

HOUSING MARKET ANALYSIS

MA-05 Overview

Housing Market Analysis Overview:

Walnut Creek lies approximately 23 miles east of San Francisco at the foot of Mt. Diablo. The city's growth throughout the 1960s and 1970s was predominately residential. A commercial development boom followed in the 1980s and 1990s. The Association of Bay Area Governments (ABAG) estimated Walnut Creek's 2020 population at 69,010 and project a 2025 population of 71,170 and a 2030 population of 73,915.

According to the 2018 ACS 5-Year Estimates, seniors (65 and older) make up about 29 percent of Walnut Creek's population (around 20,000 persons). The percent of seniors living in Walnut Creek (29 percent) is higher than Countywide (15 percent). Persons with disabilities with one or more disability account for about 12.9 percent of the population. The need for specialized senior housing will increase with the continued growth of the city's senior and "frail elderly" population (age 75 and older).

Of those who are cost burdened, 23% of senior renters and 67% of senior owners spent greater than 30 percent of their incomes on housing costs, considered "housing overpayment." Overpayment is particularly prevalent among senior owner, with over half overpaying. The vast majority (70 percent) of the senior households in Walnut Creek own their own home (ACS 2013-2017). Senior homeowners may require assistance in performing regular home maintenance or repair activities due to physical limitations.

Housing Stock: Walnut Creek has a current (2019) housing stock of 33,920 units, representing an increase of 1,239 new units since 2010 (Table 179). From 2000 to 2010, Walnut Creek added 1,256 units to its housing stock.

The housing stock composition differs from a typical suburban city. Single-family detached units make up 37percent (12,541) of the housing supply and multi-family units make up 63 percent (21,379). With the exception of mobile homes, all types of housing increased over the past years; in particular, the number of multi-family units increased by ten percent since 2010. The current vacancy rate is 7.4 percent in 2019. This vacancy rate is somewhat higher than the ideal vacancy rate of 5 percent.

Housing Age Conditions: According to the 2013-2017 American Community Survey, 73 percent of the total 31,008 housing units in Walnut Creek are over 38 years old. Most of the housing stock (79 percent) was built between 1960 and 1979. A general rule in the housing industry is that structures older than 30 years begin to show signs of deterioration and require reinvestment to maintain their quality. Unless properly maintained, homes older than 50 years require major renovations to remain in good working order.

Housing Costs and Affordability: Walnut Creek has higher housing prices than many other areas of Contra Costa County. According to the ACS 2013-2017, the median home price was \$704,900 in Walnut Creek, compared to \$522,300 countywide (Table 178).

The average rents for apartment units in 2019 were \$2,510 for a one-bedroom apartment and \$3,210 for a two-bedroom apartment (Rent Jungle). A household would need to make at least \$100,404 to afford the one-bedroom without paying more than 30% of their income, and an income of \$128,656.80 to afford the 2-bedroom apartment.

According to the 2009-2013 CHAS Reports, 45 percent of renters and 34 percent of homeowners in Walnut Creek were overpaying for housing (Table 177). Severe overpayment impacts 21 percent of the city’s renters. In terms of lower income (less than 80 percent of AMI) households overpaying, 3,585 lower-income renters and 3,270 lower-income homeowners were faced with overpayment in Walnut Creek. Of these lower-income households facing overpayment, 1,310 renters (30 percent) and 1,330 owners (20 percent) earned extremely low incomes (less than 30 percent of AMI).

Table 178 – Median Home Value, Walnut Creek			
	Base Year: 2014	Most Recent Year: 2017	% Change
Median Home Value	591,700	704,900	19%
Median Contract Rent	1,422	1,731	22%
<i>Data Source: 2013-2017 ACS 5-Year Estimates</i>			

Table 179 - State Department of Finance E-5 City/County Population and Housing Estimates, 1/1/19												
City/County	Population			Housing Units							Vacancy	Persons per HH
	Total	Household	Group Quarters	Total	Single Detached	Single Attached	2-4	5 +	Mobile Homes	Occu-pied	Rate	
Walnut Creek	70,121	69,119	1,002	33,920	12,541	5,041	4,392	11,946	0	3,424	7.4%	2.20
County	1,155,879	1,145,404	10,475	416,062	277,588	32,009	26,626	70,556	7,283	389,644	6.3%	2.94

Table 180 – Year Housing Built				
	Owner-Occupied		Renter-Occupied	
	Number	%	Number	%
2000 or later	1,025	5.2%	979	8.7%
1980-1999	3,436	17.4%	2,895	25.8%
1950-1979	14,299	72.2%	6,882	61.4%
Before 1950	1,034	5.2%	458	4.1%
Total	19,784	100%	11,214	100%
<i>Data Source: 2013-2017 American Community Survey 5-Year Estimates</i>				

MA-45 Non-Housing Community Development Assets - 91.410, 91.210(f)

Introduction

Walnut Creek serves as an important employment center for Contra Costa County and the San Francisco Bay Area. According to the ACS 2011-2015 Census, Walnut Creek has a concentration of health care and professional service jobs. The top employers in Walnut Creek are: John Muir Medical Center, Central Garden and Pet, AAA Northern California, ARC Document Solution, Heald College, Brown and Caldwell, Amerit Fleet Solutions, Carollo Engineers, SpencerPI, Valent USA, Stead Motors, Heffernan Group Foundation, Fehr & Peers, and City of Walnut Creek (Zippia).

Major sectors leading the way in Walnut Creek are retail, education, health care and other professional services. According to the Bureau of Labor Statistics, as of December 2019, the San Francisco-Oakland-Hayward Metropolitan Statistical Area (which Walnut Creek is considered under) unemployment rate was 2.2 percent compared to 3.9 percent for the state. ABAG projects the City will have 57,885 jobs by 2025, which would be an increase of 9,920 positions over ABAG's projected 2010 employment (47,965) level on which regional planning initiatives are based.

Despite the strength of Walnut Creek's professional and health care sector, many of the workers who make up the diversity of Walnut Creek's workforce earn limited incomes and are priced out of the local housing market. Because of high housing prices in Walnut Creek and surrounding areas, many of these professionals must live farther away where homes are less costly and with longer commute distances to their place of work.

According to the 2017 Longitudinal Employer-Household Dynamics Census, 35 percent of all primary jobs in Walnut Creek pay less than \$40,000 gross per year irrespective of the employee's place of residence (Table 188). This means about one third of workforce are priced-out of the housing market and the City is reliant on workers who live outside the jurisdiction. Walnut Creek's ratio of number of jobs to number of housing units is 1.58 with 53,721 jobs compared to 33,920 housing units. Wages earned and cost of housing are important considerations in addressing the needs of the local workforce.

Economic Development Market Analysis

Business Activity

Table 181 – Business Activity					
Business by Sector	# of Workers	# of Jobs	Share of Workers %	Share of Jobs %	Jobs less workers %
Agriculture, Mining, Oil & Gas Extraction	315	12	1	0	-1
Arts, Entertainment, Accommodations	2,625	5,122	11	10	-1
Construction	1,099	772	5	1	-4
Education and Health Care Services	4,682	19,254	20	37	17
Finance, Insurance, and Real Estate	2,497	7,500	10	14	4
Information	1,190	1,346	5	3	-2
Manufacturing	1,335	758	6	1	-5
Other Services	934	1,581	4	3	-1
Professional, Scientific, Management Services	5,055	7,653	21	15	-6
Public Administration	0	0	0	0	0
Retail Trade	2,451	6,543	10	13	3
Transportation and Warehousing	583	584	2	1	-1
Wholesale Trade	1,071	745	4	1	-3
Total	23,837	51,870	--	--	--
<i>Data Source: 2011-2015 ACS (Workers), 2015 Longitudinal Employer-Household Dynamics (Jobs)</i>					

Labor Force

Table 182 – Labor Force	
Total Population in the Civilian Labor Force	32,755
Civilian Employed Population 16 years and over	30,580
Unemployment Rate	6.65
Unemployment Rate for Ages 16-24	16.90
Unemployment Rate for Ages 25-65	4.84
<i>Data Source: 2011-2015 ACS</i>	

Table 183 – Occupations by Sector	
Occupations by Sector	# of People
Management, business and financial	13,165
Farming, fisheries and forestry occupations	880
Service	2,095
Sales and office	6,455
Construction, extraction, maintenance and repair	1,055
Production, transportation and material moving	560
<i>Data Source: 2011-2015 ACS</i>	

Travel Time

Table 184 – Travel Time		
Travel Time	Number	Percentage
< 30 Minutes	13,615	50%
30-59 Minutes	9,235	34%
60 or More Minutes	4,605	17%
Total:	27,455	100%
<i>Data Source: 2011-2015 ACS</i>		

Education:

Table 185 – Educational Attainment by Employment Status			
Educational Attainment	In Labor Force		Not in Labor Force
	Civilian Employed	Unemployed	
Less than high school graduate	505	35	215
High school graduate (includes equivalency)	1,690	165	695
Some college or Associate's degree	5,460	545	1,815
Bachelor's degree or higher	17,935	850	3,100
<i>Data Source: 2011-2015 ACS</i>			

Table 186 – Educational Attainment by Age					
	Age				
	18–24 yrs	25–34 yrs	35–44 yrs	45–65 yrs	65+ yrs
Less than 9th grade	14	100	65	65	180
9th to 12th grade, no diploma	93	115	145	270	450
High school graduate, GED, or alternative	860	465	450	1,635	2,840
Some college, no degree	1,850	1,270	1,160	3,290	3,380
Associate's degree	135	395	510	1,210	1,405
Bachelor's degree	1,025	3,930	3,090	6,290	5,465
Graduate or professional degree	120	1,360	2,365	4,865	4,685
<i>Data Source: 2011-2015 ACS</i>					

Table 187 – Median Earnings in the Past 12 Months	
Educational Attainment	Median Earnings in the Past 12 Months
Less than high school graduate	16,966
High school graduate (includes equivalency)	32,357
Some college or Associate's degree	39,672
Bachelor's degree	67,542
Graduate or professional degree	91,067
<i>Data Source: 2011-2015 ACS</i>	

Table 188 – 2017 Longitudinal Employer-Household Dynamics Census, Walnut Creek

Total Primary Jobs		
	2017	
	Count	Share
Total Primary Jobs	53,721	100.0%
<u>Worker Age</u>		
	2017	
	Count	Share
Age 29 or younger	10,238	19.1%
Age 30 to 54	30,632	57.0%
Age 55 or older	12,851	23.9%
<u>Earnings</u>		
	2017	
	Count	Share
\$1,250 per month or less	6,234	11.6%
\$1,251 to \$3,333 per month	12,513	23.3%
More than \$3,333 per month	34,974	65.1%

Based on the Business Activity table above, what are the major employment sectors within your jurisdiction?

Walnut Creek serves as a major employment center for Contra Costa County and the San Francisco Bay Area. According to the LEHD 2015, there are about 51,870 jobs in Walnut Creek. Financial and Professional Service jobs along with Health, Education industries comprise 66 percent of the City’s jobs, followed by Retail (13 percent), and Arts/Entertainment/Accommodations (10 percent).

Table 181 (above) shows that Education and Health Services sector provides the most jobs within the City, about 37 percent. Additionally, the table indicates that there are more jobs than workers, reflecting an undersupply of labor, and the need to import workers. The Professional, Scientific, Management Services sector contains the next largest share of jobs (15 percent) and third goes to Finance, Insurance, and Real Estate sector (14 percent).

Describe the workforce and infrastructure needs of the business community:

Workforce - The County Workforce Development Board of Contra Costa County (WDBCCC) has utilized a sector approach to address workforce and business needs in the region since 2004. As part of its sector engagement process, the WDB bundled quantitative analysis with anecdotal information gathered through business engagement efforts (e.g. interviews, surveys, and conversations), in order to better ascertain business needs, validate labor market projections, and identify skills gaps in the workforce.

In the WDB Local Plan for 2017-2020, the board found that the post-secondary educational attainment levels of young people are lower than what is required to meet the needs of the local economy. Industry trends show that future economic growth will be driven largely by the following industries:

- professional, scientific, and technical services,
- advanced manufacturing,
- clean energy and biotechnology,
- construction,
- health care and educational services, and
- leisure and hospitality industries.

The Board then prioritized and will target investments in the following five industry sectors:

1. Advanced Manufacturing;
2. Health and Life Sciences;
3. Energy;
4. Information Communication Technology (ICT) and Digital Media and
5. Construction

Many of the new jobs created by these industries will require post-secondary education, specifically scientific and technical skills knowledge. Therefore, the WDBCCC will continue to develop educational and career pathways in STEM (Science, Technology, Engineering, Math) fields. Collaboration with regional industry and education partners. It will continue to foster relationships with the East Bay Economic Development Alliance, University of California at Berkeley, Laney College (construction & woodworking), and Los Medanos College. Other key relationships are with the Corporation for Manufacturing Excellence, and the Northern California Small Business Development Center through federally funded programs, such as the Advanced Manufacturing Jobs and Innovation Accelerator Challenge.

The WDB will work with these and other key partners on the development of an East Bay workforce intermediary network to effectively link, align, and leverage funding and resources through increasing the training and advising capacity of the Small Business Development Center (SBDC).

Infrastructure

The infrastructure needs of Walnut Creek's overall business community is largely met due to the City's location within the San Francisco Bay Area. The City has one major interstate highways and is served by the Bay Area Rapid Transit (BART) passenger light rail system, which connects City residents and workers to east, central, and west Contra Costa County, in addition to the greater Bay Area.

Reference to the WBD Workplan:

<https://static1.squarespace.com/static/5821053c725e25b3040c9c1f/t/5cad13ab859ab200011543e2/1554846642703/2019.01.30+-+CCEP.pdf>

Describe any major changes that may have an economic impact, such as planned local or regional public or private sector investments or initiatives that have affected or may affect job and business growth opportunities during the planning period. Describe any needs for workforce development, business support or infrastructure these changes may create.

Several major plans and projects are planned to take hold during the Consolidated Plan years 2020-2025. The following are major projects planned or in progress:

BART Transit Village Project

- This project includes construction of 596 (596 gross and net new) residential units and would bring about 1,275 new residents to the City. The project also includes 22,000 sf of commercial/retail space, an 851 space parking structure and 15 bay bus terminal center in a transit village setting with public and private amenities. Project construction will occur in 3 phases with Phase 1 for the parking structure and bus terminal center already completed.
- Infrastructure needs created by the project include minor re-alignment of surrounding streets and utilities with a complete construction of onsite utilities.
- The project-specific fiscal impact study conducted in 2008 concluded that the project was fiscally net neutral. The project will be subject to development fees of approximately \$12 million to offset permit review costs and to provide affordable housing, transportation improvements, and public art. Long-term fiscal impacts associated with the development include increased property tax revenues and sales tax revenue. To date, the project paid \$4,078,545 and another estimated \$2,000,000 is forthcoming.
- The project's commercial, flex, and office components would generate approximately 142 jobs by 2025. Construction of the project will generate a substantial amount of short-term jobs; construction could take 5 to 8 years. The long-term employment opportunities are possible in retail, maintenance, management, and other services required to maintain a transit village.

North Downtown Specific Plan

- Adopted on October 15, 2019, the Plan will bring both housing and mixed-use development, presumably resulting in a positive economic impact. There are areas

where there are proposed density and height increases and the opportunity for the creation of new jobs.

- Regarding infrastructure needs excluding streetscape improvement, about \$3.8 million of improvements are necessary under the plan to meet the potential increase demand.

West Downtown Specific Plan

- Adopted on September 4, 2018, the Plan will bring both jobs and housing to the area, presumably resulting in a positive economic impact. There are areas where there are proposed density and height increases; however, there is no direct impact to jobs.
- Regarding infrastructure needs, about \$38 million of improvements are necessary under the plan, which do not count operations, maintenance, or replacement reserves.

Active Transportation Plan

- The City adopted a Bicycle Master Plan in 2011 and a Pedestrian Master Plan in 2016; however, since then the transportation space has evolved, such that Cities are now updating these plans as a single comprehensive effort. Staff anticipates following current best practices and plans to update these two documents as a single Plan within the 2020-2025 timeframe.
- The Plan intent is to guide and influence policies, programs, and development standards to make walking, bicycling, and other active modes such as scooters, more safe, comfortable, convenient, and enjoyable. It does this by proposing a system of bikeways and pedestrian facilities that connect neighborhoods to key destinations and centers throughout the city, developing essential support facilities, such as bike parking, suggesting education & enforcement and other programs, and make recommendations for improving safety for walkers, cyclists, and all active users.

How do the skills and education of the current workforce correspond to employment opportunities in the jurisdiction?

Educational attainment in Walnut Creek is notably higher than other areas in the County and state. According to the Census Bureau 2018 ACS 5-Year Estimates, about 65.5 percent of adult residents have a Bachelor's degree or higher as compared to 41.7 percent in the County.

Table 181 Business Activity describes the types of occupations held by Walnut Creek residents. Approximately 81 percent of residents are employed in either managerial/professional occupations (54 percent) or sales and office occupations (27 percent). Relatively higher paying jobs are in both categories, except for certain sales positions, translating into higher incomes for the residents engaged in these activities. The number of residents employed in services increased by 2 percent from 2011 to 2015. In

contrast, there was a 3% decline in the number of residents engaged in the sales and office occupational category.

Overall, about 24.6 percent of residents age 18 and above do not have a college degree. This means that approximately 1/4 of the workforce is without an advanced professional degree, making it more difficult to compete for jobs requiring higher education and technical skills.

Describe any current workforce training initiatives, including those supported by Workforce Investment Boards, community colleges and other organizations. Describe how these efforts will support the jurisdiction's Consolidated Plan.

The City previously partnered and collaborated with the Small Business Development Centers, particularly the Contra Costa County Workforce Development Board (WDBCC). The Small Business Development Center delivered no-cost group trainings and individualized advising to current and aspiring entrepreneurs. This included all types of self-employment from independent contracting to micro-enterprises and small business operations. These efforts support the Strategic Plan's goal to help lower income residents start and retain their own small business. However, due to staff turnover, the Contra Costa County Workforce Development Board no longer houses the Small Business Development Centers, but could potentially return to CDBG in future years.

The City provides continued funding for the Contra Costa Childcare Council's (COCOKids) Road to Success Program, which offers technical assistance, training and general support leading to the State licensing of Walnut Creek family child care providers. The City also continues to support the Contra Costa Small Business Development Center's Small Business Management Assistance program whose goal is to create and retain jobs for low- to moderate-income people through self-employment and micro-enterprise business expansion.

Does your jurisdiction participate in a Comprehensive Economic Development Strategy (CEDS)? No

If so, what economic development initiatives are you undertaking that may be coordinated with the Consolidated Plan? If not, describe other local/regional plans or initiatives that impact economic growth. Not applicable

Discussion Not applicable

MA-50 Needs and Market Analysis Discussion

Are there areas where households with multiple housing problems are concentrated? (include a definition of "concentration")

CDBG law authorizes an exception for grantees with no or very few areas in which 51 percent of residents are low and moderate income. The City contains very few areas of concentration of low/moderate income resident, for example the Rossmoor community, a senior-only housing area. For the purposes of understanding areas where housing problems are concentrated, the City uses the following definition for an area of concentration as 35.56 percent or more.

There are areas within Walnut Creek that have a significantly higher senior (65+) population than that of the surrounding county (29 percent versus 15 percent). A senior-only housing area, Rossmoor, accounts for 20 percent of the total housing stock in the City where the average age of Rossmoor residents is 77 years old. About 11% of the total population in Walnut Creek live in Rossmoor. The average income for the households in that area is \$59,597 (2017 data adjusted for inflation) – less than 80% of area median income. The lower income senior residents in Rossmoor often have multiple housing issues and needs including high housing cost burden, safety and accessibility repairs, and assistance to remain independent.

Are there any areas in the jurisdiction where racial or ethnic minorities or low-income families are concentrated? (include a definition of "concentration")

The City contains no areas of concentration of ethnic minorities. However, there are some census tracts with a higher concentration of low/moderate income resident (refer to Figure 2WC - Low/Mod Income Map), like the Rossmoor community, a senior-only housing area. For the purposes of understanding areas where housing problems are concentrated, the City uses the following definition for an area of concentration as 51 percent or more.

What are the characteristics of the market in these areas/neighborhoods?

The Rossmoor community is restricted to seniors 55 and older. Co-ops, condos, single-family homes and congregate living are spread out over 1,800 acres.

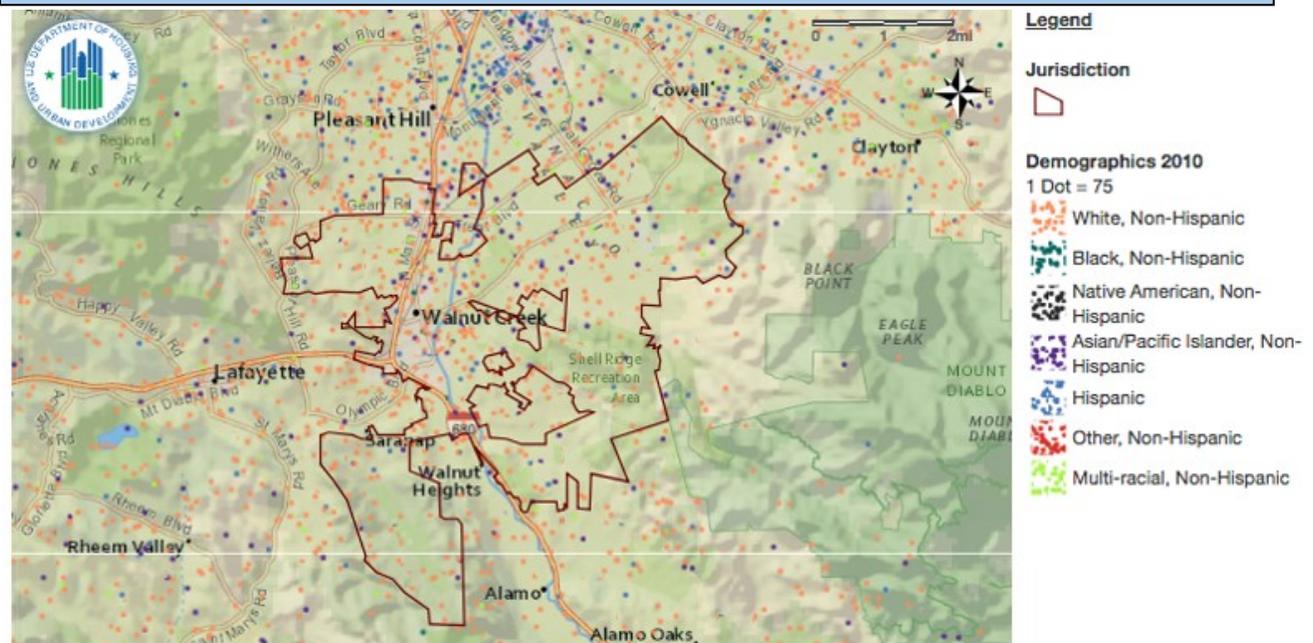
Are there any community assets in these areas/neighborhoods?

The Rossmoor community has amenities and services for the targeted population including a library, bus transportation, counseling services, adult education, and the farmers' market. Community members also frequent the public Senior Center in downtown Walnut Creek.

Are there other strategic opportunities in any of these areas?

Not Applicable

Figure 1WC – Race Distribution, Walnut Creek



MA-60 Broadband Needs of Housing occupied by Low- and Moderate-Income Households - 91.210(a)(4), 91.310(a)(2)

Describe the need for broadband wiring and connections for households, including low- and moderate-income households and neighborhoods.

According to the 2017 ACS 5-year estimates, almost 94% of Walnut Creek households have a computer, and 95% have a broadband internet subscription.

As is illustrated on the accompanying table, the Consortium is well covered by a variety of service providers with varying types of accessibility and speed. Broadband internet availability for the County as a whole at over 95% far exceeds the US average of 79%, and is better than the California average of 94%.

Coverage for the City of Walnut Creek is rated at 99-100%.

Xfinity (Comcast) offers its Internet Essentials program to every unconnected HUD-assisted household and is the primary provider of television and internet throughout the County. All areas have access to the highest speed access to high-speed internet. Xfinity (Comcast) offers this speed service by cable, and AT&T provides it by fiber (with limited coverage) and by DSL. Satellite services at 25 Mbps are offered by ViaSat and HughesNet, while DSL is provided by Sonic, also at a speed of 25 Mbps.

The need for broadband wiring and connections is viewed to be good for lower income Walnut Creek residents.

Describe the need for increased competition by having more than one broadband Internet service provider serve the jurisdiction.

The City of Walnut Creek is served by five providers with a wide range of products, speeds and prices, therefore competition is deemed to be adequate

Table 189 – Consortium Broadband Availability, Walnut Creek									
CDBG Jurisdictions	Broadband Internet Availability > 25 Mbps			Internet Provider Types and Coverage %			Internet Speed Availability in Mbps		
	City	CA	USA	Cable	DSL	Fiber	3	10	25
Antioch	97%	94%	79%	97%	94%	3%	100%	100%	97%
Concord	98%	94%	79%	98%	97%	-	100%	100%	98%
Pittsburg	97%	94%	79%	96%	96%	100%	100%	100%	97%
Walnut Creek	99%	94%	79%	100%	99%	-	100%	100%	99%

MA-65 Hazard Mitigation - 91.210(a)(5), 91.310(a)(3)

Describe the jurisdiction’s increased natural hazard risks associated with climate change.

Contra Costa County and the entitlement jurisdictions of Antioch, Concord, Pittsburg, and Walnut Creek have been assessing hazard risk and the impact of hazards on lower income communities and individuals for many years. The County and partner agencies prepared the Contra Costa County Hazard Mitigation Plan and released the final version in 2018. Volume 1 provides the planning area analysis and elements and Volume 2 provides annexes for each participating agency, including the cities of Walnut Creek, Antioch, and Concord. The City of Pittsburg prepared its own local hazard mitigation plan in 2017.

Walnut Creek is currently preparing a Sustainability Action Plan. This plan will assess the community’s current and forecasted GHG emissions and develop strategies to reduce emissions for all sources, including existing and new housing developments. It will also include efforts to enhance community-wide resilience to climate change-related hazards. This plan includes a climate vulnerability assessment that will assess the impacts and adaptive capacity of community assets and populations to climate related natural hazards. This assessment will then inform the development of adaptation strategies to help Walnut Creek

prepare for, respond to, and recover from natural hazards. Below is a basic assessment of hazard risks facing Contra Costa County and Consortium cities, followed by a general outline of how climate change may alter these hazards and their effects. The Contra Costa Consortium's Consolidated Plan will address current and developing vulnerabilities, and how they will change in the coming years.

By far the greatest natural hazard risk to Walnut Creek is from earthquakes, which are identified as a high risk in all jurisdictions in Contra Costa County. However, recent studies have shown that there is no meaningful and identifiable direct link between climate change and earthquakes (see <https://climate.nasa.gov/news/2926/can-climate-affect-earthquakes-or-are-the-connections-shaky/>).

Severe Weather includes extreme heat events, to which Walnut Creek and other communities in the consortium are prone to, is designated as Medium risk. However, severe weather is more associated with climate change. Severe weather includes:

- Drastic increase in severe heat days, heat waves, and associated health events and energy costs
- Increasingly volatile weather, negatively affecting agricultural yields and recreation/tourism
- Increasingly frequent severe storms, including high winds, hail, and lightning, which can increase risk of flood, landslide, power outages, and disruption of transportation systems

Landslides are designated as high risk and can occur when any slope becomes unstable, causing soil and rocks to slide down the slope. There is potential for landslides to worsen in Walnut Creek and surrounding areas, with wildfires and flooding reducing vegetation and increasing erosion on hillsides within the city, respectively.

Flooding is a medium risk in Walnut Creek and in the other consortium communities, especially along Tice Creek, San Ramon Creek, Walnut Creek, Ygnacio Canal, and Contra Costa Canal. Flooding is projected to increase as winter storms are expected to become more intense with climate change.

Although the Contra Costa County Hazard Mitigation Plan designated wildfire as low risk for Walnut Creek, the city is within the Wildland-Urban Interface. Wildfires can spread between wildland areas and urbanized areas, threatening people and property. Warmer temperatures, an increase in drought conditions, and potentially increasing forestry pests and disease activities are likely to create more fuel for fires on County and State wildlands. Climate change is also expected to extend the fire season throughout much of the year.

Describe the vulnerability to these risks of housing occupied by low- and moderate-income households based on an analysis of data, findings, and methods.

Walnut Creek Hazard Risk Ranking

Based on the Contra Costa County Hazard Mitigation Plan, the hazard risk rankings for Walnut Creek are as follows:

1. Earthquake
2. Landslide
3. Severe weather
4. Flood (including dam failure)
5. Drought
6. Wildfire

Sea level rise or tsunamis won't impact Walnut Creek due to its inland location.

Low income communities face various environmentally and socially driven cumulative impacts on their health. Climate change is projected to exacerbate these public health impacts.

- Many of the County's low income communities in Central and East County live around or Interstate 680, State Route 24, State Route 4, and industrial areas.
- Low income communities have limited access to healthy living conditions inside their homes.
- These communities face negative health impacts from high asthma rates, high rates of cardiovascular disease, and low birth weight as a result of these environmental and social factors.

Severe weather:

- Heat waves and number of excessive heat days are likely to intensify in the coming years.
- Excessive heat can lead to severe health impacts and associated costs. According to the California Department of Public Health, the 2006 summer heat wave in California led to the deaths of over 140 people, many of whom were elderly.
- Because many neighborhoods in Walnut Creek and other consortium communities have high housing burdens, residents are left with few resources to spend on air conditioning installation or the increased energy bills associated with air conditioning use.

Flooding:

- Health impacts related to flooding are associated with releases of hazardous waste and water contamination.

- Flood can spread hazardous material contamination of air, water, and soil to nearby communities.
- Even without the presence of hazardous waste facilities, contaminated water, also known as impaired water, contains toxins that can spread due to flooding.

Landslides and wildfires:

- Low-income communities may not have the ability to retrofit their homes to withstand or protect the structures from damage due to landslides or wildfires.
- Persons without access to lifelines, such as those who do not have a car, may be unable to evacuate in the event of a wildfire or landslide warning.
- Low-income individuals may not be able to afford home insurance to cover the lost due to landslides or wildfires.
- Extreme heat and wind events in California are now causing PG&E to shut off power to reduce the likelihood of a sparks from powerlines starting wildfires. This policy has already shown adverse effects on vulnerable populations that rely on electricity.

Populations likely to be most affected include:

- Unsheltered homeless persons, who are most at risk in times of severe weather, both drought and flooding, with little to no protections from the elements. Unhoused residents can camp along the waterways, rivers and creeks in the city, which make them particularly susceptible to danger from flooding and contamination.
- Seniors and frail elderly, living on a fixed income, who may have a lesser tolerance to high heat conditions due to medical reasons, adverse reactions to heat due to medications, and less access to air-conditioned spaces to stay cool or ability to pay high electric bills to keep it on if they do have it. Transportation to a cooling center may be more challenging for those who cannot drive.
- Persons with disabilities have similar challenges as seniors and frail elderly.
- Families living in overcrowded conditions also face significant challenges in extreme heat events

Table 190 – Hazard Risk Ranking, Walnut Creek

Table 15-11. Hazard Risk Ranking			
Rank	Hazard Type	Risk Rating Score (Probability x Impact)	Category
1	Earthquake ^b	48	High
2	Landslide ^e	39	High
3	Severe weather	30	Medium
4	Flood ^c	18	Medium
5	Dam and levee failure ^a	11	Low
6	Drought	9	Low
7	Wildfire ^f	6	Low
8	Sea level rise ^d	0	None
8	Tsunami	0	None

- a. Based on the level of detail conducted in the risk assessment, the risk ranking for this hazard is focused solely on dam failure impacts. See Chapter 6.4 of Volume 1 for combined dam inundation list on which this assessment is based.
- b. Haywired M7.05 event was used to assign probability and impacts
- c. 1-percent annual chance event was used to assign probability and impacts
- d. 2100 upper range estimates and extreme tide are used to assign probability and impacts
- e. Very High and High severity zones were used to assign probability and impacts
- f. There is no mapped risk in the city, but a score was given due to potential smoke impacts on people and the economy