



Appendix H  
Economic and Fiscal Impact Assessment

**Market Study,  
Economic Impact Analysis, and  
Public Fiscal Assessment  
of the Proposed**

**MAUI RESEARCH &  
TECHNOLOGY PARK  
MASTER PLAN UPDATE**

**Kihei, Maui, Hawaii**



June 5, 2012

Mr. Steve Perkins  
Project Coordinator  
Maui R&T Partners LLC  
1300 North Holopono Street, Suite 201  
Kihei, Hawaii 96753

**Market Study, Economic Impact Analysis and  
Public Fiscal Assessment of the  
Proposed Maui Research & Technology Park  
Updated Master Plan e  
Kihei, Maui, Hawaii**

Dear Mr. Perkins:

At your request, we have completed a series of market and econometric analyses associated with the proposed Maui Research & Technology Park (MRTP) Master Plan Update, an evolution in the design of the 20-year old project in response to market trends and land use needs which will enable the development to better meet the real estate requirements of Maui and the Kihei-Makena region over the long-term.

The original vision of MRTP as a use-restricted, large lot, 432-acre business campus did not provide sufficient diversity to achieve its technology-driven potentials within the Maui economy. The updated plan will provide for a wider spectrum of industrial, business park, commercial, mixed-use and residential use types creating cumulative attraction and synergy, currently lacking in the project, while offering product that is more responsive to community demands.

As presently proposed, the Master Plan Update will establish a mixed-use community, comprised of:

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- Up to 1,250 resident housing units preliminarily divided between 750 single family homes and 500 multifamily/townhouse units. Featuring a diverse inventory, the anticipated price range will be oriented towards meeting the housing needs of MRTP workers and their families, and the resident households of South Maui.
- Up to 1.6 million gross square feet of light industrial, business park, and commercial floor area. The large majority of space will be of the first two use-types, continuing the Park focus on technology but also expanding the opportunities for other job-creating activities and a wider spectrum of tenants. Commercial is anticipated to be limited to neighborhood-oriented retail, restaurant and service/support offerings meeting the daily needs of project residents, workers and customers, in addition to mixed-use areas promoting "live/work" and other creative and marketing spaces.
- An "Economic Opportunity Campus Area" of some 30 to 40 acres capable of supporting upwards of 400,000 gross square feet of floor space, which will be available for a major institutional, educational, corporate or research user seeking a large, integrated campus environment on Maui. The availability of a large, ready-to-build site in a modern, competitive setting will be essential in attracting and servicing many major new uses that may come to Maui as it continues its economic evolution.
- 52 acres of parks, trails, greenbelts and open space which extend throughout the project, along with sites for civic and other community supporting uses.

The updated master plan includes a Village Center, Employment Core, Knowledge Industry Expansion/Campus and residential neighborhoods, to be accessed via interior streets extending from Lipoa Parkway. The plan is consistent with the steadily increasing amount of existing and proposed development in the corridor mauka of Piilani Highway.

The 400-plus acre remaining undeveloped site is divided between a 150 acre portion with in-place land use approvals supporting the master plan (the "Entitled Area"), encompassing where Park development has occurred to date, and a 256 acre section for which approvals are being sought (the "Petition Area"). The project will be built in two phases.

Our assignment was to: determine the level of demand for the MRTP Master Plan Update inventory relative to available supply; assess the appropriateness of the site and master plan from a market perspective; and quantify the economic impacts of the project within the public and private spheres presently and in the future. Our study was primarily comprised of three elements:

1. **Market Study.** To ascertain whether there currently exists, or will exist, sufficient demand in the Maui and Kihei-Makena residential, industrial/business park, and commercial real estate sectors to successfully absorb the finished subject inventory in a timely manner given its characteristics and those of competing in-place and proposed regional developments.
2. **Economic Impact Analysis.** To estimate the general and specific effects on the local economy which will result from MRTTP build-out, including construction and business employment, wages and income, contractor/supplier profits, end-user expenditures, and other regional monetary and employment effects. This study also forecasts the de facto population of the subject community including residents, guests and workers, household income and discretionary spending levels.
3. **Public Fiscal Assessment.** To quantify the tax receipts, public costs, and net benefits which will be received by the State of Hawaii and the County of Maui resulting from the actualization and operation of the MRTTP Master Plan Update.

The subject property, identified on State of Hawaii Tax maps as Second Division Tax Map Key 2-2-24, Parcels 1-9, 14-17, 31 & 34; and, 2-2-2 Parcel 54 (por.) 13; varies from near level to moderately sloping; has favorable access, but limited frontage/exposure characteristics; offers some superior view panoramas; and is within an urbanizing corridor.

The pertinent results from our studies are presented in the following report, which opens with an Executive Summary focusing on brief narrative describing our conclusions. The remainder of the report is comprised of a series of six addenda exhibits containing the tabular presentation of our data, analysis and modeling for each aspect of the assignment.

As part of our investigation program, we have: visited the subject property and its environs; researched the Maui and Kihei-Makena submarkets including residential, industrial/business park and commercial real property sectors; interviewed knowledgeable parties active in the regional economy; reviewed government statistics, policies and publications; accessed on-line databases; and compiled materials from published and private sources.

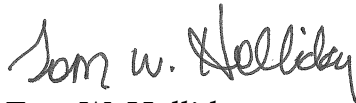
All conclusions presented herein are subject to the limiting conditions, assumptions and certifications of The Hallstrom Group, Inc., in addition to any others specifically set forth in the text. All work has been completed in conformance with the Code of Professional Ethics and Standards of Professional Appraisal Practice of the Appraisal Institute, and the Uniform Standards of Professional Appraisal Practice (USPAP).

Mr. Steve Perkins  
June 5, 2012  
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We appreciate the opportunity to be of service to the Maui R&T Partners LLC in regards to this prominent mixed-use community.

Respectfully submitted,

THE HALLSTROM GROUP, INC.

A handwritten signature in dark ink, reading "Tom W. Holliday". The signature is written in a cursive, flowing style with a large initial 'T'.

Tom W. Holliday

/as



**Market Study, Economic Impact Analysis,  
and  
Public Fiscal Assessment  
of the  
  
PROPOSED  
MAUI RESEARCH & TECHNOLOGY PARK  
MASTER PLAN UPDATE**

**Located at  
  
Kihei, Maui, Hawaii**

**Prepared for  
  
Mr. Steve Perkins  
Maui R&T Partners, LLC**

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**As of  
  
May 2012**

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## INTRODUCTION

The Maui Research & Technology Park (MRTP) Master Plan Update comprises approximately 360 acres of undeveloped urban-classified lands located mauka of Piilani Highway in the central inland area of Kihei Town. It is situated on the lower northwesterly flanks of Haleakala, one mile from the shoreline and twelve miles from the Kahului Airport (OGG).

The irregularly-shaped site, lying adjacent to the Eleair Maui Golf Club, is surrounded by a mix of undeveloped, developed and proposed-for-development lands within the interior of the Kihei-Makena Corridor, a natural growth area for the expanding resident and resort community. The gently to moderately-sloping site has favorable mauka and makai view planes, an excellent climate, and ease of access to the region's main thoroughfare and the island's roadway system.

When originally envisioned and entitled a quarter century ago, the subject property was intended to be a restricted-use (research & technology concerns only) business park/campus setting offering a quality location for high-tech and other new knowledge-oriented companies, access to the Maui High Performance Computing Center, and a quality, competitive environment for leading-edge ideas to be developed.

However, as described in the Draft Environmental Impact Statement, the breadth and depth of employment opportunities is significantly less than what more modern and progressively planned park's are capable of delivering, necessitating an updating of the master plan to maximize market and synergy opportunities:

"Development activity at the MRTP during the past two decades has occurred at a significantly slower rate than initially expected. Since its inception in the late 1980's, the approximate 432 acre MRTP is only at approximately 10 percent build-out, with 11 lots sold and approximately 180,000 square feet of structures in five (5) buildings with a total of 400 employees. Today,

everyone working in the Park commutes since the development has no housing, and few support services or amenities. Over twenty years have passed since the original controlling documents for the development have been updated. Best practices in planning, land development, and strategies for economic development through diversification have changed dramatically since the initial development of the Park. The development plan for MRTP needs to conform to current state of the art practices in modern, successful employment centers in order to deliver the economic development benefits desired by the community.

This Master Plan Update proposes to utilize the principles of New Urbanism and Smart Growth to transform the current, single-use large lot research and technology campus into an integrated and vibrant mixed-use community focused around a regional knowledge-based industry employment base. The Master Plan Update includes fundamental design elements that will have positive effects on the environment, on individual health and well being, and on the long-term economic viability and adaptability of the Park. The Master Plan Update encompasses approximately 432 acres and includes the following components: employment core; knowledge industry expansion; mixed-use village center; residential areas; and an open space network and parks...

The Master Plan Update will be implemented over a period of years. It is anticipated that all of the necessary entitlements to fully implement the Plan will be obtained by early 2014. The Master Plan Update will be implemented in phases, with key infrastructure improvements tied to the phase of development and as the improvements are warranted."

The MRTP Master Plan Update, designed by Calthorpe Associates, calls for a mixed-use community offering a comprehensive lifestyle, transportation connectivity and environmental sustainability, with the primary marketable components including:

- Up to 1,250 resident housing units preliminarily divided between 750 single family homes and 500 multifamily/townhouse units. The diverse inventory and anticipated price range will be oriented towards

meeting the housing needs of MRTTP workers and their families, and the resident households of South Maui.

- Up to 1.6 million gross square feet of light industrial, business park, and commercial floor area. The large majority of space will be of the first two use-types, continuing the Park focus on technology but also expanding the opportunities for other job-creating activities and a wider spectrum of tenants. Commercial is anticipated to be limited to neighborhood-oriented retail, restaurant and service/support offerings meeting the daily needs of project residents, workers and customers, in addition to mixed-use areas promoting "live/work" and other creative and marketing spaces.
- An "Economic Opportunity Campus Area", of some 30 to 40 acres capable of supporting upwards of 400,000 gross square feet of floor space, which will be available for a major institutional, educational, corporate or research user seeking a large, integrated campus environment on Maui. The availability of a large, ready-to-build site in a modern, competitive setting will be essential in attracting and servicing many major new uses that may come to Maui as it continues its economic evolution.
- 52 acres of parks, trails, greenbelts and open space which extend throughout the project, along with sites for civic and other community supporting uses.

The site and master plan is divided between existing "entitled area" lands (about 150 acres) and the "petition area" (256 acres). The petition area, will contain 850 of the residential units, 615,000 square feet of industrial/commercial floor space and the Economic Opportunity Campus. The project will be developed in two phases over an estimated two decade build-out.

The updated subject community will contain an increased spectrum of use-types creating a critical mass currently lacking in the project. According to the developer, "the focus and intent of those uses will be economic diversification and expansion of the existing knowledge industry in the park, and supporting the

workers in those industries with services and amenities that will make the development attractive to knowledge industry employers."

The evolved plan will also loosen the "onerous restrictions" which have hampered business development and the formation of cumulative attraction at MRTP, such as lot size, use restrictions, and setback/landscaping requirements, while promoting an integrated "live, work, play" village concept with the flexibility to embrace new ideas and emerging land use trends. It is anticipated some of the employees of the commercial and industrial businesses will be Park residents, lessening the impact of the development on regional roads and highways.

The updated vision will transform a well-located, urban-classified, underutilized property that has thus far not lived up to its economic potential for+ Maui, into a regional asset providing needed reasonably-priced housing, supporting business growth producing thousands of "worker years" of employment and wages, attracting significant new capital investment, and stimulating spending. This activity will in turn generate enhanced employment and business opportunities for island residents and companies while further expanding the tax base for the state and county.

The Hallstrom Appraisal Group, Inc.'s assignment was to analyze the proposed MRTP Master Plan Update from a real estate market perspective and to identify and quantify probable market and economic impacts associated with its development in light of competitive, regional, prevailing and forecast trends to answer four basic study questions:

1. Is there sufficient demand to absorb the various "marketable" components of the subject community (especially within the petition area) during a reasonable exposure period given competing developments and projected statewide/regional market trends?
2. Will the community be an appropriate use of the underlying site relative to market needs?

3. What will be the general/specific and direct/indirect economic impacts on Maui resulting from the undertaking of the subject community via employment, wages, business operations, population, and other economic activity related to the real property asset?
4. What will be the effect on the state and county "public purse" from the project in regards to costs of services required to service the MRTP population and increased tax/fee receipts flowing from its development?

These issues were addressed through a comprehensive research and inquiry process utilizing data from market investigation, governmental agencies, various Hawaii-based media, industry spokespersons/sources, on-line databases, and published public and private documents.

The pertinent results of our study are highlighted in the following Executive Summary, comprising the body of our report, which contains a concise narrative and tabular synopsis of our conclusions. Additional materials, contained in data tables and models depicting the subject community's lifespan from commencement to completion, are presented in the Addenda.

Our narrative presentation is divided into five sections:

- 1. Primary Study Conclusions**
- 2. Real Estate Outlook**
- 3. Market Study of the MRTP Master Plan Update Components**
- 4. Economic Impacts of the Proposed Community**
- 5. Public Fiscal Costs and Benefits Associated With MRTP**

The primary source information regarding the subject community used in our study were: maps, master plans, unit

counts, density analysis, cost estimates and background materials provided by Maui R&T Partners LLC, Calthorpe Associates, Chris Hart & Partners, and other members of the development/consultant team; resident population and housing projections, community plan materials and other data from the Maui County Planning Department; the United States 2010 Census; sales and listing data from the Maui Board of Realtors and Hawaii Information Service; and, data from our files.

The MRTP site and environs have been viewed by our firm on many occasions and specifically for this assignment. The effective date of study was April 1, 2012.

## PRIMARY STUDY CONCLUSIONS

Based on our analysis of the subject property, its environs, and envisioned development we have reached the following conclusions as of April 1, 2012 regarding the probable market standing and economic impacts of the proposed Maui Research & Technology Park Master Plan Update:

### Market Study

- Hawaii is slowly but steadily recovering from the recent recession and associated down-cycle in the real estate market. Current expectations are activity will generally recover towards long-term average levels over the next several years, and that another up-cycle will subsequently ensue, consistent with long-term economic trends in the islands.
- Maui, along with Oahu, has shown the greatest movement towards recovery among the islands. The unemployment rate has dropped to 7.2 percent from a high of 9.1 percent during the depths of the recession, total visitor days and spending are up more than 20 and 35 percent respectively since 2009, and median household income is up 2.2 percent from last year. Business creation and floor space absorption remain mixed, but are expected to show growth in 2012-13.

- Regardless of the point in the economic cycle, there remains a chronic unmet demand for additional affordably-priced housing on Maui. While numerous directed projects have been proposed, along with other mixed-use developments with a workforce housing component, they have been slow to reach fruition.
- The "Kihei-Makena Study Area" is a suburban coastal community, with residential-oriented uses in the inland areas (housing units, neighborhood commercial and limited industrial), and resort/vacation-oriented uses dominating the shoreline (condos, hotels, timeshare and destination resorts). It has expanded dramatically in the past three decades, growing four-fold in resident population, adding nearly one million square feet of commercial and industrial floor area and more than 2,500 visitor units, and evolving into a major hub of Maui investment and business activity. Forecasts are the study area population will increase from the current figure of 27,500 to between 42,000 to 46,000 by 2035 (a gain of 53 to 67 percent), and increase its importance in the island's economy; particularly as Makena Resort experiences further development and the Maui Research & Technology Park (MRTP), Honuaula and other master-planned projects are manifest.
- The demand for new residential units in the Kihei-Makena Corridor will be from 7,760 to 12,009 units over the next 24 years (through 2035). The number of existing unsold and planned resident housing units within the regional "Directed Growth Boundary", excluding the MRTP, totals some 6,634 units. This indicates there will be a shortfall in the sector of from 1,126 to 5,375 new residential units; with a mid-point under-supply of 3,251 units. Our analysis indicates there will be sufficient unmet demand to absorb the 1,250 units of subject inventory.
- Regardless of the point in the economic cycle there remains a chronic unmet demand for additional affordably-priced housing on Maui. While numerous

directed projects have been proposed, along with other mixed-use developments with a workforce housing component, they have been slow to reach fruition. Approximately 43 percent of the demand for resident housing in the Kihei-Makena Study Area will be for units with a current price of \$640,000 or less; the upper-price threshold for meeting County affordability standards (140 percent of median household income). Approximately 56 percent of the proposed product should be single family (homes or lots) and 44 percent multifamily units.

- We estimate the 750 single family homes/lots of the subject development will require approximately 14 years to be absorbed following commencement of pre-sales in 2017 (or 53.5 sales per year), and the 500 multifamily units will sell-out in 13 years (38 annually). It is likely most of the multifamily units will have market-based prices at, or below, affordability thresholds.
- At present, the study area is a secondary commercial center of Maui, meaningfully behind Kahului-Wailuku, with an estimated 700,000 square feet of commercial floor space, or 16 percent of the island total. As Kihei-Makena contains 24 percent of the de facto population of Maui, it can be asserted it is "under-serviced". The vacancy rate on the island for retail, restaurant and service/support commercial floor space is currently at just over nine percent; the highest level in many years. Rents have stabilized since mid-decade, and net absorption for the year was a negative 11,297 square feet, the smallest loss since 2008, and an indication the sector has stabilized and is likely to return to a positive absorption stance in 2012-13. Tenant stability is relatively high in Kihei-Makena (particularly compared to West Maui), with increasing interest being expressed in vacant bays as the market continues through its recovery phase.
- We estimate there will be demand for an additional 907,000 to 1,506,000 million square feet of gross leasable floor space in Kihei-Makena (the "Study Area") by 2035,

more than doubling the existing inventory, as Kahului lands are built-out, the Kihei population continues to increase, and the importance of the study area in the island's economy expands. This equates to an additional 83 to 141 acres of vacant gross land area to support expected market needs.

- While there are substantial available (and under-built) commercial lands in Kihei-Makena, and there will be sites in many of the major proposed master-planned developments, we consider it unlikely there will be sufficient competitive acreage to meet the forecast mid-point to maximum demand levels. However, it is not the intent of the MRTP Master Plan Update to directly compete within the general regional commercial market on an overall basis.
- The purpose of the subject commercial component is to meet the demand for "neighborhood" retail, restaurant, and service commercial uses among the some 2,765 de facto residents of the community, in support of the 5,878 employees of the Park tenants and their daily patrons, and to provide opportunities for small and specialized businesses within a mixed-use environment. We estimate the MRTP could readily support up to 521,000 square feet of gross commercial floor area by build-out.
- The study area industrial space sector has approximately 850,000 square feet of inventory, or less than eight percent of the total amount built on Maui; again, indicating the region is under-served. The majority of space is in storage/warehousing, staging, small businesses and quasi-commercial uses. Island-wide the vacancy rate for industrial floor area is about 2.0 percent (well below the State average of 4.8 percent), and though the sector showed a negative absorption of 74,764 square feet in 2011, the fourth quarter achieved a meaningfully positive absorption of 48,444 square feet; a sign of initial recovery. Brokers report a renewed interest in Greater Kihei industrial spaces, with several owner/user and

multi-tenant buildings under construction or in the final approval stages.

- Assuming historic economic trends continue, we estimate the demand for additional industrial floor space on Maui over the next 24 years (through 2035) will total from 5.3 million to 6.7 million square feet, an increase of from 49 to 63 percent above current levels. This equates to a demand for between 466 to 599 gross acres of underlying sites at prevailing "business park" densities; significantly more acreage (two to three times greater) if base yards, quarries, and open storage uses are included.
- On a gross basis, there is sufficient existing and proposed vacant industrial land on the island to meet demand, with some 2,000 potential acres apart from the already-zoned subject holdings. However, this acreage includes heavy industrial, restricted use (airport and harbor), agricultural-oriented (Puunene sugar mill), dump and waste transfer sites, outlying locations, and other non-competitive properties which severely decrease the amount of land available to meet demand.
- Based on its locational attributes, timing of development, availability of competitive sites in Kihei-Makena, revisions to the restrictions in MRTP, and other factors, we estimate the subject project could capture from 1.1 million to 1.5 million square feet of the projected demand on Maui (with a mid-point of 1.3 million square feet); or about 21 percent of the island-wide demand during the projection period to 2035.
- There is a significant probability that as Maui continues its evolution from an agrarian to service-based economy, and its de facto population expands, it will move beyond its current "secondary suburban" status into a "primary urban" center. Instead of largely looking to Oahu/Honolulu for corporate, financial, professional, and specialized services, these businesses (and their employees) would locate on Maui. In addition to increasing demand for industrial/business park/office

space in Central and South Maui, it would help stem the on-going "brain drain" on the island as the better educated young adults out-migrate in search of higher profile, higher paying employment opportunities in Honolulu and on the mainland.

- As the Maui economy continues to grow and diversify over the next generation, there could be numerous educational, institutional and business/R&D uses possibly seeking out a Maui location. Such uses require from 30 to 200 acre sites for facilities/campuses of between 300,000 and 1.1 million square feet of floor space. In keeping with County planning and economic goals to provide for and support such development, the updated MRTP master plan contains a circa 40 acre Economic Opportunity Campus Area.
- The subject property is a superior location for the proposed development in regards to access, views, slope, shape, complimentary existing adjacent uses, climate and ability to provide a quality lifestyle and business opportunities for a wide-range of owners and end-users. It will have the attributes necessary to be highly competitive in all its product sectors, and will capture a reasonable market share during its offering period.

Our annualized mid-point absorption estimates are summarized on Table A. We did not make a specific projection as to the likely timing of demand for the Economic Opportunity Campus Area.

We note, Phase I of the Petition Area, containing 350 single family homes, is projected to be absorbed during an nine-year construction and sales period (2016 through 2024). Phase II of the Petition Area, containing 300 homes, 200 multifamily units, some 585,200 square feet of light industrial/business park and commercial floor space, along with the economic opportunity campus acreage, is forecast to be fully absorbed over a ten-year period, 2025 to 2034.

TABLE A

SUMMARY OF PROJECT ABSORPTION BY DEVELOPMENT TYPE AND AREA  
Market Study of the Proposed Maui Tech Park Master Plan  
Kihei, Maui, Hawaii  
Assuming Mid-Point Demand Estimates

Year	Petition Area				Existing Entitled Area				Total Project Area			
	SF (Homes)	MF (Units)	Comm/Other (Sq. Ft.)	Ind/Bus (Sq. Ft.)	SF (Homes)	MF (Units)	Comm/Other (Sq. Ft.)	Ind/Bus (Sq. Ft.)	SF (Homes)	MF (Units)	Comm/Other (Sq. Ft.)	Ind/Bus (Sq. Ft.)
2013								50,000				50,000
2014								10,000				10,000
2015								15,000				15,000
2016								20,000				20,000
2017												
2018												
2019												
2020												
2021												
2022												
2023												
2024												
Phase I Totals	350	0	0	0	100	300	259,860	420,461	450	300	259,860	420,461
Total Residential Units				350	400				750			
Total Ind/Comm Gross Leasable Area				0	680,321				680,321			
2025												
2026												
2027												
2028												
2029												
2030												
2031												
2032												
2033												
2034												
Phase II Totals	300	200	208,414	376,783	0	0	53,063	349,215	300	200	261,478	725,999
Total Residential Units				500	0				500			
Total Ind/Comm Gross Leasable Area				585,198	402,278				987,476			
Economic Opportunity "Campus" Reserve				400,000	0				400,000			
Total Industrial/Business/Commercial GLA				985,198	402,278				1,387,476			
PROJECT TOTALS	650	200	208,414	376,783	100	300	312,923	769,676	750	500	521,338	1,146,459
Total Residential Units				850	400				1,250			
Total Ind/Comm Gross Leasable Area				585,198	1,082,599				1,667,797			
Economic Opportunity "Campus" Reserve				400,000	0				400,000			
Total Industrial/Business/Commercial GLA				985,198	1,082,599				2,067,797			

(1) Business hotel opens (90,000 square feet).

(2) Post Office Sorting Center opens (34,000 square feet).

(3) Civic facility opens (50,000 square feet).

Source: The Hallstrom Group, Inc.

Our forecasts show the residential, industrial/business park, and commercial inventory in the Existing Entitled Area being absorbed at an equitable pace with the Petition Area product, although the larger Entitled industrial/business park component will require an additional year to achieve full-absorption. As the timing of the absorption and construction of the Economic Opportunity Campus Area is an unknown, we have placed it in the last development year of our models (2034). Should it be opened sooner, the economic impacts of the MRTTP would be more significant during the build-out period.

### Economic Impact Analysis

We have constructed a model depicting the economic impact of the MRTTP Master Plan Update on the Maui and Statewide community during the course of its "lifespan" from ground-breaking in 2016 through the build-out of Phase II of the Petition Area in 2034. The model builds on the absorption estimates and data contained in our market study.

All estimated amounts are in constant 2012 dollars.

- Under the updated master plan, the subject development (including the Economic Opportunity Campus Area) will generate circa \$1.39 billion in capital investment into the island's economy. The construction of the Park and on-going operations/maintenance of the residences, on-site commercial and industrial/businesses, and community facilities, will provide an estimated 63,507 "worker-years" of employment and \$2.7 billion in total wages over a 19-year period. After "stabilization" the urban village community will support some 5,878 permanent jobs on-site with an annual payroll of about \$217 million, and an additional 1,469 workers with \$68.6 million in yearly wages off-site.
- The on-going business activity within the commercial and industrial/business park components will be substantial, both directly on-site and in stimulation of existing off-site companies. During the construction and absorption period, a total of \$6.2 billion in taxable sales/revenues are projected, averaging \$324.7 million per year. Following stabilization, \$557 million annually

in business activity will be occurring in the community. The Economic Opportunity Campus Area will contribute upwards of an estimated \$160 million per year in operating revenues to the MRTP, depending upon the ultimate use of the property.

- The majority of the gross operating revenues within the project, 92 percent, will be a result of outside patrons coming to the in-project companies. The base economic impact on Maui will total at least \$7.8 billion during build-out and \$903.9 million annually upon stabilization.
- At build-out the de facto population of the community will be some 2,765 persons of which 2,367 will be full-time residents (with an estimated 369 school-age children), 218 will be comprised of non-resident owners and their guests periodically using their house or condominium unit, and 180 (on average) will be guests in the business hotel proposed for the MRTP.
- The cumulative resident household income during the 20-year modeling period from final entitlements in 2015, through completion of Phase II of the Petition Area in 2034, will total \$708.5 million, and will stabilize at \$74.2 million annually (in constant 2012 dollars) thereafter. Discretionary expenditures into Maui businesses by the MRTP de facto population will be some \$802.4 million during build-out and average \$74.2 million per year on a stabilized basis.
- The project will have nominal impacts on the socio-economic aspects of the surrounding community that relate to real estate issues. Property values in the Kihei Makena Study Region are largely driven by external, cyclical economic factors and its existing cumulative mass, not any single new project. Further, the estimated selling prices of the envisioned MRTP residences are comparable to (or less than) the prevailing prices for the new and existing regional inventory. Based on current construction costs and other factors, it is anticipated a substantial number of the subject units will be sold at

## Public Fiscal Assessment

prices within current "affordability" guidelines. It is not expected there will be meaningful in-migration to Maui as a direct result of the operating components of the community.

- The County of Maui will realize Real Property and Transient Accommodations taxes, other secondary receipts and impact fees of \$141.3 million during the 19-year construction and absorption period, and \$28.5 million annually on a stabilized basis thereafter). The net benefit to the County purse will be of \$25.3 million during development, and \$21.5 million annually on a stabilized basis.
- The State of Hawaii will receive Gross Excise, Income, and Transient Accommodation taxes, secondary revenues, and impact fees of \$752.5 million during the build and sales projection time frame, and \$80.4 million per year thereafter. The net benefit to the State purse will be in excess of \$466.3 million during development, and a stabilized 'profit' of \$57.3 million per year.

The major economic impacts and public fiscal conclusions are shown on Table B. The column on the left summarizes the cumulative impacts during the initial 20-year construction and sales period, and the right hand column the annual impacts after stabilization. All figures include the Economic Opportunity Campus Area where appropriate.

## REAL ESTATE OUTLOOK

The Hawaii economy began recovery from the depths of a significant recession at the end of 2009. During the following year growth returned to the vital visitor industries of Oahu and Maui (less so for Kauai and the Big Island), and other economic sectors showed signs of stabilization. Business activity, employment, real estate and tax receipts, among other indicators, appeared to have passed through the nadir of the down-cycle and into a nascent recovery mode.

TABLE B

**SUMMARY COMPARISON OF MAJOR ECONOMIC IMPACTS  
AND PUBLIC FISCAL COSTS/BENEFITS**  
**Market Study of the Proposed Maui Tech Park Master Plan**  
**Kihei, Maui, Hawaii**  
**All Amounts Expressed in Constant, Uninflated 2012 Dollars**

Analysis Item	Cumulative During Build-Out Period	Stabilized Annually Thereafter
Direct Capital Investment	\$1,390,578,257	
Local Contractor's Profits	\$139,057,826	
Local Supplier's Profits	\$55,623,130	
Worker Years of Jobs	63,507	7,347
Employee Wages	\$2,668,233,305	\$285,538,154
De Facto Resident/Owner/Guest Population		2,765
Full-Time Resident Household Income	\$708,494,466	\$74,175,841
De Facto Population Expenditures (On & Off Site)	\$802,415,886	\$74,152,630
Total Operating Gross Receipts	\$6,169,542,446	\$572,080,983
Outside Patronage Expenditures	\$5,714,641,830	\$526,424,926
Total Maui "Base" Economic Impact	\$7,766,656,365	\$903,921,722
County of Maui Gross Tax Receipts	\$141,300,531	\$28,502,055
State of Hawaii Gross Tax Receipts	\$752,462,434	\$80,440,455
County of Maui Costs of Services (per capita basis)	\$86,960,702	\$7,034,482
State Costs of Services (per capita basis)	\$286,144,364	\$23,146,977
County of Maui Net Benefits or (Loss)	\$25,256,329	\$21,467,573
State Net Benefits or (Loss)	\$466,318,070	\$57,293,478

Source: The Hallstrom Group, Inc.

The positive signs continued into early 2011, but were destabilized in the spring by events external to the islands, including the Japan earthquake and tsunami, political instability in the Middle East, rising oil prices, European credit issues, and a sluggish mainland US recovery. Tourism, hotel and retail indicators, the underpinning of the islands' private sector economy, showed resilience and generally shrugged off the concerns, continuing to experience growth through the rest of the year and the first quarter of 2012.

Many industries in the Hawaii economy have moved into/through the post-recession stabilization phase and are achieving recovery and offering signs of emerging growth trends. Others, such as construction, remain mired within an extended slow-down without major near-term recovery prospects. Outside of the visitor industry, widespread economic expansion is still not occurring, particularly on the neighbor islands.

While activity and interest levels have shown significant increases, prices in most sectors of the Hawaii real estate market have not demonstrated substantial revival during the initial economic recovery over the past two years.

However, on Maui, demand for moderate to lower priced residential units continues to be very high (and evidencing some appreciation), investor interest in hotels and other commercial properties has meaningfully increased, and there are escalating numbers of Asian buyers (notably Japanese, Chinese and Korean) attracted by the post-recessionary prices and a favorable exchange rate.

Notwithstanding the impacts on the Maui residential sector from continuing external factors, the market has foundational conditions which should enable a move towards an upcycle if the national economy stays out of recessionary mode. Mortgages are again readily available at generationally-low interest rates (although the approval process is more extensive), there is no major "overhang" of existing inventory which must be absorbed as in many American cities, and there has been continuing natural household growth over the past four years

which creates pent up demand that will again express itself via real estate as the island economy regains its vigor.

According to the University of Hawaii Economic research Organization (UHERO) May 2012 forecasts, 2012 will see further tourism strength, the beginnings of recovery in construction, healthier government finances, and increases in employment and wages; with favorable trends extending into 2013 and beyond. Maui will continue to lead the neighbor islands in recovery and in returning to an up-cycle economy, although Kauai and the Big Island are expected to post widespread gains this year after thusfar being left behind in the recovery process.

The State of Hawaii Department of Business, Economic Development and Tourism (DBEDT) is also bullish in its 2<sup>nd</sup> quarter 2012 forecasts, stating:

"Based on the most recent development in the national and global economy, the performance of Hawaii's tourism industry, the labor market conditions in the state, and growth of personal income and tax revenues, Hawaii's economy is expected to continue positive growth for the rest of 2012 and into 2013. Overall, the current DBEDT forecast is more optimistic for most of the economic indicators, especially visitor related indicators, compared with the previous forecast."

This economic cycle of "boom, bust, stabilization, then recovery to another boom period" has been numerously repeated since Statehood in seven to 10-plus year time-frames.

Expectations are statewide real estate activity will show modest gains for the remainder of 2012 and into 2013 (albeit at lower prices and absorption levels than mid-decade highs), followed by movement into the next growth cycle by 2014-15. Based on historic trending, by the mid to latter part of this decade, hyper-appreciation and shortages of supply may well again be community concerns.

In 2011, both the statewide industrial and retail leasing markets experienced a negative net absorption, with each "losing" more than 100,000 square feet of tenants; the third straight year of

increasing vacancy. However, in the fourth quarter, retail space leasing showed positive absorption in every sector but Maui, and gains in most industrial areas throughout the islands. Expectations are that gains will continue to strengthen through the remainder of 2012 and show major lease-up of space in 2013-14.

The non-resort real estate market in the Kihei-Makena study area reflected overall market trends and fared similar to other neighbor island locales during the recent recession.

The average prices for single family homes plummeted by circa 40 percent from the 2006-08 peaks, with condominium prices off by "only" 25-plus percent. Activity in both sectors fell by upwards of two-thirds. By the end of 2012, the level of buyer interest was recovering and the number of sales up significantly from the lows in 2008-09.

The current environment of exceptionally low interest rates, pent-up demand (unexpressed during the recession), recovering economy and employment, and few overhanging units, is expected to stimulate demand and prices for residential properties and industrial and commercial space over the coming 18 months.

Regardless of the near-term issues, a solid foundation supports a continuing demand for a variety of urban uses in the primary study area over near to long-term.

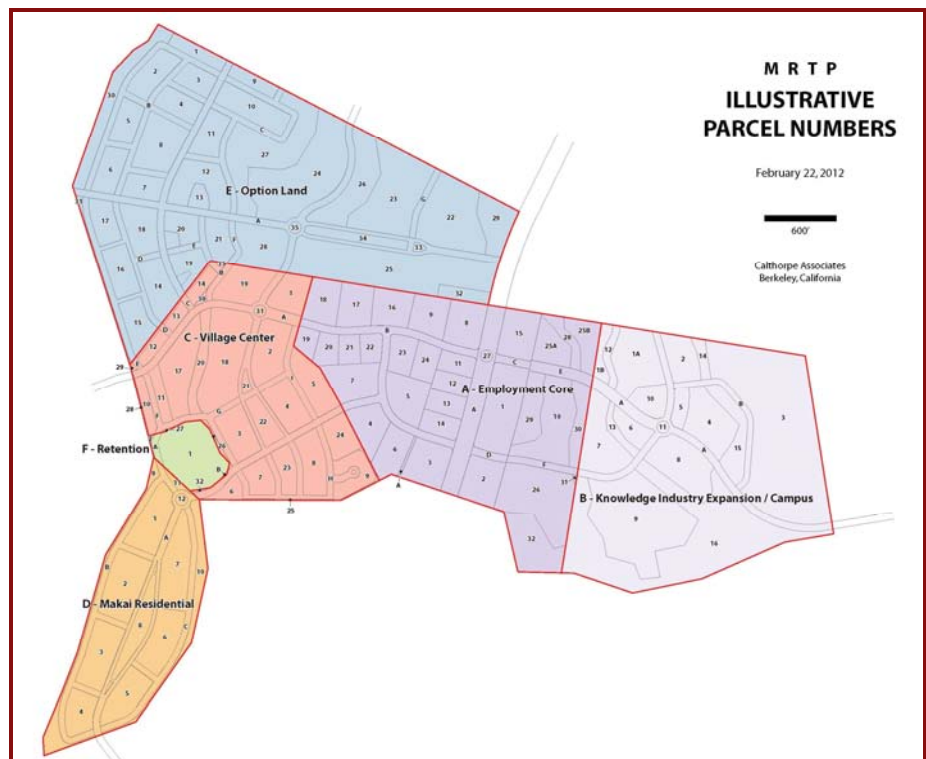
By the time the Park begins to offer parcels and residences for sale in the Petition Area, anticipated in late 2014 or 2015, the State/Maui economy and real estate market are expected to have fully recovered and be into a cyclical growth period marked by strong activity and increased absorption relative to current levels.

During the build-out period of MRTP there will be one or more economic/market cycles with periods of rapid absorption and others slow. And the recent recession and resulting impacts will be several years in the past by the time the project comes onto the market.

## OVERVIEW OF THE MASTER PLAN MARKET CONCEPT

The Maui Research & Technology Park (MRTP) Master Plan Update envisions an urban village embodying leading-edge planning, design, and development techniques providing a comprehensive lifestyle opportunity for a diverse population of residents, workers and customers within a sustainable, environmentally-aware project.

The Park will serve as a primary economic engine and high-value employment center for Maui over the next generation, providing an opportunity for expanding and new businesses to find space in a modern, amenitized, mixed-use community outside of the island's traditional industrial parks and commercial centers. The development is complementary to the other uses and exiting and proposed projects within the urbanizing Piilani Highway corridor.



We note, the "commercial/other" category includes a projected business hotel (90,000 square feet), a post office sorting center (34,000 square feet), and two civic facilities (each 50,000 square feet), in addition to a neighborhood shopping center (150,000 square feet), a mixed-use component, and a variety of other retail, restaurant and service spaces serving the MRTP community.

From a market perspective, the master plan builds upon several favorable factors, primary of which are:

- *It is within an expanding, high-demand area.* Kihei has grown many-fold in the past forty years while evolving from a sleepy visitor-oriented beach town into Maui's "second city".

The demand for residential units in the area is strong, it experiences among the highest industrial and non-resort commercial occupancy levels on Maui, with available space typically quickly filled. Many of the stores, restaurants and service providers have been at their location for decades. It is becoming a more desirable business and shopping destination over time, with solid highway access characteristics and a well-populated neighborhood trade area. Kihei is an increasingly competitive location for new and expanding businesses.

MRTP will enhance the standing of South Maui as a destination for business via new inventory specifically designed to comprehensively meet the demands of residents, workers and business within an integrated environment.

- *In concert with market trends.* While mixed-use, master-planned developments have been part of the market in Hawaii for several decades, they have traditionally been oriented heavily towards residential and supporting neighborhood commercial uses; lacking a true diversity of industrial/business park and other uses which create major employment centers. As such, much of the

transportation benefits, synergy, and lifestyle objectives sought by planners have not been achieved.

The MRTP Master Plan Update embraces a design which will create Maui's first comprehensive community, where thousands of residents will potentially have the opportunity to live, work, shop and play within a single development (of walkable scale) without having to add traffic to the regional road system.

- *Adaptability to an evolving market environment.* A competitive, large-scale, mixed-use project taking years to build-out, requires the ability to adapt to a changing market environment.

In addition to enlarging the focus of MRTP beyond just the technology sphere and embracing a more diverse range of standard and emerging uses, the developer perceives a potential for other uses that could be successfully incorporated over time. These include a business hotel, civic facilities, and mixed-use and live/work spaces. The Economic Opportunity Campus Area is another atypical aspect of the master plan which will provide ready-developable acreage for a major land user interested in locating on Maui.

Based on our analysis of the subject property and project from a market perspective, we conclude the proposed MRTP Master Plan Update will:

- Embrace leading edge mixed use "urban village" design concepts.
- Maximize the reasonable development potentials of a well-located parcel.
- Complement the existing urban development in its Piilani Highway corridor, while establishing an integrated, lifestyle design precedent for future developments to follow.

- Address existing and forecast needs for additional residential, industrial/business park and commercial inventory in the study area.
- Integrate well with established and evolving planning and transportation goals.
- Provide a desirable/competitive and comprehensive "live, work" experience.
- Is representative of the highest and best use of the property.

## MARKET STUDY OF THE MASTER PLAN COMPONENTS AND ABSORPTION ESTIMATES

### The Study Area Residential Market

The tables containing the model components summarized in this section are presented in Addenda Exhibit I.

Prior to the 1970s, Kihei was a small coastal village with fewer than 3,000 residents, with very limited resort-oriented and commercial uses. The development of Wailea Resort coupled with numerous condominium projects along South Kihei Road served to create a desirable visitor destination. At the same time, Kihei was identified as the most appropriate location for resident housing for the employees of the South and West Maui resort areas and to support the natural and in-migrating population growth of the island.

By 1980, the population had more than doubled to about 7,000 persons, substantial commercial space was being developed, and the region was well-established as a desirable vacation locale offering a wide variety of resort units.

While the near-makai areas continued to be dominated by resort/transient-oriented and non-resident use and ownership, the inland areas of Kihei began being developed at a rapid pace for local resident households. Over the next two decades, the resident population more than tripled.

Initially during this surge, most resident-oriented product was developed as vacant home sites which were then (for the most part) built-out individually as "custom" homes. However, over-time the trend was towards larger builders constructing spec tract homes. Today, 60 percent of the residential inventory in the study area is of a single family type.

Some full-time residents did locate into makai multifamily units, and there was a surge of resident-oriented interior condominium/apartment development, so that presently about 40 percent of regional households are in multifamily projects.

There were 17,981 non-resort "residential" units in the Kihei-Makena region as of the 2010 census. Of these, 4,433 units were transient vacation rentals (DBEDT Visitor Inventory Survey) and 13,548 were used for housing; 10,731 units (79.21%) by full-time resident households and 2,817 (20.79%) were second homes/part-time residences.

Long-range planning indicates there will be a need for an increase of 50 to 80 percent in order to service the anticipated demand created by community growth. It is expected that the division in product type will continue to favor single family homes/lots, but that condominium development will slightly increase as a percentage of the total market as available entitled, serviced land becomes further scarce and unit prices increase over time.

Until the last decade, most of the interior subdivision and multi-family inventory was purchased by resident households; the intended users from a planning perspective. But, given the desirability of the region among vacation home purchasers and the exceptionally high prices of in-resort units, well-capitalized non-resident buyers began to grab up homes and units in mauka non-resort developments; often out-competing the local segment for scarce inventory.

Studies done for the County and which we have completed, indicate that circa 20 to 30-plus percent of demand for new residential units in Kihei-Makena is created by non-resident

purchasers. This trend is anticipated to continue unabated apart from cyclical influences.

While purchaser restrictions can be/are applied to some categories of housing (specifically lower income and workforce housing types), there will always be competing non-resident purchaser pressure on the market-priced inventory. Thus, in order to achieve market stability and sufficient supply for resident families, it is necessary to provide suitable types and amounts of product to satiate this demand apart from resident neighborhoods.

Notwithstanding brief periodic downturns, as is presently being experienced, residential construction in Greater Kihei has progressed at a generally consistent and fairly rapid pace over the past three decades; a trend we anticipate will continue as long as suitable lands are made available for development. Among the primary reasons for this conclusion are:

- The region provides for a quality, comprehensive, modern, suburban lifestyle;
- There is a scarcity of alternative, entitled acceptable development areas throughout the island;
- In addition to the in-community availability of a broad range of commercial, industrial and service businesses, Kihei is proximate to goods, services, and support uses in Central Maui;
- Relative ease of access to major South Maui and Central Maui employment centers and other areas of the island;
- A warm, generally dry climate considered highly desirable by many residents and most non-residents; and
- Superior view panoramas from many interior locations.

Relative to most neighbor island areas, the balance between demand and supply in Kihei-Makena has been more stable than in most regions; although like elsewhere the market remains

generally under-supplied (just not acutely) from a long-term perspective. Yet, there remains significant unmet need for additional affordable housing opportunities.

The population of the Kihei-Makena study area was quantified at 26,810 as of 2010 US Census, and was estimated to be 27,436 as of year-end 2011.

Projections published by the County of Maui Planning Department in their *Socio-Economic Forecast: The economic projections for the Maui County General Plan 2030* (June 2006) estimate the resident population of Kihei-Makena will reach between 38,757 and 42,000 persons by 2030.

To provide at least a two decade study perspective, and as subject absorption will stretch past 2030, we have lengthened the time-frame to 2035 by escalating the Planning Department forecasts by an additional five years at the 2025-2030 growth rate in the model. We project that by 2035 the resident population in the study area will be between 41,750 and 46,200 persons.

Using the current average household size of 2.5 persons in Kihei-Makena (and acknowledging the long-term trend towards smaller households), along with an allowance of non-resident purchasers in the region of 20 to 25 percent, and a vacancy allowance of three to five percent to achieve a stable market, we have quantified the total demand for new housing inventory at between 7,760 and 12,009 units between 2012 and 2035, with a mid-point of 9,885 units.

These figures are consistent with Planning Department projections through 2030.

In order to best fit the forecast demand for units in the region over the next 24 years they will need to be priced (in 2012 dollars) at:

- 20 percent under \$320,000, which meet affordability guidelines for a household of four earning 80 percent of the County median household income ("Low Income");

- 23 percent from \$320,000 to \$640,000, considered affordable to households earning from 81 percent to 140 percent of median County income ("Below Moderate" to "Gap Income" categories);
- 25 percent from \$640,000 to \$1,000,000; and
- 32 percent at over \$1,000,000.

The year-end 2011 average price on Maui for a single family home was \$787,552 and at \$485,874 for a multi-family unit.

Through the end of last year, the Kihei-Makena market remained significantly down from its 2005-07 peaks; however, the number of single family house and multi-family unit sales has increased in each of the last two full years since bottoming-out in 2009, though still well below activity at mid-decade.

Prices continue to be soft in the study area, but are demonstrating stabilization, with early 2012 data pointing to strengthening prices in the near term. The average price for a single family home in the Kihei-Makena region in 2011 was \$1,173,343, up nominally from 2010. The average price of a multi-family unit during last year was \$550,318, down five percent from 2010.

The projected demand in the study area will be met through increasing percentages of multi-family units in the regional inventory, moving from recent development trends of circa 40 percent of the total new product to 47 percent new units by 2035, and comprising 44 percent of new unit additions. Single family product will drop from 60 percent to 53 percent during the 24 year projection period, and vacant house lots will continue to decline in market share.

Relative to past down economic cycles, there was not a significant amount of unsold new product "overhanging" in the study area waiting to be absorbed as the market recovered. As a result, virtually all projected demand must be met via new development.

There are numerous residential projects entitled, proposed, or announced in the study area. As part of the on-going Community Plan updating process the Planning Department has created a series of maps showing the scope and extent of the existing and proposed urban uses in the region. The Department has also worked with Citizen Advisory Committees to produce recommendations regarding future development.

The *South Maui Development Projects Directed Growth Boundaries Map* prepared by the Long Range Planning Division of the County Planning Department, which is intended to identify the extent of the proposed Directed Growth Boundaries in the Kihei-Makena region and the proposed development therein, contains approved/proposed projects totaling approximately 7,752 units (excluding time share/hotel and MRTP units, and an assumption that 60 percent of the proposed Kaononulu Village is within the boundary).

Of this total, some 1,716 are within the Wailea and Makena destination communities or along the shoreline between them; of which we estimate only about 40 percent of those within Makena will be competitive in the resident-oriented housing sector, the remainder being upscale resort-residential product.

The net resident-oriented housing unit supply would be about 6,539 total new units in the approved/proposed projects, of which 3,364 (51.5 percent) are to be single family homes/lots and 3,175 (48.5 percent) will be multi-family.

This total will be insufficient to meet even the minimum demand for housing in Kihei-Makena over the next 24 years, estimated at 7,760 units, and fall well short of the maximum of 12,009 units.

The Maui County General Plan Advisory Committee also prepared maps to support the on-going update of the Kihei-Makena Community Plan. While similar to the Planning Department, there are only portions of Kaonoulu Village and Ohukai Village and some projects with lowered densities included in the recommendations.

Their proposals equate to a total of 5,784 new housing units in the study area; or nearly 2,000 units less than minimum market demand requirements to 2035.

We have estimated the probable market acceptance levels and resulting absorption of the saleable master plan components of the Maui Research & Technology Park updated master plan using three methodologies.

- Gross Demand/Supply Comparison -- This technique assumes that if there is insufficient existing and planned supply to meet projected market gross demand levels during the projection period there is rational support for the subject units.
- The Residual Method -- In this technique, the competitive inventory planned for the Study Area over the projection period is placed on a time-line depicting their combined anticipated rates of absorption or assuming a reasonable market share. To the extent this periodic supply of units fall short of the forecast periodic demand for product in the Study Area, an undersupply situation is present and there is "residual" demand remaining for the MRTP inventory. This method is considered the most conservative as it allows all of the competitive product to achieve their absorption potential before the residual is available to absorb the subject.
- The Market Shares Method -- This approach accounts for the probable competitiveness of the subject inventory regardless of the total level of product being otherwise offered on the market. In essence, it is an estimate of how much of the total forecast demand in the Kihei-Makena region (or alternatively islandwide) the subject could expect to capture on an annual basis in light of its location, estimated pricing, competitiveness, and amenity characteristics.

Gross Demand for additional housing units in the study area will exceed anticipated supply by between 1,200 (minimum) to

6,225 units (maximum), with a mid-point shortfall of some 3,300 to 4,100 units.

Even if all of the under-construction and other potential units identified in the region achieve the absorption velocities anticipated, or enter the market as quickly as possible, there will still remain substantial unmet Residual Demand for both single family homes/lots and multi-family units in every five-year projection period from 2012 through 2035.

Using mid-point demand estimates and the higher Long Range Planning Division supply figures, the unmet periodic demand ranges from 372 units (from 2016 to 2020) to 1,030 units (2031-35). This residual demand is sufficient to absorb the subject units in a timely manner within a 12 to 15-year exposure period (pre-sale to sell-out) commencing in 2016.

Given the master-planned amenities, anticipated mid to lower-end pricing, and comprehensive lifestyle envisioned for MRTP, it will achieve a solid standing and prove strongly competitive in the regional housing market; able to garner a significant share of demand even though there are large numbers of competing units proposed.

We estimate the subject could achieve an average Market Shares (or "Capture") Rate of circa 20.7 percent of the total Kihei-Makena demand for new resident-oriented single family homes/lots during its offering period, and 21.8 percent of multi-family unit demand. A total absorption period for the subject residential product of about 16 years is indicated by this analysis, within a range of 11 to 17 years for the multi-family units and 13 to 21 years for the single family homes.

We conclude the 1,250 proposed units of the MRTP master plan will achieve full absorption within approximately fourteen-years of initial pre-sale offerings; which are anticipated to commence in 2017.

## The Study Area Commercial Market

The tables containing the model components summarized in this section are presented in Addenda Exhibit II.

The primary focus for commercial uses at MRTP will be to meet the retail, restaurant, service, medical and support commercial demands created by residents and workers in the community along with their guests and customers. Live/work and mixed-use opportunities, along with some specialty retailers and the cumulative attraction (synergy) of an emerging economic center on the island will also add to the floor space demand in the project. But it is not an objective of the updated master plan for MRTP to become a major regional/island shopping destination or support big box development.

Historically, Kihei-Makena has been a secondary commercial sector on Maui. While floor space has been steadily added since the mid-1980s, including major new projects during the past decade, it has continued to be focused towards resident-serving "neighborhood" and visitor-oriented businesses. Most "big box", major mall, destination and specialty retailers serving a super-regional/islandwide market are still located in Wailuku-Kahului. For the most part, this trend is expected to continue, particularly in regards to big box development; however, an increase in specialty retailers is probable for the study area in coming decades along with some destination types and perhaps a major mall.

At present, there is some 4.5 million square feet of commercial floor space on Maui, or the equivalent of 23 square feet of gross leasable area per capita of the de facto population (residents and visitors).

In Kihei-Makena, there is an estimated 697,208 square feet of competitive commercial floor space, or about 15.5 percent of the gross floor area on the island. This equates to a per capita spatial allowance of 15 square feet per member of the de facto study area population, or only 65 percent of the islandwide per capita average.

Given the shortfall between the study area per capita floor space (15 square feet) and the islandwide average (23 square feet), it can be asserted that the Kihei-Makena region is generally underserved in regards to commercial floor space on a gross demand/supply basis.

The commercial development and per capita demand capture rate in Kihei is reflective of the suburban "bedroom" community it has become.

Neighborhood retail uses typically constitute about 45 to 55 percent of per capita demand, with Service Commercial, Medical and Support commercial spaces combining for another 25 to 35 percent of the total. The majority of these uses are already available in the study area to serve local needs, and capture most of the demand created by the study area population for such businesses.

The remaining 10 to 30 percent of per capita demand is oriented towards big boxes, major centers, destination and specialty retailers and in-hotel space. Apart from the hotel spaces in Wailea and Makena, most of this demand is focused towards other areas of the island.

As Greater Kihei continues to grow and evolve as a community, the commercial uses in the region will intensify and diversify as a broader range of businesses seek to locate in an expanding market area. The regional capture rate of the study area per capita demand will increase over time from its current level of 65 percent to between 80 and 90 percent by 2035.

Total regional capture (100 percent) of all per capita demand is not likely, as many businesses serving an islandwide market, specialty retailers and big boxes will remain focused in Wailuku/Kahului.

The combination of a growing de facto population, increasing per capita demand (forecast to reach 30.5 to 33.0 square feet per person on Maui by 2035), and an escalating regional capture rate, will create demand for between 907,000 and 1,506,000 square feet of new gross commercial floor area in Kihei-Makena over the next 24 years, with a mid-point of 1,206,812 square feet; more than double the existing inventory.

An estimated 83 to 141 gross acres of land (112 acres mid-point) will be needed to support this forthcoming demand.

We estimate there are less than 60 acres of vacant, general plan-designated commercial sites in Kihei-Makena at present. Additional supply will be provided within several master planned communities in the corridor.

On a gross demand/supply comparison basis, there will be shortfall of commercial land in the study area over the next 24 years.

Application of the residual method is problematic due to the size and locational characteristics of the available sites and diversity of ownerships; however, it is apparent there will be a shortage of supply by next decade, and there will be substantial unmet residual demand available for MRTP.

With such a large "captive" resident and worker population (estimated at up to 8,643 persons), the number of persons who will be visiting the park to do business with the companies there, and the synergistic benefits of locating in an economic center, we conclude MRTP will prove competitive in the regional commercial market and capable of achieving a significant share of regional demand even though it is not a primary focus of the project.

We estimate the subject could achieve an average Market Shares (or "Capture") Rate of circa 37.6 percent of the total Kihei-Makena demand for new commercial floor space during its offering period from 2015 through 2034. This would equate to between 274,000 and 539,500 square feet of gross leasable floor area, with a mid-point of 406,750 square feet.

An estimated 179,090 square feet of this demand would be for neighborhood and related businesses serving the daily needs of the community, as shown on the following table.

SUMMARY OF NEIGHBORHOOD COMMERCIAL SPACE DEMAND CREATED BY SUBJECT RESIDENTS AT BUILD-OUT Market Study of the Proposed Maui Tech Park Revised Master Plan Aiea, Oahu, Hawaii		
<b>1. Stabilized Subject Population</b>		
Full-Time Residents (2.5 persons per household)		2,765
Full Time Equivalent On-Site Workers		5,878
<b>2. Project Resident Per Capita Demand for Commercial Space (in Gross Square Feet per Person)</b>		
Total for All Commercial Needs (1)		33.0
"Neighborhood Retail" Space Demand as Percent of Total		55%
Total Per Capita "Neighborhood Retail" Commercial Space Demand in Square Feet		18.2
Allowance for "Service Commercial/Medical" Space (40% of Neighborhood demand)		7.3
Allowance for "Support/Other/Destination Commercial" Space (20% of Neighborhood demand)		3.6
Total Per Capita Floor Space Demand for Resident-Oriented/Neighborhood Commercial Space		29.0
Capture Rate of In-Project Resident Neighborhood Demand		90.0%
Total Floor Space Demand for Resident-Oriented/Neighborhood Commercial Space		72,266
<b>3. Project Worker Resident Per Capita Demand for Commercial Space (in Gross Square Feet per Person)</b>		
Estimated Percent of Workers not Residing in Project		85.0%
Non-Resident Workers Patronizing Subject Commercial Businesses		4,996
Total Per Capita Floor Space Demand by Workers for Neighborhood Commercial Space (2)		7.3
Total Floor Space Demand by Workers for Neighborhood Commercial Space		36,273
<b>3. Indicated Subject Commercial Floor Space Demand</b>		
From Subject Project Population		108,539
Patronage From Other Sources	% of Community Demand	
Day Workers and Patrons of Other Businesses in Community	30%	32,562
Nearby Population in Non-Subject Projects	15%	16,281
Passer-Bys/Intercept and Others	20%	21,708
<b>Total Estimated Gross Floor Space Demand at Stabilization</b>		<b>179,090</b>

(1) Based on mid-point per person spatial demand in 2030.

(2) Based on capture rate of 25 percent of per capita resident demand in square feet.

Source: The Hallstrom Group, Inc.

In addition to the neighborhood-based and general demand contributing to the absorption of the subject commercial component, there is also envisioned a 150-room, limited service, business hotel (90,000 square feet), a 34,000 square foot US Post Office mail sorting center, and 50,000 square feet of civic facilities.

Overall, we estimate MRTTP will absorb some 521,000 square feet of commercial and related uses during its 2017 through 2034 offering period.

**The Maui Industrial Market**

The tables containing the model components summarized in this section are presented in Addenda Exhibit III.

We have quantified the demand for the subject's industrial component using an islandwide (as opposed to Kihei-Makena regional) analysis. Light industrial uses are not as locationally-dependant as many commercial uses and they often have a distinct and wide-spread customer base. As such, a business may consider a variety of competitive, alternative locations.

Historically, the focus of industrial development on Maui has been in Wailuku/Kahului, owing to its proximity to the island's working port, airport, large population, seat of government, central location and access to major highways.

At present, there are some 10.72 million square feet of light industrial space on Maui, or about 55.7 square feet per person of the de facto population. More than two-thirds of the island's industrial space is in Wailuku/Kahului.

Some of this space is used for office development, and there are numerous base yards which utilize industrial lands.

There can also be large amounts of commercial/retail space in "industrial" projects, particularly in newer ones. This has been a trend in the neighbor islands for the past two decades, with some developments having upwards of 45 percent commercial or quasi-commercial users due to the leniency of zoning regulations.

Whether these uses are located in industrial or commercial complexes is irrelevant to total per capita floor space demand square foot multipliers and our conclusions. Regardless of how it is classified the total floor space required by the market would not be meaningfully different, just moved from one designated market sector to another.

Until the mid-1990s, Kihei-Makena did not have meaningful amounts of industrial development; few sites were available, established businesses preferred a Wailuku/Kahului location,

and prior to the opening of Piilani Highway, access was inferior and traffic congestion common.

Over the past two decades there has been increasing industrial development in the study area, fueled by an expanding regional population, increasing economic importance, rising land costs in Kahului, land use entitlement efforts, and enhanced transportation in and out of Kihei. Today, approaching 25 percent of new industrial/business/office development on Maui is oriented towards Kihei-Makena; a figure forecast to increase in coming decades.

Using the Department of Planning population projections for the islands as a base, we quantified the demand for additional industrial floor space on the island through 2035. We assume the per capita demand will continue to rise slowly from the current level to between 66.75 and 70.75 square feet by the end of the projection period.

We estimate the demand for additional "light industrial" floor space (of all types) on Maui from 2012 through 2035 will be from 5.26 million to 6.74 million square feet, with a mid-point of 6.00 million. This would represent a 56 percent increase over the current in-place total.

An estimated 466 to 599 gross acres of land (532 acres mid-point) will be needed to support forecast demand.

Of this demand, we anticipate that (assuming sufficient competitive space is made available) 50 percent will be directed towards Central Maui, 35 percent will flow into the South Maui study area, and 15 percent will take place elsewhere else on the island.

In light of its favorable characteristics, including a central/northerly Kihei location, proximity and ease of access to Piilani Highway, benefits of a master planned community, and limited availability of alternative sites, we forecast MRTP will capture a market share of about 62 percent of total South Maui industrial demand during the projection period (2012 to 2035). Absorption would start at 30 percent of the regional market in

the initial years of the project as it became established and other available sites were developed, escalating to a high of 75 percent of the sector by 2031-35 as the Park achieved full market standing, the other components were completed, and alternative lands became scarce.

A CB Richard Ellis survey estimated there are currently 884 parcels comprising some 2,620 acres of vacant industrial lands on Maui. This figure includes specialized sites near the harbor and airport, base yards, surrounding the Puunene mill, quarries, dump, and many parcels that are lacking infrastructure or otherwise not competitive in the general market. Most are located in Central Maui. While there is not a general shortage islandwide, the availability of quality sites is not as over-supplied as first appears.

The only significant "reservoir" of vacant industrial land in Kihei is on the mauka side of Piilani Highway, extending from the southerly frontage Ohukai Road, approximately one mile north of the subject. The general planned-designated area contains about 70 vacant acres. We anticipate these lands will be reasonably-competitive with the MRTP product, effectively splitting demand, until it is fully absorbed in 10 to 15 years and the subject moves into a somewhat dominant position in the market.

Overall, we estimate MRTP will absorb some 1.14 million to 1.48 million square feet of industrial/business park and related uses during its 2017 through 2034 offering period, with a mid-point of 1.31 million.

#### **The Economic Opportunity "Campus" Area Component**

In addition to the industrial, residential and commercial components previously analyzed, MRTP will contain a circa 40 acre "Economic Opportunity Campus Area" capable of supporting a major, atypical user(s) seeking a large, quality, well-serviced, integrated holding for a facility or institution of 300,000 to 500,000 square feet of floor space to conduct business.

Apart from selected public institutions, a few major hotels and commercial centers, such scale of uses are currently uncommon on Maui; particularly in private enterprise.

However, as Maui continues its evolution from a traditional rural, agrarian-based economy into a modern, urbanized service-based model, new and increasingly major users will be seeking appropriate locations on the island. Particularly as the population grows, the economy expands and Maui continues on the path away from Honolulu's dominance of the primary business and professional fields.

Evidence of this on-going trend can be found in the emergence of big box stores on the island over the past 15 years, ever increasing numbers of direct mainland flights, the movement towards tract-style home development, and even the construction of a non-resort airport/business hotel.

While identifying specific potential users, and to some degree even use-types, is problematic, as by definition they are outside the current market framework, Table C summarizes the scale of floor space requirements for some of the probable uses which may be looking for a Maui location over the next quarter century.

The MRTP developer reports that it has had discussions with public and private concerns interested in a large campus site within the park, including for a general hospital, skilled nursing/senior housing facility, executive health center/medical-tourism campus, an Air Force laboratory, and private educational institutions.

Efficient, sustainable land planning within an expanding economy calls for the provision of these sites, especially in a rapidly changing economic environment as Maui has been for the last four decades, for many reasons, among them:

1. Major users are looking for entitled, infrastructure-serviced development sites. Rarely do they seek to acquire a bulk parcel, undertake a prolonged entitlement process, and make a large capital investment in site infrastructure prior to building. It is very difficult to begin engaging potential users in detailed discussions regarding facility needs without a "shovel-ready" site.

TABLE C

**SUMMARY OF SPATIAL DEMANDS FOR SELECTED ATYPICAL MAJOR BUSINESS PARK/CAMPUS USES**  
**Market Study of the Proposed Maui Tech Park Master Plan**  
**Kihei, Maui, Hawaii**

Use	Educational		Institutional		Business/R&D	
	Private/Secondary Campus	University Campus	Regional Medical Center	Community Arts & Civic Campus	Centralized Service Center	Major R&D Campus
Primary Gross Site Area in Acres	40	75 to 200	50	45	30	40
Primary Gross Finished Floor Area	275,000	500,000 to 1,100,000	450,000	350,000	325,000	400,000
Effective FAR	0.1578	0.1263 to 0.1530	0.2066	0.1786	0.2487	0.2296
Ancillary Use Potentials	None	Dorms, R&D Park	Support Medical Space	F&B, Office	None	Office
Ancillary Gross Site Area in Acres		25 to 200	15 to 50	10 to 30		5 to 25
Ancillary Gross Finished Floor Area		200,000 to 1,500,000	150,000 to 550,000	125,000 to 325,000		50,000 to 300,000
Effective FAR		0.1837 to 0.1722	0.2296 to 0.2525	0.2870 to 0.2487		0.2296 to 0.2755

Source: The Hallstrom Group, Inc.

2. These users often are choosing between locations in several communities. Not having a readily buildable site would place Maui in a meaningfully less competitive position to attract a user having other options.
3. The MRTP Updated Master Plan is designed to be a comprehensive, holistic, inter-working system. If implemented all at once, as proposed, it will be able to accommodate virtually any scale of business opportunity, from very small multi-tenant spaces to a major corporate campus. If not, the flexibility to accommodate the overall range of users will be reduced; an obstacle that impacted the Park during its first generation of development.

Although the timing for absorption of the Economic Opportunity Campus Area is unpredictable, we consider it likely to occur during the Park build-out period (by 2034). Further, we conclude it is an important asset of the MRTP which could strongly stimulate the velocity of the other subject industrial, residential and commercial inventory should it occur early in the project, and have potentially major positive impacts on the Park and regional economy well-beyond the eventual user.

Within our Economic Impact and Public Fiscal analyses, we have assumed this area of the master plan is developed with 400,000 square feet of floor space and opens in 2034; the end of the modeling period, as the timing of absorption and development of the "campus" is problematic to precisely forecast.

## ECONOMIC IMPACTS FROM DEVELOPMENT

Selected summary tables from the modeling process are contained in Addenda Exhibit IV. The primary sources and variables contributing to the model are footnoted on each table. All monetary figures are expressed in constant 2012 dollars.

M RTP has the potential to become a major "engine" in the Maui economy over the coming generation with investment, employment and business activity on a par with the primary resort and industrial/business projects on the island.

In order to forecast the primary economic impacts resulting from the development of the Updated Master Plan, we have constructed a model depicting the "lifespan" of the project from groundbreaking on Phase I (assumed in 2016), through the completion of the Phase II infrastructure emplacement in 2025, post-construction absorption to 2034, and stabilized "operation" thereafter.

The models also show the period from 2013 to 2015 during which there will be some development in the Park on the existing entitled and serviced lands (outside the petition area), and the master plan will be moving through the entitlement process.

The total "Build-Out" time-frame in the model stretches across 19-years, commencing in 2016, with sales/leasing and initial operations starting in the second year (2017).

Sources for the primary model factors include:

- Construction timing/phasing and costs were estimated by the development team.
- Job counts were taken from similar projects and operations, and/or based on industry standards.
- Wages are based on data from the State Department of Labor & Industrial Relations.
- Household size, income and spending, and de facto population estimates were based on government materials including US Department of Housing and Urban Development and 2010 census data.
- Business activity variables are based on our analysis of similar use-types on Maui and Statewide.

Since the timing of absorption and development of the Economic Opportunity Campus Area is an unknown, we have adopted a conservative perspective and assumed it is constructed in the final development period (2031 to 2034) for modeling purposes. This may result in an understatement of total economic impacts should it be built and put into operation at an earlier date.

The development and build-out of MRTP over the coming two decades will infuse some \$1.39 billion in capital investment into the Maui economy. Local contractor and supplier profits are estimated to total more than \$195.6 million.

The construction of the approximately two million square feet of industrial/commercial floor area and 1,250 housing units in the Park will require an estimated 6,461 "worker years" in a variety of trades, suppliers and services; an average of 340 Full Time Equivalent (FTE) positions per year for the 19 years of building. This is in addition to those jobs created by development on existing Park lots during the next several years pending implementation of the Updated Master Plan.

Most of these positions will not be new jobs for new businesses, but work flowing to existing contractors and suppliers.

The 1.4 million square feet of Industrial/Business Park and Economic Opportunity Campus operations will generate some 23,427 FTE worker years during the build-out period and provide stabilized employment for 4,276 permanent positions.

The nearly 521,400 square feet of commercial operations will generate some 16,411 FTE worker years from 2017-2034 and stabilized jobs for 1,490 persons.

The project will also require an estimated 113 worker years or maintenance and common element employment on a continual basis, and will generate some 14,717 worker years of off-site employment during build-out and a stabilized demand for 1469 FTE positions.

In aggregate, during the development of MRTP 68,022 worker years of employment will be created in construction and operations, on and off-site, with stabilized employment after completion of 7,347 jobs.

Wages paid to construction workers will total an estimated \$456.7 million. Employment related to Park operations during build-out will total \$2.21 billion including on-site (\$1.51 billion) and off-site (\$698.6 million), and stabilize at \$285.5 million annually in 2034 and beyond.

At build-out the de facto population of MRTP will be some 2,765 persons of which 2,367 (or 86 percent) will be full-time residents. There will also be an average of 398 persons daily populating the community comprised of non-resident owners and their guests periodically using their "second" unit/home, and hotel guests.

Resident household income during build-out will total \$708.5 million and average \$74.2 million annually on a stabilized basis. Non-resident spending will total \$377.3 million from 2017 through 2034, and average \$29.6 million annually thereafter.

Discretionary expenditures into Maui businesses by the MRTP population are estimated at \$802.4 million during construction and \$74.2 million per year on a stabilized basis.

After completion of the community, the on-site businesses will generate an estimated \$572.1 million in revenues/sales per year; the majority coming from the industrial/business park and campus operations. During the build-out period, activity will total some \$6.17 billion in gross income.

With the exception of the hotel and maintenance & common element operations, MRTP business will be dominated by outside patronage. The project de facto population is estimated to create about eight percent of total on-site sales, the remaining 92 percent by customers residing elsewhere.

During the 19 years of build-out and absorption (2017-2034), MRTP will have a base economic impact on Maui of some \$7.77

billion with a stabilized annual benefit of \$900.7 million thereafter.

We note that not all of this spending will be "new" to Maui. A small portion, specifically the commercial demand created through intercept of non-project residents, represents a relocation of their patronage from other commercial locations. Similarly, there will be some businesses which are relocating to the Park for a variety of reasons, not newly created or an expansion outlet.

However, our demand calculations are based on overall growth in the Maui economy creating the need for new industrial, business parks and commercial spaces. So whether that new growth takes place in MRTP, or it is a new business filling the vacated space elsewhere, a similar level of economic expansion will take place on Maui. Our task is to identify the specific economics related to the development of the subject property.

We have also analyzed the impacts of the project for Maui and Statewide using the State Input-Output economic model Type II multipliers. These factors quantify the total Direct, Indirect and Induced "effects" of various forms of business and spending activity as it flows through the economy of the islands.

In every instance, application of the macro Input-Output multipliers resulted in higher dollar, employment and tax revenue indicators than in our subject-focused micro model which was designed to reflect Direct and primary Indirect impacts only.

Among the outputs using the State method:

- The \$1.39 billion in cumulative MRTP construction costs will generate a total State Economic Output of \$2.94 billion.
- Direct subject construction wage earnings of \$456.7 million will yield another \$278.6 million in statewide wage earnings.

- Indirect and induced State taxes associated with construction will total more than \$165 million in addition to direct taxes paid by the project.
- Direct effect jobs created by MRTP construction employment will be 2.68 times the number of on-site workers, or a total of 17,315 worker years of employment. The total job multipliers from the construction activity as it spreads directly and indirectly across the islands will be 13.83 times the on-site employment, or more than 89,000 worker years during the build-out period.
- The \$6.17 billion in cumulative MRTP business activity during the 19-year build-out period equates to a total State Economic Output of \$12.91 billion. On a stabilized basis, the \$572.1 million in annual business activity will result in \$1.2 billion in total impact per year.
- Direct on-site wages paid by operating businesses of \$1.51 billion during construction will yield another \$1 billion in statewide wage earnings. Upon stabilization, the direct wages of \$217 million annually equates to an additional \$145 million in other wages.
- Indirect and induced State taxes associated with business operations will total \$1 billion in addition to direct taxes paid by the project during build-out and more than \$100 million more per year thereafter.
- Direct effect jobs created by MRTP business operations will be about 2.10 times the number of on-site workers, or a total of 98,400 worker years of employment from 2017 through 2034, and 12,343 annually after stabilization.

MRTP will have nominal impacts on the socio-economic aspects of Greater Kihei that relate to real property issues. Property values in the study area are largely driven by external, cyclical economic factors and cumulative mass, not any single new project.

The envisioned MRTP homes are, for the most part, to be moderately priced; below the average for single family and multi-family units in Kihei-Makena. They will have a diversity of scale and style that will be generally consistent with nearby residential development and with other proposed master planned projects in the study area.

The project will fit in well with the emerging and proposed mixed-uses in the Piilani Highway corridor. The residential component of the Park is designed to house any in-migration to Maui as a direct result of MRTP or its operating components.

## PUBLIC FISCAL COSTS/BENEFITS ASSOCIATED WITH THE PROJECT

The master summary table from the modeling process is presented in Exhibit V.

### Public Fiscal Benefits (Tax Revenues)

Maui County and the State of Hawaii will receive millions of dollars in tax receipts from the construction and "operation" of MRTP, from numerous revenue sources.

For the County, the primary tax source will be from Real Property Taxes paid by the owners of the various Park components. The property tax receipts were estimated by applying prevailing tax rates against the projected market value of the finished inventory (total construction costs, plus underlying land value, and developer's profit). Appropriate allocations were made for homeowner exemptions, assumed to be \$200,000 within the model.

We estimate the County will receive some \$82.6 million in real property tax receipts during the 19-year build-out of the project, and annual collections of \$16.9 million on a stabilized basis thereafter.

The County will also receive 10.2 percent of the \$730,700 in annual Transient Accommodation Tax (TAT) collected by the stabilized business hotel operation, or an average of \$74,531 per

year. The State receives 55.2 percent of the tax, the remainder split between Maui, Hawaii and Honolulu counties.

Secondary taxes associated with other daily activities in the subject community will contribute additional funds.

Real Property Taxes (RPT) and TAT typically generate about 74.2 percent of total County General Fund revenues, with secondary taxes and fees the forming the remainder. It is logical to assume the MRTP development and business activities will generate secondary taxes in proportion to RPT and TAT as does the overall Maui community.

The secondary Maui County receipts are equal to 33.8 percent of the RPT and TAT total (25.8% divided by 74.2%).

Application of this ratio to the MRTP property tax and TAT sums results in a cumulative total estimated County tax collection from the subject of \$112.2 million during the initial construction and sales period, and \$28.5 million annually on a stabilized basis.

Additionally the County will receive a minimum of \$29.1 million in impact fees for parks, water service and wastewater service, or circa \$23,200 per unit on average. Further fees may be imposed. These fees push the total County collections (primary taxes, secondary taxes and impact fees) to \$141.3 million during the development period.

The State of Hawaii will receive an estimated \$208.1 million in primary receipts from State Income Taxes from worker wages, resident household incomes and profits from operating businesses based on average statewide corporate and personal payments rates of 4.4 percent and 5.1 percent, respectively, applied against the economic model forecasts.

On an annualized basis after completion of the community in 2034, the State will generate income taxes of \$20.9 million; the majority (81 percent) from personal returns.

The State will collect Gross Excise Taxes (GET) of 4.166 percent on the gross amount of building contracts, construction supplies, spending by workers and residents, and outside patronage at operating businesses in the Park during the 19-year construction and absorption period will total \$382.3 million, and a stabilized amount of \$44.7 million annually.

The State will also receive its share of the TAT generated by the business hotel.

Income Tax, GET and TAT generate about 82 percent of total State revenues, secondary taxes and fees the remainder. We anticipate MRTP activity will result in similar ratios of secondary taxes flowing from the Park relative to the primary sources quantified.

The secondary State receipts are equal to 22 percent of the Income, GET and TAT totals (18% divided by 82%).

Application of this ratio to the MRTP income tax, GET and TAT sums results in a cumulative total estimated tax collection from the subject of \$747.1 million during the initial 19-year construction and sales period, and \$80.4 million annually on a stabilized basis.

Additionally the State will receive a minimum of \$5.4 million in Department of Education school impact fees, an average of \$4,284 per housing unit. Further fees may be imposed. These fees push the total State collections (primary taxes, secondary taxes and impact fees) to \$752.5 million during the development period.

## **Public Fiscal Costs**

Having quantified the cumulative revenue benefits, the second step in public fiscal assessment is to quantify the probable costs of local government services which will be required directly due to, or in general support of, the project. This is done using a "per capita costs" method described and applied following.

By comparing the tax benefits (revenues) generated by the subject with the estimated costs of providing public services, the net fiscal impact of the development can be determined.

The most appropriate way to estimate governmental expenses associated with a major new project is on a "per capita basis". This is founded on the assumption that every individual in a community is equally responsible for all costs of governance regardless of the actual services they, their household, or business may avail themselves of.

This approach is founded on a commonweal concept. If a project results in the expansion of the community, the costs of governance generally rise proportionately, and the new development should bear the direct, indirect and implied government expenses, which is best reflected on a per person (or per capita) cost per year.

This method represents the maximum cost perspective in regards to estimating public costs for a modern, mixed-use project containing significant numbers of resident households, and is appropriate as most costs of government are related to individual living needs. In general, businesses pay (in fact, collect) taxes and people require services.

The State 2011-12 combined operating and capital budgets totals some \$13.05 billion servicing a de facto population of 1,558,301 individuals (residents and tourists), or an average per capita expense of \$8,373 per person in aggregate State spending.

Similarly, the County of Maui 2011-12 budgets will spend some \$5.43 billion in operating and capital costs servicing a de facto population of 213,479 individuals, or an average per capita expense of \$2,545 per person.

Application of these per capita figures to the stabilized projected de facto population of MRTTP upon full absorption of 2,765 persons, results in total per capita costs of:

- \$23.15 million to the State of Hawaii on an annual, stabilized basis with costs totaling \$286.1 million during build-out; and,

- \$7.03 million per year on average to the County of Maui upon completion, and an aggregate expense of \$87 million from ground-breaking through 2034.

### **Correlation of Public Costs and Net Fiscal Impact**

It is estimated the County of Maui will:

- Receive an aggregate total of \$141.3 million in primary and secondary revenues and impact fees over the course of the 19-year construction period and \$28.5 million thereafter on a stabilized annual basis.
- Expend \$87 million in allocated per capita costs in servicing the project during its absorption period, and \$7.03 million per year thereafter.
- Realize a net benefit of \$25.3 million during the modeling time-frame, and a stabilized net "profit" margin of \$21.5 million per year.

The State of Hawaii will:

- Receive an aggregate total of \$752.5 million in primary and secondary tax revenues and impact fees during the construction period and \$80.4 million thereafter on a stabilized annual basis.
- Spend \$286.1 million in servicing the project during its absorption period on a per capita basis, and \$23.15 million per year thereafter.
- Realize a net benefit of \$466.3 million on a per capita basis during the modeling time-frame, and a stabilized net profit margin ranging of \$57.3 million annually.

## **LIMITING CONDITIONS AND ASSUMPTIONS**

The research, analysis, conclusions, and certification for valuation or market studies performed by The Hallstrom Group, Inc. are subject to and influenced by the following:

- The report expresses the opinion of the signers as of the date stated in the letter of transmittal, and in no way has been contingent upon the reporting of specified values or findings. It is based upon the then present condition of the national and local economy and the then purchasing power of the dollar.
- Legal descriptions used within the report are taken from official documents recorded with the State of Hawaii, Bureau of Conveyances, or have been furnished by the client, and are assumed to be correct. No survey is made for purposes of the report.
- Any sketches, maps, plot plans, and photographs included in the report are intended only to show spatial relationships and/or assist the reader in visualizing the property. They are not measured surveys or maps and we are not responsible for their accuracy or interpretive quality.
- It is assumed that the subject property is free and clear of any and all encumbrances other than those referred to herein, and no responsibility is assumed for matters of a legal nature. The report is not to be construed as rendering any opinion of title, which is assumed to be good and marketable. No title information or data regarding easements which might adversely affect the use, access, or development of the property, other than that referenced in the report, was found or provided. The property is analyzed as though under responsible ownership and competent management.
- Any architectural plans and/or specifications examined assume completion of the improvements in general conformance with those documents in a timely and workmanlike manner.
- Preparation for, attendance, or testimony at any court or administrative hearing in connection with this report shall not be required unless prior arrangements have been made therefor.

- If the report contains an allocation of value between land and improvements, such allocation applies only under the existing program of utilization. The separate valuations for land and building must not be used in conjunction with any other purpose and are invalid if so used.
- If the report contains a valuation relating to a geographical portion or tract of real estate, the value reported for such geographical portion relates to such portion only and should not be construed as applying with equal validity to other portions of the larger parcel or tract; and the value reported for such geographical portion plus the value of all other geographical portions may or may not equal the value of the entire parcel or tract considered as an entity.
- If the report contains a valuation relating to an estate in land that is less than the whole fee simple estate, the value reported for such estate relates to a fractional interest only in the real estate involved, and the value of this fractional interest plus the value of all other fractional interest may or may not equal to the value of the entire fee simple estate considered as a whole.
- It is assumed that there are no hidden or inapparent conditions of the property, subsoil, or structures which would render it more or less valuable; we assume no responsibility for such conditions or for engineering which might be required to discover such factors.
- Nothing in the report should be deemed a certification or guaranty as to the structural and/or mechanical (electrical, heating, air-conditioning, and plumbing) soundness of the building(s) and associated mechanical systems, unless otherwise noted.
- Information, estimates, and opinions provided by third parties and contained in this report were obtained from sources considered reliable and believed to be true and

correct. However, no responsibility is assumed for possible misinformation.

- Possession of the report, or a copy thereof, does not carry with it the right of publication, and the report may not be used by any person or organization except the client without the previous written consent of the appraiser, and then only in its entirety. If the client releases or disseminates the reports to others without the consent of the appraiser, the client hereby agrees to hold the appraiser harmless, and to indemnify the analysts from any liability, damages, or losses which the analysts might suffer, for any reason whatsoever, by reason of dissemination of the report by the client. Further, if legal action is brought against the analyst by a party other than the client concerning the report or the opinions stated therein, the client agrees, in addition to indemnifying the analysts for any damages or losses, to defend said analysts in said action at client's expense. However, nothing herein shall prohibit the client or analysts from disclosing said report or opinions contained therein as may be required by applicable law.
- Disclosure of the contents of this report is governed by the By-Laws and Regulations of the Appraisal Institute. Neither all nor any part of the contents of this report (especially any conclusions as to value, the identity of the appraisers or the firm which they are connected, or any reference to the Appraisal Institute or to the MAI designation) shall be disseminated to the public through advertising media, public relations media, news media, sales media, or any public means of communication without the prior consent and approval of the appraisers.
- Unless otherwise stated in this report, the existence of hazardous material, which may or may not be present on the property, was not observed by the appraiser. The appraiser has no knowledge of the existence of such materials on or in the property. The appraiser, however, is not qualified to detect such substances. The presence of substances such as asbestos, urea-formaldehyde foam

insulation, or other potentially hazardous materials may affect the value of the property. The value estimate is predicated on the assumption that there is no such material on or in the property that would cause a loss in value. No responsibility is assumed for any such conditions, or for any expertise or engineering knowledge required to discover them. The client is urged to retain an expert in this field, if desired.

- The Americans with Disabilities Act (ADA) became effective January 26, 1992. We have not made a specific compliance survey and analysis of this property to determine whether or not it is in conformity with the various detailed requirements of the ADA. It is possible that a compliance survey together with a detailed analysis of the requirements of the ADA could reveal that the property is not in compliance with one or more of the requirements of the act. If so, this fact could have a negative effect upon the value of the property. We did not consider possible noncompliance with the requirements of ADA in estimating the value of the property.
- The function of this report is for the sole purpose(s) stated herein. It may not be used in connection with any proposed or future construction for a real estate syndicate(s), real estate investment trust(s) or limited partnership to solicit investors or limited partners, and may not be relied upon for such purposes.
- The appraiser's conclusion of value is based upon the assumption that there are no hidden or unapparent conditions of the property that might prevent buildability. The appraiser recommends that due diligence be conducted through the local building department or the municipality to investigate buildability and whether the property is suitable for its intended use. The appraiser makes no such representations, guarantees or warranties.

## CERTIFICATION

The undersigned does hereby certify that, to the best of his knowledge and belief, the statements of fact contained in this report are true and correct. It is further certified that the reported analyses, opinions, and conclusions are limited only by the reported assumptions and limiting conditions, and are his personal, impartial, and unbiased professional analyses, opinions, conclusions and recommendations. He further certifies that he has no present or prospective interest in the property that is the subject of this report, and has no personal interest with respect to the parties involved. He has no bias with respect to the property that is the subject of this report or the parties involved with this assignment. His engagement in this assignment was not contingent upon developing or reporting predetermined results. His compensation for completing this assignment is not contingent upon the development or reporting of a predetermined value or direction in value that favors the cause of the client, the amount of the value opinion, the attainment of a stipulated result, or the occurrence of a subsequent event directly related to the intended use of this report. The Hallstrom Group, Inc. has not previously appraised the subject property within the three years prior to this assignment. The analyses, opinions, and conclusions were developed, and this report has been prepared, in conformity with the requirements of the Code of Professional Ethics and Standards of Professional Appraisal Practice of the Appraisal Institute, and the Uniform Standards of Professional Appraisal Practice. The use of this report is subject to the requirements of the Appraisal Institute relating to review by duly authorized representatives. The undersigned certifies that he has made a personal visit to the property that is the subject of this report. No other persons provided significant real property consulting assistance other than the undersigned.



Tom W. Holliday

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