

Economic Forecast

SPECIAL REPORT

Assessing Tourism's Contribution to the Hawaii Economy

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Executive Summary

This paper makes several important points:

- The Hawaii state economy is now in a serious recession, one that is broader, deeper, and will likely last longer than average. Although this recession has several components, the industry hardest hit is the one upon which we depend the most, tourism. Because tourism is responsible for by far the largest outside injections into the state economy, that is the sector that should receive the highest priority in stimulus spending. Until tourism gets well, the rest of the economy cannot. And the Hawaii tourism industry is in a crisis mode now.
- Hawaii is so dependent on tourism because that is the industry in which we have our true comparative advantage nowadays. Hawaii has always been largely dependent on a single industry, even though that industry has changed over the years. Efforts at diversification have been elusive. In large part, this is because the Hawaii economy is so small that true diversification is difficult. It is economically more efficient to specialize in what we do best rather than try to do a larger number of things well.
- Local attitudes toward tourism vary, but it is underappreciated by many. Often local residents view visitors as competing with them over resources, and identify tourists with negative effects such as Hawaii's high cost of living and congestion. But all regional economies must make a living, and it would be hard to invent a better export driver than tourism. It is clean; it enhances local tradition, history, and culture; it usually emerges in places that are desirable in the first place; and its jobs cannot be outsourced. However, like all industries we must compete, and our decision makers cannot take it for granted. An overwhelming majority of the visitors themselves view Hawaii as a premier destination, but care must be taken to maintain our competitive position.
- Earlier work has suggested that tourism accounts for about a quarter of local Hawaii Gross Domestic Product (GDP), and about one-third of local jobs. These estimates are without applying any normal economic multipliers. This study does apply some multipliers to both dollars and the number of jobs that are created by tourism directly. Care was taken to estimate these multipliers conservatively.
- Applying an income multiplier of 1.5 (see Appendix I) to the 25% of

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GDP mentioned above yields 40%. That share would be 35% even if this multiplier were applied only to direct visitor-related expenditures in 2007, listed in public sources. Of course, it should be noted that if, for example, 40% of the economy were removed, the remaining 60% would also be affected due to massive unemployment and reduced government services. In fact, for all practical purposes, it is impossible to draw the line between shares of the economy affected and unaffected by tourism. It is almost analogous to the removal of 40% of the vital organs from the human body and speculating on survival of the individual.

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Executive Summary

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- As for jobs, the tourism component estimated here is substantially higher. Applying a jobs multiplier of 2.6 (see Appendix II) to the one-third estimate mentioned above yields an astounding share of over 80%. If that jobs multiplier is applied only to Leisure & Hospitality jobs listed in the State Labor Department's establishment survey alone, it comes to 44%. If total government jobs are added to that 44%, only 35% of all jobs in the state remain. And that share would be 74% if the multiplier were applied to the number of jobs generated by visitor related expenditures in 2007, listed in public sources. (Given the way the jobs multiplier is calculated, that 74% would include some jobs that are only partially and indirectly touched by tourism, but that component should be counted also.)
- State taxes are also affected greatly by tourism. State taxes attributed directly to the visitor industry in 2007 accounted for 25% of General Fund revenues (and that does not include a number of fees paid by the tourism industry). Subject that to the 1.5 income multiplier above, and it becomes almost 40%. The problems encountered by tourism recently also are having a serious impact. Using Council on Revenues estimates, the decline in visitor arrivals alone, without any secondary effects on other forecasted variables, caused a 2.5% decline in the General Fund in 2008.
- All these numbers can vary substantially depending on assumptions, some of which are inevitably arbitrary. The overall point is clear, however. Tourism's contribution to the Hawaii Economy is so large even under the most conservative assumptions, that if it remains in the slump in which it now finds itself, the overall state economy — its jobs, tax revenues, and the life styles of almost all of our citizens — will be impacted seriously.

- A tourism forecast contained in this study over the next three years projects that the visitor industry may return to positive growth over that time frame, but that growth will be slow. Thus, it is imperative that leadership efforts be made now to revive and maintain the industry as much and as quickly as possible. The path of our economy depends upon a healthy tourism industry.

I. Introduction

The main thrust of this paper, commissioned by First Hawaiian Bank, is to review tourism's economic importance to Hawaii and to make some estimated quantifications about the tourism component of the economy.¹ Most observers in Hawaii and everywhere else automatically assume that tourism is the main driver of the economy of the 50th state. Yet, given its size and complexity, an exact measurement of the sector relative to the overall economy is difficult.

There are several reasons for this. One of the main reasons is that, unlike many other major industries, tourism is not broken out neatly and separately as a stand-alone sector of any economy, that of Hawaii included.

For example, total tourism jobs are not broken out separately. Under the Standard Industrial Classification (SIC) system in place in the United States prior to 1997, there was no category related specifically to tourism at all. After that, when the North American Industry Classification System (NAICS) was adopted, there was a category added for "Leisure & Hospitality Jobs."

Yet this category significantly undercounts total jobs in any economy dependent on travel and tourism.²

It does not include jobs dependent on things such as:

- capital investment by companies and governments in visitor plant, equipment, and infrastructure — as well as the actual construction of these elements,
- tourist retail and restaurant spending,
- people involved in providing other tourism services like air travel, rentals, park services, and security,
- government jobs funded by the taxes that the tourism industry pays,
- manufacture of clothing and other items sold to tourists,
- real estate sales due to tourism,
- health care revenues attributable to visitors,
- entertainment and art sales due to tourism,
- farm jobs devoted to growing food for the visitor industry,
- and a host of other jobs that are related to servicing the thousands of employees of tourism — barbers, bakers, to bankers.

A related problem is the calculation of an appropriate "multiplier" to apply to direct tourism injections to get at the total economic contribution of tourism in an economy. Both income multipliers and employment multipliers are important. Everyone agrees that such multipliers exist and most people understand the concepts involved, but the devil is in the details. Unfortunately, in many

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² Sub-categories of this component include "Arts, Entertainment, & Recreation" and "Accommodation & Food Services" jobs. The total category accounted for just over 17% of total Hawaii jobs in the year 2008.

economic studies there is a tendency to overstate such multipliers, and that undermines their credibility. This overstatement usually stems at least partly from the fact that it is often in the interest of those performing economic impact studies on various industries to overemphasize the importance of those industries. This document will attempt to estimate objective multipliers in a subsequent section and appendices.

The most important bottom line point of this paper can be put quite simply: In the final analysis, all regional economies are driven by what they sell to the rest of the world. Those injections make the wheels of the local economy turn. In most such economies, intelligent local observers recognize this readily. Detroit and the entire industrial Midwest of the United States knows it would be in deep trouble without the domestic auto industry, and a financial center such as New York knows that if that sector were to suddenly collapse most of the city economy would go with it. In many tourism-driven economies, however, this fact is more frequently forgotten.

The reasons the economic importance of tourism is more often overlooked are also due to several inherent aspects of the industry. It is sometimes less visible because it blends in with the local economy that residents also enjoy. It is sometimes not considered a “serious” industry like certain forms of manufacturing or sophisticated endeavors like high tech. Many tourism jobs are not higher paying ones, and there is a tendency not to count them equally with other jobs that require higher training and education. But the fact is, tourism creates jobs at all levels — low, middle income, and high.

Tourism is a great business to have as the main pillar of economic support. In fact, it would be hard to design a better one. It usually evolves in areas that are desirable in the first place, it encourages the enhancement and preservation of local culture, traditions, and history, and it is a clean industry that encourages the maintenance of the local environment. In addition,

it is a labor intensive industry that is not subject to outsourcing. The jobs that are created stay on the local scene.

To return to the main economic lesson of all this, however: If the primary regional driver — whatever it is — is not maintained and upgraded, then the entire local economy sinks. Jobs and economic activities that some consider to be quite far removed from that main driver can be affected very adversely. Thus, especially in times of economic hardship for the main industry, it is that sector which needs to be fixed *first*. Otherwise, the entire economy quickly gets seriously ill. There are many historical examples of that happening — sometimes irreversibly. It turns out that Hawaii tourism is in just such a state now, and with it the entire local economy. Section III of this document reviews this scenario in some detail.

II. Why is Hawaii So Dependent on Tourism?

Before turning to the state of Hawaii tourism now and the measurement of its importance, it is probably useful to devote some attention to why Hawaii is so dependent on tourism in the first place. A basic reason is that diversified economies are more resilient, and less vulnerable to economic downturns, than the less diversified ones.

Much attention in the past has been devoted to making Hawaii’s economy a more diversified one, but that has proven to be an elusive goal. One problem in this area is that the goal of diversification for its own sake often runs counter to the goal of economic efficiency. Economics teaches that economies should always specialize in what they do best, and rely on trade with the rest of the world to satisfy other needs and wants. This is the principle of *comparative advantage*.

That is why economists often oppose things like tax subsidies for infant industries. High tech is a good example. It could be that we do not have a comparative advantage in such industries. If we did, those industries

would have emerged by themselves without public subsidy. Perhaps the private sector should be trusted more than government when it comes to picking the economic winners.

More than that, however, much of the reason for the absence of diversification in the Hawaii economy lies with its relatively small size. For example, California’s state economy is quite diversified. But if California were a nation, it would be the eighth largest national economy in the world. Hawaii, on the other hand, accounts for about 3.4% of California Gross Domestic Product and less than half of one percent of U.S. national Gross Domestic Product.

The plain truth is: Hawaii’s economy has never been very diversified, and it is unlikely that it ever will be — at least compared to most larger economies. This can easily be seen by a brief review of Hawaii’s economic history. Even going back to the earliest days after European contact, our small local economy has always been relatively dependent on a single sector or industry — even though that sector has not always been the same one.

■ The **sandalwood** trade dominated from about 1810 into the 1820s. Ships carrying fur from Alaska and the Pacific Northwest stopped in Hawaii to pick up the harvest of huge stands of sandalwood, valued for its fragrance, in the higher elevations. In 1821, 4 million pounds of Hawaii sandalwood were off-loaded in Canton. Labor was diverted away from the necessities of life to cut the wood. Ali’i went into debt borrowing against wood that had not yet been harvested, and some of these debts were not repaid until well after the demise of the industry. But the industry ended quickly when sandalwood forests were depleted.

■ Servicing the Pacific **whaling** fleet was next. Whaling held sway from the 1820s to the 1870s. At its zenith in the 1840s, over 85% of the American whaling fleet was

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Why is Hawaii so Dependent on Tourism? *(continued from page 3)*

in the Pacific. Whalers fished the equator in winter and Alaskan waters in summer, stopping in Hawaii in both the spring and the fall to re-provision and for rest and recreation. Because whalers stayed in port longer (several months each way) than the sandalwood trade, they left more money in Hawaii. It was highly seasonal, but also highly cyclical, as the number of ships that visited each year varied greatly. Although the whaling industry had its ups and downs, and lasted a long time, it also ended abruptly. A bad winter destroyed much of the fleet in northern waters, and the final nail in the coffin was the discovery of crude oil in Pennsylvania, followed by other U.S. domestic oil fields.

■ **Sugar and the plantation economy** dominated from the 1876 Reciprocity Treaty until the outbreak of World War II in 1941. Polynesians had grown sugarcane for centuries, but the first commercial sugar mill in Hawaii was built at Koloa, Kauai in 1835. Hawaii sugar exports got a big boost from the U.S. Civil War, when the North was cut off from Louisiana sugar. This was a period of rapid economic and demographic growth, as workers were imported from China, Japan and Okinawa, the Philippines, the Portuguese islands of Madeira, and other locations to work the plantations. From 1876 to 1941, the U.S. population tripled, and that included the annexation of 12 new states. But Hawaii's economy grew eightfold. By 1941, on the eve of World War II, one out of three employed people in Hawaii worked for a sugar or pineapple company. But World War II heralded the beginning of the end of plantation crops like sugar and pine in Hawaii. The power of the plantations never recovered from military dominance during the war.

■ The **military** was the overwhelmingly dominant sector during World War II. Hawaii's strategic location made it attractive to the U.S. military from the days of the late 1800s. After the 1898 annexation, in 1900 Congress appropriated money for the dredging of Pearl Harbor. World War I was fought in a different theater, but several other Navy and Army installations were established in the 1920s, all on Oahu. By any standard economic growth measure, the Hawaii economy grew faster during World War II than before or since. After the war, the military's role in the economy was drastically reduced. Military withdrawal caused a severe recession during the 1945-1949 period. Today, the military role is less than in the past, more because of the growth of other sectors than because of absolute shrinkage.

■ **Tourism** has dominated the post World War II Hawaii economy. Early tourism growth came partly because World War II put Hawaii on the map, and it was fueled by the returning military personnel who had experienced it during the war. Then came 1959 statehood, and more military exposure during the Vietnam War. But it was the advent of relatively inexpensive jet air travel in the 1960s that really caused Hawaii tourism to take off. The visitor

industry is likely to remain Hawaii's biggest export sector for some time to come. This is mainly because there is no contender industry in the wings now that can possibly come close to replacing it.

A graphical depiction of this historical progression is useful. Chart I below shows how each of the above industries have dominated the economy in their turn. Even though there are some intervals of overlap, it is clear that it was one industry and one industry only that usually held center stage. (In the chart, the spikes to 100% represent the peak of the industry, even though their actual value varied.)

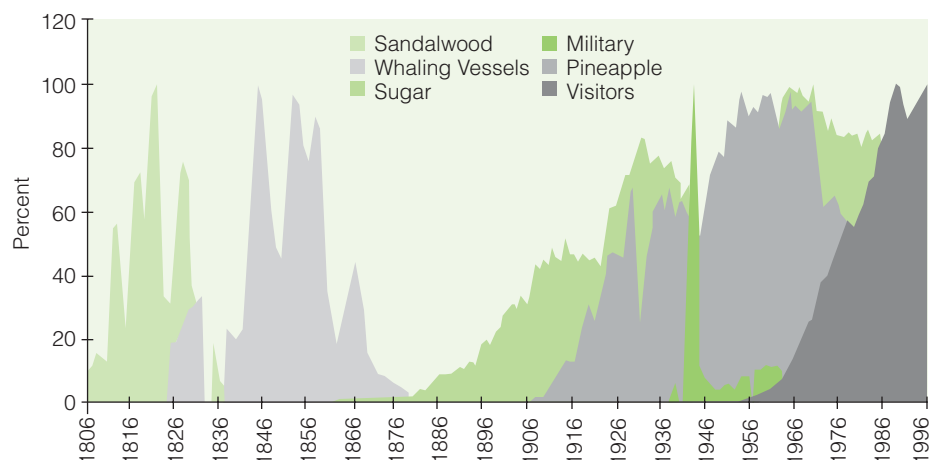
III. The Condition of Hawaii Tourism Today

The most recently completed year 2008 was not kind to the Hawaii economy, especially its tourism component. In 2007, total visitor expenditures were \$12.8 billion, or 20.8% of state Gross Domestic Product. But in 2008 that share declined to 17.9% or \$11.4 billion, an indication of how bad last year was.

Hawaii tourism is now threatened like never before. The economy entered 2008 on a slowing trajectory that had its origins in earlier years. Expectations were for flat growth going into the year, but no one saw the "perfect storm" of

CHART 1 • HAWAII'S MAJOR ECONOMIC ACTIVITIES

Scaled so that Maximum Value = 100



events that came about as the year progressed. The combination of those events continues to affect the Hawaii economy as 2009 unfolds, and that will likely be the case for some time to come.

The bad news started to accelerate toward the end of the first quarter of last year, and each of the state's four counties was affected directly. A brief review of some of the major blows follows. While some of them are not directly related to tourism, they deserve mention because they represent all the more reason we should not stand by idly while the state's major industry deteriorates.

- It was known going into the year that Norwegian Cruise Lines' *Pride of Hawaii* would leave inter-island service in 2008, after only a two year stay. Demand for the American-flagged, American-staffed vessel — plagued with service issues — never caught up with stateroom supply, and its exit occurred at the end of January. But another bombshell was dropped in February, when NCL announced that the second of what had once been three American-flagged vessels plying Hawaiian waters, the *Pride of Aloha*, would also leave in May. That left only one, the *Pride of America*, which had been present since 2005 and was designed for cruising Hawaii's seas. Economic effects of the two vessels' departure was felt especially on the Neighbor Islands, where businesses such as activity operators, tour companies, farms, laundries, and others across the board were impacted. The three months notice given for the *Pride of Aloha* was much more sudden than the ten months associated with the *Pride of Hawaii*, and several activities had only recently been created to cater to cruise passengers. Hawaii had high hopes for the Passenger Services Act — exempted *Pride* vessels when their debut was announced in 2004, and never has a Hawaii industry ramped up so quickly to be collapsed in so short a time.

- At the end of March 2008, Molokai Ranch abruptly shut down all of its major operations, including the 22-room Molokai Lodge, 40-unit Kaupo Beach Village, the Kaluakoi Golf Course, other recreational activities, plus the Maunaloa gas station and the town's theater. In the process, 120 workers lost their jobs. The company attributed the closure to failure to win enough support for a 200 lot luxury home development at La'au Point, which was to help finance other Ranch activities. While not critical from the standpoint of the overall state, the closure by the island's largest private employer and landowner (about 35% of the island) was devastating to Molokai's tiny economy.

- Days later, a much larger blow came when Aloha Airgroup announced shutdown of its passenger operations, after filing for bankruptcy for the second time since 2004. In business since 1946, the closure of this second largest kama'aina airline had psychological as well as immediate and real economic effects. Its fleet of 26 Boeing 737s served five airports in Hawaii and six destinations in the continental U.S. They were the only carrier that offered non-stop service from Orange County to Hawaii, for example. The shutdown affected 1,900 employees, impacted retirement benefits of other ex-workers, as well as stranding passengers.

- Close on the heels of this announcement, the air charter service ATA Airlines also filed for bankruptcy and discontinued all scheduled flights, attributing the action to the loss of a key contract for its military charter business. Like Aloha, this sudden action also caused disruptions, because other customers were not given any advance notice. In addition to its charter business, ATA offered regular service on several routes, almost all of them to and from Hawaii. ATA operated direct flights from the Mainland to Maui, Kauai,

and Kona as well as Honolulu. It was Hilo's only direct flight to the Mainland. The combined exit of both Aloha and ATA not only added uncertainty to air travel to and from Hawaii, it raised expectations of higher airfares at a time when many were just planning a summer vacation to the state, while at the same time it caused planners to scramble to make up the lost airlift.

- As a result of these events and various Mainland economic circumstances, expectations going into the season for 2008 summer visitors were downbeat at best. In fact, as the summer progressed, outcomes turned out to be the worst in years. Sharply higher energy prices exacerbated airfare increases, and year over year monthly visitor arrival results were consecutively worse. Interviews conducted by this author on the Neighbor Islands over the summer provided tangible evidence of this. Traffic was not as congested at the major choke points, hotel occupancies were down, properties shut restaurants and wings, and business was off visibly at other destinations frequented by visitors.

- As the summer wore on, another couple negative developments unfolded in Hawaii's agricultural sector regarding two more venerable kama'aina companies. One of Maui's dominant employers, Maui Land & Pine, announced in late July the layoff of 274 workers, about a quarter of its total workforce. The bulk of these were in its pineapple operations, which have struggled in recent years in the face of foreign competition. Attempts to shift from canning to fresh fruit have proven to be insufficient to rescue this traditional Hawaii plantation crop. (Another 100 ML&P workers were cut in February 2009; 87 at its Kapalua Resort and another 13 at its corporate headquarters in Kahului. Remaining workers took a 10% pay cut.)

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The Condition of Hawaii Tourism Industry Today

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- The other Hawaii plantation crop to take a step back in 2008 was sugar on Kauai. In September, Gay & Robinson announced that in 2010 it would harvest its last crop of commodity sugar, leaving the future of the operation to a proposed ethanol plant in partnership with Pacific West Energy. That undertaking has been in the works for about three years now, though it has encountered various financing and permitting hurdles. This Kauai closure leaves Maui's HC&S sugar operation as the only remaining Hawaii grower of commodity and specialty sugar.
- Still, none of this prepared Hawaii for what was to come in the fall. The financial global meltdown in the United States that started with the mortgage backed securities crisis spread to become a total freeze-up of the financial system. Lending ground to a halt. (Ironically, the local financial sector has withstood this meltdown remarkably well.) Investors saw significant declines in lifetime savings. Obviously none of this was conducive to long distance leisure travel, among the most discretionary of items in a household budget. Local consumers were subject to many of the same reactions as their Mainland counterparts, as the negative financial news became continuously worse. The holiday retail season in Hawaii was worse for stores and restaurants catering mainly to visitors than for those focused more on the local markets, but many of the latter also reported disappointing results.
- Business travel to Hawaii began falling with other visitor numbers in 2008. But it stalled further in 2009 when President Barack Obama called on boards of directors of companies receiving emergency government lending to develop guidelines for conferences, events,

and employee incentive programs. Wells Fargo, for example, cancelled a 11,000 room-night incentive meeting at Hilton Hawaiian Village in Waikiki in February.

In light of all these developments, it is not surprising that the overall 2008 record was very sobering and that the outlook for 2009 remains quite down-beat. A review of the numbers by county for the past calendar year bears this out. While some of these numbers are not directly related to tourism, they are important in a report like this if only to underscore why we need to nurture the main economic engine, tourism.

An Overview of Recent Economic Conditions by County *When the aggregate is down, fixing the driver becomes even more important.*

Overall job growth for the state was flat in 2008, with Oahu and Kauai showing very minor gains and Maui and the Big Island dipping marginally into negative territory. Unemployment rates accelerated markedly across the counties over the year. The Neighbor Island numbers were worse than Oahu, which from December 2007 to December 2008 on a non-seasonally adjusted basis saw only a 1.5% rise to 5.1%. The corresponding figures for Maui County were a 3.3% rise to 6.7%, compared to Hawaii County's 3.6% rise to 7.1% and Kauai's 4.6% rise to 7.7%. (The state's corresponding number on a seasonally adjusted basis rose 2.4% to 5.5%.)

The state's all-important visitor industry was very hard hit in 2008, with a decline in total arrivals of almost 11%. This was a staggering blow. Only Canada and the All Other category of visitors showed mild increases, and these are smaller in any case. Again, it was the Neighbor Islands that bore the brunt of this decline. While Oahu visitors fell 11%, Maui's fell 15%, the Big Island's dropped over 18%, and Kauai's plummeted over 20%. This was particularly devastating to the Neighbor Islands, whose economies are much more dependent on tourism than the more diversified Oahu.

Statewide hotel occupancy in 2008 declined 4.6% to 70.4%, while hotel room revenues fell by \$206.7 million to \$2.91 billion, down 6.6% from 2007. December was the worst month of the year for both occupancies and revenues. Hotel occupancy dropped nearly 10% from December 2007, the lowest statewide level since the September 11, 2001 terrorist attacks. Among the top 25 U.S. lodging markets, Hawaii ranked fifth in 2008 occupancy — behind New York City, San Francisco, Miami, and Los Angeles.

Major hotel chains that had held the line on room rates until late in the year finally dropped them, causing major declines in average daily rates (ADR). The annual ADR held the line above the \$200 mark, but this was due to a comparatively strong first quarter. Statewide revenue per available room, the broadest measure of hotel performance, ended the year at \$141.90, off 5.4% from 2007.

The discouraging path of the visitor industry in 2008 can best be seen on a cumulative basis as the year progressed. Each successive blow to the sector made the picture continually worse. Total arrivals actually showed positive growth in the first three months of the year, but by April cumulative growth was flat and by May it had reached negative territory. That cumulative decline became worse at an accelerating rate as the disastrous summer progressed, and by the fall it had reached double digit declines, ending the year with a total 11% drop.

Total spending traced a similar path on a cumulative basis. Expenditures were positive cumulatively through May, but the summer saw those numbers also drop more and more as each month passed. By the end of the year, spending was down almost 6% for the year on a current dollar basis. Oahu visitor spending in 2008 did not suffer as much as for the state as whole, for which outlays by air visitors dropped almost 10%.

This progression had an understandable negative psychological impact on all components of the industry —

as hotels, activities, restaurants, and tourism retail stood by to see just how bad it would get. By year's end, all parts of the industry had abandoned hope of holding the line on anything. Hotels dropped room rates, and heavy discounting was apparent in practically all other parts of the industry.

Waikiki hotels entered 2009 in a survival mode. Oahu has not been affected as much by the visitor downturn as the Neighbor Islands, but that is not true for off-beach properties. Beachfront properties have lowered rates to shore up occupancy, so the off-beach properties have had to follow suit. Cash flows are increasingly anemic, and overall occupancy has been down 10-15%.

The Japan market nowadays is for all practical purposes an Oahu market. It was off slightly less in 2008 than the U.S. domestic side, down 10.2% for Oahu versus a 14.5% Mainland drop. (Much of the U.S. domestic decline was attributable to the exiting cruise ships, as cruise passengers fly to Honolulu to board the vessels.) Although many Japan groups are now staying in cheaper off-beach properties, it is the beachfront properties that set the price.

In specific developments among the hotels, the Royal Hawaiian completed its major renovations, with 400 refurbished rooms, and the Sheraton Waikiki is making steady progress, but renovation of its Princess Kaiulani and the new Diamondhead tower for the Moana have been delayed. Hilton recently opened up 350 timeshare units and Outrigger is actively pursuing Asian development for diversification purposes. Outrigger Reef is putting 400 condo hotel units back on the market.

On balance, the Waikiki visitor plant actually is in better shape than it has been in some time, much better than five years ago. Most major hotels have been renovated, something that the industry standard sets as needing to be done every five to seven years. The Pacific Beach Hotel is the last major hotel not renovated.

Among restaurants, those that attract a larger share of local business —

such as Duke's, The Yardhouse, and Ruth's Chris — have been faring better in the down economy. But closure of a restaurant such as Nick's Fishmarket is a sign of the hard times.

On the leeward side at Ko Olina, Disney is moving forward with its development, but the process may slow due to the state of the economy. Preliminary site work there has begun. The resort, Disney's first in Hawaii, will include 350 traditional hotel rooms and 480 Disney Vacation Club Villas. As well, a pool, spa, wedding lawn, a convention center, children's club, and two restaurants will be included. Some expect it to compete more with Neighbor Island resorts than Waikiki, because its ambiance is more similar to those destinations.

Weak construction has added to the faltering economy. After being the leading sector in job growth over the previous several years, this component also changed abruptly in 2008. Overall state construction job growth dropped into negative territory last year, after 6.8% growth in 2007. Oahu managed to remain positive, with 1.4% growth in building jobs, but once again the Neighbor Islands generally were weaker. Maui's corresponding numbers fell 4.5% and the Big Island's dropped almost 7%. Kauai managed to remain positive with 11.7% construction job growth, but even there several projects that were moving forward earlier in the year have been scaled back, postponed, or cancelled.

Plummeting sales were the hallmark of Hawaii real estate in 2008. Realtors spend money like everyone else, and the drop in their commissions was but yet another part of Hawaii's anemic economy last year. Single family resales on Oahu were off 24%, and condos were down over 28%. On the Neighbor islands, the Realtors Association of Maui reported a 21% drop in single family sales for the year, with condo sales down 35%. The Big Island and Kauai fared worse. Hawaii County single family sales were off 33%, and condos were down 29%. On Kauai,

there was a 31% decline in single family sales and a whopping 43% drop in condo sales.

Median prices were also down, though not by nearly as much. In the face of such drastic sales declines, this was actually good news. Oahu single family median prices dropped a mere 3%, and condos prices were absolutely flat. Maui single family median prices were off 8%, with condos again showing no change. Hawaii County showed greater softness in prices. The Big Island saw a 13% median price drop for single family units, and a 6% decline for condos. Among the Neighbor Islands, Kauai prices fared best. Single family median prices were off only 5%, with condos down 4%.

As always, it should be noted that especially Neighbor Island real estate data should be taken with a grain of salt. Both transactions and prices can vary greatly across areas of the island, and the mix of transactions — the local versus the offshore market, for example — can also be distorting. But the overall trends are clear: much lower volume and a softening in prices. Expectations are that prices will fall more in 2009, and at an accelerating pace.

The housing slump has even affected the "affordable housing" component, homes aimed at low to moderate income buyers. Tighter lending standards and rising fears about jobs and the overall economy have taken a toll in this segment also, even with falling mortgage rates and the softening prices. (Another drag on construction related to the affordable housing component relates to the higher proportion of affordable housing required by counties in new developments.)

Nonetheless, Hawaii can be thankful for greater resiliency in residential prices than many Mainland locations. Constraints on the development process, resulting in lower inventory, can have buoying effect in times like the present. We frequently forget that in better times.

Trends in home prices have important implications for other components

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The Condition of Hawaii Tourism Industry Today

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of the economy also. As people feel they are worth less on paper, they spend less on other things. And builders watch home prices too, because a turnaround in prices usually mean demand for their product is ramping up. Home prices will continue to be watched closely in Hawaii. Until they stabilize, it is unlikely that we will see a genuine recovery locally.

In statewide commercial real estate transactions over \$1 million, the national freeze in commercial property lending hit Hawaii hard in 2008. The dollar amount of such commercial property transactions — including hotels, shopping centers, office buildings, and other commercial real estate — plunged from \$3 billion in 2007 to \$788 million in 2008, a 74% drop. The number of such transactions fell 37%, from 264 to 166. An absence of many high value hotel transactions was a major contributor to the decline, but it was spread over a market that also included warehouses, apartment buildings, golf courses, farmland, and undeveloped land zoned for commercial use. Much of the commercial property financing in earlier years came from loans packaged as mortgage-backed securities that were sold to institutional investors, a vehicle that dried up in 2008.

Other broad indicators of falling statewide economic activity in 2008 are noteworthy. One such indicator is auto sales, perhaps the biggest ticket item after home sales. The Hawaii Auto Dealers Association reported that in 2008 new vehicle registrations were an estimated 42,568, well below projections going into the year. The record for such a number was achieved in 2005, with 70,268 new registrations. They have been falling since then, but not at nearly so rapid a rate as in 2008. Further declines are expected in 2009; in January 2009 the Association released a sales projection of 36,000 for the year. Tourists may not buy cars here,

but those employed in the visitor industry certainly do.

Some indicators are countercyclical. For example, student enrollment across the ten campus system of the University of Hawaii rose 5.6% in the fall semester of 2008 over the previous spring. (The UH community colleges saw a 9.4% increase, and UH Manoa had a 0.3% decline.) The increase was attributed to people — many from the tourism industry — seeking additional training in this down economy, as they were unemployed or underemployed.

Emerging Developments in 2009

The year 2009 began on the same downbeat notes in Hawaii's economy that prevailed in late 2008. Lower state tax revenue forecasts sent lawmakers searching for ways to balance the growing budget deficit. Among other things, increased taxes or fees on fuel, vehicle weight, cigarettes, alcohol, rental cars, and vehicle registration were suggested. Even more severe tax increases have been discussed, including raising the state's general excise tax.

In addition to higher taxes, particularly unpopular in these lean economic times, spending cuts have also been considered — agency cuts, furloughs, using emergency hurricane relief money and the proceeds of the GET surcharge intended to fund Oahu rail transit, and reducing high tech tax credits.

It was announced in mid-February that Hawaii's share of the \$787 billion federal stimulus package would be \$940 million over the next two years. While this will not solve the state's budget deficit problems, it was welcome news. Because the injection will be based on formula-based spending, however, it was initially difficult to determine exactly how the state economy would be impacted.

Oahu home sales opened the year with a 46.5% decline over January of the previous year, only 122 transactions. The median price fell to \$539,500, a 10.1% monthly decline and the lowest level since early 2005. But the mix of

transactions in such a small sample make the numbers mean much less than they might otherwise. In the condo market, corresponding sales fell 50.9% to 159, and median prices dropped 5.8% to \$305,000.

Neighbor Island real estate numbers were similar in the first month of the year. Big Island single family sales were down 46%, Kauai's were off 55%, and Maui's were down 49%. Corresponding median prices were down 17% for the Big Island and 20% for Kauai, but only 1% for Maui. Yet once again, small samples can distort the numbers substantially.

The year over year monthly visitor numbers will begin 2009 on a continued dimly downward track. The first three months of 2008 were the best of the last year, so monthly numbers in 2009 will suffer by comparison. In January 2009, total visitor arrivals fell 12.5%, with the Japanese component dropping 12.7%. Total visitor spending was off 13.6% for the month.

The Hawaii economy will not get much help from the private construction sector in 2009 or 2010. A consensus forecast expects total construction spending to decline at double digit rates in both years. Commercial and resort building are in retreat. The residential construction downturn will continue as income and wealth losses undermine housing demand. Some help can be expected from the Federal stimulus plan and State spending, but that will not offset the private contraction. More details and certainty must come from things like the Oahu Rail Transit project before they can be factored in with any certainty.

Overall, as 2009 has begun, Hawaii braces for what is likely to be a continuation and worsening of its most severe economic downturn at least since 1959 statehood. Any signs of optimism, such as the proceeds of the federal stimulus or the rail transit project, are either too vague or too far off to be much consolation in a situation that remains quite downbeat.

IV. Local Attitudes toward Tourism: Where you stand depends on where you sit

Hawaii is blessed with an enviable number of assets that enhance its status as a visitor destination and make it superior to competition. These include its natural environment and cultural heritage. Yet attitudes toward tourism in Hawaii vary a great deal depending on the perspective from which the industry is viewed. This lack of consensus often hampers planning and the optimal development of the visitor product. Ironically, it seems to exist both in good times and in not so good times like the present. This section summarizes some of the disparities that exist in these views.³

Visitors

An overwhelming number of actual and potential Hawaii visitors view the destination as a prime place to take a tropical vacation. This is particularly true among more educated and higher income travelers. The downside of this is that, with such high expectations, care must be taken not to disappoint them when they get here.

Most of the Hawaii visitor plant compares quite favorably with that in competing destinations. Unfortunately, the same cannot be said for much of Hawaii's infrastructure: parks, roads, and other public facilities. Airports are the first impression Hawaii visitors get of the islands, and upgrades and maintenance there are essential. Visitors should be able to expect safe and clean public facilities that do not suffer in comparison to what they encounter in other destination resorts. The latter should not be seen as oases in what they sometimes perceive as a third world environment.

³ Some of the discussion in this section is drawn from *Hawaii Tourism Product Assessment, Vol. 1, Executive Summary*, presented to the Hawaii Tourism Authority by KPMG LLP, Laird Christianson Advertising, Inc., Yesawich, Pepperdine, & Brown, Market Trends Pacific, Inc., and Group 70 International, Ltd., June 8, 1999.

Ironically, Hawaii's superior image often has served as an impediment to travel to the islands. For example, corporate groups have been viewed as incurring unnecessary expense when they plan a Hawaii event or meeting. In today's environment, heavy price discounting — in airfares, hotels, activities, and other aspects of a Hawaii vacation — make this an unprecedented time to visit, and this can be an advantage that counters the negative income effects of a serious global economic downturn. But what CEO wants to be singled out as a spendthrift in the current situation because the organization plans an incentives meeting here?

Residents

Enlightened residents recognize the economic importance of the state's primary export engine. They may not be able to measure it accurately, but they do know it is critically large, which in the final analysis is all that really counts.

Unfortunately, there are sometimes far too few of those who recognize the significance of tourism's importance to Hawaii. There is often a strong unfounded perception of competition (versus partnership) between visitors and residents over limited resources. Residents often identify the tourism industry with the higher cost of living in Hawaii, and also with traffic congestion. There is little appreciation that tourism has enhanced the quality of life of our citizens and the economic development of other industries, e.g. music and agriculture. And thus this contributes to legitimate diversification of the economy.

The result is an indifferent relationship among some residents with respect to tourism. One might think this ambivalent view would diminish when tourism is in as deep a slump as it is today, but evidence from past periods of tourism contraction (such as the mid-1990s) shows that is often not the case. This indicates that the ambivalence is quite deep-seated.

It is interesting that this ambivalence does not exist in many other

regions toward their area's primary economic engine. Even in areas, and sometimes especially in areas where that engine has visible negative externalities — such as the local pollution associated with heavy industry — residents are fully aware that their living standards and lifestyle would be far worse without it.

If tourism is viewed as not being consistent with community values, then it becomes difficult if not impossible to convey several important points. Among them is an appreciation of the fact that protection of Hawaii's natural beauty enhances the local quality of life as well as the visitor experience. It also highlights respect for cultural values, history, music, dance, and our traditions, while at the same time it helps maintain a *natural* spirit of aloha.

And if tourism's economic importance is not recognized by all Hawaii residents, it hampers the ability of the tourism industry, others in private sector businesses, and government to garner the grass roots support for industry initiatives. Only marketing efforts that are internally as well as externally focused can help alleviate this problem.

Visitor Industry

No component of the Hawaii economy needs convincing less about the importance of tourism than the visitor industry itself. The burden falls primarily on this sector to convince everyone else of tourism's economic importance. Unfortunately, however, when those directly involved in any industry preach the importance of their business, it is often viewed as just another lobbying effort. A major point of this paper is that tourism indisputably occupies a central pivotal role in the Hawaii economy. This must be recognized and appreciated by all of us.

Coordination of this message within the industry is critically important. As with any human activity, internal differences can arise, but these should be minimized. Strong leadership is essential. A recent State audit concluded that the Hawaii Tourism Authority

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Local Attitudes toward Tourism: Where you stand depends on where you sit

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lacked a long-term strategy for expanding the visitor industry.

Other industries in the private sector can help, as can organizations such as business roundtables, chambers of commerce, economic development boards, and trade associations. In the private sector outside of tourism itself, there are inevitably some of the same misperceptions as those that exist among residents. While a hotel worker may know how important the visitor industry is, this appreciation may not be as great among those in non-tourism retailing, certain components of the construction industry, real estate, manufacturing, and business and professional services. (For example, it takes a broader vision for a dentist whose patients are only local residents to appreciate the importance of tourism than it does for a restaurateur whose customers are mostly locals, but also include some tourists.)

There is definitely a general awareness among businesses in the non-tourism sector of Hawaii's economy that the visitor industry is the most important among its major sectors. A recent survey by the Hawaii Business Roundtable and Pacific Resource Partnership, for example, found that the visitor industry ranked first (80% of those responding) in industry importance and first in support of other businesses and jobs (70% of those responding). Other choices were the healthcare industry, the construction industry, and the military and defense industry.⁴

Government

Lawmakers and other government officials are among the most important of those who play a role in determining the future of Hawaii tourism. Often these decision makers also take tourism for granted.

It would help if there were more of a shared vision and coordination among state, county, and individual agencies with regard to tourism policy and planning. For example, in response to the economic slowdown, our four county mayors have been meeting often to address strategic initiatives, including the federal stimulus package.

Perhaps most important, however, is the fact that much of the same indifference to tourism's overriding importance exists in the public sector as in parts of the private sector and among residents. Just as in the above discussion regarding residents and other groups, the point bears reiterating that the critical driving link between tourism and the overall economy needs to be emphasized more.

Tourists do not vote in local elections. Thus, if resident voters are ignorant of tourism's economic importance, perhaps it is rational behavior among elected officials to reflect those views of their constituents in their decision-making. This is likely to be true in spite of more enlightened views of tourism's overriding importance.

In this regard, it is the education of all stakeholders together that is needed. Without that unified support, not only the tourism sector but Hawaii's overall economy will not achieve its potential. Never has this point been more crucial than in the very challenging times that the Hawaii economy now faces.

V. Quantifying Tourism's Total Economic Contribution

There has been some prior work on estimating tourism's share of the Hawaii economy, though not very much recently. In March 1996, the World Travel and Tourism Council (WTTC) based in London, England published a study that attempted to measure the tourism share of the Hawaii economy. The approach used in their study was based on a "satellite account" methodology developed by Wharton Econometric Forecasting Associates (WEFA). The study was replicated in three subsequent years — 1997, 1998, and 1999 — but it has not been redone since then.⁵

This series of WTTC studies found that tourism accounted for about a quarter of Hawaii Gross Domestic Product and about one third of its total employment. The specific numbers contained in the last report (1999) were 26.3% of Hawaii Gross Domestic Product and 32.1% of total employment in the state. The employment share for Hawaii was compared to 13.2% for the overall United States and 8.2% for the world as a whole. Even though this series of reports is now ten years old, the numbers they contain continue to be cited widely as the tourism share of the Hawaii economy.

The report also projected that by 2010 the total employment share for Hawaii would grow to 39.6%. While verification of this number awaits an update of the 1999 report, it is plausible given the expansion of the state economy since then, an expansion that was driven in large part by tourism and changes in the composition of the local visitor plant. (Witness, for example, the large additions in time share that have occurred over the past decade.)

⁴ See *The People's Pulse*, Winter 2009, sponsored by the Hawaii Business Roundtable and Pacific Resource Partnership (research conducted by OmniTrak Group, Inc.)

⁵ See World Travel & Tourism Council, *Travel & Tourism and Hawaii's Economy*, January 31, 1997; *WTTC Hawaii Tourism Report 1998*, May 20, 1998; *WTTC Hawaii Tourism Report 1999*, June 1999. The Research and Economic Analysis Division of the State of Hawaii Department of Business, Economic Development, and Tourism is currently in the process of updating these studies, but that update was not available at the time this document was prepared.

It should be noted that all of these studies and the numbers included in them did not incorporate any economic multipliers, or the ripple effects of the overall tourism industry as they trickle throughout various levels of the economy. It was admitted that such multipliers do exist, but conservatism dictated their exclusion.⁶ This present document does make an attempt to incorporate multiplier effects, because to exclude them can grossly underestimate tourism's overall economic importance.

There are two types of multipliers that should be considered — an induced income multiplier and an employment multiplier. An example of the former is calculated in Appendix I of this document, and the latter in Appendix II. Both use conventional formulas and logic, and both have been used in earlier studies. It should also be emphasized that both are quite conservative compared to multipliers that are often invoked. This conservatism is adopted in order to avoid criticism that tourism's economic impact is overstated.

The income multiplier developed in Appendix I is 1.5 — that is, for each dollar of expenditure injected into the local economy by the tourism industry, there is another 50% that is induced as that dollar is spent and re-spent. Those familiar with the use of income multipliers in economic analyses will immediately recognize how conservative this estimate is. Often multipliers of 2.0 or 2.5, or even higher, are accepted as commonplace in economic impact studies.

The main reason the lower income multiplier is adopted here is that its value depends upon leakages from the income stream at each stage of the re-spending process. There are three general types of leakages from spending that are usually considered — part of the subject dollar is saved rather than spent, part of it is paid in taxes, and part

of it is spent on things outside the local economy, or imports. Among these three, it is imports that are abnormally large for the Hawaii economy, thus it is this leakage that reduces the local income multiplier compared to that for some other economies. Nonetheless, that 50% in additional induced spending is significant and should not be ignored.

The employment multiplier in Appendix II considers two types of indirect jobs created by the tourism industry. The first is related to those who service the industry. Some of their job might be related to non-tourism activities, but that part which is devoted to tourism should be counted. The second type of indirect job is related to the induced income multiplier developed in Appendix I. In sum, Appendix II concludes that for every direct tourism job in Hawaii, there are likely to be about 1.6 other jobs that are created indirectly. The reader is referred to the two Appendices for more in depth discussion of the logic underlying the two multipliers.

If one applies these two multipliers to the estimates contained in the WTTC study, the following tourism shares can be derived. Subjecting the state Gross Domestic Product share above of 26.3% to the income multiplier of 1.5% yields 39.45%. Of course, even this estimate can understate tourism's economic role, because if that approximate 40% were suddenly eliminated, the remaining 60% would likely be seriously affected also.

As for employment, adding the 1.6 indirect jobs to the 32.1% yields a staggering 83.5% job share that is somehow indirectly touched by the visitor industry — over 51% more than the estimated 32.1% share in the WTTC study. If that 32.1% estimate already included some indirect jobs, this might be considered an overestimate, but the point is clear. Just multiplying the 2.6 jobs multiplier of Appendix II times the

17% share for leisure and hospitality jobs in 2008 establishment survey of jobs yields 44% of total Hawaii jobs directly or indirectly related to tourism.

It is possible to update these estimates of tourism's share of the economy, using publicly available data. *Direct* visitor-related expenditures in the most recently available year of 2007 at this writing totaled \$14.5 billion.⁷ (Of this amount, \$12.8 billion was visitor spending, and the remainder was overseas airline and cruise line spending.⁸) That alone amounted to almost 24% of state Gross Domestic Product that year. If that number is subjected to the income multiplier of 1.5, it becomes \$21.75 billion — or 35% of state Gross Domestic Product in 2007.

Turning to job creation by the tourism sector, a total of 178,600 jobs have been attributed to economic activity generated by visitor-related expenditures in 2007 (direct impact only).⁹ (The Leisure & Hospitality Jobs category in the establishment survey of jobs published by the State Labor Department, which includes only "Arts, Entertainment, & Recreation" plus "Accommodation & Food Service" jobs accounted for 109,850 of that total, or 61.5%.) If that number is accurate, then subjecting it to the jobs multiplier of 2.6 yields 464,400 jobs, or almost 74% of the total jobs in the state in 2007 that were somehow touched directly or indirectly by tourism. This number is a good bit higher than most people would guess.

Note that these figures should be considered *only* estimates. They can change over time, varying with cycles in tourism for example, and they are only approximations in the first place. Plus, the multipliers themselves are only estimates. The main point is that the visitor industry is critically important

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⁶ See the introduction to the 1996 report by Richard R. Kelley of Outrigger Hotels and Resorts, "This multiplier effect, everyone agrees, does exist, but there has been no widely accepted formula for computing it; hence its exclusion from the methodology used here."

⁷ See *Hawaii State Data Book 2007*, Table 7.31.

⁸ Visitor expenditures cover direct spending by visitors staying overnight or longer, plus any non-overnight inter-island trips reported by these visitors.

⁹ See *Hawaii State Data Book 2007*, Table 7.32.

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to the Hawaii economy. One can argue about the exact share. Using different techniques to calculate the multipliers or the ultimate shares can cause the estimates to vary, but the bottom line is that without the industry Hawaii's economy would essentially dry up. Anyone who argues with that point is teetering on a very thin line.

Local Tax Impacts

A major way in which the visitor industry affects the Hawaii economy is through tax revenues and fees. For example, much infrastructure has been a result of tourism visitor plant development, including sewers, schools, water, roads, airports, and harbors. So some calculations in that regard also shed light on tourism's importance. A weak tourism sector obviously means less that can be spent on public programs of any kind, and that affects the standard of living and life style of all Hawaii residents directly.

Estimated State taxes attributed to the visitor industry directly in 2007 amounted to \$1.2 billion, or over 25% of the \$4.7 billion in General Fund tax revenues in 2007.¹⁰ To put that total of \$1.2 billion in perspective relative to various individual components of the General Fund, it was almost half of the total General Excise Taxes collected and three fourths of individual income taxes collected in the subject year.

We also cannot neglect the fact that the tourism crisis in which Hawaii now finds itself is having an extremely serious impact on tax revenues. An example from the Council on Revenues of the State of Hawaii illustrates this. The Council does not forecast the General Fund directly. Rather, its

members project several major economic variables that affect taxes. The Council's consensus forecasts of these independent variables serve as inputs to an econometric model maintained by Tax Research and Planning in the Department of Taxation. It is that model that forecasts the General Fund, so the values of coefficients in the model provide quantitative information about tourism's economic impact on taxes.

The January 2009 estimate of the *elasticity* of state visitor arrivals on the General Fund — that is, the percentage by which the General Fund will change for a one percent change in visitor arrivals — is 0.23. That amounts to a \$10.43 million impact on the General Fund.¹¹ Thus, in 2008, when total state visitor arrivals fell by 10.8%, there was an estimated 2.5% decline in the General Fund, or \$112.64 million.

But that is not the total impact on the General Fund. The estimated elasticity in the above paragraph is when *all else is held constant*. And of course, in the real world, all else is never held constant. For example, a decline in visitor arrivals will cause Hawaii total personal income to fall, and personal income is another important variable in the tax forecasting model. So consider the numbers above as *very conservative* estimates of the tax effects of the 2008 drop in visitor arrivals.

To put the \$112.64 million number in perspective, however, it is over half of the total Transient Accommodation Tax (TAT) collected in 2008, and about 12% of total government contracts awarded last year. If that estimated figure is subjected in the income multiplier derived in Appendix I of this document, it becomes \$169.0 million. This, in turn, was almost 18% of total 2008 government contracts awarded and 75% of the total TAT collected.

Thus, when one thinks of what could have been done with the money, the sum is quite significant. This fact should not escape the attention of policymakers in these times of growing State budget deficits, who must make decisions on how to best allocate increasingly scarce public funds to make the economy better. And, note once again that we have concentrated in this section only on one particular tax fund, and the calculated effects have been partial even for that.

Other Economic Benefits

The presence of the local tourism industry bestows other benefits on Hawaii that often escape attention. Consider airlift, for example. As a consequence of having a dominant tourism industry, Honolulu residents have considerably more access to air transportation than is the case for a city of a similar size that is not oriented toward a visitor industry.

Examples illustrate this clearly. If one divides available air seats by population for four cities — Tucson, Arizona, Tulsa Oklahoma, Fresno California, and Honolulu — by the population of those cities, the ratios depicted in Chart 2 (below right) apply. Tucson, Tulsa, and Fresno were chosen because those cities are not very dependent on tourism. (International origins and destinations were excluded in computing these ratios, so as not to bias results in favor of Honolulu.)

It is quite obvious that Honolulu has far more seats relative to population than the chosen non-tourist cities. Similar ratios were obtained when calculated from departures and onboard passenger numbers relative to population. This advantage is all the more valuable when one considers the relative isolation of Honolulu.

¹⁰ Hawaii Travel and Tourism Account and Table C-2, *Quarterly Statistical & Economic Report*, Department of Business, Economic Development, & Tourism, State of Hawaii.

¹¹ These estimates are presented in Council on Revenues, *Forecast of General Fund Tax Revenues, FY 2009 to FY 2015*, January 9, 2009, page 9.

VI. A Longer Term Tourism Forecast for Hawaii

The present outlook for Hawaii tourism is not optimistic. The State's own forecast for 2009 visitor arrivals is a 5.9% decline. (Using the tax revenue numbers in the preceding section, that means another \$61.53 million decline in General Fund tax revenues related to that figure *alone*.)

Anyone who claims to know with any certainty how Hawaii tourism will fare in 2010 and 2011 should immediately be suspect. But it is rather clear that tourism will be dependent to a much greater extent than usual on how quickly the national economy recovers from its worst recession since the Great Depression of the 1930s. In the current environment, tourism forecasters need to counterbalance two opposing forces. The first is the negative wealth effect and extremely weak consumer confidence that accompanies the very ill economy. The second is heavy price discounting in the Hawaii tourism industry itself, along with lower airfares that are related to cheaper energy prices that are themselves a result of that recession.

Economists often speak of the three "D's" when measuring the seriousness of a recession. These are depth, duration,

and dispersion across sectors of the economy. The current recession is unprecedented in modern times with respect to all three. So it is wise to weigh that force more heavily than the fact that a Hawaii vacation is cheaper than in years. Thus, while there may be some recovery in the Hawaii visitor industry in 2010, the increase in arrivals will likely remain almost flat, in the very low single digits at best, for 2010. We can hope for better performance by 2011, but the increase in arrivals may still remain in the low single digits. A reasonable scenario for visitor arrival growth at present might be -6.0%, 1.0%, and 3.0% for the years 2009, 2010, and 2011, respectively.

We can always hope for better outcomes, but much of this will depend on whether we get any good news coming out of the national and global economies. We should bear in mind that long distance travel to a place like Hawaii will not likely be among the first things to recover when the economy does start to grow again. We can pin some hopes on new markets such as Korea and perhaps China, but those markets will remain small enough that they cannot provide a major boost in the near term. (The signing of a mid-2008 U.S. - China agreement raised hopes, but there are several stumbling blocks to getting more Chinese visitors

to Hawaii, including a lack of nonstop flights and visa hurdles.)

This somber outlook is all the more reason to do everything possible to help the local visitor industry in its time of crisis.

VII. Conclusion

Various things should be clear from this paper. Foremost, the tourism industry has an overwhelming economic importance for Hawaii. That is true even if the empirical evidence presented here overstates the case, even though determined efforts were made to choose conservative estimates.

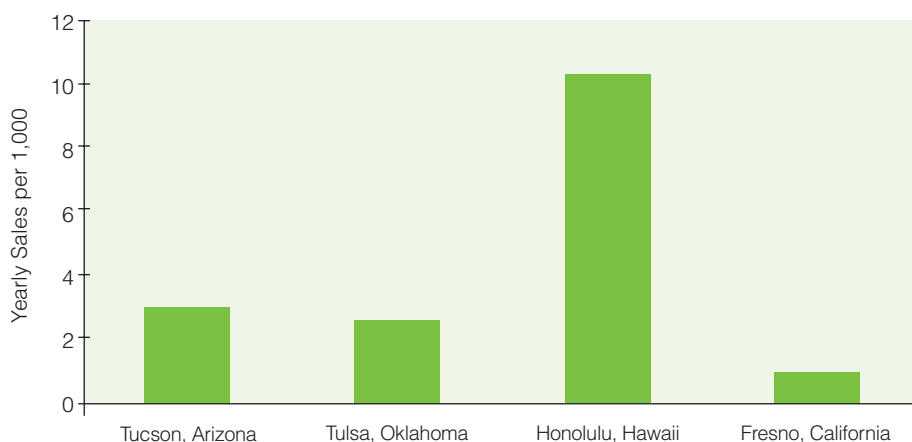
Despite this, the local tourism industry is underappreciated by many who should know better. More than that, the industry is now challenged as never before. It is imperative that this fact be recognized, and that all possible actions be taken to remedy that situation. If that does not happen, or until it does, the Hawaii economy will remain anemic. Employment in all sectors will be down, as will tax revenues, business profits, and overall economic well being.

It has not been the purpose of this document to recommend marketing strategies or new tourism products. Some have suggested recently that a new frugality has become a permanent fixture of American consumerism. That would point to repositioning Hawaii as more of a budget destination, away from the upscale image that many have tried to cultivate here over the years.

Another perennial suggestion that keeps coming back from time to time is the introduction of casino gambling. It is the opinion of this paper that the temptation to introduce gaming to Hawaii be resisted. Regardless of opinions on the social costs, the comparative advantage principle can be invoked once again. Other places that did not have such an advantage have been disappointed when they adopted gambling, and even places that do have that advantage — like Las Vegas — are suffering in today's

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CHART 2* • SEATS (LTM ENDING NOV-08) PER MSA POPULATION



* Ratios were calculated as seats (for the 12 months ending in November 2008) per 1,000 inhabitants (in July 2007) from U.S. Department of Transportation data. (The author would like to thank Frederic Proute, Senior Director - Financial Analysis, Hawaiian Airlines, for this data.)

Conclusion

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economy. Gambling usually works better in places that are large enough to absorb its potential unsavory effects, or that are so poor that they have no better economic alternatives. Hawaii is not that large, nor is it that poor.¹²

Specific marketing strategies can be brainstormed by the experts in that area. But several things seem obvious regardless of what these might be. Reducing public funding for tourism marketing will be unthinkable for the next several years, regardless of the search for ways to find money during these hard times. That is because tourism marketing is an investment in jobs, future tax revenues, and economic well being for everyone in the state. With fewer people traveling in these times, it is essential to attract a larger share of them to Hawaii. Investing in tourism is the fastest road to economic recovery for Hawaii — perhaps the only one.

Now also is the time to upgrade parks, infrastructure, harbors, marine facilities, roads, trails, and other public places. In this regard, the State's recently proposed five-year plan for the Department of Land and Natural Resources is a good investment. Temporary closure of some parks for renovation and admission fees for others makes economic sense.

In general, a renewed focus on Hawaii's core business is necessary. Without that focus, it will not be strategically positioned for long term growth. Long term growth is critical for the economic well being of everyone who lives and works in Hawaii. That will take cooperation among all stakeholders — businesses, government, unions, and community leaders among them. Without such cooperation, the entire economy may founder in this time of crisis that is not likely to blow over quickly.

¹² The author has not changed his mind on this over the years. See Leroy O. Laney and David McClain, "Should Hawaii Roll the Dice on Gambling?", *Price of Paradise*, Volume II, pp 101-107.

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APPENDIX I.

An Induced Income Multiplier for the Hawaii Economy

Most people, even those who have never had any formal exposure to economics, understand the principle that any injection into an economy does not stop at the injection point. There are further ripple effects throughout the economy. If one dollar is spent on something, the person who receives that dollar will spend a portion of it on something else, and then a portion of that portion will be spent, and so on. Thus, the total economic contribution of the original injection can be much larger than the initial outlay. There is a "multiplier" effect.*

This multiplier can be applied to any expenditure to measure its total impact on the economy. Note that after the first round, it makes no difference what the original injection is — that is, what the wages are in that industry and the like. After that, the money is circulating in the general economy and it is only economy-wide averages that count.

The problem comes in calculating an accurate value for the multiplier. This value is sometimes subject to manipulation. Those wishing to convince others that a certain undertaking will have a big impact want to see a big multiplier; those who do not favor the project might lean toward a smaller one.

* This effect was originally pointed out by John Maynard Keynes in his seminal book, *The General Theory of Employment, Interest, and Money*, published in 1936. This was during the Great Depression, and multipliers would likely have been larger in a situation like that than when the economy is closer to full employment. But Hawaii's economy today certainly is not at full employment.

Essentially, the value of the multiplier depends upon “leakages” from the income stream at each stage of the re-spending process. The greater these leakages are, the quicker the subsequent spending will be attenuated and the smaller the multiplier will be. The smaller the leakages are, the more potent the multiplier is. There are three such leakages that are usually considered — savings, taxes, and imports. For example, if Hawaii visitors inject \$10 billion annually into the state economy, the recipients of that money will not spend all of that. They will *save* some of it, be required to pay some of it in taxes, and part of what they do spend will be on items that come from outside Hawaii — thus it will leak out of the local spending stream that way.

So, the higher tax rates are, the greater the propensity to save, and the greater the tendency to buy imports is, the smaller the multiplier will be. Naive multiplier calculations often consider only the propensity to save, because that is how it is usually presented in an economics principles text — and this is one reason multipliers are sometimes overstated. But if people save nothing, if tax rates are zero, and if they only buy things produced locally, the multiplier is unbounded. That obviously does not happen.

Without deriving it, a simple formula for an “open economy” multiplier is —

$$1 / [1 - (c - m)(1 - t)]$$

where **c** represents the marginal propensity to consume out of one dollar of income, **m** represents the economy’s marginal propensity to import, and **t** is the marginal tax rate. For example, if people generally

consume 90% of their income, the marginal tax rate is 30%, and 15% of goods consumed are imported, then the multiplier becomes

$$1/[1 - (.90 - .15)(1 - .30)] = 2.1$$

A number of that magnitude is about what most people have in mind when they think of a multiplier, often even larger. (If only the marginal propensity to consume **c** is considered, the multiplier formula would be only $1/[1 - c]$ and it would equal 10 — far too high.) So if that 2.1 number were applied to the \$10 billion above, the total tourism impact on the economy would be \$21.0 billion.

Yet the assumed numbers above might not be appropriate for an economy like Hawaii. Better estimations of numbers that are more appropriate for Hawaii can be had by resorting to actual data on the economy. It might be reasonable to assume the marginal propensity to consume is still .90, but tax brackets and the marginal propensity to import would likely be higher for Hawaii. A tax rate of .35 is more reasonable, as is a propensity to buy imports of .40. (Ultimately, practically everything we consume in Hawaii comes from outside the islands. But if something is built here, cooked here, or otherwise creates local jobs, it is fair to consider it a domestic item for the purposes of this analysis. And local services, which are an important part of any budget, must come from here.)

So that yields,

$$1/[1 - (.90 - .40)(1 - .35)] = 1.5$$

While this multiplier is lower than many might have in mind when they think about it conceptually, it is more defensible from the standpoint of realism. This is the number used for the multiplier in the text. The multiplier could, of course, be higher — but it is in the interest of conservatism that this lower estimate is chosen. Although it is lower than what many would assume, it still means that the ultimate impact of any injection is 50% greater than its direct contribution.

(Some recent trends in the Hawaii economy would tend to lower the actual value of the multiplier as compared to the past. One is the tendency to import more over time as the world economy — not just Hawaii’s — becomes more global. In addition, the tax burden has risen over time.** Plus, when the economy is close to capacity, there is less room for the multiplier to have its full effect. Obviously, if we took every economic activity in the state now and subjected it to a multiplier, we would get a sum far greater than the State Gross Domestic Product. But that Gross Domestic Product is supposed to include many indirect multiplier effects. In times of recession or slack economic activity, however, incorporation of the multiplier effect is far more plausible.)

** Earlier and larger regional multipliers for the Hawaii economy may have been more realistic than they are today. One used in a past study on the sugar industry by First Hawaiian Bank was 1.72. See Thomas K. Hitch, *How the Collapse of the Sugar Industry Would Impact the Hawaii Economy*, monograph circulated by First Hawaiian Bank, 1987.

APPENDIX II.

A Jobs Multiplier for the Hawaii Tourism Industry

The derivation of an appropriate jobs multiplier here follows the methodology of Hitch.* While the estimates used in deriving this multiplier might vary some across industries, and may also have changed in minor ways since the time of the original study from which it is taken, there is little reason to believe that the results would be changed a major way. Hitch divides jobs created by an industry in Hawaii into three levels:

- (1) The direct jobs are those in the industry itself.
- (2) First round indirect jobs are those that are created by those who service the industry, such as local suppliers of construction, grounds keeping and other maintenance, transportation, communications, food, legal, etc. These suppliers may service others besides the tourism industry, but at least a large part of their job is owed to tourism.
- (3) Indirect multiplier jobs that are created. For example, when employees in categories (1) and (2) are paid, they spend most of their paycheck in the local economy. Those who supply those general goods and services therefore also benefit from the tourism industry. The multiplier in this category corresponds to the overall regional multiplier derived in Appendix I.

Let us assume that 40% of the money disbursed by a tourism activity goes to the direct creation of jobs. (This might vary by organization, but it is typical of a major hotel chain.) Of the remaining 60%, let us also assume, following Hitch, that about half becomes income to residents of Hawaii (firms or individuals) — about 30% of the direct disbursements of the company, with 30% leaking out of state. This means that, if the 30% income which stays within the state creates a commensurate number of jobs, there are close to as many indirect jobs created by the industry as there are direct ones, 75% in fact ($30/40 = .75$).

The third category of indirect multiplier jobs can then be derived by resorting to the overall regional multiplier derived in Appendix I.

To summarize:

Level 1: direct tourism job	1.00
Level 2: indirect tourism job	<u>.75</u>
Sub-total	1.75
Level 3: induced multiplier effect	x <u>1.50</u>
	2.63

Subtracting the 1.00 for direct tourism jobs means that there approximately 1.6 jobs in Hawaii that are created indirectly for every job created directly by the tourism industry.**

* Hitch (*op. cit.*), p.3. This jobs multiplier methodology was originally estimated by the Research Department of First Hawaiian Bank in 1961, and was published in a study entitled *The Impact of Exports on Income in Hawaii*.

** Hitch arrived at a number of 2.29 instead of 1.63, but that was because he used an induced income multiplier of 1.72 instead of 1.50 and made slightly different assumptions about indirect jobs. As explained in Appendix I, today the income multiplier might be smaller than it was in earlier years, thus a more conservative number is adopted here.