

New Jersey Department of Transportation
Bureau of Research

Technical Brief



Increasing Representation of Minorities, Females and Underrepresented Individuals in Journey Level Jobs on Highway Construction Projects

The overall objective of the research was to develop a framework for use by New Jersey Department of Transportation to establish a viable On-the-Job Training/Support Services (OJT/SS) pre-apprenticeship training program aimed at moving women, minorities and other under-utilized groups into journey-level positions in highway construction skilled crafts.

Background

Despite the expected growth of women and minorities in the workforce, women and minorities are still underrepresented and underutilized in highway construction employment. NJDOT is committed to addressing these underutilized groups' participation in the heavy highway construction industry and assisting construction contractors to improve their workforce diversity. However, challenges exist that limits NJDOT's ability to meet its goal. New Jersey is a highly unionized state with union members accounting for 16 percent of all wage and salary workers in New Jersey, well above the 11.3 percent union members rate for the nation. One approach for increasing the number of women and minorities employed in highway construction is through Federal Highway's (FHWA) On-the-Job Training (OJT) Program. This research seeks to provide NJDOT with information on ways in which to develop and implement a viable highway construction training program given the unionized environment on NJDOT construction projects.

Research Objectives and Approach

The overall objective of the research was to develop a framework for use by New Jersey Department of Transportation to establish a viable On-the-Job Training/Support Services (OJT/SS) pre-apprenticeship training program aimed at moving women, minorities and other under-utilized groups into journey-level positions in highway construction skilled crafts.

A literature review on apprenticeship and pre-apprenticeship programs for highway construction and for other related fields was performed. A labor market analysis of New Jersey's highway construction industry was performed involving gathering and analyzing data on the current economic outlook of New Jersey's construction industry and assessing the worker demand and supply for construction jobs in New Jersey. A survey of the On-the-Job Training/Support Services (OJT/SS) Training Programs was performed both of neighboring states and nationally. The survey sought to identify and gather information on successful skilled trades training and/or pre-apprenticeship programs connected to highway construction opportunities.

The research team sought to gather and analyze information on unions and union membership in New Jersey and to gather information from women and minority engineering technology students about perceptions of construction industry. Recommendations towards the development of a viable on-the-job training/support services pre-apprenticeship training program were developed.

Findings

Recommendations on the development of OJT/SS Pre-apprenticeship training program includes:

1. Understand the department's strengths and weaknesses for developing and implementing OJT/SS programs. Determine how the program will be administered
2. Involve contractors in program development and implementation. Understand the economy and contractors' actual needs before planning programs.
3. Build relationships with unions. Promote an open line of communication. Seek to develop direct entry agreements (or similar) with union and labor organizations.
4. Partner with nonprofits and other government agencies that supplement a given department's strengths.
5. Provide academic and financial support for program participants

For More Information Contact:

NJDOT Project Manager:	Paul Thomas
	(609) 530-5157
	Paul.Thomas@dot.state.nj.us
Principal Investigator:	Janice Daniel, Ph.D.
	New Jersey Institute of Technology
	(973) 642-4794
	daniel@njit.edu

A final report is available online at: <http://www.state.nj.us/transportation/refdata/research/>.

If you would like a copy of the full report, send an e-mail to:
Research.Bureau@dot.state.nj.us.

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