



South Carolina  
Department of Transportation



U.S. Department  
of Transportation

**Federal Highway  
Administration**



**CLEMSON**  
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## PROJECT SUMMARY

**Report No. FHWA-SC-05-03**  
**July 2005**

South Carolina  
Department of Transportation  
P. O. Box 191  
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# A WORKFORCE DEVELOPMENT PROGRAM FOR THE SC DOT

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### Overview

Given the implementation of early retirement incentive programs, technological improvements, and the need to strategically determine which positions are necessary, workforce development and/or succession planning has become crucial in the current workplace. The focus of this project was to include the development of a workforce plan for the South Carolina Department of Transportation specifically focusing on the maintenance area of the department.

In order to provide a comprehensive study and proposal, the process incorporated a literature review, a comparison of other DOT's, a study of DOT's with similar programs, career ladders for the classification series of Trades Specialists I-V, prototype position descriptions, and cost structure determination. The South Carolina Department of Transportation provided input and made necessary changes to the final submission in order to best meet their goals and objectives of the program.

### Background

The administration within the SCDOT recognized the need to develop a system of productive and well trained employees that are

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capable of meeting the challenges of the department. An initial review of the literature indicated that the SC DOT is correct in their assessment that the roles and responsibilities of DOTs are changing more rapidly today than ever before. With emerging technologies and the task of equating the right number of people with the right skills, experiences, and competencies in the right jobs at the right time, it is essential that the workforce be qualified, competent and the DOT be competitive in its hiring of maintenance employees.

Therefore, the focus and significance of this project was based on the ability of this organization to be successful by being able to project future workforce needs and take steps to assure that this workforce is in place. This research project was a conceptual design that incorporated the potential for a progressive system of advancements based on acquisition of skills, abilities and demonstration of competencies. This initial phase of the project focused on the maintenance employees of the department. The result was a Workforce Development Program that integrated the needs of the department with an opportunity for advancement for employees.

## **Results**

The primary sources of the material presented in the final report and the companion “Workforce Development Program Model” were discussions with the SCDOT headquarters personnel and district administrators, and the results of surveys distributed to maintenance employees based on job classification. The results of the surveys indicated the need for specific avenues that incorporated training and advancement.

Since there were multiple areas to address in the overall development of such a process, this project addressed workforce needs through a process of developing a “workforce planning” model and program implementation. Due to the scope and the rapidly changing workforce at the DOT, this project was carried out in three phases which included an extensive literature search in Phase I; the development of prototype position descriptions, SCDOT maintenance workforce survey and survey results, and initial career ladders in Phase II; and completed position descriptions, career ladders and training proposals in Phase III.

To ensure that the people match the positions at the right time, there was a critical need to ensure that all components of human resources were addressed. These included workforce demographics, recruitment, retention, turnover rates, training, retraining, employee development, diversity, and succession planning.

Based on this workforce development program, the SCDOT may realize identification of specific future workforce needs; determination of a cost structure in order to meet future workforce needs; prototype position descriptions; redevelopment of bands and levels; matching of environmental and demographic considerations to employees and requirements; and the facilitation of the change management allowing contributions to better people management.

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