Services	9,832	14,654	4,822	49%	2.2%
Other Services	5,422	7,388	1,966	36%	1.7%
Unclassified	77	104	n/a	n/a	n/a
Total All Government	16,497	16,509	12	0%	0.0%
Total	**134,104**	**169,433**	**35,329**	**26%**	**1.3%**

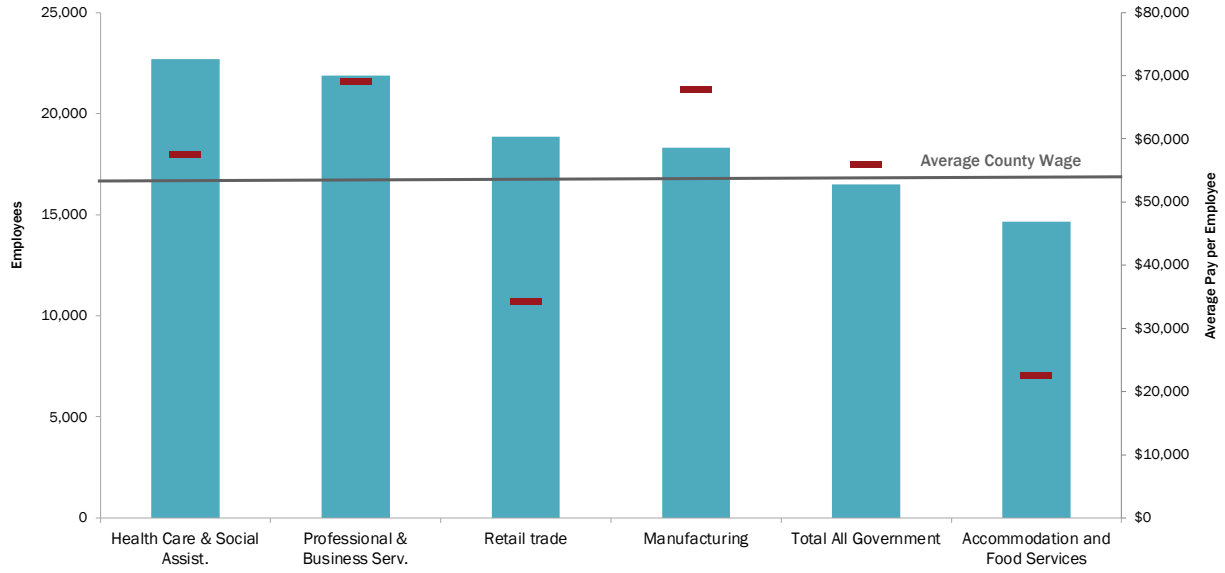
Source: Bureau of Labor Statistics, Quarterly Census of Employment and Wages, 2001–2019.

[18] **Covered** employment includes employees covered by unemployment insurance. Examples of workers not included in covered employment are sole proprietors, some types of contractors (often referred to as "1099 employees"), or some railroad workers. Covered employment data is from the Oregon Employment Department.

[19] Bureau of Labor Statistics, Quarterly Census of Employment and Wages, 2019.

Exhibit 2 shows covered employment and average wage for the six largest industries in Clackamas County. Jobs in healthcare and social assistance and professional and business services each accounted for approximately 13% of the county's total covered employment, followed by retail and manufacturing (both 11%). Of these sectors, professional and business services and manufacturing pay above the county wage ($69,007 and $67,779, respectively). The healthcare and social services sector pays just above the county average ($57,632). Jobs in government, construction, wholesale trade, financial activities, information, and other services also paid more per year than the county average, but they accounted for a smaller share of covered employment in the county.

Exhibit 2. Covered Employment and Average Pay by Sector, 6 Largest Sectors Clackamas County, 2019



Source: Bureau of Labor Statistics, Quarterly Census of Employment and Wages, 2019.

While the COVID-19 pandemic caused high unemployment and pandemic-related job losses in 2020, the economy rebounded in 2021 and into 2022 as vaccines became readily available and business restrictions lifted. Oregon experienced strong job gains in 2021 with employers adding 102,100 jobs over the year.[20] However, the job gains have been unevenly distributed throughout the economy. Some sectors such as construction, nondurable goods manufacturing, retail trade, and transportation and warehousing fully recovered from recession losses and reached new, record-high employment levels at the end of 2021. Other sectors, including leisure and

[20] Gail Krumenauer, "Job gains amid COVID waves: 2021 year in review." State of Oregon Employment Department. April 7, 2022.

hospitality and private educational services remained below pre-COVID job levels.[21] However, job growth is anticipated to be more balanced across industries moving forward.[22]

According to the Oregon Office of Economic Analysis (OEA) in their May 2021 economic and revenue forecast, jobs are forecasted to fully recover during the 2021 to 2023 biennium. Job vacancies reached record highs in Clackamas County in 2021.[23] The unemployment rate in Clackamas County in March 2022 was the same as March 2019 at 3.6%, and total nonfarm employment in Clackamas County was above where it was in March 2019.[24]

Employment in Sandy

Between 2008 and 2019, employment in Sandy increased by about 695 employees (23%), at about a 1.9% average annual growth rate. Retail trade experienced the greatest nominal increase (261 employees) followed by healthcare and social assistance (176 employees), while manufacturing experienced the greatest nominal decrease (38 employees) (Exhibit 3).

Exhibit 3. Change in Covered Employment, Sandy UGB, 2008–2019
Sectors highlighted in blue have wages higher than the city average.
*Average Annual Growth Rate

Sector	Employees		Change in Employment		
	2008	2019	Number	Percent	AAGR
Construction & Agriculture	177	162	(15)	-8%	-0.8%
Manufacturing	240	202	(38)	-16%	-1.6%
Wholesale Trade	44	54	10	23%	1.9%
Retail Trade	717	978	261	36%	2.9%
Transportation and Warehousing	24	128	104	433%	16.4%
Information	96	62	(34)	-35%	-3.9%
Finance and Insurance	83	88	5	6%	0.5%
Real Estate and Rental and Leasing	42	38	(4)	-10%	-0.9%
Professional Services and Management of Companies	86	78	(8)	-9%	-0.9%
Admin. / Support and Waste Mgmt / Remediation Serv.	29	57	28	97%	6.3%
Educational Services	4	18	14	350%	14.7%
Health Care and Social Assistance	278	454	176	63%	4.6%
Recreation, Accomodation, and Food Services	544	632	88	16%	1.4%
Other Services (except Public Administration)	195	300	105	54%	4.0%
Government	499	502	3	1%	0.1%
Total	**3,058**	**3,753**	**695**	**23%**	**1.88%**

Source: Oregon Employment Department, Quarterly Census of Employment and Wages, 2008 and 2019.

[21] Gail Krumenauer, "Job gains amid COVID waves: 2021 year in review." State of Oregon Employment Department. April 7, 2022.

[22] Josh Lehner, "Cyclical Labor Shortage is Gone, Structural Remains." Oregon Office of Economic Analysis. May 4, 2022.

[23] Amy Vander Vilet. "Clackamas County job vacancies reach record high in 2021." State of Oregon Employment Department. April 14, 2022.

[24] Oregon Employment Department, Qualityinfo.org

Exhibit 4 shows a summary of covered employment data for the Sandy UGB in 2019. The sectors with the largest number of employees were retail trade (26% of Sandy's total covered employment); recreation, accommodation, and food service (17%); government (13%); and healthcare and social assistance (12%). The average size for a private business in Sandy was 10 employees per business, slightly lower than the state average of 11 employees.

Exhibit 4. Covered Employment and Average Pay by Sector, Sandy UGB, 2019[25]

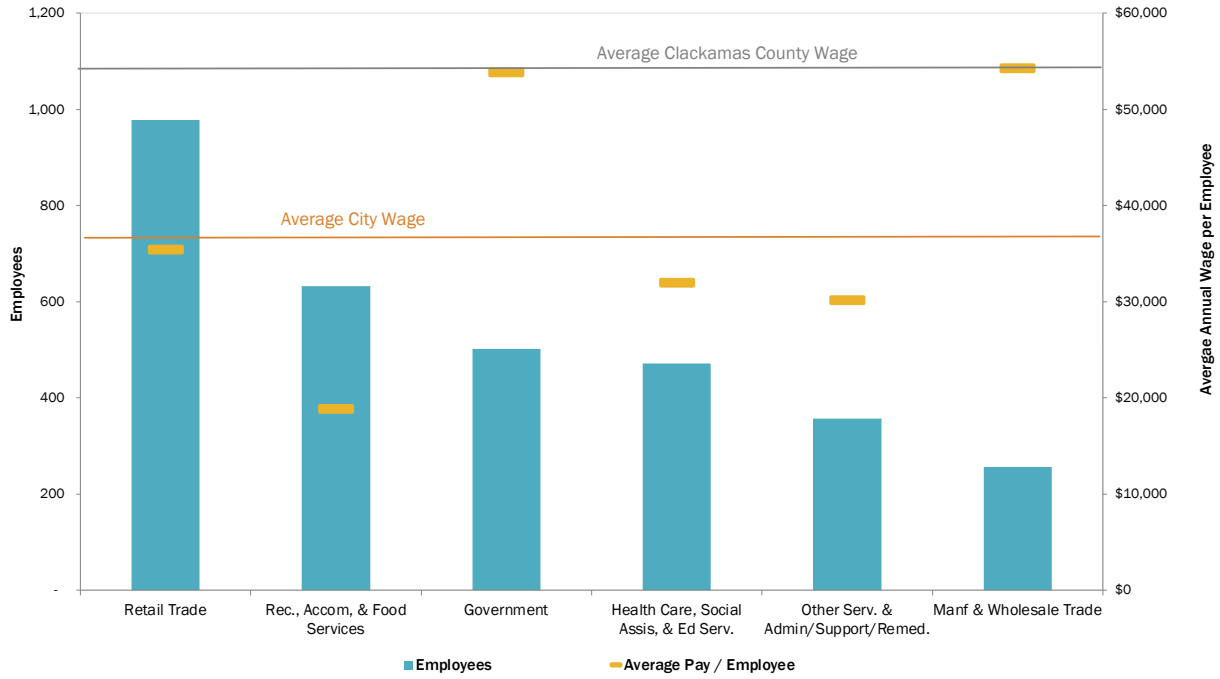
Sector	Establishments	Employees	Average Pay per Employee
Construction & Agriculture	42	162	$61,677
Manufacturing	22	202	$56,224
Wholesale Trade	14	54	$46,708
Retail Trade	46	978	$35,347
Transportation and Warehousing	11	128	$28,515
Information	8	62	$52,915
Finance and Insurance	20	88	$47,660
Real Estate and Rental and Leasing	18	38	$34,258
Professional Services and Management of Companies	19	78	$57,176
Admin. / Support and Waste Mgmt / Remediation Serv.	21	57	$26,654
Educational Services	5	18	$15,507
Health Care and Social Assistance	31	454	$32,550
Recreation, Accomodation, and Food Services	47	632	$18,829
Other Services (except Public Administration)	72	300	$30,786
Government	12	502	$53,815
Total	**388**	**3,753**	**$37,318**

Source: Oregon Employment Department, Quarterly Census of Employment and Wages, 2019.

[25] The following sectors were combined due to confidentiality of QCEW data: construction and agriculture, forestry, fishing, and hunting, and mining; professional, scientific, and technical services and management of companies; arts, entertainment and recreation and accommodation and food services.

Exhibit 5 shows the employment and average pay per employee for the six largest sectors in Sandy. Average pay in Sandy for all employees ($37,318) is shown as an orange line across the graph and average pay for individual sectors as short yellow lines. Government, manufacturing, and wholesale trade; information, finance, and real estate; construction; and professional services had above-average wages. The lowest wages were in accommodation and food services.

Exhibit 5. Covered Employment and Average Pay by Sector, Sandy UGB, 2019



Source: Oregon Employment Department, Quarterly Census of Employment and Wages, 2019.

Though data are not readily available at the city level to inform the impacts of the COVID-19 pandemic, OED reports that Clackamas County had lower rates of unemployment insurance claims as a share of labor force relative to all Oregon counties.[26] In May, following the onset of the pandemic, around 19,035 continued unemployment insurance claims were made in Clackamas County. Of these claims, 3,891 were in the accommodation and food service sector (20% of the county's total claims). Healthcare and social assistance had the next largest share of continued claims at about 14% of the county total, followed by retail trade and manufacturing at 13% and 8%, respectively. As of June 2022, these continued insurance claims were down to under 1,307 claims.

[26] Based on information from the Oregon Employment Department as of August 2022. https://www.qualityinfo.org/covid-19

Outlook for Growth in Clackamas County

Exhibit 6 shows the Oregon Employment Department's forecast for employment growth by industry for the Portland Metro region (Clackamas, Multnomah, and Washington Counties) over the 2020 to 2030 period. Employment in the region is forecasted to grow at an average annual growth rate of 1.6%.

The sectors that are projected to lead employment in the region for the 10-year period are leisure and hospitality (adding 40,700 jobs); professional and business services (30,900); private education and health services (28,600); trade, transportation, and utilities (22,400); government (11,800); and manufacturing (10,300). In sum, these sectors are expected to add 144,700 new jobs, or about 83.4% of employment growth in the Portland Metro region. Clackamas County accounts for about 16% of employment in these three counties, and Sandy accounts for about 2% of the county's employment.

Exhibit 6. Regional Employment Projections, 2020–2030, Portland Metro Region (Clackamas, Multnomah, and Washington Counties)

Industry Sector	2020	2030	Change (2020 to 2030)		
			Number	Percent	AAGR*
Total Private Payroll Employment	825,000	981,600	156,600	19%	1.8%
Natural Resources and Mining	10,200	10,900	700	7%	0.7%
Mining and Logging	600	600	0	0%	0.0%
Construction	55,100	61,800	6,700	12%	1.2%
Manufacturing	99,100	109,400	10,300	10%	1.0%
Durable Goods	75,000	82,700	7,700	10%	1.0%
Wood Product Manufacturing	2,100	2,100	0	0%	0.0%
Nondurable Goods	24,000	26,700	2,700	11%	1.1%
Trade, Transportation, and Utilities	177,700	200,100	22,400	13%	1.2%
Wholesale Trade	46,200	51,600	5,400	12%	1.1%
Retail Trade	87,700	97,100	9,400	11%	1.0%
Transportation, Warehousing, and Utilities	43,700	51,400	7,700	18%	1.6%
Information	21,100	24,900	3,800	18%	1.7%
Financial Activities	61,600	66,700	5,100	8%	0.8%
Professional and Business Services	155,400	186,300	30,900	20%	1.8%
Private Educational and Health Services	140,000	168,600	28,600	20%	1.9%
Health Care and Social Assistance	120,500	145,000	24,500	20%	1.9%
Leisure and Hospitality	72,400	113,100	40,700	56%	4.6%
Accommodation and Food Services	62,500	95,900	33,400	53%	4.4%
Other Services and Private Households	32,400	39,800	7,400	23%	2.1%
Government	112,000	123,800	11,800	11%	1.0%
Federal Government	14,500	14,600	100	1%	0.1%
State Government	8,200	8,800	600	7%	0.7%
Local Government	89,300	100,400	11,100	12%	1.2%
Self-Employment	59,500	64,500	5,000	8%	0.8%
Total employment	**996,500**	**1,169,900**	**173,400**	**17%**	**1.6%**

Source: Oregon Employment Department. Employment Projections by Industry 2020-2030.
*Note: AAGR is the Annual Average Growth Rate

Sandy's Competitive Advantage.

Economic development opportunities in Sandy will be affected by local conditions as well as the national and state economic conditions addressed above. Economic conditions in Sandy relative to these conditions in other portions of the Portland Metro region form Sandy's competitive advantage for economic development. Sandy's competitive advantages have implications for the types of firms most likely to locate and expand in the area.

Sandy's primary competitive advantages are its location along Highway 26, proximity to Mt. Hood and the Portland Metro region, access to a skilled labor force, municipal gigabit broadband access throughout the city, tourism and outdoor recreational opportunities, availability of Class A recycled water, and small-town character. These factors contribute to a high quality of life and make Sandy attractive to residents and businesses.

The discussion earlier in this chapter provided information about Sandy's existing base of businesses and access to labor, which are key to understanding Sandy's competitive advantages. This section summarizes these and other local factors that form Sandy's competitive advantages, with additional details in the sections following this summary.

Sandy's advantages for economic development include:

- **Location**. Located to the southeast of the Portland Metro region about 25 miles southeast of Portland, Sandy employers have access to labor in the broader Portland Metro region. Sandy is located 40 minutes from Portland International Airport, 50 minutes from downtown Portland, and 35 minutes from Government Camp, which is the homebase of Mount Hood. Sandy's location just outside the metro region and within eastern Clackamas County makes it an attractive small commercial area for much of eastern Clackamas County, attracting residents from many smaller communities, including Estacada, Eagle Creek, Boring, and the Villages on Mount Hood. Sandy's location can be an advantage, especially for workers who prefer to live in or near Sandy for its quality of life and access to outdoor recreational opportunities but still want access to urban amenities.
- **Transportation.** Sandy is located along Highway 26, which runs east from Portland toward Mount Hood before heading southeast toward Madras. Highway 26 intersects with major I-5 and I-205 as they run through Portland. As a major interstate, I-5 is a preferred route for trucking and distribution between California and Washington, as it is relatively flat. Highway 211 also has a spur route that runs southwest through Clackamas County from Sandy. The Sandy Area Metro (SAM) provides transit opportunities with routes to Gresham and Estacada along with numerous stops throughout Sandy. Sandy's proximity to Portland provides the city with access to an international airport less than 25 miles away.
- **SandyNet (Municipal Broadband)**. The City of Sandy developed its own internet service provider (SandyNet) in 2007 due to lack of internet service available on the

private market. The City provides gigabit optical fiber internet connections and VOIP telephone service to any business or residence within city limits for a relatively low price. Access to high-speed internet is an increasingly high priority for most businesses. SandyNet also helps 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.

- **Availability of water and wastewater services**. The City of Sandy is currently making investments into water and wastewater infrastructure, which will equip the City to better meet current demand and increase capacity for future growth. There may be an opportunity for an industrial user such as a data center to leverage Sandy's large amount of available Class A recycled water.
- **Labor market.** Sandy's workforce is relatively younger, with a larger share of residents under 40 years of age than in Clackamas County and Oregon overall. Sandy's labor force participation rate (69%) is slightly higher than the county average (65%). Sandy's workforce is aging, and replacement workers will be needed as people retire, consistent with regional trends.

  Although the share of Sandy's working age population with a bachelor's degree or higher (19%) is lower relative to the county average (37%), the city has a higher share (46%) of residents with an associate's degree. Employers have access to workers in various stages of their careers, including students attending colleges and universities within the Portland Metro region.
- **Business-friendly environment.** Sandy has comparatively lower property tax rates than other cities in the Metro area, including Portland, Gresham, Happy Valley, and others. Sandy also has an urban renewal district with funds dedicated to economic development (e.g., façade and tenant improvement grants).
- **Sandy Community Campus.** The Pleasant Street Master Plan, a long-range visioning and infrastructure plan, is intended to promote and encourage the expansion of commercial business in downtown Sandy by investing in improvements along Pleasant Street and creating a pedestrian corridor in the Alt Avenue right-of-way. The Sandy Community Campus, a publicly owned property in the Central Business (C-1) zoning district within the Pleasant Street Master Plan area, currently houses SandyNet. The City is evaluating redevelopment opportunities for the property, which may include development of a community center and parkland.

  Stronger linkages promoted by the Pleasant Street Master Plan between important institutions—including the Sandy Public Library, the Sandy Community Campus, and the Sandy Grade School—can help encourage pedestrian activity, which could have a positive effect on downtown businesses.
- **Tourism and access to outdoor recreation.** Sandy attracts visitors for its access to outdoor amenities and recreational opportunities. The city has easy access to skiing, camping, and hiking opportunities at Mt. Hood and the Mt. Hood National Forest, mountain biking at the Sandy Ridge flow trail complex, and fishing and rafting in the

Sandy River. Visitors also come to Sandy to enjoy the scenic views and visit the downtown area. The city hosts events and festivals such as the annual Sandy Mountain Festival in Meinig Memorial Park. Businesses and employees may be attracted to Sandy because of the easy access to outdoor recreation and cultural amenities.

- **Quality of life and population growth.** For many of the reasons that Sandy attracts visitors, it also attracts residents. Sandy is one of the fastest growing cities in Oregon, largely due to a quality of life that attracts employers and their workers to the City. Sandy provides residents with small-town character while providing easy access to Portland and outdoor recreation opportunities.

Sandy's disadvantages for economic development include:

- **Distance from an interstate**. For companies looking to locate in the state, Sandy's location presents challenges, as it is not along an interstate. Sandy is located about 14 miles from I-84, 17 miles from I-205, and about 26 miles from I-5. Sandy's distance from these major routes may draw residents and visitors who seek a more remote location, but it can be a disadvantage for many types of businesses that need direct access to an interstate, such as warehouse and distribution. Development of smaller scales of these businesses, however, may find Sandy's location as an advantage to serve markets in the region and the state.
- **Traffic and congestion.** Highway 26 and Bluff Road have high levels of congestion, particularly during peak hours when school is in session. The City is currently working on a major road construction project to alleviate the congestion along Bluff Road. The couplet through the City also negatively impacts livability and the business community. While efficient at moving traffic through the city, the couplet enables vehicles to move through at higher rates of speed that, in turn, negatively impacts pedestrian safety, contributes to greater emissions, and makes for a noisy downtown.
- **Housing affordability.** Sandy's housing costs are comparable to other communities in Clackamas County and lower than some communities in the eastern part of the Portland Metro region. Sandy's median home price has escalated over the last ten years, increasing from $200,000 in 2012 to over $500,000 in 2022. Home sales prices grew at 15% per year compared with incomes, which grew a little less than 4% per year.[27] According to Redfin, the median home sales price in Sandy in June of 2022 was $523,000, which was lower than the median sales price of Clackamas County overall ($638,000). While comparatively more affordable than other areas of the county, the high price of homes may make it difficult for businesses to attract and retain workers, especially workers at lower income ranges. These high costs are not unique to Sandy—they are driven in part because housing production is not keeping pace with population growth. However, Sandy in particular has limited affordable housing and has not had a new income-restricted affordable housing project since the early 1990s.

[27] Redfin, median sales price, 2012 through June 2022

- **Limited industrial land.** The BLI in Chapter 4 shows that Sandy has 54 acres of buildable industrial land in the UGB. Most of Sandy's industrial lots are smaller than 5 acres, with only four sites between 5 and 10 acres. Sandy has a limited amount of industrial land, which may limit industrial development.

- **Shortage of childcare providers.** The COVID-19 pandemic took its toll on childcare providers. The City of Sandy has two childcare centers operating as of June 2022, down from four pre-pandemic. A new facility is being constructed on Hood Street to house one of the displaced providers, bringing the number of providers back up to three, but there are not many vacant buildings for additional providers. This is not a Sandy-specific problem, with shortages seen at the state and national level.

- **Need for more healthcare services.** The City of Sandy has limited medical service providers to serve residents. There are currently no pediatricians in Sandy, with the closest providers about 20 minutes away. Most residents must travel to Gresham or Happy Valley to access general and specialized medical services.

- **Limited retail shopping opportunities.** In recent years, Sandy has experienced an increase in restaurants but continues to lack a robust retail environment to serve residents and visitors. Limited retail options could be driving potential consumers to other nearby cities. If Sandy wants to remain the commercial center for east Clackamas County, the city will need to focus on improving its retail options.

Public Facilities and Services[28]

Provision and costs of public facilities and services can impact a firm's decision about expanding or locating in a city. One of the primary considerations about developing a site is whether it has infrastructure to or near the site, including water, wastewater, stormwater, and transportation. If infrastructure is not developed to or near the site, the consideration becomes whether infrastructure can be extended in a timely manner and at a financially feasible cost.

This section discusses Sandy's water system and wastewater system infrastructure at the city level. It answers the question of whether Sandy has or is planning to have sufficient capacity to support the amount and types of development proposed in the EOA.

Water

Overall, Sandy has enough water capacity to accommodate existing and future water needs for industrial and commercial uses. The City has three water sources, including Alder Creek (a small tributary of the Sandy River), Brownell Springs (a city-owned natural spring on Lenhart Butte), and the Portland Water Bureau (Bull Run). The City's current capacity is fluid

[28] Information obtained through an interview on 8/18/22 with Ryan Wood, City of Sandy Public Works Superintendent, and through the City of Sandy's Public Works website, accessed 8/19/22 https://www.ci.sandy.or.us/publicworks

since the City can obtain a minimum of 500,000 gallons per day up to a maximum of 3 million gallons per day from the Portland Water Bureau to supplement its other sources. Currently, Sandy's average demand for water is 1.2 million gallons per day, with a maximum demand in the summer of 2.1 million gallons per day. During the spring, fall, and winter, approximately 50% of the City's supply is purchased from the Portland Water Bureau, with the remainder from Brownell Springs and Alder Creek. During the summer, each source provides approximately one-third of the total supply.

The City launched the Drinking Water Systems Reinvestment Project to ensure Sandy can meet future drinking water needs. This project focuses on repairing water facilities for Alder Creek, building new infrastructure to access Bull Run, and exploring alternative groundwater sources. The primary concern for Sandy's water supply is the need to rebuild or reinvest in the Alder Creek Drinking Water Treatment Plant, which is underperforming. Alder Creek is Sandy's preferred water source, as water purchased from the Portland Water Bureau is more expensive. The Alder Creek project has a 5-year timeline for completion, with costs in the $40 to $50 million range depending on technology used. Despite increases in service rates, the City's rates are expected to remain similar to other cities in the region. Sandy's plans for its water system upgrades will allow Sandy to accommodate the types and amounts of growth forecast in this report.

Wastewater

Sandy's wastewater treatment plant was placed into service in 1998 and treats an average of 1.25 million gallons per day during dry weather and up to 4 million gallons per day during wet weather due to infiltration into old sanitary sewer pipes. Treated effluent is discharged to Tickle Creek between November 1 and April 30 when higher winter flows from rain and snow increase the creek's capability to accept treated wastewater. Between May 1 and October 30, the City produces highly treated "recycled water" that a local area nursery uses to supplement their existing irrigation supply.

Despite some improvements to operations over the years, Sandy's wastewater treatment plant needs upgrades to meet both current and future wastewater demands and comply with federal and state requirements. The existing wastewater treatment plant is near capacity, and the sewage pipes are aging, leading to additional problems with rain infiltration. Sandy is working on the Sandy Clean Waters project to address wastewater infrastructure deficiencies. This project is fixing aging sewer pipes, will upgrade Sandy's existing treatment plant, and expand Sandy's wastewater system capacity, including establishing an alternative discharge location (this could include finding another industrial user who needs Class A recycled water). This project is underway and on track for completion in 2026. Sandy's plans for its wastewater system upgrades will allow Sandy to accommodate the types and amounts of growth forecast in this report.

3. Employment Growth and Site Needs

Goal 9 requires cities to prepare an estimate of the amount of commercial and industrial land that will be needed over a 20-year planning period. The estimate of employment land needs and site characteristics for Sandy is based on expected employment growth and the types of firms that are likely to locate in Sandy over the 20-year period. This chapter presents an employment forecast and analysis of potential growth industries that build from recent economic trends.

Forecast of Employment Growth and Commercial and Industrial Land Demand

Demand for industrial and commercial land will be driven by the expansion and relocation of existing businesses and by the growth of new businesses in Sandy. This employment land demand is driven by local growth independent of broader economic opportunities.

The employment projections in this section build off Sandy's existing employment base, assuming future growth is similar to Sandy's population growth forecast for the 2023 to 2043 period. The employment forecast does not take into account a major change in employment that could result from the location (or relocation) of one or more large employers in the community during the planning period. Such a major change in the community's employment would exceed the growth anticipated by the City's employment forecast and its implied land needs (for employment, but also for housing, parks, and other uses). Major economic events, such as the successful recruitment of a very large employer, are difficult to include in an economic opportunities analysis. The implications, however, are relatively predictable: more demand for land (of all types) and public services.

ECONorthwest has four steps to project demand for industrial and nonretail commercial land:

1. **Establish base employment for the projection.** We start with the estimate of covered employment in Sandy presented in Exhibit 4. Covered employment does not include all workers, so we adjust covered employment to reflect total employment in the city.
2. **Project total employment.** The projection of total employment considers forecasts and factors that may affect employment growth in Sandy over the 20-year planning period.
3. **Allocate employment.** This step involves allocating types of employment to different land use types.
4. **Estimate land demand.** This step estimates general employment land demand based on employment growth and assumptions about future employment densities.

This analysis applies methods established by administrative rule and input received from Sandy's Technical Advisory Committee (TAC).

Employment Base for Projection

The purpose of the employment projection is to model future employment land needs for general employment growth. The forecast of employment growth in Sandy starts with a base of employment on which to build the forecast. Exhibit 7 shows ECONorthwest's estimate of total employment in Sandy in 2019.

To develop the figures, ECONorthwest started with estimated covered employment in the Sandy UGB from confidential Quarterly Census of Employment and Wages (QCEW) data provided by the Oregon Employment Department. Based on this information, Sandy had about 3,753 covered employees in 2019, shown in Exhibit 4.

Covered employment, however, does not include all workers in an economy. Most notably, covered employment does not include sole proprietors. Analysis of data shows that *covered* employment reported by the Oregon Employment Department for Clackamas County is only about 73% of *total* employment reported by the U.S. Department of Commerce.[29] We evaluated this ratio for each industrial sector for Clackamas County and used the resulting ratios to determine the number of noncovered employees. This allowed us to determine the total employment in Sandy. Exhibit 7 shows Sandy had an estimated 5,114 *total* employees within its UGB in 2019.

Exhibit 7. Estimated Total Employment by Sector, Sandy UGB, 2019

Sector	Covered Employment	Estimated Total Employment	Covered % of Total
Construction & Agriculture	162	198	82%
Manufacturing	202	220	92%
Wholesale Trade	54	62	88%
Retail Trade	978	1,251	78%
Transportation and Warehousing	128	263	49%
Information	62	85	73%
Finance and Insurance	88	180	49%
Real Estate and Rental and Leasing	38	212	18%
Professional Services and Management of Companies	78	134	58%
Admin. / Support and Waste Mgmt / Remediation Serv.	57	80	72%
Educational Services	18	36	50%
Health Care and Social Assistance	454	532	85%
Recreation, Accomodation, and Food Services	632	813	78%
Other Services (except Public Administration)	300	509	59%
Government	502	539	93%
Total	**3,753**	**5,114**	**73%**

Source: 2019 covered employment from confidential Quarterly Census of Employment and Wage (QCEW) data provided by the Oregon Employment Department.

[29] **Covered** employment includes employees covered by unemployment insurance. Examples of workers not included in covered employment are sole proprietors, some types of contractors (often referred to as "1099 employees"), or some railroad workers. Covered employment data is from the Oregon Employment Department.

Total employment includes all workers based on data from the U.S. Department of Commerce. Total employment includes all covered employees, plus sole proprietors and other noncovered workers.

Employment Projection

The employment forecast covers the 2023 to 2043 period, requiring an estimate of total employment for Sandy in 2022. The base employment starts with the estimate of 5,114 total jobs in Sandy in 2019, shown in Exhibit 7.

Sandy does not have an existing employment forecast, and there is no required method for employment forecasting. OAR 660-024-0040(9)(a) sets out some optional "safe harbors" that allow a city to determine employment land need.

Exhibit 8 shows the forecast rate options, which includes employment growing at the rate of the PSU population growth rate (1.90%), the OED regional employment growth rate (1.62%),[30] or the historic employment growth rate in Sandy between 2008 and 2019 (1.88%). The PSU and OED growth rates are the safe harbor options in OAR 660-024-0040(9)(a)(A) and OAR 660-024-0040(9)(a)(B).

Exhibit 8. Forecast Rate Options for Employment Growth in Sandy UGB, 2023–2043
AAGR is average annual growth rate.

Year	Jobs grow at the rate of…		
	Regional Employment Growth (1.62%)	Historic Employment Growth in Sandy (2008-19) (1.88%)	Population Growth Forecast for the City (2023-43) (1.90%)
2023	5,453	5,509	5,514
2043	7,516	7,994	8,037
Change 2023 to 2043			
Employees	2,063	2,485	2,523
Percent	38%	45%	46%
Avg. Annual Growth Rate (AAGR)	1.62%	1.88%	1.90%

Source: ECONorthwest

[30] During the EOA process, ECONorthwest used the OED forecast rates for the 2020-2030 period.

The Sandy TAC selected the forecast based on the population growth rate for Sandy (1.90% average annual growth rate), consistent with the safe harbor in OAR 660-024-0040(9)(a)(B). This safe harbor allows the City to assume that the current number of jobs in the Sandy UGB will grow during the 20-year planning period at a rate equal to the population growth rate provided in the most recent forecast published by Portland State University's Oregon Population Forecast Program.

Exhibit 9 shows employment growth in Sandy between 2023 and 2043, based on the assumption that the city will grow at an average annual growth rate of 1.90%. Sandy will have 8,037 employees within the UGB by 2043, which is an increase of 2,523 employees (46%) between 2023 and 2043.

Exhibit 9. Employment Growth in Sandy UGB, 2023–2043

Year	Total Employment
2023	5,514
2043	8,037
Change 2023 to 2043	
Employees	2,523
Percent	46%
Avg. Annual Growth Rate (AAGR)	1.90%

Source: ECONorthwest

Allocate Employment to Different Land Use Types

The next step in forecasting employment is to allocate future employment to broad categories of land use. Firms wanting to expand or locate in Sandy will look for a variety of site characteristics, depending on the industry and specific circumstances. We grouped employment into four broad categories of land use based on the North American Industrial Classification System (NAICS): industrial, retail commercial, office and commercial services, and government.[31]

Exhibit 10 shows the expected share of employment by land use type in 2023 and the forecast of employment growth by land use type in 2043 in the Sandy UGB. The results assume that the share of employment in retail commercial will decrease from 24% to 19.5%, consistent with national trends of declining local retail, and that government employment will decrease from 11% to 9.5%, based on the assumption that school, county, and local employment will grow slower than other types of employment. Industrial employment is assumed to increase by 0.5% in share of employment, and office and commercial services are assumed to increase by 5.5% in share of employment.

Exhibit 10. Forecast of Employment Growth by Land Use Type, Sandy UGB, 2023–2043
*Number of Employees

Land Use Type	2023		2043		Change
	Employment*	% of Total	Employment*	% of Total	2023 to 2043
Industrial	802	15%	1,245	15.5%	443
Retail Commercial	1,349	24%	1,567	19.5%	218
Office & Commercial Services	2,783	50%	4,461	55.5%	1,678
Government	580	11%	764	9.5%	184
Total	**5,514**	**100%**	**8,037**	**100%**	**2,523**

Source: ECONorthwest
Note: The shaded percentages denote an assumption about the future change in the share of employment (as a percent of total) by land use type.

Estimate of Demand for Commercial and Industrial Land

This section shows demand for vacant (including partially vacant) land in Sandy over the 20-year period. The assumptions used in this analysis are:

- **Employment density.** Employees per net acre is a measure of employment density based on the ratio of the number of employees per acre of employment land that is developed for employment uses.

[31] Industrial employment includes construction and agriculture; manufacturing; transportation and warehousing; and wholesale trade. Retail commercial is retail trade. Office and commercial includes information; finance and insurance; real estate; professional services; management of companies; administrative support and waste management; educational services; healthcare and social assistance; recreation; accommodation and food service; and other services. Government includes all employment at federal, state, local, and other governmental agencies.

Exhibit 11 assumes the following numbers of net employees per acre: industrial will have an average of 8 employees per acre, retail commercial will have an average of 20 employees per acre, and office and commercial services will have an average of 25 employees per acre.[32] These employment densities are consistent with Oregon cities similar in size to Sandy. Some types of employment will have higher employment densities (e.g., a multistory office building), and some will have lower employment densities (e.g., a convenience store with a large parking lot).

- **Conversion from net to gross acres**. The data about employment density is in *net* acres, which does not include land for public right-of-way. Future land need for employment should include land in tax lots needed for employment, plus land needed for public right-of-way. One way to estimate the amount of land needed for employment, including public right-of-way, is to convert from *net* to *gross* acres based on assumptions about the amount of land needed for public right-of-way.[33] A net-to-gross conversion is expressed as a percentage of gross acres that are in public right-of-way.

  Based on empirical evaluation of Sandy's existing net-to-gross ratios in areas designated for and developed with industrial and commercial uses, ECONorthwest uses a net-to-gross conversion factor of 14% for industrial and commercial.

Using these assumptions, the forecasted growth of 2,523 new employees will result in the following demand for vacant (and partially vacant) employment land: 63 gross acres of industrial land, 13 acres of retail commercial land, and 78 gross acres of office commercial land.

Exhibit 11. Demand for Vacant Land to Accommodate Employment Growth, Sandy UGB, 2023–2043

Land Use Type	New Emp. on Vacant Land	Employees per Net Acre	Land Demand (Net Acres)	Land Demand (Gross Acres)
Industrial	443	8	55	63
Retail Commercial	218	20	11	13
Office & Commercial Services	1,678	25	67	78
Total	**2,339**	**-**	**133**	**154**

Source: ECONorthwest

[32] Government employment is not included when discussing employment land demand since growth in government employment does not result directly in need for more land for public uses. For instance, schools require land based on expected growth of students in the school district or replacement of existing obsolete schools, rather than as a result of growth in government employment. Local or regional governments may grow and continue to occupy existing built space or may need land based on factors other than employment growth. In addition, government employment locates in a range of zones, including commercial, residential, public, and other zones.

[33] OAR 660-024-0010(6) uses the following definition of net buildable acre. "Net Buildable Acre" consists of 43,560 square feet of residentially designated buildable land after excluding future rights-of-way for streets and roads. While the administrative rule does not include a definition of a gross buildable acre, using the definition above, a gross buildable acre will include areas used for rights-of-way for streets and roads. Areas used for rights-of-way are considered unbuildable.

Target Industries

The characteristics of Sandy will affect the types of businesses most likely to locate in the city. Attributes that may attract firms are Sandy's fast-growing population, access to a skilled and educated workforce, municipal broadband, access to Class A recycled water, and quality of life.

Sandy's existing businesses are concentrated in the industries defined in Exhibit 12. The industries in green highlight are industries with higher-than-average city wages. Industries with a high location quotient (i.e., highly specialized compared to national employment in the industry), high employment (i.e., have more than 50 employees in Sandy), and higher than average city wages have the highest potential for growth.

Sandy also has opportunities for employment growth in industries without a concentration of employment or a high location quotient.

Exhibit 12. Concentration of Industries and Employment, Sandy, 2019

	High Employment (50 employees or more)	Low Employment (at least 10 employees)
High Location Quotient	▪ Fabricated Metal Product Manufacturing ▪ Food and Beverage Stores ▪ Gasoline Stations ▪ General Merchandise Stores ▪ Transit and Ground Passenger Transportation ▪ Amusement, Gambling, and Recreation Industries ▪ Food Services and Drinking Places ▪ Repair and Maintenance ▪ Personal and Laundry Services ▪ Religious, Grantmaking, Civic, Professional, and Similar Organizations	▪ Plastics and Rubber Products Manufacturing ▪ Machinery Manufacturing ▪ Miscellaneous Store Retailers ▪ Publishing Industries (except internet) ▪ Private households
Low Location Quotient	▪ Specialty Trade Contractors ▪ Credit Intermediation and Related Activities ▪ Professional, Scientific, and Technical Services ▪ Administrative and Support Services ▪ Ambulatory Health Care Services ▪ Nursing and Residential Care Facilities ▪ Social Assistance	▪ Crop Production ▪ Construction of Buildings ▪ Food Manufacturing ▪ Merchant Wholesalers, Durable Goods ▪ Merchant Wholesalers, nondurable Goods ▪ Wholesale Electronic Markets and Agents and Brokers ▪ Electronics and appliance Stores ▪ Building Material and Garden Equipment and Supplies Dealers ▪ Health and Personal Care Stores ▪ Sporting Goods, Hobby, Musical Instrument, and Book Stores ▪ Motion Pictures and Sound Recording Industries ▪ Insurance Carriers and Related Activities ▪ Real Estate ▪ Management of Companies and Enterprises ▪ Educational Services ▪ Accommodation

Source: Oregon Employment Department, Quarterly Census of Employment and Wages, 2019.
Note: Green highlighting indicates higher than Sandy's average wage.

Potential Growth Industries

An analysis of growth industries in Sandy should address two main questions: (1) Which industries are most likely to be attracted to Sandy? (2) Which industries best meet Sandy's economic development goals? The selection of potential growth industries is based on Sandy's goals for economic development, economic conditions in Sandy and Clackamas County, and the city's competitive advantages.

Given the current employment base, which is composed of small-sized businesses, it is reasonable to assume that much of the city's business growth will come from small-sized businesses. This growth will either come from businesses already in Sandy or new businesses that start in or relocate to Sandy from within the Portland Metro region or from outside of the region. As Sandy encourages business growth, the City should consider how industries support its goals for higher-wage jobs. The industries identified as having potential for growth in Sandy are:

- **Manufacturing.** As automation continues to change manufacturing industries, Sandy's target manufacturing industries will also evolve. Based on existing businesses in Sandy, these industries may include fabricated metal product manufacturing.
  - **Industries that use Class A recycled water.** The City has high amounts of Class A recycled water, which is a necessary input for certain businesses such as data centers. A data center could provide benefits to the City, including increased property taxes, water cleaning services, and jobs. The City could also expand its partnership with neighboring plant nurseries to use Class A recycled water.
  - **Repair and Maintenance.** This subsector includes repair and maintenance of automotive, electronics and precision equipment, commercial and industrial machinery and equipment, and personal and household goods.
  - **Food and Beverage Processing.** Food and beverage processing and cold storage could fit in well with the nearby agriculture production, as long as it does not require unusually large amounts of water or wastewater service.
  - **Outdoor Equipment Manufacturing.** This City is close to many outdoor recreation opportunities. The City could leverage this proximity to grow outdoor equipment manufacturing businesses.
- **Professional Services.** Sandy's location near the Portland region, the presence of SandyNet that provides faster than usual internet connections throughout the City, and other amenities that contribute to a high quality of life could make Sandy an attractive location for professional services such as software development, accounting, attorneys, back-office services, and research and development.
- **Services for visitors.** Sandy is near Mount Hood National Forest and the Sandy and Clackamas Rivers. These natural areas provide access to a range of outdoor recreational

activities. Visitors that stop in Sandy create demand for services such as hotels, restaurants, retail, and experiences available in or near Sandy.

- **Services for residents.** As Sandy's population or the population of the outlying areas in Clackamas County grow, demand for services for residents will grow. These services include retail, restaurants, medical services, childcare services, and other services. These types of services present opportunities for entrepreneurship and small business development in Sandy.

Site Needs for Potential Growth Industries

OAR 660-009-0015(2) requires the EOA to "identify the number of sites by type reasonably expected to be needed to accommodate the expected [20-year] employment growth based on the site characteristics typical of expected uses." The Goal 9 rule does not specify how jurisdictions conduct and organize this analysis.

OAR 660-009-0015(2) does state that "industrial or other employment uses with compatible site characteristics may be grouped together into common site categories." The rule suggests, but does not require, that the City "examine existing firms in the planning area to identify the types of sites that may be needed." For example, site types can be described by (1) plan designation (e.g., heavy or light industrial), (2) general size categories that are defined locally (e.g., small, medium, or large sites), or (3) industry or use (e.g., manufacturing sites or distribution sites). For purposes of the EOA, Sandy groups its future employment uses into categories based on their need for land with a particular plan designation (i.e., industrial or commercial) and by their need for sites of a particular size.

The potential growth industries described in the prior section of this EOA are a mixture of business sizes, from small to medium-sized businesses. For the most part, Sandy's potential growth industries require sites with minimal topographic constraints, smaller than two acres and up to 25 acres. Industrial businesses need access to arterial streets and highways with no freight movement through neighborhoods. Exhibit 13 shows the typical site needs for manufacturing businesses in Oregon.

Exhibit 13. Industrial Development Competitiveness Matrix, Business Oregon

Industry Sector	Site size (Acres)	Site Topography (Slope)	Trip Generation (ADT/Acre)	Site Access Max distance in miles to interstate or major arterial	Railroad or Port Access	Telecommunications (major communications dependency)
Regionally to Nationally Scaled Clean-Tech Manufacturer	5-100+	0-5%	40 - 60	10	Preferred	Required
Heavy Industrial/ Manufacturing	10-100+	0-5%	40 - 60	10	Preferred	Preferred
General Manufacturing	5-15+	0-5%	40 - 50	20	Preferred	Required
Food Processing	5-25+	0-5%	50 - 60	30	Preferred	Preferred
Regional (multistate) Distribution Center	20-100+	0-5%	40 - 80	5 Only Interstate highway or equivalent	Preferred	Preferred
Warehouse/Distribution (local)	10-25	0-5%	40 - 80	5 Only Interstate highway or equivalent	Preferred	Preferred
Call Center / Business Services	5-15	0 to 12%	170 - 180	Not applicable	Preferred	Required
Advanced Manufacturing & Assembly	5-25+	0-7%	40 - 60	15	Not Required	Required
Business Park and R&D Campus	20 - 100+	0-7%	60 to 150	N/A	Preferred	Required
UVA Manufacturing / Research	10-25+	0-7%	40 - 80	N/A	Not Required	Required
Data Center	10-25+	0-7%	20 - 30	30	Avoid / Not Required	Required
Rural Industrial	5-25+	0-5%	40 - 50	N/A	N/A	Preferred

Source: Business Oregon, Infrastructure Finance Authority, "Industrial Development Competitiveness Matrix."
Note: Items identified as "preferred" are those that increase the feasibility of the subject property and its future reuse. Items identified as "required" are factors seen as mandatory in the vast majority of cases and have become industry standards.

For the most part, the size of sites needed by most potential growth industries will range from space in an existing building, to sites with minimal topographic constraints of one acre or less, to sites of 25 acres for manufacturing businesses. In a few instances, such as in industrial or business parks, sites larger than 25 acres may be necessary to meet the needs of businesses or developments to support businesses. Manufacturing and other industrial businesses likely to locate in Sandy will have a range of space needs, ranging from:

- **Small-scale manufacturing space.** Businesses would be in an industrial building with many other users. These businesses will need direct access to arterial streets and highways. This type of space could be used to establish a business incubator or shared workspace for growing and supporting businesses.
- **Space in an existing building.** The majority of businesses that work with Business Oregon on site selection request space in existing buildings, either in vacant buildings or in buildings with other manufacturers.
- **Small manufacturing site.** Some manufacturers may want to develop a building on a small site, such as a site 1 to 5 acres in size. These businesses will need easy access to arterial streets and may prefer to locate near other manufacturers.
- **Midsized manufacturing.** Some midsized manufacturers may prefer to locate in a building with one or two other businesses. Other manufacturers may prefer to locate in newly developed buildings on sites from five to 15 acres in size. These businesses will need direct access to arterial streets and highways and may need greater access to water and wastewater.
- **Large manufacturing space.** Some larger manufacturers may prefer newly developed buildings on sites larger than 15 acres, often in buildings specifically built by the company who will occupy the building. These businesses will need direct access to arterial streets and highways and may need greater access to water and wastewater.

Commercial businesses, including service and hospitality, require high-visibility locations near other businesses and neighborhoods. Professional and commercial service businesses have a variety of space needs, ranging from:

- **Space in an existing building.** Businesses would be located as one of many firms within the building.
- **Space in a building dominated by one firm.** This could potentially be with manufacturing or other industrial space in the building.
- **Land for construction of a building designed for the firm.** Some firms will need a custom-built building. In this case, the firm will likely need land ranging from 1 to 5 acres in size.

  Some of these sites could be in the West Sandy Concept Plan Area. The West Sandy Concept Plan is an ongoing planning process that will provide high-level design concepts for the area. Properties within the Plan area are currently zoned commercial.

4. Buildable Lands Inventory

The buildable lands inventory is intended to identify commercial and industrial lands that are available for development for employment uses within the Sandy UGB. The inventory is sometimes characterized as *supply* of land to accommodate anticipated employment growth. Population and employment growth drive *demand* for land. The amount of land needed depends on the type of development and other factors.

This chapter presents results of the commercial and industrial buildable lands inventory for the Sandy UGB. The results are based on analyses of City of Sandy, Clackamas County, and State of Oregon GIS data by ECONorthwest and was reviewed by City staff. The remainder of this chapter summarizes key findings of the buildable lands inventory.

The general steps in the buildable lands inventory are:

1. Generate UGB "land base"
2. Classify lands by buildable area status
3. Identify constraints
4. Verify inventory results
5. Tabulate and map results

The following chapter provides a summary of the results of the commercial and industrial buildable lands inventory for the Sandy UGB in both tabular and map formats. **Appendix B presents more details on the methodology for developing the inventory.**

Land Base

The land base for the Sandy employment Buildable Lands Inventory (BLI) includes all tax lots in the Urban Growth Boundary (UGB) in plan designations that allow for employment. Some tax lots in these plan designations are in zones that do not currently permit commercial or industrial development, such as Single-Family Residential (SFR), Parks & Open Space (POS), and High Density Residential (R-3). These tax lots were still designated as eligible for development due to development status being applied based on the comprehensive plan designation. These are products of a comprehensive plan/zoning conflict. Tax lots that fall under this conflict remain under consideration as eligible for development due to a BLI's focus on future planning over current planning.

Exhibit 14 shows the land base by plan designation in the UGB. Of specific note here are the two tax lots zoned as POS. Because these tax lots fell under the Commercial plan designation, they were designated as being eligible for commercial or industrial development. However, because these tax lots are owned by the City of Sandy, they were ultimately given the development status of "Public," and thus do not count towards the City's buildable land. These are the Centennial Plaza and Veteran's Memorial Square sites (tax lot numbers 24E13DB00800 and 24E13DB01200).

Exhibit 14. Employment Land Base by Plan Designation, Sandy UGB, 2022

Plan Designation/Zone	Number of taxlots	Percent	Total taxlot acreage	Percent (total acreage)
Commercial	**364**	**83%**	**384**	**65%**
Central Business District (C-1)	231	53%	54	9%
General Commercial (C-2)	130	30%	329	56%
Parks & Open Space (POS)	2	0%	0	0%
SFR - Single Family Residential (SFR)	1	0%	0	0%
Industrial	**65**	**15%**	**195**	**33%**
Industrial Park (I-1)	17	4%	39	7%
Light Industrial (I-2)	33	8%	76	13%
General Industrial (I-3)	14	3%	80	14%
High Density Residential (R-3)	1	0%	0	0%
Village Commercial	**7**	**2%**	**9**	**2%**
Village Commercial (C-3)	7	2%	9	2%
Total	**436**	**100%**	**588**	**100%**

Source: ECONorthwest analysis, City of Sandy, Clackamas County

Buildable Area Status

Exhibit 15 shows the total acres of commercial and industrial tax lots classified by development status. We used a rule-based classification (described in Appendix B) to define an initial development status. We confirmed development status through a series of reviews by ECONorthwest and City staff, based on local knowledge and review of aerial maps.

Exhibit 15. Employment Acres by Classification and Plan Designation, Sandy UGB, 2022

Plan Designation/Zone	Total Acres	Committed Acres	Constrained Acres	Buildable Acres Unconstrained Vacant & Partially Vacant
Commercial	**384**	**168**	**84**	**132**
Central Business District (C-1)	54	48	6	1
General Commercial (C-2)	329	120	78	131
Industrial	**195**	**92**	**49**	**54**
Industrial Park (I-1)	39	26	9	4
Light Industrial (I-2)	76	57	11	8
General Industrial (I-3)	80	9	29	42
Village Commercial	**9**	**3**	**1**	**6**
Village Commercial (C-3)	9	3	1	6
Total	**588**	**263**	**134**	**191**

Source: ECONorthwest analysis, City of Sandy, Clackamas County Note: The POS, SFR, and R3 zones are not shown because they accounted for only fractions of an acre and no buildable acreage. Additionally, values are rounded to the nearest whole number. Therefore, value sums may appear to be off by a value of one.

Development Constraints

The buildable lands inventory identifies the following conditions as constraints that prohibit development: FEMA 100-Year Floodplains and Regulatory Floodway, landslide susceptibility, slopes greater than 15%, 50-foot buffer on all streams, BPA easement, and flood and slope hazards (FSH) overlay. These constraints are shown on Exhibit 16.

Exhibit 17 shows development status with constraints applied, resulting in buildable acres. Vacant or partially vacant land with these constraints is considered unavailable for development and was removed from the inventory of buildable land.

Exhibit 16. Development Constraints, Sandy UGB, 2022
Source: ECONorthwest analysis, City of Sandy, Clackamas County

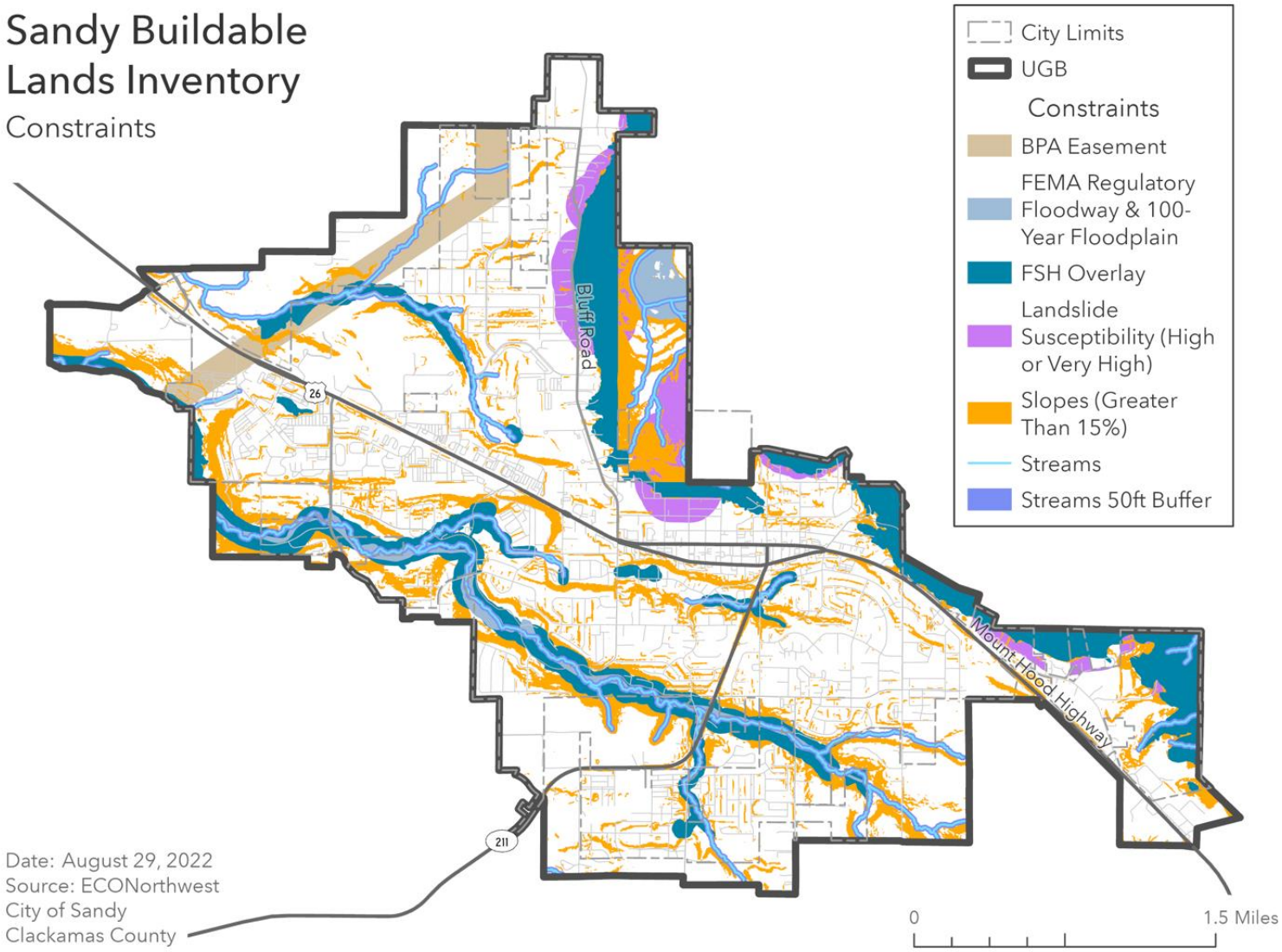
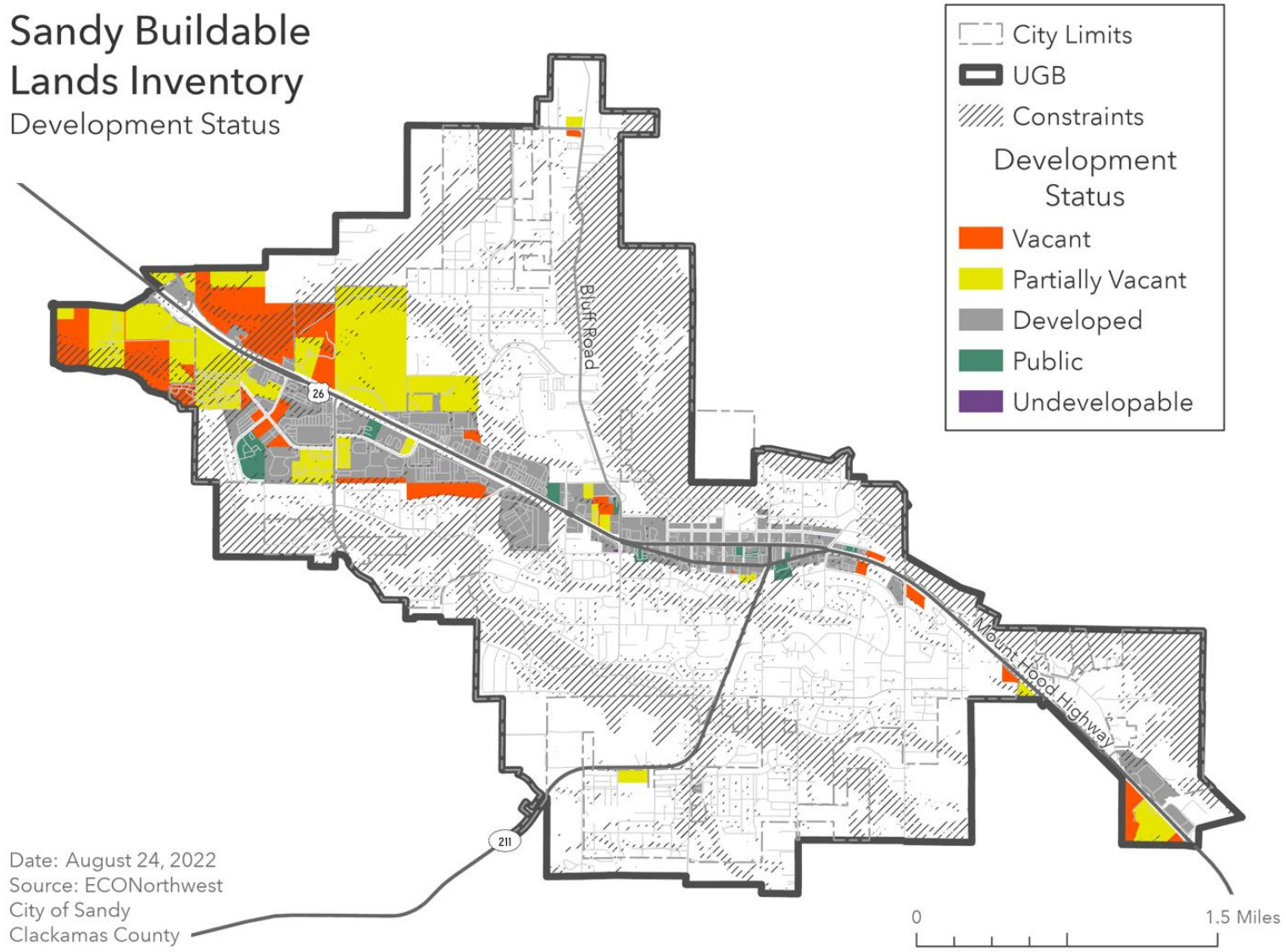


Exhibit 17. Development Status with Constraints, Sandy UGB, 2022
Source: ECONorthwest analysis, City of Sandy, Clackamas County



Vacant Buildable Land

Exhibit 18 shows buildable acres (i.e., acres in tax lots after constraints are deducted) for vacant and partially vacant land by plan designation.

Note that tax lots shown as partially vacant in the map in Exhibit 17 do not distinguish the part of the tax lot that is unavailable for development. The buildable lands inventory database accounts for the portion of the tax lot that is developed (and considered unavailable for future development), and the portion of the tax lot that is vacant is shown in Exhibit 17.

Exhibit 18. Buildable Acres in Vacant/Partially Vacant Tax Lots by Plan Designations, Sandy UGB, 2022

Plan Designation/Zone	Total Buildable Acres	Buildable Acres on Vacant Lots	Buildable Acres on Partially Vacant Lots
Commercial	**132**	**51**	**81**
Central Business (C-1)	1	-	1
General Commercial (C-2)	131	51	81
Industrial	**54**	**23**	**30**
Industrial Park (I-1)	4	4	-
Light Industrial (I-2)	8	2	5
Heavy Industrial (I-3)	42	17	25
Village Commercial	**6**	**2**	**3**
Village Commercial (C-3)	6	2	3
Total	**191**	**76**	**115**

Source: ECONorthwest analysis, City of Sandy, Clackamas County Note: The POS, SFR, and R3 zones are not shown because they contained no buildable acres. Additionally, values are rounded to the nearest whole number. Therefore, value sums may appear to be off by a value of one.

Exhibit 19 shows Sandy's buildable vacant and partially vacant residential land by plan designation.

Exhibit 19. Buildable Employment Land by Plan Designation with Development Constraints, Sandy UGB, 2022
Source: ECONorthwest analysis, City of Sandy, Clackamas County

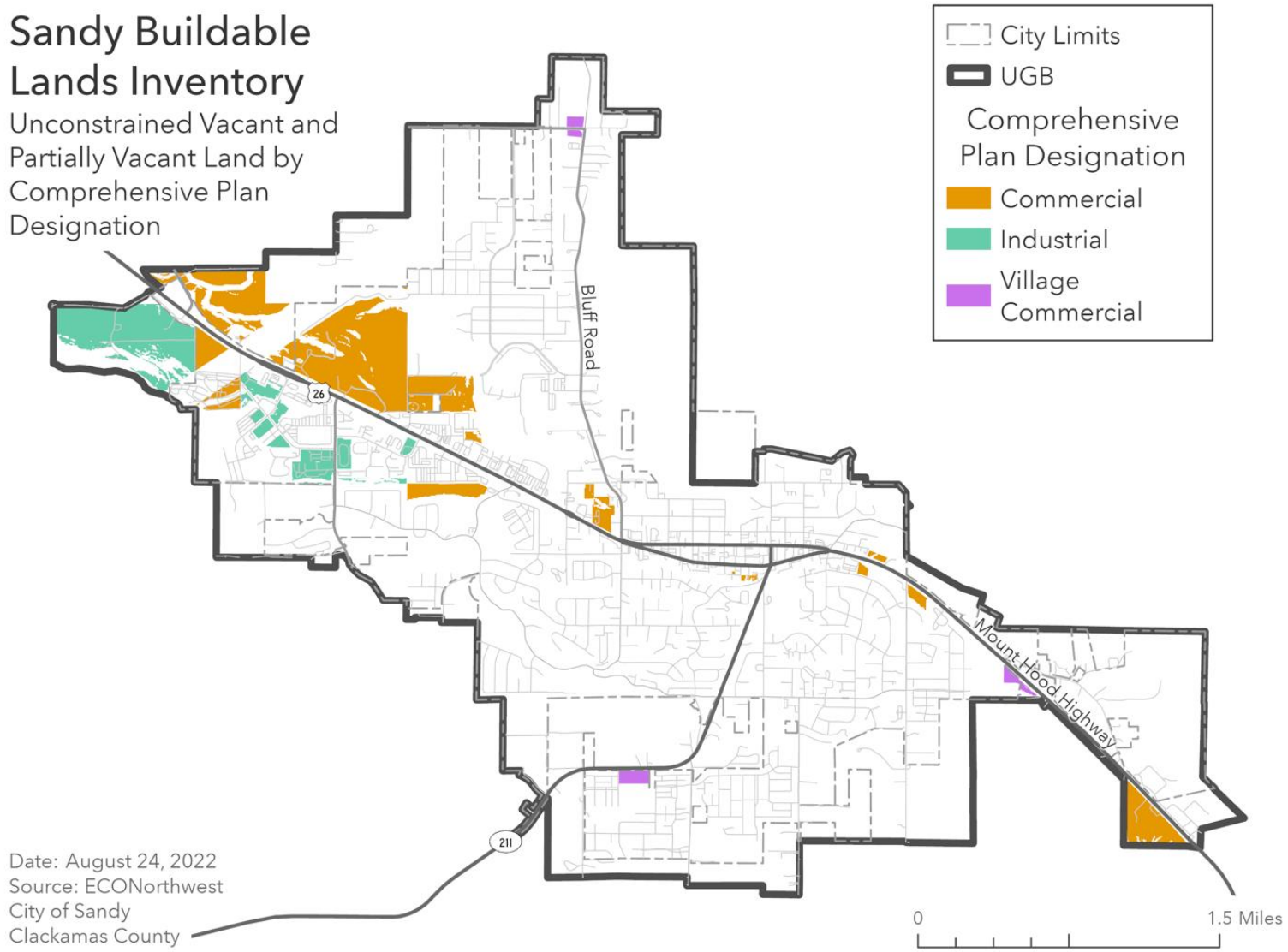


Exhibit 20 shows the size of lots by plan designations for buildable employment land. Sandy has 9 lots that are smaller than 0.5 acres (with 3 acres of land); 43 lots between 0.5 and 2 acres (42 acres of land); 6 lots between 2 and 5 acres in size (23 acres of land); 7 lots between 5 and 10 acres in size (49 acres of land); 2 lots between 10 and 25 acres in size (26 acres of land); and 1 lot between 25 and 50 acres in size (48 acres of land).

Exhibit 20. Taxlot Size by Plan Designation, Buildable Acres, Sandy UGB, 2022

Plan Designation/Zone	Buildable Site Size							
	0 - 0.5 Acres	0.5 - 1 Acres	1 - 2 Acres	2 - 5 Acres	5 - 10 Acres	10 - 25 Acres	25 - 50 Acres	Total
Commercial	2	10	11	12	23	26	48	132
Central Business (C-1)	0	1	0	0	0	0	0	1
General Commercial (C-2)	2	9	11	12	23	26	48	131
Industrial	1	6	9	11	27	0	0	54
Industrial Park (I-1)	0	3	1	0	0	0	0	4
Light Industrial (I-2)	0	3	4	0	0	0	0	8
Heavy Industrial (I-3)	1	0	4	11	27	0	0	42
Village Commercial	0	2	3	0	0	0	0	6
Village Commercial (C-3)	0	2	3	0	0	0	0	6
Acreage Subtotal	**3**	**18**	**24**	**23**	**49**	**26**	**48**	**191**
Commercial	6	14	8	3	3	2	1	37
Central Business (C-1)	0	1	0	0	0	0	0	1
General Commercial (C-2)	6	13	8	3	3	2	1	36
Industrial	3	8	7	3	4	0	0	25
Industrial Park (I-1)	0	4	1	0	0	0	0	5
Light Industrial (I-2)	1	4	3	0	0	0	0	8
Heavy Industrial (I-3)	2	0	3	3	4	0	0	12
Village Commercial	0	3	3	0	0	0	0	6
Village Commercial (C-3)	0	3	3	0	0	0	0	6
Lot Subtotal	**9**	**25**	**18**	**6**	**7**	**2**	**1**	**68**

Source: ECONorthwest analysis, City of Sandy, Clackamas County

5. Land Sufficiency and Conclusions

This chapter presents conclusions about Sandy's employment land sufficiency for the 2023–2043 period, as well as recommendations for the City to consider for meeting its economic growth needs throughout the planning period.

Land Sufficiency

Exhibit 21 shows commercial and industrial land sufficiency within the Sandy UGB. It shows:

- **Vacant unconstrained land within the UGB**. This land is identified and discussed in detail in the Vacant Buildable Land section of this report. Utilizing data from that section, Exhibit 21 shows that Sandy has 54 gross acres of industrial land and 142 gross acres of commercial land.
- **Demand for commercial and industrial land.** The Estimate of Demand for Commercial and Industrial Land section of this report describes the methodology used to identify demand. Based on assumptions described in that section, Sandy will need a total of 63 gross acres for industrial uses and 91 gross acres for commercial uses over the 2023-2043 period (Exhibit 11).
- **Land Sufficiency.** When subtracting the demand for land from the supply of vacant unconstrained land, Exhibit 21 shows that Sandy has:
  - A 9-acre deficit of industrial land
  - A 52-acre surplus of commercial land. It is possible that some of this land may be used for development of affordable housing as allowed by Senate Bill 8.

Exhibit 21. Comparison of the Capacity of Unconstrained Vacant Land with Employment Land Demand by Land Use Type, Sandy UGB, 2023–2043

General Plan Designation	Land Supply (*Suitable Gross Acres*)	Land Demand (*Gross Acres*)	Land Sufficiency (*Gross Acres*)
Industrial	54	63	(9)
Commercial	142	91	52

Source: ECONorthwest
Note: It is possible that some of the commercial land may be used for development of affordable housing as allowed by Senate Bill 8.[34]

The target industries identified are a combination of manufacturing and industrial businesses and retail and commercial services for residents and visitors (see Potential Growth Industries). The site needs generally show that these businesses in Sandy will need sites that range from space in an existing building, to sites with minimal topographic constraints of one acre or less, to sites of 25 acres for manufacturing businesses. In a few instances, sites larger than 25 acres may be desired (see Site Needs for Potential Growth Industries).

Exhibit 20 shows that Sandy has 9 sites (75 acres) from 5 to 25 acres. Three of these sites are designated commercial and 4 sites are designated industrial. Sandy has 1 site (48 acres) that is between 25 and 50 acres in size within the commercial designation. Some businesses will need sites smaller than 5 acres for development. Sandy has many sites smaller than 5 acres (68 acres). In addition, development of sites larger than 5 acres is likely to result in dividing of land into smaller sites.

Based on this information and the analysis in Exhibit 21, we conclude that Sandy has enough land within the UGB to accommodate expected commercial growth but does not have enough land to accommodate expected industrial growth. In addition, Sandy has a limited number of industrial sites larger than 5 acres, which may limit midsized industrial development. The Commercial zones allow some manufacturing, assembly, processing, and production as long as they do not produce significant levels of noise or odor. Sandy has six commercial sites (123

[34] SB 8 requires local governments to approve the development of certain affordable housing and not require a zone change or conditional use permit on land zoned to allow commercial uses, to allow religious assembly, or as public lands. Qualifying land may be owned by a public body or a religious nonprofit. The bill applies to property zoned to allow for industrial uses only if the property is publicly owned, adjacent to lands zoned for residential uses or schools, and not specifically designated for heavy industrial uses. These requirements do not apply to land that a local government determines lacks adequate infrastructure or on property that contains a slope of 25% or greater, is within a 100-year floodplain, or is constrained by state land use regulations based on natural disasters and hazards or natural resources. Local governments may still impose development requirements based on siting and design standards and building permits. SB 8 also includes a statewide density bonus for affordable housing in areas zoned for residential use. A local government may reduce the density or height of a development as necessary to address a health, safety, or habitability issue (including fire safety) or to comply with a protective measure adopted pursuant to a statewide land use planning goal. SB 8 was signed into law on June 23, 2021, and the bill goes into effect on January 1, 2022. To read the full text of Senate Bill 8, use the link below.
https://olis.oregonlegislature.gov/liz/2021R1/Downloads/MeasureDocument/SB8

acres of land) larger than 5 acres, which provide additional opportunity for development of midsized and possibly larger manufacturing, as long as they meet the requirements about odor and noise.

Conclusions

The conclusions about commercial and industrial land sufficiency are:

- **Sandy is forecasted to grow in both the commercial and industrial employment sectors.** Sandy is planning for growth of 2,523 new jobs in the city over the 2023 to 2043 period. About 443 of the jobs will be industrial, 1,678 of the jobs will be in office and commercial services, and 218 in retail. Growth of these jobs will result in demand for about 91 gross acres of commercial land and 63 gross acres of industrial land.
- **Sandy has enough employment land to accommodate commercial growth.** Exhibit 21 shows that Sandy has enough land for commercial employment growth over the next 20 years, with a surplus of 52 acres. For its target industries, Sandy will have need for commercial sites ranging from space in existing buildings to custom built buildings on sites from 1 to 5 acres.
- **Sandy has a deficit of land for industrial development.** Exhibit 21 shows that Sandy has a deficit of about 9 gross acres of land for industrial uses. Some of this deficit can be met on commercial land, assuming the manufacturing or production use does not produce significant levels of noise or odor. Sandy has few opportunities for midsized and larger industrial opportunities, which may create barriers to growth of manufacturing and related uses.

  This deficit can be accommodated through increases in land use efficiency within the existing UGB, expansion of the UGB for more industrial land, or both. In particular, Sandy may want to consider a UGB "land swap" for industrial land, which would allow the City to remove some industrial land from the UGB and add new land into the UGB. The best land to consider for a land swap is land with substantial physical constraints that make development more difficult or land where the owner does not want to develop in the reasonably foreseeable future.
- **Sandy wages are lower than the regional average.** Sandy's average wage of $37,318 is lower than the average of $54,802 for Clackamas County. Sandy's potential growth industries generally have above-average wages, except for certain types of services for residents and visitors, such as retail.
- **Sandy will need to address key infrastructure needs in the city.** Sandy will need to address wastewater system deficiencies to support future employment growth. To meet upcoming demand, Sandy has plans to fix aging sewer pipes, upgrade Sandy's existing treatment plant, and expand Sandy's wastewater system capacity, including establishing an alternative discharge location. Sandy's plans for its wastewater system upgrades will allow Sandy to accommodate the types and amounts of growth forecast in this report.

Recommended Actions

Following are ECONorthwest's recommendations for actions for Sandy based on the analysis and conclusions in this report.

- **Update the Economic Element of the Comprehensive Plan.** The Economy Element has not been updated in more than a decade. The new information in the EOA document provides a refreshed fact base for making future decisions.
- **Align the City's goals for economic development with planning for infrastructure development.** Aside from ensuring that there is sufficient land to support employment growth, one of the most important ways that the City can support economic development is through planning for and developing infrastructure (e.g., roads, water, sanitary sewer, and stormwater systems). We recommend that the City align its goals for economic development with infrastructure development through updates to the City's Capital Improvements Plan.
- **Monitor and replenish the supply of commercial and industrial land on a regular, periodic basis.** The buildable lands inventory identifies the existing development status of employment land in Sandy. While Sandy will not completely update the buildable lands inventory on an annual basis, City staff should still monitor the development status of these employment lands and replenish short-term supply when possible.
- **Determine whether and how to address the deficit of industrial land.** At the least, Sandy should consider whether there are opportunities to do a UGB land swap, moving industrial land that is difficult or unlikely to develop out of the UGB and bringing in land that is more likely to develop. Sandy should also evaluate whether there are land use efficiency measures, such as opportunity to re-zone land to allow more industrial development. In addition, Sandy might direct some types of industrial uses to commercial areas for manufacturing or other uses that are low odor or low noise and would be compatible with surrounding commercial (and possibly adjacent residential) uses. Finally, Sandy may want to consider a modest UGB expansion to meet its industrial needs, which might be most efficiently done if the City also implements a UGB land swap.
- **Support entrepreneurship and growing small businesses.** Small-scale manufacturing sites could provide opportunities to create a business incubator or shared business space. The City should explore how this type of space could support entrepreneurs and small businesses as they start and grow their businesses.
- **Implement the Economic Development Strategy.** The City's Economic Development Strategy identifies the following six goals.
  - Improve systems to ensure broad and durable access to economic opportunity and maintain Sandy's high quality of life.
  - Leverage our investments in technology to maximize economic benefits.

- Build on our assets in manufacturing to establish Sandy as a destination for metals fabrication and related activities.
- Cultivate innovation in specialty food and beverage industries and align with the region's robust food storage and processing sector.
- Invest in hospitality and place-based tourism to make Sandy the most active and vibrant basecamp for Mt. Hood area adventures.
- Be a leader as both retail hub and heart of East Clackamas County.

These goals align with the potential growth industries and economic advantages and disadvantages identified in the EOA. We recommend the City implement the actions in the Strategy to achieve these goals.

Appendix A. National, State, and Regional and Local Trends

The economic trends discussed in this appendix are based on long-term trends that are generally expected to continue on national, state, and regional scales. During the development of this document, the effects of the global COVID-19 pandemic continued to evolve, as the worst of the effects of the pandemic on the labor force resolved.

National Trends

Economic development in Sandy over the next 20 years will occur in the context of long-run national trends. The most important of these trends are as follows:

- **Economic growth was interrupted by the effects of the COVID-19 pandemic but is expected to continue from 2022 through 2031.** The Congressional Budget Office (CBO) estimates that by mid-2022 real GDP growth and employment growth will surpass pre-pandemic levels. While the CBO states the economy is stronger than previously forecasted, goods supply and services trail demand and are contributing to inflationary pressures.
- **As the U.S. economy recovers from the COVID-19 pandemic, inflation has increased significantly.** In March 2022, the personal consumption expenditures (PCE) price index increased 6.6% year-over-year.[35] Excluding food and energy, which are more volatile, the PCE price index rose 5.2%. The average hourly earnings for nonfarm employees increased slightly through April 2022 but inflation-adjusted real average hourly earnings declined slightly due to continued inflation.[36]

  The exact drivers of the rise in inflation are the subject of ongoing debate. Supply chain disruptions triggered by the pandemic have dramatically increased shipping rates, which in turn has led to higher prices for goods and services.[37] Exacerbating this trend is pent-up demand among households, many of which received three direct assistance payments from the federal government in 2020 and 2021. Lastly, the expansion in the money supply generated by the Federal Reserve's monetary policy has also been cited as

[35] U.S. Department of Commerce, Bureau of Economic Analysis. Personal Consumption Expenditures Price Index. March 2022.

[36] *New Inflationary Concerns: A US Macroeconomic Update*, IBISWorld, June 03, 2022. https://www.ibisworld.com/blog/new-inflationary-concerns-us-macroeconomic-update/1/1126/

[37] Martin, F. M. (October 2021). What Are the Risks for Future Inflation? Federal Reserve Bank of St. Louis, *On The Economy Blog*.

a contributor to inflation.[38] The Federal Open Market Committee increased lending rates several times in 2022 and expects to continue to raise rates again in 2022.

- **After declining sharply during the COVID-19 pandemic, employment has mostly recovered, and employers now face a tight labor market**. As of April 2022, the unemployment rate was 3.6%, which is about the same as pre-pandemic levels in February 2020.[39] Despite the addition of over 500,000 jobs each month during the first quarter of 2022,[40] the labor force participation rate remains slightly below pre-pandemic levels,[41] suggesting there are those who do not yet feel the need to or have the ability to return to work. In April 2022, wages increased year-over-year by 5.5%,[42] faster growth than in recent pre-pandemic years but a smaller rise than the increase in inflation over the same period.
- **The aging of the baby boomer generation accompanied by increases in life expectancy.** Over the forecast period, the interest rate on 10-year Treasury notes is projected to rise gradually, reaching 3.2% in 2031.[43] As the baby boomer generation continues to retire, the number of Social Security recipients is expected to increase from almost 65 million in 2020 to over 88 million in 2045, a 36% increase. But due to lower birth rate replacement generations, the number of covered workers is only expected to increase 10% over the same time period, from over 178 million to almost 197 million in 2045. In 2020, there are 36 Social Security beneficiaries per 100 covered workers, but by 2045, there will be 45 beneficiaries per 100 covered workers. This will increase the percent of the federal budget dedicated to Social Security and Medicare.[44]
- **Baby boomers are retiring sooner as a result of the COVID-19 pandemic.** In the third quarter of 2021, about half of U.S. adults age 55 and older had retired, up from 48% in the third quarter of 2019.[45] This trend can be seen in Oregon, where the annual number of retirements among workers age 60 and older increased dramatically in 2020 and 2021.[46] However, there is evidence to suggest that these retirements are temporary and

[38] Martin, F.M. (April 2022). 2021: The Year of High Inflation. Federal Reserve Bank of St. Louis, *On The Economy Blog*.

[39] Bureau of Labor Statistics. (2022). *The Employment Situation – April 2022*. https://www.bls.gov/news.release/pdf/empsit.pdf

[40] White House Council of Economic Advisers. (2022). *The Employment Situation in April*. https://www.whitehouse.gov/cea/written-materials/2022/05/06/the-employment-situation-in-april-2/

[41] Bureau of Labor Statistics. (2022). *The Employment Situation – April 2022.* https://www.bls.gov/news.release/pdf/empsit.pdf

[42] Bureau of Labor Statistics. (2022). *The Employment Situation – April 2022.* https://www.bls.gov/news.release/pdf/empsit.pdf

[43] Congressional Budget Office. *An Update to the Budget and Economic Outlook: 2021 to 2031, July 2021.* https://www.cbo.gov/publication/57339

[44] The Board of Trustees, Federal Old-Age and Survivors Insurance and Federal Disability Insurance Trust Funds, 2021 https://www.ssa.gov/OACT/TR/2021/tr2021.pdf

[45] Pew Research Center. *Amid the pandemic, a rising share of older U.S. adults are now retired. November 2021.*

[46] Oregon Office of Economic Analysis. (2021). *Older Workers and Retirements*.

that some of these workers will return to the labor force as the economy recovers from the impacts of the pandemic, consistent with pre-pandemic trends.[47]

- **Need for replacement workers.** The need for workers to replace retiring baby boomers will outpace job growth. Between 2018 and 2028, the Bureau of Labor Statistics (BLS) estimates that total employment in the United States will grow by about 8.4 million jobs. Over this same period, BLS forecasts an annual average of 19.7 million occupational openings, indicating that the number of job openings per year exceeds expected employment growth. About 78% of annual job openings are in occupations that do not require postsecondary education.[48]
- **The importance of education as a determinant of wages and household income.** According to BLS, a majority of the fastest-growing occupations will require an academic degree, and on average, they will yield higher incomes than occupations that do not require a degree. The fastest-growing occupations requiring an academic degree will be nurse practitioners, agents and business managers, occupational therapy assistants, statisticians, physical therapist assistants, and information security analysts.[49] Of the top 10 fastest-growing occupations, the top three do not require an academic degree—from 2020 to 2030, the fastest-growing occupations are projected to be motion picture projectionists, wind turbine service technicians, ushers and lobby attendants, nurse practitioners, and solar photovoltaic installers.

  However, because 2020 serves as the base year for these projections, many occupations are expected to experience cyclical recoveries in the first few years of the decade as they return to their long-term growth patterns. For example, motion picture projectionists are concentrated in an industry that experienced significant yet temporary employment losses in 2020. To account for this, the BLS has also listed the fastest-growing occupations from 2020-2030 that do not include occupations with above-average cyclical recovery. These occupations include wind turbine service technicians, nurse practitioners, solar photovoltaic installers, statisticians, physical therapist assistants, and information security analysts. However, the two occupations that do not require college degrees—wind turbine service technicians and home health and personal care aids—had lower median annual wages in 2020 than the occupations necessitating a college degree.

  Three sectors are projected to decline from 2020 to 2030.[50] These include the federal government, retail trade, and utilities. The BLS estimates that retail trade will decrease by 586,800 positions, possibly due to the rise of e-commerce. Conversely, this shift in

[47] Pew Research Center. (2021). *Amid the pandemic, a rising share of older U.S. adults are now retired*.

[48] Bureau of Labor Statistics. (2019). *Occupational Employment Projections 2018-2028*. https://www.bls.gov/news.release/pdf/ecopro.pdf .

[49] Bureau of Labor Statistics. (2021). Occupational *Employment Projections to 2020-2030* https://www.bls.gov/news.release/pdf/ecopro.pdf.

[50] Bureau of Labor Statistics. (2021). Occupational *Employment Projections to 2020-2030* https://www.bls.gov/news.release/pdf/ecopro.pdf

shopper preference is increasing occupations in transportation and warehousing. Retail positions typically have lower pay than occupations requiring an academic degree. The national median income for people over the age of 25 in 2019 was about $48,464. Workers without a high school diploma earned $19,708 less than the median income, while those with a high school diploma earned $10,504 less than the median income. Workers with some college education earned $6,760 less than the median income, and workers with a bachelor's degree earned $13,832 more than the median income. Workers in Oregon experience the same patterns as the nation, but pay is generally lower in Oregon than the national average.

- **Increases in labor productivity.** Productivity, as measured by output per hour of labor input, increased in most sectors between 2000 and 2010, peaking in 2007. However, productivity increases were interrupted by the recession. After productivity decreases from 2007 to 2009, many industries saw large productivity increases from 2009 to 2010. Industries with the fastest productivity growth were information technology–related industries. These included wireless telecommunications carriers, computer and peripheral equipment manufacturing, electronics and appliance stores, and commercial equipment manufacturing wholesalers.[51]

  Since 2010, labor productivity has increased across a handful of large sectors but has also decreased in others. In wholesale trade, productivity—measured in output per hour—increased by 19% from 2009 to 2017. Retail trade gained even more productivity, showing a 25% increase over this same period. Food services, however, has remained stagnant since 2009, fluctuating over the nine-year period and shrinking by 0.01% over this time frame. Additionally, the Bureau of Labor Statistics reports multifactor productivity in manufacturing has been slowing down 0.3% per year over the 2004 to 2016 period. Much of this, they note, is due to slowdown in the manufacturing of semiconductors, other electrical component manufacturing, and computer and peripheral equipment manufacturing.[52]

- **The importance of entrepreneurship and growth in small businesses.** According to the 2021 Small Business Profile from the U.S. Small Business Office of Advocacy, small businesses account for over 99 percent of total businesses in the United States, and their employees account for nearly 47% of American workers.[53] Women and people of color make up 43% and 19%, respectively, of small business owners.[54] The National League of Cities suggests ways that local governments can attract entrepreneurs and increase the number of small businesses, including strong leadership from elected officials; better

[51] Brill, M.R., & Rowe, S.T. (March 2013). Industry Labor Productivity Trends from 2000 to 2010. Bureau of Labor Statistics, *Spotlight on Statistics.*

[52] Brill, M., Chanksy, B., & Kim, J. (July 2018). Multifactor productivity slowdown in US manufacturing. *Monthly Labor Review*, U.S. Bureau of Labor Statistics.

[53] Small businesses are defined by the US Small Business Office of Advocacy as having between zero and 500 employees.

[54] U.S. Small Business Office of Advocacy. (2021). 2021 Small Business Profile. https://cdn.advocacy.sba.gov/wp-content/uploads/2021/08/30143723/Small-Business-Economic-Profile-US.pdf

communication with entrepreneurs, especially regarding the regulatory environment for businesses in the community; and partnerships with colleges, universities, small business development centers, mentorship programs, community groups, businesses groups, and financial institutions.[55]

Increases in automation across sectors. Automation is a long-running trend in employment, with increases in automation (and corresponding increases in productivity) over the last century and longer. The pace of automation is increasing, and the types of jobs likely to be automated over the next 20 years (or longer) are broadening. Lower-paying jobs are more likely to be automated, with the potential for automation of more than 80% of jobs paying less than $20 per hour over the next 20 years. About 30% of jobs paying $20 to $40 per hour, and 4% of jobs paying $40 or more per hour, are at risk of being automated over the next 20 years.[56]

Low to middle-skilled jobs that require interpersonal interaction, flexibility, adaptability, and problem solving will likely persist into the future, as will occupations in technologically lagging sectors (e.g., production of restaurant meals, cleaning services, hair care, security/protective services, and personal fitness).[57] This includes occupations such as (1) recreational therapists, (2) first-line supervisors of mechanics, installers, and repairers, (3) emergency management directors, (4) mental health and substance abuse social workers, (5) audiologists, (6) occupational therapists, (7) orthotists and prosthetists, (8) health-care social workers, (9) oral and maxillofacial surgeons, and (10) first-line supervisors of firefighting and prevention workers.

Occupations in the service and agricultural or manufacturing industry are most at risk of automation because of the manual nature of the work.[58,59,60] This includes occupations such as (1) telemarketers, (2) title examiners, abstractors, and searchers, (3) hand sewers, (4) mathematical technicians, (5) insurance underwriters, (6) watch repairers, (7) cargo and freight agents, (8) tax preparers, (9) photographic process workers and processing machine operators, and (10) accounts clerks.[61]

- **Continued transformation of retail.** In the last two decades, retail sales by e-commerce and warehouse clubs/supercenters (a lower-cost model to the traditional department

[55] National League of Cities. (2012). Supporting Entrepreneurs and Small Businesses.

[56] Executive Office of the President. (2016). Artificial Intelligence, Automation, and the Economy.

[57] Autor, D.H. (2015). Why Are There Still So Many Jobs? The History and Future of Workplace Automation. *Journal of Economic Perspectives, 29*(3), 3–30.

[58] Frey, C.B, & Osborne, M.A. (2013). The Future of Employment: How Susceptible Are Jobs to Computerisation? Oxford Martin School, University of Oxford.

[59] Otekhile, C.A., & Zeleny, M. (2016). Self Service Technologies: A Cause of Unemployment. *International Journal of Entrepreneurial Knowledge, 4*(1). DOI: 10.1515/ijek-2016-0005.

[60] PwC. (n.d.). Will robots really steal our jobs? An international analysis of the potential long-term impact of automation. 2019.

[61] Frey, C.B., & Osborne, M.A. (2013). The Future of Employment: How Susceptible Are Jobs to Computerisation? Oxford Martin School, University of Oxford.

store) have increased steadily, pulling the industry in two different directions. On the one hand, the trend toward warehouse/supercenters is increasing the average scale of retail operations, increasing market concentrations, reducing business dynamism, and shifting retail activity toward more populated areas. On the other hand, the trend toward e-commerce generates "smaller [retailers], less market concentration, more geographical dispersion, and higher productivity."[62] Since 2012, e-commerce sales grew from 5% of total retail sales to 14.5% (Q4 2021). Total e-commerce sales for 2021 were about $870.8 billion, an increase of 14.2% from 2020.[63]

Ultimately, the growth in online shopping and the increasing dominance of large supercenters has made it difficult for small and medium-sized retail firms (offering a narrower selection of goods) to compete. Declining net profits and increased competitive pressures have led many well-known retailers (e.g., JCPenney, Macy's, Sears) to declare bankruptcy or to scale back their operations.

In the future, the importance of e-commerce will likely continue to grow, and despite the highly publicized closures of brick-and-mortar stores, physical retail is likely to remain an important part of the retail sector. In fact, retail sales at brick-and-mortar stores accounted for 85.5% of all retail sales in the Q4 of 2021.[64]

Modern consumers are increasingly price sensitive, less brand loyal, and (since the advent of internet) able to substitute between retailers easily. To compete, retailers must be nimble, adept in recognizing the changing needs of their consumers, and quick to differentiate themselves from their competitors.

- **Opportunities for local retail and service.** The types of retail and related services that remain will likely be sales of goods that people prefer to purchase in person or that are difficult to ship and return (e.g., large furniture), specialty goods, groceries and personal goods that are needed immediately, restaurants, and experiences (e.g., entertainment or social experiences). According to the Urban Land Institute, new trends in the retail and service sector are beginning to emerge, including the convergence of technology and shopping as businesses focus on brand awareness and customer engagement via digital channels in the physical retail space.[65]
- **The importance of high-quality natural resources.** The relationship between natural resources and local economies has changed as the economy has shifted away from resource extraction. High-quality natural resources continue to be important in some states, especially in the western United States. Increases in the population and in

[62] Ali Hortaçsu and Chad Syverson. (2015). The Ongoing Evolution of US Retail: A Format Tug-of-War. *Journal of Economic Perspectives, 29*(4), 89–112, p. 109.

[63] U.S. Census Bureau, Monthly Retail Trade, Latest Quarterly E-Commerce Report. Retrieved from: https://www.census.gov/retail/mrts/www/data/pdf/ec_current.pdf

[64] U.S. Census Bureau, Monthly Retail Trade, Latest Quarterly E-Commerce Report. Retrieved from: https://www.census.gov/retail/mrts/www/data/pdf/ec_current.pdf.

[65] Diane Hoskins. "Three Trends Shaping Retail's Great Transformation." *Urban Land Institute*, September 3, 2019. https://urbanland.uli.org/economy-markets-trends/three-trends-shaping-retails-great-transformation/

household incomes, plus changes in tastes and preferences, have dramatically increased demand for outdoor recreation, scenic vistas, clean water, and other resource-related amenities. Such amenities contribute to a region's quality of life and play an important role in attracting both households and firms.[66]

- **Continued increase in demand for energy.** Energy prices were unusually high in early 2022. Total energy consumption will increase because population growth and economic growth will outpace efficiency gains in energy consumption. Energy consumption is expected to grow primarily from industrial and, to a lesser extent, commercial users. Residential and transportation energy consumption are forecasted to decrease or remain flat through about 2040 and possibly grow slightly through 2050. Electric vehicles are expected to continue to gain market share, but petroleum-powered vehicles are expected to continue to account for a substantial amount of vehicle sales through 2050. The share of electric vehicles is expected to grow from less than 3% in 2021 to 13% in 2050. Energy consumption by type of fuel is expected to change over the planning period. By 2050, the United States will continue to shift from crude oil toward natural gas and renewables. [67]
- **High rates of inflation.** For the last several decades, inflation rates have generally stayed below 3% in the United States of America. Inflation started to increase in 2021 and has accelerated in 2022, increasing to 9.06% in June 2022, to its highest levels in about 40 years. Inflation increased most quickly in June 2022 for energy, motor vehicles, food, and household furnishings.[68] Continued high rates of inflation may slow economic growth, further erode purchasing power, discourage savings, and lead to a national recession.
- **Impact of rising energy prices on commuting patterns.** As energy prices increase over the planning period, energy consumption for transportation will decrease. These increasing energy prices may decrease willingness to commute long distances, though with expected increases in fuel economy, it could be that people commute farther while consuming less energy.[69] Moreover, lower-income households tend to have fewer options for commuting and are more likely to have jobs that require them to commute. From 2019 to 2035, the U.S. Energy Information Administration estimates in its forecast that the decline in transportation energy consumption as a result of increasing fuel

[66] For a more thorough discussion of relevant research, *see,* for example, Power, T.M. and R.N. Barrett. 2001. *Post-Cowboy Economics: Pay and Prosperity in the New American West*. Island Press, and Kim, K.-K., D.W. Marcouiller, and S.C. Deller. 2005. "Natural Amenities and Rural Development: Understanding Spatial and Distributional Attributes." *Growth and Change* 36 (2): 273-297.

[67] Energy Information Administration, 2019, Annual Energy Outlook 2019 with Projections to 2050, U.S. Department of Energy, January 2019. https://www.eia.gov/outlooks/aeo/pdf/aeo2019.pdf. Note, the cited growth rates are shown in the interactive tables and can be viewed here: https://www.eia.gov/outlooks/aeo/data/browser/.

[68] Bureau of Labor Statistics, U.S. Department of Labor, *The Economics Daily*, Consumer prices up 9.1 percent over the year ended June 2022, largest increase in 40 years at https://www.bls.gov/opub/ted/2022/consumer-prices-up-9-1-percent-over-the-year-ended-june-2022-largest-increase-in-40-years.htm (visited *July 25, 2022*).

[69] Energy Information Administration, 2019, *Annual Energy Outlook 2019 with Projections to 2050*, U.S. Department of Energy, January 2019.

economy more than offsets the total growth in vehicle miles traveled (VMT). VMT for passenger vehicles is forecasted to increase through 2050.

- **Potential impacts of global climate change.** The consensus among the scientific community that global climate change is occurring expounds important ecological, social, and economic consequences over the next decade and beyond.[70] Extensive research shows that Oregon and other western states have already experienced noticeable changes in climate and that more change will occur in the future.[71]

  In the Pacific Northwest, climate change is likely to (1) increase average annual temperatures, (2) increase the number and duration of heat waves, (3) increase the amount of precipitation falling as rain during the year, (4) increase the intensity of rainfall events, (5) increase sea level, (6) increase wildfire frequency, and (7) increase forest vulnerability to tree disease.[72] These changes are also likely to reduce winter snowpack and shift the timing of spring runoff earlier in the year.[73]

  The Oregon Climate Change Research Institute (OCCRI) evaluated potential scenarios for "Climate Change Influence on Natural Hazards in Oregon Counties" in 2018. OCCRI specifically focused on counties in the Gorge and Eastern Oregon and evaluated the potential increased or decreased risk for natural hazards such as heat waves, cold waves, heavy rains, river flooding, drought, wildfire, poor air quality, windstorms, dust storms, increased invasive species, and loss of wetland ecosystems. Across the eight counties evaluated, the hazards most likely to increase with the effects of climate change are heat waves, heavy rains, river flooding, wildfires, increased invasive species, and loss of wetland ecosystems.[74]

  These anticipated changes point toward some of the ways that climate change is likely to impact ecological systems and the goods and services they provide. There is considerable uncertainty about how long it would take for some of the impacts to

[70] U.S. Global Change Research Program. *National Climate Assessment*. 2018. https://nca2018.globalchange.gov/

[71] Oregon Global Warming Commission. *2020 Biennial Report to the Legislature.* 2020. https://www.keeporegoncool.org/reports/

[72] U.S. Global Change Research Program. *National Climate Assessment*. "Chapter 24: Northwest." 2018. https://nca2018.globalchange.gov/chapter/24/

[73] Mote, P., Salathe, E., Duliere, V., & Jump, E. (2008). *Scenarios of Future Climate for the Pacific Northwest.* Climate Impacts Group, University of Washington. March. http://cses.washington.edu/db/pdf/moteetal2008scenarios628.pdf; Littell, J.S., McGuire Elsner, M., Whitely Binder, L.C., and Snover, A.K. (eds). (2009). "The Washington Climate Change Impacts Assessment: Evaluating Washington's Future in a Changing Climate - Executive Summary." *In The Washington Climate Change Impacts Assessment: Evaluating Washington's Future in a Changing Climate*, Climate Impacts Group, University of Washington. www.cses.washington.edu/db/pdf/wacciaexecsummary638.pdf; Madsen, T., & Figdor, E. (2007). *When it Rains, it Pours: Global Warming and the Rising Frequency of Extreme Precipitation in the United States.* Environment America Research & Policy Center and Frontier Group.; Mote, P.W. (2006). Climate-driven variability and trends in mountain snowpack in western North America. *Journal of Climate, 19*(23), 6209-6220.

[74] Mote, P.W., Abatzoglou, J., Dello, K.D., Hegewisch, K., & Rupp, D.E. (2019). Fourth Oregon Climate Assessment Report. Oregon Climate Change Research Institute. occri.net/ocar4; Oregon Climate Change Research Institute. Climate Change Influence on Natural Hazards in Eight Oregon Counties. August 2018. https://www.oregon.gov/lcd/CL/Documents/OCCRI_PDM16_AllCountyOverview2018.pdf

materialize and the magnitude of the associated economic consequences. Assuming climate change proceeds as today's models predict, the Pacific Northwest will experience the following potential economic impacts:[75]

- *Potential impact on agriculture and forestry.* Climate change may impact Oregon's agriculture through changes in growing season, temperature ranges, and water availability.[76] Climate change may impact Oregon's forestry through an increase in wildfires, a decrease in the rate of tree growth, a change in the mix of tree species, and increases in diseases and pests that damage trees.[77]
- *Potential impact on tourism and recreation.* Impacts on tourism and recreation may range from (1) decreases in snow-based recreation if snowpack in the Cascades decreases, (2) negative impacts to tourism along the Oregon Coast as a result of damage and beach erosion from rising sea levels,[78] (3) negative impacts on availability of summer river recreation (e.g., river rafting or sports fishing) as a result of lower summer river flows, and (4) negative impacts on the availability of water for domestic and business uses.

Short-term national trends will also affect economic growth in the region, but these trends are difficult to predict. At times, they may run counter to the long-term trends described above. The most prevalent example is the recession and subsequent recovery triggered by the global COVID-19 pandemic. While the unemployment rate rose quickly to a high of 14.7% in April 2020, it has since gradually declined to 3.6% as of March 2022, close to the pre-pandemic (February 2020) rate[79]. However, employment in some industries that were most severely impacted by the pandemic, such as leisure and hospitality, have not yet fully returned to pre-pandemic levels. Nonetheless, this report takes a long-run perspective on economic conditions (as the Goal 9 requirements intend) and does not attempt to predict the impacts of short-run macroeconomic trends on employment of economic activity.

[75] The issue of global climate change is complex and there is a substantial amount of uncertainty about climate change. This discussion is not intended to describe all potential impacts of climate change but to present a few ways that climate change may impact the economy of cities in Oregon and the Pacific Northwest.

[76] Resource Innovations & Institute for a Sustainable Environment. (2005). The Economic Impacts of Climate Change in Oregon: A Preliminary Assessment. https://scholarsbank.uoregon.edu/xmlui/bitstream/handle/1794/2299/Consensus_report.pdf?sequence=1

[77] Climate Leadership Initiative & Institute for Sustainable Environment. (2007). Economic Impacts of Climate Change on Forest Resources in Oregon: A Preliminary Analysis.

[78] Resource Innovations & Institute for a Sustainable Environment. (2005). The Economic Impacts of Climate Change in Oregon: A Preliminary Assessment. https://scholarsbank.uoregon.edu/xmlui/bitstream/handle/1794/2299/Consensus_report.pdf?sequence=1

[79] The Employment Situation – March 2022. News Release, Bureau of Labor Statistics. Retrieved from: https://www.bls.gov/news.release/pdf/empsit.pdf.

State Trends

Short-Term Trends

According to the Oregon Office of Economic Analysis (OEA), Oregon's economy is following the trends affecting the national economy: fast growth (with continued recovery from the COVID-19 pandemic recession), high demand for labor, and high inflation. The biggest economic challenges are supply chain issues, resulting from strong consumer demand and problems that started with the COVID-19 pandemic. [80]

The biggest risk to the economic outlook is persistently high inflation. In early 2021, higher inflation was tied to reopening the economy and semiconductor shortages in the automobile industry. Over the last year, pressure from inflation has broadened and is more persistent than originally expected. In addition, the tight labor market is putting upward pressure on wages, with the average wage in Oregon up 17% since March 2020. Businesses are passing most of the cost increases (from increases in costs for goods and labor) onto consumers, who are showing a willingness to pay higher prices. As a result, business incomes remain high.[81]

The Oregon economy has added back most of the jobs lost during the COVID-19 pandemic, with an expectation that the remaining lost jobs will be regained by fall 2022. The labor market remains tight for several reasons; for instance, employees are quitting jobs at record rates or are not returning to the workforce because they are caring for sick family members or have childcare challenges.[82]

The outlook for growth is a continuation of growth of the entire economy, with faster growth of selected sectors. Leisure and hospitality are still 12% below pre-pandemic employment and expected to have strong growth through 2023. Professional and business services, healthcare, and transportation and warehousing are also expected to have strong growth through 2023. Demand for housing will drive growth in the construction industry. Growth in high-tech manufacturing will continue, supported by demand for automobiles, computers, and other electronics. However, growth in high-tech manufacturing has not translated into more employment due to increases in productivity. And the industry is set to grow nationally, with some investments in Oregon but with investments in other states as well. [83]

[80] Office of Economic Analysis. (2022). Oregon Economic and Revenue Forecast, March 2022. Vol. XLII, No. 1. https://www.oregon.gov/das/OEA/Documents/forecast0322.pdf

[81] Office of Economic Analysis. (2022). Oregon Economic and Revenue Forecast, March 2022. Vol. XLII, No. 1. https://www.oregon.gov/das/OEA/Documents/forecast0322.pdf

[82] Office of Economic Analysis. (2022). Oregon Economic and Revenue Forecast, March 2022. Vol. XLII, No. 1. https://www.oregon.gov/das/OEA/Documents/forecast0322.pdf

[83] Office of Economic Analysis. (2022). Oregon Economic and Revenue Forecast, March 2022. Vol. XLII, No. 1. https://www.oregon.gov/das/OEA/Documents/forecast0322.pdf

Oregon has underbuilt about 111,000 housing units in recent decades, which contributes to the high demand for housing and low vacancy rates.[84] Housing starts in 2021 reached approximately 21,200 units, as opposed to 18,100 in 2020 and 20,700 in 2019. However, as the affordability crunch leads to a decrease in home sales, the Oregon Economic and Revenue Forecast points to a decline in housing starts in 2023 of 4%.[85]

Oregon's economic health is dependent on the export market, which was also affected by the COVID-19 pandemic. The value of Oregon exports in 2020 was $24.977 billion. In 2020, the countries that Oregon exported the most to were China (38% of total Oregon exports), Canada (11%), Vietnam (6%), South Korea (6%), Japan (6%), and Malaysia (6%).[86] Strains on the relationship between the United States and China could impact Oregon's economy. Additionally, China's public debt burden poses a threat not only to the state and region but also to the global economy. [87]

Long-Term Trends

State, regional, and local trends will also affect economic development in Sandy over the next 20 years. The most important of these trends includes continued in-migration from other states, distribution of population and employment across the state, and change in the types of industries in Oregon.

- **Continued in-migration from other states.** Oregon will continue to experience in-migration (more people moving *to* Oregon than *from* Oregon) from other states, especially California and Washington. From 2010-2020, Oregon's population increased by 406,491, 77% of which was from people moving into Oregon (net migration).[88] The average annual increase in population from net migration over the same time period was about 31,412. During the early to mid-1990s, Oregon's net migration was highest, reaching over 60,000 in 1991, with another smaller peak of almost 42,100 in 2006. In 2020, net migration reached just over 26,028 persons. [89]
- **Increasing ethnic diversity.** Oregon's population has continued to get more ethnically and racially diverse, with the Latino population growing from 12% of the population in 2010 to 13% of the population in 2019.[90] The population of people of color grew from

[84] Office of Economic Analysis. (2022). Oregon Economic and Revenue Forecast, March 2022. Vol. XLII, No. 1. https://www.oregon.gov/das/OEA/Documents/forecast0322.pdf

[85] Office of Economic Analysis. (2022). Oregon Economic and Revenue Forecast, September 2022. Vol. XLII, No. 3. https://www.oregon.gov/das/OEA/Documents/forecast0922.pdf

[86] United States Census Bureau. State Exports from Oregon, 2017-2020.

[87] Office of Economic Analysis. Oregon Economic and Revenue Forecast, December 2019. Vol. XXXIX, No. 4, p. 14. https://www.oregon.gov/das/OEA/Documents/forecast1219.pdf.

[88] Oregon Office of Economic Analysis, Oregon Economic and Revenue Forecast, March 2022. Vol. XLII, No. 1, p. 58.

[89] Oregon Office of Economic Analysis, Oregon Economic and Revenue Forecast, March 2022. Vol. XLII, No. 1, p. 58.

[90] U.S. Census Bureau, American Community Survey 2019 5-year estimates, Tables B02001 and B03002, 2010 Decennial Census P003001 and P005001.

13.3% of the population to 16% of the population over the same period. The share of Latino and people of color populations increased in Sandy since 2000 as well.

- **Forecast of job growth.** Total nonfarm employment in Oregon is forecasted to increase 10% from 1.82 million in 2020 to just over 2 million in 2025. The OEA forecasts total private nonfarm employment in Oregon to increase 11% from 1.54 million in 2020 to 1.71 million in 2025.[91]
- **Manufacturing is an important part of Oregon's economy.** The manufacturing sector has long been a crucial component of Oregon's economy. Since 2010, employment in manufacturing has grown 12% compared to the nation's 7%.[92] However, as a result of the COVID-19 pandemic, employment in the sector has declined 8% compared with a 4% decline across the nation.[93]

  Manufacturing remains an important piece of Oregon's economy and the sector is evolving. Only a few decades ago, Oregon's manufacturing economy was dependent on forestry and wood products. But between 1990 and 2018, annual average employment in wood product manufacturing dropped by 22,600 jobs or 46%.[94]

  Growth in Oregon's electronic component manufacturing, however, has filled the gap left by the decline in wood manufacturing. In 2018, there were a total of 37,900 jobs in Oregon's electronic component manufacturing (i.e., manufacturing of computer chips, computers and related equipment, and communications equipment), making it Oregon's largest manufacturing industry. Employment in this industry is over six times more concentrated in Oregon than it is nationally and is driving much of the growth in Oregon manufacturing.[95]

  Continued growth, spurred by electronic component manufacturing, is expected in the future for Oregon's manufacturing sector. Although Oregon's economy is shifting, the state's roots in forestry and wood product manufacturing remain important, particularly for rural areas. Douglas County, for example, had 8.3% of its total employment and 10.7% of its total payroll in wood product manufacturing in 2018.[96]

[91] Oregon Office of Economic Analysis, Oregon Economic and Revenue Forecast, March 2022. Vol. XLII, No. 1, p. 35.

[92] Oregon Employment Department (2021). Made in Oregon: A Profile of the State's Manufacturing Sector. https://www.qualityinfo.org/-/made-in-oregon-a-profile-of-the-state-s-manufacturing-sector

[93] Oregon Employment Department (2021). Made in Oregon: A Profile of the State's Manufacturing Sector. https://www.qualityinfo.org/-/made-in-oregon-a-profile-of-the-state-s-manufacturing-sector.

[94] Oregon Employment Department (2021). Made in Oregon: A Profile of the State's Manufacturing Sector. https://www.qualityinfo.org/-/made-in-oregon-a-profile-of-the-state-s-manufacturing-sector.

[95] Oregon Employment Department (2021). Made in Oregon: A Profile of the State's Manufacturing Sector. https://www.qualityinfo.org/-/made-in-oregon-a-profile-of-the-state-s-manufacturing-sector.

[96] Oregon Employment Department (2021). Made in Oregon: A Profile of the State's Manufacturing Sector. https://www.qualityinfo.org/-/made-in-oregon-a-profile-of-the-state-s-manufacturing-sector.

- **Advancements in technology and increases in automation of jobs.**[97] In decades past, automation was focused on manufacturing. In the coming decades, jobs at risk for automation will tend to be those without "computerization bottlenecks" or jobs that do not require social intelligence, perception, creativity, or fine motor skills. Jobs in industries lacking a customer service component, such as those in transportation and material moving, are also at greater risk. Most researchers agree that "less-educated workers in low-skill, lower-wage jobs featuring routine tasks are those most likely to be displaced by automation."[98] Oregon's overall risk of automation is similar to the nation's, with lower and middle-wage jobs at higher risk.

  In 2017, 144,200 jobs in Oregon were found to be at risk of automation and 93% of jobs in food preparation and serving were found to be at risk.[99] However, automation risk does not imply automation certainty. For example, consumer preferences for personalized and genuine experiences/interactions will likely slow job automation, particularly in the food services and hospitality sectors. In addition, there is a notable difference between task automation and full automation of jobs. One research study speculates that only 5% of jobs are fully automated and that the "activities most susceptible to automation involve physical activities in highly structured and predictable environments, as well as the collection and processing of data."[100]

- **Income and wages continue to increase.** Despite Oregon's income and wages falling below the average among states, Oregon wages are at their highest point relative to other states since the recession in the early 1980s, mainly due to the wage growth over the last two to three years. In 2019, the average annual wage in Oregon was $55,023 and the median household income was $67,058 (compared to national average wages of $59,209 in 2019 and national household income of $65,712).[101] Total personal income (all classes of income, minus Social Security contributions) in Oregon is expected to increase by 78%, from $221.2 billion in 2019 to $395.4 billion in 2030 (in nominal dollars).[102] Per

[97] Portland Business Alliance. (2017). Automation and the Future of Work. https://portlandalliance.com/assets/pdfs/2017-VOJ-Automation-summary.pdf

[98] Marcus Casey and Sarah Nzau. (2019). Searching for clarity: How much will automation impact the middle class? Brookings.

[99] Portland Business Alliance. (2017). Automation and the Future of Work. https://portlandalliance.com/assets/pdfs/2017-VOJ-Automation-summary.pdf

[100] McKinsey & Company. (2017). A Future that Works: Automation, Employment, and Productivity.

[101] Average annual wages are for "total, all industries," which includes private and public employers. Oregon Quarterly Census of Employment and Wages, 2019. Retrieved from: https://www.qualityinfo.org; Bureau of Labor Statistics, Quarterly Census of Employment and Wages, 2019; Total, U.S. Census American Community Survey 1-Year Estimates, 2019, Table B19013.

[102] Oregon Office of Economic Analysis. Oregon Economic and Revenue Forecast, March 2022. Vol. XLII, No. 1, page 37.

capita income is expected to increase by 64% over the same time period, from $52,500 in 2019 to $86,200 in 2030 (in nominal dollars).[103]

- **Small businesses continue to account for a large share of employment in Oregon**. Between 1994 and 2018, employment in Oregon small businesses grew by 30%—exceeding the national average growth rate.[104]

  In 2018, small businesses (those with 100 or fewer employees) accounted for 95% of all businesses and 40% of all private-sector employment in Oregon. Said differently, most businesses in Oregon are small (in fact, 76% of all businesses have fewer than 10 employees), but the largest share of Oregon's employees work for large businesses (those with more than 100 employees).[105] The average annualized payroll per employee for small businesses was $43,949 in 2019, which is considerably less than that for large businesses ($64,335) and the statewide average for all businesses ($53,253).[106]

  Younger workers are important for the continued growth of small businesses across the nation. More than one-third of millennials (those born between 1980 and 1999) are self-employed, with approximately one-half to two-thirds interested in becoming an entrepreneur. According to the Kauffman Indicators of Entrepreneurship, in 2020, about 78.09% of start-ups nationwide were still active after one year.[107] On average, start-ups nationwide created approximately 5.03 jobs in their first year (when normalized by population).[108] In Oregon, only 78% of start-ups survive the first year and just 4.85 jobs were created on average.[109] It is typically the case that start-ups are important for job creation on a longer-time horizon, well beyond their first year, as "fewer than half of all start-ups in America are still in business after five years."[110]

- **Entrepreneurship in Oregon.** The creation of new businesses is vital to Oregon's economy, as their formation helps to generate new jobs and advance new ideas and

[103] Oregon Office of Economic Analysis. Oregon Economic and Revenue Forecast, March 2022. Vol. XLII, No. 1, page 37.

[104] U.S. Small Business Office of Advocacy. (2021). 2021 Small Business Profile. https://cdn.advocacy.sba.gov/wp-content/uploads/2021/08/30143123/Small-Business-Economic-Profile-OR.pdf

[105] U.S Census Bureau, 2019 Statistics of U.S. Businesses, Annual Data, Enterprise Employment Size, U.S and States. https://www.census.gov/data/tables/2019/econ/susb/2019-susb-annual.html.

[106] U.S Census Bureau, 2019 Statistics of U.S. Businesses, Annual Data, Enterprise Employment Size, U.S and States. https://www.census.gov/data/tables/2019/econ/susb/2019-susb-annual.html.

[107] Kauffman Foundation. *Kauffman Indicators of Entrepreneurship*. Indicators: Startup Early Job Creation and Startup Early Survival Rate. Information retrieved on January 26, 2022. https://indicators.kauffman.org/indicator/startup-early-survival-rate.

[108] Kauffman Foundation. *Kauffman Indicators of Entrepreneurship*. Indicators: Startup Early Job Creation and Startup Early Survival Rate. Information retrieved on January 26, 2022. https://indicators.kauffman.org/indicator/startup-early-survival-rate.

[109] Kauffman Foundation. *Kauffman Indicators of Entrepreneurship*. State Profiles: Oregon Early-Stage Entrepreneurship. https://indicators.kauffman.org/state/oregon.

[110] Nish Acharya. "Small Business Are Having A Bigger Impact on Job Creation Than Large Corporations." Forbes, May 5, 2019. https://www.forbes.com/sites/nishacharya/2019/05/05/who-is-creating-jobs-in-america/#5c74c156597d.

innovations into markets. Start-ups can also produce more efficient products and services to better serve local communities. According to the Kauffman Early-Stage Entrepreneurship (KESE) Index, Oregon ranked 25th in the country in 2020 for its Early-Stage Entrepreneurship activity, a measurement comprised of four statistics: rate of new entrepreneurs, opportunity share of new entrepreneurs, start-up density, and start-up early survival rate.[111] This ranking is higher than Oregon's 2017 rank of 30th. Oregon's rate of new entrepreneurs (the percent of adults that became an entrepreneur in a given month) was in steady decline post-recession, but since 2012, has gradually declined until 2019 where it dropped to 0.26%. In 2020, the rate increased to 0.29%, still well below Oregon's prerecession peak of 0.43% in 2000.

Moreover, in January 2021, the Oregon Office of Economic Analysis reported new business applications in Oregon were increasing since shelter in place orders were lifted.[112] However, as of December 2021, new business filings have slowed while active business licenses have maintained some growth.[113] Though this measurement of economic activity does not constitute a full understanding of how well entrepreneurship is performing, it does provide an encouraging signal.

[111] Kauffman Foundation. *Kauffman Indicators of Entrepreneurship*. Early-Stage Entrepreneurship. The Kauffman Index, Oregon. https://indicators.kauffman.org/.

[112] Josh Lehner. "So Far Fewer Business Closures than Expected." Oregon Office of Economic Analysis, March 2, 2021. https://oregoneconomicanalysis.com/2021/03/02/so-far-fewer-business-closures-than-expected/

[113] Oregon Secretary of State. (February 2022). *Oregon Business Statistics.* https://sos.oregon.gov/business/Documents/business-reports-current/0222.pdf

Regional and Local Trends

Throughout this section of Appendix A., Sandy is compared to Clackamas County and the State of Oregon. These comparisons are to provide context for changes in Sandy's socioeconomic characteristics.

Availability of Labor

The availability of trained workers in Sandy will impact the development of its economy over the planning period. A skilled and educated populace can attract well-paying businesses and employers and spur the benefits that follow from a growing economy. Key trends that will affect the workforce in Sandy over the next 20 years include its growth in its overall population, growth in the senior population, and commuting trends.

Population Change

Population growth in Oregon tends to follow economic cycles. Oregon's population grew from 3.4 million people in 2000 to 4.3 million people in 2021, an increase of almost 850,000 people or 1.1% each year.

Between 2000 and 2021, Sandy's population increased by 7,484 people at an average annual rate of 4.2% (Exhibit 22), exceeding both Clackamas County's and Oregon's growth rates during the same time (1.1% and 1.1%, respectively).

Exhibit 22. Population Growth, Sandy, Clackamas County, and Oregon, 2000–2021
Source: U.S. Census Bureau, 2000, and 2010. Portland State University Population Estimates, 2021.

				Change, 2000-2021		
Geography	2000	2010	2021	Number	Percent	AAGR
Sandy	5,385	8,420	12,869	7,484	139%	4.2%
Clackamas County	338,391	381,775	425,316	86,925	26%	1.1%
Oregon	3,421,399	3,844,195	4,266,560	845,161	25%	1.1%

Age Distribution

By 2060, the population of people 65 years and older in the United States is projected to nearly double from 52 million in 2018 to 95 million.[114] The economic effects of this demographic change include a slowing of the growth of the labor force, the need for workers to replace retirees, the aging of the workforce for seniors that continue working after age 65, an increase in the demand for health-care services, and an increase in the percent of the federal budget dedicated to Social Security and Medicare.[115]

[114] Mather, M., Scommegna, P., & Kilduff, L. (2019). Fact Sheet: Aging in the United States. https://www.prb.org/aging-unitedstates-fact-sheet/

[115] The Board of Trustees, Federal Old-Age and Survivors Insurance and Federal Disability Insurance Trust Funds, 2017, The 2017 Annual Report of the Board of Trustees of the Federal Old-Age and Survivors Insurance and Federal

Exhibit 23 through Exhibit 26 show the following trends:

- Sandy has a younger population than Clackamas County and the state overall. In 2019, only 17% of Sandy residents were 60 years and older (Exhibit 25). Sandy is growing across all age groups, but the increase in median age between 2000 and 2019 suggests that Sandy is attracting or retaining older adults.[116]
- Clackamas County's population is expected to continue aging, with people 60 years and older increasing slightly from 27% of the population in 2020 to 29% in 2040. This is consistent with statewide trends. Clackamas County may continue to attract those in their late adult years (i.e., 60 years and older) over the planning period. While the share of retirees in these respective areas may increase over the next 20 years, the share of youth (i.e., under 20 years old) or people in their early adult lives (i.e., 20 to 39 years old) is likely to decrease. As the working population continues to exit the labor force later in life, those approaching retirement will provide a valuable source of skilled labor and experience to younger generations entering the workforce.

Sandy's median age increased between 2000 and 2019 but remains less than both the county and state.[117]

Sandy's increase in median age of 3.7 years is similar to Clackamas County's change of 4 years and Oregon's change of 3 years.

Exhibit 23. Median Age, Sandy, Clackamas County, and Oregon, 2000 to 2015–2019

Source: U.S. Census Bureau, 2000 Decennial Census, Table P013; American Community Survey 2015–2019 5-Year Estimates, Table B01002.

2000	32.5 Sandy	37.5 Clackamas County	36.3 Oregon
2015-19	36.2 Sandy	41.5 Clackamas County	39.3 Oregon

Disability Insurance Trust Funds, July 13, 2017. The Budget and Economic Outlook: Fiscal Years 2018 to 2028, April 2018.

[116] 2019 data is based on the 5-year ACS (2015-2019).

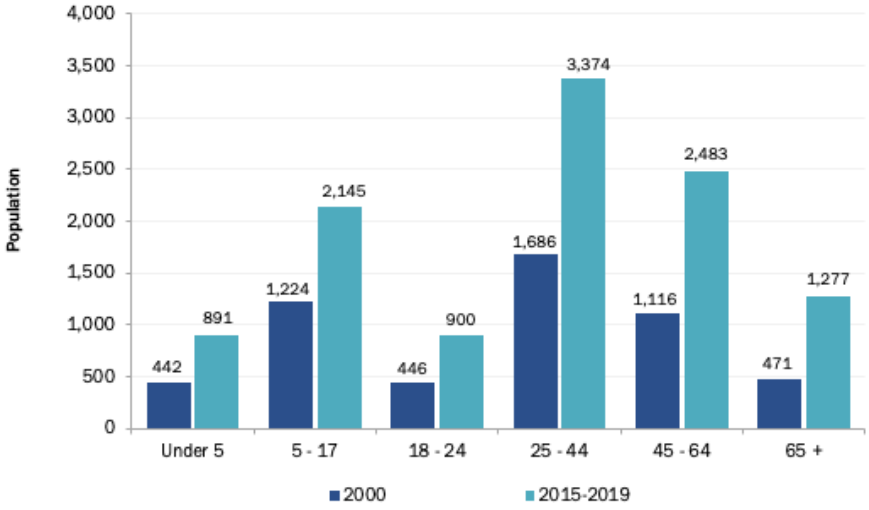
[117] 2019 data is based on the 5-year ACS (2015-2019).

Between 2000 and 2019, Sandy's largest nominal population increases were for those aged 25–44 years and 45-64 years.[118]

Statewide, the highest percent increase was for those aged 65 and over, followed by those aged 45-64 years.

Exhibit 24. Sandy Population Change by Age Group, 2000 to 2015–2019

Source: U.S. Census Bureau, 2000 Summary File; American Community Survey 2015–2019 5-Year Estimates, Table B01001.



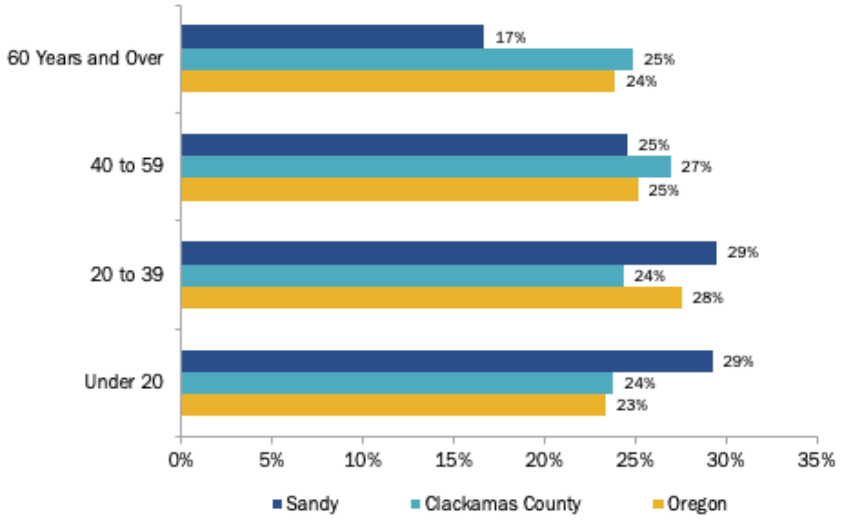
Seventeen percent of Sandy residents were over 60 years of age.

The proportion of Sandy's older residents was lower than that of both the state and Clackamas County.

Conversely, the proportion of Sandy residents 39 years of age and younger was higher relative to Clackamas County and Oregon.

Exhibit 25. Population Distribution by Age, Sandy, Clackamas County, and Oregon, 2015–2019

Source: U.S. Census Bureau, American Community Survey, 2015–2019 5-Year Estimates, Table B01001.



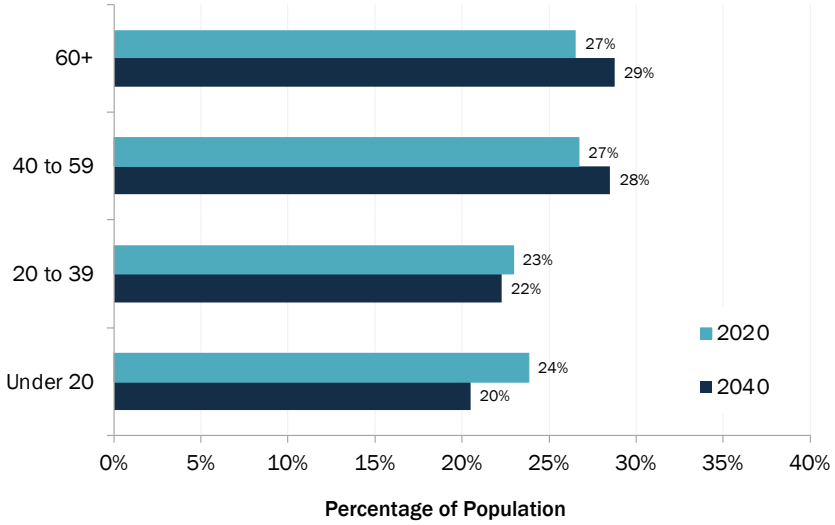
[118] 2019 data is based on the 5-year ACS (2015-2019).

By 2040, Clackamas County will have a larger share of residents 40 years and older than it does today.

The share of residents 60 years and older will 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 will increase from 27% to 28%.

Exhibit 26. Population Growth by Age Group, Clackamas County, 2020–2040

Source: Portland State University, College of Urban & Public Affairs: Population Research Center, Population Forecast, 2020.



Race and Ethnicity

Sandy, like Oregon overall, is becoming more racially and ethnically diverse. Both Hispanics and Latinos and people of color increased in Sandy between 2000 and 2019.[119] Hispanics and Latinos increased from 4% to 10% of the population, while people of color increased from 6% to 9%. Similar to the city, people of color in Clackamas County increased slightly from 9% to 12%, and Hispanics and Latinos grew from 5% to 9%. Despite the increase, Sandy is still less ethnically diverse than the state, but providing culturally specific services to Spanish-speaking community members can help improve their participation in the workforce and economy.

The population of people of color is defined as the share of the population that identifies as another race other than "white alone" according to Census definitions. The small population in Sandy results in small sample sizes, and thus the margin of error is considerable for the estimate of these populations.

Exhibit 27 and Exhibit 28**Error! Reference source not found.** show the change in the share of Hispanic and Latino and people of color in Sandy, compared to Clackamas County and Oregon, between 2000 and 2019.[120] The groups with the largest share of people of color in 2019 included those that identified as Asian or two or more races, each representing 2% and 4% of Sandy's total population respectively.[121]

[119] 2019 data is based on the 5-year ACS (2015-2019).

[120] 2019 data is based on the 5-year ACS (2015-2019).

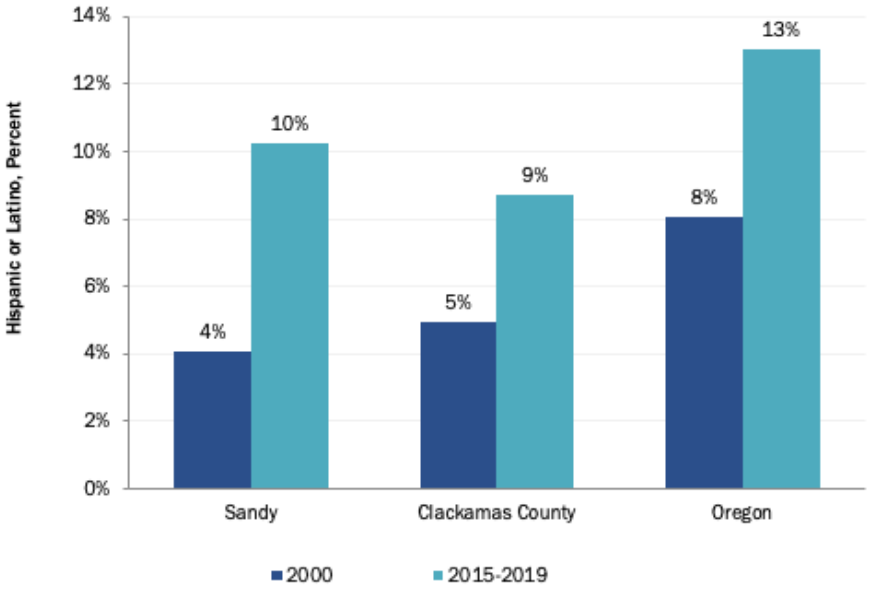
[121] "Some other race alone" also includes individuals who identify as American Indian or Alaska Native or Native Hawaiian and other Pacific Islander.

Sandy's Hispanic/Latino population increased between 2000 and 2019 from 4% to 10%.[122]

Clackamas and Sandy are less ethnically diverse than the state overall, even with their increases over the period.

Exhibit 27. Hispanic or Latino Population as a Percentage of the Total Population, Sandy, Clackamas County, and Oregon, 2000, 2015–2019 (5-year ACS)

Source: U.S. Census Bureau, 2000 Decennial Census, Table P008; 2015–2019 American Community Survey, 5-Year Estimates, Table B03002.



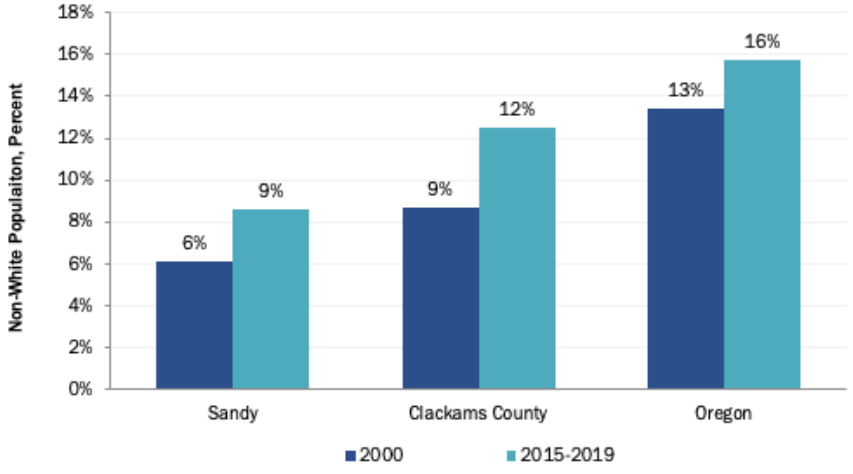
People of color in Sandy increased between 2000 and 2019.[123]

Sandy and Clackamas County are less racially diverse than the state. In 2019,[124] the share of people of color in both Sandy and Clackamas County was 9% and 12%, respectively, compared to 16% statewide.

During this time period, Asian or two or more races were the largest nonwhite groups representing 2% and 4%, respectively.

Exhibit 28. Population of People of Color as a Percentage of the Total Population, Sandy, Clackamas County, and Oregon, 2000, 2015–2019 (5-year ACS)

Source: U.S. Census Bureau, 2000 Decennial Census Table P007; 2015–2019 American Community Survey, 2015–2019 5-Year Estimates, Table B02001.



[122] 2019 data is based on the 5-year ACS (2015-2019).

[123] 2019 data is based on the 5-year ACS (2015-2019).

[124] 2019 data is based on the 5-year ACS (2015-2019).

Income

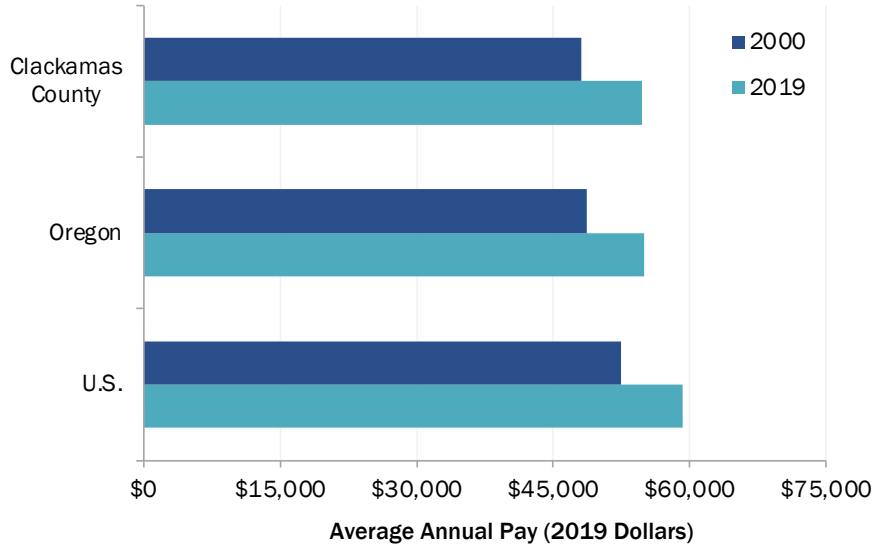
Income and wages affect business decisions for locating in a city. Areas with higher wages may be less attractive for industries that rely on low-wage workers. Sandy's median household income ($73,443) was below the county median ($80,484). In 2019, average wages at private businesses in Sandy ($37,318) were also below the county average ($54,802).

Between 2000 and 2019, Clackamas County's average wages increased as did average wages across the state and the nation. When adjusted for inflation, average annual wages grew by 14% in Clackamas County and 13% in both Oregon and across the nation.

From 2000 to 2019, average annual wages rose in Clackamas County, Oregon, and the nation.

In 2019, average annual wages were $54,802 in Clackamas County, $55,019 in Oregon, and $59,209 in the U.S. overall.

Exhibit 29. Average Annual Wage, Covered Employment, Clackamas County, Oregon, and U.S., 2000 to 2020, Inflation-Adjusted 2020 Dollars
Source: Bureau of Labor Statistics, Quarterly Census of Employment and Wages; State of Oregon Employment Department, Employment and Wages by Industry (QCEW).



The median household income in Sandy was 9.6% below Clackamas County's median household income but 14.5% above Oregon's.

Exhibit 30. Median Household Income (MHI),[125] 2015–2019
Source: U.S. Census Bureau, American Community Survey 2015–2019 5-Year Estimates, Table B19013.

$73,443	$80,484	$62,818
Sandy	Clackamas County	Oregon

[125] The Census calculated household income based on the income of all individuals 15 years old and over in the household, whether they are related or not.

Sandy's median family income was below Clackamas County's by 20% but above Oregon's by 5%.

Exhibit 31. Median Family Income,[126] 2015–2019
Source: U.S. Census Bureau, American Community Survey 2015–2019 5-Year Estimates, Table B19113.

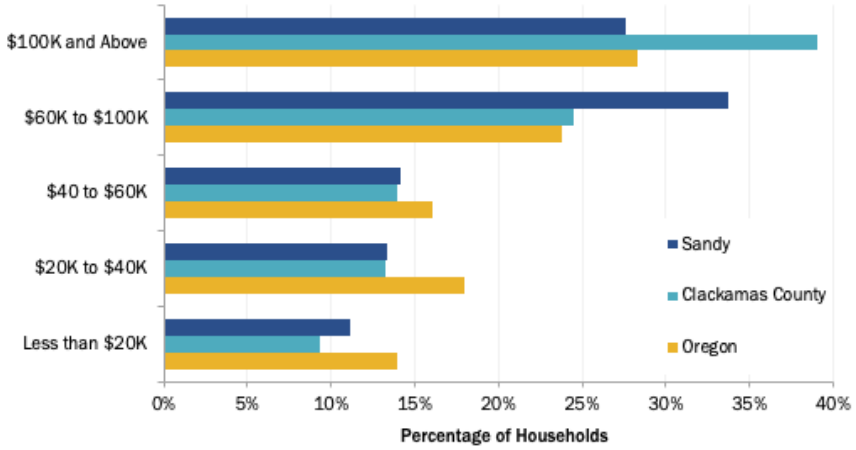
$80,847	$97,130	$76,946
Sandy	Clackamas County	Oregon

About 24% of Sandy households earned less than $40,000 annually, similar to Clackamas County and lower than Oregon overall.

Over the same period, 28% of Sandy households earned over $100,000 annually, which is equal to Oregon but less than Clackamas County.

Sandy had the largest proportion of households earning between $60,000 and $100,000 (34%).

Exhibit 32. Household Income by Income Group, Sandy, Clackamas County, and Oregon, 2015–2019, Inflation-Adjusted 2019 Dollars
Source: U.S. Census Bureau, American Community Survey 2015–2019 5-Year Estimates, Table B19001.



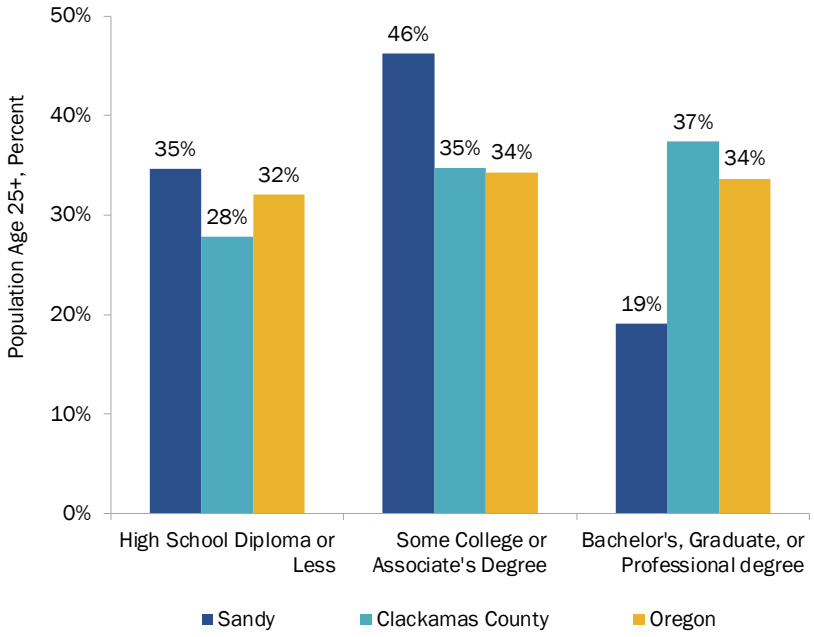
[126] The Census calculated family income based on the income of the head of household, as identified in the response to the Census forms, and income of all individuals 15 years old and over in the household who were related to the head of household by birth, marriage, or adoption.

Educational Attainment

The availability of trained, educated workers affects the quality of labor in a community. Educational attainment is an important labor force factor because firms need to be able to find educated workers.

The share of Sandy residents who have a bachelor's degree or a professional degree falls below both the state and Clackamas County.

Exhibit 33. Educational Attainment for the Population 25 Years and Over, Sandy, Clackamas County, and Oregon, 2015–2019
Source: U.S. Census Bureau, American Community Survey 2015–2019 5-Year Estimates, Table B15003.



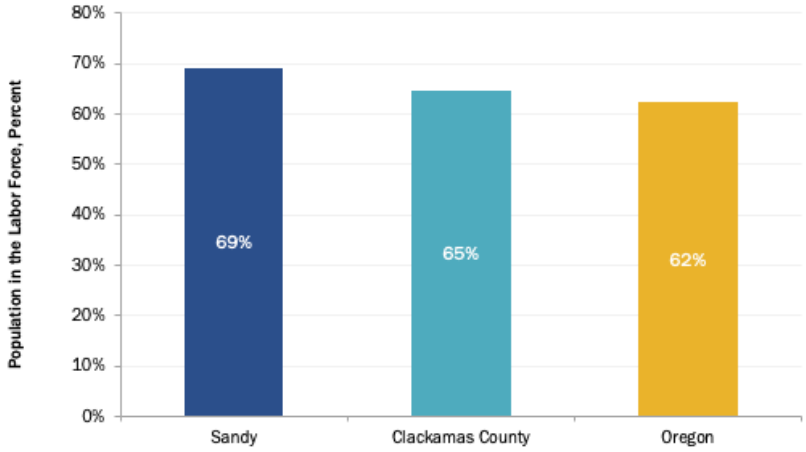
Labor Force Participation and Unemployment

The current labor force participation rate is an important consideration in the availability of labor. The labor force in any market consists of the adult population (16 and over) who are working or actively seeking work. The labor force includes both employed and unemployed people. Children, retirees, students, and people who are not actively seeking work are not considered part of the labor force. According to the 2015–2019 American Community Survey, Clackamas County had 214,622 people in its labor force during that period and Sandy had 5,846 people in its labor force.

In 2019, the Oregon Office of Economic Analysis reported that the most common reason for difficulty in filling jobs included a lack of applications (29% of employers' difficulties), unfavorable working conditions (23%), a lack of qualified candidates (16%), a lack of soft skills (8%), a lack of work experience (7%), and low wages (7%).[127] These statistics indicate a mismatch between the types of jobs that employers are demanding and the skills that potential employees can provide.

Sandy has a higher labor force participation rate (69%) relative to Clackamas County (65%) and Oregon overall (62%).

Exhibit 34. Labor Force Participation Rate, Sandy, Clackamas County, and Oregon, 2015–2019
Source: U.S. Census Bureau, American Community Survey 2015–2019 5-Year Estimates, Table B23001.



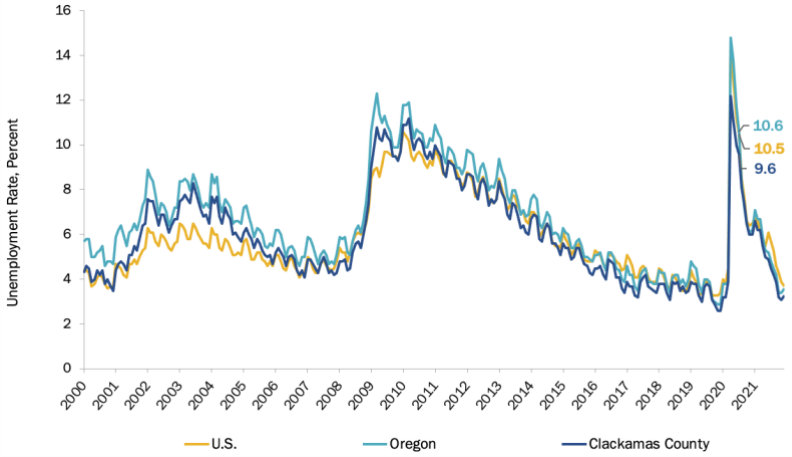
[127] Oregon's Current Workforce Gaps: Hiring Challenges for Unfilled Job Vacancies, May 2019. Employer-Provided Reasons for Difficulty Filling Vacancies in Oregon, 2018. p. 20. https://www.qualityinfo.org/documents/10182/13336/Oregon%27s+Current+Workforce+Gaps.

The unemployment rates in Sandy, Clackamas County, Oregon and the nation have declined since the Great Recession. However, following the pandemic, unemployment rates for the month of May 2020 exceeded the peak rate experienced during the Great Recession.

The unemployment rate for December 2021 in Clackamas County (3.3%) was slightly lower than that of the state (3.6%) and nation (3.7%).

Exhibit 35. Unemployment Rate, Clackamas County, Oregon, and the U.S., 2000–December 2021

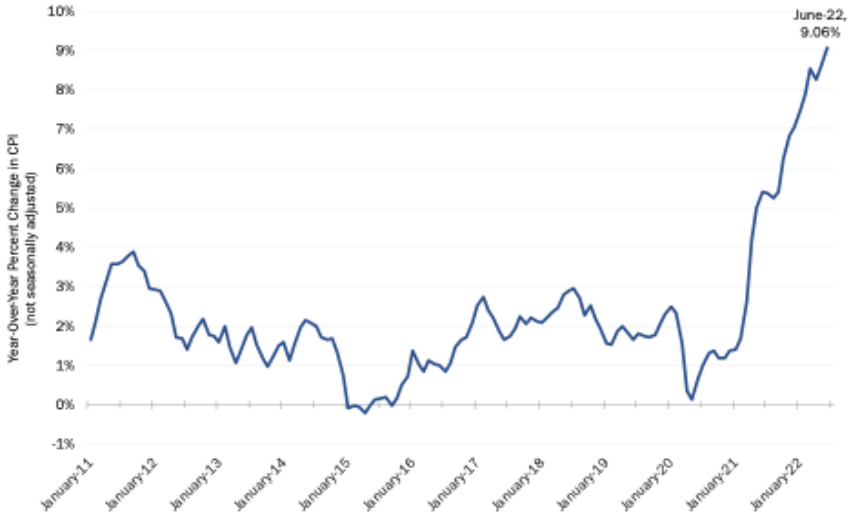
Source: Bureau of Labor Statistics, Local Area Unemployment Statistics and Labor Force Statistics. Not seasonally adjusted.



The annual inflation rate in the U.S. declined steadily following the Great Recession until 2015. From 2016-2018, inflation increased steadily to nearly 2.5% before declining in 2019 and 2020. In 2021, inflation increased to 9.1% in June 2022.

Exhibit 36. Annual Inflation Rate, All Urban Consumers, City Average, U.S., 2010-2021

Source: Bureau of Labor Statistics, Consumer Price Index. Not seasonally adjusted.



Commuting Patterns

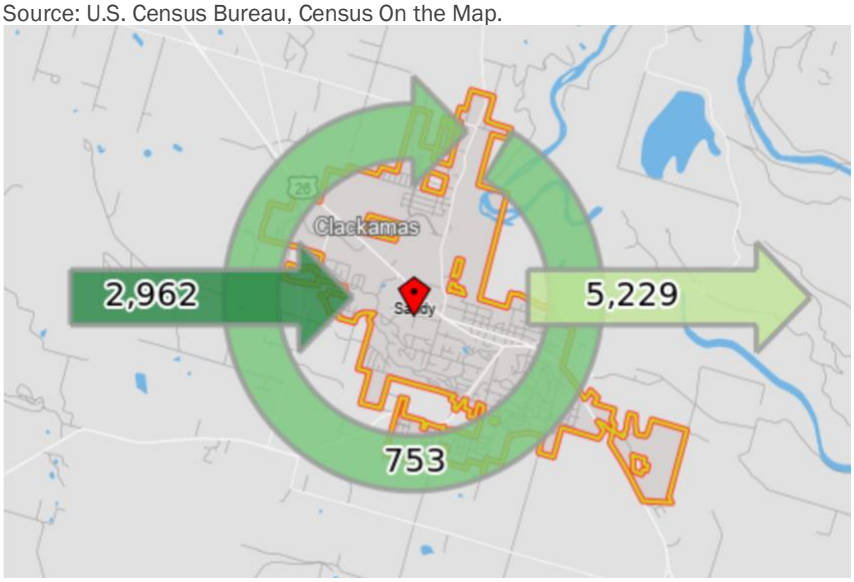
Commuting plays an important role in Sandy's economy because employers in the area are able to access workers from cities across Clackamas County and the Portland region.

Exhibit 37 shows that nearly 3,000 people commute into Sandy for work while 5,200 commute out of Sandy for work. About 750 people both live and work in Sandy. Exhibit 38 demonstrates that 20% of people who work in Sandy also live in Sandy, while 12% commute from Gresham and 8% from Portland. Further, Exhibit 39 shows that 27% of people who live in Sandy commute to Portland while 13% remain in Sandy and 11% commute to Gresham.

Sandy is part of an interconnected regional economy.

Fewer people both live and work in Sandy than commute into or out of the city for work.

Exhibit 37. Commuting Flows, Sandy, 2019
Source: U.S. Census Bureau, Census On the Map.



About 20% of all people who are employed at businesses in Sandy also lived in Sandy.

Exhibit 38. Places Where Sandy Workers Lived,[128] 2019
Source: U.S. Census Bureau, Census On the Map.

20%	12%	8%	4%
Sandy	Gresham	Portland	Mount Hood

[128] In 2019, 3,715 people worked at businesses in Sandy, with 20% (753) of workers both living and working in Sandy.

About 13% of residents who live in Sandy also worked in Sandy.

27% of Sandy residents commute to Portland for work.

Exhibit 39. Places Where Sandy Residents Were Employed,[129] 2019
Source: U.S. Census Bureau, Census On the Map.

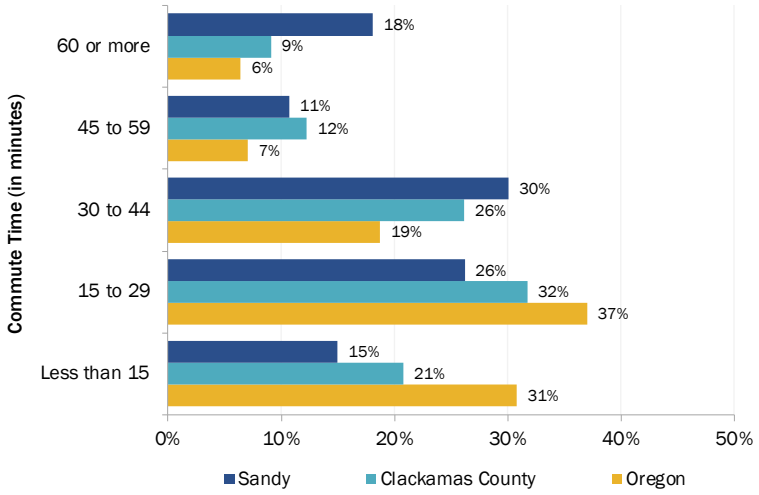
27%	13%	11%	2%
Portland	Sandy	Gresham	Beaverton

In 2019, about 15% of Sandy residents had a commute of less than 15 minutes, compared to 21% of Clackamas County's residents and 31% of Oregon residents.[130] In general, Sandy residents had a much higher rate of long commutes over 60 minutes, with 18% of workers traveling longer than an hour compared to 9% of Clackamas County residents and 6% across Oregon.

Most Sandy residents (85%) have a commute time over 15 minutes. This is relatively consistent with Clackamas County, where 79% of residents have a commute time of this length.

Sandy residents were much more likely to have a commute over 60 minutes (18%) than residents of the county (9%) or state (6%).

Exhibit 40. Commute Time by Place of Residence, Sandy, Clackamas County, and Oregon, 2015–2019
Source: U.S. Census Bureau, American Community Survey 2015–2019 5-Year Estimates, Table B08303.



[129] In 2019, 5,982 residents in Sandy worked, with 13% of Sandy residents (753) both living and working in Sandy.

[130] 2019 data is based on the 5-year ACS (2015-2019).

Tourism in the Portland Region and Clackamas County

Dean Runyan Associates provides state, regional, and county statistics on travel. The following information is from Dean Runyan Associates' TravelStats dashboard created for Travel Oregon. This section of Appendix A includes information on Clackamas County.[131]

Broadly, travelers to Clackamas County accounted for about 2.3 million overnight trips in 2021, or 31% of all Portland region overnight travel that year. Clackamas County received $523.8 million from direct travel spending in 2021 with the largest spending categories in food service, retail sales, and accommodations.

Direct travel spending in Clackamas County increased 14% from 2010 to 2021.

The Portland region's direct travel spending increased by 3% over the same period.

Exhibit 41. Direct Travel Spending ($ millions), 2010 and 2021
Source: Dean Runyan Associates, Oregon Travel Impacts, 2010 and 2021.

2010	$3,639.0 Portland Region	$460.1 Clackamas County
2021	$3,764.7 Portland Region	$523.8 Clackamas County

The area of largest visitor spending for purchased commodities in 2021 in Clackamas County was food service.

Exhibit 42. Largest Visitor Spending Categories ($ millions), Clackamas County, 2021
Source: Dean Runyan Associates, Oregon Travel Impacts

$154.6 Food Service	$99.4 Retail Sales	$70.7 Accommodations

The industry with the most employment generated by travel spending in Clackamas County in 2021 was in the accommodations and food services industry.

Exhibit 43. Largest Industry Employment Generated by Travel Spending, Clackamas County, 2021
Source: Dean Runyan Associates, Oregon Travel Impacts.

4,200 jobs Accommodations & Food Services	977 jobs Arts, Entertainment, and Recreation	504 jobs Retail

The number of overnight visitors to Clackamas County has decreased from 2,312,377 in 2010 to 2,262,024 in 2021, a decrease of 50,353 overnight stays (or 2%). These numbers are likely due to impacts from the COVID-19 pandemic, including reduced travel and difficulty in data collection.

[131] Travel Oregon. "Oregon Travel Impacts dashboard" Dean Runyan Associates. Retrieved July 18, 2022, from https://www.travelstats.com/impacts/oregon

Appendix B. Buildable Lands Inventory

The buildable lands inventory is intended to identify commercial and industrial lands that are available for development for employment uses within the Sandy UGB. The inventory is sometimes characterized as *supply* of land to accommodate anticipated employment growth. Population and employment growth drive *demand* for land. The amount of land needed depends on the type of development and other factors.

This appendix presents methods and definitions used to develop the commercial and industrial buildable lands inventory for the Sandy UGB. The results (shown in Chapter 4) are based on analyses of the City of Sandy, Clackamas County, and State of Oregon GIS data by ECONorthwest and reviewed by City staff. The remainder of this appendix summarizes key findings of the buildable lands inventory.

Methods and Definitions

The Buildable Lands Inventory (BLI) for Sandy includes all land that allows commercial and industrial uses within the UGB. From a practical perspective, land was included in the BLI if it met all of the following criteria: 1) it is inside the Sandy UGB, 2) it is inside a tax lot (as defined by Clackamas County), and 3) if its current zoning/comprehensive plan designation allows employment uses. Note that tax lots do not generally include road or railroad rights-of-way or water. The inventory then builds from the tax lot–level database to estimate buildable land by plan designation.

Inventory Steps

The five steps in the BLI are:

1. Generate UGB "land base"
2. Classify lands by buildable area status
3. Identify constraints
4. Verify inventory results
5. Tabulate and map results

Step 1: Generate UGB "Land Base"

The commercial and industrial inventory used all of the tax lots in the Clackamas UGB with the appropriate comprehensive plan designations: commercial, light industrial, and village-commercial. Exhibit 46 shows a map of the specific designations that were used in the BLI.

Step 2: Classify Lands by Buildable Area Status

In this step, ECONorthwest classified each tax lot with an employment plan designation (based on definition above) into one of five mutually exclusive categories based on buildable area status:

- Vacant land
- Partially vacant land
- Developed land
- Public land
- Undevelopable land

ECONorthwest identified buildable land and classified buildable area status using a rule-based methodology. The rules are described below in Exhibit 44.

Exhibit 44. Rules for Buildable Area Status Classification

Development Status	Definition	Statutory Authority
Vacant Land	A tax lot: (a) Equal to or larger than one-half acre not currently containing permanent buildings or improvements; or (b) Equal to or larger than five acres where less than one-half acre is occupied by permanent buildings or improvements. For the purpose of criteria (a) above, lands with improvement values of $0 are considered vacant.	OAR 660-009-005(14)
Partially Vacant Land	Partially vacant tax lots are those between one and five acres occupied by a use that could still be further developed based on the zoning. This determination was based on a visual assessment and City staff verification.	No statutory definition
Developed Land	OAR 660-009-005(1) defines developed land as "Non-vacant land that is likely to be redeveloped during the planning period." Lands not classified as vacant, partially vacant, undevelopable, or public or exempt are considered developed.	OAR 660-009-005(1)

Development Status	Definition	Statutory Authority
Public Land	Lands in public or semipublic ownership are considered unavailable for commercial or industrial development. This includes lands in Federal, State, County, or City ownership as well as lands owned by churches and other semipublic organizations. Public lands will be identified using the Clackamas County Assessment property tax exemption codes.	No statutory definition
Undevelopable	Vacant tax lots less than one-half acre in size are considered undevelopable.	No statutory definition

Step 3: Identify Constraints

As shown in Exhibit 45, the BLI included development constraints consistent with guidance in OAR 660-009-0005(2).

Exhibit 45. Constraints to Be Included in BLI

Constraint	Statutory Authority	Threshold	Source
Goal 5 Natural Resource Constraints			
Streams with 50 ft. Buffer	OAR 660-009-0005(2)	Identified by City staff	City of Sandy
Natural Hazard Constraints			
Regulatory Floodway	OAR 660-009-0005(2)	Lands within FEMA FIRM identified floodway	FEMA via National Map
100-Year Floodplain	OAR 660-009-0005(2)	Lands within FEMA FIRM 100-year floodplain	FEMA via National Map
Steep Slopes	OAR 660-009-0005(2)	Slopes greater than 15%	Oregon Department of Geology and Mining Industries
Landslide Susceptibility	OAR 660-009-0005(2)	High or Very High Landslide Susceptibility	Oregon Department of Geology and Mining Industries
BPA Easement	OAR 660-009-0005(2)	Lands within the BPA Easement area	City of Sandy
Flood and Slope Hazards (FSH) Overlay	OAR 660-009-0005(2)	Lands within the FSH Overlay	City of Sandy

These areas were evaluated as prohibitive constraints (unbuildable). All constraints were merged into a single constraint file, which was then used to identify the area of each tax lot that

is constrained. These areas were deducted from lands that are identified as vacant or partially vacant.

Step 4: Verify Inventory Results

ECONorthwest used a multistep verification process. The first verification step involved a "visual assessment" of land classifications using GIS and recent aerial photos. The visual assessment involves reviewing classifications overlaid on recent aerial photographs to verify uses on the ground. ECONorthwest reviewed all tax lots included in the inventory using the visual assessment methodology. The second round of verification involved City staff verifying the visual assessment output. ECONorthwest amended the BLI based on City staff review and a discussion of staff's comments. The final verification is reviewed by stakeholders, most especially by members of the Technical Advisory Committee (TAC).

Step 5: Tabulate and Map Results

The results of the commercial BLI are presented in tabular and map format in the remainder of Appendix B. This includes a zoning/comprehensive plan map, the land base by classification, vacant and partially vacant lands by plan designation, and vacant and partially vacant lands by plan designation with constraints revealed.

Exhibit 46. Comprehensive Plan Designations and Zones Included in the Commercial and Industrial BLI, Sandy UGB, 2022
Source: ECONorthwest analysis, City of Sandy, Clackamas County

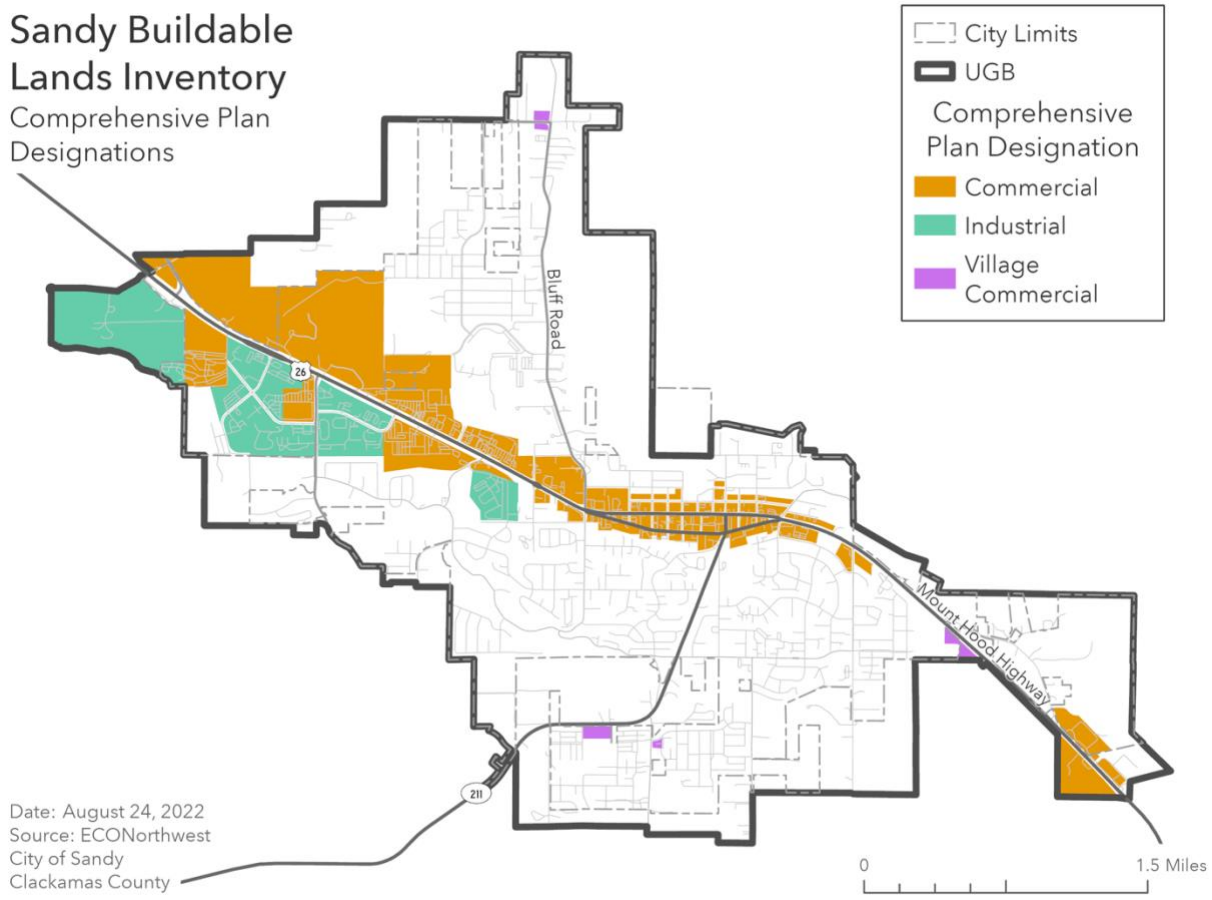


Exhibit 47. Employment Land Development Constraints by Constraint Type, Sandy UGB, 2022
Source: ECONorthwest analysis, City of Sandy, Clackamas County

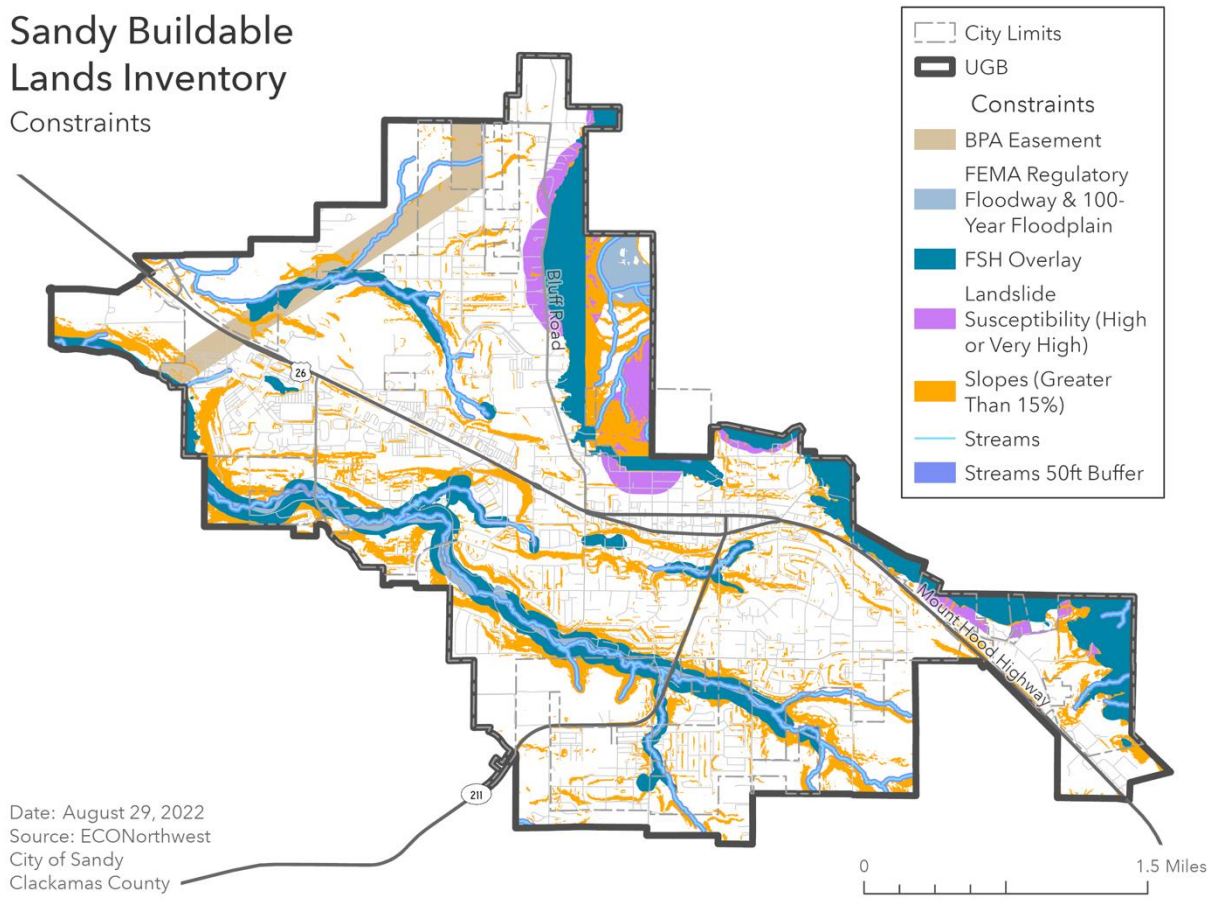
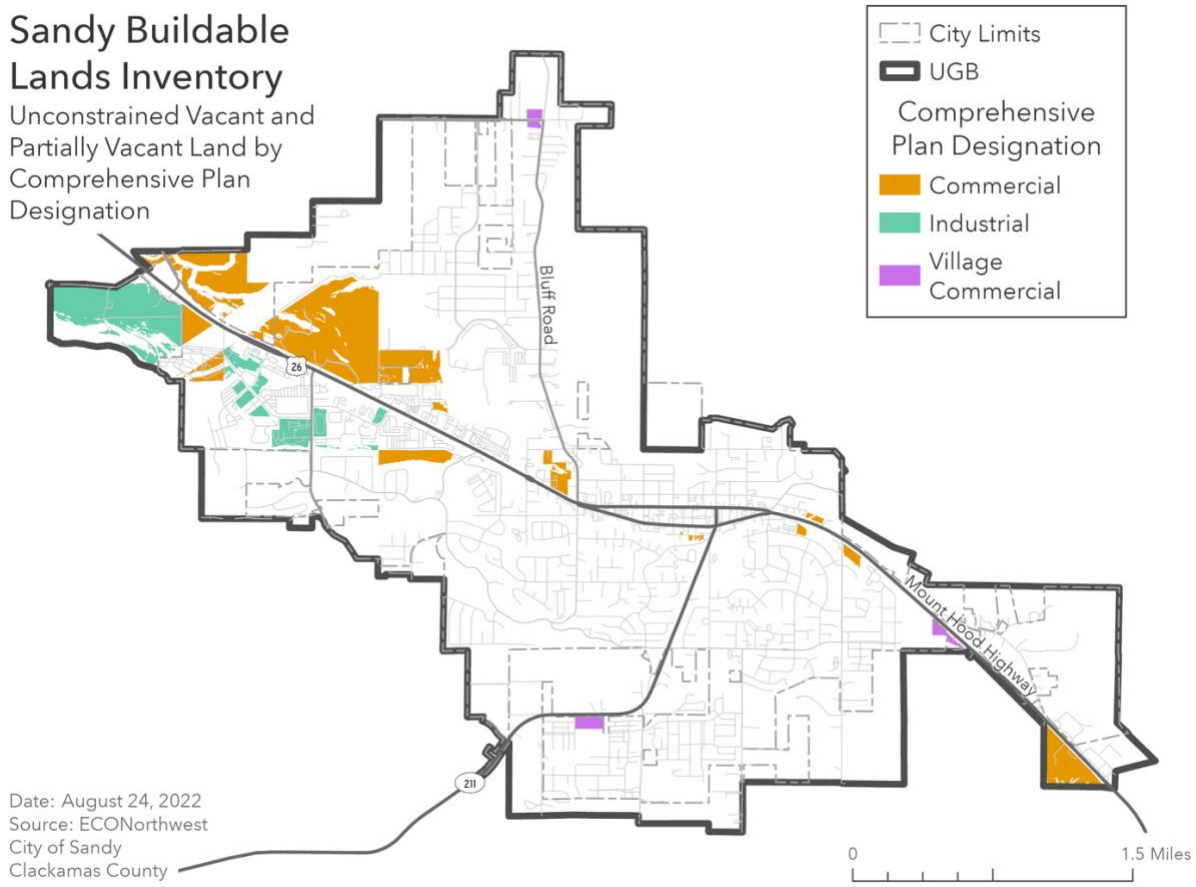


Exhibit 48. Buildable Employment Land by Plan Designation with Development Constraints, Sandy UGB, 2022
Source: ECONorthwest analysis, City of Sandy, Clackamas County



ORDINANCE NO. 2024-02

AN ORDINANCE ADOPTING THE ECONOMIC OPPORTUNITY ANALYSIS (EOA) AS A SUPPORTING DOCUMENT TO THE CITY OF SANDY'S COMPREHENSIVE PLAN

WHEREAS, Oregon statutes and administrative rules require every municipality to enact a Comprehensive Plan and land use regulations in conformance with Statewide Planning Goals and Guidelines, and coordinate with other affected government agencies; and

WHEREAS, in late 2021, the City of Sandy received a Technical Assistance Grant from the Department of Land Conservation and Development (DLCD) to contract with ECONorthwest to develop several documents to inform land use planning citywide; and

WHEREAS, one of the documents developed is the 2023-2043 Economic Opportunity Analysis (EOA) Report (Exhibit A); and

WHEREAS, the EOA Report is intended to identify issues with land use that supports employment and unmet economic needs; and

WHEREAS, the EOA Report addresses the specific requirement of Oregon's Statewide Planning Goal 9 and the Goal 9 administrative rules at OAR 660-009; and

WHEREAS, the EOA Report will act as a supporting document to aid in the development of new and updated Comprehensive Plan policies; and

WHEREAS, the case File No. 23-049 CPA staff report (Exhibit B) includes findings supporting the adoption of the EOA Report; and

WHEREAS, the City of Sandy Planning Commission held a public hearing on February 26, 2024, where the Commission recommended that the City Council adopt the EOA as an official support document to the Comprehensive Plan; and

WHEREAS, the City Council held a public hearing on April 1, 2024, and, after considering all of the information in the record and all testimony received, believes that it is in the best interest of the City to adopt the EOA Report.

NOW, THEREFORE, THE CITY OF SANDY ORDAINS AS FOLLOWS:

Section 1: The City of Sandy 2023-2043 Economic Opportunity Analysis dated September 2023, attached as Exhibit A to this Ordinance and incorporated herein by reference, is hereby adopted in its entirety.

Section 2: The City of Sandy 2023-2043 Economic Opportunity Analysis is hereby made an official appendix and support document to the Sandy Comprehensive Plan.

Section 3: In support of this Ordinance, the City Council adopts the findings as presented in the File No. 23-049 CPA Staff Report, attached as Exhibit B, and incorporated herein by reference.

This ordinance is adopted by the City Council of the City of Sandy 1st day of April, 2024.

_____

Stan Pulliam, Mayor

ATTEST:

_____

Jeffrey Aprati, City Recorder

ORDINANCE NO. 2024-03

AN ORDINANCE ADOPTING THE HOUSING CAPACITY ANALYSIS (HCA) AS A SUPPORTING DOCUMENT TO THE CITY OF SANDY'S COMPREHENSIVE PLAN

WHEREAS, Oregon statutes and administrative rules require every municipality to enact a Comprehensive Plan and land use regulations in conformance with Statewide Planning Goals and Guidelines, and coordinate with other affected government agencies; and

WHEREAS, in late 2021, the City of Sandy received a Technical Assistance Grant from the Department of Land Conservation and Development (DLCD) to contract with ECONorthwest to develop several documents to inform land use planning citywide; and

WHEREAS, one of the documents developed is the 2023-2043 Housing Capacity Analysis (HCA) Report (Exhibit A); and

WHEREAS, the HCA Report is intended to identify issues with residential land use and unmet housing needs; and

WHEREAS, the HCA addresses the specific requirement of Oregon's Statewide Planning Goal 10 and the Goal 10 administrative rules at OAR 660-008; and

WHEREAS, the HCA Report will act as a supporting document to aid in the development of new and updated Comprehensive Plan policies; and

WHEREAS, the case File No. 23-049 CPA staff report (Exhibit B) includes findings supporting the adoption of the HCA Report; and

WHEREAS, the City of Sandy Planning Commission held a public hearing on February 26, 2024, where the Commission recommended that the City Council adopt the HCA as an official support document to the Comprehensive Plan; and

WHEREAS, the City Council held a public hearing on April 1, 2024, and, after considering all of the information in the record and all testimony received, believes that it is in the best interest of the City to adopt the HCA Report.

NOW, THEREFORE, THE CITY OF SANDY ORDAINS AS FOLLOWS:

Section 1: The City of Sandy 2023-2043 Housing Capacity Analysis dated January 2023, attached as Exhibit A to this Ordinance and incorporated herein by reference, is hereby adopted in its entirety.

Section 2: The City of Sandy 2023-2043 Housing Capacity Analysis is hereby made an official appendix and support document to the Sandy Comprehensive Plan.

Section 3: In support of this Ordinance, the City Council adopts the findings as presented in the File No. 23-049 CPA Staff Report, attached as Exhibit B, and incorporated herein by reference.

This ordinance is adopted by the City Council of the City of Sandy 1st day of April, 2024.

_____

Stan Pulliam, Mayor

ATTEST:

_____

Jeffrey Aprati, City Recorder