



KAKAAKO, URBAN CORE

LIVING

June 2014

Research and Economic Analysis Division
Department of Business, Economic Development and Tourism

STATE OF HAWAII

Introduction

The development of new housing in Kakaako is attracting interest from across the state. The vision for the creation of a vibrant urban core community in the Kakaako area started almost four decades ago in 1976, when the State Legislature created the Hawaii Community Development Authority (HCDA) and designated Kakaako as the authority's first Community Development District. However, the speed of redevelopment since then has been slow.

Although a few high rise condos were built in Kakaako in the 80's and 90's, the total population in the neighborhood still hovered around 2,250 residents in 1990. More high-rise condos were added to the area over the 1990-2010 period, but the increase in population was gradual, with the addition of just about 4,000 new residents each decade. By 2010, there were 10,673 residents living in the Kakaako area.

Today, development in Kakaako is accelerating. Encouraged by favorable market conditions, developers are

taking action and proposals for new projects are surging. At the current pace, the population in Kakaako is easily expected to double within several years.

The accelerated pace of development in Kakaako has brought about both excitement and concern. This report examines various statistics on the Kakaako area, to shed light on current and future conditions in the district. First, it reviews trends of changing families and lifestyles, which further explain the new demand for urban core living. Next, it examines various demographics and housing characteristics of Kakaako based on the 2010 census data, followed by a brief illustration of business activities in the Kakaako area. An analysis of the current and future construction projects in Kakaako and their expected impacts on the Hawaii's economy is included in an Appendix at the end.

Revival of the Urban Core (Experience in Other Cities)

For many decades since the invention of the automobile, high

population growth was mostly observed in areas farther away from the city center. Although this was seen in varying degrees throughout the country, it was commonly observed in most major cities.

People with increased income levels wanted bigger spaces and better neighborhoods - which could only be found in areas farther away from the city center, rather than in or nearby the city center itself.

At the time, people didn't mind longer commutes in exchange for the upgraded housing options. Without much effort to redevelop and reinvest in the city center, many cities witnessed a population decline in the center of the city.

Recent census data, however, showed two noteworthy changes from the long-term population trends in the U.S.:

- For several decades, U.S. population growth in suburban areas was faster than growth in urban areas. But this long-time trend was reversed in 2011, when urban population growth began to outpace suburban growth.¹

- The revival of city cores was also noted in recent U.S. population growth statistics. The latest decennial census shows that major metropolitan areas experienced significant population increases in the center of the city during the 2000-2010 period. This was especially true for the large metro areas with 5 million residents or more, which experienced double-digit percentage population growth at the heart of the city. They saw a 13.3% population increase in the areas within 2 miles from the city hall, while their overall population grew only 6.2% during the same period.²

However, not all cities experienced population growth and increased density in the city center over the past decades. Some cities have thrived, while some continued to shrink.

Two researchers at the Federal Reserve Bank at Cleveland looked at four decades of census data to answer how loss of population density at the core of a city has been related

to a city's overall population growth and productivity.³ They grouped 345 metropolitan areas into shrinking, moderate growth, and fast growth areas based on the population changes between 1980 and 2010.

They found that growing metropolitan cities have generally maintained dense urban centers, while shrinking metropolitan cities have not.

In the shrinking metropolitan areas, population growth occurred only in the outer limits of the city, while the areas closer to the city center continued to lose residents. On the other hand, in the growing cities, population grew both in the areas farther from the city center and in the areas closer to the city center.

Examining the growing cities by time period, the researchers found that the 1980s and 1990s are more characterized by high population growth occurring about 10 miles away from the city center, while the 2000s are characterized by relatively high population growth in areas near the city center.

The researchers also examined how the population density at the core of the city correlated to the productivity of the city. Using a regression analysis, they showed that changes in population density near the city center are positively associated with the city's overall income growth.⁴

However, since regression reflects just correlation and not causality, it's unclear what caused what. A prosperous economy could be a result of economies of agglomeration, or the regression result could have simply reflected the fact that growing and economically robust cities have the necessary capital to revive old city towns. In either case, revival of the city core seems to be a common phenomenon of thriving cities.

Population growth in Honolulu

Honolulu is one of the most densely populated cities in the country. With more than 1,500 people per square mile, Honolulu has the 5th highest population density in the U.S., behind New York City, Los Angeles, San Francisco, and Trenton-Ewing in New Jersey.

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Figure1, Population Distribution on Oahu, 2010

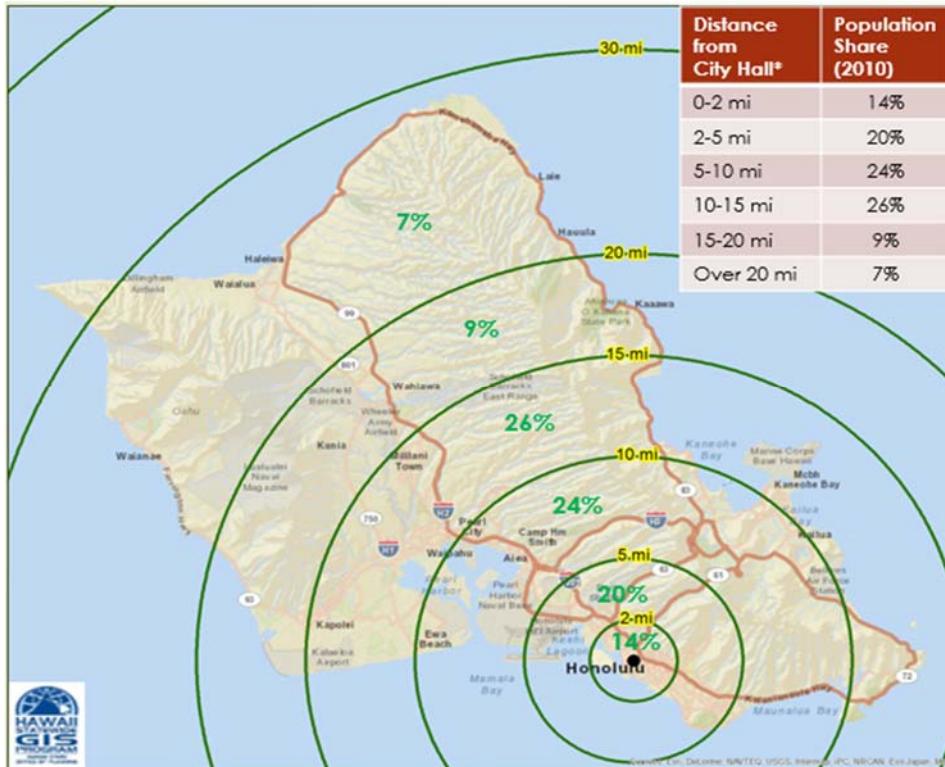
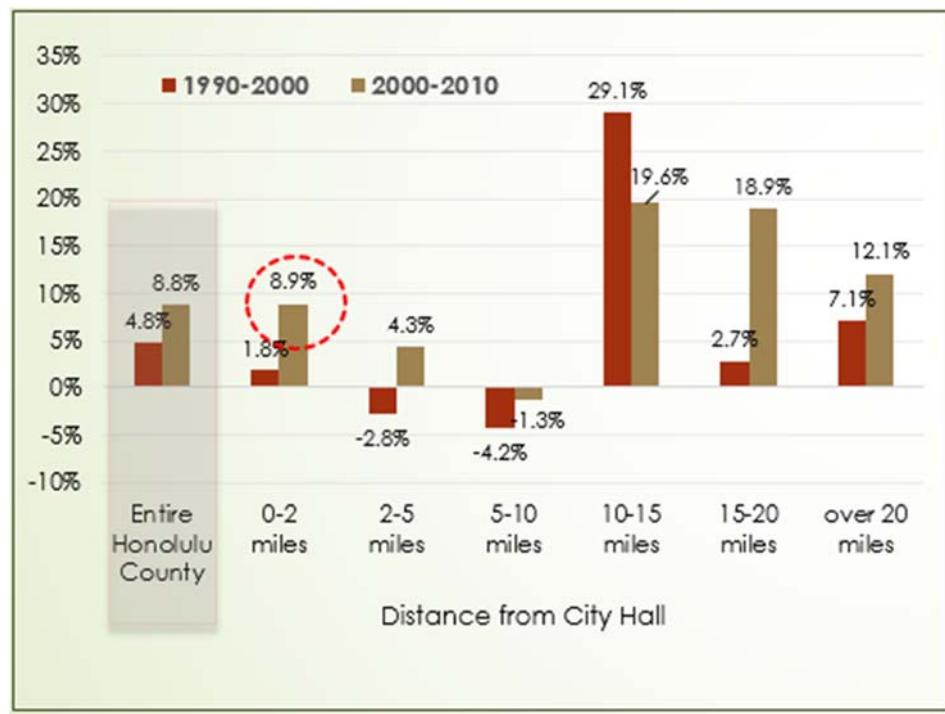


Figure2, Population Growth by the Distance from City Center



In 2010, 58 percent of Honolulu residents were living within 10 miles from the city center, and 84 percent were living within 15 miles from the city center.⁵

Like other metropolitan areas in the U.S., the greatest population growth in Honolulu County took place in the outer part of the city during past decades. In the 1990s, the area 10 to 15 miles from the city center gained 47,500 residents, while the areas within 10 miles of the city center mostly lost population.

Although it was to a modest degree, urban core revival was also seen in Honolulu in the 2000s. While the outer part of the city continued to take the lead in major population growth, the inner part of the city began to show a sound population growth in the 2000s.

This was especially notable in the area within 2 miles of city hall, which saw an average population increase of 0.9% annually, a little higher than the population growth for Honolulu County as a whole. Needless to say, the redevelopment effort in the

Kakaako area deserves much of the credit for the decent population increase in the city center of Honolulu.

Changing Families and Changing Housing Demand

Even if an urban core area is underutilized, redevelopment of the urban core would fail if there is not enough demand for the area. In order for an area to grow in population, it not only requires an adequate supply of housing, but also enough demand for living in that area.

A recent DBEDT report estimated that Hawaii would need approximately 5,200 units to be built each year until 2020 to adequately accommodate the state's projected population growth.⁶

For Honolulu County alone, over 3,300 new homes would be needed each year to accommodate the anticipated population growth.

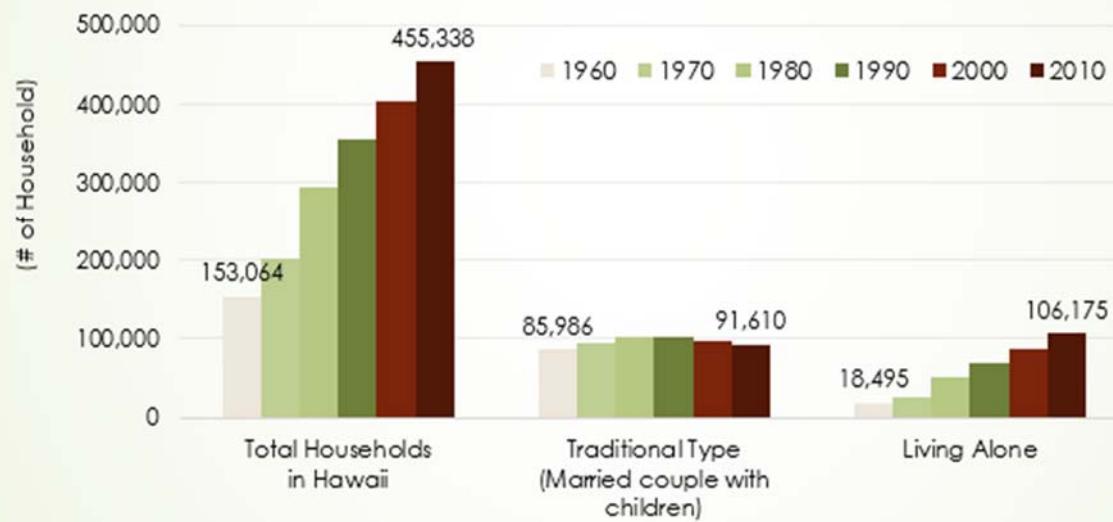
Hence, we need to build more housing. But the looming question is, "Where do we build it?" For a long time, buying a large single family house in a suburb represented the American dream. People were willing to move out of the city in exchange for bigger and newer houses, safer neighborhoods and better schools. Honolulu was no exception.

Recently, however, we have observed an increased preference for living closer to the city center. Worsening traffic in Honolulu could be one cause, however it is

likely not the only reason for the shift back to the urban core. Compared to the older generation, the newest generation has grown up in the age of the internet and social media and prefers a more connected and convenient lifestyle.

Another factor for this shift is the changing household pattern. Larger sized single family houses in the areas farther from the city center were mostly built for families. Working parents were willing to accept the inconvenience of longer commutes and traffic jams for a bigger yard and better schools for their children.

Figure3, Household Growth in Hawaii from 1960 to 2010



However, the traditional families who have been creating that housing demand have significantly diminished over time. In 1960, 86 percent of total households in Hawaii were family households, comprised of people who were related to each other by birth, marriage, or adoption. However, this share decreased to 67 percent by 2010.

Within family households, the traditional family type that consists of a married couple with children has rapidly decreased. As Figure 3 shows, the absolute number of traditional family households barely grew for the past 50 years while the total household number tripled. With increased numbers of unmarried couples, single parents, broken marriages, and couples who choose to delay or forgo childbirth, the share of traditional households (married couple with children) has decreased from 56 percent in 1960 to 20 percent in 2010.

Another trend is the proliferation of one-person households. The share of one-person households as a percentage of total households in Hawaii increased from 12.1 percent in 1960 to 23.3 percent in 2010.

The fast increasing number of those living alone is a result of increased individualism and improved financial ability, as young working adults can afford to maintain a residence of their own. Also, the aging senior population often lives alone and has also contributed to the increase of one-person households.

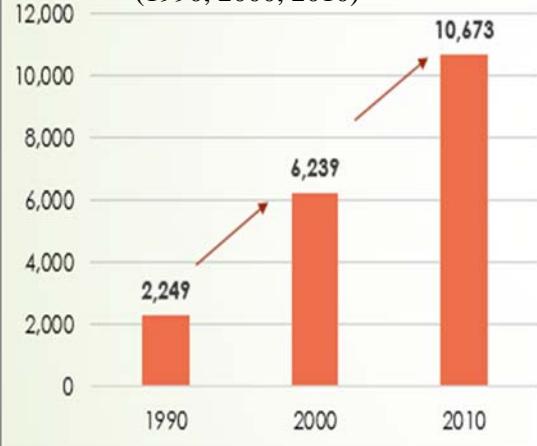
All these changes in household forming style have resulted in a new diverse housing demand. While family households with children are still more likely to be attracted to bigger houses and safer neighborhoods in the suburbs, diverse and dense city core living would better appeal to singles and couples without children. Therefore, the increasing number of non-family households and families without children implies increased potential demand for housing in the urban core.

KAKAAKO (Who Lives There)

Kakaako consists of 88 blocks bounded by Piikoi Street, King Street, Punchbowl Street, Ala Moana Boulevard, and the waterfront area below Ala Moana Boulevard. The most recent census data shows there were 6,131 housing units available in the Kakaako area in 2010.

Among those, the majority were occupied, with 10,034 residents living in 5,253 units. Including 639 people living in group living facilities, the total population in the Kakaako area was 10,673 in 2010, a 71 percent increase from its population in 2000.

Figure 4, Population in Kakaako (1990, 2000, 2010)



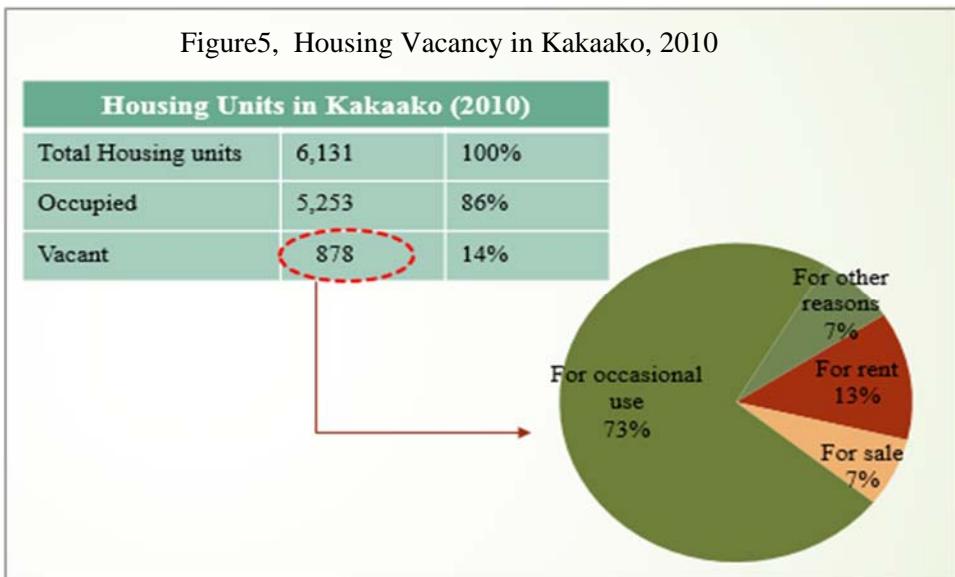
Period	Change	Change in %
1990-2000	3,990	177.4%
2000-2010	4,434	71.1%

Vacancy rate

There have been concerns that many of the newly developed units in Kakaako would be purchased by out-of-state investors and could be left vacant. At the time of the 2010 census, 878 units out of total 6,131 housing units were vacant, showing a 14 percent vacancy rate.

By census definition, a housing unit is deemed vacant if no one is living in it at the time of enumeration, unless its occupants are only temporarily absent. Units that are temporarily occupied at the time of enumeration by people who have a usual residence elsewhere are also classified as vacant.

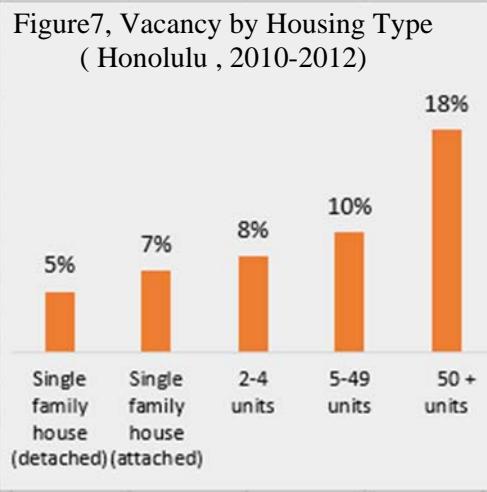
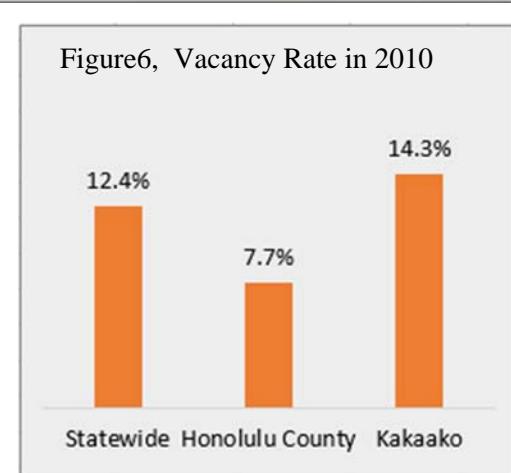
There were a number of reasons for vacancies. Some units were vacant because they were waiting to be sold or rented, while others were kept vacant by their owners for seasonal, recreational, or occasional use. In Kakaako, vacancy for seasonal, recreational or occasional use was the dominant reason, accounting for 73 percent of total vacancy in the area. About 20 percent of total vacancy was attributed to those units that were waiting to be rented or sold.⁷



The vacancy rate in the Kakaako area was 6.6 percentage points higher than the vacancy rate for all of Oahu.

However, much of this difference can be explained by the type of housing offered in Kakaako versus the rest of Oahu.

Vacancy rates vary significantly between single family housing and condominiums. The American Community Survey from the U.S. Census Bureau shows that the vacancy rate of detached single family houses in Honolulu was only 5 percent during the 2010-2012 time period, while the corresponding rate for buildings with 50 units or more, was 18 percent.⁷



Given that housing in the Kakaako area is mostly contained within high-rise condos, the vacancy rate in Kakaako is relatively high, but not higher than expected for a condominium area.

Home ownership

Among 5,253 occupied housing units in the Kakaako area in 2010, 46.4 percent (2,436 units) were occupied by owners, while the rest were occupied by renters.

This homeownership rate is about 10 percentage points lower than the homeownership rate for Honolulu County.

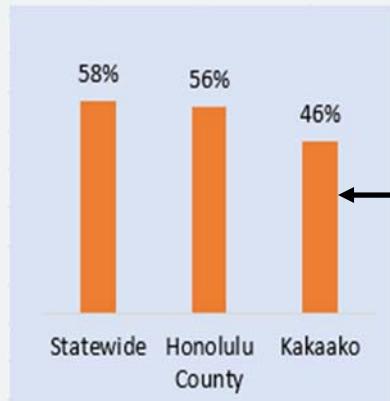
However, homeownership also varies significantly depending on the structure of the building.

American Community Survey shows that while homeownership of single family housing in the Honolulu County was as high as 78 percent during the 2010-2012 period, homeownership for multi-unit buildings was much lower; especially multi-unit buildings with less than 50 units, which are more likely to be cost effective housing options and tend to have a very low homeownership rate.⁷

That being said, a lower homeownership rate in the Kakaako area is not particularly low for an area with so many condominiums.

Looking at homeownership by householder's age, we find that homeownership rates in Kakaako were lower in

Figure 8, Homeownership Rate in 2010



5,253 Occupied Housing Units in Kakaako in 2010

Owner occupied	2,436 (46%)
Renter occupied	2,817 (54%)

Figure 9, Homeownership Rate by Housing Type (Honolulu, 2010-2012)

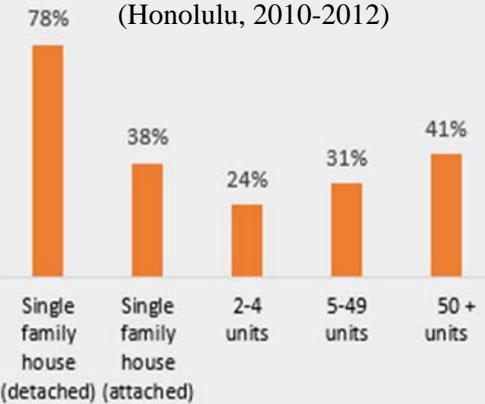
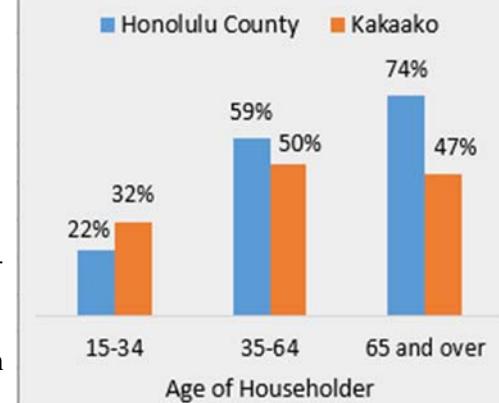


Figure 10, Homeownership Rate by Householder Age (2010)



general, especially among older householders. However, young householders in Kakaako showed relatively high homeownership. Among young Kakaako householders aged 15 to 34 years old, 32 percent owned their units, while the rest rented. Although this may not seem like much, it is 10 percentage points higher than the

corresponding young homeownership rate for all of Oahu.

It could be an indication that Kakaako has been successful in attracting many young and financially capable first time home buyers.

42 percent are single households

In 2010, family households accounted for less than 50 percent of total occupied households in the Kakaako area. The rest was non-family households.

The biggest component of non-family households in Kakaako was one-person households. 2,210 units out of a total 5,253 occupied household units in the area were home to single-person households in 2010. This means people living alone represented 42 percent of the total households in the area.

For the entire Honolulu County, 22.8 percent of total households were living alone in 2010. Compared to other household types, one-person households were more likely to choose a multi-unit housing option that comes with a smaller space, but better security and more amenities in general.

In fact, 47 percent of all housing units in larger condominium buildings (50 units or more) in Honolulu were occupied by people who lived alone during the 2010 to 2012 time period.⁷

Many single households in Kakaako were actively working professionals, but 37 percent of them were senior citizens over 65 years old.

“Living Alone” Households in Kakaako by age (2010)

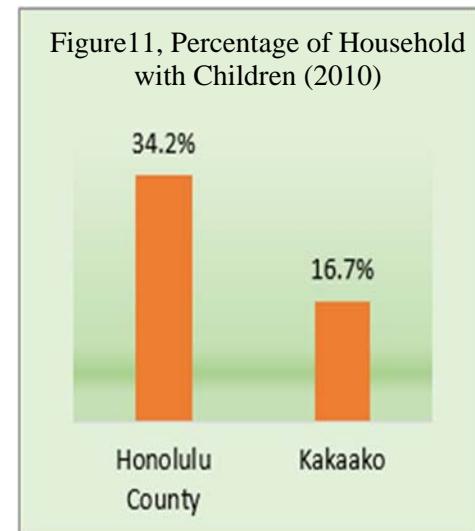
15-34 years	336 (15%)
35-64 years	1,047 (47%)
65 and over	827 (37%)

17 percent of the households had children

Among 5,253 households living in Kakaako in 2010, 17 percent (877 households) had at least one child under the age of 18. This is a much smaller segment compared to the rest of Oahu, where 34 percent of households reported having at least one child.

The number of schools needed for the growing Kakaako population will depend on how many school-age

Figure11, Percentage of Household with Children (2010)



children are expected to live in the area in coming years. In 2010, there were 940 school age children living in the Kakaako area. The number of new residential units to be built is one main factor in estimating the demand for new schools. However, the actual number of school age children in Kakaako will be greatly affected by whether the new units are built to attract local families with children or not.

School Age Children in Kakaako (2010)

5-9 years old	359
10-14 years old	354
15-17 years old	227

Unit size, building amenities, parks and open spaces are all items that could affect a family's decision to buy. A studio or one-bedroom unit would not likely attract a family with children. Unit price is also an important factor because a two-bedroom or three-bedroom unit with a million dollar price tag is not something that an average local family can afford.

Shorter Commuting Time

One of the reasons to live in the urban core is to be closer to work. Like in other areas, the main mode of transportation to work for Kakaako residents was by car. 69 percent of working residents in Kakaako commuted by car. However, walking to work

was the second most popular way to get to work. Among the working residents in Kakaako, 15.2 percent said they walked to work, much higher than the 5.3 percent of Honolulu County who said they walked to work.

Living closer to the city center, Kakaako residents enjoy a shorter commuting time. 54 percent of working Kakaako residents spent less than 20 minutes to get to work, compared to 35 percent of Oahu residents.

*Commuting data reported here is for an extended Kakaako area including some Ala Moana area adjacent to Kakaako

Source: U.S. Census Bureau, American Community Survey, 2008-2012

Smaller household and family size

With fewer children and more people living alone, the average household and family size in the Kakaako area was much smaller than that of the rest of Oahu. While an average of three people lived in a household in Honolulu in 2010, only 1.9 people lived in a household in the Kakaako area.

Figure 12, Household and Family Size (2010)

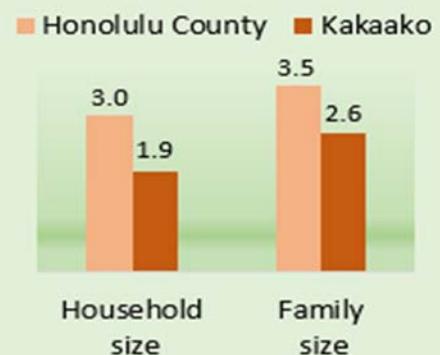


Figure 13, Means of Transportation (Kakaako area)

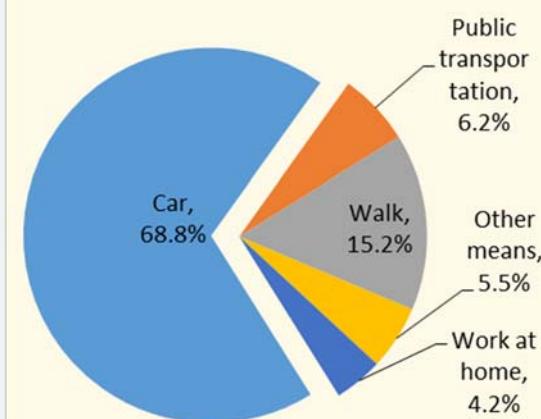


Figure 14, Percentage Who Walks to Work

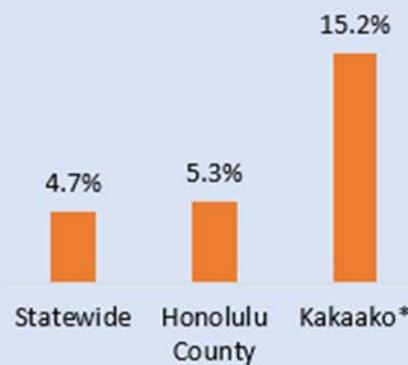
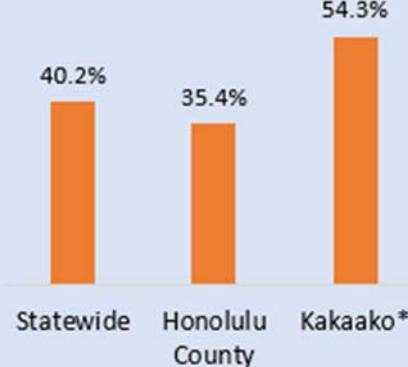


Figure 15, Travel Time to Work Less than 20 minutes



Businesses in Kakaako

For a long time, Kakaako was known as an industrial area, filled with warehouses and repair shops. However, in recent years, there has been a shift to more mixed uses, as the landscape began changing to a more residential area with new community gathering places.

According to the unemployment insurance data from the Hawaii Department of Labor, there were 1,260 businesses operating in Kakaako in 2012.

While 45 businesses were in Kakaako's traditional Maintenance and Repair sector, there were far more businesses in a variety of diverse sectors.

The sector with the most number of businesses was the "Professional, Scientific and Technical Service" sector, with 171 businesses operating in the area in 2012. Arising as a new gathering place for both residents and tourists, the Kakaako area also accommodated 134 retail shops and 106 restaurants (food and beverage).

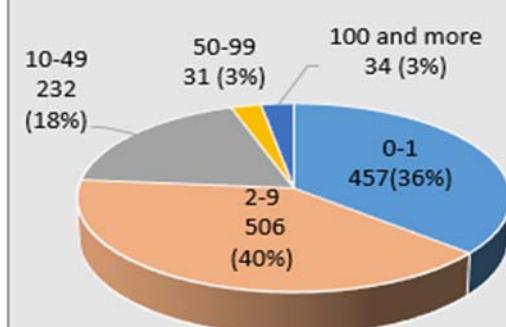
Table 1. Kakaako Businesses by Sector

Sector	Number of Businesses In 2012
Professional, Scientific, and Technical Services	171
Organizations	156
Business organization (mostly AAOO)	(116)
Retail Trade	134
Food Services and Drinking Places	106
Wholesale Trade	100
Health Care Services (Ambulatory)	79
Finance and Insurance	71
Construction	62
Real Estate and Rental and Leasing	56
Administrative and Support Services	50
Maintenance and Repair	45
Information	33
Other sectors	197
Total	1,260

There were 79 health care clinics located in the area, and 71 headquarters or branches of financial institutions were operating in the area. Kakaako was also home to media companies. In addition to the Honolulu Star Advertiser, KITV, KHON, and Pacific Business News, more than 30 small media companies were based in Kakaako area in 2012.

In terms of size, more than three quarters of businesses in Kakaako were small businesses with less than 10 employees.

Figure 16, Kakaako Businesses by Number of Employees



Among those, 457 businesses had one employee or less. 0-1 person business were commonly found in the professional, technical, and other services sector.

Larger businesses also made their home in Kakaako. In 2012, 34 companies in the Kakaako area reported having more than 100 employees. However, a company's employees do not necessarily have to work in Kakaako, even if the company is based there.

When a company does businesses at various locations, it is a common practice that all employees are reported under the area where the company's headquarters or personnel office is located. ABC Stores and Kamehameha schools are good examples of this case. In 2012, 25,300 employees were reported under the 1,260 businesses in the Kakaako area. For the reason mentioned above, the actual number of employees who worked in the Kakaako area would be much less. However, it can be said that Kakaako is one of Oahu's core business areas, overseeing more than 25,000 employees in Honolulu.

Conclusion

One of the key challenges for any growing city is to ensure adequate housing to meet resident demand. The redevelopment of Kakaako is helping to ease the housing shortage in Honolulu and meet the increasing demand for urban core living.

During the construction phase, redevelopment will create jobs and business opportunities in the construction industry and many other sectors. It may also contribute to increasing productivity of the city through more efficient and dense use of land and improved infrastructure.

Statistics based on the 2010 census show that vacancy and homeownership rates in the Kakaako area are not high or low enough to raise concerns at this moment. However, building specific statistics tell us that vacancy and homeownership vary substantially depending on what kind of housing options a building provides. It implies that efforts to guide each project to meet the city's true needs would be very important to the success of Kakaako in providing more housing options to local residents at reasonable rates.

Endnotes

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2. Patterns of Metropolitan and Micropolitan Population Change: 2000 to 2010, 2010 Census Special Reports, September 2012, U.S. Census Bureau
3. Urban Growth and Decline: The Role of Population Density at the City Core, Kyle Fee and Daniel Hartley, Federal Reserve Bank of Cleveland Economic Commentary, December 2011
4. The Relationship between City Center Density and Urban Growth or Decline, Kyle Fee and Daniel Hartley, Federal Reserve Bank of Cleveland Working Paper, June 2012
5. GIS program, Office of Planning, DBEDT, State of Hawaii
6. Construction and Hawaii's Economy, Feb 2014, DBEDT, State of Hawaii
7. U.S. Census Bureau, 2012 American Community Survey 3-year Estimates

APPENDIX

Economic Impact of Kakaako Construction

The construction industry in Hawaii enjoyed a strong and extended expansion for seven consecutive years from 2000. Although it suffered for several years after the recession started in 2008, the sector entered a robust expansion again in recent years.

Most would agree that one of the major contributors to this construction boom has been the recent development in Kakaako. From 2000 to early 2014, 8 residential buildings were newly constructed or renovated in the area, adding about 2,600 residential units and 140 thousand square feet of commercial space.

As of June 2014, 11 projects were either under construction or approved to be built, while several others were expected in the pipeline.

When completed, the 11 approved projects will provide additional 4,200 residential units and over 302,000 square feet of commercial space in the Kakaako area.

In addition to providing new residential and commercial spaces to the Honolulu residents and businesses, the construction projects in Kakaako generate wide range of benefits for Hawaii's economy. The estimated construction value of these 11 projects is \$2 billion.

Construction activity creates jobs and income in the construction sector itself and in many other sectors that support the construction industry, such as engineering design, transportation, and financial services. Spending by construction workers and the supporting industry workers will generate further economic activities. Table A1 summarizes the expected economic impacts of the estimated two billion dollars of new Kakaako construction projects.

Calculated from DBEDT's Input-Output

model, the 11 construction projects in Kakaako are expected to create a total of \$4.1 billion sales in Hawaii during the construction period. Households in the state will enjoy an increase of \$1.2 billion in household income, state government will collect \$215 million tax revenue from the construction activity, and a cumulative of 18,000 jobs will be generated or supported by the construction projects during the construction period.

If the construction takes 5 years to complete, the average jobs created or supported would be 3,600 per year, of which about half will be in the construction sector.

Figure A1, New Projects in the Kakaako Area



Table A1. Impact of \$2 billion Kakaako Construction on the Economy

Output generated	\$4.1 billion
Household Income generated	\$1.2 billion
State Tax Revenue generated	\$215 million
Total Jobs generated/ supported	18,000 Job years

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This report was produced by the Research and Economic Analysis Division, headed by Dr. Eugene Tian, Division Administrator. The author, Dr. Yang-Seon Kim, Research and Statistics Officer, extends special thanks to the GIS program, Office of Planning at DBEDT, for providing data and maps, and Paul Oshiro, Research Statistician, for his assistance with data preparation.