

**CALIFORNIA DEPARTMENT OF TRANSPORTATION
DUTY STATEMENT**

CLASSIFICATION TITLE Research Analyst II	DISTRICT/DIVISION/OFFICE 56/Maintenance/Office of Major Maintenance Support	
WORKING TITLE HM Research Analyst	POSITION NUMBER 913-660-5731-918	EFFECTIVE DATE

As a valued member of the Caltrans team, you make it possible for the Department to improve the mobility across California by being innovative and flexible; reporting to work as scheduled; working cooperatively with team members and others; and treating others fairly, honestly and with respect. Your efforts are important to each member of the team, as well as those we serve.

GENERAL STATEMENT:

Under the direction of the Staff Services Manager I, the Research Analyst II is responsible for: research and independent analysis relative to statistical work in the financial, resource, and economic fields, and statistical research of Major Maintenance contract dollars and support resources, leading to enhancements in current methodologies, and the development of new processes for managing Highway Maintenance (HM) funding.

TYPICAL DUTIES:

Percentage Job Description
Essential (E)/Marginal (M)¹

50 % (E) Develop a project level model to forecast resource needs for all five HM programs. The incumbent will gather, compile, edit, and interpret quantitative data, develop, implement, and monitor systems and procedures to assemble and structure the necessary data to establish the model. This work includes problem exploration and definition, planning and designing the approach and sequence of steps, collection of data, interpretation of findings, and documentation and reporting of findings. Will apply exploratory research, which structures and identifies new resource problems impacting the allocation levels to each HM program and all 12 Districts. Will conduct constructive research, which will develop solutions to accurately model project estimates. Will conduct empirical research, which tests the feasibility of the developed model to find solutions on current cost structure practices, considering overhead and construction support cost, to achieve maximum delivery of resources relative to HM. Current budgetary issues, as well as Division of Accounting interface, will be researched and analyzed as an implicit consideration for solutions. Incumbent will lead and provide oversight to implement solutions for all five HM programs.

30% (E) The incumbent is expected to apply quantitative and qualitative research to evaluate and identify cash flow and support expenditure trends by project phase and by functional activities. The incumbent performs a variety of tasks, including technical research and statistical work, to develop resource levels for all 12 Districts for the HM.

¹ ESSENTIAL FUNCTIONS are the core duties of the position that cannot be reassigned.
MARGINAL FUNCTIONS are the minor tasks of the position that can be assigned to others

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Programs, HM-1 Pavement, HM-2 Landscape and Drainage, HM-3 Structures, HM-4 Traffic/Electrical Guidance, HM-5 Lands and Buildings Coordinators. The incumbent will establish and implement cost analysis reporting methodologies for various financial databases, to improve and enhance decision making by executive management.

Develop the statistical framework for monitoring and continuously evaluating the Service Level Agreement with the Division of Engineering Services, encompassing all five HM programs. On a monthly basis, the incumbent will update and maintain a financial model to determine impacts of charging practices and policy changes by office and by specific tasks to forecast resource needs, as well as track and maintain a detailed inventory of HM projects authorized through the Five-Year Maintenance Plan.

15% (E) Incumbent acts as lead analyst on HM program studies which involve collection of data, interpretation of findings, and documentation and reporting of findings in a structured format. Interpret data to calculate additional support resource needs. Incumbent will participate in policy development to implement statewide indicators, standards and models relative to the five HM programs. The incumbent leads in the development of the five HM program checkbooks and works closely with project engineers providing functional direction and guidance to resolve funding issues, District specific and statewide.

5% (M) Research statewide budgetary tools needed to augment HM program support resources and prepare Budget Change Proposals. Provide budgetary responses on current HM program questions, asked by the Department of Finance and Legislative Analyst Office, which require financial analysis and written response. Research and report on statistical data relative to lane miles achieved, bridge and culvert work completed for the Five-Year Maintenance Plan.

SUPERVISION EXERCISED OVER OTHERS

This position does not supervise, but may act as a lead person.

KNOWLEDGE, ABILITIES AND ANALYTICAL REQUIREMENTS

Incumbent must have a complete journey-level understanding of financial reporting processes, as well as the ability to navigate various financial systems. Incumbent must also be familiar with award contracting processes.

Knowledge of research methods and techniques including planning of studies and investigations, statistical procedures, general principles, concepts and terminology used in research. Position may also require knowledge of principles and concepts of economics, public agency finance, resources, economic research methodology, and econometrics (as applied in a research setting). Incumbent should possess understanding and commitment to effectively designing and implementing research-related projects, and to departmental policies and procedures.

Must be able to develop and analyze flow charts; identify critical paths and optional areas for change. This work involves varied degrees of research and analysis including problem exploration and

definition, planning and designing the approach and sequence of steps, collection of data, interpretation of findings and documentation and reporting of findings in a structured professional format.

This position requires the ability to research and interpret fiscal data and provide financial strategies to enable optimal management decisions. Incumbent will have a good understanding of the Five-Year Maintenance Plan. Incumbent must have a high level of expertise in communicating effectively in writing and orally; working cooperatively with all levels of upper management; negotiating resolutions to issues or problems with accomplishing goals; being sensitive to and working with political interests; and making effective presentations.

Incumbent must have the ability to: adopt and apply formal research methods and principles to research problems of an applied practical nature and gather, compile, analyze and interpret data; prepare research and statistical reports; analyze written and numerical data regarding general governmental problems; speak and write effectively; reason logically and creatively, and use a variety of analytical techniques to resolve or provide information regarding complex governmental and managerial problems; develop and evaluate alternatives; consult with and advise administrators or other interested parties on a wide variety of subject-matter areas; gain and maintain the confidence and cooperation of others; analyze problems accurately, develop appropriate solutions, and recommend effective optional courses of action; identify improvements, and originate and develop new solutions which depart from traditional and existing patterns; assume increased responsibility; be flexible; work effectively with others.

CONSEQUENCE OF ERROR/RESPONSIBILITY FOR DECISIONS

Incumbent is responsible for researching, identifying, recommending, and implementing the Division of Maintenance's Major Maintenance Program so that the Division's goals and objectives are optimally accomplished. Incumbent is responsible for quantitative research in developing budget change proposals, which request an appropriate level of HM resources. Consequences of error include the potential for over/under-stating program financial requirements and misallocating resources between Districts, resulting in project shortfalls and/or leaving HM resources over or under spent and further, affecting the Five-Year Maintenance Plan. This plan is monitored by the Department of Finance, the Legislative Analyst Office and the Legislator. Failure to deliver the Five-Year Maintenance Plan, including the necessary project and corresponding resources, would be detrimental to the Program and the Department, resulting in a loss of credibility with the potential of impacting future funding requests.

PUBLIC AND INTERNAL CONTACTS

Incumbent has close contact with the District staff involved with HM-1 Pavement, HM-2 Landscape and Drainage, HM-3 Structures, HM-4 Traffic/Electrical Guidance, HM-5 Lands and Buildings, and HM-6 Snow Coordinators, District Maintenance Managers, Headquarters (HQ) HM Program Managers, HQ Program Advisors, Region Managers, Deputy District Directors, Headquarters Office Chiefs and Executive Management. Incumbent will also have contact with Office Engineers, District Budget staff, Division of Accounting, Division of Procurement and Contracts, and other governmental agencies.

PHYSICAL, MENTAL AND EMOTIONAL REQUIREMENTS

The incumbent must be able to sit for long periods of time while analyzing data and using a keyboard to input data into spreadsheets and reports.

WORK ENVIRONMENT

The incumbent will work in an office building in the downtown area of Sacramento, on the third floor of a six-floor building. The office environment is modular-open space, in a team setup. Meetings are held at various sites statewide.

Statewide travel is required.

I have read, and understand the duties listed above and can perform them either with or without reasonable accommodation. (If you believe you may require reasonable accommodation, please discuss this with your hiring supervisor. If you are unsure whether you require reasonable accommodation, inform the hiring supervisor who will discuss your concerns with the Reasonable Accommodation Coordinator.)

Please Print:

EMPLOYEE'S NAME

EMPLOYEE'S SIGNATURE

DATE

I have discussed the duties with and provided a copy of this duty statement to the employee named above.

SUPERVISOR'S NAME

SUPERVISOR'S SIGNATURE

DATE