
APPENDIX B

**THE ECONOMIC IMPACTS
OF KAHULUI AIRPORT,
2010**

THE ECONOMIC IMPACTS OF KAHULUI AIRPORT, 2010

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EXECUTIVE SUMMARY

As part of the Master Plan Update for Kahului Airport, Martin Associates developed a baseline economic analysis of the airport operations in 2010. The purpose of the study is to quantify the economic impacts generated by passenger, freight, and general aviation activity at Kahului Airport for the most recent year complete operational data is available, 2010. In order to measure the impacts in the most defensible manner possible, the methodology utilized is based on interviews, local economic data, and airport statistics. The impacts are quantified in terms of:

- Jobs;
- Employee earnings;
- Business revenue; and
- State and local taxes and Federal airport-specific taxes.

The impacts are estimated for total airport activity for calendar year 2010. In addition to the baseline impacts, an economic impact model has been developed which can be used to estimate the impacts associated with capital construction and expansion projects identified in the Kahului Master Plan. Furthermore, the model can be used for annual updates of the impacts as well as to test the sensitivity of impacts to changes in:

- Passenger levels;
- Domestic versus international passengers;
- Passenger trip purpose;
- Peak hour flight levels and mix of aircraft;
- Labor productivity and work rules; and
- Freight levels.

The methodology used in this analysis has been used by Martin Associates to estimate the economic impacts generated by airport activity for the following airports:

- Hartsfield Atlanta International Airport
- Miami International Airport
- Denver's Stapleton International Airport
- San Francisco International Airport
- Portland (PDX) International Airport
- Minneapolis/St. Paul International Airport
- Milwaukee's General Mitchell International Airport
- Seattle-Tacoma International Airport
- Toronto's Lester B. Pearson International Airport

- Washington Dulles International and Reagan National Airports
- San Jose International Airport
- Sacramento International Airport
- Oakland International Airport
- Bellingham (WA) International Airport
- Harrisburg International Airport
- General Aviation and Commuter Airports in:
 - Harrisburg, PA
 - Lancaster, PA
 - Carlisle, PA
 - Milwaukee, WI
 - San Jose, CA
 - Hillsboro, OR
 - Troutdale, OR
 - Mulino, OR
 - 34 GA Airports in the State of Maryland

1. IMPACTS CREATED BY OGG ACTIVITY IN 2011

In 2010, passenger and air freight activity at Kahului Airport had the following impacts:

- 2,682 direct, induced and indirect jobs were generated for residents of Maui and the state of Hawaii. Of the 2,682, jobs 1,824 were direct jobs, while 635 jobs were induced throughout the region to support the purchase of goods and services by the 1,824 directly dependent employees. An additional 222 indirect jobs were generated in the local economy due to \$34.5 million of local purchases by firms directly dependent on the airport.
- \$132.3 million of direct, induced and indirect personal income and consumption expenditures were generated in Maui as a result of the airport activity in 2011.
- Nearly \$1.1 billion of business sales were generated by airport activity, including \$21.1 million of business revenue generated by air cargo activity.
- The Federal Government received \$82.0 million in airport-specific taxes from activity at Kahului Airport.
- State and local governments received \$12.7 million in tax revenues from airport activity.

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In addition to these airport-generated impacts, it is estimated that 44,025 direct, induced and indirect jobs were supported in the Maui visitor industry due to expenditures by the 2.1 million visitors to the region who arrived via the Kahului Airport. These visitors, who include both domestic as well as international travelers, spent about \$2.8 billion on island hotels, restaurants, retail stores and entertainment establishments, which in turn generated the jobs in the Maui visitor industry. As the result of visitors arriving via the airport, \$119.3 million of state and local tax revenues were generated.

With a combined economic impact of nearly 47,000 direct, induced and indirect jobs, it is critical to maintain and invest in the airport infrastructure in order to sustain and grow the economic conditions within Maui.

I. INTRODUCTION, OVERVIEW AND SUMMARY OF RESULTS

As part of the Master Plan Update for Kahului Airport, Martin Associates developed a baseline economic analysis of the airport operations in 2010. The purpose of the study is to quantify the economic impacts generated by passenger, freight, and general aviation activity at Kahului Airport for the most recent year complete operational data is available, 2010. The economic impacts created by the airport are measured in terms of jobs, personal income, state and local taxes, and revenue generated directly by airport activity, including the impact of visitors to Maui who use Kahului Airport.

The methodology used in this analysis has been used to assess the economic impacts created by airport activity at Hartsfield Atlanta International Airport, San Francisco International Airport, Seattle-Tacoma International Airport, Miami International Airport, Milwaukee's General Mitchell International Airport, Minneapolis/St. Paul International Airport, Washington, DC's Reagan National and Dulles International Airports, Oakland International Airport, Baltimore-Washington International Airport, Portland International Airport, San Jose International Airport and Sacramento International Airport.

In order to measure the impacts in the most defensible manner possible, the methodology utilized is based on interviews, local economic data, and airport statistics. An operational model of the airport was also developed to use in updating the impacts on a short term basis, and to measure the incremental changes in airport generated impacts due to changes in such factors as changes in total passenger and air freight levels, changes in the number of flight operations, changes in domestic and international passenger levels, and changes in work rules by airlines. Also, the model is designed to measure the economic impacts of various capital investment and airport expansion projects associated with the current Kahului Master Plan Study.

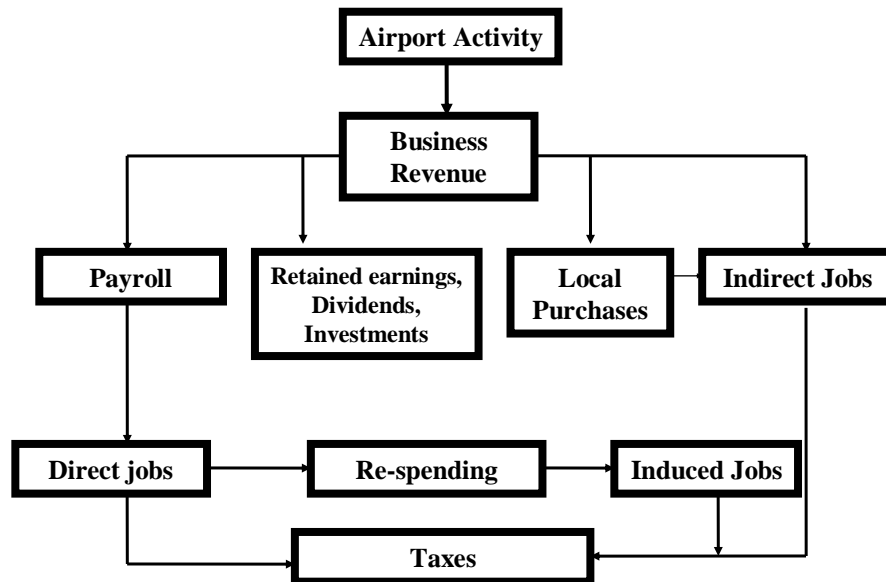
The remainder of this chapter summarizes the methodology, highlights key assumptions, and summarizes the major findings.

1. IMPACT STRUCTURE

Activity at a major airport contributes to the local and state economy by generating business revenue to local and national firms providing air passenger service, freight service and support services to the airport and the airlines. These firms, in turn, provide employment and income to individuals, and pay taxes to state and local governments. Exhibit I-1 shows how air traffic activity at Kahului Airport generates

impacts throughout the local and state economy. As this exhibit indicates, the impact of an airport on a local, state or national economy cannot be reduced to a single number, but instead, airport activity creates several impacts. These are the revenue impact, employment impact, personal income impact, and tax impact. These impacts are not additive. For example, the income impact is a part of the revenue impact, and adding these impacts together would result in double counting. Exhibit I-1 shows how activity at Kahului Airport generates the four impacts.

Exhibit I-1
Flow of Economic Impacts Generated by
Airport Activity
**FLOW OF ECONOMIC
IMPACTS**



1.1 Revenue Impact

At the outset, activity at the airport generates business revenue for firms which provide air passenger service, freight service and ground support services. This business revenue impact is dispersed throughout the economy in several ways. It is used to hire people to provide the services, to purchase goods and services, to pay for the use of airports and to make federal, state and local tax payments. The remainder is used to pay stockholders, retire debt, make investments, or is held as retained earnings. It is to be emphasized that the only portions of the revenue impact that can be definitely identified as remaining in Maui or the State of Hawaii are those portions paid out in salaries to

direct employees, in state and local taxes, and in payments to the airport itself. Landing fees and terminal rentals paid by airlines provide for some of the costs of operation of the airport and capital costs of new construction.

1.2 Employment Impact

The employment impact of aviation activity consists of three levels of job impacts:

- Direct employment impact - jobs directly generated by airport activity which would vanish if activity at Kahului Airport were to cease;
- Induced employment impact - jobs created throughout Maui and the State's economy because individuals directly employed due to airport activity spend their wages locally on goods and services such as food and housing;
- Indirect employment impact - jobs generated due to the purchase of goods and services by firms dependent upon airport activity;

1.3 Income Impact

The income impact is the measure of personal income received by individuals directly employed due to airport activity. This direct personal income is re-spent throughout Maui by those that are directly employed. This re-spending effect in turn generates additional jobs -- the induced employment impact. This re-spending throughout the island and state is estimated using a regional personal income multiplier, which reflects the percentage of purchases that are made within a region. The re-spending effect varies by region: a larger re-spending effect occurs in regions that produce a relatively large portion of the goods and services consumed by residents, while lower re-spending effects are associated with areas that import a relatively large share of consumer goods and services (since personal income "leaks out" of the region for these purchases). For the purposes of this study, the State of Hawaii is defined as the region.

1.4 Tax Impact

State and local tax impacts are tax payments to the state and local governments by both firms and individuals involved in providing services in support of airport activity. State and local tax impacts include tax revenue from all types of state and local taxes. Also included in the tax impact are Federal aviation-specific taxes generated by air passenger and air cargo activity at the Airport. The four types of impacts outlined above are estimated for 2010 passenger and air cargo activity at Kahului Airport (OGG).

2. ECONOMIC IMPACT SECTORS

An airport is a diverse economic system. The businesses that have employees at OGG cover a spectrum of trade and service sectors. For the purposes of this study, the airport system is divided into four sectors:

- Airline/airport service;
- Freight transportation;
- Passenger ground transportation; and
- Visitor industry services.

Each of these sectors covers a variety of activities. A discussion of these four categories is provided below, with a description of the major participants in each.

2.1 Airline/Airport Service Sector

Airline/airport service sector consists of airlines providing passenger services, general aviation, and firms providing support services to the airlines, passengers, and to the airport. This group consists of the following participants:

- Passenger Airlines;
- General Aviation, (i.e., corporate hangars and business aircraft, not-for-profit aviation services, flying clubs, etc.);
- Airport Administration;
- Catering Firms;
- Janitorial Firms;
- Sky Caps;
- Security Firms;
- Aviation Service Firms (including fixed base operators);

- Airport Retail Tenants (i.e., newsstands, retail shops, and food concessions);
- Federal Government Agencies (i.e., F.A.A., Post Office, and US Customs and Border Protection, TSA);
- Military Bases, including the Air National Guard; and
- Parking and Miscellaneous.

Jobs in this category are typically located on the airport property.

2.2 Freight Transportation Sector

Freight transportation includes freight airlines, freight forwarders, and trucking firms involved in transporting air freight. The air cargo consists of air freight and mail transported on dedicated freight airlines and in the cargo section of passenger airlines. Included in this group are air couriers, freight forwarders, and common carrier trucking firms located throughout Maui. Jobs in this category are located both on and off the airport.

2.3 Passenger Ground Transportation Sector

Passenger ground transportation consists of car rental firms and other ground transportation modes, such as buses, taxis and limousines. This group covers all transportation of individuals to and from Kahului Airport and includes both drivers and supporting reservation and maintenance employees.

2.4 Visitor Industry Services Sector

Both domestic and international passengers arrive in Maui via the Kahului Airport for several purposes, including business, pleasure and conventions. As a result of these out-of-town residents purchasing lodging, food and entertainment, jobs are created in the service and retail industries in Maui. To evaluate the impacts of visitors arriving via air in Maui, the data supplied by the Hawaii Tourism Authority for air passengers in Maui were used to develop expenditure data by air visitors.

3. DATA COLLECTION

Impacts were estimated on the basis of interviews with firms in the economic impact categories described above. Data from 59 firms were included in the analysis. Exhibit I-2 shows the number of firms by type of firm. It is to be emphasized that multiple interviews were conducted with most firms. These firms were identified from

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the tenant records of Kahului Airport. A 100% a response rate was achieved from these firms.

Exhibit I-2
Summary of Interview Responses

Firms	
Airlines	13
Rental Cars	6
Concessions	17
Government	9
FBOs	14
Total	59

4. SUMMARY OF FINDINGS

The key economic impacts generated by the Kahului Airport are presented in Exhibit I-3. It is to be emphasized that these measures separate and distinct economic impacts generated by airport activity at Kahului and are not additive.

Exhibit I-3
Summary of Impacts Generated by the
Kahului Airport, 2010

IMPACTS	AIRPORT GENERATED	VISITOR INDUSTRY	TOTAL IMPACT
JOBS			
DIRECT	1,824	27,020	28,844
INDUCED	635	8,186	8,821
INDIRECT	<u>222</u>	<u>8,819</u>	<u>9,042</u>
TOTAL	2,682	44,025	46,706
PERSONAL INCOME (MILLIONS)			
DIRECT	\$64.9	\$712.3	\$777.2
INDUCED	\$58.9	\$530.6	\$589.5
INDIRECT	<u>\$8.5</u>	<u>\$257.9</u>	<u>\$266.4</u>
TOTAL	\$132.3	\$1,500.8	\$1,633.1
BUSINESS REVENUE (MILLIONS)	\$1,107.2	\$2,750.1	\$3,857.2
LOCAL PURCHASES (MILLIONS)	\$34.5	\$464.2	\$498.7
STATE AND LOCAL TAXES (MILLIONS)	\$12.7	\$119.3	\$132.0
FEDERAL GOVERNMENT AVIATION - SPECIFIC TAXES (MILLIONS)	\$82.0	NA	\$82.0

II. EMPLOYMENT IMPACTS

In this chapter, the employment generated by air cargo and passenger activity at Kahului Airport is estimated. The chapter is organized as follows:

- First, employment that is totally or partially dependent on the activities at Kahului Airport is estimated;
- Second, the subset of total employment that is judged to be totally dependent on airport activity is discussed; and
- Induced and indirect jobs are described.

1. TOTAL JOB IMPACTS

As a result of airport activity in 2011, 46,706 Maui residents held jobs that were in some way related to activity at the Kahului Airport. Of these residents:

- 1,824 direct jobs are dependent upon activity at Kahului Airport. These jobs would be discontinued immediately if airport activity ceased. Also, these jobs would be impacted as a result of changes in number of flights and passenger levels.
- 635 induced jobs are created in the region due to the purchases of goods and services within the region by those 1,824 directly dependent upon activity at Kahului Airport.
- 222 indirect jobs are generated in the local economy due to the \$34.5 million of local purchases for office supplies, maintenance and repair work, communications and utilities, professional services, fuel, etc., by those firms completely dependent upon the airport.
- 44,025 visitor industry jobs are created in the region as a result of visitors arriving via Kahului Airport. Of these, 27,020 jobs are created with hotels, restaurants, retail outlets, entertainment and recreational establishments due to direct expenditures by visitors in Maui who have arrived via the airport. In addition, 8,186 induced jobs are supported by the regional purchases of the 27,020 individuals holding jobs directly created due to expenditures by visitors using OGG. Finally, another 8,819

jobs are indirect jobs supported by \$464.2 million of local purchases by the hotels, restaurants and other visitor industry firms impacted by the visitors arriving via OGG.

Chapter IV presents a more detailed discussion of the job impacts created due to visitor expenditures.

2. DIRECT JOB IMPACTS

As Exhibit II-1 shows, 65% of the 1,824 jobs directly generated by airport activity are concentrated in the airline/airport service category. The number of jobs in the other two categories is small in comparison.

Exhibit II-1
Direct Job Impacts by Sector
Kahului Airport

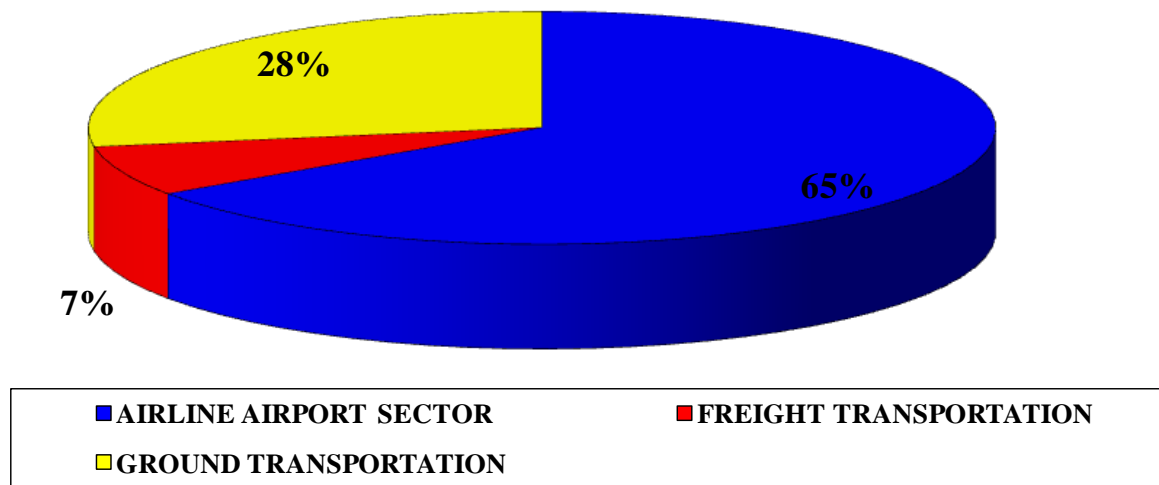


Exhibit II-2 shows the distribution of employment within each major sector. More than 612 jobs with passenger airlines are concentrated in the first category. The jobs include flight crews, administration, ticket agents, ramp employees, and maintenance workers.

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Exhibit II-2
Direct Job Impacts by Category

IMPACT CATEGORY	DIRECT JOBS
AIRLINE/AIRPORT SECTOR	
PASSENGER AIRLINES	612
CATERING (NON AIRLINE-OWNED)	55
FEDERAL GOVERNMENT	240
OGG AIRPORT ADMINISTRATION	56
RETAIL CONCESSIONS	103
FIXED BASE OPERATORS/GA	<u>126</u>
SUBTOTAL	1,192
FREIGHT TRANSPORTATION SECTOR	
FREIGHT AIRLINES & COURIERS	112
FREIGHT FORWARDERS	<u>15</u>
SUBTOTAL	127
GROUND TRANSPORTATION	
RENTAL CARS	290
TAXIS/LIMOS/VANS	<u>214</u>
SUBTOTAL	504
TOTAL	1,824

Totals may not add due to rounding

4. INDUCED JOB IMPACT

A portion of the income received by those 1,824 directly employed due to airport activity is saved, another portion is used to pay federal, state and local taxes, while another portion is used to purchase goods and services from firms located in Maui and the State, as well as out-of-region firms. The purchase of goods and services from Maui firms creates induced jobs for area residents in the firms supplying the goods and services. Furthermore, those individuals supplying the goods and services also receive income from their employers and use a portion of it for additional purchases from firms located in the area. This "trickle-down" effect of an initial income expenditure results in a multiplier effect throughout Maui and the State of Hawaii known as the personal income multiplier. As a result of this re-spending, 635 additional jobs in other sectors of

the regional economy are supported. These jobs are with state and local government agencies (excluding those state and local government jobs included as direct impacts), financial/business and educational services, retail, housing/construction, transportation services (including service stations, auto parts suppliers, automobile dealers, body shops, etc.), entertainment/recreational services, apparel and healthcare services.

5. INDIRECT IMPACTS

In addition to these induced jobs created due to purchases by the 1,824 individuals directly employed due to activity at Kahului Airport, additional jobs in Maui and State economies will be created indirectly due to the purchase of goods and services by the firms involved in airport activity. For example, airlines purchase such items as fuel, catering services, parts and office supplies from local firms, thereby creating jobs in these supplying industries. Similarly, the airport itself purchases such services as contract construction, utilities, and maintenance services from local suppliers, also creating jobs in the local economy. For the most part, the jobs resulting from such purchases are included in the direct job impacts (see Exhibit II-2). For example, the 55 jobs with caterers, the 126 jobs with suppliers of aircraft services, (including fixed based operators, fuel handlers, and parts suppliers), and the 504 jobs with rental car companies and cab operators are all included as direct job impacts. In some studies, impacts in these supplying industries are included as indirect jobs and measured through the use of a regional input/output model. For the purposes of this study, a more detailed assessment of jobs in the supplying industries was more appropriate since many are located on the airport facility and these impacts are considered as direct job impacts.

In addition to these purchases, another \$34.5 million of local purchases were made by the firms' dependent upon the airport. These local purchases include purchases for goods, maintenance and repair services, utilities and communications, transportation and fueling. The \$34.5 million of local purchases supported the 222 indirect jobs.

III. REVENUE, INCOME AND TAX IMPACTS

The movement of passengers and freight via Kahului Airport generates revenue for firms in each of the four categories of airport-related activity. For example, in the airline/airport service category, revenue is received by catering firms providing services to the airlines, and by airport tenants who sell retail merchandise to passengers in the airport. In the freight transportation category, airlines receive revenue from moving the air cargo to and from the airport and freight forwarders receive revenue from arranging air transportation for the cargo. Similarly, the rental car agencies and the firms providing ground transportation receive revenue from transporting passengers to and from the airport, while contract construction and consulting firms receive revenue from the airport and airlines that have contracted these services. In the hotel/restaurant/visitors service category, local service and retail firms receive revenue from passengers staying overnight in the Maui area.

Revenue generated by airport activity is dispersed throughout the economy in several ways. For example, gross revenue is used to pay employee salaries and the whole range of taxes, it is distributed to stockholders, and it is used for purchases of goods and services (as described in the discussion of indirect job impacts in the last chapter). Only part of this revenue can be traced geographically with any degree of accuracy, the portion of the revenue paid out in salaries and state and local taxes. These impacts are addressed in separate sections of this chapter.

1. REVENUE IMPACT

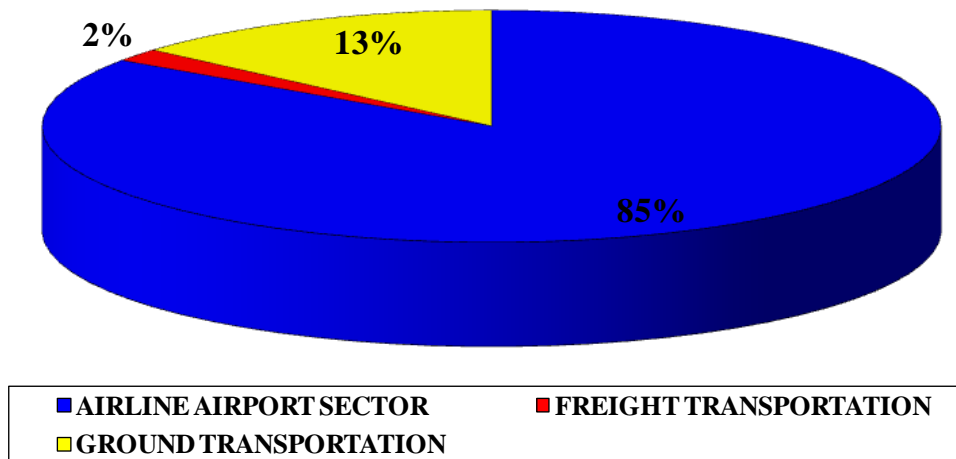
It is useful to estimate the revenue received by each category of firms involved with airport activity because the distribution is quite different from that of employment. However, only a portion of the revenue can be definitely traced to uses within the Maui regional economy. The portion of revenue paid in salaries and re-spent within the Maui regional economy or paid in taxes by individuals, and state and local taxes paid by firms, represents an impact that can be traced as remaining in the regional economy. In addition, airline user fees paid to the airport represent local impacts.

As explained in Chapter II in relation to the indirect job impact, it is unlikely that a large portion of a firm's expenditures on goods and services takes place within the Maui economy. Although to the extent that local products and services are purchased, this represents an additional impact. For example, the majority of air carrier purchases of major equipment are made out of the region. Thus, there is little spin-off effect and the use of an expenditure multiplier would overstate the revenue impact.

1.1 Revenue Impact by Sector

In 2010, passenger and air freight activity generated \$1.1 billion of business revenue to firms providing services at the airport. Exhibit III-1 indicates the distribution, by economic impact sector, of the \$1.1 billion of revenue generated by airport activity at Kahului Airport.

Exhibit III-1
Distribution of Revenue
by Sector



As with the employment impact, the majority of revenue generated by airport activity is concentrated in the airline/airport service category.

2. PERSONAL WAGE AND SALARY IMPACTS

A total of \$132.3 million of direct, induced and indirect wages and salaries were generated in the Maui area as a result of airport activity in 2010. Of this total wage and salary impact, \$64.9 million was paid in wages and salaries to the 1,824 direct employees. This income impact is estimated based on the average wage and salaries for each job category multiplied by the corresponding job impact in that category. In addition, \$58.9 million of induced income and local consumption expenditures and \$8.5 million of indirect income was generated by activity at OGG in 2010.

The spending of the \$64.9 million direct personal income within Maui creates the additional employment estimated as induced jobs in Chapter II, which results in an additional \$58.9 million of personal income and local consumption purchases. Re-spending of income within a region is measured by a regional income multiplier. The size of the multiplier varies by region depending on the portion of regional goods and services purchased by individuals, the higher this percentage the lower the income leakage out of the region. Based on data provided by the Bureau of Economic Analysis, for every one dollar earned by individuals in the State of Hawaii, another \$0.91 is spent in the region. It is to be emphasized that this re-spending effect measures the total re-spending impact in Maui and the State of Hawaii. The induced jobs, which are generated by this re-spending of the direct income, only include jobs generated at the retail and wholesale level due to consumer purchases, since it is assumed that these jobs will most likely occur in Maui. In addition to these induced retail and wholesale jobs, there are also additional induced and indirect jobs created to support purchases by those induced jobs in the wholesale and retail sectors, i.e., a second round of induced and indirect jobs. These second level induced and indirect jobs are not estimated, since it is not possible to identify with any degree of defensibility the geographic location where these second round induced and indirect jobs are created. Because the total number of induced and indirect jobs (second, third and fourth levels, etc.) generated by airport activity is not estimated, it is not possible to divide the induced income and local consumption expenditures (\$58.9 million) by the estimated induced jobs to estimate the salary and wage income associated with the estimated induced jobs (635). To do so would result in a gross overestimation of the personal income associated with the induced jobs.

In addition to the induced income, the 222 indirectly employed workers received \$8.5 million of indirect wages and salaries.

3. TAX IMPACTS

Airport activity in 2010 generated government revenue through an assortment of tax payments by airport businesses and employees. The tax impacts are estimated at the state and local government levels. Federal aviation-specific taxes are estimated for passengers boarding flights at Kahului Airport and for air cargo loaded on planes at the airport. The Federal aviation-specific taxes on cargo, departing international passengers, and domestic passengers are paid to the Federal Aviation Trust Fund, which is in turn used to finance airport development throughout the US.

To estimate the state and local tax impact, per income tax burdens were developed for the State of Hawaii by the Tax Foundation. The per income tax burden was multiplied by the direct, induced and indirect wage and salary personal income generated as the result of airport activity in 2010.

Using these state and local tax indices, it is estimated that activity at Kahului Airport generated about \$12.7 million of state and local tax revenues. The State of Hawaii received about \$9.6 million of the tax revenue while local governments received the balance.

Federal aviation-specific taxes were estimated based on the appropriate tax formulas. The domestic passenger tax is based on a 7.5 percent tax on enplaned domestic passenger revenue. The international departure tax is based on \$13.20 per enplaning passenger, while the INS/Customs tax is based on a \$13.00 tax per deplaning passenger. An additional federal flight segment tax of \$3.00 per domestic enplaned passenger and a \$2.50 security fee per enplaned passenger are also included in the aviation specific taxes. The Federal Air Cargo Tax is based on a 6.25 percent tax levy on the value of enplaned air cargo. The average transportation value of air cargo was provided to Martin Associates by air cargo carriers. As a result of the airport activity, \$82.0 million in tax revenue was paid to the Federal Government.

IV. VISITOR INDUSTRY IMPACTS

The impact of visitors on the Maui economy is measured in terms of jobs, income, revenue and taxes created in the hotels, retail establishments, entertainment activities, and transportation service firms.

Individuals visit Maui for a variety of reasons, including business, pleasure and for participation in conventions. Furthermore, both domestic and international visitors use the airport. These visitors purchase hotel rooms, pay for meals and entertainment, and make retail purchases while in Maui. These purchases of goods and services stimulate the local economy, in turn generating jobs with hotels, restaurants, retail outlets, and local entertainment establishments. Those individuals employed in the Maui visitor industry due to visitors' purchases receive income. This income is re-spent in the local economy generating induced jobs in the regional economy.

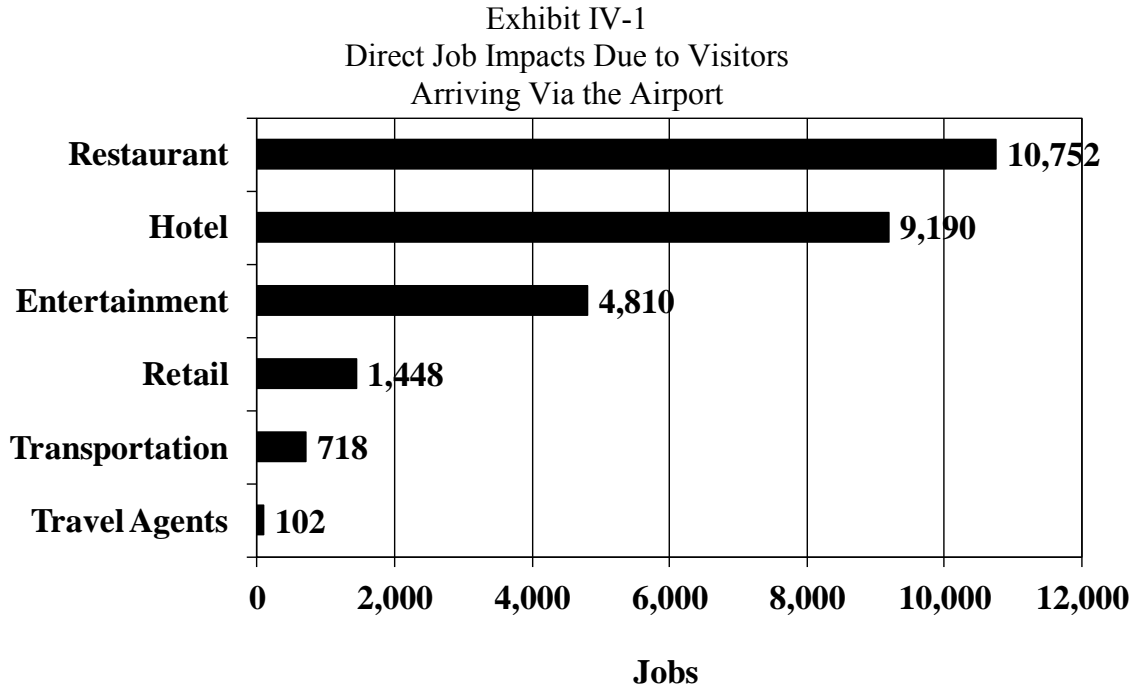
The magnitude of the economic impact generated by visitors using Kahului Airport varies directly with the volume of out-of-town visitors and the length of time the visitors stay on Maui. Also, the impacts depend upon the amount of money spent by visitors on a daily basis, as well as the types of purchases made. The volume of air visitors to the area depends upon the number of origin and destination passengers compared to connecting passengers, as well as the number of out-of town airport users versus the number of local resident users of the airport.

To estimate the economic impact of visitors arriving via Kahului Airport, the results of data collected by the Hawaii Tourism Authority for air visitors to Maui were used to develop passenger characteristics, including area residents versus visitors, as well as expenditure data and length of stay data.

In 2010, 2.7 million passengers boarded commercial aircraft at Kahului Airport. Of the 2.7 million enplaning passengers, 79% of the enplaning passengers were estimated to not be residents of Maui, but instead visitors to the Island. Therefore, of the 2.7 million enplaning passengers at Kahului Airport, about 2.1 million passengers were not residents. It is the travel and spending characteristics of these 2.1 million visitors that will contribute to the Maui economy through lodging, retail purchases, eating in restaurants, and local transportation services. The Hawaii Tourism Authority estimates that in 2010, 94% of air passenger visitors to Maui were on vacation or attending conferences. Furthermore, these individuals visited the Island for about 8 days per trip. On average, and individual visitor to Maui spends about \$1,400 per trip.

1. VISITOR INDUSTRY JOB IMPACT

Using the results of the visitor industry data, the 2.1 million visitors arriving via Kahului Airport are estimated to have spent about \$2.8 billion in the Maui visitor industry for lodging, food, entertainment, and transportation. This spending supported 27,020 direct jobs on Maui. Exhibit IV-1 summarizes these direct visitor industry impacts.



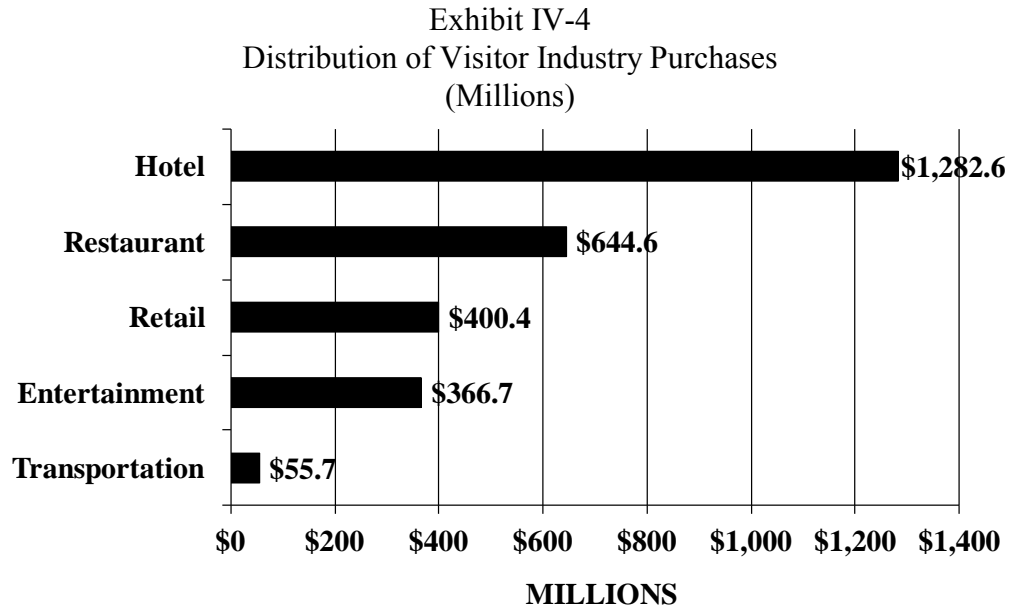
The majority of the impacts are generated in restaurants, followed by jobs with hotels and motels. About 4,810 jobs are generated with local entertainment, recreational and tourism establishments, while 1,448 are created in the retail sectors of the visitors industry. An additional 718 jobs are with local transportation jobs, including gasoline stations and support services.

2. BUSINESS REVENUE IMPACT

The purchases made by air visitors to Maui in 2010 generated \$2.8 billion dollars of business revenue to hotels, restaurants, retail outlets, entertainment establishments and local transportation firms. The distribution of the business revenue by visitor sector industry is shown in Exhibit IV-2. As this exhibit demonstrates, local hotels received \$1.3 billion due to visitors using the airport, while restaurants received \$644.6 million in sales as a result of visitors using Kahului Airport. Another \$400.4 million was spent on

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local retail purchases by visitors using Kahului Airport, while visitors spent about \$366.7 million on local recreational and entertainment activities and \$55.7 million on local transportation.



3. PERSONAL INCOME AND TAX IMPACTS

The 27,020 individuals directly employed in the Maui visitor industry as the result of expenditures by the 2.1 million visitors to the area received \$712.3 million in wages and salaries. A portion of this personal income is also used for regional purchases of goods and services, creating induced jobs. Applying a personal income multiplier for the tourism industry in State of Hawaii developed by the Bureau of Economic Analysis, Regional Input Output Modeling System, an additional \$530.6 million of re-spending and local purchases are made in the local economy. These local purchases by the 27,020 directly employed in the visitors industry support an additional 8,186 induced jobs.

The local hotels, restaurants, retail outlets impacted by the visitors made \$464.2 million of local purchases for supplies and support activities. These local purchases supported 8,819 indirect jobs, and received \$257.9 million of indirect income.

Finally, as a result of the visitors arriving via the Kahului Airport, \$119.3 million of state and local taxes are created, including local hotel tax receipts.

