



ECONOMIC IMPACT STUDY

Statewide Airport System

State of Hawaii

Department of Transportation

A Message from Governor Benjamin J. Cayetano

The economic contribution from Hawaii's Airport System can be all too often easily overlooked. Aviation has become such a daily and common part of our lifestyle that in 1996, well over 37 million travellers used our airports for interisland, domestic, and international travel. Expectations for the new millennium and beyond are for continuing growth of as much as 60.2 million travellers by the decade 2020 - an increase of over 61 percent. The magnitude of this level of air travel is not without its effects. Throughout our State air transportation promotes business, commerce, and the exchange of cultures and ideas.

An economic study of our Statewide Airport System was performed in 1997 to estimate the contribution of airport activities on the economy. Based on results, one thing is clear - Hawaii's airports continue to be a long-term investment in our future. It is my hope that the information obtained from this study will promote an improved understanding of the linkages between our airports and the economy, and that this understanding, in turn, will assist us in guiding the future development of our airports to the benefit of all of Hawaii's residents.



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1. INTRODUCTION

The State of Hawaii Airport System is a major asset and benefit to our people. In 1996, over 37 million passengers were handled by the airports system. Future projections indicate that as we enter the new millennium, these numbers will increase to nearly 50 million by the year 2010, and approximately 60 million by 2020.

Visitor travel will continue to play a major role in creating demand for sufficient passenger facilities. However, not only must our airports provide for tourism based visitors, it must provide facilities for continuing international, national, and statewide business, trade, and commerce.

A study of the economic contribution of the airports system on our local economy was therefore initiated. Airport centered or related businesses, organizations, and agencies were invited to participate in a survey of their financial operations. The information sought included type of organization, number of employees, general business expenses, and length of time operating at the airport. Analysis to aggregate and assess economic impacts was completed with the assistance of the Research and Economic Analysis Division (READ) of the State Department of Business, Economic Development & Tourism (DBED&T). The results of this study, summarized in the following pages, are intended to help provide a better understanding of the role of our airports in the economy.



ECONOMIC IMPACTS

The economic analysis took into account the direct, indirect, and induced impacts of airport activity:

Direct Impacts - are directly associated with airport operations. This includes on-airport employment and purchase of goods and services by on- and off- airport organizations and businesses.

Indirect Impacts - impacts to suppliers of the industries that experience direct impacts. An airline produces a direct impact: an oil company that sells fuel to the airline produces an indirect impact.

Induced Impacts - are the impacts on industries that serve households. Employees and proprietors earn income from industries that experience direct and indirect impacts; the personal consumption resulting from this earned income is the induced impact of airport activity.

The principal finding of the analysis is the magnitude of the Statewide Airport System on the economy of Hawaii. In 1996, approximately \$4.4 billion was generated which circulated throughout our economy producing employment, services, and

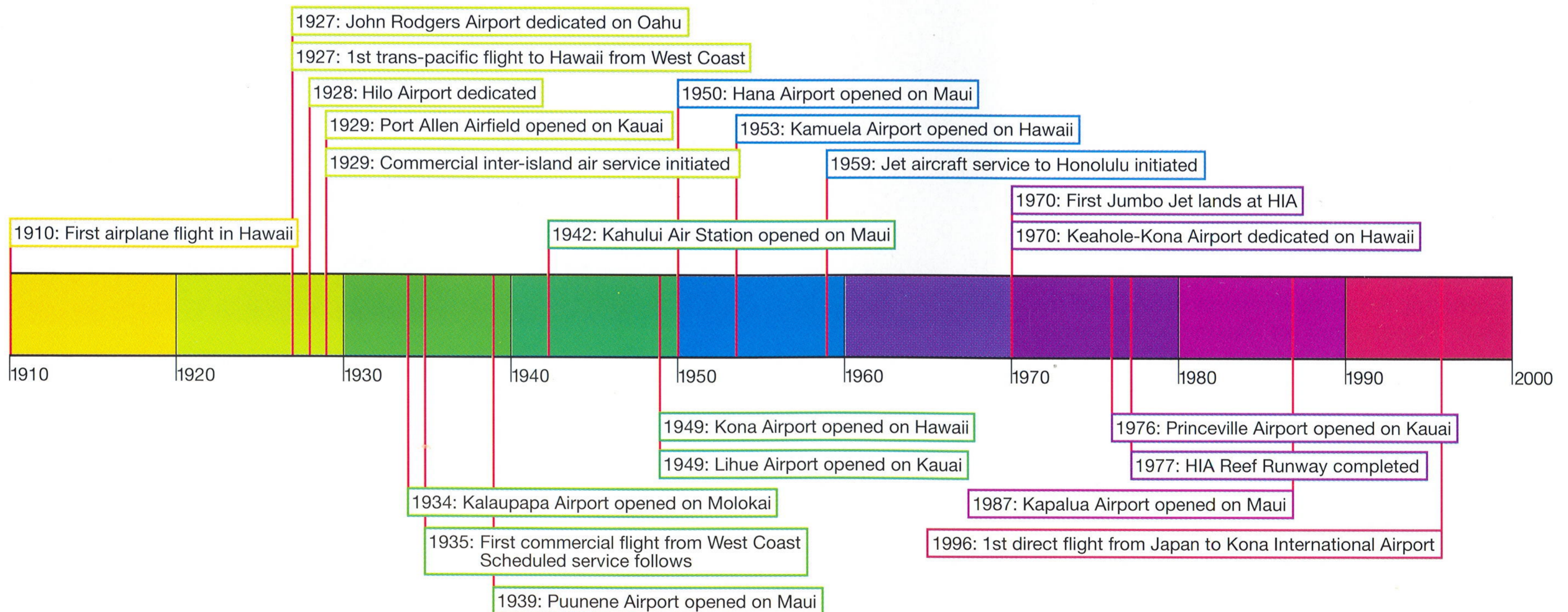
products.

The Statewide Airport System, in this regard, functions like an economic power-plant. It provides the means to generate the energy that strengthens and sustains Hawaii's ties to State, National, and International commerce, culture, business, and trade.

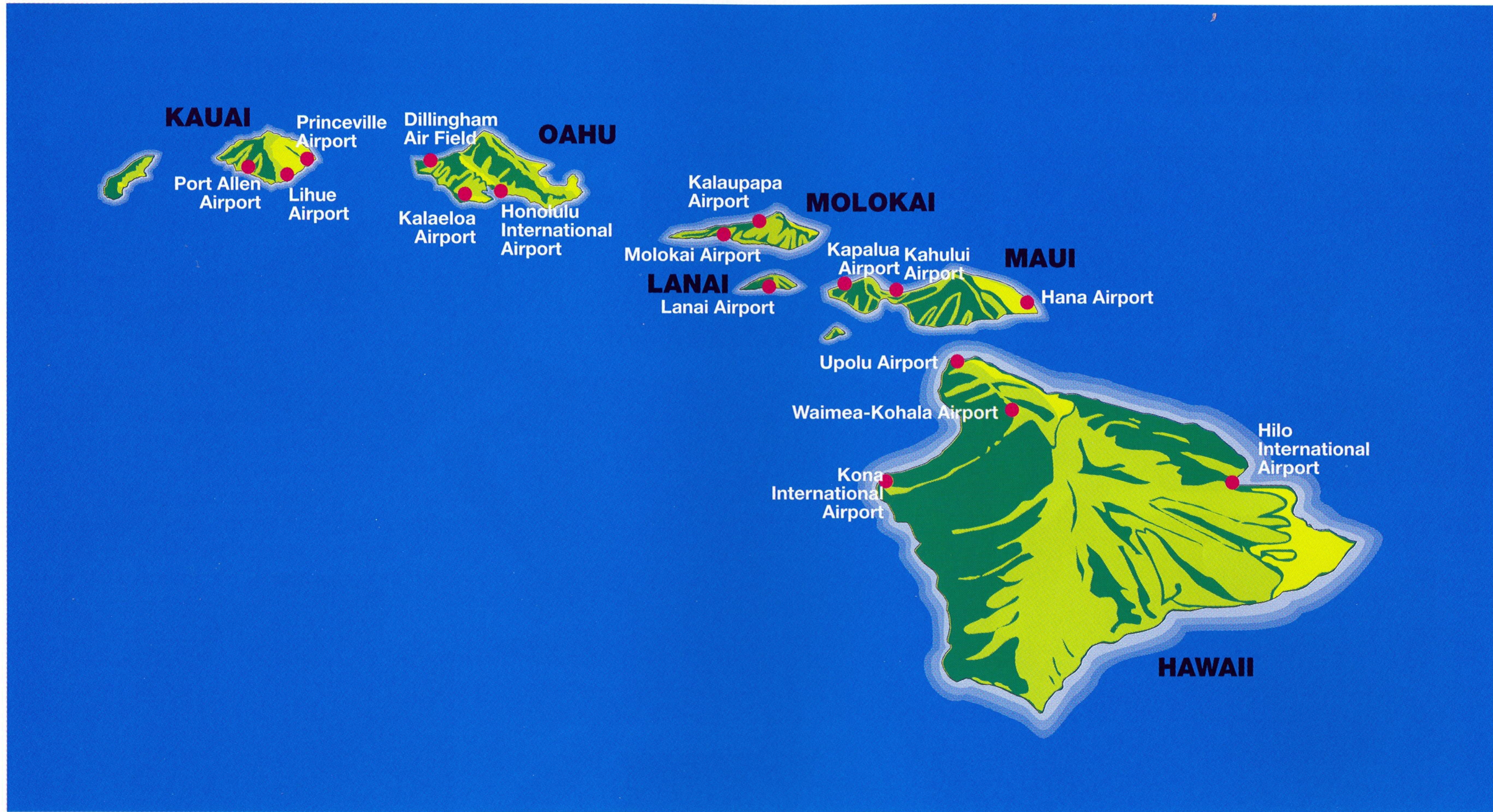
It is our hope that through the following pages you will be informed, enlightened, and come to better appreciate the benefits we enjoy from Hawaii's Airports!

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1910 - 1996: A Brief History of Aviation in Hawaii



2. HAWAII'S STATEWIDE AIRPORT SYSTEM



Hawaii's statewide airport system represents a major public investment consisting of five primary and ten secondary airports. Economic activities generated through this investment are significant.

Direct revenue generation from airport activities alone comprises approximately 6.3% of the Gross State Product (GSP). Direct, indirect and induced impacts, when totaled, account for \$4.4 billion, or approximately 13.2% of the GSP. These figures

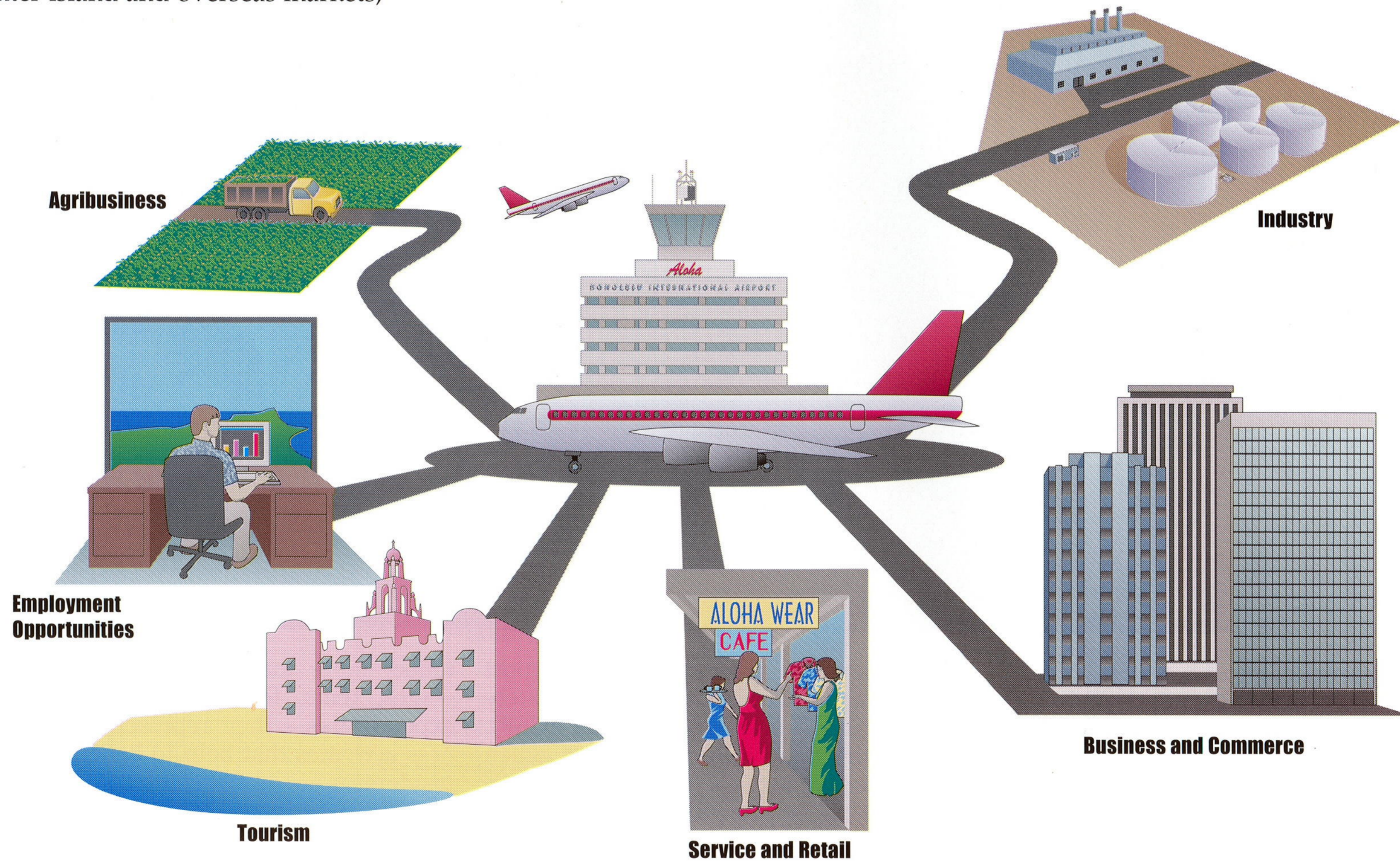
reflect more than just an aggregation of wages, rents, fees, purchases, and other expenditures - they represent major business activities that help to benefit Hawaii's residents.

3. ECONOMIC LINKAGES

The State of Hawaii Airport System is linked to several sectors of Hawaii's economy. Many of these sectors are represented daily in activities at the airport:

- Tourist arrivals and departures;
- Conveyance of goods and services to inter-island and overseas markets;
- Transit, delivery, and other transactions related to Island industries and agribusiness;
- Airport-based governmental operations; and,
- Employment opportunities for State residents.

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4. THE SIGNIFICANCE OF HAWAII'S AIRPORTS TELLS A STORY

The key elements of the analysis of the airport system included an examination of the following: types of airport-related business activities; types of revenues generated by type of business activity; and, characteristics of airport users. Research for this analysis included the following steps:

1. A survey was conducted to gather employment and expenditure information from all businesses operating at State Airports. This included all contractors, vendors, concessionaires, lessees, licensees, and permittees engaged in activities at the airport;
2. The survey information was analyzed to estimate current impacts; direct, indirect, and induced, of airport-related activities on the State economy; and,
3. Projections of future economic impacts were made based on an airport activity forecast produced by the Department of Transportation, Airports Division.

Together, this information tells a story about Hawaii's airport system and its contribution to our economy.

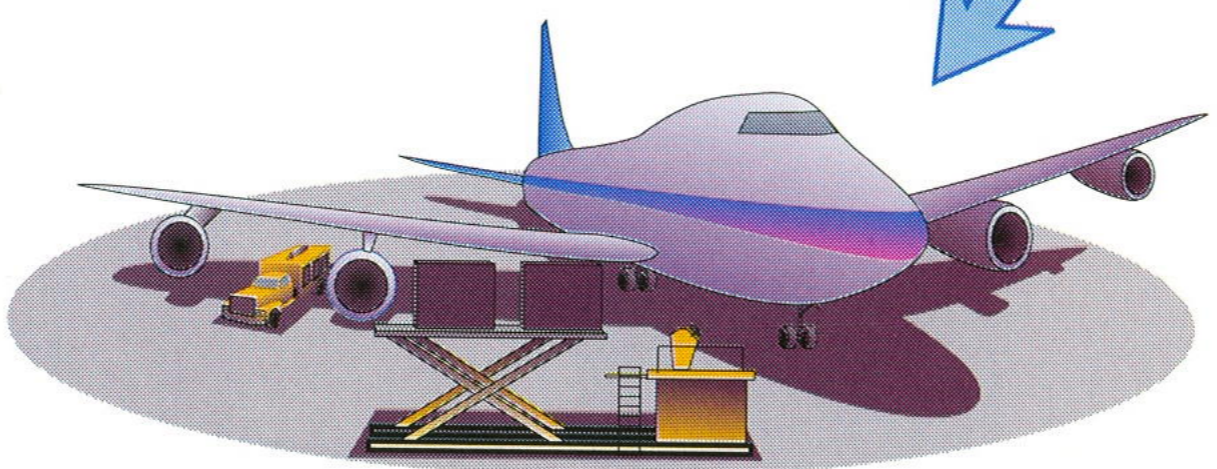
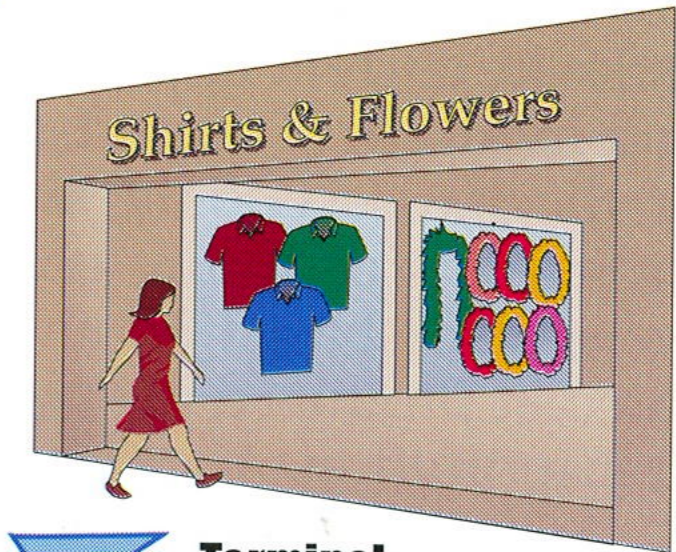
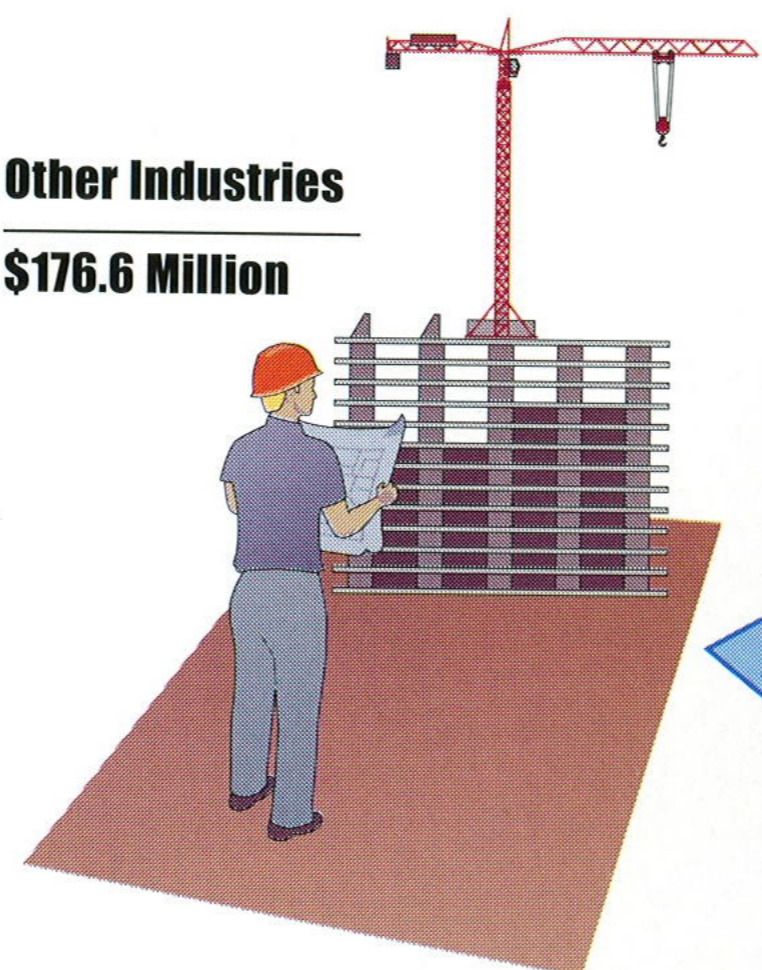
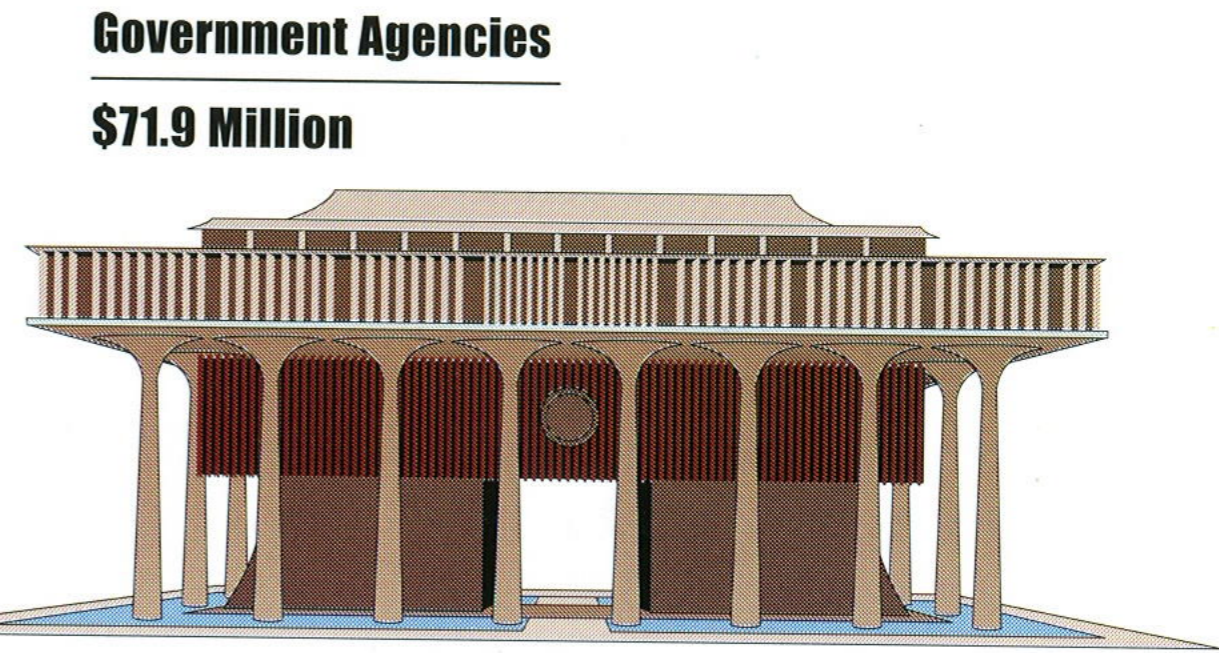
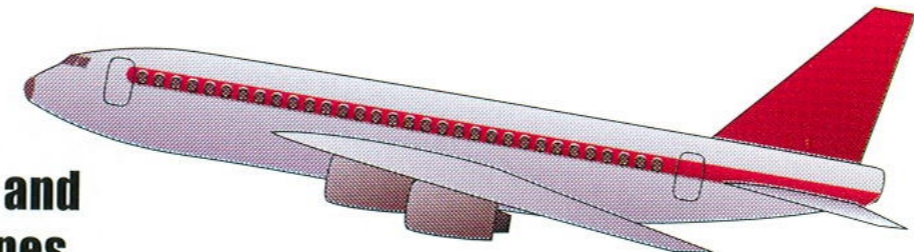
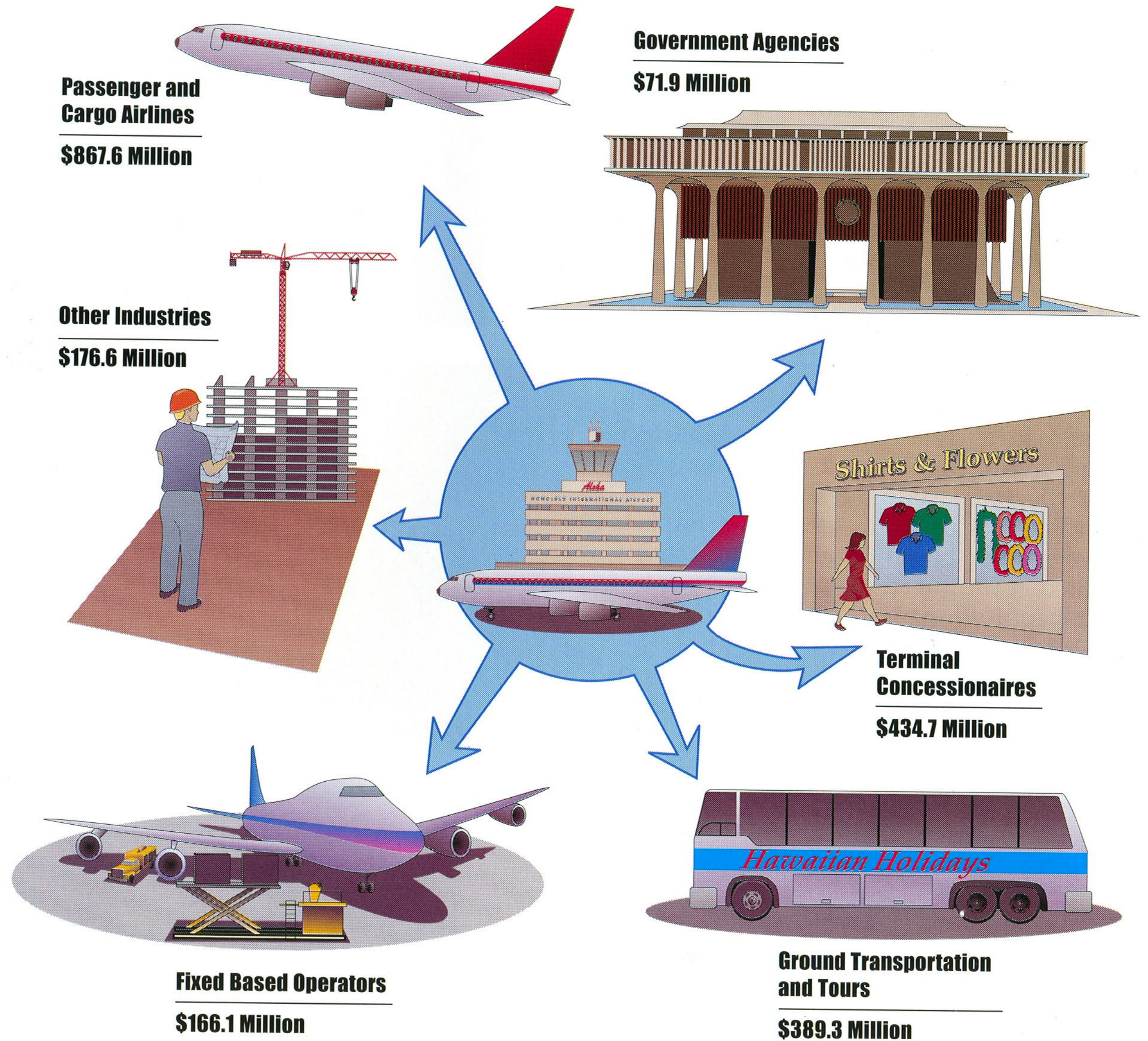


5. STATEWIDE AIRPORT INDUSTRIES - DIRECT ECONOMIC IMPACT

Hawaii's airports serve as home-base to numerous and varied enterprises that contribute to the State economy. Information obtained from the airport survey helped to identify the following industry categories:

- Air Carriers and All-Cargo Airlines
- Terminal Concessionaires
- Fixed-Base Operators
- Government Agencies
- Ground Transportation and Tour Operators
- Other Industries

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DIRECT ECONOMIC IMPACT BY INDUSTRY

The following table identifies the direct economic impacts due to operation of airport related industries. This information was derived from results of the State Airport System Survey.

Direct Economic Impact By Industry (Dollars in Millions)

TYPE ORGANIZATION	NUMBER EMPLOYEES	GROSS PAYROLL (\$)	EXPENSES (\$)					TOTAL PAYROLL PLUS EXPENSES	
			Materials & Supplies	Services	Capital Expenditures	Other Expenditures	Total	Dollars (\$)	Percentage
Passenger & Cargo Airlines	9,448 ¹	341.7 ²	39.6	239.4	87.1	159.8	525.9	867.6	41.19%
Terminal Concessionaires	2,518 ³	38.0	57.8	14.3	1.1	323.5	396.7	434.7 ⁵	20.65%
Fixed-Base Operators	2,655	61.2	47.8	28.2	7.8	21.1	104.9	166.1	7.89%
Government Agencies	1,956 ⁴	61.3	6.5	0.3	0.4	3.3	10.5	71.9	3.41%
Ground Transportation & Tours	9,631	216.5	30.5	46.4	6.6	89.2	172.7	389.3	18.48%
Other Organizations	3,388	51.1	49.7	25.5	5.9	44.4	125.5	176.6	8.38%
TOTALS	29,596	769.9	231.9	354.1	109.0	641.2	1,336.2	2,106.1	100.00%

Notes: Dollar amounts are in millions of 1997 dollars. Totals may not add due to rounding.

1. Employment figures from 1996 Employment and Payrolls in Hawaii, State Department of Business, Economic Development & Tourism.
2. Averages calculated from employment, expense, and payroll figures reported by survey respondents, 1st half 1997.
3. Employment figure calculated using standard industry employment averages from 1996 Employment and Payrolls in Hawaii.
4. Includes DOT-Airports Employment (245 employees).
5. Figure represents concessionaire and DFS revenues.

DIRECT ECONOMIC IMPACT BY COUNTY

The direct economic impact of airport activities varies by county. As Hawaii's largest population center and the primary gateway to the Islands, the City and County of Honolulu generates the greatest share of direct airport revenue. In 1996, payroll plus expenditures of businesses directly associ-

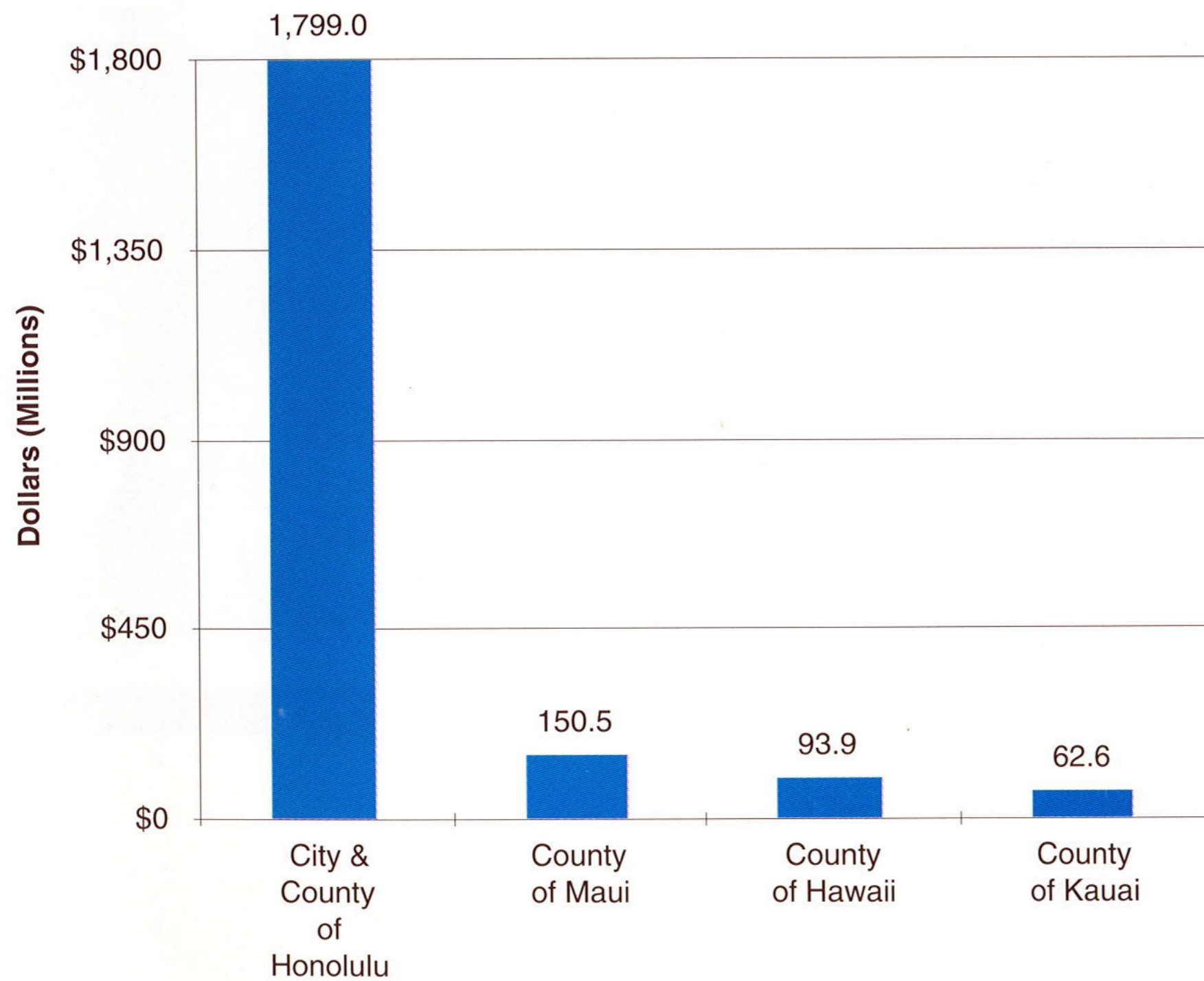
ated with airport operations was approximately \$1,799 million on Oahu, or 85.42% of the total direct revenue.

Maui County provided the next largest contribution of \$150.5 million or 7.15%, while Hawaii County and Kauai County generated, respectively, 4.46% and 2.97% of

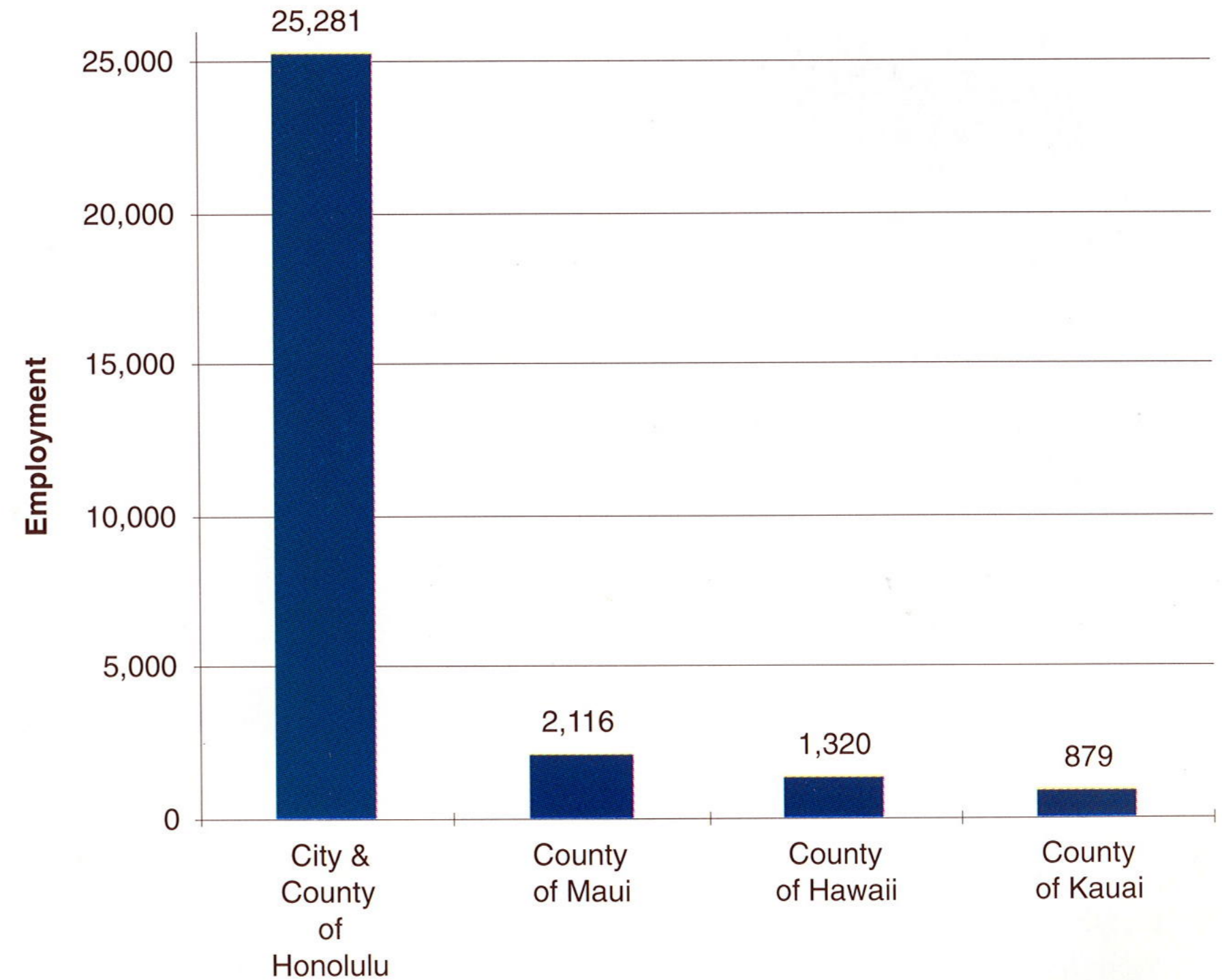
the statewide revenue totals for direct expenditures.

Employment followed the same lineup, with Oahu's airports directly supporting 25,281 jobs (85%), Maui providing 2,116 jobs (7%), Hawaii providing 1,320 jobs (5%), and Kauai, with 879 jobs (3%).

Direct Total Payroll Plus Expenses By County



Direct Employment By County



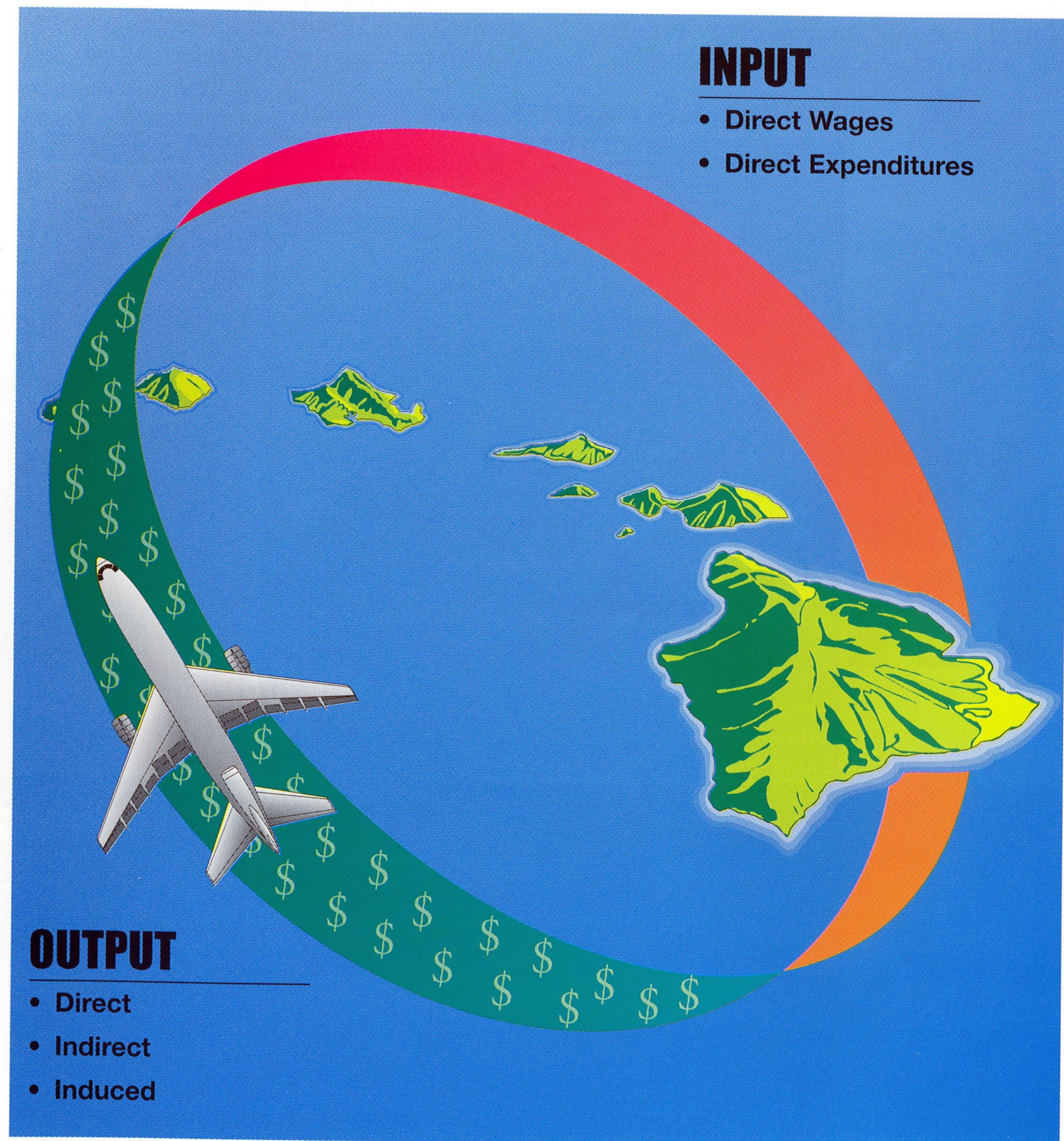
The county data refer to impacts generated as a result of aviation activity in each county, and do not necessarily represent the county in which the impacts are realized. For example, purchases of supplies for an airport in Maui county are reported for Maui, even though those supplies might have been purchased in Oahu County.

6. TOTAL ECONOMIC IMPACT

Calculating the direct economic impacts of airport-related enterprises reveals only one part of the story. Indirect and induced impacts must also be considered in order to appreciate the total benefit of airport activity on the State's economy. DBED&T utilized the State's regional input-output analytical technique to track the ways in which dollars directly generated by airport activities circulate into the economy. The results of the airport system survey combined with the regional input-output analysis produce a picture of the total economic impact from direct, indirect, and induced revenues.

The Results:

A total of \$4.4 billion dollars were generated as a result of statewide airport activities.



BREAKDOWN OF TOTAL ECONOMIC IMPACTS

The following tables provide a breakdown of total economic outputs (jobs, income, and revenues generated) due to direct,

indirect, and induced activities. The multiplier effect of airport activities can be readily seen on a number of various sectors in

the economy. The county breakdown details economic effects on each county in the state.

Total Impacts By Industry (Dollars in Millions)

INDUSTRY CATEGORY*	OUTPUT (\$)	JOBS	LABOR INCOME (\$)
Air Transportation	980.0	9,124	396.1
Transportation Services	286.0	4,181	119.3
Government Services	134.7	2,431	83.6
Automobile and Miscellaneous Repairs	165.8	2,973	76.6
Local Ground Transportation	218.8	4,204	89.6
Retail Trade	521.8	11,644	251.1
Wholesale	71.6	1,071	34.5
Eating and Drinking Places	96.4	1,854	30.5
Commercial Construction	49.9	585	27.0
Banking and Finance	194.0	1,878	57.2
Real Estate	321.9	2,229	37.9
Communications	71.7	444	23.4
Business Services	183.0	4,110	96.7
Health and Professional Services	411.1	6,219	224.4
Personal Services	32.4	1,331	21.3
Farming, Forestry, Fishing, & Food Processing	73.0	840	17.6
Manufacturing	385.2	671	35.3
Utilities	78.7	247	16.0
Amusement	76.9	1,974	36.9
Other Industries	75.0	224	4.3
Labor Income**	1,679.3	N/A	N/A
TOTAL	4,427.8	58,234	1,679.3

* Totals may not add due to rounding.

**Labor Income: Total direct, indirect, and induced labor income in the economy due to airports related outputs.

Total Impact By County (Dollars in Millions)

COUNTY	EMPLOYMENT	WAGES (\$)	TOTAL OUTPUT (\$)	PERCENTAGE
City and County of Honolulu	49,743	1,434.4	3,782.2	85.42%
County of Maui	4,164	120.1	316.6	7.15%
County of Hawaii	2,597	74.9	197.5	4.46%
County of Kauai	1,730	49.9	131.5	2.97%
TOTAL	58,234	1,679.3	4,427.8	100.00%

7. THE FUTURE: WHERE DO WE GO FROM HERE?

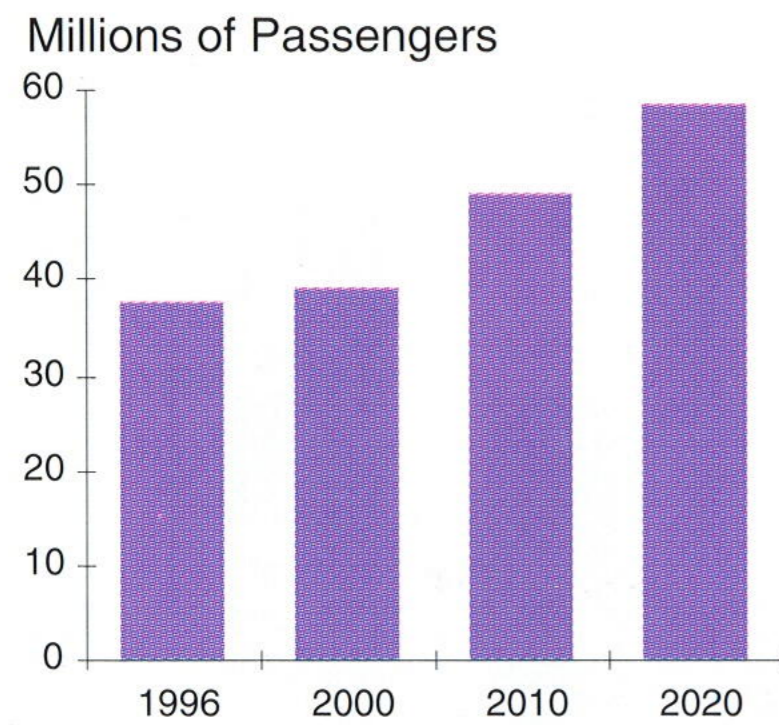
Hawaii's airports are expected to continue to be a leading source of economic activity into the foreseeable future. The measures of this growth are in air passengers, air cargo, and aircraft operations.

Future increases in direct airport-related expenditures are determined using propor-

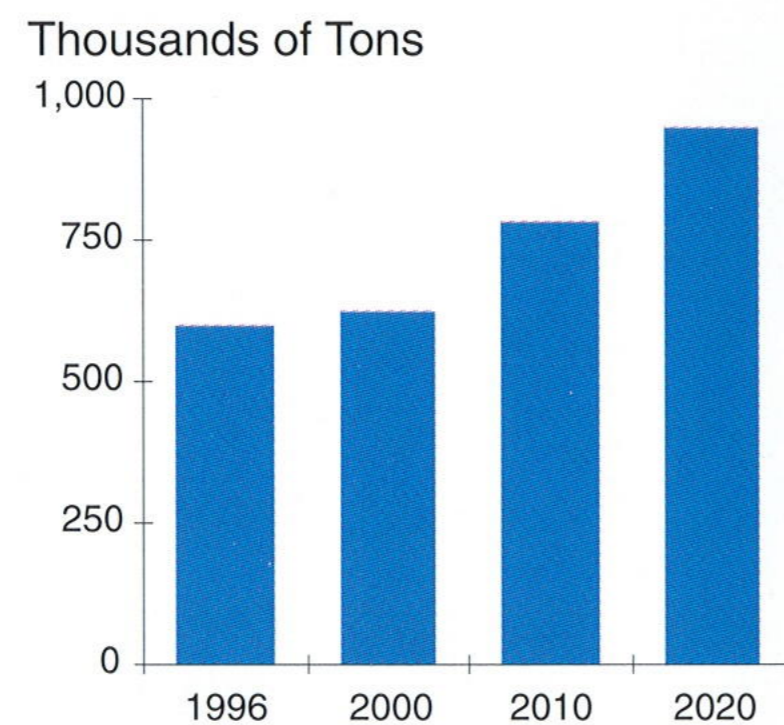
tional measures of forecast growth in the amount of air carrier passengers, aircraft operations, and air cargo tonnage. The charts below track future expansion in these categories of airport activity and the corresponding growth in direct expenditures for the years 2000, 2010, and 2020.

Based on projected expenditures of direct airport-related activities, the total economic impact of airports on the economy of the State was also forecast to the year 2020.

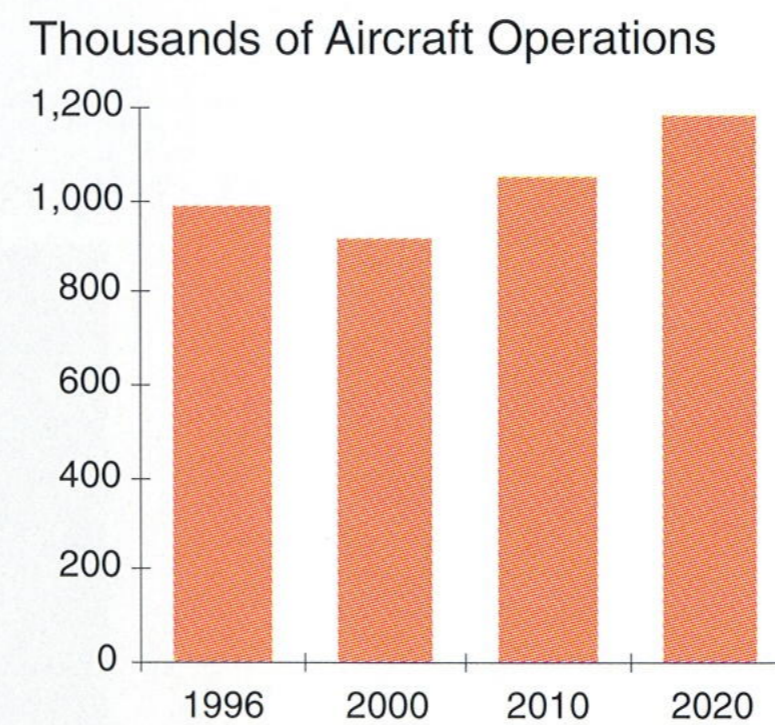
AIR PASSENGERS



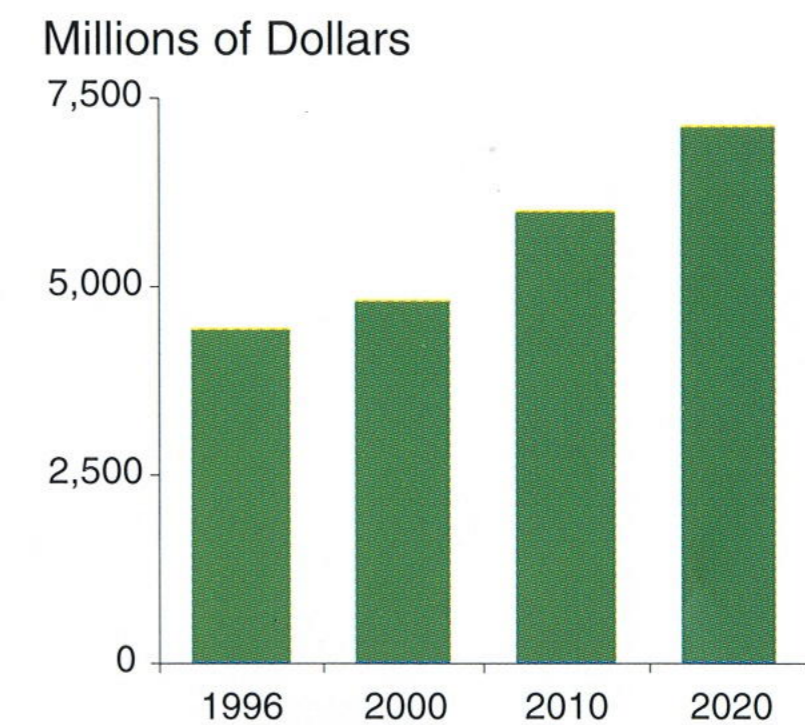
AIR CARGO



AIRCRAFT OPERATIONS



DIRECT & TOTAL REVENUE



8. THE MORAL OF THE STORY

Hawaii's Airport System is playing an increasingly important role in stimulating the state economy and connecting Hawaii to the world. Airports generated revenues have helped to contribute almost \$4.4 bil-

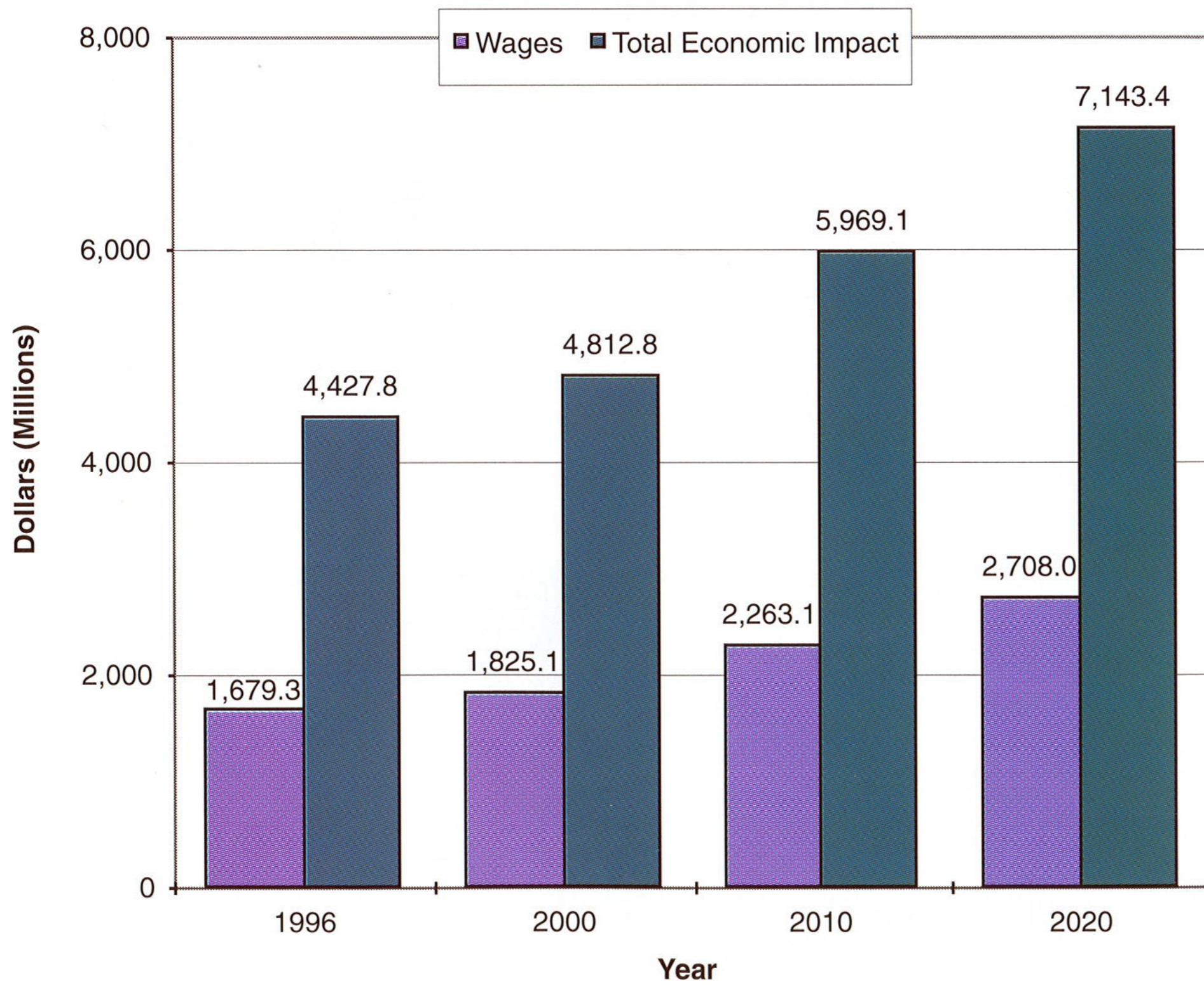
lion to Hawaii's economy in 1996. The growth of airport businesses and related activities has further created a valuable wellspring of employment opportunities for Hawaii's residents. In 1996, 58,234 jobs

were attributed directly and indirectly to airport operations.

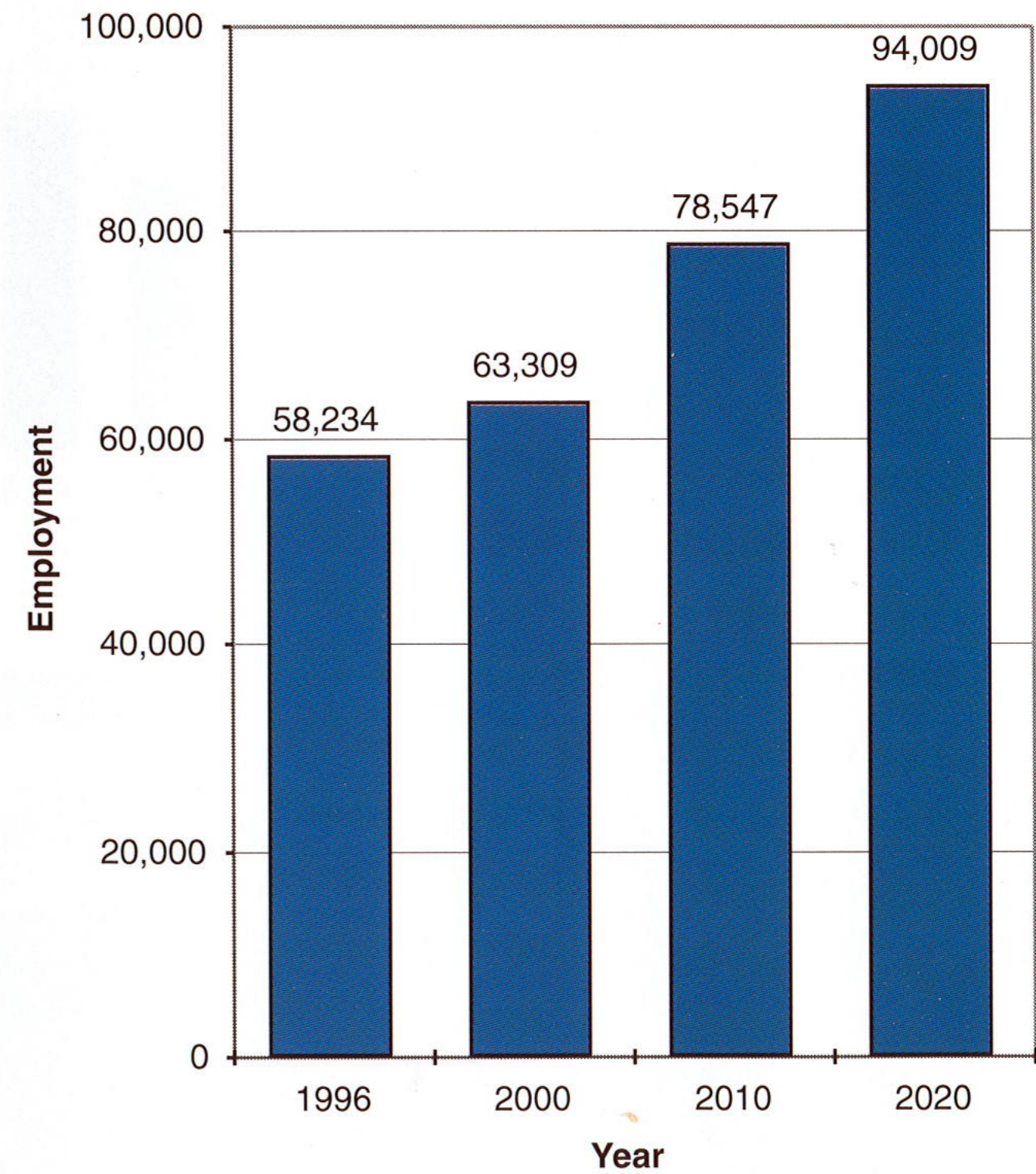
Projections for the future indicate that this growth is expected to continue well into the 21st century.

ANTICIPATED AIRPORTS GENERATED GROWTH

Wages and Total Economic Impact

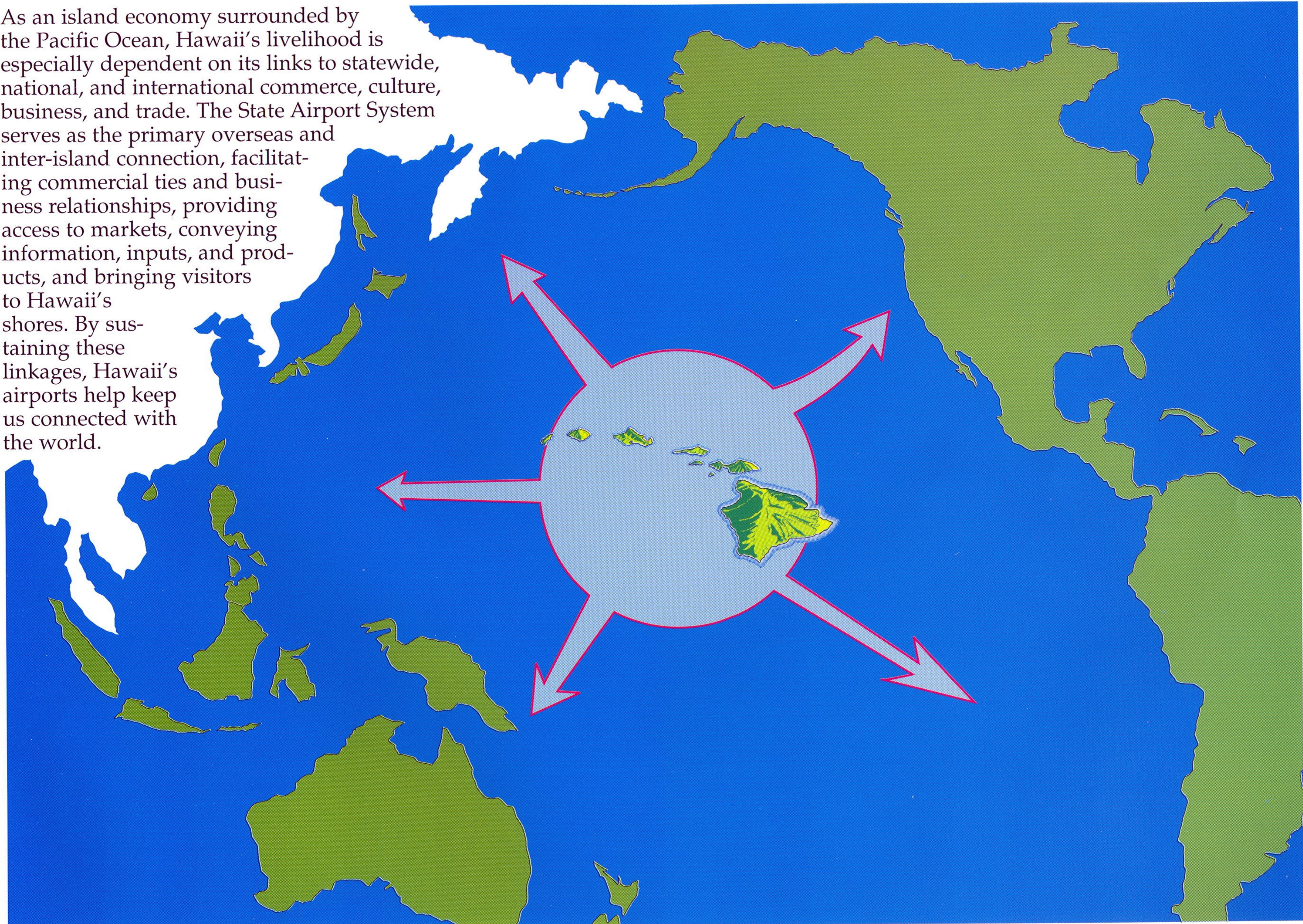


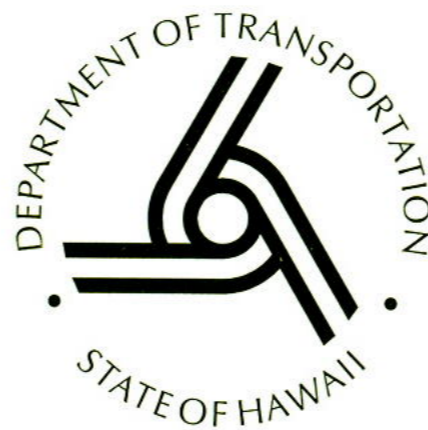
Employment



HAWAII'S AIRPORTS KEEP US CONNECTED

As an island economy surrounded by the Pacific Ocean, Hawaii's livelihood is especially dependent on its links to statewide, national, and international commerce, culture, business, and trade. The State Airport System serves as the primary overseas and inter-island connection, facilitating commercial ties and business relationships, providing access to markets, conveying information, inputs, and products, and bringing visitors to Hawaii's shores. By sustaining these linkages, Hawaii's airports help keep us connected with the world.





State of Hawaii

Department of Transportation

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Statewide Airport System

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