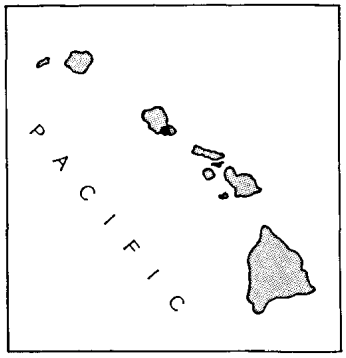

Honolulu

Karl E. Kim and Kem Lowry

Honolulu is both a real and imagined city. While the real Honolulu does have swaying palms, sandy beaches and exotic people it also has daily traffic jams, the highest housing costs in the USA and an economy increasingly dependent on financial decisions made in Tokyo, New York, Hong Kong and Los Angeles, leading some to question whether the city is as nice a place to live as it is to visit. In the last quarter century there have been many changes in the urban landscape. Planners have had to struggle with the difficult tasks of accommodating growth while preserving the character and charm of the imagined Honolulu. This profile of Honolulu begins with a description of the natural environment, followed by some observations regarding the city's social and spatial development. The system of governance is briefly described. Several of the major planning problems (tourism, housing and transport) are discussed. The profile concludes with a discussion of the future prospects for the city.

Karl E. Kim is an Assistant Professor in the Department of Urban and Regional Planning, University of Hawaii at Manoa, 2424 Maile Way, Honolulu, HI 98222, USA, where Kem Lowry also serves as Chair and Associate Professor.

Of the eight major islands (Hawaii, Maui, Oahu, Kauai, Molokai, Lanai, Niihau, and Kahoolawe) in the Hawaiian chain Oahu, with an area of 1574 square kilometres,[1] is the third largest. The City and County of Honolulu, incorporated in 1907, has jurisdiction over the entire island of Oahu. The island is located between 21 and 22 degrees north latitude, just below the Tropic of Cancer. The southernmost state in the USA, Hawaii shares the same latitude with a variety of places including Calcutta, Hong Kong, Mexico City and the Sahara Desert.

Volcanic activity, which started some thirty million years ago, created the Hawaiian archipelago. Consequently most of the landforms on the island of Oahu are the result of volcanic actions and the erosive effects of wind, streams and waves. The island of Oahu is dominated by two large mountain ranges (Waianae and Koolau) which run north to south. Lava flows from these volcanoes joined together to create a central plain (Leilehua Plateau) in the middle of the island. Oahu's 112 statue miles of coastline include a variety of coastal features including many well known sandy beaches (eg Waikiki) and scenic rocky shorelines.[2] Coral reefs play a major role in Hawaii's coastal environment by providing a major source of beach material and by protecting the shoreline from wave attack. The wide, shallow fringing reefs dominate near shore waters but there is one barrier reef located in Kaneohe Bay on the windward side of Oahu.

Isolation, geography and climate are the primary factors that account for the diversity and uniqueness of plant and animal life that evolved on the Hawaiian Islands. Tropical rain forests, lava fields with desert like conditions, forests, woodlands and pastures support some 2500 kinds of plants which occur in Hawaii and nowhere else.[3] The Hawaiian duck (*koloa*), Hawaiian goose (*nene*), Hawaiian hawk (*io*), Hawaiian crow (*alala*), Hawaiian owl (*pueo*) and many varieties of honeycreepers are but some of the rare and unusual birds found in Hawaii. Hawaii has the dubious distinction of having approximately one-third of the USA's entire roster of endangered species.[4]

Urban settlement

Since the turn of the century urban settlements have been concentrated along the south-eastern coast of the island. The downtown waterfront area, where a natural deep water harbour[5] provided a safe anchorage for whaling fleets and merchantmen plying their trade between the west coast of America and the Orient, was the area first settled.[6] Urban settlements proceeded in a linear fashion, following the coastline along several major thoroughfares running east to west (King Street, Beretania and later Kalakaua and Kapiolani). The Ala Wai Canal, completed in the 1920s, served to reinforce this linear pattern of development as well as transforming a swampy, mosquito-ridden area know as Waikiki into a place more suited for hotel and resort development.

While the City and County of Honolulu has jurisdiction over the entire

[1] R.W. Armstrong, *Atlas of Hawaii*, University of Hawaii Press, Honolu, HI, 1983, p 15.
[2] For a detailed description see R. Moberly and T. Chamberlain, *Hawaii Beach Systems*, Hawaii Institute of Geophysics, University of Hawaii, 1964, Report No HIG-64-2.
[3] *Op cit*, Ref 1, p 69.

continued on page 275

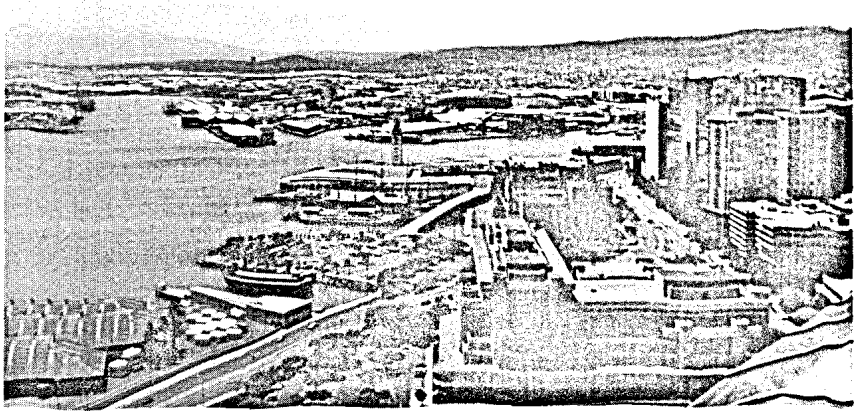

Figure 1. Downtown Honolulu water front.

island Honolulu can be described in terms of neighbourhoods, towns and outlying settlement areas.[7] The oldest residential neighbourhoods (Nuuanu, Makiki, Kalihi, Palama etc) were close to the downtown areas, while others, such as Kaimuki, Manoa and the area near Fort Shafter, developed as the street car and electric trolley system evolved.[8] The dependence of the Hawaiian economy on sugar, which was in turn dependent on the plantation system of production, encouraged a nodal pattern of spatial development. Outlying plantation towns – Waipahu, Wahiawa, Waialua and Kahuku – served as points of collection and accumulation, with Honolulu serving as the main hub for transport and communication with the rest of the world. In addition to the communities in close proximity to downtown a number of plantation camps and towns sprung up in the agricultural areas (Waipahu, Wahiawa, Waialua and Kahuku).[9] Two towns on the windward side of the island (Kaneohe and Kailua) grew in part because of the location of several large military facilities and the completion of two roadways (Likelike and Pali) which link the windward side with downtown Honolulu by means of tunnels through the Koolau Mountains. Military installations account for almost a quarter of the land area on Oahu.[10] In addition to the facilities at Pearl Harbour some of the best known include Schofield Barracks and Hickam Air Force Base. Suburban development, greatly facilitated by the expansion of automobile ownership on Oahu, occurred first in the areas near Pear Harbour (Pearl City), followed by large planned developments in Hawaii Kai (East Honolulu) and later in Mililani (West Honolulu). In general the most prestigious neighbourhoods have developed on the coastline, such as the Diamond Head–Kahala area. However, in recent years, neighbourhoods located in the hillside and mountain areas in close proximity to downtown (Figure 1), have enjoyed greater status. The expense of ridgeline development and strict development restrictions intended to protect watersheds in the mountains have limited the availability of developable land in areas closest to Honolulu's core.

Much of the residential development and virtually all of the industrial, commercial and office development has occurred between Pearl Harbour and Waikiki. This is where the majority of people work and where most of the major activity centres (shopping, cultural, educational, religious etc) are located. Most of the offices for all three levels of government (federal, state and local) are located in the downtown area, all within walking distance. While there are efforts to expand housing opportunities and development in outlying areas and there has been some development of suburban shopping malls and business districts, the area near downtown has remained the economic, political and social centre for both Oahu and the state as a whole.

Demographics

Of the state's 1 098 200 residents more than three-quarters (838 500)

continued from page 274

[4]It has been also reported that since the beginning of human habitation nearly 70% of non-migrant Hawaiian birds and 50% of native insects have become extinct: see J.L. Culliney, *Islands in a Far Sea*, Sierra Club Books, San Fransico, CA, 1988.

[5]In the Hawaiian language *honolulu* means protected bay: see M. Pukui *et al*, *Place Names of Hawaii*, University of Hawaii Press, Honolulu, HI, 1974, p 50.

[6]Among the most prominent historical works tracing the development of Hawaii is R.S. Kuykendall, *The Hawaiian Kingdom*, Vol I, *1778–1854*, Vol II, *1854–1874* and Vol III, *1874–1893*, University of Hawaii Press, Honolulu, HI, 1938, 1966, 1967.

[7]For a more detailed description of these areas see W.T. Chow, 'Urbanization: six propositions', in J.R. Morgan, ed, *Hawaii: A Geography*, Westview Press, Boulder, CO, 1983, pp 167–185.

[8]One of the few detailed descriptions of Honolulu's fixed rail system is contained in R. Melvin and R. Ramsey, *Hawaiian Tramways*, Golden West Books, San Marino, CA, 1974.

[9]An assessment of Hawaii's sugar industry is contained B. Plash, *Hawaii's Sugar and Sugarcane Lands: Outlook, Issues, and Options*, Department of Planning and Economic Development, State of Hawaii, Honolulu, HI, 1989.

[10]Military owned or controlled lands in 1987 amounted to approximately 93 888 acres of the total 397 200 acres on Oahu: Department of Business and Economic Development, *State of Hawaii Data Book*, Honolulu, HI, 1989, p 286.

live in Honolulu.[11] The city's *de facto* population, which includes tourists and other visitors but excludes residents temporarily absent is 902 600.[12] A central characteristic of Honolulu is the diversity of ethnic groups and cultures. Much of this diversity can be traced back to the labour policies of the sugar plantations. Caucasian merchantmen and the descendants of missionaries established sugar plantations on all the islands. By the mid-19th century the plantations were experiencing severe labour shortages. Chinese were brought to Hawaii as contract labourers. When their contracts expired and they left the plantations Japanese and later Filipino workers were imported. Between 1852 and the end of the World War II more than 352 000 contract workers had been brought to Hawaii, primarily from Asia.[13]

The descendants of plantation workers remained in Hawaii and many intermarried. Nearly 29% of the population in Honolulu consider themselves to be of mixed ancestry.[14] While approximately 17.7% of the city's population is of part-Hawaiian ancestry less than 1% classify themselves as native Hawaiian. The major ethnic groups in Honolulu include those who define themselves of Japanese (23.7%), Caucasian (23.4%), Filipino (10.5%) and Chinese (6.0%) ancestry. Blacks constitute 2.9% of Honolulu's population. Hispanics and Puerto Ricans constitute a similarly small proportion of the city's total population.

The economy

Since statehood in 1959 Hawaii's economy has continued to grow. The gross state product grew from $1.4 billion dollars in 1958 to $21.6 billion in 1988.[15] In 1982 constant dollars this represents a growth from $4.1 billion to just over $17.0 billion. The military has continued to maintain a strong presence in Hawaii, especially on the island of Oahu. In addition to the 133 958 members of the armed forces and their dependants stationed in Hawaii, the total civilian payroll for the combined forces amounted to more than $193 million in 1988.[16] Other military expenditure on supplies and services amounted to more than $498 million.

The growth in the visitor industry has been especially great with the annual number of visitors rising from 46 593 in 1950 to 6.1 million in 1988.[17] There has been a corresponding increase in the tourism infrastructure: hotel rooms increased from 2000 in 1950 to over 69 000 in 1988.[18] About 38 000 of these rooms are on the island of Oahu. Over the same period, annual direct visitor expenditures grew from $24.2 million to $8.3 billion.[19]

One consequence of the growth of tourism in Hawaii has been the increase in service employment. In 1950 about 8% of the total employment was in service industries. Today more than 24% of the employment is in the service industries and an additional 24.3% of employment is concentrated in wholesale and retail trade.[20] Total retail trade in Hawaii in 1988 amounted to $10.9 billion.[21] Over the same period agricultural employment has declined. Agricultural employment accounted for 16% of Hawaii's total employment in 1950 but a mere 2.6% of total employment today is in agriculture.

The decline of agriculture in Hawaii is related to problems with the state's two primary products – sugar and pineapples. The sugar acreage harvested and the volume of production of sugar has decreased as the Hawaiian sugar industry continues to struggle with competitive world conditions.[22] But sugar is still the state's largest legal agricultural product and the total value of sugar and molasses produced in 1988 was $318 million. The US Congress has passed into law price supports (18 cents per pound) which have heavily subsidized the production of Hawaiian sugar. In addition Congress has also enacted the Sugar Import Quota Bill, which should help sustain the Hawaiian sugar industry.

While the Hawaiian pineapple industry is considerably smaller than it was 30 years ago there has been some growth in production since 1975. The value of fresh and processed pineapple

[11] *Ibid*, p 16.
[12] *Ibid*, p 17.
[13] Hawaii Sugar Planters' Association, *Hawaii's Sugar Industry: Perspectives on Current Issues*, Honolulu, HI, 1990, p 3.
[14] *Ibid*, p 41.
[15] *Op cit*, Ref 9, p 337.
[16] Chamber of Commerce of Hawaii, *Hawaii Facts and Figures*, Chamber of Commerce, Honolulu, HI, 1989, p 1.
[17] *Ibid*.
[18] *Ibid*.
[19] *Ibid*.
[20] *Ibid*, p 4.
[21] Figures provided by Hawaii State Department of Taxation.
[22] For a recent discussion of Hawaii's sugar industry see J. Kahane and J. Mardfin, *The Sugar Industry in Hawaii: An Action Plan*, Legislative Reference Bureau, Report No 9, Honolulu, HI, 1987.

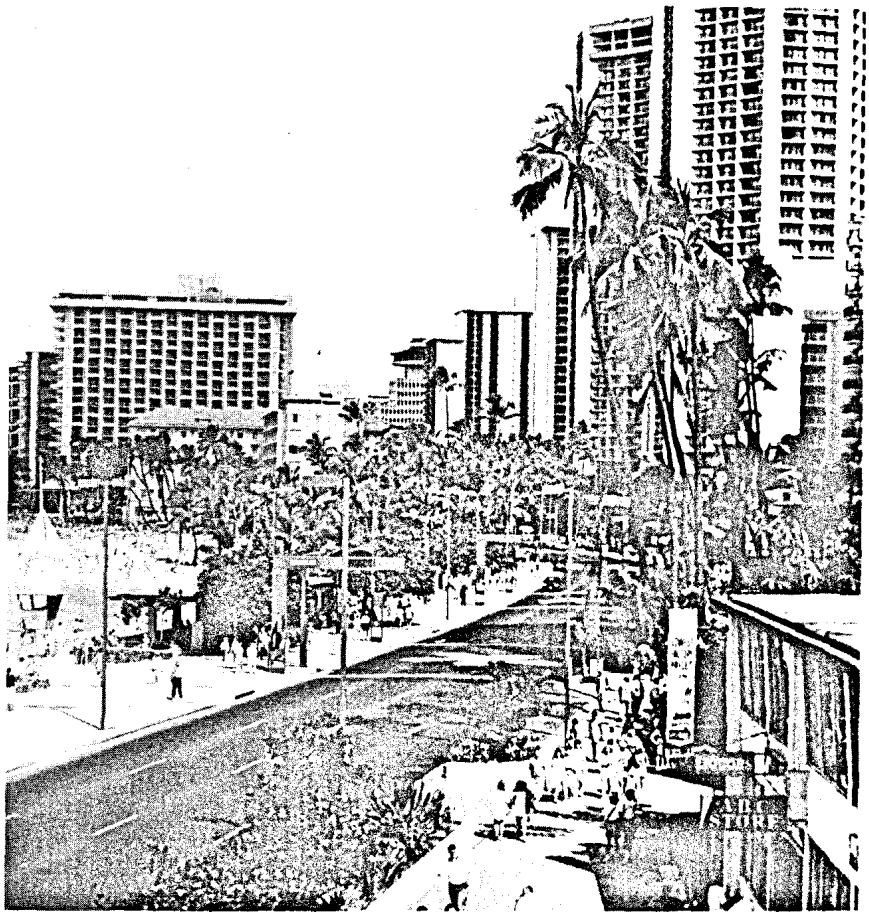

Figure 2. Waikiki.

products in Hawaii amounted to $247 million in 1988.[23]

In addition to sugar and pineapple other important agricultural products include flowers and nursery products, cattle, milk, vegetables, macademia nuts, fruits, eggs and hogs. In 1988, the total combined value of these products was $308 million.[24]

The fact that so much of the economy is dependent upon tourism and the related trade and service industries has created special types of problems for Hawaii planners. Invariably many major public decisions or investments are evaluated in terms of their impact upon tourism. The arguments for a diversified economic base are well known in the islands. At the same time the need to preserve and protect many of the natural amenities, open space and scenic vistas has led to a spatial development pattern in which many of the resorts and hotel facilities are concentrated in certain areas – Waikiki, Makaha, Kuilima (on Oahu) or Kihei, Lahaina (Maui), or Kona-Kailua (Hawaii). More than half of all the hotel rooms in the state are located on Oahu, of which almost 90% are located in the Waikiki area (Figure 2).[25] This has led to a spatial concentration of an array of tourism related businesses including restaurants, travel agencies, gift shops, tour guide operations and other service and recreational industries.[26] Large expanses of the islands' coastlines remain relatively open. With economic growth pressure to develop these areas has intensified. A new megaresort complex is being planned for an area of Oahu known as West Beach. This new, $2 billion planned resort community, known as Ko Olina, is expected to include some seven new hotels, a 450 slip marina, several golf courses and other tourist facilities.[27] This development is part of a strategy to build a secondary urban centre. These plans will undoubtedly result in some significant spatial and economic restructuring although as yet the impacts of such changes are not yet known.

[23] *Op cit*, Ref 16, p 1.
[24] *Ibid*, pp 2–3.
[25] Of the 37 841 visitor accommodation units on Oahu, 33 661 are located in Waikiki.
[26] Waikiki generates an estimated $2 billion each year in retail sales: G. Mason and T. Leonard, *All About Business in Hawaii*, Crossroads Press, Honolulu, HI, 1989, p 36.
[27] *Hawaii Investor*, Vol X, No 3, March 1990, pp 16–22.

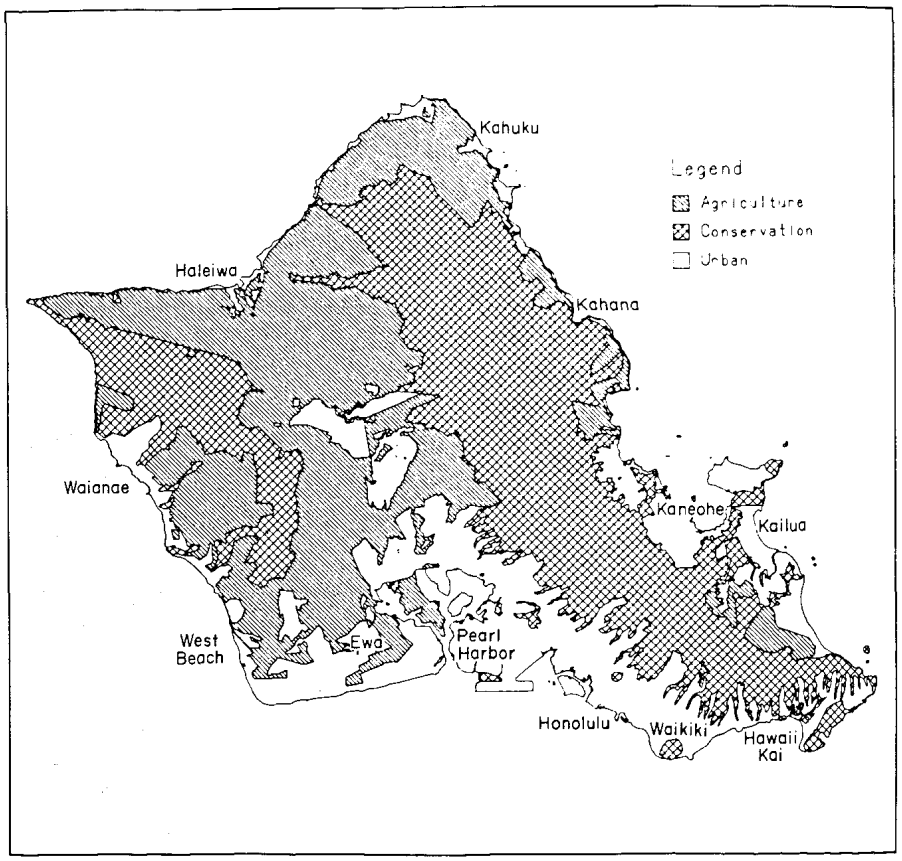

Figure 3. State land-use districts, Oahu.

Governance

The system of state and local government in Hawaii is unique among US states because of the relatively few government jurisdictions and the centralization of government authority. Hawaii is the only state with just two levels of government – county and state. There are no municipalities or other entities with taxing power. Hawaii has a bicameral legislature of 25 senators and 51 representatives. Unlike many states the Hawaii state government has responsibility for public education, including primary, secondary and higher education. The City and County of Honolulu, which is governed by a mayor–council form of government, has responsibility for mass transit, community development, housing and other basic public services (police, fire etc). There is one redevelopment authority, established by the state legislature in the downtown Kakaako area of Honolulu.

Although land-use control traditionally falls under the domain of local government, Hawaii was the first of several states to assert state control.[28] Hawaii's Land-Use Law was enacted in 1961 in order to preserve prime agricultural land and to prevent scattered urban settlement without adequate infrastructure. Under this law all land is classified into one of four categories: urban, rural, agricultural and conservation (Figure 3). Counties were given primary jurisdiction over urban land and the state government took primary responsibility for the management of all other land. The law gives the state substantial control over the timing and location of new development.

Growth control continues to be a major theme in Hawaii politics. One manifestation of the growth management imperative was a state plan law which was enacted in 1978.[29] The state plan established a policy framework for planning and development and contains an overall statement of the goals, objectives, policies and priorities of the state as a whole. The function of the plan is to coordinate the state planning processes and ensure linkages between the various state functional plans and county level plans, state land decisions, and state infrastructure planning. The state

[28]The movement towards increased state government control over land-use matters is referred to as the 'quiet revolution'; see Fred Bossleman and David Callies, *The Quiet Revolution in Land Use Controls*, Council on Environmental Quality, Washington, DC, 1975. For an analysis of the implementation of the law, see Kem Lowry, 'Evaluating state land use control: perspectives and a Hawaii case study', *Urban Law Annual*, No 18, 1980, pp 85–117.

[29]Hawaii Revised Statutes, Chapter 225.

functional plans include agriculture, conservation lands, education, energy, health, higher education, historic preservation, housing, recreation, tourism, transport and water resources. County level plans include general plans which contain broad county specific goals, objectives and priorities and development plans which guide development in specific areas.

Numerous boards, councils, agencies and offices are charged with the responsibility for planning in Hawaii. In 1988 the legislative created the Office of State Planning (OSP), which oversees long-range, comprehensive and strategic planning in the state. In addition to implementing the state plan, OSP also oversees responsibility for the functional plans, the Coastal Zone Management Office (CZM) and interacts closely with the various departments (land and natural resources, business and economic development, agriculture, health and transportation) engaged in planning activities. In the City and County of Honolulu the principal agencies involved in planning include the Department of General Planning and the Department of Land Utilization (which oversees zoning). Planning is also carried out by the Departments of Housing and Community Development, Transportation Services and the Board of Water Supply.

Planning issues

Many of the planning issues confronting Honolulu relate to the management of growth on an island with limited resources. A major policy choice involves the use of agricultural lands which have become increasingly available with the decline in sugar and pineapple production. At the centre of this conflict over land-use are pressing demands for more affordable housing. Conversion of agricultural land to housing also raises issues about urban infrastructure, particularly transport. Some discussion of Honolulu's housing and transport problems reveals much about the city's future and the manner in which planning is conducted in Hawaii.

Housing needs

Housing and crisis have been long synonymous in Hawaii. There have been numerous studies, conferences and campaign promises concerning the housing situation. Housing prices, tenure and quality are central themes in the debate. The average price of a single-family home in Hawaii 1988 was $312 600, compared to a national average of only $111 850.[30] The median price of a single-family home on Oahu in 1988 was $210 000. High prices have contributed to the large rental market. In Honolulu more than 55.9% of the housing stock is occupied by renters.[31] Monthly rents in 1988 in Honolulu averaged $950 for single-family homes and $895 for apartment units.[32] The demand for both rental and owner occupied housing is high, as evidenced by vacancy rates. While a housing emergency is said to exist when vacancy rates drop below 5% Honolulu's current vacancy rate is estimated at 1% to 2%.[33] If home ownership in Honolulu were to be somehow increased to the national average, it would necessitate moving more than 40 000 households from the rental stock into owner occupied homes.[34] Another related problem in Honolulu is poor housing quality. There are approximately 13 000 owner occupied and 30 000 renter occupied substandard units in Honolulu.[35] These conditions have resulted from the lack of investment in repair and maintenance as well as from the fact that many of the houses were poorly constructed. Hawaii's remote location, the associated costs of shipping and transport and the lack of indigenous materials used in construction have contributed, over the years, to the poor quality of housing.

Explanations for Hawaii's housing problems are quite varied. Developers and others in the private sector argue that government has put unnecessary and cumbersome restrictions on development. Developers maintain that to acquire the appropriate state and county planning permits to convert agricultural land to residential uses can take years.[36] While government officials argue that these permits are necessary to protect the public interest

[30] *Op cit*, Ref 26, p 37.
[31] Bank of Hawaii, *Construction in Hawaii*, Honolulu, HI, 1988, p 21.
[32] Peat Marwick, *Rental Housing Development Study*, Prepared for Department of Housing and Community Development, City and County of Honolulu, HI, 1989.
[33] *Ibid.*
[34] *Op cit*, Ref 31.
[35] Department of Housing and Community Development, City and County of Honolulu, *Proposed Three Year Housing Assistance Plan: October 1988-September 1991*, Honolulu, HI, 1988, p 1.
[36] According to one study a typical subdivision approval process – from initial application to final approval – took an average of 73 months: see *op cit*, Ref 31, p 20.

and ensure that development conforms to community held standards, developers maintain that these restrictions have greatly increased the costs of development. Others argue that government has not moved quickly enough to open up agricultural lands for development and the shortage of raw land, a primary cost component of housing, has contributed to price increases. Concentrated land ownership and a recent wave of foreign investment in housing have also been cited. However, according to one recent study purchases of homes by Japanese investors constituted only 10% to 15% of the total value of sales at the height of the investment wave in 1987, with the sales being heavily concentrated in a few areas.[37]

At the same time several initiatives have been undertaken by the state and local government to encourage the production of affordable homes in Hawaii. The most significant is a state government requirement that 60% of the units built on land reclassified from agricultural to urban be provided for households which earn between 80% and 140% of the median income. The City and County of Honolulu is also using development plan amendments as a means of encouraging the development of affordable housing, although income limits are defined somewhat more narrowly (120% of median income) than in the state initiatives.

The majority of new public and private planned developments are located in the Ewa and Central Oahu areas of the island. Traditionally these have been agricultural areas, primarily used for the cultivation of sugar cane. The amount of planned development is significant, with an estimated 30 000 additional units for Central Oahu and more than 45 000 units in Ewa in the next decade. These new developments are consistent with efforts to develop a secondary urban centre on Oahu. While they have not progressed as far as residential development efforts there are also efforts to develop employment centres (industrial park, commercial centres, and other tourist destinations) to direct growth away from the congested downtown area.

The planned residential developments are significant for a number of reasons. First, they symbolize a combined effort on the part of the public and private sector to build a sizable amount of new housing. Completion of all proposed housing units would increase Honolulu's housing stock by approximately 27%. Second, while the appropriateness of using prime agricultural land for residential purposes will continue to be a topic of debate, the new housing represents a substantial new investment, with numerous benefits accruing to the construction industry in Hawaii since many of the projects are being planned as complete new communities. With new schools, infrastructure, parks and other amenities, these developments represent an opportunity for easing the housing crisis for some residents.

Transport problems

As is the case in many US cities Honolulu suffers from too many cars and the associated problems of congestion, inadequate parking spaces, and air and noise pollution. One study found that Honolulu ranks 14th among US urban areas in terms of annual vehicle hours of delay.[38] Since 1950 population has grown by 2.3 times; the number of registered motor vehicles has increased by almost six times. There are now more than 571 738 motor vehicles in Honolulu.[39] Census data from 1980 shows that approximately 76% of the work force commutes by private automobile. A recent study found that 85% of these vehicles were occupied by only one person.[40] While Honolulu has one of the highest per capita bus riderships in the USA, the preferred mode of commuting is by private automobile and most people would rather drive themselves than form carpools or engage in some type of ridesharing.

Honolulu's surface transport problems are compounded by geography and a linear pattern of spatial development, resulting in one principal narrow corridor where most jobs and housing are located. The fact that most of the major activity generators – shopping centres, businesses, educa-

[37]N. Ordway, *A Preliminary Statistical Evaluation of Japanese Investment in Hawaii Real Estate,* Hawaii Real Estate Center, University of Hawaii, Honolulu, HI, 1988.
[38]J. Lindley, *Quantification of Urban Freeway Congestion and Analysis of Remedial Measures, Final Report,* Federal Highway Administration, Washington, DC, 1986.
[39]*Op cit,* Ref 9, p 467.
[40]Arthur Young, *Promoting and Implementing Paratransit on Oahu: A Plan of Action,* Department of Transportation, State of Hawaii, Honolulu, HI, 1987.

Figure 4. H-I freeway.

tional institutions, cultural and government institutions – are all located within the same 14-mile corridor extending from Pearl Harbor to Waikiki has created two major traffic problems: bottlenecks and spreading peaks. The state has been using computerized traffic signals, contraflow lanes and high occupancy vehicle lanes and has experimented with staggered work hours in an effort to increase roadway efficiency. While these strategies have proved useful in the short term, there is no sign of any abatement in the rate of automobile ownership. Since most of the planned highway improvements affecting the primary urban centre have been completed and there is virtually no available land for highway widening or construction of a new highway, Honolulu appears headed for gridlock (Figure 4).

For more than two decades Honolulu has been planning a fixed rail rapid transit system. Proponents of the system argue that the linear pattern of development, the high propensity to use public transport (evidenced by high bus ridership) and developments in fixed rail technology make it possible to build a cost-effective system which can compete with the automobile in terms of travel times and costs. Current plans envision an elevated, automated, medium capacity system similar to those operating in Vancouver, Detroit or Miami. Opponents maintain that fixed rail will never be able to compete with automobiles in terms of door to door service and building a billion dollar rapid transit system to replace the existing bus system is a costly gamble. Opponents also point to exaggerated patronage estimates and huge cost overruns which have typically plagued new start up systems. The stakes have become especially high since federal aid can no longer be counted on to subsidize the lion's share of capital costs. Although in the past federal funding could have amounted to 80% of total construction costs, the expected federal share is much lower – perhaps less than 50%.

In spite of the increased financial burden on the state and local sector there seems to be more receptivity to rapid transit than ever before. An environmental impact statement and an alternatives analysis prepared by the City and County of Honolulu has been approved by the Urban Mass Transportation Administration (UMTA). The state legislature has adopted a bill which provides funding for a rapid transit system to service Honolulu. Several transit construction consortia have expressed interest in the Honolulu project and while the project is still only in the alternatives analysis phase it is clear that plans to build rapid transit in Honolulu have gained momentum.

Uncertainties about ridership, costs, financing and technologies are only part of the transit planning dilemma. The difficulties associated with achieving consensus over transit are great in a community such as Honolulu where there are many diverse values, interests and needs. Building a new elevated, fixed rail transit system will have a tremendous aesthetic impact in Honolulu. While it may be

difficult to reconcile the image of a sleek, modern transit system whisking thousands of commuters between home and work with images of Hawaii as a tropical island paradise, the reality is that any solution to Honolulu's transport problems will involve a tremendous expenditure of resources, time and effort.

Conclusions

Honolulu is in the middle of a major transformation. Spurred in part by foreign investment a substantial number of public and private projects are under way or are in the advanced planning stages. In addition to the megaresort complex planned for West Oahu, a new deep-draught harbour, a new major highway project, a new rapid transit system, new convention centres, redevelopment of the Honolulu waterfront, numerous high rise condominiums, office buildings and golf courses are planned or under construction. These projects will substantially alter Honolulu's physical and social landscape.

Two major challenges face Honolulu's planners and elected officials. The first challenge, urban design, is not new. In fact, after undertaking a study for the Honolulu Parks Department in the 1930s, Lewis Mumford described Honolulu as 'the city where if the social and esthetic vision needful for planning ever took possession of its leaders, a transformation might be wrought that would lift Honolulu beyond all rivalry. No other city that I know would proportionately yield such high returns to rational planning as Honolulu.'[41] Mumford's challenge is as valid now as it was more than a half century ago. In spite of special design districts, a park dedication ordinance, shoreline setbacks, prohibitions on large signs and billboards and other design legislation, striking a balance between the natural and the built environment, between the past and future, and between economic imperatives and aesthetics, is a continuing struggle. Honolulu's transport and housing problems and the proposed solutions (rapid transit and subdivision development) mean that big, irreversible decisions affecting the physical appearance of the city loom on the horizon.

The second general challenge facing Honolulu involves ensuring that the benefits and burdens of the city's rapid growth are equitably distributed. With increasing foreign investment and control over land, businesses and hotel rooms, Honolulu faces a situation in which many of the profits and returns on investment have leaked out of state. At the same time, many of the costs of new development – increased congestion, restricted access to shorelines because of new hotels, loss of views and strained infrastructure – have been imposed on residents. The tax system, which relies heavily upon the taxation of personal income and consumption, has also forced a disproportionate share of the costs of public services on low and middle income families. The heavy dependence on tourism and the domination of the service sector over other parts of the economy has meant that a majority of the city's residents hold low wage positions with little room for advancement. Low wages have undoubtedly contributed to the lower than average levels of home ownership. While the public sector has launched ambitious housing development schemes larger issues concerning income, employment and job creation remain somewhat neglected. The reality is that Hawaii has become so dependent on tourism it knows little else. Tourism will undoubtedly continue to play a major role in Honolulu's future; yet with the 'globalization of capital', particularly in the Pacific region, ensuring that Hawaii residents can reap a fair share of benefits is likely to be a continuing policy issue. In the future the city is likely to become more international and cosmopolitan. If multimillion dollar housing prices, expensive designer boutiques and leisure activities for the rich and famous are any indication of the things to come, Honolulu is already well on its way to becoming a 'post-industrial playground'. The ultimate challenge to planners in Honolulu may be to protect the quality of life for residents so that Hawaii becomes as nice a place to live as it is to visit.

[41] L. Mumford, *Report on Honolulu*, reprinted in *Hawaii Observer*, 3 February 1976.