Business Economics

Raleigh
North Carolina

January 1, 2023

INVESTMENT RISK RATING: High Risk

SCORE: -0.5

RALEIGH. Pre-pandemic job growth was strong. The economy features large government (state government, NC State), business services (to the government), and information sectors. Current job growth is better than the national average of 3.2 percent, little different than last month. Recent growth in business services was strong. Effects of the pandemic still linger. In this market permanent covid job losses have been small.

RALEIGH. Population growth is high. 34 percent of housing is rented. Colleges provide a large renter market. Over the last 3 years, total income (a pressure on prices) grew 26 percent (US: 21%); home prices rose 57 percent, 25 percent in the past year. The market is now well overpriced. The home price boom is over, expect softer prices in 2023. If the economy falters, home prices could drop 22 percent.

NATIONAL. The boom in home prices is over. Prices in the third quarter were up 16 percent from a year ago, but only 1 percent from the second quarter. The rapid effect of higher mortgage rates in damping demand shows how thin that demand was and means that prices will decrease. How quickly and how much depends on the growth of the economy, which right now looks like it's slowing down as inflation has cut consumer spending power. The effects of the war in Ukraine and the lingering pandemic will continue to depress world economies during the next year and could drag the US into a new recession.

Business Economics

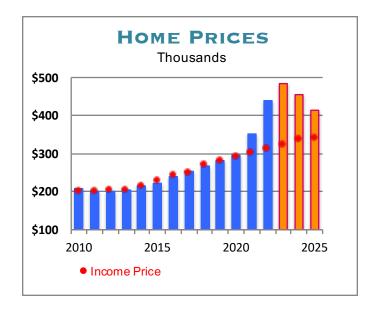
Raleigh
North Carolina

January 1, 2023



Compared to the same quarter of the previous year, home prices were up 32 percent in the second quarter and 25 percent in the third quarter. In two years prices have risen 50 percent. Over the last 3 years, total income (a pressure on prices) grew 26 percent (US: 21%).

Nationally, home prices were up 17 percent in the third quarter. The boom that began in 2021 is over, finally killed by higher mortgage rates, and prices in most markets will be lower in 2023. If the US goes into a recession, prices in Raleigh could be 22 percent lower in two years.



The average home price of \$440,200 in 2022 is 43 percent higher than the "Income Price" (red dots), which shows the price local incomes can support. After a boom, home prices ALWAYS return to the Income Price.

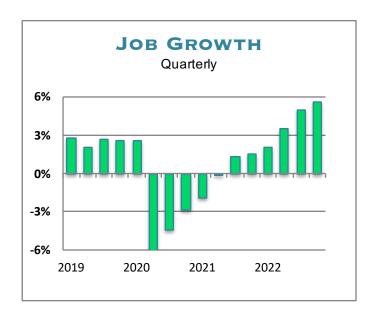
FORECAST

Our forecast is that prices in Raleigh will be 10 percent higher in 2023. In total over the next three years we expect prices to decrease 4 percent, compared to a national increase of 10 percent.

Business Economics

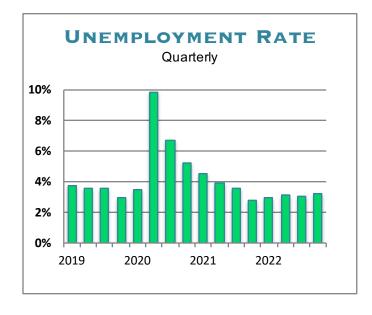
Raleigh
North Carolina

January 1, 2023



Pre-pandemic job growth was strong. Recovery from the recession was rapid. Current job growth at 5.6 percent is better than the national average of 3.2 percent, better than last quarter. This pace of growth is not sustainable.

The economy features large government (state government, NC State), business services (to the government), and information sectors. Recent job growth in business services was a very strong 10.4 percent.

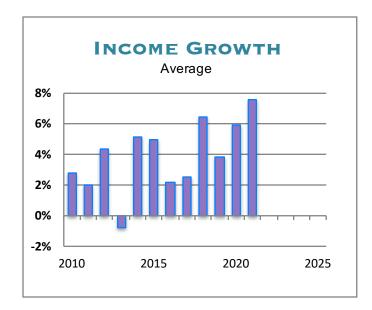


The unemployment rate in November was 3.1 percent, compared to the national average of 3.7 percent.

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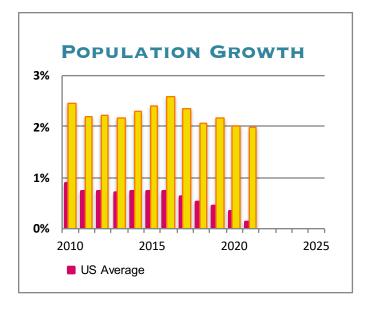
Raleigh
North Carolina

January 1, 2023



Average income grew 7.6 percent in 2021, compared to the national average of 7.2 percent, boosted by pandemic stimulus payments. Growth in 2022 and 2023 is likely to be lower.

The average household income in Raleigh was \$89,000 in 2021, compared to the national average of \$73,000. Most households in the Raleigh area have an income under \$125,000. But 13 percent make more than \$200,000.



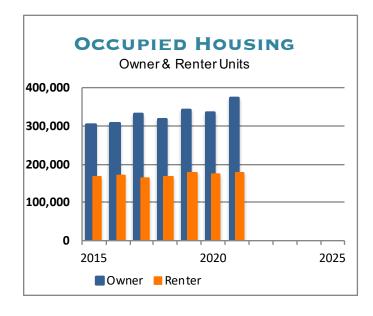
Population growth was 2 percent in 2021, well above the national average of 0.1 percent. In the last five years the population grew 14 percent.

People move to Raleigh mainly from Durham, Charlotte, New York, Asia, Washington DC, Greensboro, Greenville, and Europe.

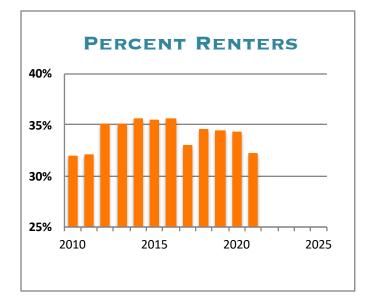
Business Economics

Raleigh North Carolina

January 1, 2023



There were 180,000 renter-occupied housing units in Raleigh in 2021 and 370,000 owner-occupied units. Total occupied units increased 14 percent over the last three years.

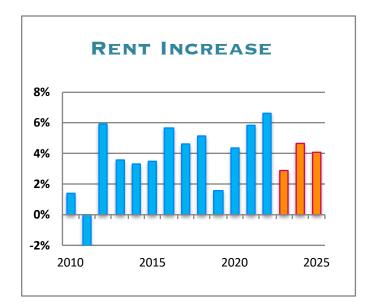


The percent of renters decreased in recent years and was 32 percent in 2021.

Business Economics

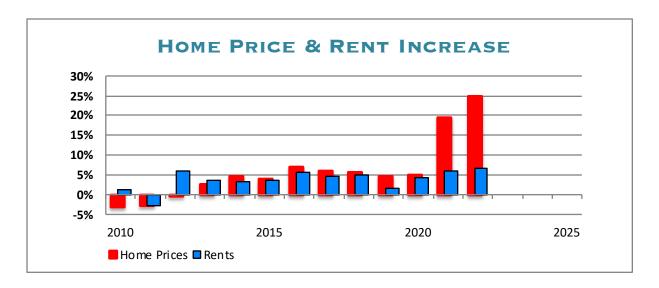
Raleigh
North Carolina

January 1, 2023



The average rent increased 6.6 percent in 2022. This is the rent paid by all renters, not just new ones.

We forecast a 3 percent rent increase in 2023 followed by 5 percent in 2024 and 4 percent in 2025.

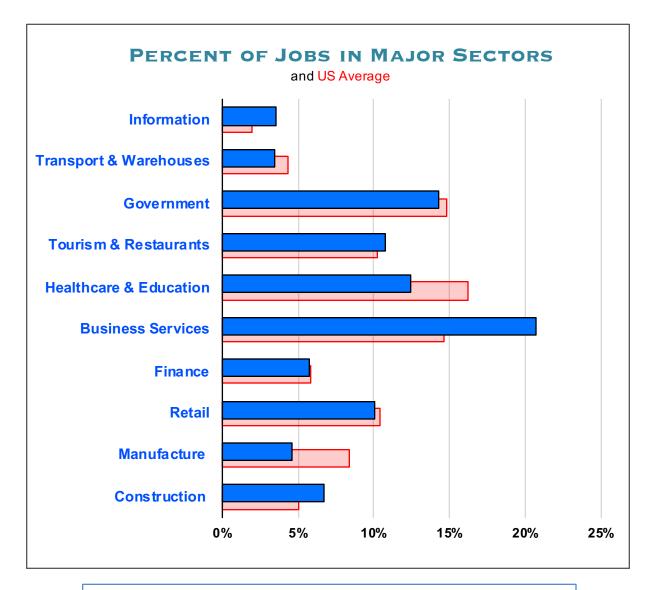


Rent increases are closely tied to income increases, while home prices often respond to other pressures. Rents rarely increase more than 5 percent a year.

Business Economics

Raleigh North Carolina

January 1, 2023

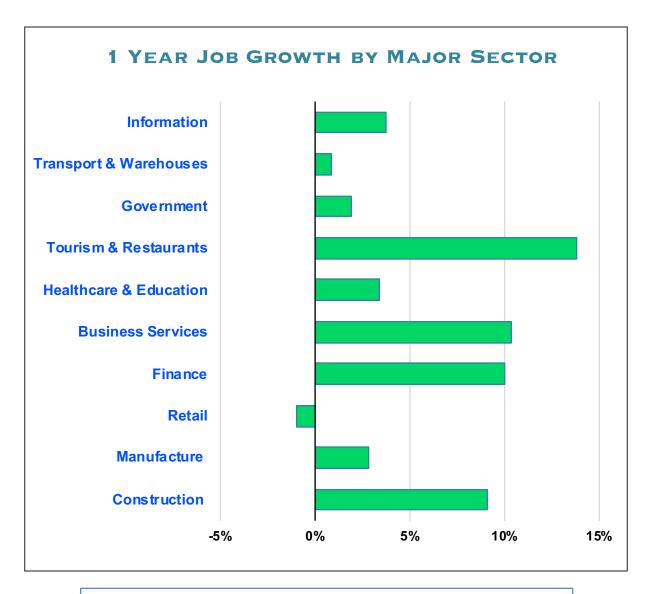


The large business services sector drives the local economy. The government sector includes state schools.

Business Economics

Raleigh North Carolina

January 1, 2023



Current job growth in Business Services and in Finance is exceptionally high. The high growth in Tourism & Restaurants is largely a recovery of pandemic job losses.

Business Economics

Raleigh
North Carolina

January 1, 2023

INVESTMENT RATING COMPONENTS

Population Growth 2.0

Job Growth + Covid Losses 2.0

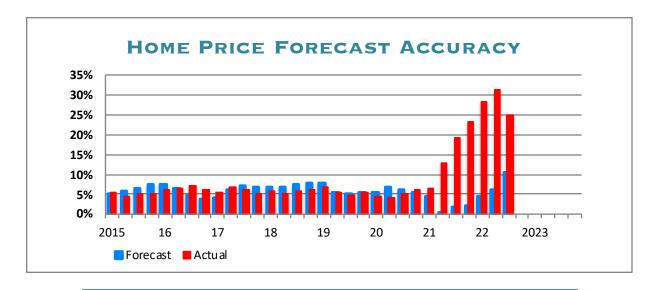
Unemployment Rate 0.5

Home Price Change -2.0

High Home Prices -2.0

Boom Dynamics -1.0

High Risk -0.5



Our forecast entirely missed the pandemic price surge, which was unrelated to any economic data, and will probably be too high on the down-side as well.

Investor Zip Code Analysis

Raleigh
North Carolina

US AVERAGE:

January 1, 2023

HOME PRICES & RENTS

CURRENT		PRICE-RENT	3-YEAR FORECAS		
Prices	Rents	RATIO	Prices	Rents	
\$ 440,200	\$1,360	27	-4%	12%	
\$ 278,500	\$967	19	10%	11%	

INVESTMENT OPTIONS. In over-priced markets like this, sub-dividing and apartments are the safest options. The high local home-price-to-rent ratio means the market for straight single-family rentals is fairly small. Rents increased moderately in recent years. The end of the home price boom and the slower national economy mean that investors can expect lower prices in 2023 and resistance to higher rents. Investors should carefully monitor the dynamics of the local price cycle.

A PRICE-RENT RATIO (home price divided by annual rent) above 22 means homes are too expensive for straight rentals; sub-dividing into several rental units is a better choice. A ratio below 16 provides opportunities to upgrade homes to a higher rent. In between, straight single-family rentals, sub-dividing, upgrading and apartments are all possible.

TOTAL INCOME GROWTH in the last three years measures the strength of support for home prices and rents in zip code areas. It mainly reflects people moving into or out of a zip code.

BEST RENT RANGE shows the monthly rent paid by most renters in the local zip code area. Investment in a property that requires rents above that range is risky because few renters pay that much. The risk may not be apparent until two years later, when the average renter moves out and a new one must be found.

Investor Zip Code Analysis

Raleigh North Carolina

January 1, 2023

		Income	Price-Re	ent	Home Price	
Zip		Growth	Ratio	Best Rent Range	2020	2021
07500	ADEVAIO	0.00/		£4.050 t- £0.004	00/	400/
27502	APEX NC	26%	23	\$1,056 to \$2,084	2%	12%
27504	BENSON NC	20%	18	\$626 to \$1,081	5%	11%
27511	CARY NC	17%	22	\$945 to \$2,084	5%	12%
27513	CARY NC	24%	27	\$1,056 to \$2,084	4%	14%
27518	CARY NC	4%	30	\$1,167 to \$1,597	1%	15%
27519	CARY NC	17%	27	\$1,167 to \$2,084	-1%	13%
27520	CLAYTON NC	24%	18	\$739 to \$1,635	6%	16%
27523	APEX NC	52%	22	\$1,167 to \$2,084	2%	10%
27524	FOUR OAKS NC	-1%	15	\$626 to \$1,337	2%	11%
27525	FRANKLINTON NC	6%	17	\$624 to \$1,334	7%	13%
27526	FUQUAY VARINA NC	21%	19	\$833 to \$2,084	5%	14%
27527	CLAYTON NC	71%	21	\$739 to \$967	4%	16%
27529	GARNER NC	14%	18	\$833 to \$1,597	5%	15%
27539	APEX NC	10%	23	\$722 to \$2,361	1%	15%
27540	HOLLY SPRINGS NC	33%	22	\$1,459 to \$2,084	3%	15%
27542	KENLY NC	18%	13	\$739 to \$967	3%	4%
27545	KNIGHTDALE NC	26%	16	\$833 to \$1,597	5%	18%
27549	LOUISBURG NC	23%	15	\$624 to \$1,334	6%	11%
27560	MORRISVILLE NC	36%	21	\$1,167 to \$2,084	2%	13%
27569	PRINCETON NC	29%	13	\$626 to \$1,194	6%	14%
27576	SELMA NC	19%	16	\$626 to \$1,081	1%	16%
27577	SMITHFIELD NC	16%	19	\$739 to \$1,081	5%	11%
27587	WAKE FOREST NC	36%	26	\$945 to \$2,084	2%	15%
27591	WENDELL NC	23%	18	\$833 to \$1,306	2%	14%
27592	WILLOW SPRING NC	24%	27	\$833 to \$1,167	6%	16%
27596	YOUNGSVILLE NC	29%	22	\$738 to \$1,845	2%	16%
27597	ZEBULON NC	25%	22	\$611 to \$1,056	5%	15%
27601	RALEIGH NC	64%	28	\$945 to \$2,361	4%	13%
27603	RALEIGH NC	36%	19	\$722 to \$2,084	5%	14%
27604	RALEIGH NC	35%	16	\$1,056 to \$1,459	2%	14%
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Investor Zip Code Analysis

Raleigh North Carolina

January 1, 2023

		3-Year				
			Price-R			Prices
Zip		Growth	Ratio	Best Rent Range	2020	2021
27606	RALEIGH NC	21%	24	\$945 to \$1,597	2%	12%
			33	\$1,056 to \$1,459	5%	11%
27607		18%				
27608		17%	51	\$945 to \$1,167	5%	12%
27609		18%	28	\$945 to \$2,084	4%	14%
27610	RALEIGH NC	20%	15	\$945 to \$1,806	1%	15%
27612	RALEIGH NC	25%	27	\$1,056 to \$1,806	-1%	13%
			27			
27613		9%	30	\$945 to \$1,459	6%	16%
27614		8%	27	\$833 to \$2,084	2%	10%
27615		13%	25	\$1,056 to \$1,597	2%	11%
27616	RALEIGH NC	17%	18	\$945 to \$1,806	7%	13%
0704	PALFICLING	4 50/	40	Φ4 407 t- Φ0 004	5 0/	4.40/
27617	RALEIGH NC	15%	19	\$1,167 to \$2,084	5%	14%

Investor Zip Code Analysis

27502 APEX NC

Last year home prices rose 12 percent.

Most homes cost from \$270,000 to \$580,000.

Most renters pay between \$1,000 and \$2,000.

The average household income is \$125,000.

23 percent of people hold a graduate degree.

27511 CARY NC

Last year home prices rose 12 percent.

Most homes cost from \$210,000 to \$460,000.

Most renters pay between \$900 and \$2,000.

The average household income is \$88,000.

21 percent of people hold a graduate degree.

27518 CARY NC

Last year home prices rose 15 percent.

Most homes cost from \$410,000 to \$590,000.

Most renters pay between \$1,100 and \$1,600.

The average household income is \$118,000.

35 percent of people hold a graduate degree.

27520 CLAYTON NC

Last year home prices rose 16 percent.

Most homes cost from \$160,000 to \$350,000.

Most renters pay between \$700 and \$1,600.

The average household income is \$78,000.

9 percent of people hold a graduate degree.

27524 FOUR OAKS NC

Last year home prices rose 11 percent. Most homes cost from \$90,000 to \$210,000. Most renters pay between \$600 and \$1,300. The average household income is \$62,000. 5 percent of people hold a graduate degree.

27526 FUQUAY VARINA NC

Last year home prices rose 14 percent.

Most homes cost from \$220,000 to \$460,000.

Most renters pay between \$800 and \$2,000.

The average household income is \$87,000.

12 percent of people hold a graduate degree.

27504 BENSON NC

Last year home prices rose 11 percent.

Most homes cost from \$90,000 to \$270,000.

Most renters pay between \$600 and \$1,000.

The average household income is \$54,000.

4 percent of people hold a graduate degree.

27513 CARY NC

Last year home prices rose 14 percent. Most homes cost from \$280,000 to \$590,000. Most renters pay between \$1,000 and \$2,000. The average household income is \$108,000. 28 percent of people hold a graduate degree.

27519 CARY NC

Last year home prices rose 13 percent.

Most homes cost from \$340,000 to \$770,000.

Most renters pay between \$1,100 and \$2,000.

The average household income is \$147,000.

39 percent of people hold a graduate degree.

27523 APEX NC

Last year home prices rose 10 percent.

Most homes cost from \$330,000 to \$570,000.

Most renters pay between \$1,100 and \$2,000.

The average household income is \$98,000.

25 percent of people hold a graduate degree.

27525 FRANKLINTON NC

Last year home prices rose 13 percent. Most homes cost from \$90,000 to \$340,000. Most renters pay between \$600 and \$1,300. The average household income is \$56,000. 8 percent of people hold a graduate degree.

27527 CLAYTON NC

Last year home prices rose 16 percent.

Most homes cost from \$220,000 to \$470,000.

Most renters pay between \$700 and \$900.

The average household income is \$99,000.

12 percent of people hold a graduate degree.

Investor Zip Code Analysis

27529 GARNER NC

Last year home prices rose 15 percent.

Most homes cost from \$160,000 to \$340,000.

Most renters pay between \$800 and \$1,600.

The average household income is \$75,000.

12 percent of people hold a graduate degree.

27540 HOLLY SPRINGS NC

Last year home prices rose 15 percent.

Most homes cost from \$280,000 to \$590,000.

Most renters pay between \$1,400 and \$2,000.

The average household income is \$120,000.

20 percent of people hold a graduate degree.

27545 KNIGHTDALE NC

Last year home prices rose 18 percent.

Most homes cost from \$160,000 to \$290,000.

Most renters pay between \$800 and \$1,600.

The average household income is \$73,000.

10 percent of people hold a graduate degree.

27560 MORRISVILLE NC

Last year home prices rose 13 percent.

Most homes cost from \$220,000 to \$590,000.

Most renters pay between \$1,100 and \$2,000.

The average household income is \$106,000.

29 percent of people hold a graduate degree.

27576 SELMA NC

Last year home prices rose 16 percent.

Most homes cost from \$90,000 to \$220,000.

Most renters pay between \$600 and \$1,000.

The average household income is \$45,000.

5 percent of people hold a graduate degree.

27587 WAKE FOREST NC

Last year home prices rose 15 percent. Most homes cost from \$220,000 to \$590,000. Most renters pay between \$900 and \$2,000. The average household income is \$112,000. 20 percent of people hold a graduate degree.

27539 APEX NC

Last year home prices rose 15 percent.

Most homes cost from \$220,000 to \$590,000.

Most renters pay between \$700 and \$2,300.

The average household income is \$119,000.

19 percent of people hold a graduate degree.

27542 KENLY NC

Last year home prices rose 4 percent.

Most homes cost from \$90,000 to \$140,000.

Most renters pay between \$700 and \$900.

The average household income is \$56,000.

5 percent of people hold a graduate degree.

27549 LOUISBURG NC

Last year home prices rose 11 percent. Most homes cost from \$90,000 to \$270,000. Most renters pay between \$600 and \$1,300. The average household income is \$55,000. 6 percent of people hold a graduate degree.

27569 PRINCETON NC

Last year home prices rose 14 percent.

Most homes cost from \$90,000 to \$280,000.

Most renters pay between \$600 and \$1,100.

The average household income is \$57,000.

4 percent of people hold a graduate degree.

27577 SMITHFIELD NC

Last year home prices rose 11 percent. Most homes cost from \$90,000 to \$270,000. Most renters pay between \$700 and \$1,000. The average household income is \$51,000. 6 percent of people hold a graduate degree.

27591 WENDELL NC

Last year home prices rose 14 percent. Most homes cost from \$90,000 to \$280,000. Most renters pay between \$800 and \$1,300. The average household income is \$71,000. 8 percent of people hold a graduate degree.

Investor Zip Code Analysis

27592 WILLOW SPRING NC

Last year home prices rose 16 percent.

Most homes cost from \$160,000 to \$350,000.

Most renters pay between \$800 and \$1,100.

The average household income is \$80,000.

10 percent of people hold a graduate degree.

27597 ZEBULON NC

Last year home prices rose 15 percent.

Most homes cost from \$90,000 to \$340,000.

Most renters pay between \$600 and \$1,000.

The average household income is \$71,000.

6 percent of people hold a graduate degree.

27603 RALEIGH NC

Last year home prices rose 14 percent.

Most homes cost from \$160,000 to \$470,000.

Most renters pay between \$700 and \$2,000.

The average household income is \$79,000.

14 percent of people hold a graduate degree.

27606 RALEIGH NC

Last year home prices rose 11 percent.

Most homes cost from \$210,000 to \$520,000.

Most renters pay between \$900 and \$1,600.

The average household income is \$67,000.

23 percent of people hold a graduate degree.

27608 RALEIGH NC

Last year home prices rose 10 percent.

Most homes cost from \$390,000 to \$1,650,000.

Most renters pay between \$900 and \$1,100.

The average household income is \$129,000.

32 percent of people hold a graduate degree.

27610 RALEIGH NC

Last year home prices rose 14 percent.

Most homes cost from \$150,000 to \$280,000.

Most renters pay between \$900 and \$1,800.

The average household income is \$58,000.

10 percent of people hold a graduate degree.

27596 YOUNGSVILLE NC

Last year home prices rose 16 percent.

Most homes cost from \$160,000 to \$470,000.

Most renters pay between \$700 and \$1,800.

The average household income is \$88,000.

8 percent of people hold a graduate degree.

27601 RALEIGH NC

Last year home prices rose 13 percent.

Most homes cost from \$90,000 to \$580,000.

Most renters pay between \$900 and \$2,300.

The average household income is \$63,000.

16 percent of people hold a graduate degree.

27604 RALEIGH NC

Last year home prices rose 14 percent. Most homes cost from \$220,000 to \$280,000. Most renters pay between \$1,000 and \$1,400. The average household income is \$75,000. 15 percent of people hold a graduate degree.

27607 RALEIGH NC

Last year home prices rose 8 percent.

Most homes cost from \$210,000 to \$680,000.

Most renters pay between \$1,000 and \$1,400.

The average household income is \$85,000.

32 percent of people hold a graduate degree.

27609 RALEIGH NC

Last year home prices rose 13 percent.

Most homes cost from \$150,000 to \$520,000.

Most renters pay between \$900 and \$2,000.

The average household income is \$73,000.

18 percent of people hold a graduate degree.

27612 RALEIGH NC

Last year home prices rose 12 percent.

Most homes cost from \$210,000 to \$580,000.

Most renters pay between \$1,000 and \$1,800.

The average household income is \$88,000.

24 percent of people hold a graduate degree.

Investor Zip Code Analysis

27613 RALEIGH NC

Last year home prices rose 14 percent.

Most homes cost from \$220,000 to \$590,000.

Most renters pay between \$900 and \$1,400.

The average household income is \$110,000.

25 percent of people hold a graduate degree.

27615 RALEIGH NC

Last year home prices rose 13 percent.

Most homes cost from \$150,000 to \$590,000.

Most renters pay between \$1,000 and \$1,600.

The average household income is \$96,000.

24 percent of people hold a graduate degree.

27617 RALEIGH NC

Last year home prices rose 11 percent.

Most homes cost from \$210,000 to \$390,000.

Most renters pay between \$1,100 and \$2,000.

The average household income is \$94,000.

22 percent of people hold a graduate degree.

27614 RALEIGH NC

Last year home prices rose 11 percent.

Most homes cost from \$270,000 to \$580,000.

Most renters pay between \$800 and \$2,000.

The average household income is \$116,000.

20 percent of people hold a graduate degree.

27616 RALEIGH NC

Last year home prices rose 18 percent.

Most homes cost from \$220,000 to \$350,000.

Most renters pay between \$900 and \$1,800.

The average household income is \$72,000.

14 percent of people hold a graduate degree.

Business Growth Analysis

Raleigh North Carolina

January 1, 2023

THREE YEAR JOB GROWTH

NAIC		2022 Jobs	Change	NAIC		2022 Jobs	Change
111	Crop Farming	183	-28	4881	Airport Services	762	377
112	Animal/Aquaculture Farming				Freight Agents	593	199
2111	Oil & Gas Extraction			4931	Warehousing & Storage	6,657	5,675
2121	Coal Mining			5111	News & Book Publishers		
2122	Metal Ore Mining			5112	Software Publishers		
2123	Mineral Mining			512	Movie & Sound Recording	892	-247
2131	Oil, Gas & Mining Services			515	Broadcasting		
2361	Residential Construction	6,637	1,434		Data & Internet Services	3,078	728
	Nonresidential Construction	4,038	482	522	Banking & Financing	14,405	4,053
237	Heavy Construction	4,847	-92	531	Real Estate	9,168	1,570
238	Specialty Trade Contractors	24,183	2,182	532	Rental & Leasing Services	1,900	-289
	Food Mfg	1,610	80		Legal Services	5,422	642
	Beverage Mfg				Accounting & Payroll	4,442	739
	Textile Mills	75	-6		Architecture & Engineering	14,457	1,301
	Textile Product Mills	88	20		Computer Systems Design	18,946	1,647
	Wood Product Mfg	309	-193		Consulting Services	14,219	3,229
	Pulp & Paper Mills				Employment Agencies	23,041	3,537
	Cardboard Box Mfg				Cleaning & Landscaping	13,042	567
	Commercial Printing	1,150	416		Colleges & Universities	1,448	201
3241	Oil Refining & Asphalt			6211	Doctors Offices	9,643	776
3251	Basic Chemicals Mfg	48	14	6212	Dentists Offices	5,147	441
3254	Drug Mfg	1,051	-62	6213	Health Practitioner Offices	5,174	1,650
331	Primary Metal Mfg			6214	Outpatient Care Centers	1,824	260
332	Metal Products Mfg	2,519	209	6215	Medical Laboratories	2,454	340
333	Machinery Mfg	1,243	96	6216	Home Health Care Services	4,269	78
334	Computer & Electronics Mfg	6,966	-5,176	6221	General Hospitals	19,391	1,427
	Transport Equipment Mfg	86	-43	6231	Nursing Homes	2,142	-93
337	Furniture Mfg	419	-18		Retirement & Assisted Living	3,992	-1,139
3391	Medical Products Mfg	577	14		Child Day Care Services	4,691	37
42	Wholesalers	26,154	1,628	711	Performing Arts & Sports	2,298	-1,211
	Car Dealers	6,939	-46	7121	Museums & Historical Sites	148	-31
	Car Parts Stores	1,990	91		Amusement Parks & Arcades	506	
4421	Furniture Stores			7132	Gambling	62	
	Electronics & Appliances			7211	Hotels & Motels	4,182	-298
	Building Materials Stores	5,953	223		Bars	1,505	48
	Food & Beverage Stores	12,404	527	7225	Restaurants	47,813	313
	General Merchandise Stores			811	•	5,741	554
4541	Electronic Shopping				Personal & Laundry Services	6,792	481
		1,664	524		Religious Organizations	336	73
484	Truck Transport	3,286	432	8139	Professional Organizations	1,984	106