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T E R R I T O R Y O F H A W A I I P U B L I C W O R K S •

TERRITORY OF HAWAII
DEPARTMENT OF PUBLIC WORKS
HONOLULU

June 30, 1957

Honorable Samuel W. King
Governor, Territory of Hawaii
Iolani Palace
Honolulu, T. H.

Dear Governor King:

The Department of Public Works submits its annual report for the fiscal year ending June 30, 1957.

Construction contracts granted by this Department totaled \$7,858,682.68, divided as follows: highways, \$4,700,734.34; general public works, \$2,242,819.95; airports, \$915,128.39. The 35 projects included work on all of the five major islands.

The most costly and dangerous project ever undertaken by the Territorial Highway Department—the tunnel section of the new Nuuanu Pali Highway—reached successful completion May 10, 1957. The most dangerous part of the job—the tunneling—was pushed through without loss of life or serious injury. Contractor J. M. Tanaka finished the project a week ahead of his allotted time.

The unusual precautions taken for the safe completion of this project will also be followed for the construction of the parallel tunnels, which will be advertised for bids in the fall of 1957.

Congress approved the \$50,000,000 Hawaii gastax revenue bond issue in July, 1956. The first bonds, totaling \$12,500,000, were marketed in October in New York. The interest rate, 3.83 per cent, was considered satisfactory to the Territory in the light of the tight money market.

The Highway Department had no backlog of plans at the time the bond money became available. The bond portion of our \$80,000,000 accelerated program should hit full stride in the latter part of the 1958 fiscal year.

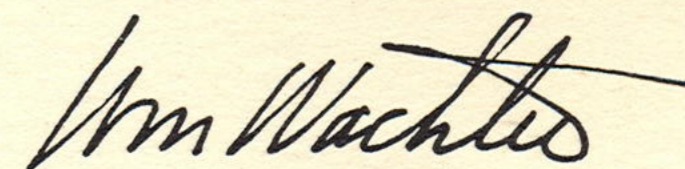
The Highway Department has been working with military leaders toward the creation of an Hawaii Defense Highway System eligible to receive Federal aid on the same basis as the National Interstate and Defense Highway System. Hawaii at present does not share equally with the states in the revenues from the new and higher Federal motoring taxes which became effective July 1, 1956. Creation of the Hawaii Defense Highway System, which would require an act of Congress, would correct this inequity.

Ben E. Nutter resigned as Superintendent of Public Works in December, 1956, after three and one-half years as head of this Department. During his period of service, he laid the financial groundwork for construction of a vastly improved network of highways by 1961. Probably more than any other single person, he is responsible for the fine record on the Nuuanu Pali tunnel construction project.

After my appointment as Superintendent, Mr. Harold W. Butzine was reappointed by me as Assistant Superintendent of Public Works.

Speaking for my entire staff, I would like to thank you once again for the support and encouragement which you as Governor have always extended to all phases of our public works construction program. This Department's accomplishments in recent years offer sound testimonial to the quality of your leadership.

Yours very truly,



Superintendent of Public Works

SUPERINTENDENT OF PUBLIC WORKS

A N N U A L R E P O R T

FISCAL YEAR ENDING JUNE 30

1 9 5 7

WILLIAM M. WACHTER

Superintendent of Public Works and Territorial Highway Engineer

HAROLD W. BUTZINE

Assistant Superintendent of Public Works

TIM HO

Deputy Territorial Public Works Engineer

JOHN C. MYATT

Deputy Territorial Highway Engineer

District Engineers

R. W. HENDRY
Oahu

E. S. KAAUA
Hawaii

E. F. MORRISON
Maui, Molokai, Lanai

FRED L. SCHUMACHER
Kauai

ROSWELL E. HOWE

Administrative Assistant

TERRITORY OF HAWAII

GENERAL PUBLIC WORKS

UNIVERSITY AND NATIONAL GUARD

BENEFIT FROM 16 OF 37 JOBS

General public works projects totaling \$4,848,431.60 were underway in fiscal year 1957 under supervision of the Building Division.

They included 37 projects which either reached completion or went under contract during fiscal year 1957. Not included in the total are seven airport projects, which are discussed on page 12.

The University of Hawaii's campus accounted for 10 of the 37 general public works jobs and nearly \$2,000,000 of the total cost. Six of the projects, totaling about \$460,000, were for Hawaii National Guard facilities.

Largest contract of the year was the University's new physical education building, which is expected to cost about \$541,000 when completed.

The following list summarizes general public works projects under contract in fiscal year 1957. The final cost figures are in most cases only estimates. They include design and engineering, rights-of-way (if required) and construction.

OAHU

Bureau of the Budget—Protective wall for the Surplus Property Division's Ala Moana storage area. Completed January 22, 1957; estimated final cost, \$5,816.80.

Diamond Head School—Installation of Sewer Line "B". Completed October 22, 1956; estimated final cost, \$4,626.60.

Farrington High School—Concrete bleachers, 26-tiered, 110 feet long, constructed over concrete and hollow tile physical education facilities. To be completed in February, 1958; estimated final cost, \$7,604.30.

Highway Department—Two office buildings and one warehouse. Pre-fabricated steel frame. Completed October 26, 1956; estimated final cost, \$91,524.40.

Iolani Palace—Reroofing and repairs. Completed February 4, 1957; estimated final cost, \$21,850.40.

Improvements and additions to the electrical system of buildings and ground. To be completed about July 22, 1957; estimated final cost, \$21,846.

Kahuku Hospital—Additions, alterations and improvements. New unit is fireproof, steel-frame and plaster construction. Completed August 15, 1956; final cost, \$173,447.88.

Kaneohe Civic Center—Split-level building with offices and assembly room. Hollow tile construction, shake-shingle roof; completed October 31, 1956; final cost, \$83,840.78.

Kapiolani Technical School—Construction of two-story unit for the Practical Nursing Department. Concrete and hollow tile construction. Completed May 28, 1957; estimated final cost, \$117,282.

University of Hawaii—Alterations and additions to old library building (George Hall). Completed August 29, 1956; final cost, \$249,631.54.

Agricultural buildings. Three hollow tile, steel and wood units, with asbestos roofing. Completed October 30, 1956; final cost, \$369,757.46.

Construction of parking area at University Avenue and Metcalf Street. Completed November 26, 1956; final cost, \$19,084.96.

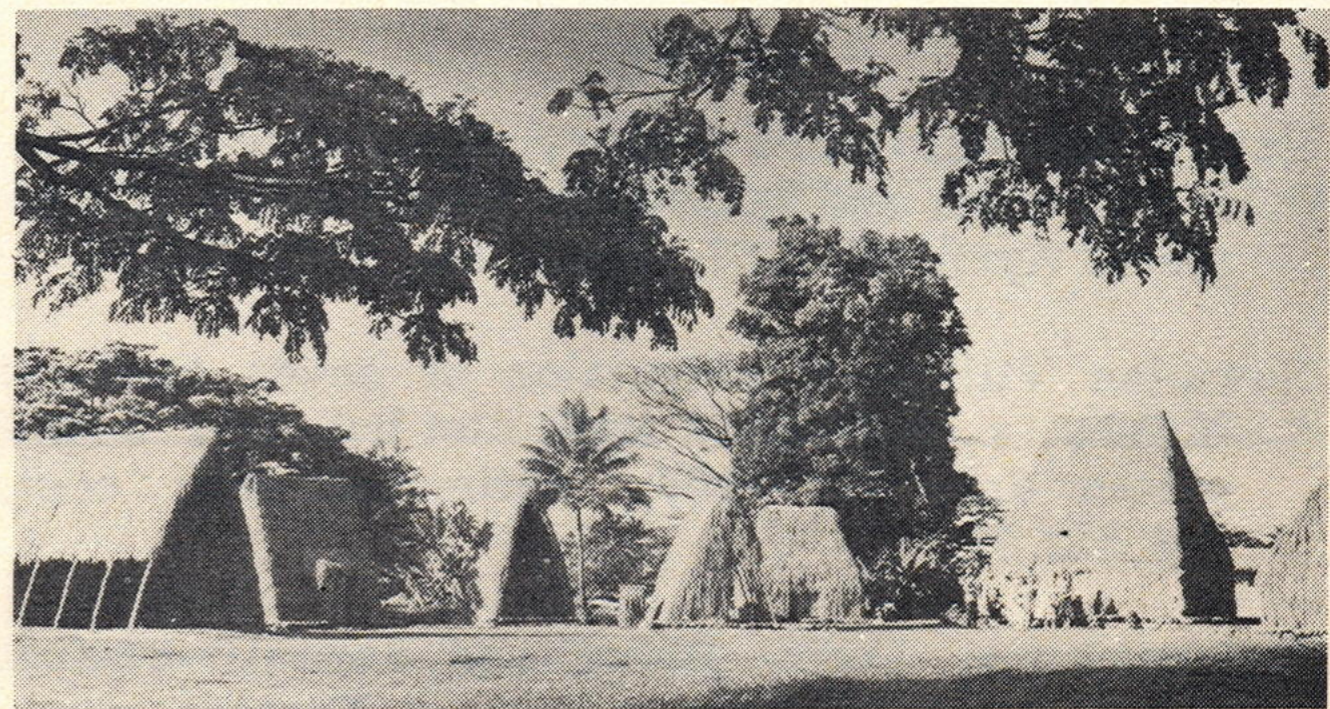
Construction of parking area at Dole Street. Completed December 12, 1956; estimated final cost, \$11,907.97.

University High School. Two-story building, concrete walls with steel trusses, steel roof construction with asphalt shingle roofing. Completed March 12, 1957; estimated final cost, \$370,191.32.

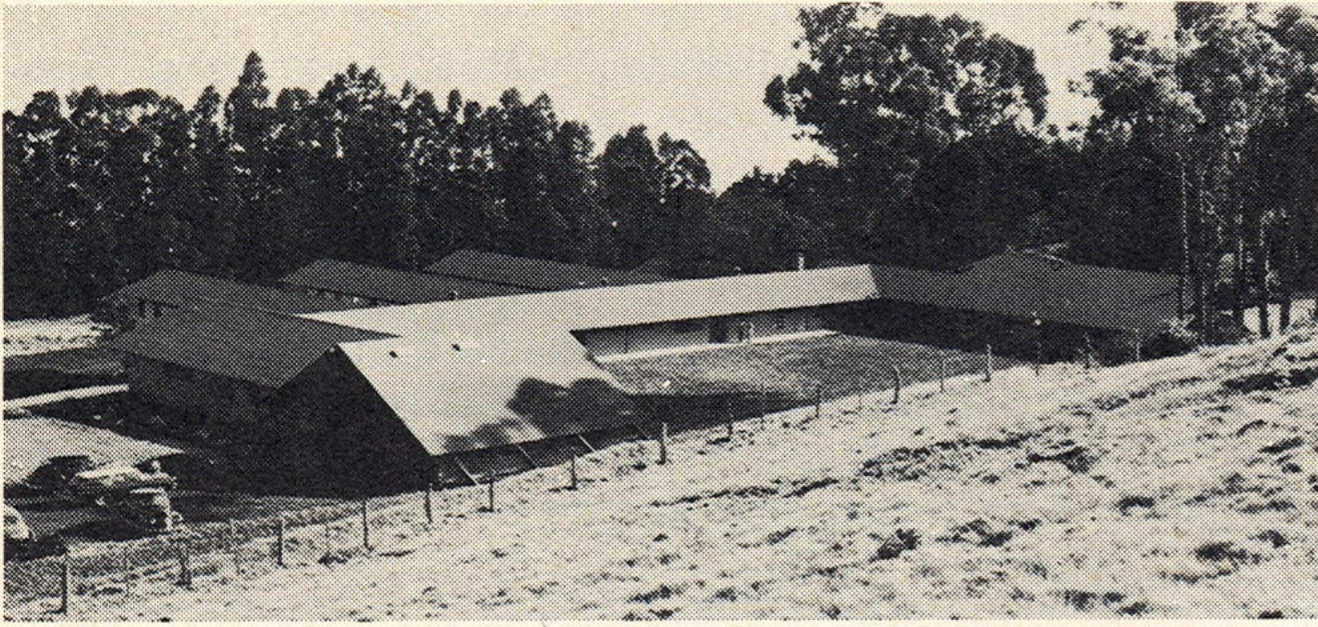
Physical Education Building. One- and two-story building of concrete and steel construction with interior partitions of hollow tile. To be completed in August, 1957; estimated final cost, \$540,985.50.

Resurfacing of Metcalf and Maile Way. To be completed in July, 1957; estimated final cost, \$9,304.90.

Veterans' Memorial Men's Dormitory. Construction of Unit "A", a reinforced concrete,



Hilo's Hawaiian Village was a unique project.



Olinda Prison's new buildings near completion.

three-story building, with basement, built-up (tar-and-gravel) roofing. To be completed about July 18, 1957, except for installation of certain fixtures; estimated final cost, \$340,000.

Agricultural Building III. Alterations and cabinet work in Rooms 319, 325, 331 and 332. To be completed in October, 1957; estimated final cost, \$6,396.05.

Installation of 10 lighting standards on Metcalf Street and in the main quadrangle. To be completed about August, 1957; estimated final cost, \$8,252.20.

Wahiawa Civic Center—Hollow tile and steel-frame one-story building. Completed January 15, 1957; final cost, \$147,610.09.

Waikiki Public Beach Improvement—Dredging and sand importation for beach and swimming area between the War Memorial Natatorium and Monsarrat Avenue. To be completed in September, 1957; estimated final cost, \$225,000.

Waimanalo Farm Lots—Drilling, casing and capping one well, and installation of one pumping unit. Completed November 11, 1956; estimated final cost, \$7,035.84.

Furnishing and testing one deep well pump. Completed November 16, 1956; final cost, \$7,370.

Construction of roadways, drainage, irrigation and water system facilities. Completed December 5, 1956; final cost, \$453,821.35.

HAWAII

Hawaii National Guard Armory, Olaa—One-unit armory, steel and hollow tile construction. Completed April 18, 1957; final cost, \$137,691.31.

Hawaiian Village—Construction of seven thatched houses, a canoe shed and toilet building. Completed July 21, 1956; estimated final cost, \$59,522.01.

Kailua, Kona, Shore Drive and Seawall—32-foot paved roadway from American Factors warehouse to Hulihee Palace; 13-foot planting strip

and concrete rubble masonry seawall. To be completed about July 17, 1957; estimated final cost, \$158,658.50.

Kulani Prison Camp—Furnishing pipes and pipe fittings for extension of water system by prison labor. Completed July 19, 1956; estimated final cost, \$15,237.52.

University of Hawaii, Hilo—Construction of roadway and parking areas; completed August 26, 1956; estimated final cost, \$16,691.55.

KAUAI

Hawaii National Guard Armory, Kapaa—Construction of a one-unit armory. Steel and hollow tile. To be completed July, 1957; final cost, \$146,782.90.

Hawaii National Guard Armory, Lihue—Painting and repairs. Completed October 18, 1956; final cost, \$6,682.

Hawaiian Homes Commission Subdivision, Anahola—Construction of reservoir, pumps, control building, pipelines, road, electrical facilities. To be completed in July, 1957; estimated final cost, \$330,526.44.

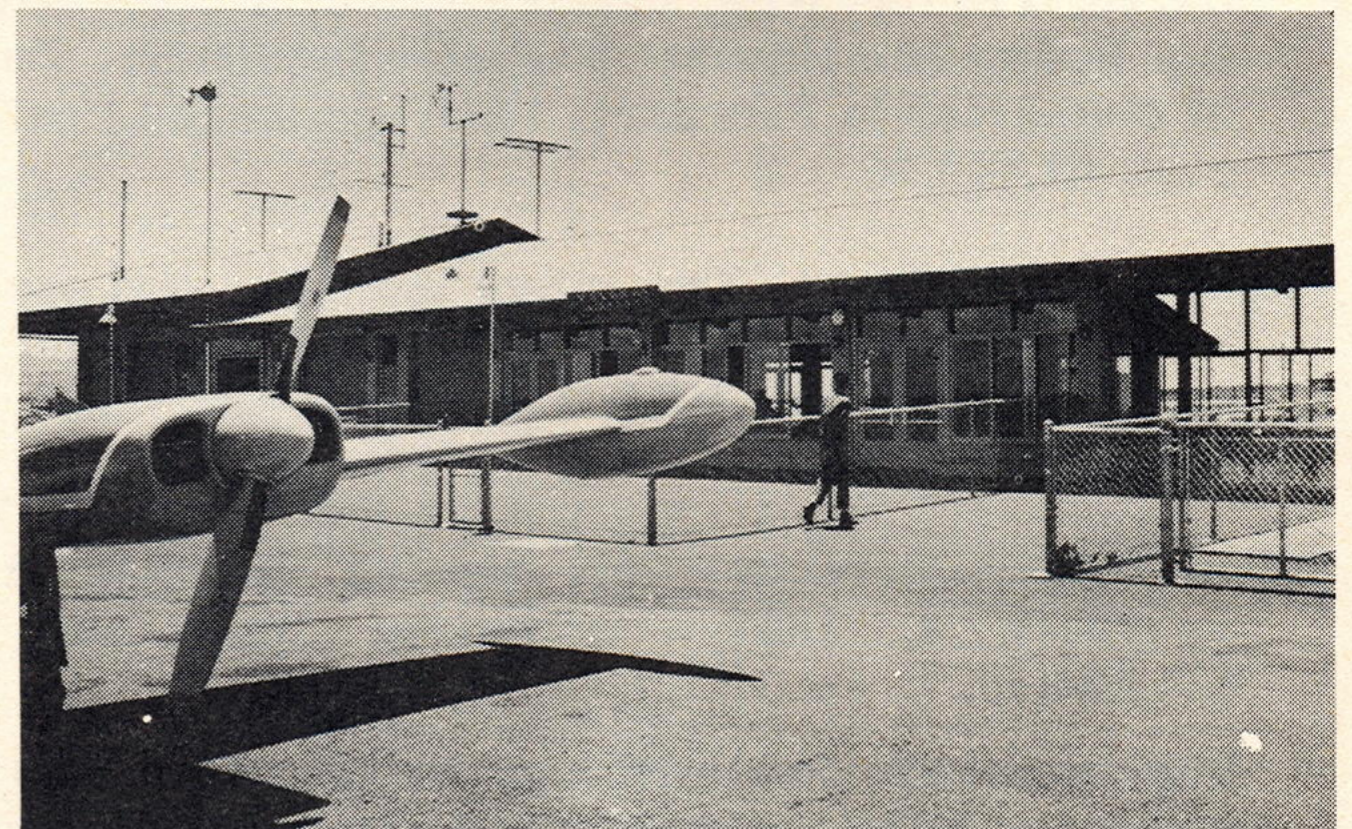
MAUI

Hawaii National Guard Armory, Kahului—Construction of one-unit armory. Steel and hollow tile. To be completed September 17, 1957; estimated final cost, \$154,871.20.

Olinda Prison Camp—One-story hollow tile and wood frame building housing new administration offices and dormitories. 99 per cent completed on June 30, 1957; estimated final cost, \$243,566.40.

MOLOKAI

Kalaupapa Settlement—Construction of nine frame cottages. Completed October 19, 1956; final cost, \$80,591.63.



Molokai Airport has a new terminal building.

AIRPORTS

NEW ENGINEERING DIVISION TAKES OVER AIRPORT WORK

Seven airport construction projects, totaling \$1,045,070, were under contract in fiscal year 1957.

During most of the year, these projects were under the supervision of a separate Airport Division. On April 1, 1957, this division was abolished and airport projects became the responsibility of the new Engineering Division.

The Department of Public Works is construction agent for the Hawaii Aeronautics Commission.

Largest airport project underway during the year was a \$577,000 contract for stockpiling sub-grade material for the proposed new Honolulu International Airport terminal.

The contractor is to dredge 700,000 cubic yards of coral from the new seadrome lane in the reef area off the southwest end of the airport. The dredged material will be used to raise the elevation of the terminal area.

Estimated final costs include construction, rights-of-way, and engineering.

Airport projects under construction in the 1957 fiscal year are summarized in the following list.

General Lyman Airport—Installation of medium intensity lighting. Completed July 18, 1956; estimated final cost, \$69,117.09.

Construction of Taxiway 8-26 and pavement rehabilitation of Runway 8-26. Completed February 8, 1957; estimated final cost, \$81,955.27.

Hana Airport—Pavement rehabilitation. Completed July 20, 1956; estimated final cost, \$6,802.48.

Honolulu International Airport—Rehabilitation of runways 4L, 4R and 8-26. Completed February 19, 1957; estimated final cost, \$17,210.23.

Stockpiling of 700,000 cubic yards of coral fill material for site of future terminal construction. To be completed about August, 1958; estimated final cost, \$600,000.

Painting and repairs of structural steel members of five maintenance hangars. Completed December 10, 1956; estimated final cost, \$42,935.41.

Molokai Airport—Construction of passenger-freight terminal building and paved areas. Completed June 7, 1957; estimated final cost, \$221,550.

CONSTRUCTION CONTRACTS AWARDED

HIGHWAYS

<i>Project and Location</i>	<i>Contractor</i>	<i>Date</i>	<i>Amount</i>
Construction of Pali Golf Course section, Kamehameha Highway, F 083-1(1), Oahu	Highway Construction Co.	Aug. 8, 1956	\$ 140,520.00
Construction of Country Club Road-to-Laimi Road section, Nuuanu Pali Highway, US 0610(2), Oahu	J. M. Tanaka	Aug. 13, 1956	264,947.00
Construction of Manowaiopae-Kihalani section, Hawaii Belt Road, F 019-2(3), Hawaii	S. K. Oda, Ltd.	Oct. 1, 1956	397,255.00
Construction of Olowalu-Lahaina section, Lahaina-Wailuku Road, F 030-1(1), Maui	Moses Akiona, Ltd.	Nov. 13, 1956	686,372.35
Construction of Nuuanu Ave.-Lusitana St. section, Vineyard Thoroughfare, F 098-1(1), Unit 2, Oahu	J. M. Tanaka	Dec. 6, 1956	551,175.00

<i>Project and Location</i>	<i>Contractor</i>	<i>Date</i>	<i>Amount</i>
Construction of practical nursing school unit, Kapiolani Technical School, Oahu	Hunt Steel Co., Ltd.	Nov. 1, 1956	106,620.00
Construction of protective wall for Ala Moana warehouse area, Surplus Property Division, Bureau of the Budget, Oahu	United Construction Co., Ltd.	Dec. 3, 1956	5,288.00
Construction of floodlight system, and repairs to Buildings Nos. 269 and 271, Hawaii National Guard, Fort Ruger, Oahu	United Construction Co., Ltd.	Jan. 15, 1957	6,913.00
Construction of one-unit armory, Hawaii National Guard, Kahului, Maui	F. & M. Contractors	Jan. 26, 1957	140,792.00
Dredging and sand importation for Waikiki public beach improvement, between War Memorial Natatorium and Monsarrat Avenue, Oahu	Territorial Contractors	Feb. 7, 1957	205,000.00
Alterations and cabinet work in Rooms 319, 325, 331 and 332, Agricultural Building III, University of Hawaii, Oahu	W. S. Kiyota	May 10, 1957	5,805.50
Construction of swimming pool bleachers and physical education facilities, Farrington High School, Oahu	Nakakura Construction Co.	May 14, 1957	188,690.00
Resurfacing of Metcalf St. and Maile Way, University of Hawaii, Oahu	Hawaiian Bitumuls & Paving Co., Ltd.	June 20, 1957	8,459.00
Installation of lighting standards on Metcalf St. and main quadrangle, University of Hawaii, Oahu	Hygrade Electric	June 24, 1957	7,502.00
		TOTAL	<u>\$2,242,819.97</u>

AIRPORTS

<i>Project and Location</i>	<i>Contractor</i>	<i>Date</i>	<i>Amount</i>
Painting and repairs of structural members of five maintenance hangars, Honolulu International Airport	Walter W. Inoue	Aug. 21, 1956	40,398.00
Construction of passenger-freight terminal building and paved areas, Molokai Airport	John A. Scully Co., Ltd.	Oct. 31, 1956	205,687.65
Construction of Taxiway 8-26 and pavement rehabilitation of Runway 8-26, General Lyman Field, Hawaii	James W. Glover, Ltd.	Nov. 19, 1956	76,500.98
Rehabilitation of runways at Honolulu International Airport	Hawaiian Bitumuls & Paving Co., Ltd.	Jan. 2, 1957	15,541.76
Stockpiling of subgrade material at Honolulu International Airport	Hawaiian Dredging & Construction Co., Ltd.	Feb. 4, 1957	577,000.00
		TOTAL	<u>\$ 915,128.39</u>

DEPARTMENT OF HIGHWAYS ANNUAL EXPENDITURES
Fiscal Years 1953 - 1957

	1953	1954	1955	1956	1957	Total
Administration	\$ 90,854.06	\$ 113,020.10	\$ 180,726.00	\$ 175,556.65	\$ 315,426.16	\$ 875,582.97
Land Acquisition	1,048,779.76	1,575,765.10	1,316,253.12	2,920,111.64	5,627,931.32	12,488,840.94
Design & Construction . .	7,917,060.64	6,927,082.74	6,405,759.04	6,050,312.88	8,331,696.86	35,631,912.16
Operation & Maintenance	1,080,153.91	1,101,614.47	1,537,187.62	1,389,582.39	1,526,175.73	6,634,714.12
Total	\$10,136,848.37	\$9,717,482.41	\$9,439,925.78	\$10,535,563.56	\$15,801,230.07	\$55,631,050.19*

*Includes \$50,000,000 in Highway Revenue Bonds (Highway Vehicle Fuel Tax Bonds) authorized by Act 249, SLH 1955, and \$3,635,000 in Territorial General Obligation Bonds authorized by Act 150, SLH 1957. As of June 30, 1957, Highway Revenue Bonds in the amount of \$12,500,000 had been sold.

AVERAGE PER YEAR FOR ABOVE ACTIVITIES

Administration	\$ 175,116.59
Land Acquisition	2,497,768.19
Design & Construction	7,126,382.43
Operation & Maintenance	1,326,942.82
Total	\$11,126,210.03

SERVICES RENDERED & PROJECTS SUPERVISED BY DEPT. OF PUBLIC WORKS
PAYABLE OUT OF FUNDS OF OTHER DEPARTMENTS
Fiscal Year Ending June 30, 1957

Department	Maintenance & Operation	Design & Construction	Total
Board of Agriculture & Forestry	\$ --	\$ 1,179.91	\$ 1,179.91
Department of the Comptroller	86.74	--	86.74
Bureau of the Budget	966.68	5,288.00	6,254.68
City & County, Building Department	--	1,783.40	1,783.40
City & County, Bureau of Plans	--	28.18	28.18
City & County, Division of Sewers	--	587.07	587.07
Fire Marshal's Office	163.92	--	163.92
Governor's Office	849.12	--	849.12
Board of Harbor Commissioners	--	10,783.25	10,783.25
Hawaii Aeronautics Commission	--	388,882.56	388,882.56
Department of Health	1,833.88	--	1,833.88
Department of Institutions	1,604.00	--	1,604.00
Department of Public Instruction	1,576.17	4,206.00	5,782.17
Hawaii Water Authority	--	18,554.24	18,554.24
Department of Labor & Industrial Relations	30,774.25	--	30,774.25
Land Commissioner	--	187,073.62	187,073.62
Library of Hawaii	640.86	--	640.86
McKinley High School	159.92	--	159.92
Secretary of Hawaii	858.21	--	858.21
Bureau of Sight Conservation	573.61	--	573.61
Survey Department	432.54	--	432.54
Tax Commission	2,093.64	--	2,093.64
University of Hawaii	--	14,348.47	14,348.47
Department of Public Welfare	10,540.58	--	10,540.58
Hawaii National Guard	--	80,249.41	80,249.41
Hawaiian Homes Commission	--	267,291.37	267,291.37
County of Hawaii	--	4,534.63	4,534.63
Economic Planning & Coordination Authority	1,478.77	--	1,478.77
Total	\$54,632.89	\$984,790.11	\$1,039,423.00

COVER PHOTO—Five bridges and half-bridges take Honolulu-bound traffic to the lower bore on the Nuuanu Pali Highway's new \$3,000,000 tunnel route.—Courtesy Honolulu Advertiser