

**DRAFT**

**Market Opportunities Study  
Kalihi Neighborhood TOD Plan**

*Prepared for*

**The City and County Of Honolulu**

*Prepared by:*

**Keyser Marston Associates, Inc.**

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## ***Introduction/Purpose***

The City and County of Honolulu (City) has initiated preparation of the Kalihi Neighborhood Transit Oriented Development (TOD) Plan for three stations along the planned new elevated transit line in Honolulu - Middle Street, Kalihi, and Kapalama. The purpose of the overall assignment is to promote transit oriented land uses and improve neighborhood quality and character of the areas around the transit stations.

The new 20-mile elevated rail system is planned to connect East Kapolei to Ala Moana Center and will consist of 21 stations. As a general rule, existing development in the Ewa area of the island is less intense than in the existing built areas of the “urban” stations that are the subject of this assignment. According to the Environmental Impact Statement (EIS), the transit line will be built out in 2019, and by 2030 it is estimated that there will be approximately 116,000 annual boardings.

This report, prepared by Keyser Marston Associates, Inc. as a sub consultant to Dyett & Bhatia, assesses the potential market demand for a variety of residential and commercial land uses consistent with TOD principles and to identify the opportunities and constraints for development of those types of uses. More specifically, this study examines the following uses<sup>1</sup>:

- Residential condominiums and apartments
- Retail
- Office
- Hotel

This Market Opportunities Study is a companion document to the Existing Conditions Report prepared by Dyett & Bhatia, which describes in more detail the existing conditions around the three stations. The Market Opportunities Study will help the City make decisions with respect to potential TOD land uses that might be accommodated around each of the three stations.

## ***Assumptions and Limitations***

Keyser Marston has assessed the market demand for the various land uses based on typical market and demand factors for real estate analysis, including historic and projected population and employment, market metrics such as rents, vacancies, and absorption, as well as construction trends. In undertaking this analysis, Keyser Marston has performed original research as well as obtained data from third parties such as the City and County of Honolulu, the State of Hawaii, the Honolulu Board of Realtors, Claritas (a private data research company),

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<sup>1</sup> Industrial uses, while typically not associated with TOD, are also discussed in this report due to the predominant presence of industrial uses in portions of the study area.

and local real estate brokers, developers and property owners. While Keyser Marston believes data obtained from third parties is reliable, we cannot guarantee its accuracy.

The demand estimates included in this report are based on an examination of historic patterns of new development, the experiences with TOD in other parts of the country, and on Keyser Marston's professional judgment with respect to TOD opportunities around the Kalihi stations. However, because the study area is a largely built-out environment, in order for much of the potential new demand to be accommodated redevelopment of existing properties will be required. Keyser Marston's scope of work for this assignment does not include an assessment of financial feasibility of specific projects.

### ***Transit Oriented Development***

In general terms, TOD is defined as development around transit stations that is at medium to high densities and that encourages transit ridership. The goals of TOD are to be pedestrian and bicycle friendly so as to encourage non-automobile forms of transportation and to encourage mixed use development so that residents, employment centers, and services are within convenient proximity of each other<sup>2</sup>. The typical TOD catchment area is typically a five- or ten-minute walk from the station, or up to about a ½ mile.

The potential benefits of TOD are many:

- Decreased traffic congestion;
- Cost savings from decreased dependence on private vehicles for transportation and for parking;
- Preservation of open space by accommodating new growth in higher density developments;
- Decreased generation of greenhouse gasses from lower private auto use;
- Promotion of healthier lifestyles by encouraging more walking and bicycling;
- Increased property values;
- Generation of fiscal benefits to the City and County through new development and redevelopment of properties around the transit stations

However, for a variety of reasons TOD can also be difficult to accomplish. Since TOD is at higher densities, the associated construction costs are also higher. TOD within existing built neighborhoods is further challenged by the need to relocate existing tenants or buy out existing leases, demolish buildings to clear the way for new construction, replace public infrastructure, and coordinate development efforts among sometimes numerous small property owners.

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<sup>2</sup> While a mix of uses would result in vitality and more self-sufficient neighborhoods, there are numerous examples of largely single-use TOD districts.

## **Station Areas**

In this report, the Middle Street, Kalihi, and Kapalama station areas are collectively referred to as the "Kalihi planning area." The Kalihi planning area enjoys many locational strengths including its close proximity to employment centers such as downtown and Waikiki, as well as to the airport and the harbor. In addition, the area is surrounded by high concentrations of population, which supports commercial businesses in the area. These factors will help to encourage successful TOD in the Kalihi planning area. The following is a brief summary of each of the three station areas examined in this report. More detailed information regarding the station areas is included in the Existing Conditions report prepared by Dyett & Bhatia.

A common challenge for successful TOD in all three stations is the largely built out nature of the area; therefore development of TOD on any significant scale will require redevelopment of existing built properties. There may in fact be numerous buildings within the study area that at some point in time will be good candidates for redevelopment due to poor physical condition or property underutilization (such as some of the industrial uses). Two other issues that need to be addressed in the planning area are the presence of crime and homelessness.

### Middle Street Station Area

The Middle Street Station is the western-most station of the stations in this study. Key land uses in the Middle Street Station area include the Kalihi Transit Center bus station, industrial uses mauka of Dillingham Boulevard the Oahu Community Correctional Center makai of Dillingham. Fort Shafter is the opposite side of the freeway. Key property owners include the State of Hawaii and the Robinson Trust. The industrial uses on the Robinson Trust property appear generally to be well tenanted.

Given the presence of the bus facility, Middle Street will be a multi-modal transit location when the transit station is completed. This presents opportunities for TOD development. Challenges to TOD include the presence of the correctional center, the large industrial uses, the long blocks in this station area which discourage walking, and the freeway on and off ramps and overpasses. There are currently no plans to relocate the correctional center, and in fact there are plans to expand the facility. In addition, since the industrial properties on the Robinson Trust appear to be tenanted, it could be some time before these properties are ready to be redeveloped for more TOD-types of uses.

### Kalihi Station Area

The Kalihi Station is approximately ½ mile east of the Middle Street Station. The station area is characterized by a primarily residential neighborhood mauka of Dillingham and a mix of industrial, commercial, retail, and residential uses on the makai side.

Challenges to TOD in the Kalihi Station area include the many small parcels and individual property owners in the area, which makes it challenging to assemble properties and to coordinate a uniform TOD strategy. In addition, the area is in need of sidewalks and other pedestrian improvements.

### Kapalama Station Area

Of the three stations in the Kalihi planning area, the Kapalama Station area appears to hold the most promise for successful TOD. The primary reason is that this station area is dominated by two large land owners who already have plans to redevelop their properties with TOD-type uses, Kamehameha Schools (KS) and the UH Honolulu Community College. KS owns roughly 100 acres of land within the Kapalama station area, which are currently improved with a mix of older shopping centers along Dillingham and warehouse/industrial uses both mauka and makai of Dillingham. KS is planning to redevelop these properties as current tenant leases expire over the coming years. Plans developed by KS (but not yet submitted for approval by the City) currently call for redevelopment/repositioning of the retail along Dillingham, new office uses, and mid-rise housing ewa of the Kapalama canal.

The Honolulu Community College campus, which occupies over 20 acres, has a Long Range Development Plan (LRDP) that calls for significant new facilities. First phase projects include construction of the new 145,000 sq. ft. ATTC building, completion of sidewalks along the Kokea Street frontage, removing the temporary buildings next to the transit station, and relocation of the auto body shop from its Dillingham location to the Kokea Street campus. Ultimately, the plans call for a new student union building, other new classroom facilities, and a parking garage where the current parking lot exists. The college's plan is conducive to TOD in that it fosters a pedestrian-friendly environment, incorporates food, retail, and services for its students, and plans to orient new improvements in ways that encourages transit ridership. Implementation of both the Kamehameha Schools and Honolulu Community College plans can act as a catalyst to encourage TOD by other property owners in the Kapalama station area.

### ***Demographics and Employment***

For purposes of the market demand analysis, Keyser Marston obtained population and demographic data from Claritas for the area around the three Kalihi planning area stations. A one-mile radius area was utilized in order to obtain the demographic characteristics of a larger area than the typical ½ mile TOD catchment area because the statistical data for a larger area is generally felt to be more reliable. This data indicates that the population of the one-mile radius was about 34,900 in 2010, the average household size was 3.63, and the median household income was about \$41,700 (see attached Table 1). The median income in the Kalihi planning area is nearly 40% lower than Honolulu as a whole.

In terms of economic activity, much of the State of Hawaii's economy is based on tourism or the military/government, with about 32% of the Gross State Product generated by these industries<sup>3</sup>. In addition, much of the economic activity supporting other job sectors such as retail and real estate is generated by the tourism and government sectors. In the Kalihi-Palama subarea of the City, over 85% of the jobs are focused in four categories: services, industrial, retail, and transportation/utilities<sup>4</sup>.

### ***Residential Condominiums and Apartments***

Residential real estate market conditions in Honolulu have declined over the past several years. Data from the City indicate that residential building permits, both single family and multi-family, have dropped precipitously during this time. While there were permits for about 2,200 multi-family units pulled in Honolulu in 2004, there were just 174 in 2009 (Table 5). The average number of multi-family building permits over the past 20 years was about 1,200 per year. The Honolulu Board of Realtors also indicates that the number of residential sales have decreased significantly over the past five years, although home values have not declined as significantly. The median condominium price in Honolulu was about \$300,000 in 2010 which was roughly 10% below the peak in 2008. Multi-family condominiums, which are more conducive to TOD than single family detached housing, has not occurred in any significant amount in the Kalihi planning area. Most condominium development has historically been concentrated in Waikiki, Ala Moana, and downtown, as well as pockets such as Hawaii Kai. Despite the slow down in activity in the last few years, the long-term outlook for housing in Honolulu remains positive because of the need to accommodate future population growth in a highly land constrained environment.

Despite high demand for rental housing opportunities in the urban core, there has been almost no new development of market rate apartments in years, a reflection of the discrepancy between the values of for-sale condominiums vs. those supported by apartment rents. The rental housing stock in Honolulu is generally a combination of older market rate apartments, public housing or other subsidized housing, and for-sale condominiums that owner/investors are renting. Rental rates for condominium units vary considerably from project to project depending on location and amenities, and can range from about \$1,700 per month to well over \$2,000 for a two-bedroom unit<sup>5</sup>.

The new transit line will bring new opportunities for residential housing growth to the Kalihi planning area. Studies have shown that new transit lines promote growth of higher density housing units within close proximity of the stations, particularly when they are located in mixed

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<sup>3</sup> 2008 GSP from Government and Accommodation & Food Services, Enterprise Hawaii.

<sup>4</sup> Honolulu Department of Planning and Permitting

<sup>5</sup> Kevin Carney, EAH, 2011

use areas near jobs and cultural/entertainment amenities<sup>6</sup>. Studies have also shown that these types of neighborhoods are a draw particularly for empty-nesters looking to downscale, as well as single, young people not yet ready to purchase a larger home. Combined with the fact that traffic congestion is already a major problem in Honolulu, it is likely that there will be growing demand for TOD housing in the Kalihi planning area.

Keyser Marston has estimated the range of new TOD housing units in the Kalihi planning area based on projections that the area will capture a larger share of the Honolulu housing market than exists today due to the new transit line. There are currently about 3,700 housing units within ½-mile radius of the three Kalihi planning area stations, which represents about a 1.09% share of the 340,000 housing units in all of Honolulu<sup>7</sup>. Keyser Marston estimates that once the transit line is fully operational, the three Kalihi planning area stations (½-mile radius) could eventually capture a share of the housing market in the range of 1.85%. This range is based on the characteristics of the three station areas, on studies that have demonstrated that higher density housing tends to cluster around transit stations, and on an assumption that the bulk of new growth along the transit line will center around six stations – Ho’opili, West Loch, Pearlridge, Kapalama, Iwilei, and Ala Moana of which one (Kapalama) is in the study area<sup>8</sup>. This larger capture would equate to about 7,700 housing units by 2035 based on the City’s projection of 416,000 housing units in that year, or about 4,000 more units than there were in 2010 (about a 5% share of the regional increase).

Again, these possible housing estimates are based on demand factors and not on financial feasibility or on the availability of development/redevelopment sites appropriate to accommodate such demand. Accommodating this range of new housing units will require redevelopment of existing built properties in the Kalihi planning area. Kamehameha Schools for example, has plans to redevelop some of its industrial properties with over 2,000 housing units<sup>9</sup>. However, KS recognizes that much of these plans (calling for mid rise residential development consistent with TOD) will require improvement in project economics before they are feasible<sup>10</sup>.

It is likely that the new transit line once it is fully operational will contribute toward the economics of redevelopment projects. Empirical studies of the economic impacts of transit indicate that the value of residential condominiums with close proximity to transit can be increased by up to 18% and apartment values by up to 45%<sup>11</sup>. Given its locational advantages and given prospects for

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<sup>6</sup> For example, Hidden in Plain Sight: Capturing the Demand for Housing Near Transit, Center for Transit Oriented Development (September 2004)

<sup>7</sup> Dyett & Bhatia and the Honolulu Department of Planning and Permitting

<sup>8</sup> The 2010 Jones Lang LaSalle Value Capture Study for the City and County of Honolulu identified these stations as having the highest potential to generate value capture.

<sup>9</sup> Kapalama Strategic Implementation Plan.

<sup>10</sup> Catherine Camp, Kamehameha Schools, 2011.

<sup>11</sup> Capturing the Value of Transit, Center for Transit-Oriented Development (November 2008).

higher values due to transit, it appears that there are strong economic, market, and demographic factors in favor of more residential growth in the Kalihi planning area.

With respect to building typologies, future TOD housing in the Kalihi planning area will likely be in low- to mid-rise buildings depending on proximity to the stations and the neighboring land uses. Generally, we would expect the higher density developments to occur in the immediate areas around the Kapalama Station given the long-term opportunities for large scale redevelopment of the KS properties, the planned community college improvements, and the possibilities for future Kapalama canal improvements.

### ***Retail***

Honolulu has a substantial mix of retail opportunities, which cater to both residents as well as tourists. Within the Kalihi planning area, there is a significant presence of big box retail adjacent to the Kapalama and Iwilei stations including Costco, Home Depot, and Best Buy. In addition, there is a significant amount of neighborhood-serving convenience retail which includes grocery stores, pharmacies, and eating and drinking establishments. Unlike the big box stores, much of the inventory of retail space in the study area appears have been built 30 years ago or more and as a result much of that space is in need of significant reinvestment or redevelopment. Much of the existing retail can be characterized as strip retail at low densities.

Retail market conditions in Honolulu historically have been quite strong. Average retail rents in Honolulu are currently in the range of \$3.00 and \$4.00 per sq. ft. and the average vacancy rate is about 3.75% (Table 10). Rents in the Kalihi planning area are generally lower than the Honolulu average (in the range of \$2.00 to \$2.50) in large part due to the aged condition of much the retail in the area<sup>12</sup>. While retail market conditions have declined somewhat from what they were several years ago, the retail market in Honolulu is far better off than most big cities on the mainland.

In order to assess the amount of retail that might be supported in the study area, Keyser Marston analyzed sales data for both a one-mile radius and five-mile radius around the transit stations. This analysis indicates that there is a significant influx of retail sales into both the one-mile and five-mile radius areas. That is, stores within these areas generate sales from a trade area far larger than the immediate area itself. For the one-mile radius, this result is not surprising relative to certain types of sales such as general merchandise and building supplies given the presence of large format stores such as Costco and Home Depot. However, the trend extends to almost all other retail categories as well including grocery stores and pharmacies which generally attract sales from a much smaller trade area. For the five-mile radius, there continues to be a large influx of sales for both convenience and comparison goods. It is clear that sales are generated by households living in the area as well as people working in the area and commuting through the area. Sales from commuters are elevated due to the fact that the

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<sup>12</sup> Anthony Hunt, CBRE, 2011

area is a significant commuter corridor and because traffic to and from the Likelike Highway flows through the area.

Keyser Marston has evaluated the amount of TOD-oriented retail that can be supported in the Kalihi planning area based on projected household growth. Based on these growth projections, a preliminary estimate is that there could be support for net new TOD-oriented retail in the range of 465,000 sq. ft. within the ½-mile radius by 2035 (Table 11)<sup>13</sup>. This estimate excludes potential demand from general merchandise sales and building material/supply stores (which is often accommodated in big box stores) or automobile sales because these types of retail uses are generally not consistent with TOD.

Based on the anticipated segmentation of retail sales, it is likely that a large portion of future TOD-type retail in the Kalihi planning area will be in small- to medium-format stores with the largest of these stores being in the 50,000 to 60,000 sq. ft. range, or about the size of a modern grocery store. Other retail sales such as clothing stores (non discount), sporting goods, books and music, gift stores, and eating and drinking establishments will likely be in smaller formats. A portion of the retail space, perhaps in the 10% to 15% range, could be supported on the ground floor of mixed use buildings, with residential or office uses above. Of critical importance to the success of mixed use and other types of pedestrian-oriented retail is the inclusion of "place-making" amenities including sidewalks, streetscape improvements, public plazas, and the like.

### **Office**

Historically, office development in Honolulu has largely been focused in the central business district. According to a report by Colliers Monroe Friedlander, more than 72% of the 15.7 million sq. ft. of office inventory is located in the central business district and the Kapiolani Corridor. Most of the office development that has occurred in Honolulu occurred in the late 1980s and early 1990s and, in fact, there hasn't been a new multi-tenant office building built in Honolulu since the First Hawaiian Center in 1996. Two projects in which significant office space exists in the Kalihi planning area is the Dole Office Building/Dole Cannery and the Gentry Pacific Design Center. Both the Dole and Gentry facilities are conversions of old canneries to retail/office complexes.

The market fundamentals for office space are not favorable at the current time. The central business district vacancy rate was about 13% as of the fourth quarter of 2010 and the average rent was about \$2.70 per sq. ft. There continues to be weakness in the finance, insurance, real estate, and tourism-related sectors of the office market, while office space catering to tenants with government and military contracts remains fairly steady<sup>14</sup>.

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<sup>13</sup> Projections of future retail market demand based on population growth are an "order of magnitude" estimate. A more detailed retail study, which would include a retail void analysis, detailed capture analysis, etc., is beyond the scope of this assignment.

<sup>14</sup> Hawaii Commercial Real Estate, LLC. Office Market Report

In the near term, there will be limited opportunities for new office development given the high cost of construction and the projected slow recovery in the economy. As the economy stabilizes over the longer term and more healthy growth patterns return, there will likely be demand for new office space. This growth in demand will continue to put upward pressure on office rents. Potential new growth industries for office space in Honolulu include high tech, life sciences/biotech, and dual defense contracting.

Keyser Marston has estimated the amount of office space that can be supported in the Kalihi planning area based on City estimates of employment growth in those job sectors that typically demand office space (such as finance, insurance, and real estate) plus an enhanced capture rate associated with the new transit line. Based on these projections, which estimate that roughly 1,600 new office jobs will be generated in the Kalihi planning area between 2010 and 2035, it is projected that there could be net new demand for about 575,000 sq. ft. of office space within a ½-mile radius of the three stations (Table 14).

### ***Hotel***

The Honolulu hotel industry is still recovering from the recession. Data from the Hawaii Tourism Authority indicates the number of annual visitors to Honolulu in 2010 (about 4.3 million) is significantly below the number in the years 2005 to 2007 (about 4.7 million), although the number did improve between 2009 and 2010 (Table 15). Significant improvement in tourism numbers going forward will require broad improvement in worldwide economic conditions, and particularly in the U.S. and Japan. New development of hotels will also require improvement in the capital markets, as financing for new hotel construction has been extremely difficult to obtain since the financial meltdown in 2008 and 2009.

According to information provided by the Honolulu Land Information System, there are currently no hotels located in the Kalihi planning area (within a ½ mile of the three stations), although there are a few hotels within the 1-mile radius of the stations. These hotels are categorized as budget/economy or mid price hotels.

As the number of visitors to Honolulu continues to increase, there will be a declining ability to accommodate that growth in Waikiki and other popular tourist locations. It is likely that as time goes on, increasing tourism will pressurize the demand for new hotel accommodations in other areas. However, we do not see new tourist-based hotels being developed in the Kalihi planning area in the foreseeable future. It is possible that a new hotel could be supported for business customers if the area continues to grow jobs but projecting long-term demand for new hotel facilities is difficult based on currently available information.

## ***Industrial***

Generally, industrial uses would not be considered consistent with TOD due to the large land areas that they involve and because they are a relatively low intensity use (self-storage facilities, which are also present in the study area, also fall within this category). However, because many of these businesses appear to be economically healthy, there may not be a compelling reason for many of those properties to be redeveloped for any other use in the near term, particularly since the rents that might be supported by alternative uses are generally not yet sufficient to justify the high costs of new construction.

There has been significant new industrial development on the Ewa area of the island and there are still several hundred acres of West Oahu land zoned for industrial use (with more in the entitlement process<sup>15</sup>). The market fundamentals for industrial uses are relatively healthy, particularly in the Iwilei submarket. The industrial vacancy rate in the Iwilei submarket was about 1.9% as of the fourth quarter of 2010 and the weighted average industrial rent in Iwilei is higher than all but one other submarket (Kailua) (Table 17). A large part of the reason for the strength of the Iwilei submarket is that it is centrally located in a highly populated area of the island, and it enjoys convenient proximity to the airport, harbor, Waikiki, downtown and other job centers.

Eventually, rising property values will justify redevelopment of some industrial uses in the Kalihi planning area with higher value uses such as office and retail. The Dole Cannery and Gentry Pacific Design Center are examples of large industrial uses that have been converted. As noted previously, Kamehameha Schools has plans to redevelop some of its industrial properties but the current slow pace of the economic recovery is hampering those efforts.

## ***Conclusions***

Given the locational strengths of the study area and given the long term pressures of population, tourism and broader growth in the Honolulu economy, over the long term it is likely that there will be both market demand and sufficiently high property values to support new development of TOD in the study area. Based on the assessment of market data and real estate conditions as summarized in this report, Keyser Marston believes the TOD might be supported in the Kalihi planning area within the following broad ranges:

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<sup>15</sup> Colliers Monroe Friedlander 2010

**Kalihi Planning Area  
(Within ½-Mile Radius of Stations)**

TOD Land Use	Potential Range of New Development Demand by 2035*
Residential Condominiums & Apartments	±4,000 units
TOD Retail	±465k sq. ft.
Office	±575k sq. ft.
Hotel	Future market-driven (TBD)

\* Assumes transit system is fully operational by 2019.

It is difficult to estimate the amount and timing of development that might occur because there are a number of variables and considerations that are hard to predict or are beyond the scope of this assignment to analyze. These considerations include:

- Existing Encumbrances – Many properties in the study area have existing property encumbrances (leases) that must run their course or be bought out before redevelopment can occur;
- Successful Industrial Businesses – Many industrial uses in the study area are economically successful businesses and therefore there is little pressure on many property owners to redevelop in the near term;
- Need for Infrastructure – There is a need for new public infrastructure improvements in some parts of the study area, the funding and timing for which is uncertain;
- Economic Recovery – There is a need for improvement in broader economic conditions in order to drive up values sufficient to support high construction costs and land values

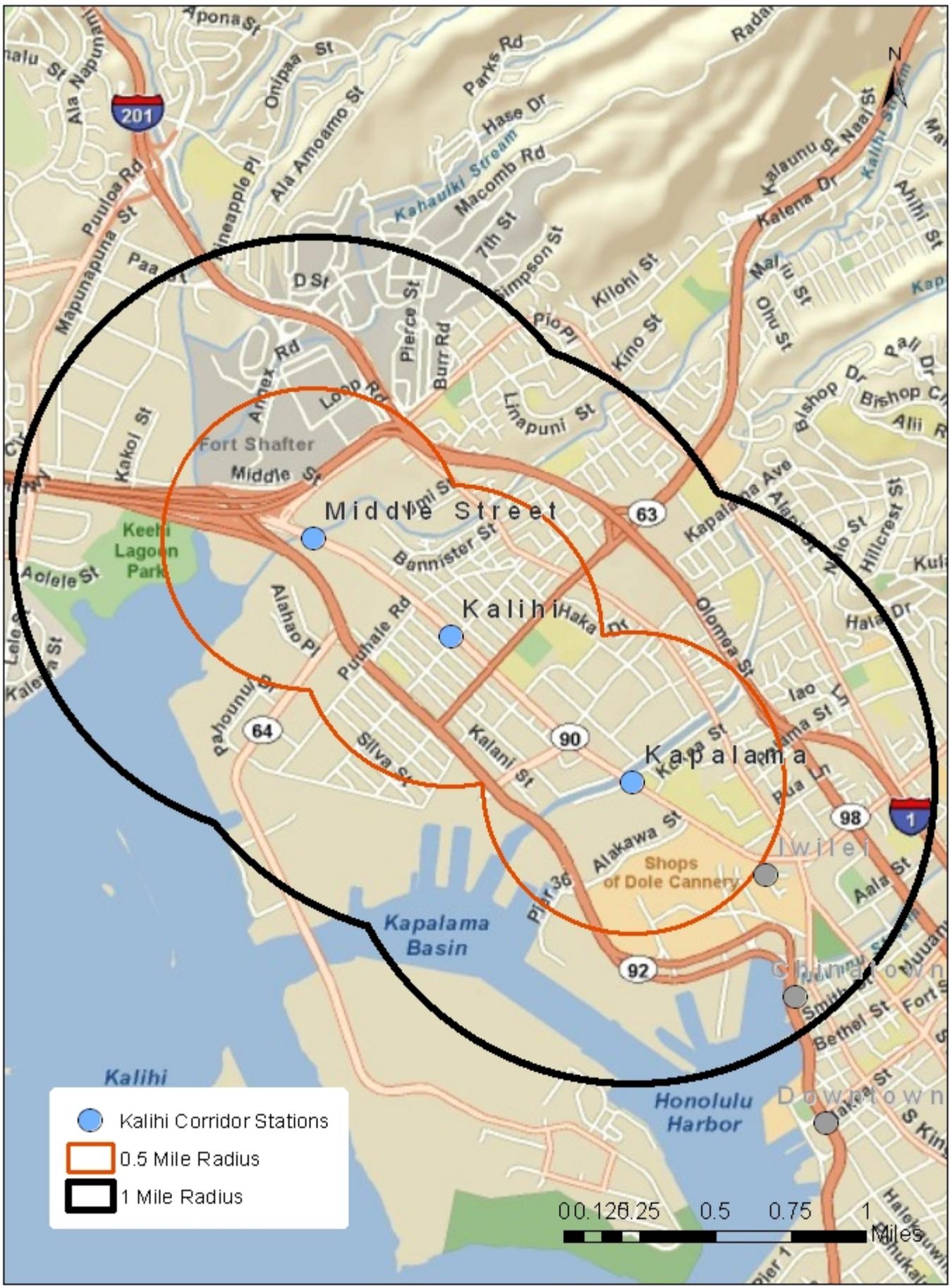
From an implementation perspective, TOD can be encouraged if the City is able to adopt a consistent, well-coordinated set of policies that removes regulatory barriers, prioritizes key infrastructure improvements, and (to the extent possible) assists in lowering the costs of private development. Strategies that can be utilized to encourage successful TOD include:

- Lower parking requirements in TOD areas in order to encourage transit use and lower construction costs on new projects;
- Permit flexibility in development densities, setback requirements, etc.;
- Coordinate and streamline fees and permits costs on new development and consider lowering fees if appropriate;

- Provide flexibility in how affordable housing and park dedication requirements may be satisfied;
- Target some level of public financial resources for the production of affordable housing so that households of all income ranges can benefit from TOD;
- Consider use of tax increment financing, community facilities district financing, tax credits, and other financing tools to invest in public infrastructure and increase the financial feasibility of TOD, but only to the extent that private development cannot support itself;
- Consider public-private partnerships and joint development between the City and private developers to facilitate development consistent with TOD principles.

***Individuals Interviewed for this Assignment***

1. Catherine Camp and Constanza Asfura, Kamehameha Schools
2. Kevin Carney, EAH
3. Tom Fee and Tara DePonte, Helber Hastert & Fee
4. Anthony Hunt, CBRE
5. Frances Okazaki, CBRE
6. Bruce Plasch, Decision Analysis
7. Terry Ware and Renee Espiau, City and County of Honolulu



- Kalihi Corridor Stations
- 0.5 Mile Radius
- 1 Mile Radius

0 0.125 0.25 0.5 0.75 1 Miles

**Table 1****Kalihi Corridor Socio-Demographic Trends and Projections - 1-Mile Radius  
Honolulu TOD Market Study**

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<b>Demographic Statistic</b>	<b>2010 Estimate</b>	<b>2015 Projection</b>
Population	34,936	34,353
Households	9,270	9,102
Families	7,009	6,862
Housing Units	10,172	9,989
Group Quarters Population	1,301	1,263
Average Household Size	3.63	3.64

<b>Households By Income</b>	<b>2010</b>		<b>2015</b>	
	<b>Estimate</b>	<b>%</b>	<b>Projection</b>	<b>%</b>
Less than \$34,999	4,010	43.26%	3,671	40.33%
\$35,000-\$49,999	1,393	15.03%	1,324	14.55%
\$50,000-\$74,999	1,511	16.30%	1,510	16.59%
\$74,000-99,999	919	9.91%	940	10.33%
\$100,000 or more	1,439	15.52%	1,656	18.19%
	9,270		9,102	
<b>Average Household Income</b>	\$60,801		\$66,719	
<b>Median Household Income</b>	\$41,741		\$44,962	

Source: Claritas

**Table 2**  
**Honolulu County Largest Employers**  
**Honolulu TOD Market Study**

County Rank	State Rank	Employer	Number of Employees	Industry	Public/Non Profit
1	1	University of Hawaii	9,000	Colleges, Universities, and Professional Schools	Public
2	2	Kapiolani Medical Center	5,000	General Medical and Surgical Hospitals	Non Profit
3	3	Kyo-Ya Co Ltd. <sup>1</sup>	4,000	Federal Government Contractors	
4	4	Hawaii Health Systems Foundation	3,400	Legislative Bodies	Non Profit
5	5	Bank Of Hawaii	2,500	Commercial Banking	
6	6	Bank Of Hawaii Corp	2,100	Offices of Bank Holding Companies	
7	7	St Francis Healthcare System	2,100	Home Health Care Services	Non Profit
8	8	Aloha Air Cargo	2,090	Scheduled Freight Air Transportation	
9	10	Honolulu Police Department	2,000	Police Protection	Public
10	11	Kaiser Permanente Medical	2,000	General Medical and Surgical Hospitals	
11	12	Straub Clinic & Hospital	1,900	General Medical and Surgical Hospitals	Non Profit
12	13	Hilton-Hawaiian Village Beach	1,800	Hotels (except Casino Hotels) and Motels	
13	14	Polynesian Cultural Center	1,700	Nature Parks and Other Similar Institutions	Non Profit
14	15	Outrigger Enterprises Group	1,600	Hotels (except Casino Hotels) and Motels	
15	16	Hawaii Medical Service Association	1,500	Insurance Agencies and Brokerages	
16	17	Honolulu Intl Airport-Hnl	1,500	Other Airport Operations	Public
17	18	Oahu Transit Service	1,431	Other Urban Transit Systems	Public
18	19	Adjutant General	1,400	State Government-National Security	Public
19	21	Roberts Overnights	1,400	Travel Agencies & Bureaus	
20	22	Kuakini Emergency Service	1,300	General Medical and Surgical Hospitals	Non Profit
21	24	Kaimuki Toyota/Suzuki	1,200	Automobile Dealers-New Cars	
22	25	Kapi'Olani Health	1,200	All Other Miscellaneous Ambulatory Health Care Services	Non Profit
23	26	Sheraton-Waikiki	1,200	Hotels (except Casino Hotels) and Motels	
24	27	Servco Pacific Inc	1,100	Offices of Real Estate Agents and Brokers	
25	28	Castle Medical Ctr	1,000	General Medical and Surgical Hospitals	
26	30	Honolulu Environmental Services	1,000	City Government-Environmental Programs	Public
27	31	Kuakini Health System	1,000	All Other Miscellaneous Ambulatory Health Care Services	Non Profit
28	33	Royal Hawaiian Hotel	1,000	Hotels (except Casino Hotels) and Motels	
29	34	Servco Mapunapuna Plaza	1,000	Automobile Dealers-New Cars	
30	35	Sheraton-Princess Kaiulani	1,000	Hotels (except Casino Hotels) and Motels	
31	36	Thomas Hale Hamilton Library	1,000	Libraries-Public	Public
32	39	Hale Koa Hotel	900	Hotels (except Casino Hotels) and Motels	
33	41	Hyatt Regency-Waikiki Resort	875	Hotels (except Casino Hotels) and Motels	
34	44	Halekulani-Orchids	800	Hotels (except Casino Hotels) and Motels	
35	45	Hawaii Newspaper Agency Inc	800	Newspaper Publishers	
36	46	Hawaiian Telcom	800	Wireless Telecommunications Carriers (except Satellite)	
37	48	Sheraton-Moana Surfrider	735	Hotels (except Casino Hotels) and Motels	

Source: 50 Largest Employers in State of Hawaii, CareerOneStop, U.S. Department of Labor, Employment and Training.

<sup>1</sup> Owner of Princess Kaiulani Hotel, Moana Surfrider Hotel, Sheraton Waikiki Hotel, Royal Hawaiian Hotel, Sheraton Maui Hotel, and other restaurants and parking lots

Keyser Marston Associates, Inc.

\\Sf-fs1\wp\11\11985\010\Honolulu Tables 5 6 11.xls; Largest Employers Summary; 5/9/2011

**Table 3**  
**Employment (Jobs) Trends and Projections - City and County of Honolulu**  
**Honolulu TOD Market Study**

	2000	2005	2010	2015	2020	2025	2030	2035
Primary Urban Center (PUC)								
Downtown	59,424	61,156	61,443	63,775	64,950	66,053	67,202	68,545
Kalihi-Palama	42,317	43,254	43,794	44,753	46,867	47,811	48,790	49,858
Rest of PUC	261,099	276,435	282,847	290,697	296,526	302,258	308,322	314,936
Total Primary Urban Center	362,840	380,845	388,084	399,225	408,343	416,122	424,314	433,339
Rest of Honolulu City and Co.	138,289	168,963	173,600	197,958	212,772	227,841	241,880	255,041
Total City and County	501,129	549,808	561,684	597,183	621,115	643,963	666,194	688,380

As % of Total Primary Urban Center

Downtown	16.4%	16.1%	15.8%	16.0%	15.9%	15.9%	15.8%	15.8%
Kalihi-Palama	11.7%	11.4%	11.3%	11.2%	11.5%	11.5%	11.5%	11.5%
Rest of PUC	72.0%	72.6%	72.9%	72.8%	72.6%	72.6%	72.7%	72.7%

As % of Total City and County

Downtown	11.9%	11.1%	10.9%	10.7%	10.5%	10.3%	10.1%	10.0%
Kalihi-Palama	8.4%	7.9%	7.8%	7.5%	7.5%	7.4%	7.3%	7.2%
Rest of PUC	52.1%	50.3%	50.4%	48.7%	47.7%	46.9%	46.3%	45.8%
	72.4%	69.3%	69.1%	66.9%	65.7%	64.6%	63.7%	63.0%

Source: Department of Planning and Permitting

**Table 4**

**Employment (Jobs) Trends and Projections by Industry - Primary Urban Center**

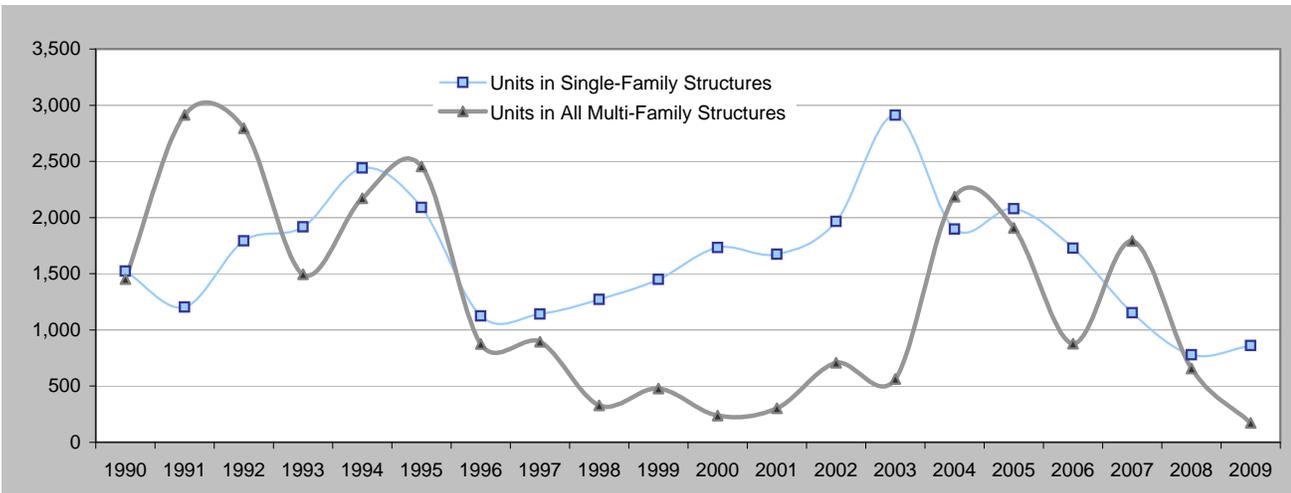
**Honolulu TOD Market Study**

	2000	2010	2020	2030	2035	2000-2010 Change		2010-2020 Change		2020-2030 Change	
						Total	%	Total	%	Total	%
<b>Downtown</b>											
Armed Forces	0	0	135	135	135	0	N/A	135	N/A	0	0%
Public Admin	10,894	11,044	11,229	11,448	11,562	150	1%	185	2%	219	2%
Hotel	79	80	80	85	85	1	1%	0	0%	5	6%
Agriculture	309	138	140	140	141	-171	-55%	2	1%	0	0%
Transportation ad Utilities	5,534	5,926	6,587	6,983	7,191	392	7%	661	11%	396	6%
Industrial	1,575	1,575	1,575	1,575	1,575	0	0%	0	0%	0	0%
Fin. Ins. & RE	10,438	9,486	9,533	9,571	9,664	-952	-9%	47	0%	38	0%
Services	24,666	26,835	28,791	30,102	30,740	2,169	9%	1,956	7%	1,311	5%
Retail	4,957	4,976	5,064	5,127	5,274	19	0%	88	2%	63	1%
Construction	972	1,383	1,816	2,036	2,178	411	42%	433	31%	220	12%
<b>Total</b>	<b>59,424</b>	<b>61,443</b>	<b>64,950</b>	<b>67,202</b>	<b>68,545</b>	<b>2,019</b>	<b>3%</b>	<b>3,507</b>	<b>6%</b>	<b>2,252</b>	<b>3%</b>
<b>Kalihi-Palama</b>											
Armed Forces	0	125	81	81	81	125		-44	-35%	0	0%
Public Admin	1,478	1,568	1,672	1,800	1,866	90	6%	104	7%	128	8%
Hotel	10	10	10	11	11	0	0%	0	0%	1	10%
Agriculture	290	133	138	140	142	-157	-54%	5	4%	2	1%
Transportation ad Utilities	5,730	6,186	6,858	7,280	7,498	456	8%	672	11%	422	6%
Industrial	8,438	8,423	8,423	8,423	8,423	-15	0%	0	0%	0	0%
Fin. Ins. & RE	2,882	2,622	2,630	2,641	2,665	-260	-9%	8	0%	11	0%
Services	13,735	15,660	17,418	18,532	19,076	1,925	14%	1,758	11%	1,114	6%
Retail	7,072	7,371	7,827	7,991	8,139	299	4%	456	6%	164	2%
Construction	2,682	1,696	1,810	1,891	1,957	-986	-37%	114	7%	81	4%
<b>Total</b>	<b>42,317</b>	<b>43,794</b>	<b>46,867</b>	<b>48,790</b>	<b>49,858</b>	<b>1,477</b>	<b>3%</b>	<b>3,073</b>	<b>7%</b>	<b>1,923</b>	<b>4%</b>
<b>Rest of PUC</b>											
Armed Forces	14,780	15,118	15,021	15,021	15,021	338	2%	-97	-1%	0	0%
Public Admin	15,267	15,764	16,368	17,084	17,446	497	3%	604	4%	716	4%
Hotel	15,153	15,208	15,549	15,591	15,604	55	0%	341	2%	42	0%
Agriculture	793	352	368	373	375	-441	-56%	16	5%	5	1%
Transportation ad Utilities	23,276	25,007	27,624	29,254	30,102	1,731	7%	2,617	10%	1,630	6%
Industrial	14,618	14,604	14,604	14,604	14,604	-14	0%	0	0%	0	0%
Fin. Ins. & RE	14,353	13,045	13,111	13,176	13,288	-1,308	-9%	66	1%	65	0%
Services	96,046	109,467	118,138	125,440	129,035	13,421	14%	8,671	8%	7,302	6%
Retail	58,899	61,872	64,445	65,664	66,776	2,973	5%	2,573	4%	1,219	2%
Construction	7,914	12,410	11,298	12,115	12,685	4,496	57%	-1,112	-9%	817	7%
<b>Total</b>	<b>261,099</b>	<b>282,847</b>	<b>296,526</b>	<b>308,322</b>	<b>314,936</b>	<b>21,748</b>	<b>8%</b>	<b>13,679</b>	<b>5%</b>	<b>11,796</b>	<b>4%</b>
<b>Primary Urban Center (PUC)</b>											
Armed Forces	14,780	15,243	15,237	15,237	15,237	463	3%	-6	0%	0	0%
Public Admin	27,639	28,376	29,269	30,332	30,874	737	3%	893	3%	1,063	4%
Hotel	15,242	15,298	15,639	15,687	15,700	56	0%	341	2%	48	0%
Agriculture	1,392	623	646	653	658	-769	-55%	23	4%	7	1%
Transportation ad Utilities	34,540	37,119	41,069	43,517	44,791	2,579	7%	3,950	11%	2,448	6%
Industrial	24,631	24,602	24,602	24,602	24,602	-29	0%	0	0%	0	0%
Fin. Ins. & RE	27,673	25,153	25,274	25,388	25,617	-2,520	-9%	121	0%	114	0%
Services	134,447	151,962	164,347	174,074	178,851	17,515	13%	12,385	8%	9,727	6%
Retail	70,928	74,219	77,336	78,782	80,189	3,291	5%	3,117	4%	1,446	2%
Construction	11,568	15,489	14,924	16,042	16,820	3,921	34%	-565	-4%	1,118	7%
<b>Total</b>	<b>362,840</b>	<b>388,084</b>	<b>408,343</b>	<b>424,314</b>	<b>433,339</b>	<b>25,244</b>	<b>7%</b>	<b>20,259</b>	<b>5%</b>	<b>15,971</b>	<b>4%</b>

Source: Department of Planning and Permitting

**Table 5**  
**Residential Building Permits 1980-2009 - City and County of Honolulu**  
**Honolulu TOD Market Study**

Year	Total Units	Units in Single-Family Structures	Units in All Multi-Family Structures	Units in 2-unit Multi-Family Structures	Units in 3- and 4-unit Multi-Family Structures	Units in 5+ Unit Multi-Family Structures
1980	4,952	1,599	3,353	46	256	3,051
1990	2,977	1,524	1,453	126	85	1,242
1991	4,118	1,203	2,915	50	116	2,749
1992	4,588	1,793	2,795	42	148	2,605
1993	3,411	1,916	1,495	62	59	1,374
1994	4,612	2,440	2,172	76	66	2,030
1995	4,544	2,090	2,454	64	76	2,314
1996	2,000	1,125	875	34	0	841
1997	2,035	1,141	894	38	23	833
1998	1,601	1,272	329	20	16	293
1999	1,928	1,449	479	0	21	458
2000	1,969	1,732	237	4	0	233
2001	1,975	1,673	302	10	39	253
2002	2,673	1,964	709	12	67	630
2003	3,473	2,910	563	84	12	467
2004	4,084	1,898	2,186	8	108	2,070
2005	3,988	2,079	1,909	0	160	1,749
2006	2,606	1,727	879	0	0	879
2007	2,944	1,152	1,792	0	148	1,644
2008	1,438	780	658	2	21	635
2009	1,036	862	174	8	20	146

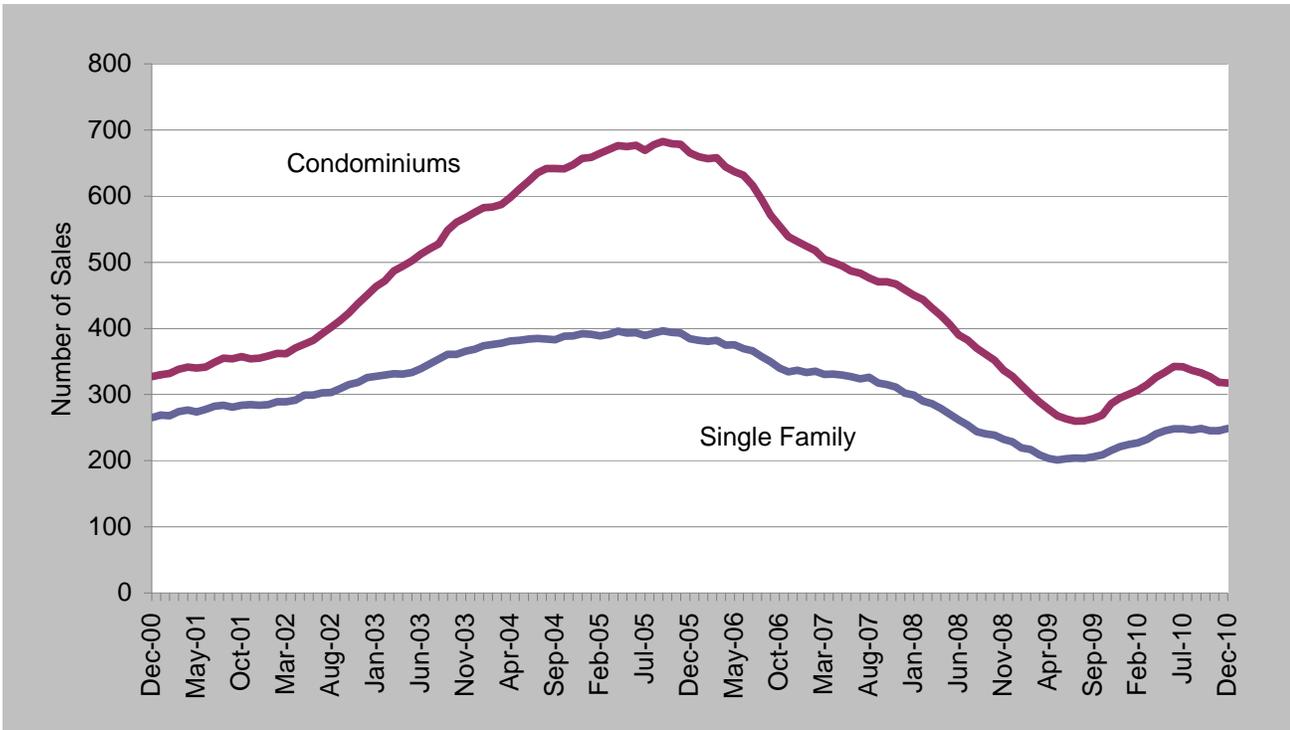


<b>1980-89</b>						
<b>Total</b>	35,634	17,286	18,348	920	1198	16,230
<b>Avg/Yr</b>	3,563	1,729	1,835	92	119.8	1,623
<b>1990-99</b>						
<b>Total</b>	31,814	15,953	15,861	512	610	14,739
<b>Avg/Yr</b>	3,181	1,595	1,586	51	61	1,474
<b>2000-2009</b>						
<b>Total</b>	26,186	16,777	9,409	128	575	8,706
<b>Avg/Yr</b>	2,619	1,678	941	13	57.5	871

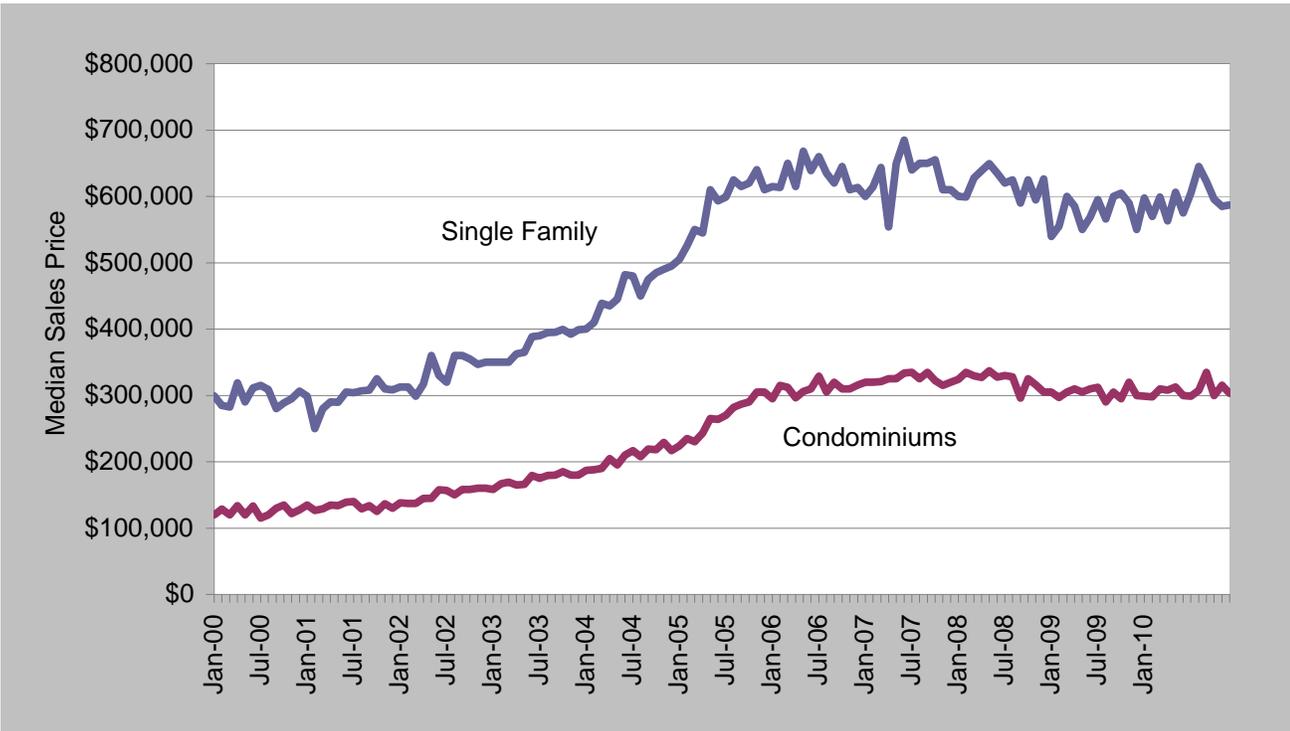
Source: State of the Cities Data System, HUD

**Table 6**  
**Residential For-Sale Market Trends - City and County of Honolulu**  
**Honolulu TOD Market Study**

**Annual Unit Sales Rates Based on Prior 12 Months**



**Median Sales Price of Residential Properties**



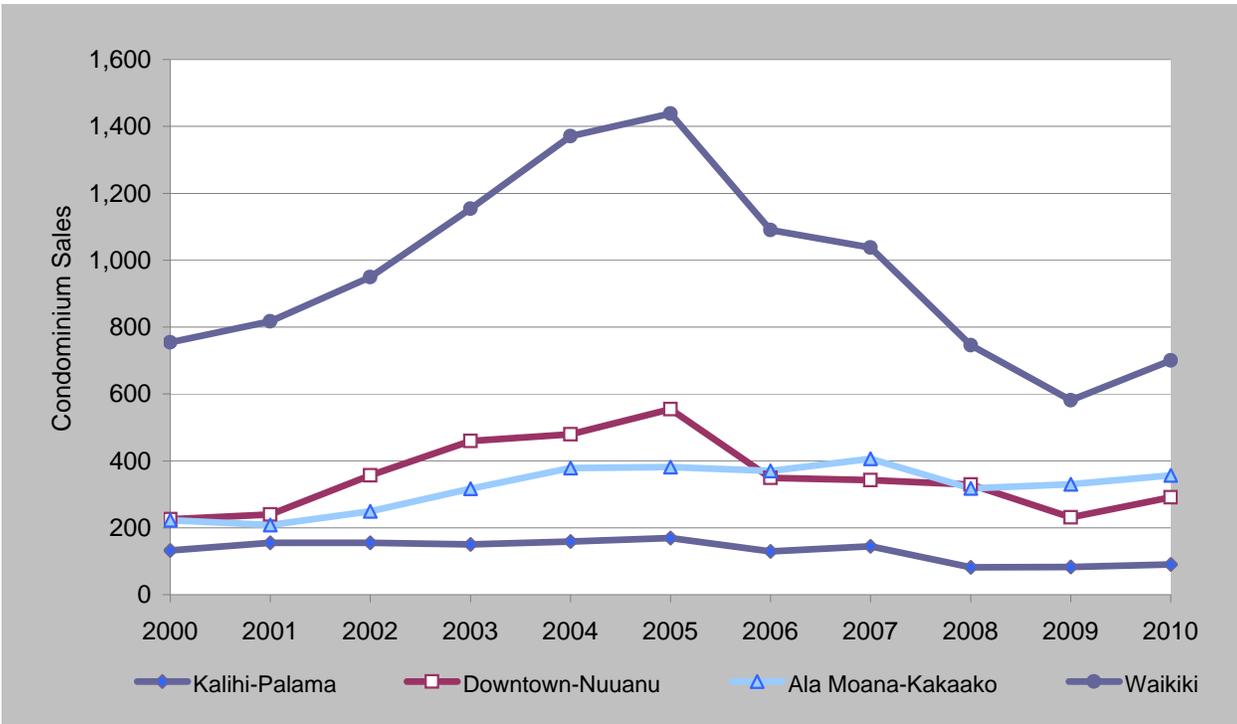
Source: Honolulu Board of Realtors

Keyser Marston Associates, Inc.

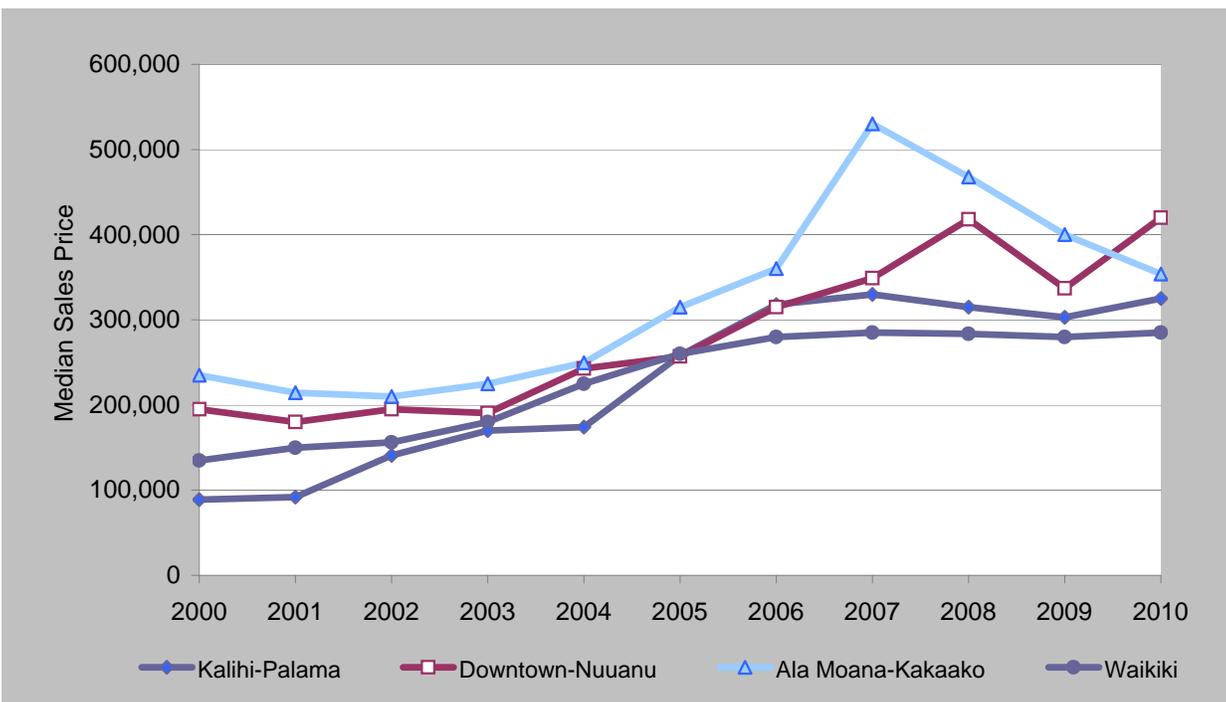
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**Table 7**  
**Condominiums For-Sale Market Trends - Select Neighborhoods**  
**Honolulu TOD Market Study**

**Annual Condominium Sales, by Neighborhood**



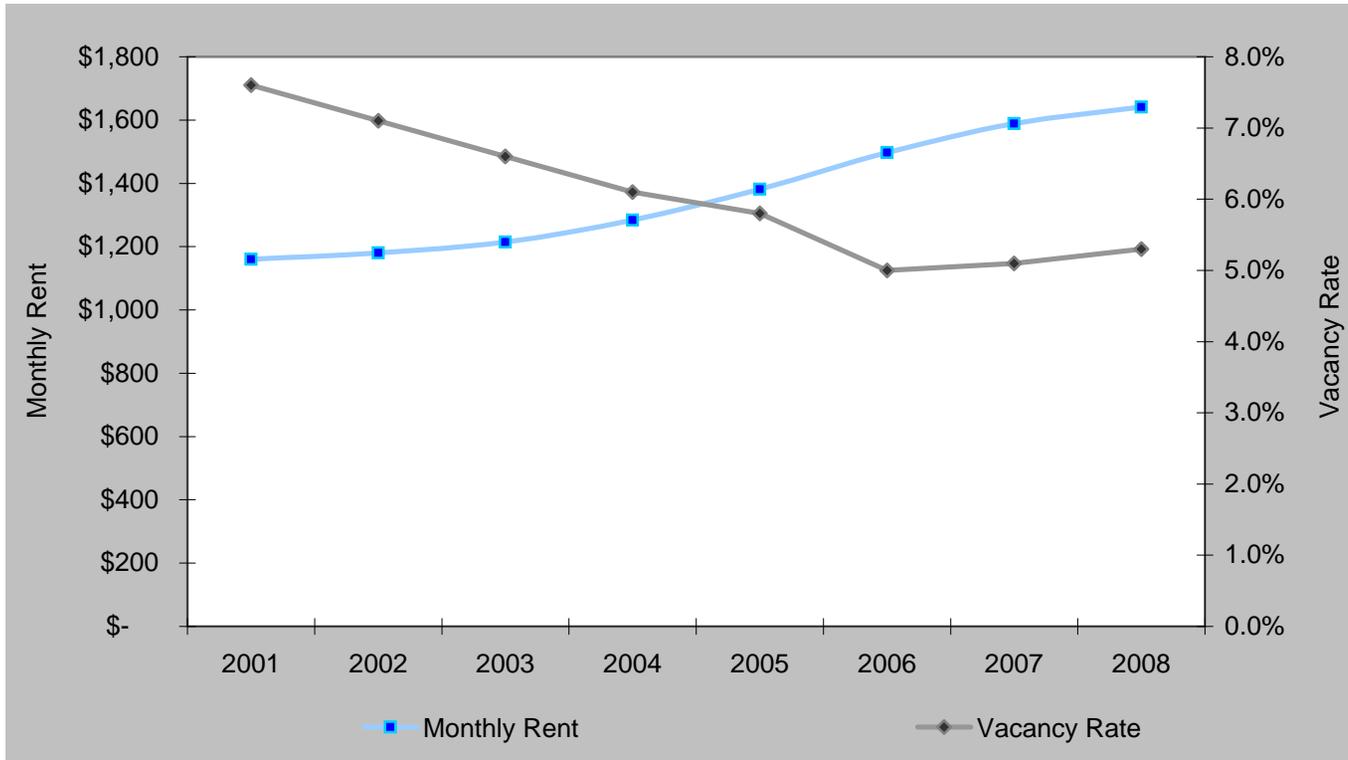
**Median Sales Price of Condominiums, by Neighborhood**



Source: Honolulu Board of Realtors

**Table 8**  
**For-Rent Residential Market Trends**  
**Honolulu TOD Market Study**

	2001	2002	2003	2004	2005	2006	2007	2008
<b>Monthly Rent</b>	\$ 1,160	\$ 1,180	\$ 1,214	\$ 1,284	\$ 1,381	\$ 1,497	\$ 1,589	\$ 1,641
<b>Vacancy Rate</b>	7.6%	7.1%	6.6%	6.1%	5.8%	5.0%	5.1%	5.3%



Source: PPR

**Table 9**  
**Development Projects in Primary Urban Center**  
**Honolulu TOD Market Study**

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Location	Total Units	Year Built		Notes
		Out		
<i>Pearl City/Aiea/Aliamanu/Airport</i>				
Hale Mohalu II (Pearl City)	163	2012		
Ford Island Residential (Navy)	231	2008		
Country Club Village 6	269	2009		
<i>Kalihi/Palama /Iwilei</i>				
Iwilei Elderly Residential Complex	160	2013		
<i>Downtown/Nuuanu</i>				
15 Craigsides (Nuuanu elderly condos)	171	2011		
<i>Kakaako/Ala Moana</i>				
Halekauwila Place (Pohukaina School)	196	2012		
Moana Vista	492	Unknown		Construction has halted
Nauru Tower 5	295	Unknown		Schedule is uncertain
1226 Waimanu Street	64	Unknown		Schedule is uncertain
The Vanguard Lofts (old NCR Bldg.)	32	Unknown		Completion date is uncertain
Ward Village Shops (Luxury Rentals)	165	Unknown		Apartments on hold
<i>Makiki /Moiliili/Palolo</i>				
The Chelsea	42	Unknown		construction has halted
Holomua (Kulana Hale II)	176	2010		
1700 Kalakaua	120	Unknown		Project has been abandoned
1723 Kalakaua	120	Unknown		Project is no longer active
<i>Waikiki</i>				
Ala Wai Garden Plaza	44	2009		
Allure Waikiki Condominium	291	2010		
The Cove Waikiki (Waikiki Palms)	119	Unknown		Schedule is uncertain

Source: Department of Planning and Permitting, Annual Report on the Status of Land use on Oahu, 2009.

**Table 10****Retail Market Trends by Retail Type, City and County of Honolulu****Honolulu TOD Market Study**

	<b>Total Inventory (SF)</b>			<b>Vacancy Rate</b>			<b>Net Absorption (SF)</b>		
	<b>2008</b>	<b>2009</b>	<b>2010</b>	<b>2008</b>	<b>2009</b>	<b>2010</b>	<b>2008</b>	<b>2009</b>	<b>2010</b>
Community/Power Center	2,398,255	2,703,838	2,703,838	6.41%	4.79%	4.55%	-34,101	343,098	6,455
Neighborhood	3,426,066	3,627,044	3,689,831	2.10%	2.44%	3.36%	78,762	133,578	-27,831
Regional	4,367,911	4,418,985	4,418,985	0.89%	2.39%	1.61%	433,539	-66,856	34,803
Resort/Specialty	1,399,912	1,341,584	1,341,584	6.98%	6.27%	9.14%	-6,405	11,887	-38,452
Strip	177,188	177,188	177,188	9.95%	10.08%	12.71%	37,716	-237	-4,648
Totals	11,769,332	12,268,639	12,331,426	3.23%	3.47%	3.75%	509,511	421,470	-29,673

	<b>Avg. Low NNN Asking Rents</b>			<b>Avg. High NNN Asking Rents</b>			<b>Avg. CAM Expenses</b>		
	<b>2008</b>	<b>2009</b>	<b>2010</b>	<b>2008</b>	<b>2009</b>	<b>2010</b>	<b>2008</b>	<b>2009</b>	<b>2010</b>
Community/Power Center	\$3.78	\$3.64	\$3.38	\$4.71	\$4.53	\$4.25	\$1.05	\$1.10	\$1.14
Neighborhood	\$2.84	\$2.97	\$2.87	\$3.59	\$3.89	\$3.78	\$0.88	\$0.97	\$0.96
Regional	\$2.92	\$2.69	\$2.92	\$10.10	\$4.29	\$9.98	\$1.64	\$1.83	\$1.89
Resort/Specialty	\$4.56	\$4.33	\$4.13	\$13.84	\$14.10	\$12.96	\$1.89	\$2.19	\$1.90
Strip	\$3.00	\$3.37	\$3.28	\$4.04	\$4.08	\$4.16	\$1.02	\$1.03	\$1.16
Totals	\$3.05	\$3.08	\$2.94	\$3.90	\$4.05	\$3.92	\$1.10	\$1.10	\$1.09

Source: Colliers Monroe Friedlander

\*Islandwide total for average rents and CAM calculations exclude Waikiki and Ala Moana Shopping Center

**Table 11**  
**Household Spending Patterns and Opportunity Gap Analysis - Kalihi Corridor**  
**Honolulu TOD Market Study**

**2010 Household Retail Expenditures and Retail Sales**

	<b>Expenditures per Household <sup>2</sup></b>	<b>Retail Sales per Household <sup>2</sup></b>	<b>Opportunity Gap/Surplus <sup>3</sup></b>
Apparel and Accessories, Furniture and Other <sup>1</sup>	\$4,510	\$22,570	(\$18,060)
Health and Personal Care Stores	\$2,450	\$440	\$2,010
Foodservice and Drinking Places	\$3,810	\$18,790	(\$14,980)
Grocery Stores and Liquor Stores	\$5,450	\$19,190	(\$13,740)

**Supportable Additional Retail Space 2010-2035 (1/2-Mile Radius)**

Total Growth in Households (2010 - 2035) <sup>4</sup>	4,000		
	<b>Retail Space Supported by:</b>		<b>Total Retail Space Demand</b>
	<b>Area HH Sq. Ft. <sup>5</sup></b>	<b>Outside Demand Sq. Ft. <sup>5</sup></b>	<b>Sq. Ft. <sup>5</sup></b>
Apparel and Accessories, Furniture and Other <sup>1</sup>	31,000	124,000	155,000
Health and Personal Care Stores	24,000	0	24,000
Foodservice and Drinking Places	27,000	105,000	132,000
Grocery Stores and Liquor Stores	44,000	110,000	154,000
	126,000	339,000	465,000

<sup>1</sup> Includes clothing and clothing accessories stores, sporting goods, hobby, book and music stores, office supplies, stationary, and gift stores.

<sup>2</sup> Based on data from Claritas.

<sup>3</sup> The difference between expenditures and sales represents the opportunity gap or surplus - a positive value signifies an opportunity gap while a negative value signifies a surplus.

<sup>4</sup> Estimated by KMA.

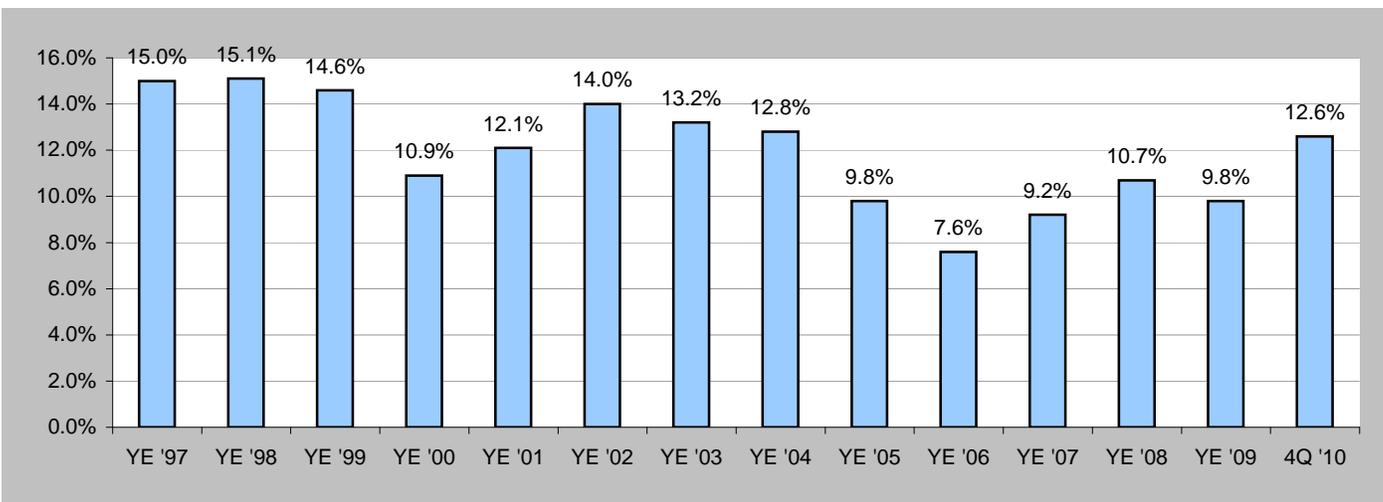
<sup>5</sup> Estimated by KMA. Assumptions for sales per square foot and local capture rates based on industry trends and local conditions.

**Table 12**

**Class A Office Market Snapshot (Select Properties) - Central Business District  
Honolulu TOD Market Study**

	<b>Building SF</b>	<b>Asking FSG Rents</b>		<b>Operating Expenses \$/SF/Mo.</b>	<b>Vacancy</b>
		<b>Low \$/SF/Mo.</b>	<b>High \$/SF/Mo.</b>		
Alii Place	316,040	\$3.01	\$3.16	\$1.26	7.4%
Bishop Place	462,072	\$2.47	\$2.97	\$1.32	16.2%
Bishop Square / ASB Tower	483,455	\$2.74	\$3.04	\$1.34	12.1%
Bishop Square / Pauahi Tower	438,596	\$2.80	\$3.00	\$1.40	10.0%
Central Pacific Plaza	209,821	\$2.87	\$2.87	\$1.17	2.0%
City Financial Tower	180,563	\$2.82	\$2.82	\$1.32	12.7%
Davies Pacific Center	354,322	\$2.45	\$3.10	\$1.45	19.2%
First Hawaiian Center	379,336	\$3.28	\$3.28	\$1.28	13.5%
Harbour Court - Office Tower	186,138	\$2.90	\$3.10	\$1.45	7.8%
Pacific Guardian Center	629,518	\$2.71	\$3.11	\$1.36	17.7%
Pioneer Plaza	245,000	\$2.85	\$2.90	\$1.25	10.0%
TOPA Financial Center	483,776	\$3.19	\$3.24	\$1.34	17.0%
Waterfront Plaza (Office Portion)	455,600	\$2.94	\$3.09	\$1.44	6.1%
	<u>4,824,237</u>				
	Average	\$2.85	\$3.05	\$1.34	12.6%
	Range	\$2.45	\$3.28		

**CBD Class A Office Vacancy Rate**



Source: Hawaii Commercial Real Estate, LLC

**Table 13**  
**Office Market Trends - City and County of Honolulu**  
**Honolulu TOD Market Study**

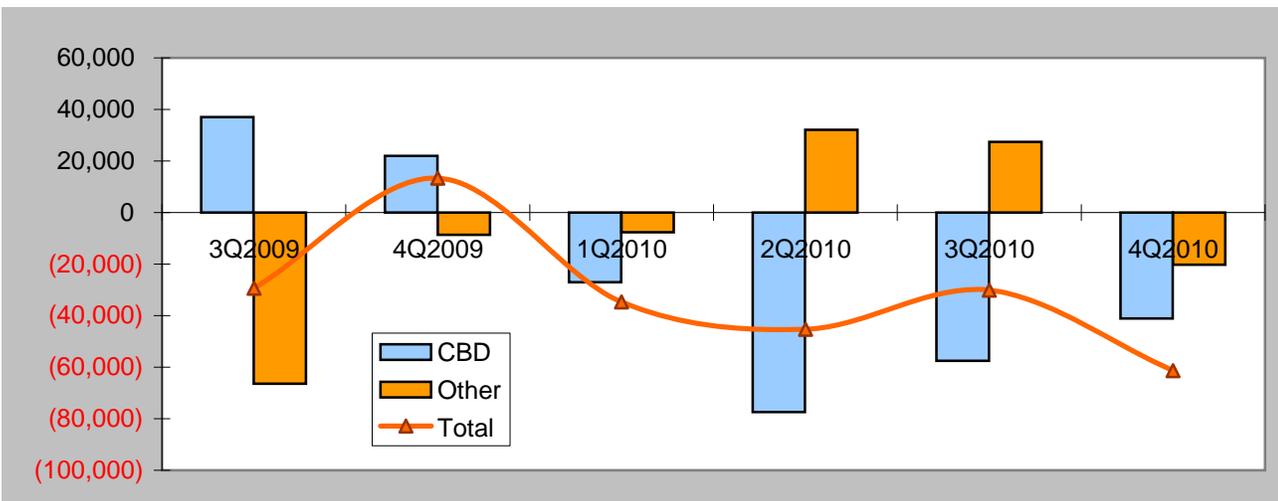
**Vacancy Trends (Q3 2009 through Q4 2010)**

	Total SF	No. Bldg.	3Q2009	4Q2009	1Q2010	2Q2010	3Q2010	4Q2010
Airport	575,042	4	21.4%	21.6%	20.7%	20.2%	19.6%	16.4%
CBD	5,724,623	24	10.3%	10.0%	10.5%	11.9%	12.9%	13.6%
East Oahu	257,586	6	7.0%	6.7%	5.4%	6.1%	6.0%	5.2%
Kakaako	1,338,687	6	5.9%	6.3%	6.7%	6.2%	5.5%	6.1%
Kalihi/Iwilei	569,529	4	7.4%	11.3%	11.5%	11.1%	9.8%	10.5%
Kapiolani	1,249,565	9	10.8%	9.7%	11.4%	11.5%	11.1%	10.3%
King	78,547	2	12.7%	12.7%	18.5%	21.2%	8.8%	20.3%
Leeward	603,712	8	3.1%	1.5%	70.0%	0.7%	0.9%	2.7%
Waikiki	782,395	7	17.1%	17.3%	18.1%	17.6%	18.3%	20.9%
Windward Oahu	110,165	3	7.9%	9.8%	10.8%	8.7%	8.9%	7.4%
	11,289,851	73	10.3%	10.2%	10.7%	11.3%	11.5%	12.1%

**Average Lease Rates (FSG/SF/Mo)**

	Total SF	Avg. rate	3Q2009	4Q2009	1Q2010	2Q2010	3Q2010	4Q2010
Airport	575,042	\$2.44	\$2.52	\$2.38	\$2.42	\$2.42	\$2.42	\$2.46
CBD	5,724,623	\$2.74	\$2.99	\$2.71	\$2.69	\$2.71	\$2.68	\$2.68
East Oahu	257,586	\$3.38	\$3.31	\$3.31	\$3.32	\$3.32	\$3.32	\$3.67
Kakaako	1,338,687	\$3.24	\$3.11	\$3.26	\$3.26	\$3.26	\$3.26	\$3.26
Kalihi/Iwilei	569,529	\$2.46	\$2.46	\$2.46	\$2.48	\$2.48	\$2.48	\$2.41
Kapiolani	1,249,565	\$3.42	\$3.74	\$3.44	\$3.40	\$3.32	\$3.32	\$3.29
King	78,547	\$2.77	\$2.75	\$2.77	\$2.77	\$2.77	\$2.77	\$2.77
Leeward	603,712	\$3.59	\$3.63	\$3.63	\$3.73	\$3.51	\$3.51	\$3.51
Waikiki	782,395	\$2.95	\$3.00	\$3.00	\$3.00	\$3.00	\$2.85	\$2.85
Windward Oahu	110,165	\$3.10	\$3.12	\$3.12	\$3.20	\$3.05	\$3.05	\$3.05
	11,289,851	\$3.01	\$3.06	\$3.01	\$3.03	\$2.98	\$2.96	\$2.99

**Absorption Q3 2009 - Q4 2010**



Source: Hawaii Commercial Real Estate, LLC

Keyser Marston Associates, Inc.

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**Table 14**  
**Kalihi Corridor Projected Office Space Demand**  
**Honolulu TOD Market Study**

Industry	Primary Urban Center		Kalihi Corridor	
	Projected Job Growth <sup>1</sup>	Projected Office Employment Share <sup>2</sup>	Projected Office Employment 2010-2035	Office Employment Capture <sup>3</sup>
	2010-2035		2010-2035	2010-2035
Armed Forces	-6	0%	0	1%
Public Admin	2,498	80%	1,998	6%
Hotel	402	7%	27	0%
Agriculture	35	0%	0	21%
Transportation and Utilities	7,672	10%	767	17%
Industrial	0	10%	0	34%
Fin. Ins. & RE	464	100%	464	10%
Services	26,889	50%	13,445	11%
Retail	5,970	5%	299	10%
Construction	1,331	0%	0	12%
<b>Total</b>	<b>45,255</b>		<b>17,000</b>	<b>1,746</b>

	<b>2010-2035</b>
Total Office Space Demand (@300SF/Employee) <sup>4</sup>	523,700
Plus Normal Vacancy (@ 10%) <sup>4</sup>	52,370
<b>Net Kalihi Corridor Office Space Demand</b>	<b><u>576,070</u></b>

<sup>1</sup> Planning and Permitting Department.

<sup>2</sup> Represents the percentage of employment in each industry that is likely to occupy office space. KMA assumption based on data from the 2008-18 National Employment Matrix by the Bureau of Labor Statistics.

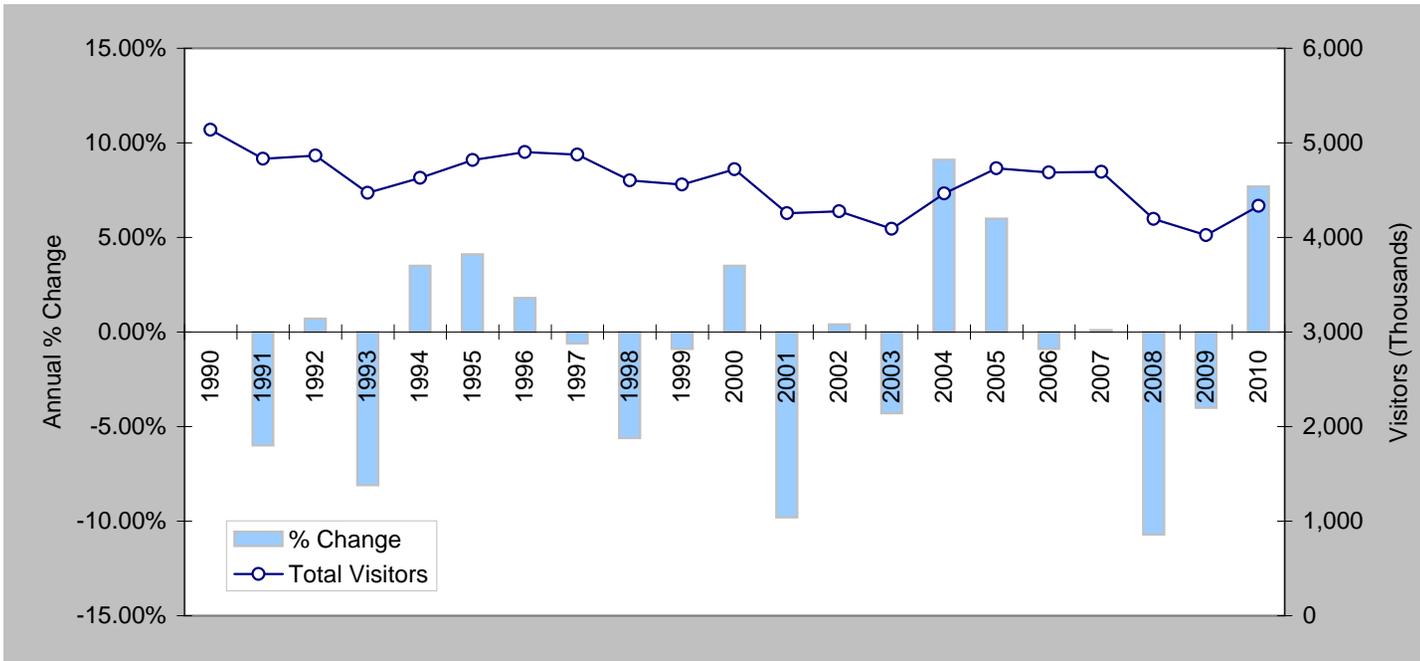
<sup>3</sup> Based on KMA's estimate of the Kalihi Corridor's share of employment by industry.

<sup>4</sup> KMA Assumption.

**Table 15**  
**Tourism Industry Trends - City and County of Honolulu**  
**Honolulu TOD Market Study**

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Total Visitors (thousands) <sup>1</sup>	4,719	4,258	4,276	4,091	4,465	4,732	4,688	4,695	4,194	4,025	4,334
Visitor Expenditures (\$millions, current) <sup>2</sup>				\$4,628	\$5,384	\$5,643	\$5,623	\$5,712	\$5,626	\$5,011	\$5,725
Room Stock (thousands) <sup>3</sup>	36.3	36.8	36.5	35.5	35.8	33.9	33.6	33.6	34.1	34.0	34.0
Average Length of Stay (Domestic) <sup>4</sup>	7.5	7.7	7.8	8.2	7.8	7.6	7.4	7.3	7.8	7.9	8.0
Average Length of Stay (International) <sup>4</sup>	5.8	5.9	5.9	6.0	5.9	5.8	5.7	5.8	6.1	6.5	6.5

**Long Term Visitor Trends**



Source: Hawaii Tourism Authority. Accessed Via University of Hawaii Economic Research Organization (UHERO).

<sup>1</sup> Total Visitor Arrivals

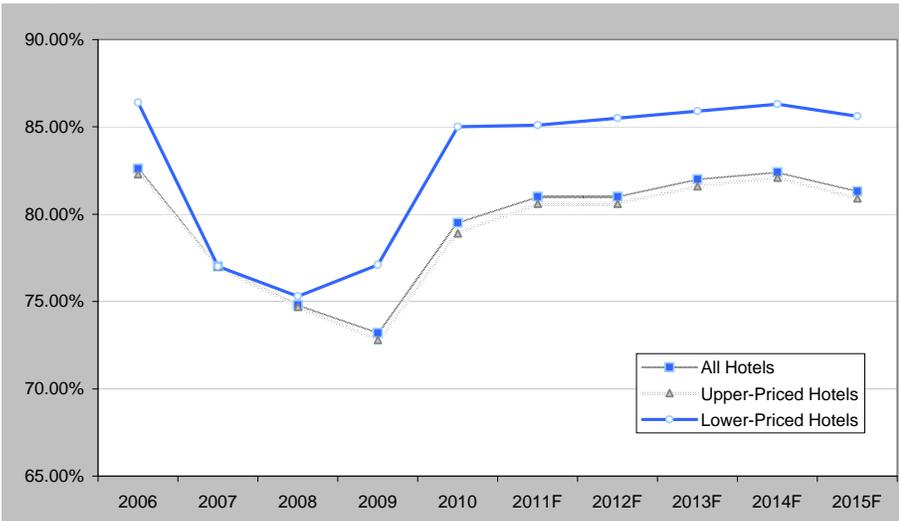
<sup>2</sup> Current Dollars

<sup>3</sup> Total Visitor Accommodations. Sum of hotels, condominium hotels, timeshare units, individual vacation units, bed & breakfasts, hostels, and others.

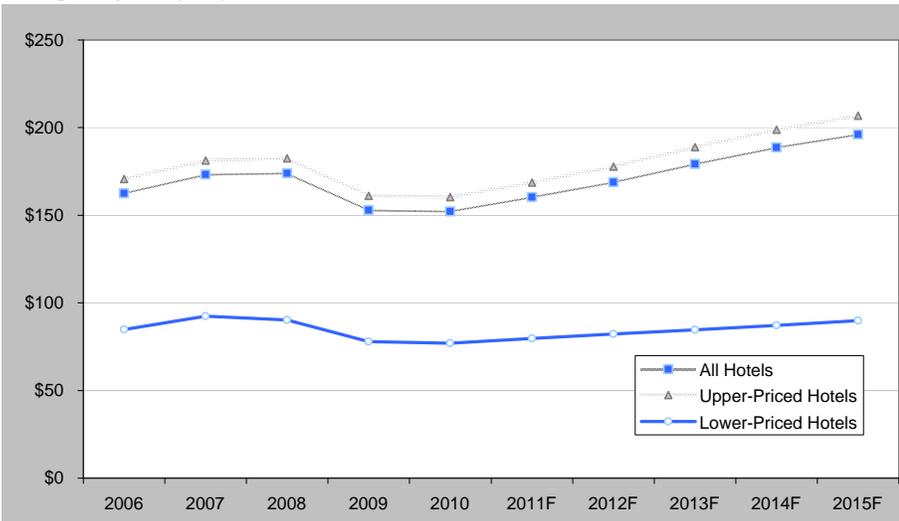
<sup>4</sup> Visitor Days Divided by Visitor Arrivals

**Table 16**  
**Hotel Trends - City and County of Honolulu**  
**Honolulu TOD Market Study**

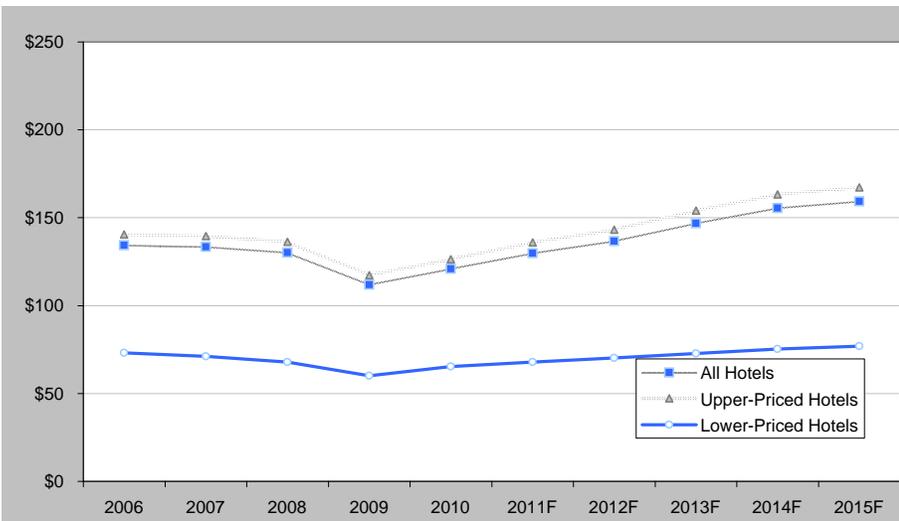
**Occupancy Rates**



**Average Daily Rate (ADR)**



**Average Daily Rate per Available Room (RevPAR)**



Source:PKF

**Table 17**  
**Industrial Market Trends - Honolulu County**  
**Honolulu TOD Market Study**

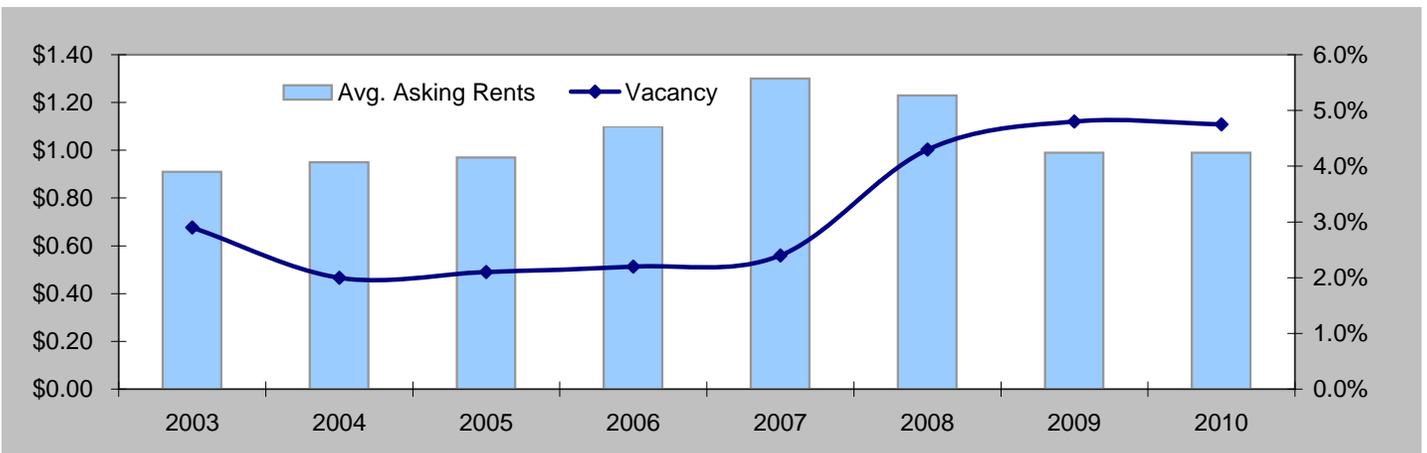
**Vacancy Trends (Q3 2009 through Q4 2010)**

	Total SF	No. Bldg.	3Q2009	4Q2009	1Q2010	2Q2010	3Q2010	4Q2010
Kalihi/Sand Island	9,281,259	706	5.8%	6.1%	4.2%	4.4%	4.5%	5.9%
Iwilei	2,433,603	94	2.9%	3.1%	1.2%	99.0%	1.1%	1.9%
Kapalama Military Reserve	1,250,000	19	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Airport/Mapunapuna	8,418,972	220	93.0%	2.0%	1.3%	1.0%	1.5%	1.4%
Bougainville/Halawa	3,309,376	104	3.8%	2.7%	2.8%	2.8%	3.9%	4.4%
Pearl City/Pearl City Industrial/Aiea	2,375,466	75	3.2%	2.1%	2.5%	4.4%	5.3%	6.6%
Waipahu/Milltown	3,025,345	149	4.4%	4.9%	6.4%	4.2%	4.3%	2.4%
Gentry Business Park	1,775,845	66	11.4%	11.2%	9.5%	10.1%	10.0%	10.0%
Campbell Industrial Park/Kapolei Business Park/Kenail	5,605,778	254	8.7%	9.0%	10.8%	9.5%	9.0%	9.3%
Kailua	507,789	49	7.1%	6.2%	5.2%	6.4%	8.4%	6.3%
Kaneohe	546,601	41	4.3%	3.6%	1.8%	1.6%	1.6%	3.6%
<b>Total</b>	<b>38,530,034</b>	<b>1,777</b>	<b>4.6%</b>	<b>4.8%</b>	<b>4.4%</b>	<b>4.1%</b>	<b>4.4%</b>	<b>4.8%</b>

**Weighted Average Net Asking Rent**

	Total SF	Avg. rate	3Q2009	4Q2009	1Q2010	2Q2010	3Q2010	4Q2010
Kalihi/Sand Island	9,281,259	\$1.00	\$1.02	\$1.01	\$0.99	\$0.94	\$0.92	\$1.09
Iwilei	2,433,603	\$1.11	\$0.93	\$0.95	\$1.05	\$1.24	\$1.27	\$1.24
Kapalama Military Reserve	1,250,000		N/A	N/A	N/A	N/A	N/A	N/A
Airport/Mapunapuna	8,418,972	\$0.98	\$1.04	\$1.04	\$0.97	\$1.04	\$0.86	\$0.93
Bougainville/Halawa	3,309,376	\$1.03	\$1.14	\$1.04	\$0.97	\$1.00	\$1.02	\$1.00
Pearl City/Pearl City Industrial/Aiea	2,375,466	\$1.12	\$1.16	\$1.24	\$1.14	\$1.11	\$1.09	\$0.97
Waipahu/Milltown	3,025,345	\$0.95	\$1.07	\$1.01	\$0.97	\$0.88	\$0.87	\$0.91
Gentry Business Park	1,775,845	\$1.02	\$0.99	\$1.01	\$0.99	\$1.00	\$0.99	\$1.15
Campbell Industrial Park/Kapolei Business Park/Kenail	5,605,778	\$0.93	\$1.19	\$0.89	\$1.03	\$0.85	\$0.80	\$0.81
Kailua	507,789	\$1.16	\$1.36	\$1.05	\$1.09	\$1.06	\$1.05	\$1.37
Kaneohe	546,601	\$1.03	\$1.11	\$1.37	\$1.10	\$0.83	\$0.83	\$0.91
<b>Total</b>	<b>38,530,034</b>	<b>\$0.99</b>	<b>\$1.09</b>	<b>\$0.99</b>	<b>\$1.01</b>	<b>\$0.94</b>	<b>\$0.91</b>	<b>\$0.99</b>

**Long Term Vacancy and Rental Rates Trends**



Source: Collier Monroe Friedlander, Inc.