

Ming Chew Associates

Consulting Real Estate Economists

January 16, 1989

Mr. Ed Kuniyoshi
Belt Collins & Associates
680 Ala Moana Boulevard, Suite 200
Honolulu, Hawaii 96813

Dear Ed:

We are pleased to transmit the results of our Market Analysis for the expansion component of the proposed Lihue/Puhi Project District Plan, located at the boundary of Lihue and Puhi, Island of Kauai, State of Hawaii.

Our conclusions are summarized in Chapter I. The research and analyses upon which they are based appear in the body of the report.

Briefly, Kauai's economy has expanded recently as a result of growth in both tourism and construction. New projects completed in the past few years and corresponding increased household income, have increased housing demand faster than the housing industry has been able to build units, causing a present undersupply. Moreover, projects expected to be completed during the next few years will create still more housing demand. Since most of the new demand is expected to occur in the Lihue area, the Lihue/Puhi Project District Plan area is well-positioned to accommodate both the current pent-up housing demand, and projected new demand. Additional household spending from other growth in the region, including the proposed expansion, would generate demands for a sizable amount of retail commercial land use.

It has been a pleasure working with you on this very interesting and challenging assignment. Please let us know if we can be of further assistance.

Very sincerely,

MING CHEW ASSOCIATES

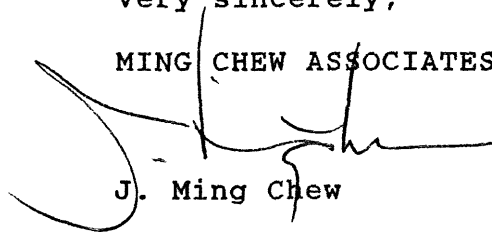

J. Ming Chew

EXHIBIT F

TABLE OF CONTENTS

	<u>Page</u>
I. ASSIGNMENT AND SUMMARY	1
II. DESCRIPTION OF THE REGION	4
III. DESCRIPTION OF THE PROPERTY AND ENVIRONS	6
IV. DESCRIPTION OF THE PROPOSED PROJECT	8
V. ECONOMIC OVERVIEW	9
VI. PROJECTED ECONOMIC ACTIVITIES	12
VII. HOUSING MARKET ANALYSIS	16
VIII. RETAIL MARKET ANALYSIS	—
IX. CONCLUSIONS AND RECOMMENDATIONS	—

ILLUSTRATIONS

Figure 1. Location Map	facing 4
Figure 2. Environs Map	facing 6
Figure 3. Lihue/Puhi Project District Plan	facing 8

Qualifications of the Consultant and Firm

I. ASSIGNMENT AND SUMMARY

A. Assignment

Our assignment has been to prepare a market study for the expansion component of the proposed Lihue/Puhi Project District Plan, located at the boundary of Lihue and Puhi, Island of Kauai, State of Hawaii. The results of this analysis are to be used to assist in preparing a petition to the Hawaii State Land Use Commission for a State land use boundary change of selected lands.

B. Approach

Relevant economic and market forces affecting the subject expansion were analyzed and converted to projections of residential and retail commercial demand. The demand projections were compared to estimates of current and anticipated supplies of such land uses in order to arrive at marketability conclusions for the proposed expansion.

The approach employs the Regional Economic Model, which indicates that economic activity is the driving force behind other types of activity in a region, such as employment, population and land use. Economic forces result in activities which create jobs. Jobs represent employment positions which are filled by workers. These workers, plus the unemployed, constitute the labor force.

At the same time, labor force availability is a function of population. That is, the number of available workers is usually a function of the number of persons of working age, which in turn, can be related to total population and households.

Thus, the demand for land uses such as residential and commercial can be estimated from analyses of economic activity, the resulting jobs and the associated population and households.

In this analysis, we have related the number of new jobs directly to estimates of new households and associated demand for new housing units. Estimated retail commercial demand was based upon projected regional growth.

C. Summary

1. The economy of Kauai, driven mainly by growth both in tourism and construction, has expanded rapidly in recent years.

2. Tourism has become the primary economic driving force on Kauai, and is expected to continue being the fastest growing segment of the Island's basic economy for at least the next several years.
3. Lihue is a major population and residential center on Kauai, and serves as its seat of government, as well as a center for business, transportation, retail trade, commerce, tourism and education.
4. Although tourism-related jobs have occurred in different resort areas around Kauai, including Lihue, most of the new population-support jobs have been generated in or near Lihue.
5. The area covered by Grove Farm's Lihue/Puhi Project District Plan has evolved into a major new community to support the continuing economic growth on Kauai. Current uses in the Plan area include moderate- and market-priced residential subdivisions, parks, Kukui Grove Center (the only large regional shopping center on the Island), Kukui Grove Village (commercial center), neighborhood commercial and light industrial land uses. Moreover, it is in close proximity to a wide variety of employment centers, transportation, schools and shopping.
6. Recently completed projects have created a large number of new jobs on Kauai. These new jobs have resulted in additional income, and thus new purchasing power and spending, and have generated demands for the types of land uses included in the proposed Lihue/Puhi Project District Plan.
7. As a result of new economic activity, and corresponding new jobs and households, housing demand in the last few years has increased more rapidly than the homebuilding industry has been able to construct new units. At present, the estimated imbalance between demand and supply is some 300 housing units.
8. Major projects currently under construction or planned for the next few years are expected to increase even more the number of jobs and labor force requirements in the community. As a result, housing demand on Kauai is projected to increase by about 600 units in 1989, 1,000 units during both 1990 and 1991, and 600 units

per year from 1992 to 1995.

9. About 60 percent of the resulting new jobs will be located in the Lihue area. With the large amount of population-support as well as other secondary economic activities in Lihue, about 70 percent of new jobs created by the projects would likely be located in Lihue.
10. Historically, population settlements gravitate toward economic activity centers (job centers). Thus, most of the new housing demand generated by projects expected to be completed in the next few years, is projected to occur mainly in or near Lihue.
11. Household incomes at almost all levels have increased faster than the rate of inflation, and are projected to continue doing so for the near future.
12. Higher household incomes indicate increased housing affordability. Nonetheless, housing demand is projected to expand across a broad range of prices.
13. Based upon housing demand projected for the Lihue market area, the residential units and subdivision lots in the proposed subject expansion could be absorbed during the five-year period from 1990 to 1995.
14. Projected growth on Kauai, and associated increases in household spending would generate demand for an additional 26 acres of regional retail land use from 1990 to 1995, and another 26 acres from 1995 to 2000.

PROFESSIONAL QUALIFICATIONS OF J. MING CHEW

BUSINESS BACKGROUND

Principal, Ming Chew Associates, Honolulu, Hawaii
Executive Vice President, Hastings, Martin, Chew & Associates, Ltd., Honolulu, Hawaii
Senior Economic Consultant, Real Estate Research Corporation, San Francisco, California
Economic and Project Analyst, Humble Oil and Refining Company, Baytown, Texas

EDUCATION

M.B.A. (Economics and Finance) 1967 Stanford University
B.S. (Chemical Engineering) 1957 Georgia Institute of Technology

PROFESSIONAL MEMBERSHIPS

American Real Estate and Urban Economics Association
Hawaii Economic Association
Pacific Area Travel Association

Member, Past-Chairman, Hawaii Visitors Bureau (HVB) Research Committee, Honolulu, Hawaii
Member, HVB Long-Range Planning Committee, Honolulu, Hawaii
Member, Council on Revenues, State of Hawaii
Member, Editorial Board, Tourism Research Publications, University of Hawaii at Manoa

Former Member, Pacific Area Travel Association (PATA) Research Authority, San Francisco, California
Past President, Hawaii Society of Corporate Planners
Former Member, Technical Advisory Committee to the Honolulu City Council Planning and Zoning Committee
Former Commissioner, Environmental Quality Commission, State of Hawaii

TYPICAL CLIENTS

Financial Institutions

First National Bank of Chicago
Pioneer Federal Savings & Loan Association
Standard Finance Company, Ltd.

Investors and Investment Groups

Morgan Stanley & Co., Inc.
Salomon Brothers
Waiehu Heights Associates

Government Agencies

U.S. Department of Commerce
(Economic Development Administration)
U.S. Fish and Wildlife Service
U.S. Department of Transportation
(Urban Mass Transportation Administration)
State of Hawaii Department of Planning
and Economic Development
City and County of Oahu, Department of
Transportation Services
County of Hawaii
County of Kauai Public Housing Agency
Marianas Public Land Corporation
Maui Redevelopment Agency
City of Chicago, Board of Education

Individuals and Estates

Kamehameha Schools/Bernice P. Bishop Estate
The Estate of James Campbell
Arthur Summerfield, Jr.

Mortgage Bankers/Brokers

Brooks, Harvey & Co., Inc.
G.L. Thoele Company, Ltd.

Builders and Developers

American Towa Corporation
Amfac Financial Corporation
Asahi Development Corporation
Boise Cascade-Waikoloa
Cooke Land Company, Inc.
Dillingham Land Corporation
GO Development Corporation
DWA Investment Co.
Grove Farm Company, Ltd.
Haleakala Ranch Co.
Hawaii Takenaka International, Ltd.
Hawaiian Land Company
Herbert K. Horita
Home Properties, Inc.
Sheridan C.F. Ing
George Issacs
Kalua Koi Corp.
Kamehameha Investment Corporation
Kapalua Land Company, Inc.
Lokahi Pacific
Mahukona Properties, Inc.
Maui 100 Partners
Maui Land and Pineapple Company, Inc.
Mauna Kea Properties, Inc.
Mauna Lani Resort, Inc.
Ohbayashi Hawaii Corporation
Pankow Development, Inc.
Princeville Development Corporation
Prudential Life Insurance Company of America
Bruce C. Stark
Transcontinental Corporation
Wailea Land Corporation
John Michael White

**Specializing in research, analysis and counseling to identify
Hawaii and Pacific Area real estate opportunities.**

Professional Services:

REGIONAL ECONOMIC ANALYSIS

Determination of economic, labor and demographic forces creating demands for real estate and land uses.

TOURISM RESEARCH AND ANALYSIS

Evaluation of economic development and employment potential of tourism, resort and recreation supply and demand analysis, competitive market strategies and tourism impact analysis.

REAL ESTATE MARKET AND FEASIBILITY ANALYSIS

Measurement of real estate supply and demand factors for primary and recreational housing, retail, office and industrial markets.

REAL ESTATE STRATEGIES

Identification of ways to profit from real estate market opportunities and means to minimize risks.

LAND USE POLICY

Formulation of alternatives supported by economic and market conditions to accomplish public policy goals and objectives regarding land use.

ECONOMIC AND COMMUNITY IMPACT ANALYSIS

Estimation of land use demands and community impacts of projects for governmental permit processing.

DEVELOPMENT AND INVESTMENT COUNSELING

Interpretation of highest and best use, including selection of synergistic land and space uses and optimum timing.

EXPERT TESTIMONY

Qualified expert witness on regional economic issues, real estate markets and marketability, and community and land use impacts.

REAL ESTATE INVESTMENT PORTFOLIO ANALYSIS

Selection of investment projects, and responsive mix and timing decisions.