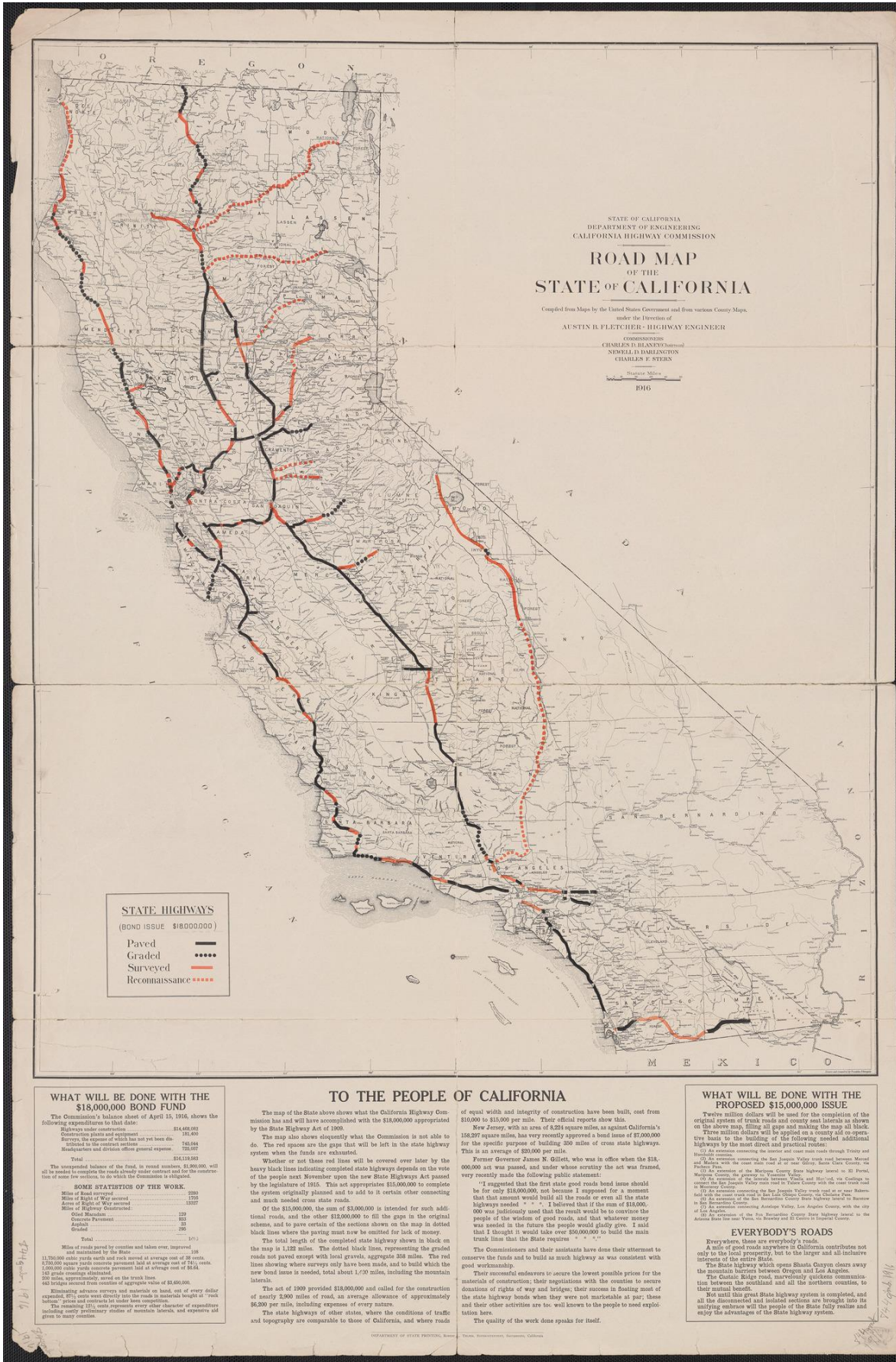


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STATE OF CALIFORNIA
 DEPARTMENT OF ENGINEERING
 CALIFORNIA HIGHWAY COMMISSION

ROAD MAP OF THE STATE OF CALIFORNIA

Compiled from Maps by the United States Government and from various County Maps.
 under the Direction of
AUSTIN B. FLETCHER - HIGHWAY ENGINEER

COMMISSIONERS
CHARLES D. HALENBY President
NORWELL D. HAMILTON
CHARLES F. STERN

Scale in Miles
 1916

STATE HIGHWAYS
 (BOND ISSUE \$10,000,000)

Paved —————
 Graded
 Surveyed - - - - -
 Reconnaissance ·····

WHAT WILL BE DONE WITH THE \$18,000,000 BOND FUND

The Commission's balance sheet of April 15, 1916, shows the following expenditures to that date:

Highways under construction	\$14,448,000
Construction plants and equipment	156,800
Surveys, the expense of which has not yet been paid	743,800
Expenses on the contract system	743,044
Indemnities and district office general expense	725,077
Total	\$16,816,921

The suspended balance of the fund, in round numbers, \$1,200,000, will be needed to complete the road already under contract and for the construction of some few sections, to be which the Commission is obligated.

SOME STATISTICS OF THE WORK

Miles of Road surveyed	2200
Miles of Right of Way secured	1775
Acres of Right of Way secured	13377
Miles of Highway Constructed	262
Other Roadwork	129
Contract Payments	302
Surveys	302
Gravelled	302
Total	3217

Miles of road paved by contract and taken over, improved, and maintained by the State 198
 11,750,000 cubic yards earth and rock saved at average cost of 30 cents.
 1,700,000 square yards concrete pavement laid at average cost of 74 cents.
 1,000,000 cubic yards aggregate pavement laid at average cost of 66 cents.
 112 gravel roadways completed.
 200 miles, approximately saved on the trunk lines.
 643 bridges erected from cost of approximately \$2,600,000.

Reimbursing advance surveys and materials on hand, out of every dollar expended, 67 1/2 cents were directly into the road in material brought to "trunk before" prices and contracts in under item competition.
 The remaining 32 1/2 cents represents every other character of expenditures including early preliminary studies of mountain laterals and expensive aid given to many counties.

TO THE PEOPLE OF CALIFORNIA

The map of the State shows what the California Highway Commission has and will have accomplished with the \$18,000,000 appropriated by the State Highway Act of 1910.
 The map also shows eloquently what the Commission is not able to do. The red spaces are the gaps that will be left in the state highway system when the funds are exhausted.

Whether or not these red lines will be covered over later by the heavy black lines indicating completed state highways depends on the vote of the people next November upon the new State Highway Act passed by the legislature of 1916. This act appropriates \$10,000,000 to complete the system originally planned and to add to it certain other connecting and much needed cross state roads.

Of the \$10,000,000, the sum of \$3,000,000 is intended for such additional roads, and the other \$7,000,000 to fill the gaps in the original system, and to pave certain of the sections shown on the map in dotted black lines where the paving must now be omitted for lack of money.
 The total length of the completed state highway shown in black on the map is 1,128 miles. The dotted black lines, representing the graded roads not paved except with local gravel, aggregate 358 miles. The red lines showing where surveys only have been made, and to build which the new bond issue is needed, total about 1,700 miles, including the mountain laterals.

The act of 1910 provided \$18,000,000 and called for the construction of nearly 2,000 miles of road, at an average allowance of approximately \$6,200 per mile, including expense of every nature.

The state highways of other states, where the conditions of traffic and topography are comparable to those of California, and where roads

of equal width and integrity of construction have been built, cost from \$10,000 to \$15,000 per mile. Their official reports show this.
 New Jersey, with an area of 8,224 square miles, at a cost of \$7,000,000 for 152,377 square miles, has very recently approved a bond issue of \$7,000,000 for the specific purpose of building 200 miles of cross state highways. This is an average of \$35,000 per mile.
 Former Governor James N. Gillet, who was in office when the \$18,000,000 act was passed, and under whose scrutiny the act was framed, very recently made the following public statement:

"I suggested that the first state good roads bond issue should be for only \$18,000,000, not because I supposed for a moment that that amount would build all the roads or even all the state highways needed. I believed that if the sum of \$18,000,000 was judiciously used that the result would be to convince the people of the wisdom of good roads, and that whatever money was needed in the future the people would gladly give. I said that I thought it would take over \$50,000,000 to build the main trunk lines that the State requires."

The Commissioners and their assistants have done their utmost to conserve the funds and to build as much highway as was consistent with good workmanship.

Their successful endeavor to secure the lowest possible prices for the materials of construction; their negotiations with the counties to secure donations of rights of way and bridges; their success in floating most of the state highway bonds when they were not marketable at par; these and their other activities are too well known to the people to need explanation here.

The quality of the work done speaks for itself.

WHAT WILL BE DONE WITH THE PROPOSED \$15,000,000 ISSUE

Twelve million dollars will be used for the completion of the original system of trunk roads and county seat laterals as shown on the above map, filling all gaps and making the map all black. Three million dollars will be applied on a county aid to specific bonds to the building of the following needed additional highways by the most direct and practical routes.

- (1) An extension connecting the former and latter main trunk through Trinity and Historic Counties.
- (2) An extension connecting the San Joaquin Valley trunk road between Mendocino and Colusa counties, the latter half of said trunk being State County and Pacific Road.
- (3) An extension of the Marin County State highway located in El Portal, Marin County, to the junction of the Truckee Valley Road.
- (4) An extension of the Contra Costa County State highway from the junction of the San Joaquin Valley trunk road to the town of Danville.
- (5) An extension connecting the San Joaquin Valley trunk road at or near Colusa with the coast trunk road in San Joaquin County, through the town of Colusa to the San Bernardino County.
- (6) An extension connecting Antelope Valley, Los Angeles County, with the city of Los Angeles.
- (7) An extension of the San Bernardino County State highway from the junction of the Antelope Valley trunk road to the town of San Bernardino.

EVERYBODY'S ROADS

Everywhere, these are everybody's roads. A mile of good roads anywhere in California contributes not only to the local property, but to the larger and all inclusive interests of the entire State.
 The State highway which opens Shasta County clears away the mountain barriers between Oregon and Los Angeles.
 The Contra Costa road marvelously quickens communication between the foothills and all the northern counties, to their mutual benefit.
 No matter how great State highway system is completed, and all the disconnected and isolated sections are brought into its unifying embrace will the people of the State fully realize and enjoy the advantages of the State highway system.

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CALIFORNIA HIGHWAY BULLETIN

CALIFORNIA HIGHWAY COMMISSION

Department of Engineering

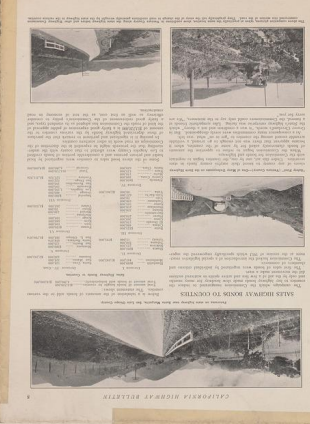
San Francisco, California

OVERHEAD

The "overhead" of California's highway system is the State Highway Commission, which is the central authority for the planning, financing, and construction of the state's highway network. The Commission is composed of representatives from various state agencies and is responsible for the overall development and maintenance of the state's transportation infrastructure.

STATE HIGHWAY BRIDGES

The State Highway Bridges are a critical component of California's highway system, providing safe and reliable passage for vehicles across various waterways. These bridges are designed to meet the specific needs of the state's diverse terrain and climate, ensuring the continuity of the highway network.



CALIFORNIA HIGHWAY BULLETIN

THE GREAT SHORT CUT OVER THE CHAMPAIGN MOUNTAINS

From the Upper Contra Costa Range between Oakland and Los Angeles via Concord and Colton.

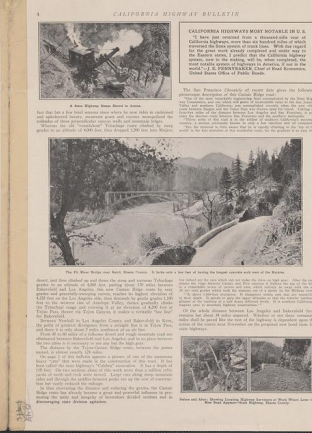
This article details the construction of a new, more direct route through the Champaign Mountains. The project involved significant earthmoving and the construction of several large-scale retaining walls and embankments. The new route is designed to reduce travel time and improve safety by providing a more level and stable driving surface compared to the old, winding paths.

CALIFORNIA HIGHWAY BULLETIN

ELIMINATING THE TERRORS OF THE BELL SPRINGS GRADE

What the New State Highway via the South Fork of the River Means to Humboldt and Shasta Counties.

The article describes the elimination of a notoriously dangerous and steep grade in the Bell Springs area. The new highway route bypasses the treacherous terrain, providing a safer and more comfortable driving experience. This project is a significant step towards modernizing the state's highway system and improving the safety of its travelers.



CALIFORNIA HIGHWAY BULLETIN

THE STATE HIGHWAY BRIDGES

This section provides a detailed overview of the various types of bridges used in California's highway system. It discusses the engineering challenges associated with different bridge designs and the materials used in their construction. The text emphasizes the importance of regular maintenance and safety inspections to ensure the longevity and reliability of these critical infrastructure elements.

