ATTACHMENT I: SOCIOECONOMIC IMPACT ASSESSMENT

Socioeconomic Review

Goldeneye Energy Storage Project

June 2024

Prepared for:

Goldeneye Energy Storage, LLC 14302 FNB Parkway Omaha, NE 68154

Prepared by:



1750 S Harbor Way, Suite 400 Portland, OR 97201

Table of Contents

1.0	PRO	PROJECT OVERVIEW1								
2.0	SUM	SUMMARY OF RESULTS 1								
3.0	SOCI	SOCIOECONOMICS STUDY AREA1								
4.0	0 POPULATION, LABOR FORCE, AND HOUSING									
	4.1	Popula	tion and Labor Force Impacts							
		a)	Population and growth rate data for the most current ten-year period for the county or counties and incorporated cities in the study area							
		b)	Published forecast population figures for the study area for both the construction and operation periods							
		c)	Numbers and percentages describing the race/ethnic composition of the cities and counties in the study area							
		d)	Aggregate per capita and household incomes, including the number and percentages of the population below the poverty level for the cities and counties within the study area							
		e)	A description of whether or not any minority or low-income populations would be displaced by this project or disproportionately impacted							
		f)	The average annual work force size, total number of employed workers, and the number and percentage of unemployed workers including the year that data are most recently available. Employment numbers and percentage of the total work force should be provided for the primary employment sectors							
		g)	An estimate by month of the average size of the project construction, operational work force by trade, and work force peak periods							
		h)	An analysis of whether or not the locally available work force would be sufficient to meet the anticipated demand for direct workers and an estimate of the number of construction and operation workers that would be hired from outside of the study area if the locally available work force would not meet the demand							
		i)	A list of the required trades for the proposed project construction							
		j)	An estimate of how many direct or indirect operation and maintenance workers (including family members and/or dependents) would temporarily relocate 11							
		k)	An estimate of how many workers would potentially commute on a daily basis and where they would originate							
	4.2	Housin	g Impacts							
		a)	Housing data from the most recent ten-year period that data are available, including the total number of housing units in the study area, number of units occupied, number and percentage of units vacant, median home value, and							

	median gross rent. A descripion of the available hotels, motels, bed and breakfasts, campgrounds or other recreational facilities
b)	How and where the direct construction and indirect work force would likely be housed. A description of the potential impacts on area hotels, motels, bed and
,	breakfasts, campgrounds and recreational facilities
C)	Whether or not meeting the direct construction and indirect work force's housing needs might constrain the housing market for existing residents and whether or
	not increased demand could lead to increased median housing values or median

gross rents and/o new housing construction. Describe mitigation plans, if needed, to meet shortfalls in housing needs for these direct and indirect work forces...... 16

List of Tables

Population in Washington Counties and Incorporated Communities in the
Socioeconomic Study Area
Population Projections for Washington Counties in the Socioeconomic Study Area, 2025
to 2045
Race and Ethnicity in Washington Counties and Incorporated Communities in the
Socioeconomic Study Area, 20225
Income and Poverty in Washington Counties and Incorporated Communities in the
Socioeconomic Study Area, 20226
Average Annual Workforce, 20237
Employment by Economic Sector, 2022
Existing Construction Workforces in the Mount Vernon-Anacortes and Bellingham MSAs
by Occupation, 202210
Housing Characteristics in Counties and Incorporated Communities in the
Socioeconomic Study Area, 2022
Number of Housing Units in Counties and Incorporated Communities in the
Socioeconomic Study Area, 2013 and 202213
Rental Housing in Counties and Incorporated Communities in the Socioeconomic Study
Area, 2022

List of Figures

Figure 1.	Estimated Average On-Site Constructi	on Workforce by Month	9
Figure 1.	Estimated Average On-Site Constructi	on workforce by Month	•

1.0 PROJECT OVERVIEW

Goldfinch Energy Storage, LLC (the Applicant) proposes to construct and operate the Goldeneye Energy Storage Project (Project), a stand-alone 200-megawatt / 800-megawatt hour battery energy storage system, with related interconnection and ancillary support infrastructure. Located in unincorporated Skagit County, Washington, approximately 0.5 mile northeast of the city of Sedro-Woolley, the Project will not generate electricity but will instead provide augmentation for Skagit County's electrical grid. The Project will interconnect with the existing Puget Sound Energy Sedro-Woolley substation, located approximately 0.4 mile southwest of the Project site, via a new underground 230-kilovolt transmission line. Project construction is anticipated to take 14 months for a target in-service date of October 2026. The Project is expected to have an operational life of 20 years.

2.0 SUMMARY OF RESULTS

This Socioeconomic Review addresses components of Washington Administrative Code (WAC) 463-60-535 for the Application for Site Certification (ASC). The document contains information about impacts to population, labor force, and housing. The Applicant anticipates that the construction workforce will consist almost entirely of local workers. Local workers are those who normally reside within daily commuting distance of the Project site and would commute daily to the Project site from their homes. Non-local workers seeking temporary accommodation near the Project site are expected to be limited to occasional visitors from out of town and construction managers, if one or more are hired from outside the local area. If hired from outside the area, construction management staff are expected to temporarily relocate to the vicinity of the Project for the duration of their employment. Based on the very limited number of non-local workers potentially involved, the temporary influx of these workers is not expected to affect the availability of temporary housing resources (hotels, motels, or recreational vehicle [RV] parks or campgrounds), constrain the housing market for existing residents, or result in changes in housing values, rents, or new housing construction. As indicated in the following review, numerous temporary housing resources are available within daily commuting distance of the Project site.

3.0 SOCIOECONOMICS STUDY AREA

The primary socioeconomic study area for this analysis is based on WAC 463-60-535 and incorporates areas that may be affected by employment within a 1-hour commute of the Project area. The Project area is located in unincorporated Skagit County, Washington, approximately 0.5 mile northeast of the city of Sedro-Woolley. Larger communities within a 1-hour commute of the Project site include the cities of Everett and Marysville to the south, the city of Bellingham to the north, and the city of Mount Vernon, also to the south. Everett and Marysville are located in Snohomish County, Bellingham is in Whatcom County, and Mount Vernon, the closest of these four communities to the facility site, is in Skagit County. Incorporated communities within an approximately 1-hour commute of the Project site are identified in Table 1, below.

The area within an approximately 1-hour commute of the Project area includes parts of three counties: Skagit, Snohomish, and Whatcom. All three counties are part of a separate Metropolitan

Statistical Area (MSA). MSAs consist of integrated geographic regions typically made up of an urbanized economic core (a principal city or cities) and economically related counties (Office of Management and Budget 2023). Skagit County makes up the Mount Vernon-Anacortes MSA, which consists of the principal cities of Mount Vernon and Anacortes and the surrounding county. The Bellingham MSA consists of the city of Bellingham and surrounding county (Whatcom County). Snohomish County located to the south is part of the larger Seattle-Tacoma-Bellevue MSA, which also includes King and Pierce Counties, along with nine principal cities, including Seattle, Tacoma, and Bellevue. Only one of the nine principal cities, Everett, is in Snohomish County, and within 1 hour of the Project site.

4.0 POPULATION, LABOR FORCE, AND HOUSING

This section addresses components of WAC 463-60-535 related to population, labor force, and housing.

4.1 **Population and Labor Force Impacts**

a) Population and growth rate data for the most current ten-year period for the county or counties and incorporated cities in the study area.

Skagit County had an estimated population of 132,000 in 2023 (Table 1). More than half of the population (60 percent) lived in one of eight incorporated communities. The largest incorporated community in Skagit County is Mount Vernon, which accounted for 27 percent of the total population, followed by Anacortes (14 percent) and Sedro-Woolley (10 percent). Skagit County is the 11th most populated county in Washington, with an average population density of 76.3 people per square mile in 2023 compared to a statewide average of 119.7 people per square mile (Washington Office of Financial Management [OFM] 2023a; U.S. Census Bureau 2024a).

Total population in Skagit County increased by 12,500 people or 10.5 percent between 2014 and 2023, an increase below the state average of 14.1 percent over the same period (Table 1). The population in Sedro-Woolley, the closest community to the Project site, increased by more than twice the county average over this period (21.6 percent compared to 10.5 percent), with a net gain of almost 2,300 people (Table 1). Population growth results from either net in-migration or natural increase. Net inmigration occurs when more people move to an area than leave. Natural increase occurs when there are more births than deaths. Migration accounted for 75 percent of statewide population growth in Washington between 2014 and 2023, with natural increase accounting for the remaining 25 percent. Migration played a larger role in Skagit County, accounting for approximately 92 percent of population growth over this period, with natural increase accounting for the remaining 8 percent (Washington OFM 2023b).

Snohomish County had an estimated population of 859,800 in 2023 (Table 1). Two-thirds of the population (66 percent) lived in one of 20 incorporated communities, 6 of which are within an approximately 1-hour commute of the Project site (Table 1). Everett and Marysville, the two largest communities, together accounted for 22 percent of total population, and are both within 1 hour of the Project site. The third most populated county in Washington, Snohomish County, had an average

population density of 412.1 people per square mile in 2023 compared to a statewide average of 119.7 people per square mile (Washington OFM 2023a; U.S. Census Bureau 2024a).

 Table 1.
 Population in Washington Counties and Incorporated Communities in the Socioeconomic Study Area

			2014 to 2023			
Geographic Area	2014	2023	Net Change	Percent Change	Annual Growth Rate	
Skagit County ^{1/}	119,500	132,000	12,500	10.5%	1.0	
Anacortes	16,190	18,020	1,830	11.3%	1.1	
Burlington	8,445	9,905	1,460	17.3%	1.6	
Concrete	720	810	90	12.5%	1.2	
Hamilton	305	295	(10)	-3.3%	-0.3	
La Conner	895	990	95	10.6%	1.0	
Lyman	445	425	(20)	-4.5%	-0.5	
Mount Vernon	33,170	35,590	2,420	7.3%	0.7	
Sedro-Woolley	10,610	12,900	2,290	21.6%	2.0	
Unincorporated	48,720	53,065	4,345	8.9%	0.9	
Snohomish County ^{2/}	741,000	859,800	118,800	16.0%	1.5	
Arlington	18,360	21,740	3,380	18.4%	1.7	
Darrington	1,350	1,505	155	11.5%	1.1	
Everett	104,900	114,200	9,300	8.9%	0.9	
Marysville	62,600	73,780	11,180	17.9%	1.7	
Snohomish	9,270	10,330	1,060	11.4%	1.1	
Stanwood	6,530	8,585	2,055	31.5%	2.8	
Other Incorporated	217,655	255,225	37,570	17.3%	1.6	
Unincorporated	320,335	374,435	54,100	16.9%	1.6	
Whatcom County ^{3/}	207,600	235,800	28,200	13.6%	1.3	
Bellingham	82,810	95,960	13,150	15.9%	1.5	
Blaine	4,865	6,310	1,445	29.7%	2.6	
Everson	2,570	3,135	565	22.0%	2.0	
Ferndale	12,710	16,330	3,620	28.5%	2.5	
Lynden	12,920	16,520	3,600	27.9%	2.5	
Nooksack	1,435	1,560	125	8.7%	0.8	
Sumas	1,468	1,810	342	23.3%	2.1	
Unincorporated	88,822	94,175	5,353	6.0%	0.6	
State Total	6,968,170	7,951,150	982,980	14.1%	1.3	

Source: Washington OFM 2022a, 2023a

1/ All eight incorporated communities in Skagit County are within an approximately 1-hour commute from the Project.

2/ Six of the 20 incorporated communities in Snohomish County are within an approximately 1-hour commute; the other 14, not included here (Bothell [part], Brier, Edmonds, Gold Bar, Granite Falls, Index, Lake Stevens, Lynnwood, Mill Creek, Monroe, Mountlake Terrace, Mukilteo, Sultan, and Woodway), are more than 1 hour away.

3/ All seven incorporated communities in Whatcom County are within an approximately 1-hour commute from the Project.

Total population in Snohomish County increased by an estimated 118,800 people or 16.0 percent between 2014 and 2023, an increase above the state average of 14.1 percent (Table 1). Natural increase accounted for almost one-third (31 percent) of the increase, with net in-migration making up the remaining 69 percent (Washington OFM 2023b). Whatcom County had an estimated population of 235,800 in 2023 (Table 1). Almost half of the population (47 percent) lives in the city of Bellingham, with 34 percent living in one of six other incorporated communities and 19 percent in unincorporated parts of the county. Whatcom County is the ninth most populated county in Washington, with an average population density of 111.9 people per square mile in 2023 compared to a statewide average of 119.7 people per square mile (Washington OFM 2023a; U.S. Census Bureau 2024a).

Total population in Whatcom County increased by an estimated 28,200 people or 13.6 percent between 2014 and 2023, an increase slightly below the state average of 14.1 percent (Table 1). More people moved to than from Whatcom County over this period, with net in-migration accounting for most (90 percent) of the population gain over this period, with natural increase making up the remaining 10 percent (Washington OFM 2023b).

b) Published forecast population figures for the study area for both the construction and operation periods

The Washington OFM prepares county population projections for planning under Washington state's Growth Management Act (GMA). High-, medium- and low-growth expectations are prepared for each county, with the medium series considered the most likely because it is based on assumptions that have been validated with past and current information. Current projections developed in support of the GMA extend through 2050.

The Project is expected to have an operational life of 20 years. Population is projected to continue grow from 2020 through 2045 in the study area counties, as well as statewide (Table 2). From 2020 to 2025, population was projected to increase by 5.0 percent and 6.4 percent in Skagit and Snohomish Counties, respectively, and 5.9 percent in Whatcom County compared to a statewide average of 5.1 percent. Population was also projected to increase at a faster rate in Snohomish County from 2020 to 2045, with a projected increase of about 32 percent (261,500 people), compared to smaller relative increases of 24 percent (31,300 people) in Skagit County, 29 percent (65,900 people) in Whatcom County, and 25 percent (1.9 million people) statewide (Table 2).

Geographic Area	2020	2025	2030	2035	2040	2045
Skagit County	129,523	136,028	142,805	149,164	155,142	160,830
Snohomish County	827,957	881,083	935,370	988,014	1,039,254	1,089,406
Whatcom County	226,847	240,321	254,158	267,462	280,275	292,714
Washington State	7,706,310	8,100,384	8,502,764	8,884,512	9,248,473	9,598,597

Table 2. Population Projections for Washington Counties in the Socioeconomic Study Area, 2025 to 2045

Source: Washington OFM 2022b

Note:

1/ Data for 2020 are federal census counts for that year. The remaining numbers are medium-growth projections developed by the Washington OFM.

c) Numbers and percentages describing the race/ethnic composition of the cities and counties in the study area.

According to the most recent Census estimates, approximately two-thirds (66 percent) of the population of Washington state is White alone. Persons of Hispanic or Latino origin were identified as the single largest minority group, accounting for 13 percent of the total population (Table 3). A larger

share of the total population in Skagit County was identified as White (72 percent), with persons of Hispanic or Latino origin also accounting for a larger share than the statewide average (19 percent compared to 13 percent) (Table 3). The majority of the populations in the eight incorporated communities in Skagit County was White alone, with White populations ranging from 56 percent (Mount Vernon) to 86 percent (Anacortes) (Table 3).

Table 3.Race and Ethnicity in Washington Counties and Incorporated Communities in the
Socioeconomic Study Area, 2022

	Percent of Total					
Geographic Area	Total Population ^{1/}	White ^{2/}	Hispanic or Latino ^{2/}	American Indian and Alaska Native ^{2/}	Other Race ^{2/3/}	Two or More Races ^{2/}
Skagit County	129,480	72%	19%	1%	3%	4%
Anacortes city	17,667	86%	7%	1%	3%	4%
Burlington city	9,361	65%	26%	1%	5%	4%
Concrete town	792	63%	21%	1%	3%	12%
Hamilton town	376	82%	9%	0%	3%	6%
La Conner town	1,000	72%	13%	9%	3%	4%
Lyman town	386	82%	5%	0%	0%	13%
Mount Vernon city	35,120	56%	35%	0%	5%	3%
Sedro-Woolley city	12,470	67%	26%	1%	3%	3%
Snohomish County	828,337	65%	11%	1%	17%	6%
Arlington city	20,263	72%	15%	1%	8%	5%
Darrington town	1,233	87%	9%	0%	1%	2%
Everett city	110,847	59%	17%	0%	18%	6%
Marysville city	70,847	68%	15%	1%	10%	6%
Snohomish city	10,133	83%	5%	0%	4%	7%
Stanwood city	8,051	86%	2%	3%	3%	7%
Whatcom County	226,523	77%	10%	2%	6%	5%
Bellingham city	91,353	77%	10%	1%	8%	5%
Blaine city	5,865	70%	16%	0%	9%	5%
Everson city	2,960	74%	21%	0%	1%	3%
Ferndale city	15,130	72%	13%	2%	8%	5%
Lynden city	15,723	78%	13%	1%	3%	5%
Nooksack city	1,564	83%	13%	0%	0%	3%
Sumas city	1,397	77%	9%	4%	4%	7%
Washington	7,688,549	66%	13%	1%	14%	6%

Source: U.S. Census Bureau 2024b

Notes:

1/ Estimates are annual totals developed as part of the 2018-2022 American Community Survey 5-Year Estimates.

2/ Non-Hispanic only. The federal government considers race and Hispanic/Latino origin to be two separate and distinct concepts. People identifying as Hispanic or Latino origin may be of any race. The data summarized in this table present Hispanic/Latino as a separate category.

3/ The "Other Race" category presented here includes census respondents identifying as Black or African American, Asian, Native Hawaiian and Other Pacific Islander, or Some Other Race.

The majority of the populations in Snohomish and Whatcom Counties also identified as White alone, accounting for 65 percent and 77 percent of total populations, respectively (Table 3). This was also the case for the communities in these counties. The White shares of the populations in the Snohomish County communities within a 1-hour commute of the Project site ranged from 59 percent (Everett) to 87 percent (Darrington). The White share of the population in the Whatcom County communities ranged from 70 percent (Blaine) to 83 percent (Nooksack) (Table 3).

d) Aggregate per capita and household incomes, including the number and percentages of the population below the poverty level for the cities and counties within the study area.

Income and poverty data are summarized for the three counties, incorporated communities, and Washington state in Table 4. Per capita and median household incomes were below the state averages in two of the three counties (Skagit and Whatcom counties) and higher in the other (Snohomish County). Per capita and median household incomes were below the state averages in all the incorporated communities within an approximately 1-hour commute of the Project area in Washington, with two exceptions. Per capita income in Anacortes and median household income in Marysville were higher than the corresponding state averages (Table 4).

The estimated share of households below the poverty level in Washington state was 9.9 percent in 2022. The corresponding rates in Skagit and Whatcom Counties were higher than the state average, with an estimated 12.0 percent and 12.9 percent of households below the poverty level, respectively. The percent of households below the poverty level was lower than the state average in Snohomish County (7.6 percent compared to 9.9 percent). The share of households below the poverty level in the incorporated communities ranged from 6.5 percent (Marysville) to 18.8 percent (Darrington) (Table 4).

	Per capita	income ^{1/,2/}	Median house	Percent of	
Geographic Area	2022 Dollars	Percent of State Per Capita	2022 Dollars	Percent of State Median	Population Below the Poverty Level ^{1/}
Skagit County	41,191	85%	82,029	91%	12.0%
Anacortes city	49,833	102%	86,911	96%	8.4%
Burlington city	34,942	72%	68,737	76%	10.4%
Concrete town	37,834	78%	82,375	91%	14.9%
Hamilton town	38,535	79%	64,063	71%	17.0%
La Conner town	47,466	97%	72,981	81%	7.9%
Lyman town	34,188	70%	81,250	90%	10.9%
Mount Vernon city	33,522	69%	69,227	77%	17.7%
Sedro-Woolley city	30,136	62%	72,281	80%	15.1%
Snohomish County	49,215	101%	104,083	115%	7.6%
Arlington city	43,785	90%	89,587	99%	7.4%
Darrington town	29,540	61%	48,750	54%	18.8%
Everett city	40,215	83%	77,806	86%	12.1%
Marysville city	40,238	83%	98,288	109%	6.5%

Table 4. Income and Poverty in Washington Counties and Incorporated Communities in the Socioeconomic Study Area, 2022

	Per capita income ^{1/,2/}		Median house	Percent of	
Geographic Area	2022 Dollars	Percent of State Per Capita	2022 Dollars	Percent of State Median	Population Below the Poverty Level ^{1/}
Snohomish city	44,689	92%	81,731	90%	7.7%
Stanwood city	39,247	81%	85,357	94%	6.8%
Whatcom County	40,916	84%	77,581	86%	12.9%
Bellingham city	40,287	83%	64,026	71%	18.7%
Blaine city	37,061	76%	78,633	87%	15.3%
Everson city	32,295	66%	76,645	85%	10.8%
Ferndale city	33,508	69%	82,466	91%	10.9%
Lynden city	39,677	81%	86,175	95%	7.1%
Nooksack city	37,130	76%	76,125	84%	11.7%
Sumas city	35,777	73%	82,188	91%	9.7%
Washington	48,685	100%	90,325	100%	9.9%

Source: U.S. Census Bureau 2024c, 2024d, 2024e

Notes:

1/ Estimates are annual totals developed as part of the 2018-2022 American Community Survey 5-Year Estimates.

2/ Per capita and median household income estimates are in 2022 inflation-adjusted dollars.

e) A description of whether or not any minority or low-income populations would be displaced by this project or disproportionately impacted.

As indicated in Part 3, Section O of the ASC, four residences will be removed as part of the Project. These residences are located on the Project site and owned by the current landowner. Construction and operation of the Project is not expected to displace or otherwise affect other existing or future housing, including housing for minority or low-income populations. Construction and operation of the Project is also not expected to disproportionately impact minority or low-income populations in any other way.

f) The average annual work force size, total number of employed workers, and the number and percentage of unemployed workers including the year that data are most recently available. Employment numbers and percentage of the total work force should be provided for the primary employment sectors.

Average annual workforce, employment, and unemployment data are summarized for the three counties and the state of Washington (Table 5). The average annual unemployment rate was 4.0 percent in Washington in 2023. Viewed by county, the corresponding rates ranged from 3.4 percent (Snohomish County) to 4.6 percent (Skagit County) (Table 5).

Geographic Area	Civilian Labor Force	Employed	Unemployed	Unemployment Rate (%)
Skagit County	62,323	59,484	2,839	4.6%
Snohomish County	459,901	444,448	15,453	3.4%
Whatcom County	115,772	110,811	4,961	4.3%
Washington State	4,058,533	3,895,393	163,140	4.0%

|--|

Sources: Washington Employment Security Department 2024

Summary employment data are presented by economic sector for the three counties and the state of Washington in Table 6. An estimated 72,502 people were employed in Skagit County in 2022. Government was the largest economic sector based on employment, accounting for about 17 percent of total employment, followed by the retail trade sector, which accounted for about 12 percent (Table 6). In Snohomish County, an estimated 411,508 people were employed in the county in 2022. Manufacturing was the largest sector by employment, accounting for 13 percent of total employment (Table 6). An estimated 134,622 people were employed in Whatcom County in 2022. Government and healthcare and social assistance were the largest employers, accounting for 12 percent and 11 percent of total employment, respectively (Table 6).

Economic Sector	Skagit County	Snohomish County	Whatcom County	Washington State			
Total Employment ^{1/}	72,502	411,508	134,622	4,815,623			
Percent of Total							
Agriculture	4.0%	0.6%	3.2%	1.9%			
Forestry, fishing, and hunting	1.4%	0.3%	(D)	0.9%			
Mining	0.2%	0.1%	(D)	0.1%			
Utilities	0.3%	0.0%	0.1%	0.1%			
Construction	7.8%	8.3%	8.0%	6.1%			
Manufacturing	8.8%	13.0%	7.3%	5.9%			
Wholesale trade	2.2%	2.7%	2.6%	3.1%			
Retail trade	11.8%	10.7%	10.5%	8.9%			
Transportation & warehousing	3.9%	5.7%	3.7%	5.2%			
Information	0.7%	1.3%	1.4%	4.0%			
Finance and insurance	4.1%	4.9%	3.8%	4.4%			
Real estate, rental and leasing	5.5%	5.3%	6.1%	5.4%			
Professional, scientific, and technical services	5.3%	6.8%	6.8%	8.1%			
Management of companies and enterprises	0.3%	0.3%	0.5%	2.3%			
Administrative and waste management services	3.4%	5.1%	4.4%	4.9%			
Educational services	1.3%	1.5%	1.7%	1.7%			
Healthcare and social assistance	8.5%	10.0%	11.0%	10.6%			
Arts, entertainment, and recreation	1.8%	1.9%	2.6%	2.1%			
Accommodation and food services	6.7%	6.2%	7.3%	6.2%			
Other services (except public administration)	5.3%	5.0%	5.7%	4.5%			
Government	16.9%	10.2%	11.9%	13.5%			

Table 6. Employment by Economic Sector, 2022

Source: U.S. Bureau of Economic Analysis 2023

(D) Not shown to avoid disclosure of confidential information; estimates for these items are, however, included in the totals.

1/ Employment estimates include self-employed individuals. Employment data are by place of work, not place of residence, and, therefore, include people who work in the area but do not live there. Employment is measured as the average annual number of jobs, both full and part time, with each job counted at full weight. 2/ Percentages for Whatcom County do not sum to 100 because employment counts are not provided for some sectors to avoid disclosing confidential information (identified by [D] in the table).

g) An estimate by month of the average size of the project construction, operational work force by trade, and work force peak periods.

The Applicant anticipates a 14-month construction period with a target in-service date of October 2026. On-site employment is expected to average 43 workers over this period, with the on-site construction workforce expected to peak at 80 individuals. Figure 1 shows the estimated average on-site construction workforce by month. On-site construction employment would generally follow a bell-shaped curve, with monthly average employment ranging from 20 on-site workers in months 1 and 2 to 80 workers in months 4 and 5. On-site employment would gradually decrease following the peak, with an estimated 25 workers employed in months 11 through 14, the final months of construction.



Figure 1. Estimated Average On-Site Construction Workforce by Month

The expected life of the Project is assumed to be 20 years. The Applicant anticipates that one to two maintenance personnel would be employed during operation.

h) An analysis of whether or not the locally available work force would be sufficient to meet the anticipated demand for direct workers and an estimate of the number of construction and operation workers that would be hired from outside of the study area if the locally available work force would not meet the demand.

The Applicant anticipates that all of the on-site construction workforce would be hired locally, with the possible exception of one or more construction managers. For this analysis, we assume that all (100 percent) of the estimated workforce already resides within a 1-hour commute of the Project area, resulting in an estimated peak of 80 local workers employed on-site at one time (Figure 1).

Review of occupational data for two of the Washington MSAs within a 1-hour commute indicates that the area has a large construction workforce pool. Representative occupational employment estimates

for the disciplines required to construct the Project are presented for the Mount Vernon-Anacortes and Bellingham MSAs in Table 7. In addition to total employment, Table 7 also provides mean hourly and annual wage data. These data suggest that the existing construction workforce should be sufficient to meet the peak estimated Project-related demand for construction workers. Overall, more than 5,000 workers are currently employed in five of the required labor disciplines in these two MSAs (Table 7). In addition, a large construction workforce exists to the south in the Seattle-Tacoma-Bellevue MSA (Snohomish, King, and Pierce Counties), with 55,700 workers currently employed in the five labor disciplines identified in Table 7 (U.S. Bureau of Labor Statistics [BLS] 2023). In addition, more than 1,400 iron workers, the other labor discipline required for construction, are employed in the Seattle-Tacoma-Bellevue MSA.

These estimates cover wage and salary workers in nonfarm establishments and do not include the self-employed or owners and partners in unincorporated firms, which could be another potential source of construction labor for the Project (BLS 2023).

Table 7. Existing Construction Workforces in the Mount Vernon-Anacortes and Bellingham MSAs by Occupation, 2022

		Mount Ve	rnon-Anaco	ortes MSA	Bellingham MSA		
SOC CODE	Labor Discipline	Total Employ- ment	Mean Hourly Wage	Mean Annual Wage	Total Employ- ment	Mean Hourly Wage	Mean Annual Wage
11-9021	Construction Managers	160	\$57.45	\$119,490	260	\$58.79	\$122,280
47-2061	Construction Laborers	430	\$27.41	\$57,010	1,030	\$26.26	\$54,620
47-2073	Operating Engineers and Other Construction Equipment Operators	240	\$40.08	\$83,370	240	\$39.00	\$81,120
47-2111	Electricians	450	\$44.66	\$92,880	560	\$38.21	\$79,490
53-3032	Heavy and Tractor-Trailer Truck Drivers	790	\$29.46	\$61,280	1,150	\$27.86	\$57,960

Source: BLS 2023

Notes:

SOC - standard occupational classification; MSA - Metropolitan Statistical Area; na - not available

1/ Data are for May 2022, the most current data available.

2/ The Mount Vernon-Anacortes and Bellingham MSAs consist of Skagit County and Whatcom County, respectively.

3/ Mean hourly and annual wage estimates represent wages and salaries only, and do not include employee bonuses or nonwage costs to the employer, such as health insurance or employer contributions to retirement plans.

i) A list of the required trades for the proposed project construction.

Trades required during the construction phase of the Project include:

- Construction managers and supervisors
- Construction laborers
- Equipment operators
- Iron workers
- Electricians
- Truck drivers

The corresponding occupational categories for all trades, with the exception of iron workers, are identified above in Table 7. Review of the above occupational data did not identify any iron workers

currently employed in the Mount Vernon-Anacortes and Bellingham MSAs, but as noted above, more than 1,400 iron workers are employed in the neighboring Seattle-Tacoma-Bellevue MSA, part of which is within daily commuting distance of the Project.¹

j) An estimate of how many direct or indirect operation and maintenance workers (including family members and/or dependents) would temporarily relocate.

The Applicant anticipates that one to two maintenance workers would be employed on-site during operation. These workers and their families are expected to be hired locally and will likely already reside in the area. No operation and maintenance workers or family members are expected to temporarily relocate to the area.

k) An estimate of how many workers would potentially commute on a daily basis and where they would originate.

Workers hired locally (i.e., within a 1-hour commute of the Project) would commute daily between the Project and their normal place of residence. During construction, for this analysis we assume that an estimated peak of 80 local workers would commute daily to and from the Project site. Most of these workers are likely to normally reside in the larger nearby communities. Workers will generally access the Project site via Interstate 5, Washington State Route 20, and Minkler Road.

During operations, an estimated one to two workers would commute to and from the Project.

4.2 Housing Impacts

a) Housing data from the most recent ten-year period that data are available, including the total number of housing units in the study area, number of units occupied, number and percentage of units vacant, median home value, and median gross rent. A description of the available hotels, motels, bed and breakfasts, campgrounds or other recreational facilities

Housing resources are summarized by county, incorporated community, and state in Tables 8 and 9. The data presented in these tables are annual estimates for 2022 prepared by the U.S. Census Bureau using 5 years of data (2018 to 2022) (U.S. Census Bureau 2024f).² The U.S. Census Bureau defines a housing unit as a house, apartment, mobile home or trailer, group of rooms, or single room occupied or intended to be occupied as separate living quarters. There were an estimated 55,875 housing units in Skagit County in 2022, with the cities of Mount Vernon and Sedro-Woolley together accounting for almost one-third of the total, 24 percent and 9 percent, respectively (Table 8). An estimated total of 5,051 units were vacant in Skagit County in 2022, approximately 9.0 percent of the total. Median values for owner-occupied homes in Skagit County were below the state median, with the exception of Anacortes, ranging from about \$281,300 in Hamilton to \$590,700 in Anacortes. Median rent for renter-occupied units ranged from about \$960 (Concrete) to just over \$2,000 (Hamilton) (Table 8).

¹ Iron workers are identified for the purposes of this discussion as workers employed in SOC 47-2221 – Structural Iron and Steel Workers.

² Data from the same series are also presented for 2013 in Table 9. These estimates are based on 5 years of data from 2009 to 2013 (U.S. Census Bureau 2014).

Snohomish County had an estimated total of 323,438 housing units in 2022, most of which are located in communities that are more than a 1-hour commute from the Project site. Everett, the largest city within a 1-hour commute, accounted for about 15 percent of county-wide housing units (Table 8). An estimated 15,795 or 4.9 percent of all housing units were vacant in Snohomish County in 2022. Median values for owner-occupied homes in the communities within 1 hour ranged from \$329,300 (Darrington) to \$529,400 (Snohomish). Median rent for renter-occupied units ranged from about \$880 (Darrington) to more than \$1,700 (Arlington and Marysville) (Table 8).

	Total Housing Units	Occupied Housing Units	Vacant Housing		Median	Median
Geographic Area			Number of Units	Percent of Total	Home Value (dollars)	Gross Rent (dollars)
Skagit County	55,875	50,824	5,051	9.0%	444,300	1,350
Anacortes	8,522	7,799	723	8.5%	590,700	1,526
Burlington	4,141	3,850	291	7.0%	397,200	1,530
Concrete	409	351	58	14.2%	288,400	963
Hamilton	189	179	10	5.3%	281,300	2,021
La Conner	539	489	50	9.3%	434,700	1,327
Lyman	144	144	0	0.0%	334,600	1,125
Mount Vernon	13,233	12,942	291	2.2%	385,200	1,185
Sedro-Woolley	4,758	4,562	196	4.1%	361,400	1,432
Snohomish County	323,438	307,643	15,795	4.9%	592,800	1,794
Arlington	8,098	7,502	596	7.4%	448,500	1,709
Darrington	633	566	67	10.6%	329,300	883
Everett	46,913	43,840	3,073	6.6%	471,200	1,611
Marysville	26,371	25,423	948	3.6%	456,600	1,763
Snohomish	4,599	4,330	269	5.8%	529,400	1,291
Stanwood	2,941	2,884	57	1.9%	486,000	1,520
Whatcom County	100,394	91,171	9,223	9.2%	475,000	1,370
Bellingham	42,358	40,085	2,273	5.4%	528,600	1,385
Blaine	2,584	2,329	255	9.9%	450,500	1,285
Everson	1,045	1,045	0	0.0%	419,000	1,202
Ferndale	5,624	5,179	445	7.9%	429,000	1,341
Lynden	5,972	5,786	186	3.1%	478,500	1,405
Nooksack	590	561	29	4.9%	405,400	1,565
Sumas	565	533	32	5.7%	305,700	871
State Total	3,216,243	2,979,272	236,971	7.4%	473,400	1,592

Table 8.	Housing Characteristics in Counties and Incorporated Communities in the Socioeconomic Study
	Area, 2022

Source: U.S. Census Bureau 2024f

Note:

1/ Estimates are annual totals developed as part of the 2018-2022 American Community Survey 5-Year Estimates.

Whatcom County had an estimated total of 100,400 housing units in 2022. The city of Bellingham accounted for 42 percent of the total (Table 8). An estimated 9,223 or 9.2 percent of housing units

were vacant in Whatcom County in 2022. County-wide, the median value for owner-occupied homes was \$475,000 and the median rent for renter-occupied units was \$1,370 (Table 8).

The number of housing units has increased statewide in Washington and in all three counties over the last decade (since 2013), with net gains of about 4,400 units (8.6 percent), 34,600 units (12.0 percent), and 9,500 units (10.5 percent) in Skagit, Snohomish, and Whatcom Counties, respectively (Table 9). Viewed by community within a 1-hour commute, the largest absolute increase (6,300 units) was in Bellingham, followed by Marysville (3,500 units) and Everett (2,100 units) (Table 9).

			2013 to 2022	
Geographic Area	2013	2022	Net Change	Percent Change
Skagit County	51,434	55,875	4,441	8.6%
Anacortes	7,465	8,522	1,057	14.2%
Burlington	3,635	4,141	506	13.9%
Concrete	371	409	38	10.2%
Hamilton	130	189	59	45.4%
La Conner	456	539	83	18.2%
Lyman	225	144	-81	-36.0%
Mount Vernon	12,321	13,233	912	7.4%
Sedro-Woolley	4,392	4,758	366	8.3%
Snohomish County	288,797	323,438	34,641	12.0%
Arlington	7,209	8,098	889	12.3%
Darrington	669	633	-36	-5.4%
Everett	44,770	46,913	2,143	4.8%
Marysville	22,846	26,371	3,525	15.4%
Snohomish	3,968	4,599	631	15.9%
Stanwood	2,620	2,941	321	12.3%
Whatcom County	90,877	100,394	9,517	10.5%
Bellingham	36,015	42,358	6,343	17.6%
Blaine	2,513	2,584	71	2.8%
Everson	936	1,045	109	11.6%
Ferndale	4,564	5,624	1,060	23.2%
Lynden	5,068	5,972	904	17.8%
Nooksack	458	590	132	28.8%
Sumas	518	565	47	9.1%
State Total	2,899,538	3,216,243	316,705	10.9%

Table 9.Number of Housing Units in Counties and Incorporated Communities in the Socioeconomic
Study Area, 2013 and 2022

Sources: U.S. Census Bureau 2014, 2024f

Note:

1/ Estimates are annual totals developed as part of the ACS 5-Year Estimates.

Rental housing resources are summarized in Table 10. Viewed by county, these estimates suggest that rental housing is available within a 1-hour commute in all three Washington counties, with about 150 units available for rent in Skagit County, almost 2,000 units available in Snohomish County

communities, and about 900 units available in Whatcom County.³ Additional units classified for seasonal, recreational, or occasional use may also be available in all three Washington counties (Table 10). Rental housing options may also include other special living situations, such as Airbnb units and spare bedrooms in homes that residents would be willing to rent to construction workers. These types of potential housing opportunities are not included in the data presented in Table 10.

Table 10. Rental Housing in Counties and Incorporated Communities in the Socioeconomic Study Area, 2022

Geographic Area	Total Vacant Housing Units ^{1/}	Rental Vacancy Rate ^{1/}	Units Available for Rent ^{1/}	Units for Seasonal, Recreational, or Occasional Use ^{1/2/}
Skagit County	5,051	1.1%	167	2,719
Anacortes	723	1.8%	47	362
Burlington	291	3.6%	75	0
Concrete	58	7.1%	7	26
Hamilton	10	0.0%	0	0
La Conner	50	4.0%	8	11
Lyman	0	0.0%	0	0
Mount Vernon	291	0.2%	11	66
Sedro-Woolley	196	0.0%	0	0
Snohomish County	15,795	4.5%	4,566	3,372
Arlington	596	6.8%	183	73
Darrington	67	0.0%	0	0
Everett	3,073	5.8%	1,405	27
Marysville	948	3.6%	283	50
Snohomish	269	2.6%	50	25
Stanwood	57	5.6%	57	0
Whatcom County	9,223	2.9%	1,033	4,588
Bellingham	2,273	3.4%	790	413
Blaine	255	4.5%	38	89
Everson	0	0.0%	0	0
Ferndale	445	4.8%	93	0
Lynden	186	0.0%	0	0
Nooksack	29	0.0%	0	0
Sumas	32	0.0%	0	7
State Total	236,971	4.0%	45,935	84,274

Sources: U.S. Census Bureau 2024f, 2024g

1/ All data are annual estimates from the American Community Survey 5-year estimates for 2018-2022.

2/ Housing units for seasonal, recreational, or occasional use are generally considered to be vacation homes. They are not included in the estimated number of housing units shown here as available for rent.

Temporary housing is also available in the form of hotel and motel rooms. Data compiled by the Skagit Tourism Promotion Area (TPA) Advisory Board identified 21 hotels with a combined total of

³ Note these counts are just for the incorporated communities within an approximately 1-hour commute and do not include homes in unincorporated areas or communities further than 1 hour from the Project site.

1,340 guestrooms operating in Skagit County in 2021 (Skagit TPA Advisory Board 2021). This total was limited to hotels with 40 or more rooms and included one hotel with 40 rooms in Sedro-Woolley, the closest community to the Project. Other nearby Skagit County communities with hotels with more than 40 rooms include Burlington (8 hotels, 577 rooms) and Mount Vernon (6 hotels; 398 rooms), both of which are within a short commuting distance of the facility. Hotel and motel rooms are also available in neighboring Whatcom and Snohomish Counties. In Whatcom County, for example, at least 12 hotels and motels are located in the Bellingham area, approximately 45 minutes from the Project (Visit Bellingham 2024).

Temporary accommodation in the study area also includes RV parks and campgrounds. Parks and campgrounds in Skagit County include 19 RV parks and campgrounds, with more than 1,600 RV spaces. These facilities include one RV park with 36 spaces in Sedro-Woolley, with other facilities located in Burlington, Mount Vernon, and elsewhere in the county. A review of online resources indicated that additional RV parks and campgrounds are also available within a 1-hour commute in neighboring Whatcom and Snohomish Counties, with seven parks/campgrounds (668 spaces) identified in Snohomish County.⁴

b) How and where the direct construction and indirect work force would likely be housed. A description of the potential impacts on area hotels, motels, bed and breakfasts, campgrounds and recreational facilities.

Project construction is expected to require approximately 14 months to complete with a target inservice date of October 2026. The Applicant anticipates that the construction workforce will consist almost entirely of local workers who would commute daily to the Project site from their homes. Nonlocal workers seeking temporary accommodation near the Project site are expected to be limited to occasional visitors from out of town and construction managers, if one or more are hired from outside the local area. If hired from outside the area, construction management staff are expected to temporarily relocate to the vicinity of the Project for the duration of their employment. Occasional visitors would likely stay for a few days at a time. Based on the very limited number of non-local workers potentially involved, the temporary influx of these workers is not expected to affect area hotels, motels, bed and breakfasts, campgrounds, or recreational facilities.

⁴ Data on RV parks and campsites were compiled from a number of online sources, including rvshare.com, goodsam.com, and campground.rvlife.com, as well as individual campground web sites.

c) Whether or not meeting the direct construction and indirect work force's housing needs might constrain the housing market for existing residents and whether or not increased demand could lead to increased median housing values or median gross rents and/or new housing construction. Describe mitigation plans, if needed, to meet shortfalls in housing needs for these direct and indirect work forces.

As discussed in the preceding section, estimated construction-related demand for temporary housing is expected to be negligible and is, therefore, not expected to constrain the housing market for existing residents or lead to changes in housing values, rents, or new housing construction.

5.0 **REFERENCES**

- BLS (U.S. Bureau of Labor Statistics). 2023. Occupational Employment and Wage Statistics. May 2022 Data. Available online at: https://www.bls.gov/oes/current/oes_48300.htm
- Office of Management and Budget. 2023. Revised Delineations of Metropolitan Statistical Areas, Micropolitan Statistical Areas, and Combined Statistical Areas, and Guidance on Uses of the Delineations of These Areas. OMB Bulletin No. 23-01. July 21. Available online at: https://www.whitehouse.gov/wp-content/uploads/2023/07/OMB-Bulletin-23-01.pdf
- Skagit TPA Advisory Board. 2021. 2021 TPA Work Plan. January 14. Available online at: https://www.skagitcounty.net/CountyCommissioners/Documents/TPA/2021%20TPA%20Wor k%20Plan.pdf
- U.S. Bureau of Economic Analysis. 2023. CAEMP25N Total full-time and part-time employment by industry, 2022. November 16. Available online at: http://www.bea.gov.
- U.S. Census Bureau. 2014. DP04: Selected Housing. 2009-2013 American Community Survey 5-Year Estimates. Available online at: https://data.census.gov/cedsci/
- U.S. Census Bureau. 2024a. QuickFacts. Available online at: https://www.census.gov/quickfacts/US
- U.S. Census Bureau. 2024b. B03002: Hispanic or Latino Origin by Race. 2018-2022 American Community Survey 5-Year Estimates. Available online at: https://data.census.gov/cedsci/
- U.S. Census Bureau. 2024c. B19301: Per Capita Income in The Past 12 Months (In 2022 Inflationadjusted Dollars). 2018-2022 American Community Survey 5-Year Estimates. Available online at: https://data.census.gov/cedsci/
- U.S. Census Bureau. 2024d. B19013: Median Household Income in the Past 12 Months (in 2022 Inflation-Adjusted Dollars). 2018-2022 American Community Survey 5-Year Estimates. Available online at: https://data.census.gov/cedsci/
- U.S. Census Bureau. 2024e. S1701: Poverty Status in the Past 12 Months. 2018-2022 American Community Survey 5-Year Estimates. Available online at: https://data.census.gov/cedsci/
- U.S. Census Bureau. 2024f. DP04: Selected Housing. 2018-2022 American Community Survey 5-Year Estimates. Available online at: https://data.census.gov/cedsci/

- U.S. Census Bureau. 2024g. B25004: Vacancy Status. Universe: Vacant Housing Units. 2018-2022 American Community Survey 5-Year Estimates. Available online at: https://data.census.gov/cedsci/
- Visit Bellingham. 2024. Hotels and Resorts. Available online at: https://www.bellingham.org/hotelsand-resorts?RegID=1_2_4_6_7_9
- Washington Employment Security Department. 2024. Resident Civilian Labor Force and Employment in Washington State. Historical resident labor force and employment, not seasonally adjusted. January 23. Available online at: https://esd.wa.gov/labormarketinfo/labor-force
- Washington OFM (Office of Financial Management). 2022a. Intercensal Estimates of April 1 Population and Housing, 2010-2020. Forecasting and Research Division. Version: 20220726. July 26.
 Available online at: https://ofm.wa.gov/washington-data-research/population-demographics
- Washington OFM. 2022b. Projections of the Total Resident Population for Growth Management. 2022 GMA Projections - Middle Series. December. Available online at: https://ofm.wa.gov/washington-data-research/population-demographics/populationforecasts-and-projections/growth-management-act-county-projections
- Washington OFM. 2023a. April 1, 2023 Population of Cities, Towns and Counties Used for Allocation of Selected State Revenues. Forecasting and Research Division. April. Available online at: https://ofm.wa.gov/washington-data-research/population-demographics
- Washington OFM. 2023b. Population and Components of Change, 1960 to Present. Forecasting and Research Division. July 26. Available online at: https://ofm.wa.gov/washington-dataresearch/population-demographics