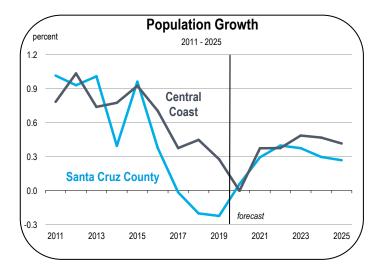
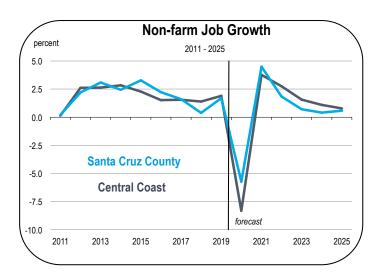
Forecast Summary

- It is estimated that an average of 5,000 to 7,000 jobs will be lost in Santa Cruz County during 2020. Job losses will be heavy in the first half of the year.
- Employment losses will be largest in leisure services, professional business services, and government.
- No sectors are expected to expand in a meaningful way in 2020.
- The unemployment rate averaged 4.8 percent in 2019. It will average between 8 percent and 10 percent for the 2020 calendar year.
- The Santa Cruz County population is expected to grow more slowly than the Central Coast average during the forecast period.
- Home values are not expected to change much in 2020 or 2021.
- Housing production is expected to decline in 2020 but rebound just as quickly in 2021.

Job Growth

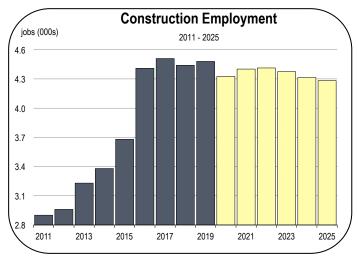
- Total employment in the county will decline by at least 4 percent in 2020. This is an annual average change from 2019.
- In 2021, Santa Cruz County is expected to re-gain many of the jobs that were lost during the Coronavirus Recession.

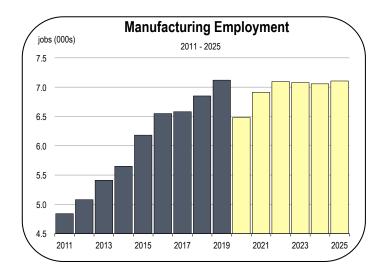




Construction Employment

- The construction sector is expected to lose between 100 and 200 jobs in 2020.
- Most California construction activity was deemed non-essential for portions of March and April, leading to significant construction layoffs that average down total employment in 2020.
- Restrictions on construction were lifted in late April, and overall construction activity began to ramp back up during the summer.
- Construction projects will largely have resumed by 2021 but fewer workers may be used to meet new protocols. Employment might





decline again after 2022 as the list of housing and commercial development shortens.

Manufacturing Employment

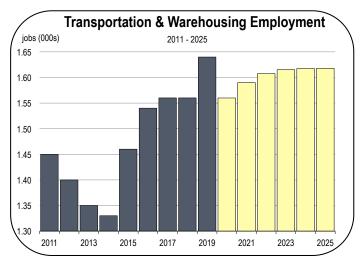
- Manufacturing employment is expected to decrease by up to 10 percent in Santa Cruz County during 2020.
- Manufacturing activity is forecast to rebound after the recession subsides and may approach pre-recession levels by 2022 or 2023.

Transportation and Warehousing Employment

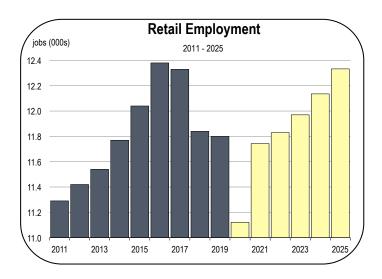
- Most transportation jobs in Santa Cruz County are in trucking and warehousing, where firms deliver goods to and from the Port of Oakland, and store these goods in logistics facilities.
- A meaningful share of Santa Cruz County transportation jobs are in delivery firms like UPS, FedEx, and Instacart. Delivery firms hired large numbers of workers during the second quarter of 2020, and could be among the few corners of the labor market to expand throughout the year.

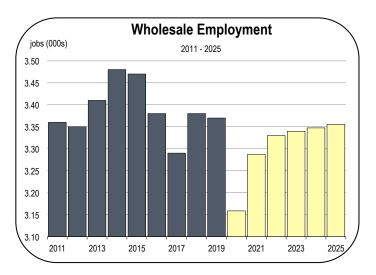
Retail Trade Employment

• The retail sector is expected to lose 600 to 1,200 jobs in 2020 on an annual average basis.



- Many retail chains chose to furlough their employees rather than lay them off completely, and furloughed workers are not considered to be unemployed. This is a technical detail that will mask the true number of work stoppages in the retail sector.
- Accounting for furloughed workers, more than 2,000 retail workers could be effectively not working and not earning an income on an annual average basis in 2020.
- Retail trade jobs will return after in-store shopping is permitted in a sustained way.





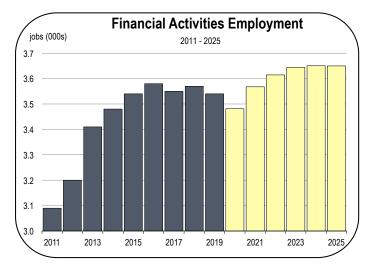
Wholesale Trade Employment

- Wholesale trade employment is expected to fall by at least 200 jobs on an annual average basis in 2020.
- Wholesale employment is unlikely to re-gain all lost jobs due to ongoing consolidation within the industry that was occurring prior to the recession.

Financial Activities Employment

- A few hundred job losses are expected in financial activities because some employers closed, committing their employees to shelter-in-place for health reasons.
- The most prominent losses were in real estate sales and lending.
- There have been far fewer homes on the market in 2020 than there were last year, which should translate into fewer home sales, reducing the need for real estate agents and mortgage brokers.

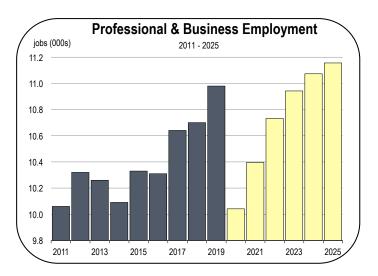
Financial Activities Sub-Sectors 2019	Jobs in Subsector	Subsector's Share of Overall Industry
Real Estate	1,300	37.1%
Insurance	900	25.7%
Banks	800	22.9%
Investment Management	200	5.7%
Other	300	8.6%



- Banks also reduced their head counts in 2020 due to a temporary reduction of in-person branch visits.
- Financial Activities companies are expected to re-gain a meaningful number of jobs through 2021, and will ultimately surpass the employment totals that were observed before the recession.

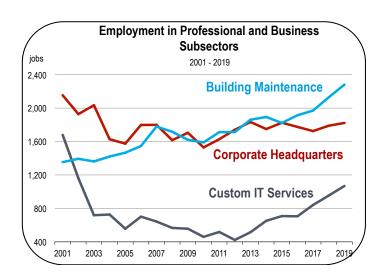
Professional and Business Services Employment

- The professional and business services industry has a diverse array of subsectors, and each will be impacted differently during the recession and recovery phases of 2020 and 2021.
- Jobs in corporate security and building maintenance declined substantially during the shutdowns but are expected to rebound at office and industrial buildings with repopulating employment.



Professional & Business Services Sub-Sectors 2019	Jobs in Subsector	Subsector's Share of Overall Industry
Building Maintenance	2,300	20.9%
Corporate Headquarters	1,800	16.4%
Custom IT Services	1,100	10.0%
Scientific Research	800	7.3%
Engineering & Architecture	500	4.5%
Staffing Agencies	500	4.5%
Business Consulting	400	3.6%
Corporate Security	400	3.6%
Law	400	3.6%
Accounting & Bookkeeping	300	2.7%
Marketing and Advertising	200	1.8%
Call Centers & Collections Agencies	100	0.9%
Other	2,200	20.0%

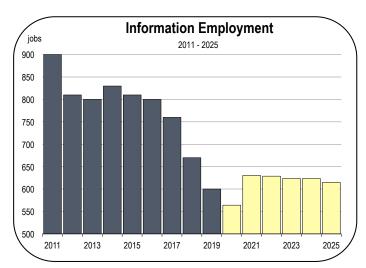
- Staffing agencies had significant losses during the contraction, but may bounce back quickly through 2021.
- Staffing agencies primarily employ temp workers, who are often laid off first in a downturn but hired back first during a recovery.
- Aside from security, maintenance, staffing agencies, and scientific research labs, most subsectors of the professional business services industry operated remotely and were largely unaffected by the shutdowns, although some had layoffs due to the recessionary macroeconomic conditions that persisted through the U.S.

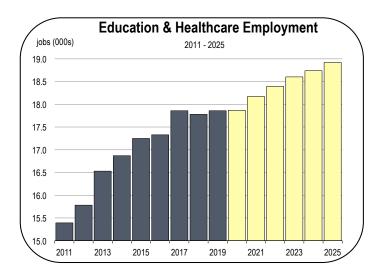


Information Sub-Sectors 2019	Jobs in Subsector	Subsector's Share of Overall Industry
Movie Theaters	150	25.0%
Telecommunications	150	25.0%
Newspaper / Magazine / Book Publishing	100	16.7%
Radio & TV Broadcasting	100	16.7%
Software Publishers	50	8.3%
Data & Internet Services	50	8.3%

Information Employment

- In Santa Cruz County, the information sector is dominated by movie theaters and telecommunications companies like Comcast.
- Movie theaters were completely closed during the shutdowns. Jobs at movie theaters will return slowly because social distancing requirements will restrict the number of customers that can visit movie theaters.
- Telecommunications jobs were classified as essential and these workers largely remained employed during the recession. Consequently, employment was not impacted as severely as it was in other sectors.
- Many newspaper, magazine, and TV/radio workers were allowed to remain in their jobs, but advertising revenues contracted with the rest of the economy, giving employers little choice but to issue layoff notices.
- Most subsectors of the information industry are in long-term patterns of stagnation, and will not generate a meaningful number of jobs during the 2020-2025 forecast period.



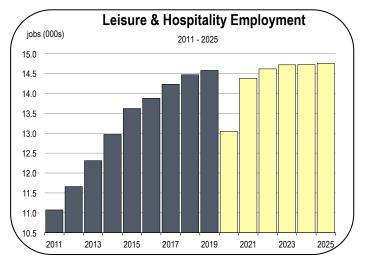


Private Education and Healthcare Employment

- There were 10,000 healthcare jobs in Santa Cruz County in 2019.
- Healthcare jobs were recession proof during the 2008-2009 financial crisis. However, some non-essential medical offices had to close in 2020, and hospitals reduced employment levels because resources were not being utilized as envisioned to support Coronavirus patients.
- There were approximately 5,000 social assistance jobs in 2019, including industries like childcare, housing shelters, and nonmedical care for senior citizens.
- There were also 2,000 jobs in private schools and colleges, tutoring services, vocational schools, and other educational organizations.
- Jobs in social assistance and education were mostly classified as essential. Nevertheless, there were layoffs at institutions with revenue shortfalls.

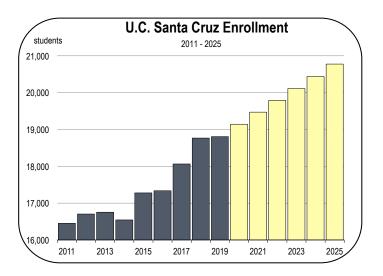
Leisure and Hospitality Employment

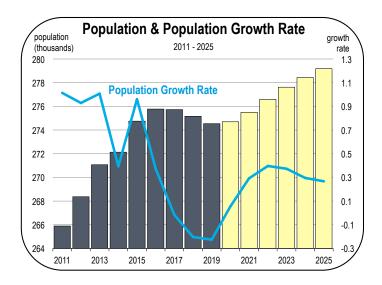
- The leisure and hospitality industry was devastated by the recession more than any other sector of the labor market.
- In 2019, Santa Cruz County had 12,000 jobs in restaurants, hotels, and bars. Our research indicates that most were laid off, furloughed, or had their hours cut in March and April of 2020.
- Santa Cruz also had 2,500 jobs in entertainment and recreation in 2019, including things like fitness centers, museums, and recreation centers. Many of these organizations will operate at reduced capacities into 2021.



Government Employment

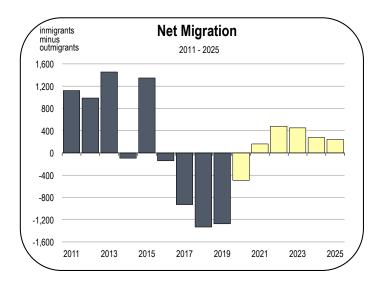
- Government agencies are expected to lose revenue from taxes and fees in 2020, and these revenue shortfalls will likely persist into 2021 and 2022.
- Government employment is strongly influenced by enrollment at U.C. Santa Cruz. Student enrollment is expected to increase by approximately 1,500 to 2,500 students over the forecast period.
- When government agencies need to reduce expenditures on salaries, many workers are expected to be given unpaid furlough days that are distributed throughout the year, and many staffing reductions could be the result of hiring freezes rather than layoffs.
- However, if revenue shortfalls are severe and Congress does not appropriate funding to mitigate these shortfalls, government agencies may have no choice but to issue layoffs.

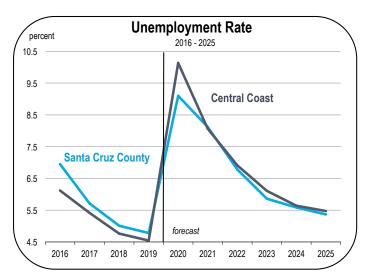




Population Growth

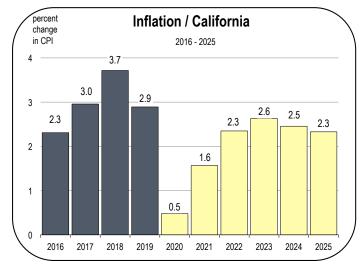
- The Santa Cruz County population is expected to expand more slowly than the Central Coast average between 2020 and 2025.
- Net migration is not expected to be a meaningful contributor to population growth. The county has high home prices that are not typically supported by local job opportunities, preventing many residents from moving to the area.
- The population will expand at an annual average rate of 0.3 percent per year from 2020 to 2025.
- By 2025 the Santa Cruz County population will approach 280,000 residents.





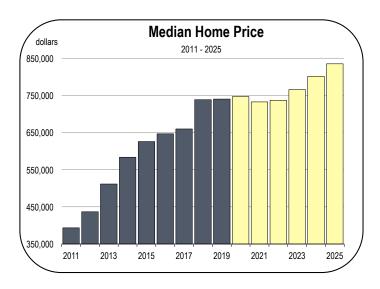
Unemployment and Inflation Rates

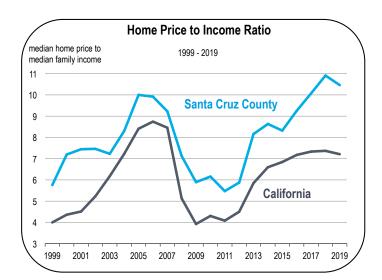
- The unemployment rate in Santa Cruz County averaged 4.8 percent in 2019, above the composite rate for the Central Coast.
- The unemployment rate is expected to average between 8 and 10 percent in 2020.
- The unemployment rate is expected to remain elevated for several years, but is likely to improve more quickly than after the 2008-2009 recession.
- Inflation decelerated in 2019 as energy prices declined and home prices increased more slowly than the previous year.
- Inflation is expected to be very low in 2020 but could accelerate in 2021 or 2022.



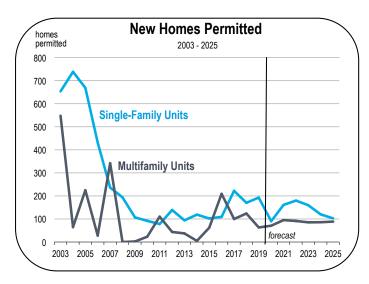
Home Prices and New Housing Production

- In 2019 the median home price in Santa Cruz County was \$739,800.
- The median price is not expected to show much change in 2020 or 2021.
- The median price has become prohibitively expensive in Santa Cruz County, where the price-to-income ratio had surpassed 10, meaning that housing affordability was worse in 2019 than it was during the housing bubble of 2004-2007.
- In 2019, a typical household in Santa Cruz County would have had to spend 50 percent of its pre-tax income on mortgage payments in order to afford the median-priced home, indicating that housing prices have become excessive.
- Across California, the typical household would have to spend approximately 30 percent of its income on mortgage payments for the median priced home.





- From 2014 to 2019, an average of 250 new homes were started per year in Santa Cruz County. Approximately two thirds were single-family homes.
- Housing production is expected to average 220 homes per year from 2020 to 2025, consisting primarily of single-family homes.



Economic Indicators

2015-2019 History, 2020-2050 Forecast

	Population (people)	House- holds (thousands)	Net Migration (people)	New Homes Permitted (homes)	Registered Vehicles (thousands)	Personal Income (billions)	Taxable Retail Sales (billions)	Total Taxable Sales (billions)	Real Industrial Production (billions)	Real per Capita Income (dollars)	Unemploymer Rate (percent)	Real nt Farm I Production (millions)(
2015	274,749	95.2	1,348	164	257	\$16.3	\$2.7	\$3.6	\$1.3	\$66,836	7.5	\$703	1.5
2016	275,776	95.5	-142	318	264	\$16.8	\$2.7	\$3.6	\$1.3	\$66,906	7.0	\$700 \$600	2.3
2017 2018	275,729 275,168	95.6 95.7	-928 -1,332	322 294	262 263	\$17.9 \$19.0	\$2.8 \$2.9	\$3.8 \$3.9	\$1.3 \$1.3	\$69,078 \$71,176	5.7 5.0	\$620 \$703	2.9 3.6
2018	275,100	95.9	-1,332	256	203	\$20.1	\$2.9 \$2.9	\$3.9 \$4.0	\$1.3 \$1.4	\$73,044	4.8	\$703 \$717	3.0
2020	274,698	96.2	-492	161	267	\$19.9	\$2.7	\$3.7	\$1.3	\$71,905	9.1	\$716	0.6
2021	275,500	96.3	162	256	268	\$20.7	\$3.0	\$3.9	\$1.4	\$73,101	8.1	\$722	2.0
2022	276,591	96.5	480	271	268	\$22.1	\$3.1	\$4.1	\$1.5	\$75,855	6.8	\$728	2.5
2023	277,622	96.7	450	245	269	\$23.3	\$3.2	\$4.3	\$1.5	\$77,732	5.9	\$733	2.6
2024	278,443	96.9	276	206	269	\$24.4	\$3.4	\$4.5	\$1.5	\$79,251	5.6	\$739	2.5
2025	279,187	97.0	242	191	268	\$25.5	\$3.5	\$4.7	\$1.5	\$80,614	5.4	\$745	2.3
2026	279,816	97.2	162	177	268	\$26.4	\$3.7	\$4.9	\$1.6	\$81,545	5.2	\$750	2.3
2027	280,348	97.3	108	227	267	\$27.4	\$3.9	\$5.2	\$1.6	\$82,679	5.2	\$756	2.2
2028 2029	280,443 280,429	97.5 97.6	-288 -374	189 214	267 266	\$28.4 \$29.4	\$4.0 \$4.1	\$5.4 \$5.6	\$1.6	\$83,935	5.0 5.1	\$762 \$768	2.2 2.3
2029	280,429	97.6 97.8	-374 -395	214	266	\$29.4 \$30.3	\$4.1 \$4.2	\$5.6 \$5.7	\$1.6 \$1.6	\$84,743 \$85,562	5.1	\$766 \$773	2.3
2030	280,370	98.0	-408	234	266	\$31.2	\$4.3	\$5.8	\$1.7	\$86,398	5.2	\$779	2.2
2032	280,018	98.2	-599	200	266	\$32.2	\$4.4	\$6.0	\$1.7	\$87,067	5.2	\$785	2.3
2033	279,914	98.4	-419	214	266	\$33.1	\$4.5	\$6.1	\$1.7	\$88,027	5.3	\$790	1.9
2034	280,094	98.5	-111	237	266	\$34.1	\$4.6	\$6.2	\$1.7	\$88,796	5.2	\$796	2.1
2035	280,467	98.7	102	187	267	\$35.2	\$4.7	\$6.4	\$1.7	\$89,451	5.2	\$802	2.2
2036	280,784	98.8	63	188	267	\$36.3	\$4.9	\$6.5	\$1.7	\$89,808	5.3	\$807	2.6
2037	281,122	99.0	93	189	268	\$37.4	\$5.0	\$6.7	\$1.7	\$90,055	5.3	\$813	2.7
2038	281,373	99.1	29	171	269	\$38.5	\$5.1	\$6.9	\$1.8	\$90,447	5.2	\$819	2.5
2039	281,485	99.2	-85	146	269	\$39.7	\$5.3	\$7.1	\$1.8	\$90,734	5.2	\$825	2.7
2040	281,562	99.3	-88	145	270	\$40.9	\$5.4	\$7.3	\$1.8	\$91,062	5.2	\$830 \$830	2.6
2041 2042	281,543 281,310	99.4 99.5	-150 -335	127 118	271 272	\$42.1 \$43.3	\$5.6 \$5.7	\$7.5 \$7.7	\$1.8 \$1.8	\$91,522 \$92,112	5.2 5.2	\$836 \$842	2.4 2.3
2042	280,819	99.5 99.6	-569	103	272	\$43.5 \$44.5	\$5.8	\$7.7 \$7.8	\$1.8	\$92,112	5.2	\$042 \$847	2.3
2043	280,467	99.6	-414	120	273	\$45.8	\$5.9	\$8.0	\$1.8	\$93,604	5.2	\$853	2.2
2044	280,213	99.7	-286	135	274	\$47.0	\$6.1	\$8.2	\$1.8	\$94,175	5.2	\$859	2.0
2046	279,958	99.8	-268	136	275	\$48.3	\$6.2	\$8.4	\$1.8	\$94,786	5.2	\$864	2.1
2047	279,630	99.9	-326	128	275	\$49.5	\$6.4	\$8.5	\$1.8	\$95,360	5.2	\$870	2.1
2048	279,254	99.9	-364	123	275	\$50.8	\$6.5	\$8.7	\$1.8	\$95,943	5.2	\$876	2.1
2049	278,858	100.0	-365	122	276	\$52.1	\$6.6	\$8.9	\$1.9	\$96,516	5.2	\$882	2.1
2050	278,472	100.1	-339	124	276	\$53.4	\$6.8	\$9.1	\$1.9	\$97,080	5.1	\$887	2.1

Employment Sectors

2015-2019 History, 2020-2050 Forecast

	Total Wage & Salary	Farm	Construction	Manufac- turing	Transportation & Utilities	Wholesale & Retail Trade (thous	Financial Activities sands of jobs	Professional Services)	Information	Health & Education	Leisure	Government
2015	106.7	8.3	3.7	6.2	1.5	15.5	3.5	10.3	0.8	17.3	13.6	21.4
2015	108.9	8.4	4.4	6.6	1.5	15.8	3.6	10.3	0.8	17.3	13.9	21.7
2010	110.3	8.1	4.5	6.6	1.6	15.6	3.6	10.6	0.8	17.9	14.2	21.9
2017	110.5	7.9	4.4	6.9	1.6	15.2	3.6	10.7	0.7	17.8	14.5	22.0
2010	112.5	8.2	4.5	7.1	1.6	15.2	3.5	11.0	0.6	17.9	14.6	23.2
2013	106.5	8.2	4.3	6.5	1.6	14.3	3.5	10.0	0.6	17.9	13.0	22.0
2020	110.9	8.2	4.4	6.9	1.6	15.0	3.6	10.4	0.6	18.2	14.4	22.5
2022	112.8	8.2	4.4	7.1	1.6	15.2	3.6	10.7	0.6	18.4	14.6	23.1
2023	113.6	8.2	4.4	7.1	1.6	15.3	3.6	10.9	0.6	18.6	14.7	23.1
2024	114.0	8.2	4.3	7.1	1.6	15.5	3.7	11.1	0.6	18.7	14.7	23.1
2025	114.6	8.2	4.3	7.1	1.6	15.7	3.6	11.2	0.6	18.9	14.8	23.2
2026	115.3	8.2	4.3	7.2	1.6	15.9	3.7	11.2	0.6	19.1	14.8	23.3
2027	116.0	8.2	4.3	7.2	1.6	16.1	3.7	11.2	0.6	19.3	14.9	23.4
2028	116.5	8.2	4.3	7.3	1.6	16.3	3.7	11.2	0.6	19.4	15.0	23.5
2029	116.9	8.2	4.3	7.3	1.6	16.4	3.7	11.2	0.6	19.6	15.0	23.6
2030	117.3	8.2	4.3	7.3	1.6	16.4	3.7	11.2	0.6	19.7	15.1	23.6
2031	117.5	8.2	4.3	7.4	1.6	16.4	3.7	11.1	0.6	19.8	15.1	23.7
2032	117.8	8.2	4.3	7.4	1.6	16.4	3.7	11.1	0.6	20.0	15.2	23.8
2033	118.1	8.2	4.3	7.4	1.6	16.5	3.7	11.1	0.6	20.1	15.3	23.9
2034	118.5	8.2	4.3	7.4	1.6	16.5	3.7	11.1	0.6	20.2	15.3	24.0
2035	118.7	8.1	4.3	7.4	1.6	16.5	3.7	11.1	0.6	20.4	15.4	24.1
2036	119.0	8.1	4.3	7.5	1.6	16.5	3.7	11.1	0.6	20.5	15.4	24.1
2037	119.3	8.1	4.3	7.5	1.6	16.6	3.7	11.1	0.6	20.6	15.5	24.1
2038	119.6	8.1	4.2	7.5	1.6	16.6	3.7	11.1	0.6	20.8	15.5	24.2
2039	119.8	8.1	4.2	7.5	1.6	16.6	3.7	11.1	0.6	20.9	15.6	24.2
2040	120.1	8.1	4.2	7.6	1.6	16.6	3.7	11.1	0.6	21.1	15.6	24.3
2041	120.4	8.0	4.2	7.6	1.6	16.6	3.7	11.1	0.6	21.2	15.7	24.3
2042	120.7	8.0	4.2	7.6	1.6	16.7	3.7	11.1	0.6	21.3	15.7	24.4
2043	121.0	8.0	4.2	7.6	1.6	16.7	3.7	11.1	0.6	21.5	15.8	24.5
2044	121.3	8.0	4.2	7.7	1.6	16.7	3.7	11.1	0.6	21.6	15.8	24.6
2045	121.7	7.9	4.2	7.7	1.6	16.7	3.7	11.2	0.6	21.8	15.8	24.7
2046	122.0	7.9	4.2	7.7	1.6	16.8	3.7	11.2	0.6	21.9	15.9	24.8
2047	122.3	7.9	4.2	7.7	1.6	16.8	3.7	11.2	0.6	22.1	15.9	24.9
2048	122.6	7.8	4.2	7.8	1.6	16.8	3.7	11.2	0.6	22.2	16.0	24.9
2049	123.0	7.8	4.2	7.8	1.6	16.8	3.7	11.2	0.6	22.4	16.0	25.0
2050	123.3	7.8	4.2	7.8	1.6	16.9	3.7	11.2	0.6	22.5	16.0	25.1



