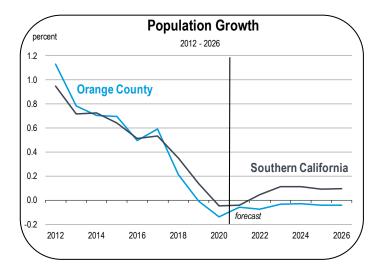
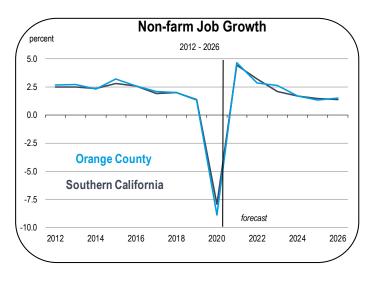
Forecast Summary

- On an annual average basis, 70,900 non-farm jobs will be reinstated in 2021.
- Total employment will return to pre-pandemic levels by 2023.
- Employment gains in 2021 will be largest in leisure services, professional business services, private education and healthcare, and retail.
- The reopening of Disneyland and Knott's should jump start tourism again this year.
- Pent-up demand for travel and amusement parks will produce a substantial lift in economic growth, especially employment.
- The unemployment rate averaged 8.9 percent in 2020.
- The unemployment rate is expected to average 5.3 percent in 2021.
- The population declined in 2020. It is expected to decline very slowly during the forecast period.
- Housing production fell sharply in 2020. It should rebound robustly in 2021, but total housing production over the 2021-2026 period will be lower than it was for the 5 years before the recession.
- Home prices rose unexpectedly in 2020, increasing by 9 percent.
- Home prices are forecast to increase by 6 to 8 percent in 2021.



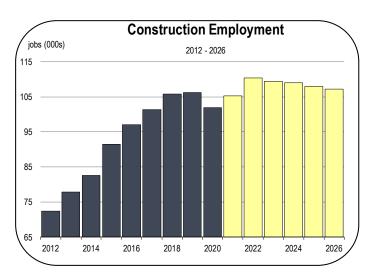


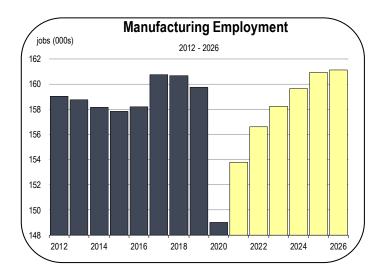
Job Growth

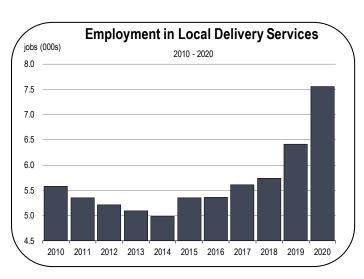
- Total employment in Orange County will expand by 4.6 percent in 2021 on an annual average basis.
- Over the entire forecast period, job growth in Orange County will be similar to the Southern California average.

Construction Employment

- The rehiring of approximately 3,500 construction workers is expected in 2021. In 2022 this sector should expand by another 5,100 jobs, putting it above pre-recession levels.
- After 2022, total construction employment is forecast to level off or decline slightly.





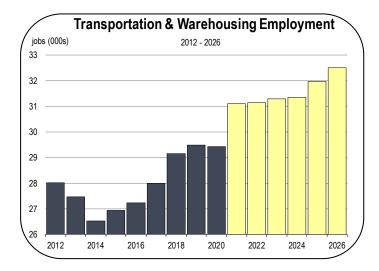


Manufacturing Employment

- Manufacturing employment declined by 7 percent during 2020.
- In 2021, the manufacturing industry will regain half of the jobs lost during 2020.
- A full recovery is still several years away.

Transportation and Warehousing Employment

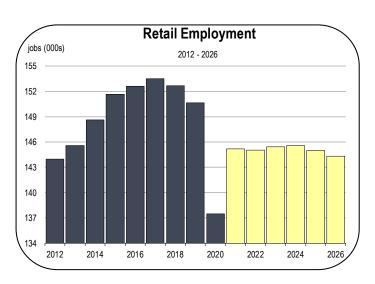
- Transportation and warehousing employment did not change much in 2020.
- Airports and taxi/bus/boating services lost a substantial number of jobs, but gains in local delivery services were large, almost completely offsetting declines elsewhere.

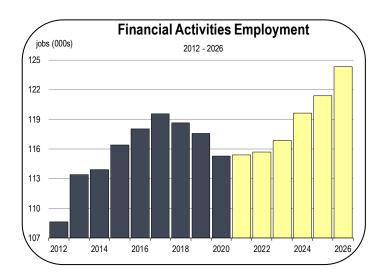


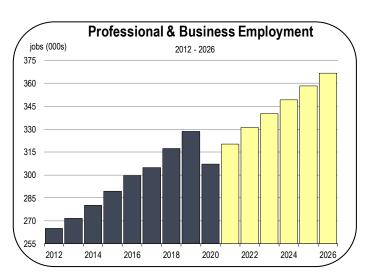
 In 2021, this sector is forecast to sharply expand, due to the completion of new industrial space and the conversion of retail to industrial, distribution, and fulfilment uses.

Retail Trade Employment

- The retail sector was decimated in 2020, declining by 8.7 percent and losing 13,200 jobs.
- Losses were largest at car dealers, clothing stores, and big box department stores.
- Grocery store employment expanded during 2020.
- Retail employment will rebound sharply in 2021, but will enter a long-term pattern of stagnation that will persist throughout the rest of the forecast period.







Financial Activities Employment

- Financial activities employment declined by a small amount in 2020, continuing a downward trajectory that had been in place for a few years.
- The largest losses were in real estate firms, car rental agencies, banks, and asset management companies.
- Total employee headcounts in this sector will remain relatively unchanged in 2021 and 2022, but growth is expected to accelerate in the second half of the forecast period.

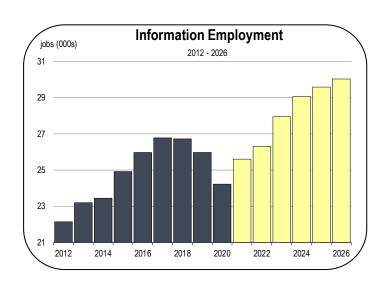
Professional and Business Services Employment

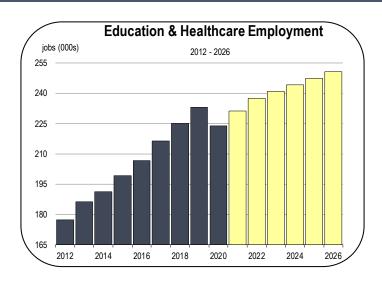
- The professional and business services industry has a diverse array of subsectors, and each was affected differently during the recession.
- The largest subsector staffing agencies experienced significant losses during 2020, but is expected to bounce back quickly in 2021 and 2022.
- Staffing agencies primarily employ temp workers. Temp workers are usually laid off first during a downturn, but hired back first during a recovery.
- Aside from staffing agencies, the largest job losses in 2020 were observed in marketing and advertising firms, building maintenance companies, and at the headquarters of large and mid-size corporations.

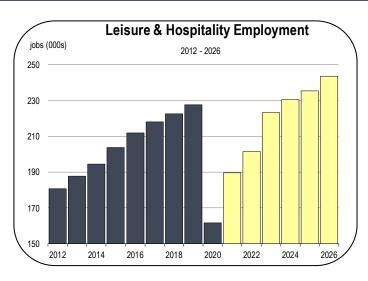
- Accounting, engineering, scientific research, and IT consulting companies continued to add jobs in 2020.
- The professional and business services industry is expected to gain 13,200 jobs in 2021 and 10,800 jobs in 2022.

Information Employment

- In Orange County, the information sector is dominated by software publishing, telecommunications, and Internet/data services.
- Across all subsectors, approximately 1,800 jobs were lost in 2020.
 Most of these jobs will be restored in 2021, and the industry will reach a new peak in 2022 or 2023, led by new software and IT job formation.







Private Education and Healthcare Employment

- The private healthcare and education industries were characterized by job losses that would have been large in most recessions, but were fairly moderate for the Coronavirus Recession.
- Healthcare jobs were relatively recession proof during the 2008-2009 financial crisis and declined by only 3 percent during the Coronavirus Recession.
- Hospital employment fell by 2 percent. Employment at doctor and dentist offices fell by 4 percent.
- · Private schools and tutoring centers declined by 12 percent.
- This sector also includes social assistance and childcare centers.
 Childcare centers lost 1,000 jobs last year while social assistance organizations continued to expand.
- Overall, the healthcare and education industry will recover 7,300 jobs in 2021 and gain another 6,300 jobs in 2022.

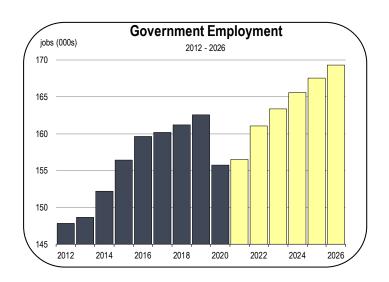
Leisure and Hospitality Employment

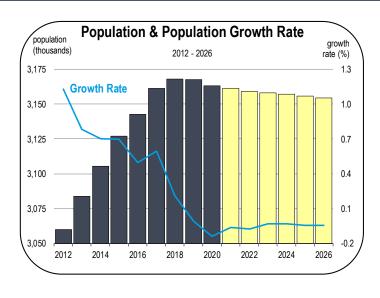
- Leisure and hospitality firms were impacted by the restricted economic conditions more than almost any other business sector.
- In 2020, employment levels in restaurants, bars, and catering services decline by 32,000 jobs, a decrease of 22 percent.
- Employment at hotels fell by 10,300 jobs (39 percent). Entertainment and recreation, which includes Disneyland, declined by 22,000 jobs (46 percent).
- Leisure and hospitality employment could rebound sharply in the second half of 2021 due to a surge in travel, dining, drinking, and recreation throughout Orange County.

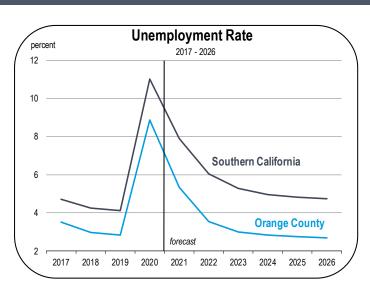
 We expect the leisure and hospitality sector to regain 28,100 jobs in 2021 and another 11,900 jobs in 2022, but it could take several years for the industry to fully recover.

Government Employment

- State and local government agencies lost 7,400 jobs during 2020.
- Federal government agencies added a few hundred jobs in 2020, but this was mainly due to the Decennial Census, which creates temporary government jobs every 10 years. These Census jobs have already ended.
- Total Government employment led by State and Local Governments will reinstate some jobs in the second half of 2021 as budgets are augmented by the American Rescue Plan, signed into law by President Biden in March 2021.







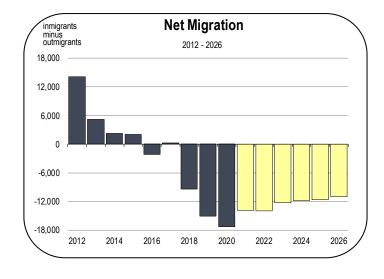
Population Growth

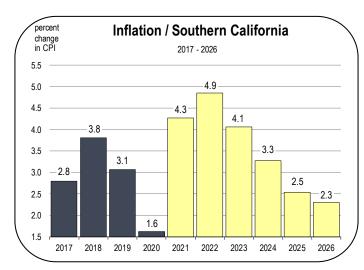
- The Orange County population declined in 2020 by more than 4,000 residents.
- More than 17,000 net migrants left the county, the largest total since the housing bubble of 2005. Housing affordability has become a major issue, and it has contributed substantially to out-migration.
- Over the forecast period, an average of 12,400 net migrants will leave the county each year.
- The population will decline slowly between 2021 and 2026.

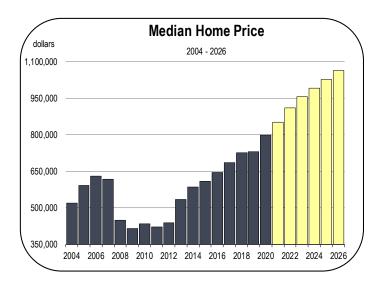
Unemployment and Inflation Rates

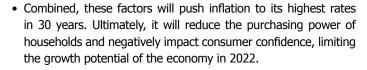
• The unemployment rate in Orange County averaged 8.9 percent in 2020, which was lower than the composite rate for Southern California.

- The unemployment rate is expected to average 5.3 percent in 2021 and 3.5 percent in 2022.
- Inflation decelerated sharply in 2020, largely because energy prices declined when the demand for fuels plunged. Inflation soared in 2021 and is expected to remain elevated for several years.
- Over the forecast period, there will be a number of factors that will contribute to high inflation. The most prominent will be:
 - Record levels of spending by consumers and government agencies
 - Fractures in the global supply chain that raise the cost of production for many businesses
 - Sharp increases in the cost of housing and energy
 - Labor market recruitment challenges that force companies to raise wages





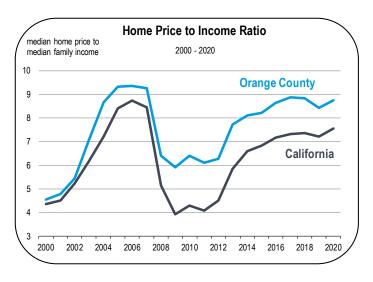


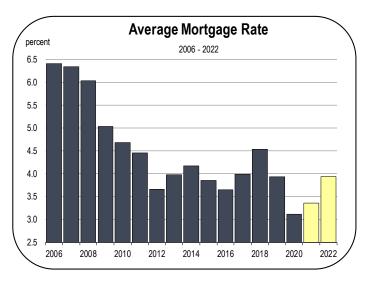


 However, inflation will begin to decelerate as supply chains and the labor force are restored by the second half of the forecast period, eventually falling below 3 percent.

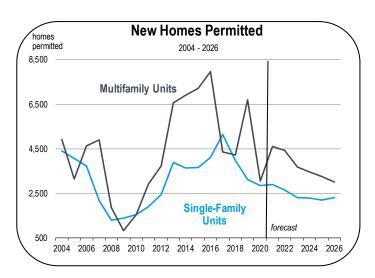
Home Prices and New Housing Production

- The median home price was \$798,600 in 2020, and increase of 9 percent from the previous year.
- Home selling prices will increase by 6 to 8 percent in 2021, and could increase by another 6 to 8 percent in 2022.
- Orange County has a serious problem with housing affordability.
 As of 2020, the price-to-income ratio was 8.8, which is an exceptionally high ratio.





- A 20 percent down payment on the median priced home would be \$160,000, which is out of reach for most households.
- Without a 20 percent down payment, the typical mortgage payment would consume at least 40 percent of pre-tax income for many households, which exceeds most affordability guidelines.
- Interest rates have been very low for several years, which has
 offset some of the affordability issues caused by rising home prices.
 But even with low interest rates, monthly mortgage payments are
 still high enough to price many households out of the ownership
 market.
- From 2015 to 2020, an average of 9,400 new homes were authorized per year. Multifamily units accounted for 59 percent of all units.
- Housing production will average 6,200 homes per year from 2021 to 2026. Approximately 60 percent will be multifamily units.



- Rancho Mission Viejo is one of the largest residential projects in all of Southern California, and is expected to produce more than 14,000 dwelling units in addition to commercial space.
- At buildout, the Ranch will be organized into multiple, intergenerational mixed-use villages.
- Villages in the project include:
 - Sendero Village
 - 940 townhouses
 - 15-acre park
 - 10-acre retail center

- Esencia Village
 - 2,700 attached and detached homes
- 10 "all-age" neighborhoods
 - 250-500 apartment homes
 - 50 acres of retail, office, and medical space
- Future villages have not been named, but completion is scheduled for 2030 spanning:
 - Up to 14,000 dwelling units
 - 5 million square feet of office, retail, and medical space
 - Sites for schools, parks, and community farms



Economic Indicators

2015-2020 History, 2021-2050 Forecast

	Population	House- holds	Net Migration	New Homes Permitted	Registered Vehicles	Personal Income	Taxable Retail Sales	Total Taxable Sales	Real Industrial Production	Real per Capita Income	Unemploymer Rate	Real nt Farm Ir Production	nflation
	(people)	(thousands)	(people)	(homes)	(thousands)	(billions)	(billions)	(billions)	(billions)	(dollars)	(percent)	(millions) (p	
2015	3,127,120	1,014	1,990	10,897	2,784	\$193.1	\$41.2	\$61.9	\$33.6	\$70,324	4.5	\$143	0.9
2016	3,142,584	1,020	-2,207	12,083	2,901	\$200.8	\$41.8	\$63.1	\$34.2	\$71,406	4.0	\$128	1.9
2017	3,161,226	1,028	240	9,501	2,885	\$209.6	\$43.2	\$65.1	\$36.5	\$72,104	3.5	\$123	2.8
2018	3,167,885	1,038	-9,386	8,201	2,915	\$218.9	\$45.0	\$67.5	\$37.8	\$72,368	3.0	\$99	3.8
2019	3,167,626	1,047	-15,109	9,816	2,944	\$227.7	\$46.0	\$69.7	\$38.1	\$73,063	2.8	\$91	3.1
2020	3,163,256	1,054	-17,239	5,919	2,849	\$234.3	\$42.1	\$62.5	\$39.8	\$74,069	8.9	\$86	1.6
2021 2022	3,161,366	1,057 1.064	-13,857	7,486	2,849	\$240.5 \$252.2	\$46.3	\$69.5 \$71.0	\$39.6	\$74,201 \$76,054	5.3	\$84 \$83	4.3
2022	3,159,035 3,158,051	1,064	-13,957 -12,242	7,080 5,985	2,840 2,829	\$252.2 \$268.0	\$47.3 \$48.7	\$71.0 \$73.2	\$40.0 \$40.8	\$76,054 \$78,881	3.5 3.0	ადა \$81	4.9 4.1
2023	3,157,100	1,071	-12,242	5,735	2,829	\$280.6	\$46.7 \$50.1	\$75.2 \$75.2	\$40.6 \$41.4	\$80,661	2.8	\$79	3.3
2024	3,155,754	1,070	-11,618	5,466	2,808	\$200.0	\$50.7	\$76.2	\$42.0	\$82,179	2.8	\$78	2.5
2026	3,154,398	1,086	-10,989	5,311	2,798	\$304.6	\$51.3	\$77.0	\$42.3	\$83,766	2.7	\$76	2.3
2027	3,152,671	1,091	-10,544	5,075	2,790	\$317.3	\$51.9	\$77.8	\$42.9	\$85,453	2.7	\$75	2.1
2028	3,150,767	1,096	-10,015	4,805	2,780	\$330.5	\$52.4	\$78.6	\$43.4	\$87,144	2.6	\$73	2.1
2029	3,148,644	1.100	-9,635	4,674	2,772	\$342.6	\$53.9	\$80.8	\$43.5	\$88,372	2.6	\$71	2.1
2030	3,145,871	1,104	-9,652	4,380	2,764	\$354.9	\$55.6	\$83.4	\$43.5	\$89,659	2.7	\$69	2.1
2031	3,142,283	1,108	-9,608	4,254	2,759	\$367.1	\$56.8	\$85.3	\$43.6	\$90,943	2.7	\$68	2.2
2032	3,137,856	1,112	-9,626	4,193	2,756	\$378.6	\$58.3	\$87.5	\$43.6	\$91,843	2.7	\$66	2.1
2033	3,132,714	1,116	-9,555	4,045	2,750	\$391.1	\$59.6	\$89.5	\$43.8	\$93,262	2.7	\$65	1.9
2034	3,126,967	1,120	-9,120	4,003	2,743	\$404.1	\$61.0	\$91.6	\$44.1	\$94,558	2.7	\$64	2.0
2035	3,120,379	1,123	-8,981	3,899	2,733	\$417.4	\$62.7	\$94.2	\$44.2	\$95,772	2.7	\$63	2.0
2036	3,112,640	1,127	-9,119	3,829	2,727	\$430.8	\$64.8	\$97.4	\$44.1	\$96,617	2.7	\$62	2.1
2037	3,103,808	1,130	-9,282	3,811	2,724	\$444.9	\$66.7	\$100.3	\$44.0	\$97,434	2.7	\$62	2.1
2038	3,094,300	1,134	-8,828	3,620	2,726	\$459.4	\$68.7	\$103.2	\$44.1	\$98,487	2.7	\$63	2.0
2039	3,083,820	1,137	-8,852	3,580	2,729	\$474.2	\$70.7	\$106.2	\$44.0	\$99,339	2.7	\$64	2.1
2040	3,072,775	1,141	-8,507	3,533	2,730	\$489.4	\$72.5	\$109.0	\$44.3	\$100,311	2.7	\$66 \$67	2.0 2.1
2041 2042	3,060,789 3,048,275	1,144 1,147	-8,420 -8,066	3,490 3,395	2,732 2,732	\$504.4 \$519.8	\$74.2 \$75.9	\$111.6 \$114.1	\$44.2 \$44.4	\$101,564 \$102,946	2.7 2.7	\$67 \$69	2.1
2042	3,035,708	1,147	-7,302	3,409	2,732	\$535.3	\$75.9 \$77.7	\$114.1 \$116.8	\$44.4 \$44.6	\$102,940	2.7	\$70	1.9
2043	3,023,186	1,153	-6,423	3,409	2,730	\$555.5 \$551.1	\$77.7 \$79.2	\$110.0	\$44.9	\$104,360	2.7	\$70 \$73	2.0
2045	3,010,481	1,156	-5,723	3,248	2,712	\$566.9	\$81.1	\$121.9	\$45.3	\$107,461	2.7	\$75	2.1
2046	2,997,577	1,159	-5,115	3,288	2,701	\$582.5	\$82.9	\$124.7	\$45.3	\$108,734	2.7	\$80	2.1
2047	2,984,161	1,162	-4,917	3,205	2,688	\$598.2	\$84.8	\$127.5	\$45.5	\$109,758	2.7	\$86	2.1
2048	2,970,235	1,165	-4,731	3,095	2,675	\$614.0	\$87.0	\$130.9	\$45.3	\$110,647	2.7	\$92	2.2
2049	2,956,258	1,168	-4,120	3,079	2,663	\$630.3	\$89.1	\$134.0	\$45.2	\$111,889	2.7	\$98	1.9
2050	2,942,020	1,171	-3,707	3,022	2,650	\$646.8	\$91.3	\$137.4	\$45.2	\$113,023	2.7	\$106	2.0
					,								

Employment Sectors

2015-2020 History, 2021-2050 Forecast

	Total Wage & Salary	Farm	Construction	Manufac- turing	Transportation & Utilities	Wholesale & Retail Trade (thou	Financial Activities sands of jobs	Professional Services	Information	Health & Education	Leisure	Government
2015 2016 2017 2018 2019 2020 2021 2022 2023 2024 2025 2026 2027 2028 2029 2030 2031 2031 2032 2033 2034 2035 2036 2037 2038 2039 2040 2041 2042 2043 2044 2044 2044 2044 2045	8. Salary 1,549 1,589 1,621 1,654 1,675 1,527 1,597 1,643 1,686 1,715 1,738 1,764 1,788 1,813 1,837 1,858 1,876 1,893 1,908 1,922 1,935 1,947 1,959 1,969 1,979 1,989 1,997 2,005 2,013 2,020 2,029 2,035	2.4 2.4 2.1 2.0 1.9 1.8 1.7 1.7 1.6 1.6 1.6 1.6 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5	91.4 97.0 101.4 105.9 106.2 101.9 105.3 110.4 109.0 107.9 107.2 105.3 104.3 103.9 102.9 102.0 101.3 100.6 99.9 99.1 98.4 97.6 96.8 95.9 95.1 94.2 93.4 92.6 91.7 90.7 89.8	turing 157.8 158.2 160.7 160.7 159.8 149.0 153.8 156.6 158.2 159.6 160.9 161.1 162.2 163.1 163.0 162.3 161.7 161.1 160.5 160.7 159.9 159.0 158.6 158.2 157.2 156.5 156.2 155.7 155.2	8. Utilities 26.9 27.2 28.0 29.2 29.5 29.4 31.1 31.1 31.3 31.4 32.0 32.5 33.0 33.5 34.0 34.5 34.9 35.3 35.7 36.1 36.5 36.9 37.2 37.5 37.8 38.1 38.4 38.7 39.0 39.2 39.5 39.7	Retail Trade	Activities	Services	Information 24.9 26.0 26.8 26.7 26.0 24.2 25.6 26.3 27.9 29.1 29.6 30.0 30.8 32.2 32.6 33.4 33.9 34.7 35.2 35.5 35.9 36.2 36.4 36.6 36.8 36.9 37.0 37.1 37.1 37.3 37.5		203.8 212.0 218.1 222.6 227.7 161.5 189.6 201.5 223.3 230.5 235.4 243.6 252.5 260.5 268.9 276.5 282.2 286.9 290.5 293.5 295.7 297.8 299.9 301.9 303.8 305.8 307.7 309.5 311.6 313.9 315.9	156.4 159.6 160.2 161.2 162.5 155.7 156.5 161.1 163.4 165.6 167.5 169.3 170.9 172.4 173.7 174.9 176.0 176.9 177.8 178.5 179.2 179.2 179.2 180.5 181.0 181.6 182.0 182.4 183.4 183.4 183.4 183.6 183.9
2047 2048 2049 2050	2,043 2,048 2,054 2,058	1.6 1.6 1.6 1.7	89.0 88.0 87.0 86.1	154.8 153.7 152.7 151.6	39.9 40.1 40.3 40.5	238.9 239.8 240.6 241.4	129.3 128.6 127.8 126.9	497.6 502.3 506.9 511.4	37.5 37.6 37.6 37.6	288.6 289.1 289.5 289.7	319.6 321.3 323.0 324.5	184.1 184.2 184.4 184.5

Socioeconomic Indicators

