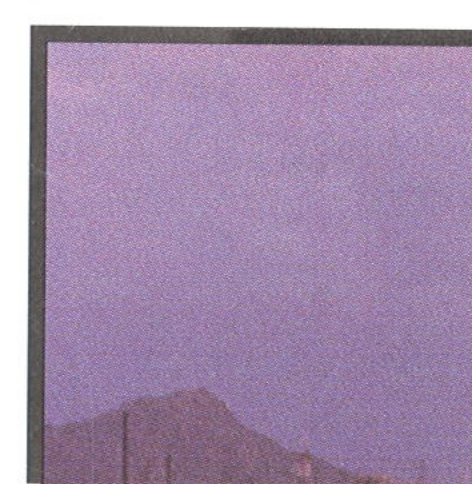
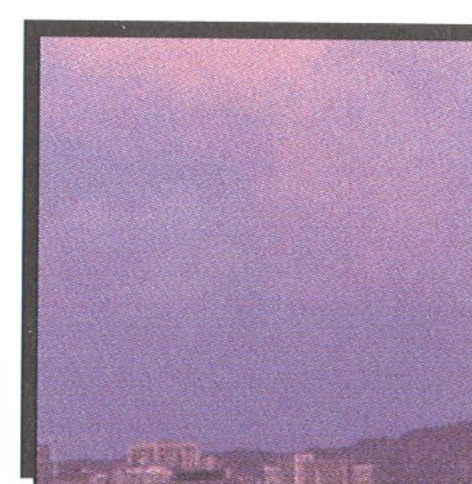
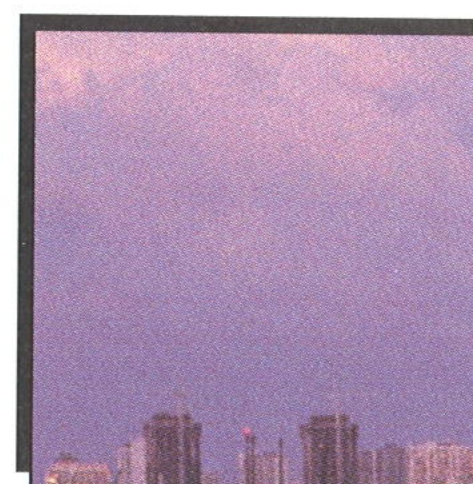




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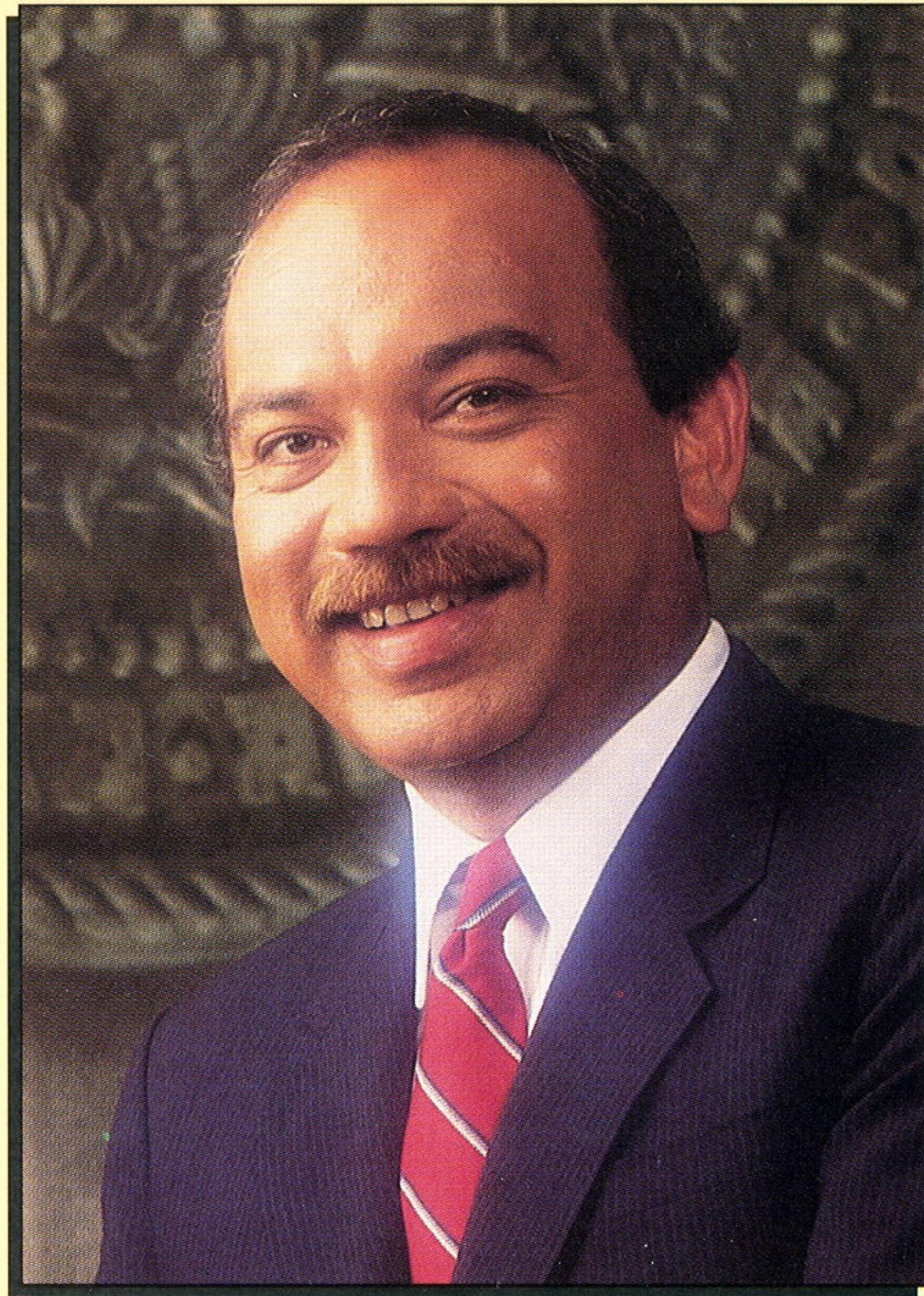
IMPACT

REPORT



HONOLULU • INTERNATIONAL • AIRPORT

MESSAGE FROM GOVERNOR JOHN WAIHEE



It is well known that tourism contributes significantly to the economic well-being of the State of Hawaii. Total visitor expenditures are estimated to be \$9.2 billion in 1988, an increase of 40% over the \$6.6 billion spent in 1987.

It is also generally understood that Hawaii's airport system, and in particular Honolulu International Airport, is extremely important in providing the facilities to accommodate the flow of visitors to and from the Islands.

What is not so well known is the significant contribution that Honolulu International Airport makes to the local economy. An economic impact study was performed in 1988 to estimate the current and future economic contribution of the Airport on the economy of the island of Oahu. As can be seen from the results summarized in this brochure, Honolulu International Airport is a major contributor to the economy of the State of Hawaii.

A handwritten signature in black ink that reads "John Waihee". The signature is written in a cursive style with a long, sweeping horizontal line extending from the "J".

INTRODUCTION/FINDINGS

Air transportation is vital to the economy of the State of Hawaii, especially the tourist industry. Honolulu International Airport, located about five miles west of downtown Honolulu, is the focal point for air transportation in Hawaii and is one of the major employers and contributors to the economy of Oahu and the other Hawaiian Islands.

The study of the economic impact of the Airport on Oahu included analyses of the direct, indirect, and induced impacts of Airport activity. The direct impacts relate to operations at the Airport and include the expenditures of on-Airport organizations and off-Airport businesses such as air freight forwarders and travel agents. The indirect and induced impacts relate to the effects of such expenditures on the economy of Oahu.

The expenditures of visitors to Honolulu were specifically not included in the estimate of the total economic impact of the Airport. Although the Airport facilitates the movement of air visitors, their expenditures are independent of the Airport.



The total economic impact of the Airport was determined to be as follows:

	1987	1992	2010
▶ Total employment	47,000	56,000	83,000
▶ Total wages and salaries	\$0.9	\$1.1	\$1.6
▶ Total output (sales)	\$2.5	\$3.0	\$4.3
DOLLARS IN BILLIONS			

Honolulu International Airport is the principal air carrier airport serving the Hawaiian Islands. The primary role of the Airport is to provide air transportation facilities and services to accommodate demand generated on the island of Oahu, and in the State of Hawaii as a whole.

PASSENGERS

The two categories of passenger airline service at the Airport are (1) overseas service between Honolulu and the Mainland (the United States and Canada) and between Honolulu and the Asia-Pacific countries (Asia and Oceania), including transit passengers, and (2) interisland service between Oahu and the Neighbor Islands.

The total number of passengers at the Airport is forecast to increase from 20.3 million in 1987 to 36.3 million in 2010, as shown on the graph to the right.

Asia-Pacific passengers are forecast to be the fastest growing group of overseas passengers, increasing from 3.3 million in 1987 to 11.2 million in 2010, at an average annual rate of 5.5%. Mainland passengers are forecast to increase from 7.8 million in 1987 to 11.9 million in 2010, at an average annual rate of 2%.

CARGO

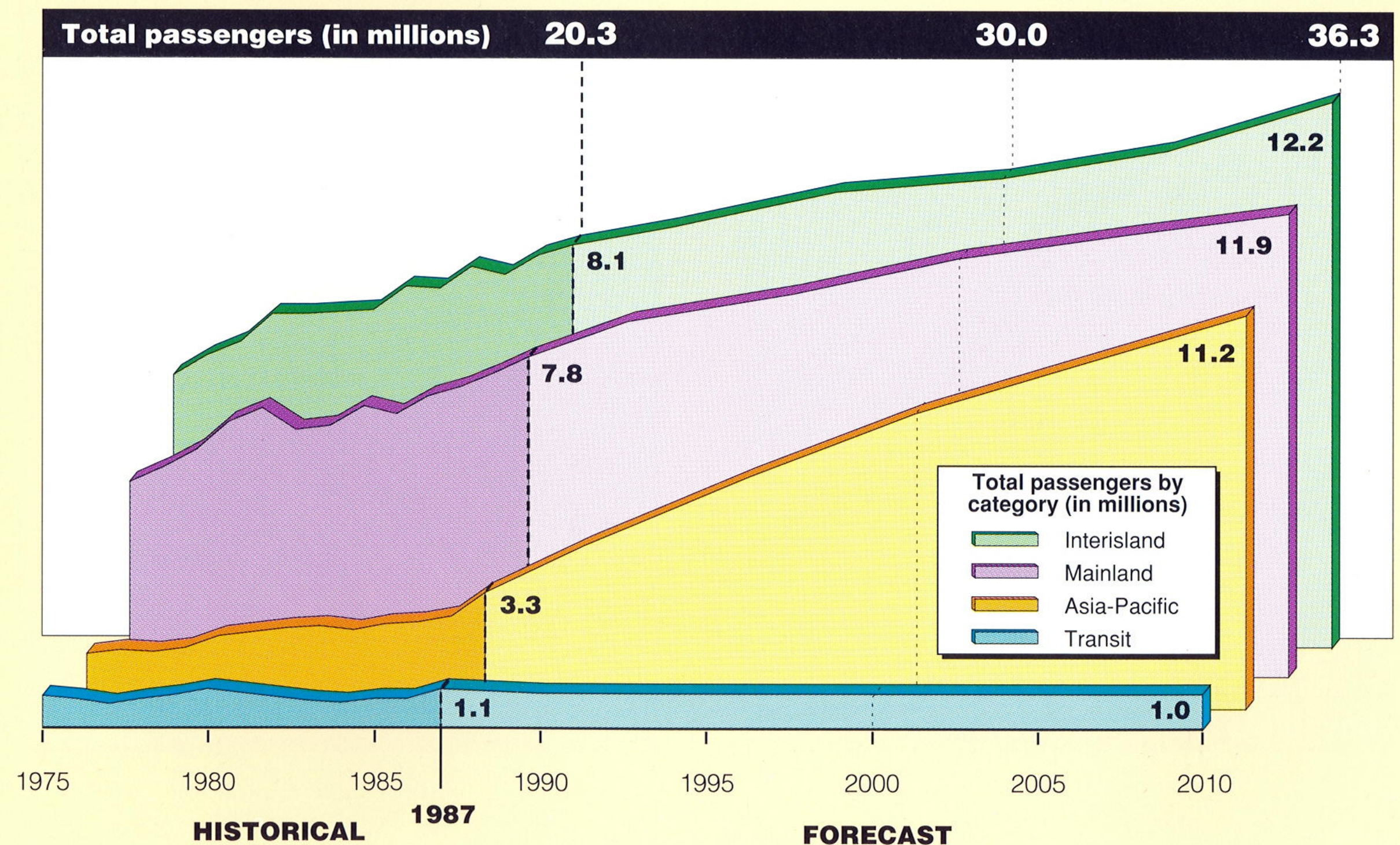
Three all-cargo airlines (Federal Express, Flying Tiger Line, and United Parcel Service), many of the passenger airlines, and a large number of air freight forwarders provide cargo services at the Airport, including delivery of freight and mail to overseas and Neighbor Island locations.

The total volume of air cargo at the Airport is forecast to increase an average of 1% per year,

from 302,000 tons in 1987 to 374,000 tons in 2010. Freight is forecast to continue to represent almost 90% of the total cargo tonnage at the Airport.

AIRCRAFT OPERATIONS

The total number of aircraft operations is forecast to increase about 1% per year, from 385,000 in 1987 to 496,000 in 2010. Air carrier aircraft operations are forecast to increase from 216,000 in 1987 to 271,000 in 2010.



DIRECT IMPACT OF AIRPORT ACTIVITY IN 1987

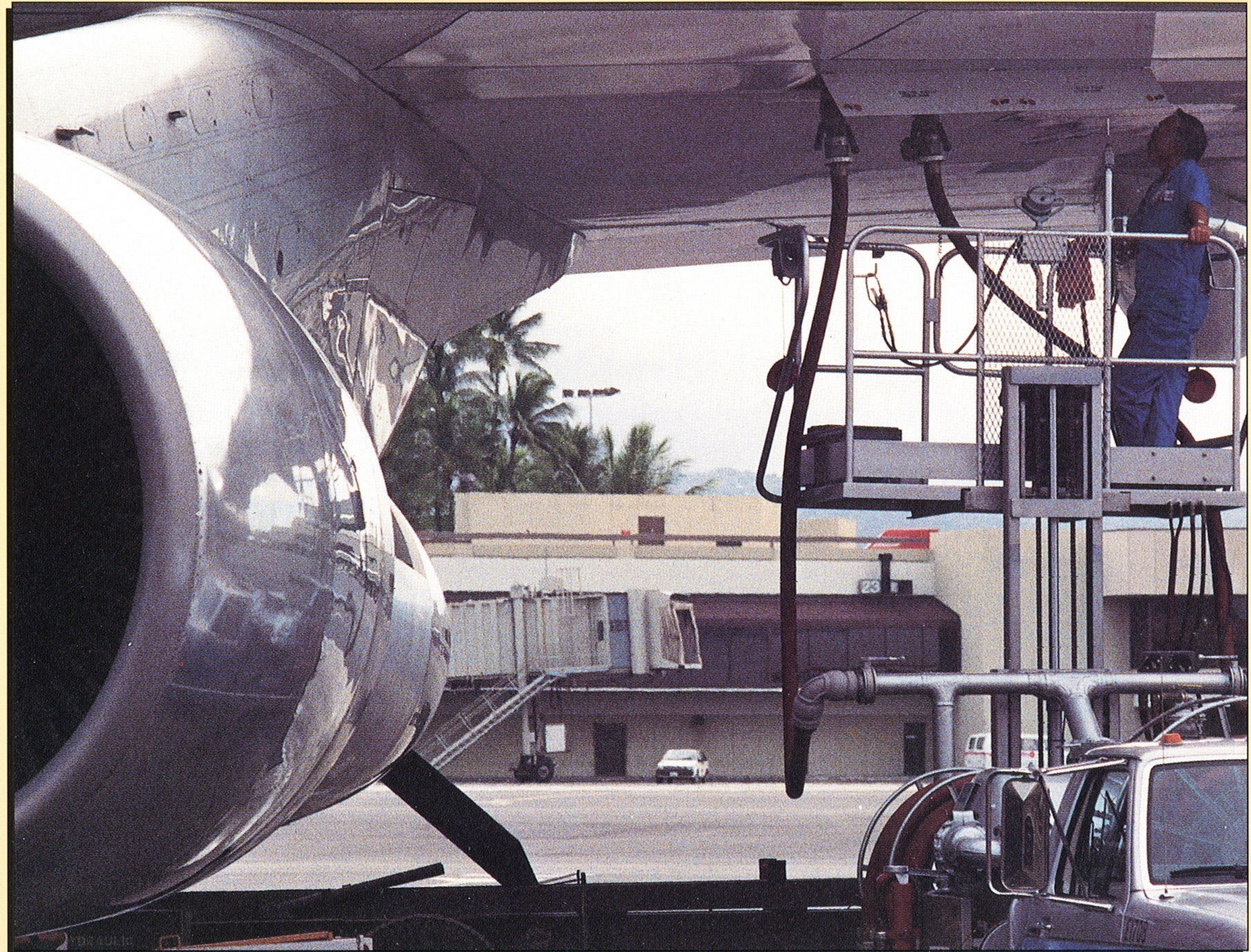
The direct economic impact of activity at Honolulu International Airport includes the effects of :

- ▶ The expenditures from the operations of on-Airport organizations
- ▶ The expenditures of off-Airport businesses such as air freight forwarders and travel agents

A mail survey of on-Airport organizations was conducted to obtain data on employment and expenditures, which are major factors in determining the Airport's direct economic impact.

The organizations surveyed included the following:

- ▶ Passenger and all-cargo airlines
- ▶ Passenger terminal concessionaires
- ▶ Fixed base operators and aircraft maintenance and sales services
- ▶ Government agencies
- ▶ Ground transportation and tour operators (taxi, bus, limousine)
- ▶ Other organizations



The expenditures of off-Airport businesses such as air freight forwarders and travel agents contribute to the direct economic impact of the Airport on the island of Oahu.

To estimate the magnitude of these expenditures, a mail survey of air freight forwarders and a telephone survey of travel agents were conducted.

EXPENDITURES OF ON-AIRPORT ORGANIZATIONS

The table below summarizes expenditures of on-Airport organizations by type and industry. Materials and supplies, the largest expenditure category other than wages and salaries, accounted for about \$315 million in 1987.

1987 Expenditures of On-Airport Organizations by Type (in millions)

On-Airport organization	Nonwage expenditures						Wages and salaries	Total expenditures
	Taxes	Services	Materials and supplies	Capital expenditures	Other	Total		
Passenger and all-cargo airlines	\$19	\$ 74	\$253	\$10	\$0 ^a	\$356	\$197	\$553
Passenger terminal concessionaires	10	44	35	5	0	94	55	150
Fixed base operators	1	1	3	2	0 ^a	7	17	25
Government agencies	0	39	7	73	0	119	39	158
Ground transportation and tour operators	4	27	11	1	0 ^a	44	21	65
Other organizations	1	10	5	0 ^a	3	20	7	27
Total	\$36	\$195	\$315	\$92	\$4	\$641	\$337	\$978

Note: Totals may not add because of rounding.
a. Less than \$0.5 million.



EXPENDITURES OF OFF-AIRPORT BUSINESSES

The total number of air freight forwarder employees associated with aviation activity in 1987 was estimated to be 260. Those employees accounted for about \$5 million in payroll expenditures, or an average of about \$19,000 per employee. Nonwage expenditures related to aviation activity for the freight forwarders were also estimated to be \$5 million, for a total of \$10 million in direct expenditures attributable to the Airport in 1987.

Much of the activity of Oahu travel agents is related to the booking of airline trips. Therefore, this activity is associated with the Airport and contributes to the Airport's economic impact on Oahu. The survey of travel agents was conducted to obtain data about employment and expenditures.

From the survey, it was determined that the average full-time salary of travel agency employees was about \$16,000 per year. Of the total dollar volume of travel bookings for customers, about 65% was for airline tickets and 35% was for hotel rooms, ocean voyages, surface travel, and other travel-related expenditures. The total estimated annual payroll of travel agents associated with air travel was about \$130 million in 1987.

SUMMARY OF DIRECT IMPACTS

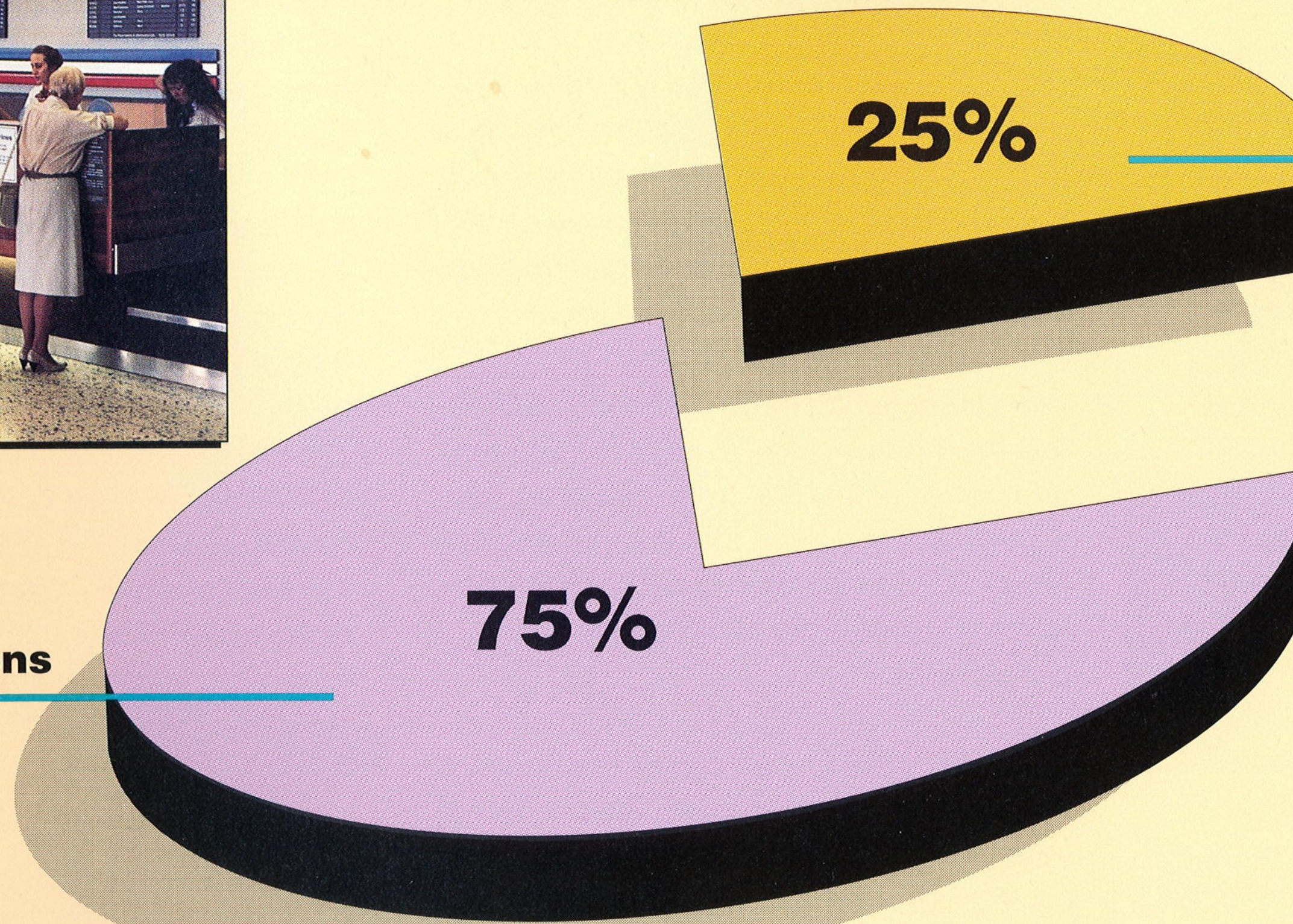
The direct economic impact of activities at Honolulu International Airport was about \$1.3 billion in 1987, as determined from 1988 surveys of on-Airport organizations and off-Airport businesses. On-Airport organizations—passenger and all-cargo airlines, passenger terminal concessionaires, fixed base operators, government agencies, ground transportation and tour operators, and other organizations—accounted for 75%, the largest share. Off-Airport businesses—freight forwarders and travel agents—accounted for the remaining 25% of total direct expenditures.

The total employment of on-Airport organizations and off-Airport freight forwarders and travel agents was about 24,000 in 1987. On-Airport organizations accounted for 66% of the total and off-Airport businesses accounted for the remaining 34%.





**On-Airport
organizations**

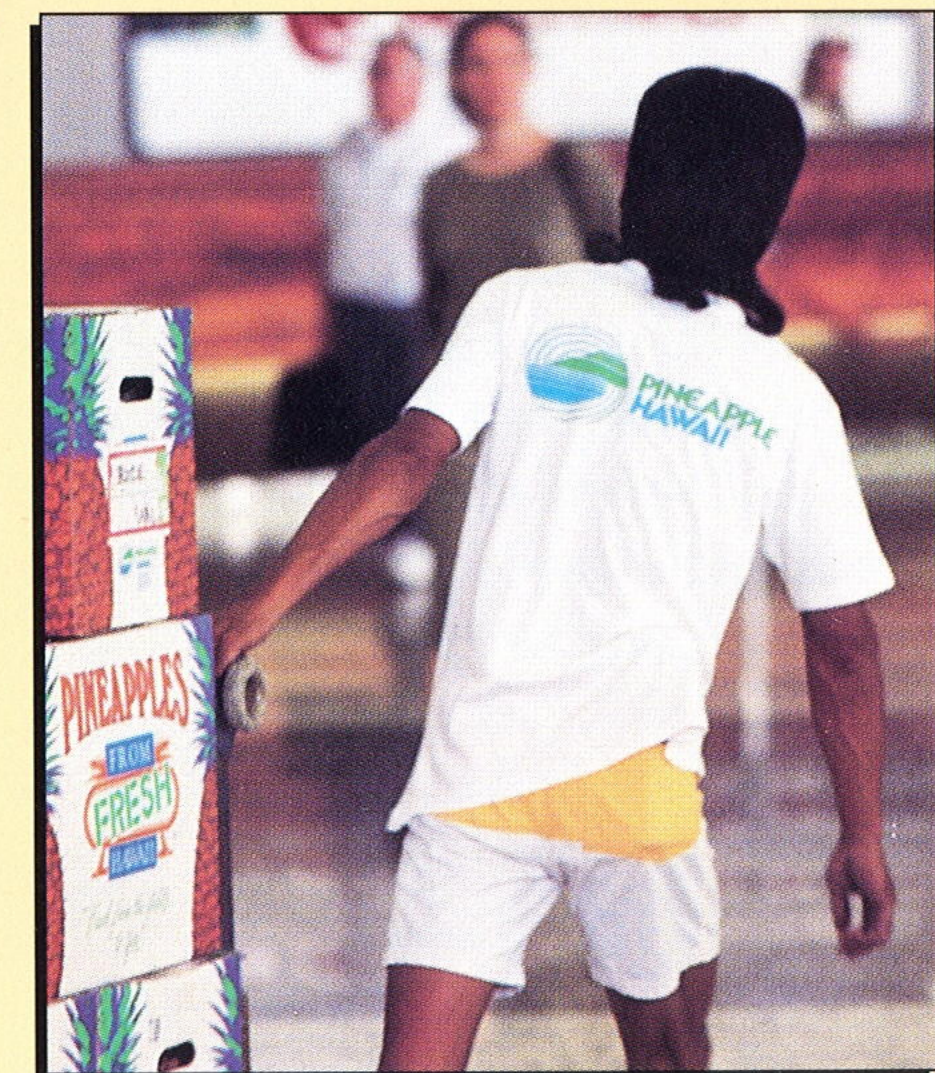


25%

**Off-Airport
businesses**



**Honolulu
International
Airport**



TOTAL ECONOMIC IMPACT OF AIRPORT ACTIVITY IN 1987

The total economic impact of Airport activity in 1987 can be estimated from the survey results. The analytical technique used to estimate total economic impact is called regional input/output analysis.

ANALYTICAL TECHNIQUE

Input/output analysis is based on the interrelationships between producers and consumers in an economy—the demand for additional output or production of goods and services requires the input of other related industries, stimulating further economic activity in terms of employment, wages, and output. Input/output computer models are used to summarize these inter-industry relationships and allow the model user to compute the impacts of a change in economic activity.

The State of Hawaii Department of Business and Economic Development originally developed and maintains the Hawaii Input/Output Model, which was used to estimate the total economic impact of Airport activity—the sum of direct, indirect, and induced impacts, as defined in the following paragraphs.

- ▶ **Direct Impacts:** the impacts that are directly associated with Airport operations, such as on-Airport employment and the purchase of goods and services by on-Airport organizations and off-Airport businesses.
- ▶ **Indirect Impacts:** the impacts on the industries that are suppliers to 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:** 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.
- ▶ **Multiplier Effect:** the ratio of total impact (the sum of direct, indirect, and induced impacts) to direct impact. The multiplier is used to measure the extent to which the indirect and induced impacts flow from the direct impact. Thus, the direct employment and expenditures of on-Airport employers, freight forwarders, and travel agents “multiply” themselves throughout the regional economy, resulting in the total economic impact of Airport activity.

The model produces three economic measures of total impact—employment, wages, and output.

The employment measure of the model is the number of employees related to Airport operations in the direct, indirect, and induced categories.

The wages measure of the model is the total gross wages, salaries, and proprietors’ income (including taxes) generated in the direct, indirect, and induced categories.

The output measure of the model is equivalent to the sales volumes of all industries related to Airport operations in the direct, indirect, and induced categories. Output relates only to sales in the region. The output impact is the change in the sales volume of regional industries resulting from Airport activity.

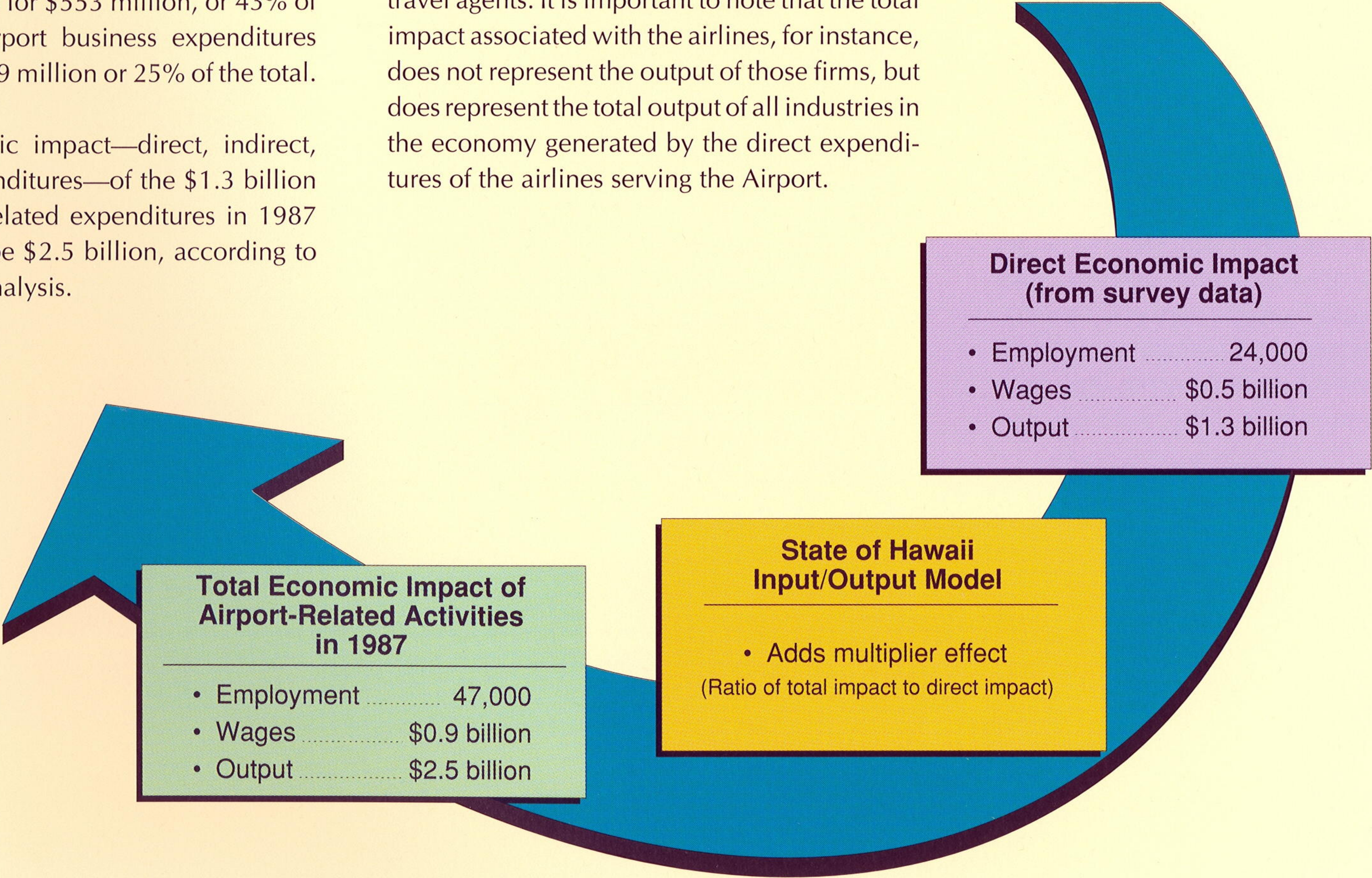


RESULTS

It was determined from the survey data that direct expenditures totaled almost \$1.3 billion in 1987. Of the total, the largest share—\$978 million or 75%—was attributable to the expenditures of on-Airport organizations. The largest category of on-Airport employers, the airlines, accounted for \$553 million, or 43% of the total. Off-Airport business expenditures accounted for \$319 million or 25% of the total.

The total economic impact—direct, indirect, and induced expenditures—of the \$1.3 billion in direct Airport-related expenditures in 1987 was estimated to be \$2.5 billion, according to the input/output analysis.

Of this total impact, 73%—about \$1.8 billion—was the impact on the economy generated by the direct expenditures of on-Airport organizations. The remaining 27%—\$676 million—represented the impact generated by the direct expenditures of off-Airport freight forwarders and travel agents. It is important to note that the total impact associated with the airlines, for instance, does not represent the output of those firms, but does represent the total output of all industries in the economy generated by the direct expenditures of the airlines serving the Airport.



IMPACT BY TYPE OF ORGANIZATION

As shown in the table to the right, the total impact of the airlines (\$976 million) represented about 40% of the total economic impact of \$2.5 billion; next was the total impact generated by the expenditures of travel agents (\$655 million).

The total impact on employment estimated to result from the direct employment of Airport-related businesses is also presented in the table. A total of about 47,000 in direct, indirect, and induced employment is estimated to result from the direct employment of 24,000. The direct employment of on-Airport organizations generated 68%—32,000 employees—of the total impact employment in the economy, and the direct employment of off-Airport businesses generated the remaining 32%, or 15,000 employees.

The total economic impact in terms of wages and salaries is estimated at \$900 million in 1987, or 36% of the total output of \$2.5 billion.

The economic impact of Airport activity by industry category is also illustrated in the table.

	Employment (number of employees)	Wages and salaries (millions)	Total output (millions)
On-Airport activity			
Passenger and all-cargo airlines	15,150	\$346	\$ 976
Passenger terminal	7,030	118	254
Fixed base operators	3,100	31	44
Government agencies	2,790	70	352
Ground transportation and tour operators	3,310	44	134
Other organizations	730	13	51
Subtotal	32,100	\$622	\$1,810
Off-Airport activity			
Freight forwarders	490	\$ 10	\$ 21
Travel agents	14,730	268	655
Subtotal	15,220	\$278	\$ 676
All activities total	47,320	\$900	\$2,486



TAX IMPACT OF AIRPORT ACTIVITY

The impact of Airport activity on taxes paid to State and local governments by individuals and businesses in 1987 was also estimated. Of the estimated total of \$195 million in State and local taxes generated by Airport activity in 1987, \$112 million (57%) was paid by businesses, and \$83 million (43%) was paid by individuals or households. State taxes accounted for \$175 million (90%) of the total taxes, and local taxes accounted for \$20 million (10%).

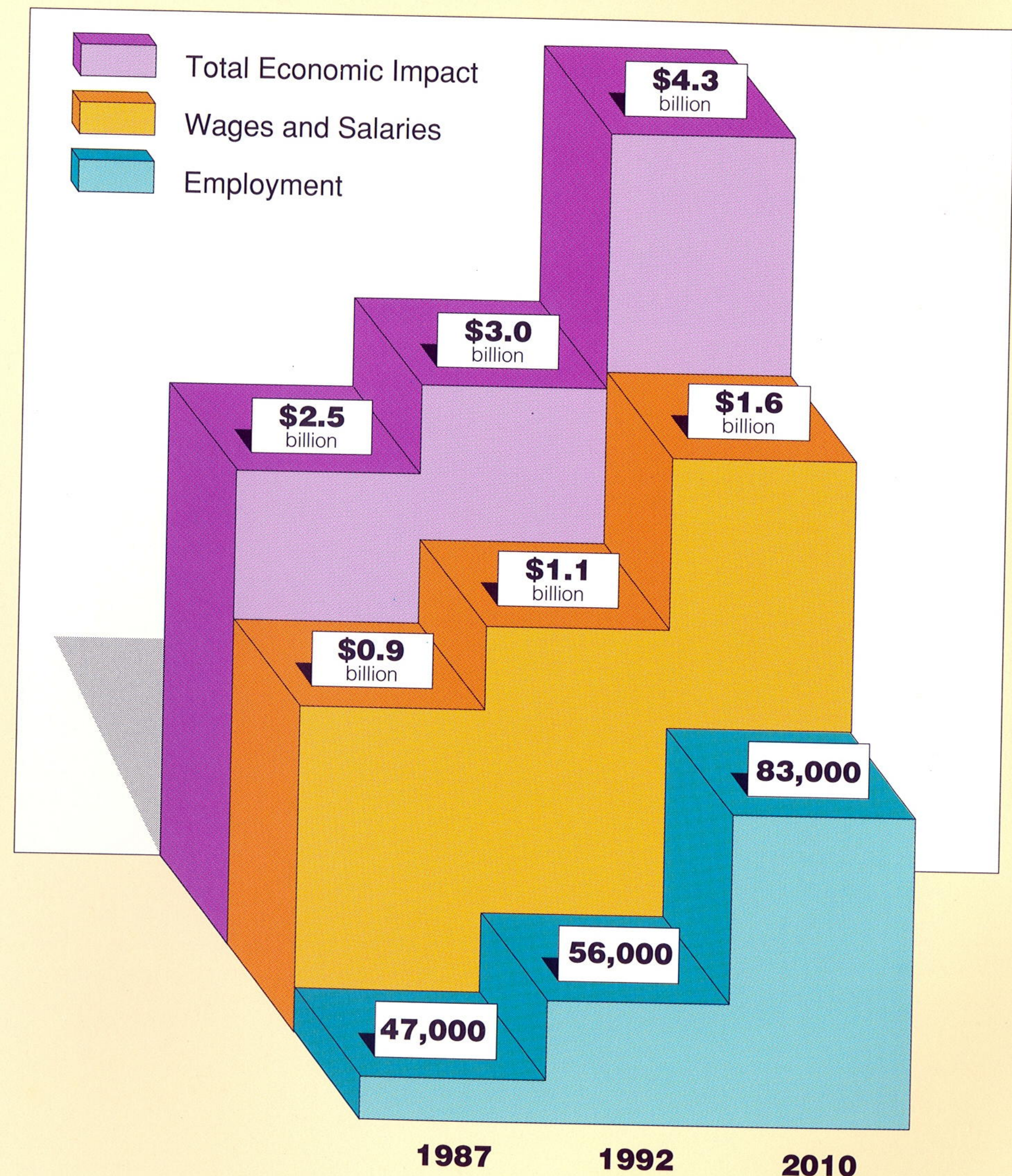
The taxes paid by businesses—State corporate income taxes and local property taxes—are included in the total output of \$2.5 billion. The taxes paid by individuals—State personal income taxes, State excise taxes, State sales taxes, and local property taxes—are included in the total wages of \$900 million.

ECONOMIC IMPACT OF FORECAST AIRPORT ACTIVITY

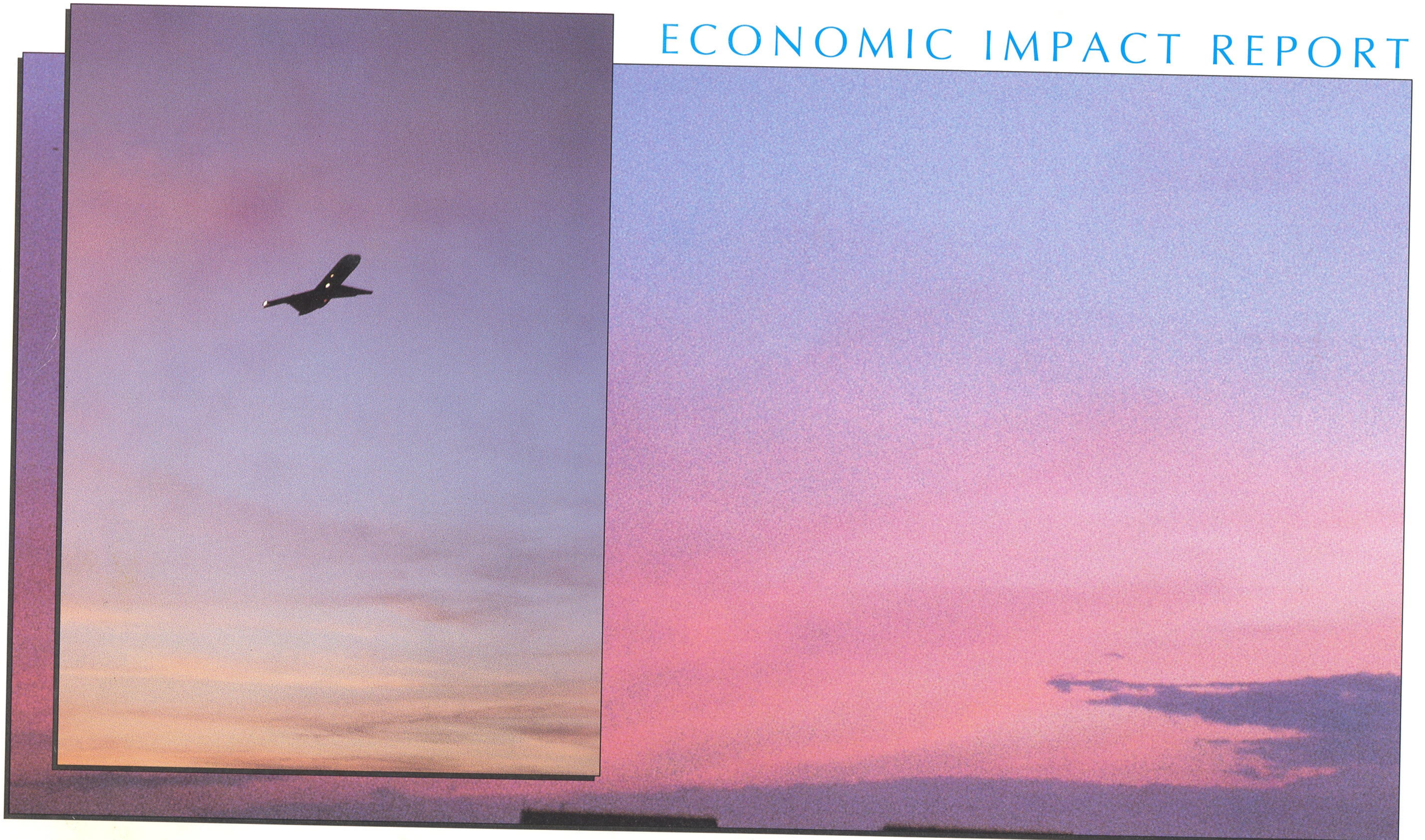
As aviation activity increases in the future, Airport-related expenditures and the total economic impact will increase. The extent of the increase in each type of expenditure will be a function of the growth in various sectors of Airport activity. For this study, the forecast increase in expenditures was assumed to be related to sectors of Airport activity.

- **Employment:** Total direct, indirect, and induced employment related to Airport activity is forecast to total 56,000 by 1992 and 83,000 by 2010.
- **Wages and Salaries:** Total direct, indirect, and induced wages and salaries are forecast to total \$1.1 billion by 1992 and \$1.6 billion by 2010.
- **Total Economic Impact:** The annual total economic impact of the Airport, as measured by output, is forecast to be \$3.0 billion (in 1987 dollars) by 1992 and \$4.3 billion (in 1987 dollars) by 2010.

Current and Forecast Economic Impact (1987-2010)



ECONOMIC IMPACT REPORT



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