

**BIENNIAL REPORT OF
THE DEPARTMENT OF
HIGHWAYS, 1895-1896**

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Biennial Report of the Department of Highways, 1895-1896 by R. C. Irvine & Marsden
Manson & J. L. Maude

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R. C. IRVINE & MARSDEN MANSON & J. L. MAUDE

**BIENNIAL REPORT OF
THE DEPARTMENT OF
HIGHWAYS, 1895-1896**



STATE CAPITOL, SACRAMENTO CITY

BIENNIAL REPORT

OF THE

California —
BUREAU OF HIGHWAYS

1895—1896.

R. C. IRVINE, MARSDEN MANSON, J. L. MAUDE,

Commissioners.

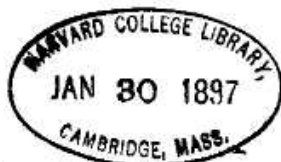


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The Commencement

OFFICE OF BUREAU OF HIGHWAYS, }
SACRAMENTO, CAL., November 25, 1896. }

To his Excellency JAMES H. BUDD, Governor of the State of California:

SIR: We herewith transmit to you the report of the Bureau of Highways, covering the work of the Bureau since the date of its organization, April 11, 1895, under authority of the Act approved March 27, 1895.

The Bureau would especially acknowledge its indebtedness to the Attorney-General, Hon. W. F. Fitzgerald, to the State Mineralogist, Hon. J. J. Crawford, to the Honorable the State Board of Prison Directors, to other State and County officials, and to public-spirited citizens throughout the State, for hearty coöperation and assistance in the discharge of its duties.

Very respectfully,

R. C. IRVINE,
MARSDEN MANSON,
J. L. MAUDE,
Commissioners.

Attest: E. MYRON WOLF, Clerk.

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REPORT
OF THE
BUREAU OF HIGHWAYS.

EXPENDITURES ON ROADS. Exclusive of the sums expended on the streets of cities, towns, and even of many villages, nearly \$2,000,000 were expended on the highways of the State of California during the fiscal year 1894-95. During the eleven years, from 1885 to 1895, such data as could be gathered from the records of the various county officials show that, not including private subscriptions of money, labor, and material, and poll tax, paid for generally in labor previous to 1893, and cost of construction of numerous bridges, payment for which was taken in part or in whole out of funds other than those set apart for highway purposes, the highway expenditures of the State reached the enormous sum of \$18,000,000.

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NATURAL CONDITIONS FAVORABLE TO ROAD CONSTRUCTION. The climatic, geological, and topographical conditions in the State are exceedingly favorable to road construction. The absence of severe freezing, which works so injurious an effect upon the roads of many of the Eastern States, removes one of the greatest difficulties with which road-builders generally are confronted. The geological formations throughout the entire State furnish an abundant supply of excellent road-building material. There is scarcely a county in the State that has not within its confines, or, at any rate, close at hand, an abundance of material suitable for highway construction. The topography of the State permits of the easy location of highways along the many fertile valleys and through the intervening mountain passes.

ACTUAL
CONDITION OF
ROADS.

To any one familiar with any considerable fraction of the mileage of roads in our State, it is not necessary to suggest that, with the exception of certain roads which are naturally good, the roads of California are in a deplorable condition. The absolutely systemless manner in which the majority of the roads in the State have been located and constructed, and are being maintained, as well as the extensive unnecessary mileage, are evident to any one who has traveled over the State.

* * * * *

CAUSE OF OUR
BAD ROADS.

All natural conditions, then, are favorable to road construction in California; immense sums of money have been raised for, and ostensibly expended upon, the highways of the State, and yet the mileage of good roads in California is deplorably meager. The query at once suggests itself, What is the cause of this condition of affairs? To this query there can be but one answer: *The work on our highways has been carried on without method or system; the money has been wastefully and injudiciously expended.*

* * * * *

THE REMEDY.

The remedy must be apparent. Changes in the existing laws alone will not suffice. Such defects as exist in these may be remedied, but until an economic and definite system of highway construction throughout the entire State be inaugurated, California can hope for no improvement over her present highway condition.

* * * * *

CLASSIFICATION
OF ROADS.

Investigation into the experiences of European countries and of the progressive Eastern States, which show conclusively that this action must be along the lines of State management of the main highways, and consideration of the conditions peculiar to California, have led to the conclusion that the following plan would best subserve the interests of our State: The division of the roads of California into three distinct classes: (1) State highways, (2) County thoroughfares, (3) District roads.

The State highways should be the great arteries of a road system from which should branch out the minor highways serving counties and districts. They should be located along those lines which the physical features of the State forever fix as the easiest lines of communication, and should be constructed and maintained by the State. The Bureau has mapped out such a system as would traverse the great belts of timber, fruit, agricultural, and mineral wealth within our State, connect all the large