



The State of Hawaii
Department
of Transportation
1988 Report
to the Governor

Letter from the Director

*From left:
The Honorable John Waihee
Governor, State of Hawaii
Edward Y. Hirata, Director
State Department of
Transportation*



December 22, 1988

I am pleased to submit the Department of Transportation's annual report for the fiscal year ending June 30, 1988.

Shortly after we were appointed, Governor Waihee asked each Department to set up goals for his term of office. Our Department came up with two goals. Our first goal is to promote economic development by improving our airports, harbors and highways to meet the growing demands being placed on them. Our second goal is to reduce traffic congestion.

I think we have made progress in both areas.

To coordinate Hawaii's response to an increase in international travel, Governor Waihee formed the Interdepartmental Task Force on International Aviation in November, 1987. He directed our Department to coordinate activities with the Departments of Business and Economic Development and Commerce and Consumer Affairs.

We are also working with the Hawaii Visitor's Bureau, the Pacific Basin Development Council, the Federal Inspection Services, Hawaii's Congressional delegation and industry groups.

Deputy Director Jeanne K. Schultz is heading up the Task Force. It's objectives are to increase the number of international visitors to Hawaii, improve the international arrival procedure at Honolulu International Airport, and to begin planning for international arrivals at our Neighbor Island airports.

While most of our visitors arrive by air, 98% of the goods consumed in Hawaii come through our harbors.

We started an aggressive marketing program for our harbors this year. We published a Port Hawaii handbook listing all of our facilities, and you will find our Port Hawaii ads in numerous business and shipping publications around the world.

The response to the campaign has been very favorable.

We have begun a number of innovative programs to help meet our second goal to reduce traffic congestion. These are in addition to our traditional programs such as new lanes and new highways.

We spent a lot of time working on a plan for a new commuter ferry system on Oahu. The ferry would initially help reduce congestion on Kalaniana'ole Highway while construction of two new lanes is in progress. We also have plans to extend commuter ferry service as far as Barbers Point Harbor.

We went out to bid on the ferry system and received a low bid from San Diego Shipbuilding & Repair. They have proposed paying the state a total of \$7,200 over the first eight years, \$1,200 a year for the first four years, then declining to zero in a straight line in the subsequent four years, without a startup subsidy.

We are studying their proposal and hope to award

the contract in the next fiscal year.

We are also working on some other innovative programs including carpooling, computerized ridesharing, park and ride facilities, staggered work hours and a Telework Center.

We also initiated "Beat the School Jam" on Oahu to deal with back-to-school traffic and "Beat the Rush Hour Blues" on Kauai to deal with morning and afternoon congestion in Lihue town. Both programs were successful in raising public awareness.

We expect to continue working on both traditional and non-traditional ways to ease traffic congestion.

We are making every effort to cut bureaucratic red tape and increase productivity to make our department the most effective and efficient in the state.

Sincerely,

A handwritten signature in black ink, reading "Edward Y. Hirata". The signature is written in a cursive style with a long horizontal line extending to the right.

Edward Y. Hirata
Director of Transportation



3 STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES

Airports

For the FY ending June 30, 1988, passenger traffic at all state airports totalled 31,915,244, which is 5.5% greater than the previous fiscal year.

The Airports Division is developing noise maps, describing levels of disturbance by aircraft on areas adjacent to airports, at Hilo, Keahole, Kahului and Lihue Airports. Federal standards for noise measurement and description are prescribed in Federal Aviation Regulation Part 150 and used to create the noise maps and establish guidelines for appropriate land use compatible with airport activities.

Known as Part 150 Studies, the projects involve several public information meetings to discuss findings and alternative remedial actions that can be taken to reduce noise conflicts.

Left: Kahului Airport Crash, Fire, Rescue crew members Michael Hayashi, Harvey Grocholski and Paul Javier are quick to respond to airport emergencies.

In addition to providing relief for neighboring communities, the program will assist in assuring that the long-range airport system will meet the needs of the state and local public served by each airport. State and County planners, as well as affected property owners, will have a basis for assessing the noise impact and deciding the appropriate land use around airports.

In addition to the noise studies, the Airports Division is updating the Statewide Airport System Master Plan which forecasts movements of passengers and cargo by air into and throughout the State.

Detailed master plans for Honolulu International Airport, General Lyman Field, Keahole Airport, Kahului Airport, Port Allen Airport and Lihue Airport are being revised to reflect the new forecasts and to depict future improvements at each airport. Updates for Dillingham Field and Lanai, Molokai and Kalaupapa Airports are also planned. Public input into these projects will also be obtained through information meetings held on all islands.

An office automation program brought the Airports Division further along toward its goal of more efficient data and information management. Software was under development for a new billing system, project control and computer aided drafting and design. Modifications to existing programs were also un-

derway for the Financial Accounting Management Information System (FAMIS), property management and maintenance management. A goal of the program is to network both administrative and engineering offices, as well as each airport district office.

In November, 1987, the Division sold Airport Revenue Bonds valued at \$85 million to finance the cost of various airport projects. The effective interest rate was 8.21%.

The Department hosted the Pacific Basin Airport Operators Council International Conference on Maui in May, 1988. The conference was attended by 175 representatives from airports around the Pacific, as well as the U.S. Mainland.

Oahu Airports



On Oahu, the Department of Transportation owns and operates Honolulu International Airport, the Dillingham Airfield for small airplanes and gliders and operates the airstrip at Ford Island.

Passenger traffic totalled 20,983,407 at Honolulu International Airport in FY 88, a 5.2% increase over the previous year. Honolulu International Airport is the 13th busiest airport in the United States and the 17th busiest airport in the world.

The Airport Division acquired 5.8 acres of land adjacent to HIA from the U.S. General Services Administration for the expansion of the South Ramp. Hawaii's Congressional delegation assisted the Department in getting favorable financial aid from the Airport Improvement Program.

Existing master plans and noise maps were reviewed and proposed updates were presented to the public at several public informational meetings. Proposed changes include the revised South Ramp layout and ad-

ditions to the maintenance area west of the Ewa Concourse.

On October 19, 1987, a ceremony was held to celebrate the 25th anniversary of John Rodgers Terminal at HIA. Employees with 25 years of service at the airport were also recognized during the program.

Interisland Terminal No. 3 was opened for service on June 2, 1988, representing the first phase of a new Interisland passenger terminal for HIA. Built at a cost of \$23.3 million, Terminal No. 3 includes an innovative air conditioning system utilizing ice storage during periods of low electrical consumption, with resulting low demand during peak periods.

Hawaiian Airlines is temporarily housed in this building to allow demolition of the old terminal building for the new structure. Terminal No. 3 will be double-decked later to enable passenger loading using loading bridges.

Ten year concession contracts were awarded to five

rental car operators at HIA, beginning March 1, 1988. This represents an increase over the four operators previously serving the terminal.

The Department received the highest bid for a duty free concession in the world when bids were opened on February 5, 1988 for the duty free concession at HIA. For the contract period of four years and 11 months, which begins July 1, 1988, Duty Free Shoppers agreed to pay more than \$1.15 billion to the Airport Revenue Fund.

Work was underway in FY 88 on a new computer based airport operations and control system. Initial phases include the flight information system, fire alarm system and energy management system. The security system and public information system will be added. The same system with slight modifications will be used for Neighbor Island airports.

A major upgrading of the terminal ticket lobbies, baggage claim areas and concession space was begun in FY 88. Work was completed on the Central

Concourse and contracts were awarded for the Central Lobby concession spaces. Work on the ticket lobbies and baggage claim areas were awarded in phases to allow the removal of asbestos while at the same time maintaining airline operations.

When completed, all lobby and concession spaces will be on a par with the recently completed Diamond Head Ticket Lobby expansion. New, larger baggage claim devices will be installed to reduce congestion. Work to upgrade the administration tower was also in progress. This work will upgrade the tower's external appearance and renovate office spaces and operational areas.

Improvements continued to be made on the South Ramp to develop this area for fixed base operators, air cargo, general aviation and other aeronautical activities. Realignment of Lagoon Drive doubled the available space for the construction of hangars and cargo terminals. In addition to

Kauai Airports, Harbors & Highways



On Kauai, the Airports Division manages one commercial airport at Lihue and one general aviation airfield at Port Allen.

For the FY ending June 30, 1988, passenger traffic at Lihue Airport totalled 2,683,655 for a 2.1% increase over the previous fiscal year.

At Lihue Airport, construction of the new restaurant and snack bar was completed in the passenger terminal building, which opened in February, 1987. On September 16, 1987, the 15-year contract for food and beverage service began with Marriott/Host. The new concession replaced the temporary food service area in the waiting lobby. The snack bar is operated as a minority business enterprise under a subcontract of the food and beverage concession.

Work was started on the modification to the Lihue Airport parking lot to provide additional parking for rental car concessions.

Plans for additional storage and maintenance space for rental car and other ground transportation activities were delayed until a decision could be reached on the helicopter master plan for the old terminal area.

Master plan work for Lihue Airport included aircraft noise impact studies and the development plan for the old terminal area. Aircraft noise maps will be the result of noise analysis of existing and future aircraft landings and takeoffs.

Community interest was excellent since Lihue has a substantial part of the air traffic made up of sight-seeing helicopter flights. Several public information meetings were held to discuss plans for the development of helicopter facilities which would correct the problem of congestion at the existing helipad which needed to be moved to allow the construction of a taxiway.

In addition to helicopter activities, the old terminal area will be the site for a new cargo building and commuter aircraft terminal building.

A new master plan for Port Allen Airport was proposed by the Airports Division to allow helicopter operators to obtain leases for the construction of maintenance and passenger facilities. To obtain community input, a task force consisting of the operators and local citizens was created to review the findings of the consultant preparing the plan. Meetings were held in Hanapepe and a plan will be completed in 1988 to guide future development of this airport.

Maui Airports, Harbors & Highways



Kahului, Hana, Lanai, Molokai and Kalaupapa airports are all managed by the Maui District of the Airports Division.

In FY 88, passenger traffic at Kahului Airport totalled 4,412,987 for a 1.6% decrease over FY 87. The decline in traffic occurred in the Interisland sector, which decreased by 1.5%, while overseas traffic increased by 1.5%.

Master plan changes and noise studies generated substantial local interest on issues of tourist development and infrastructure needs. Kahului Airport is the second busiest airport in the state and direct overseas service is growing steadily in spite of the slight decline in overall traffic.

To allow widebody aircraft to operate at maximum takeoff weight, strengthening and lengthening of the existing runway was proposed in the recommended master plan. In addition to a longer runway, the Airports Division has proposed a parallel runway to meet future airfield capacity needs.

Plans for the construction of an extended runway safety area resulted in extensive discussions with both the community and county officials. The project was designed to improve airfield safety and did not include extension of the runway pavement. However, if the community agreed to the need for a longer runway, the safety area would be capable of supporting the pavement.

Design and construction of several phases of expansion of passenger facilities at Kahului Airport progressed

satisfactorily. The first phase included the completion of the commuter terminal and the construction of parking lots and part of the aircraft parking apron.

Design work included the new terminal building, access roads, and the extended runway safety area. Total cost of the project is estimated to be \$73 million.

Phase I construction of aircraft hardstands for Kahului Airport was completed. Extreme ramp congestion during peak traffic necessitated building the new parking apron in two parts for the new terminal building. Parking for automobiles was also divided into two parts with the first segment completed in late 1987.

On Maui, the Harbors Division operates Kahului Harbor and small boat harbors at Lahaina and Maalaea; the Manele Boat Harbor on Lanai; and Kaunakakai Harbor on Molokai.

At Kahului Harbor, a 235-foot pier extension was completed at a cost of \$4.2 million. It was dedicated and blessed in a ceremony held in November, 1987. The pier extension now allows the simultaneous berthing of two ocean going vessels, thus improving the effectiveness of the harbor.

Pier 1 was dredged to the design depth of 35-feet. To protect perishable interisland cargo, a low bid for enclosing the Pier 2 shed was received and is being evaluated.

For the long term, a 2010 Master Plan for the port is being developed with the participation of the carriers, terminal operators, government officials and interested persons from the community. The plan is expected to be completed in FY 89.

Big Island Airports, Harbors & Highways



On the Big Island, the Airports Division operates airports in Hilo (General Lyman Field) and Kailua-Kona (Keahole Airport), Waimea and Upolu.

For the fiscal year ending June 30, 1988, passenger traffic at Keahole Airport totalled 1,750,477, a decrease of 1.2% from the previous year. Passenger traffic at General Lyman Field totalled 1,192,873, a 0.7% increase over the year before.

Master plan work for Keahole Airport was completed in December, 1987 and focused on the development of the airport for expanded overseas activity. In addition to the noise map for future land use guidance, the master plan provides for the extension of the existing 6,500 foot runway to an ultimate length of 11,000 feet and the construction of terminal facilities designed for wide-body overseas aircraft.

Updating the master plan for General Lyman Field in Hilo was started and is expected to be completed in 1988. The aircraft noise map which will be part of the study is expected to establish areas of incompatible use adjacent to the airport. The long range development plan for the airport includes improvements to cargo buildings in addition to a site for irradiation facilities.

On January 13, 1988, an electrical short circuit caused a fire in the passenger terminal building at Waimea-Kohala Airport. Damage to the structure was estimated at \$100,000 and was confined to the ticket counter area. Passenger service was moved to the baggage claim area and continued without interruption. Work to repair the structure is expected to be completed in 1988.

Design work for the Col. Elison Onizuka Memorial at Keahole Airport was started with a \$75,000 appropriation by the Legislature. Construction is expected to start in 1989 with completion a year later.

The Harbors Division manages Hilo and Kawaihae commercial harbors. It also manages small boat harbors at Kailua-Kona, Honokohau, Kawaihae, Keauhou, Reed's Bay, Radio Bay and Wailoa Basin.

At Hilo Harbor, a 400-foot section of the Pier 1 apron is being improved under a \$4.5 million contract. This improvement will increase the strength of the pier to handle state of the art cargo handling equipment. The project is expected to be completed in early 1989.

A .5 acre parcel of the container yard was improved with an asphalt concrete pavement under a \$270,000 contract.

A maintenance dredging project at Piers 1 and 3 was completed to restore the depth to 35 feet.

The Department of Transportation

The Department of Transportation was formed shortly after Hawaii became a state in 1959. Since that time, the DOT has grown. Today, the Department's Airports, Harbors, and Highways Divisions are supported by nine Departmental staff offices. These offices include Statewide Transportation Planning, Hazardous Materials, Public Affairs, Visitor Information, PPB Management and Analytical, Personnel, Business Management, Computer Systems and Services, and Property Management.

Funding

The DOT is required by law to generate its own monies to fund its programs and projects. Independent special funds were established for each of the three division's major programs. Each fund is expected to generate enough revenues to pay for its program's oper-

ating and maintenance costs and contribute a fee to the State General Fund for central services. This fee is set at five percent of each special fund's gross revenues minus debt service.

These special funds must also provide a higher level of cash financing in the Capital Improvement Program to ease the burden on debt service. Because the Capital Improvement Program is a large one, the DOT continues to rely on reimbursable General Obligation Bonds, Revenue Bonds and federal aid to help fund programs and projects. The special funds are as follows:

Highway Fund

The State Highway Fund was established under Section 248-8 HRS, as amended. The principal sources of revenue are an 11 cent per gallon fuel tax, a 1/2 cent per pound weight tax and a four percent general excise tax

levied on the sale of motor vehicle fuel.

Act 239-85 which authorizes the transfer of the excise tax on fuel from the General Fund to the Highway Special Fund, will expire on June 30, 1991.

Boating Special Fund

The Boating Special Fund was established in accordance with Section 266-19 and 277-20 HRS, as amended. Mooring fees, residence service charges, commercial user fees and the fuel tax make up 90 percent of the Boating Special Fund. General Funds are used for the construction of breakwaters, navigational aids, and dredging of major channels and turning basins for small boat harbors. Special Funds cover the costs of berthing facilities and other harbor backup facilities, such as roadways, parking lots and utilities.

Airport Revenue Fund

The Airport Revenue Fund was created under Section 261-5, Hawaii Revised Statutes. The aviation fuel tax, landing fees, airport use charges, concession fees and investment income are the primary revenue sources. Other revenue sources include rentals and miscellaneous earnings.

Harbor Special Fund

The Harbor Special Fund was established under Section 266-19, HRS. Revenues for the Fund come from the fees and charges for the use of commercial harbor facilities and services. Earnings from wharfage, dockage, demurrage and the rental of land and wharf space constitute the majority of the revenues with the remaining amount generated from various service charges, permits and licenses.



John K. Uchima
First Deputy Director



Ronald Hirano
Second Deputy Director



Dan Kochi
Second Deputy Director



Jeanne Schultz
Second Deputy Director

Airports Division

Statements of Revenues, Expenses and Changes in Retained Earnings

| <i>Years ended June 30</i> | <i>1988</i> | <i>1987</i> |
|---|---------------|---------------|
| Operating revenues: | | |
| Concession fees | \$121,334,221 | 92,519,339 |
| Aeronautical rentals | 9,390,919 | 10,816,927 |
| Aviation fuel tax | 6,914,188 | 6,286,293 |
| Airport use charge and landing fees | 6,805,471 | 2,466,575 |
| Nonaeronautical rentals | 3,124,481 | 3,180,211 |
| Miscellaneous | 2,502,447 | 2,018,509 |
| Total operating revenues | \$150,071,727 | \$117,287,854 |
| Operating expenses other than depreciation | 54,571,091 | 54,705,677 |
| Operating income before depreciation | 95,500,636 | 62,582,177 |
| Depreciation | 18,393,348 | 16,910,334 |
| Operating income | 77,107,288 | 45,671,843 |
| Nonoperating revenues (expenses): | | |
| Interest income— | | |
| Certificates of deposit and U.S. Government Securities | 15,760,995 | 14,850,814 |
| Investment in financing leases | 671,270 | 670,619 |
| Interest expense— | | |
| Revenue bonds: | | |
| Airports systems | (23,803,709) | (24,740,938) |
| Special facility | (671,270) | (670,619) |
| General Obligation bonds | (1,325,910) | (1,638,504) |
| Other, net | 84,365 | 63,029 |
| | (9,284,259) | (11,465,599) |
| Net income | 67,823,029 | 34,206,244 |
| Add depreciation expense transferred to contributed capital — Federal Government grants | 3,673,756 | 3,344,894 |
| Increase in retained earnings | 71,496,785 | 37,551,138 |
| Retained earnings at beginning of year | 233,528,892 | 195,977,754 |
| Retained earnings at end of year | \$305,025,677 | \$233,528,892 |

Projects Completed and in Progress Fiscal Year 1987-88

| <i>Project</i> | <i>Started</i> | <i>Completed</i> | <i>Cost</i> | <i>Description</i> |
|--|----------------|------------------|-------------|--|
| Honolulu International Airport Administrative Tower | 10/87 | 12/88 | \$2.4M | Renovate 2nd, 3rd, 6th, 7th, 8th floors |
| Honolulu International Airport Administrative Tower | 7/88 | 12/88 | \$0.9M | Exterior modifications |
| Honolulu International Airport Energy Monitoring & Control | 3/86 | 6/88 | \$1.4M | Phase I |
| Honolulu International Airport Flight Information Display System | 4/86 | 10/88 | \$4.1M | New system |
| Honolulu International Airport Signage & Graphics | 5/86 | 12/87 | \$1.9M | Phase I |
| Honolulu International Airport Concessions | 8/87 | 6/88 | \$1.2M | Renovate Concessions, Phase II, Ewa Extension |
| Honolulu International Airport Fire Alarm System | 5/87 | 9/88 | \$2.5M | New system |
| Honolulu International Airport Roof Screening, Main Terminal | 10/87 | 2/88 | \$0.4M | |
| Honolulu International Airport Hand & Guardrail | 6/87 | 2/88 | \$1.4M | Phase II replacement |
| Honolulu International Airport Baggage Claim | 5/88 | 11/89 | \$8.4M | Modifications to existing baggage claim |
| Honolulu International Airport Ewa Ticket Lobby | 10/87 | 5/89 | \$6.8M | Renovation |
| Honolulu International Airport Central Ticket Lobby | 10/87 | 8/89 | \$9.7M | Renovation |
| Honolulu International Airport Diamond Head Extension | 4/86 | 12/87 | \$0.6M | Signs |
| Honolulu International Airport Concession, Phase IB | 3/88 | 11/88 | \$3.0M | Diamond Head Extension, Makai |
| Honolulu International Airport Concession, Phase III | 3/88 | 6/89 | \$6.8M | Renovate concessions in Central Waiting Lobby |
| Honolulu International Airport Concession, Phase IVA | 1/88 | 4/88 | \$1.0M | Renovate concessions in Central Concourse |
| Honolulu International Airport Operating & Control System | 5/88 | 10/90 | \$0.6M | Phase I |
| Honolulu International Airport Aircraft Guide-In System | 6/88 | 12/88 | \$0.3M | |
| Honolulu International Airport Roadway & Parking | 12/87 | 6/88 | \$2.9M | Ground Level, Phase I |
| Honolulu International Airport Parking Lot Access & Exit Plaza | 2/87 | 7/88 | \$3.0M | Diamond Head area |
| Honolulu International Airport Interisland Airfield Apron | 3/87 | 1/88 | \$2.9M | Phase II |
| Honolulu International Airport Expansion Terminal No. 3 | 3/87 | 3/88 | \$8.3M | Interisland Terminal Complex |
| Honolulu International Airport Interisland Terminal No. 3 | 2/88 | 5/88 | \$1.5M | Tenant Space |
| Honolulu International Airport Baseyard Facilities | 4/88 | 7/89 | \$2.6M | Expansion and alteration to Baseyard, Phase II |
| Keahole Airport Airfield Improvements | 11/86 | 9/87 | \$2.3M | Misc. improvements |
| Keahole Airport Terminal Building Additions | 4/87 | 8/88 | \$0.9M | |
| Upolo Airport Misc. Improvements | 11/87 | 2/88 | \$0.2M | |
| Lihue Airport Taxiway Modifications | 4/87 | 10/87 | \$1.4M | |
| Lihue Airport Restaurant and Beverage Concession | 1/87 | 9/87 | \$1.7M | |
| Lihue Airport Parking Lot Modifications | 11/87 | 4/88 | \$0.3M | |
| Kahului Airport Aircraft Hardstands Phase I | 7/86 | 10/87 | \$8.8M | |
| Kahului Airport Aircraft Hardstands Phase II | 2/88 | 2/89 | \$7.2M | |
| Kahului Airport Access Roads & Parking, Phase I | 12/87 | 11/87 | \$3.7M | |
| Interstate Route H-1, Waiawa Interchange to Waiau Int. | 8/87 | 2/88 | \$1.03M | Phase II, Additional lane, Westbound direction |
| Interstate Route H-1, Waiawa Interchange towards Halawa Int. | 5/86 | 8/87 | \$3.10M | Additional lane in each direction |
| Interstate Route H-1, Keehi Int., West of Moanalua Stream | 7/87 | 12/88 | \$786,826 | Landscaping |
| Interstate Route H-1, Keehi Int., West of Moanalua Stream | 8/87 | 1/89 | \$748,108 | Landscaping |
| Interstate Route H-1, Keehi Int., Lagoon Drive to Ahua St. | 7/84 | 8/88 | \$7.56M | Viaduct, roadway construction |
| Interstate Route H-1, Palailai Interchange to Kunia Interchange | 5/86 | 12/87 | \$8.62M | Additional lane in each direction |
| Interstate Route H-1, Halawa Interchange to Middle Street Interchange (Kalauao Springs to Halawa Reservoir) | 5/87 | 11/88 | \$4.65M | Non-potable water for landscape sprinkler system |
| Interstate Route H-1, Middle St. to Aina Koa Ave. (resurfacing) and Aala St. to Punchbowl St. and Keeaumoku St. (lights) | 9/87 | 12/88 | \$6.19M | Resurfacing and street light system |
| Interstate Route H-3, Halekou Interchange | 2/83 | 10/88 | \$20.90M | Interchange, ramps and roadways |
| Interstate Route H-3, N. Halawa Valley Construction Access Rd. | 11/87 | 1/89 | \$9.81M | Access road to tunnel portal |
| Interstate Route H-3, Halekou Interchange to Kailua Interchange | 3/87 | 11/87 | \$2.3M | Rehabilitation |
| Sand Island Road Widening, 2nd Bridge and Approaches | 9/87 | 3/89 | \$12.75M | New bridge and roadway approach |
| Farrington Highway Replacement of Makaha Bridge No. 2 | 11/87 | 3/89 | \$1.03M | Bridge replacement |
| Demolition of Buildings on Kalaniana'ole Highway | | 7/88 | \$5,900 | Demolition |
| Fort Weaver Road, Renton Road towards Hanakahi Street | 6/86 | 11/87 | \$4.13M | Widening, realignment |