2005
Annual Report to the Governor and Legislature

Project Labor Agreement (PLA) Act
P.L. 2002, Chapter 44
(C.52:38-et seq.)

New Jersey Department of Labor
and Workforce Development
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EXECUTIVE SUMMARY

This is the 2005 status report on the monitoring and impact of the Project Labor Agreement (PLA) Act (P.L. 2002, Chapter 44) on public works projects in New Jersey, signed into law on July 25, 2002. The Act specifies that beginning December 31, 2003, an annual report must be prepared by the Commissioner of Labor and Workforce Development evaluating the effectiveness of projects utilizing Project Labor Agreements. PLA public works projects must be compared with non-PLA projects related to cost, efficiency, quality, timeliness, skilled labor force and safety, among other items which are found in section 5 of the Act. Information does not exist to perform all of these comparisons, but this report presents the information that is available. The report describes the few projects that have been completed so far.

The use of project labor agreements in general, and the use of a statewide project labor agreement for the $8.6 billion school construction program in particular, is a recent occurrence in New Jersey. This report shows that by September 30, 2005,[1] there were a total of 121 identifiable construction projects completed since the effective date of the legislation. Seventeen projects were completed with a project labor agreement and 104 projects were completed without a PLA. The results show that most owners elected not to use a project labor agreement for their construction projects. Only school construction projects in the Abbott districts (16) and in one non-Abbott school district, all completed under the oversight of the Schools Construction Corporation (SCC), used PLAs.

Appendix II to this report lists all 121 public works projects completed between July 25, 2002, and September 30, 2005. It highlights the available information on the project award amounts; the project employment work hours (participation rates) by various categories including journey workers, apprentices, females, minorities, as well as by trade or occupation; the number of workers employed on each project by race/ethnicity (utilization rates), as well as the project construction duration and completion timeliness.

Award Amounts

After examining the 121 completed projects, it was concluded that a PLA versus non-PLA comparison of the project award amounts (or initial award costs) is not possible. The dissimilarity and the small number of projects preclude a conclusive comparative analysis. Since there are an insufficient number of equivalent projects, no definite conclusions can be reached as to the PLA versus non-PLA award amount costs. The data may, however, provide some general impressions.

In order to draw relevant conclusions as to the construction award amount costs of PLA and non-PLA projects, a sufficient number of identical or very similar types of projects is needed for comparisons. To do so, PLA and non-PLA building projects should be equivalent and comparable in terms of location (in, for example, the same county), approximate size (square feet), type of building (elementary school, high school, municipal building), and mode of construction (new construction, renovation, new addition and renovation) and, for schools, the approximate number of students served.

Employment Work Hours for Minorities, Females and Apprentices

Comparisons pertaining to the PLA versus non-PLA employment participation (based on total actual hours worked) for minorities, females and apprentice are feasible since the likeness or dissimilarities of projects do not influence employment considerations.

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[1] A September 30 cut-off date allows for the receipt and inclusion of all field reports, information entry and transfer, data analysis, report writing and issuance.

Based on all 121 completed projects, the participation rate attained for minorities on PLA projects is 25.8 percent which is slightly above the weighted 25.3 percent county goal obligation. The participation rate achieved on non-PLA projects was 16.3 percent versus a 16.7 percent weighted county goal obligation. The female participation rates for both the PLA (1.3 percent) and non-PLA projects (0.7 percent) are substantially below the county target of 6.9 percent. The apprentice participation rate on PLA projects is higher (11.5 percent) compared with the non-PLA projects (10.5 percent).

Based on the 86 completed school projects, the minority participation rate slightly exceeds the weighted county goals both for PLA and non-PLA projects.

Employment Work Hours for Minorities and Apprentices by Trade

The minority and apprentice participation rates vary among different trades. For example, in the trade category of laborers, both the PLA and non-PLA projects in all of the listed counties exceeded, often substantially, the required county goal obligation. The overall work-hour-based weighted statewide minority participation for all trades favors PLA projects (+2.7 percent above the goal for PLA and 3.5 percent below the goal for non-PLA projects). A detailed overview of participation rates for minorities and apprentices by the individual construction trades for 60 school projects is shown in Appendix I.

Utilization Rates for Minorities (Blacks, Hispanics, American Indian, Asians) by Trades

There are substantial variations in the minority utilization rates (based on the number of minority workers employed by month) among the various trades, as well as between PLA and non-PLA projects. The minority utilization on PLA projects was higher for 17 out of 20 trades; for glaziers, operating engineers, and surveyors, the minority utilization rate was higher on non-PLA projects.

Construction Duration and Timeliness

There are a myriad of factors that influence the construction duration and completion timeliness. Variables such as project size and complexity, permitting, financing, material availability and delivery, change order requests, staffing and available resources, weather, unanticipated circumstances and more, play a crucial role in determining the projected and actual start and completion times of a construction project.

Due to the disparity and variations in the recorded projects, a PLA versus non-PLA analysis is not indicated. The lengths of time and timeliness are approximations based on how the start and completion dates are recorded. As a consequence, any findings should not be interpreted rigidly.

Labor and Workforce Development (LWD) Construction Trades Training Program for Women and Minorities (CTTP-WM)

The Construction Trades Training Program for Women and Minorities was established to increase the number of women and minorities who require academic training before entering a construction trade apprenticeship program. The program was initiated in March 2002 and is administered by the Department of Labor and Workforce Development. Through October 5, 2005, the CTTP-WM had enrolled a total of 1,167 participants in training with 857 completions (73.4 percent). Of those completing the program, 260 (30.3 percent) obtained a union apprenticeship, and 180 (21.0 percent) obtained non-union construction placement. Thus, a total of 440 (51.3 percent) new personnel entered construction occupations. One hundred sixty-six (10.4 percent) training completers are awaiting apprenticeship testing.

2006 Report Outlook

June 30, 2006 has been selected as the cut-off date for the data to be included in the 2006 annual report to the Governor and Legislature. This will provide additional time for data collection, processing, validation and analysis, and the inclusion of recommendations regarding legislation to make changes to better effectuate the purposes of the PLA Act, closer to the established due date of December 31, 2006.

INTRODUCTION

On July 25, 2002, Governor James E. McGreevey signed into law the "Project Labor Agreement Act" (P.L. 2002, Chapter 44). The law authorizes all public agencies (state, county, municipal, others) in New Jersey to include project labor agreements (PLAs) in all public works projects for the construction, reconstruction, demolition or renovation of buildings (other than pumping stations and water/sewage treatment plants) at public expense, for which the total cost of the project, exclusive of land acquisition cost, will equal or exceed $5 million.

Projects labor agreements are a form of pre-hire collective bargaining agreements permitted under federal law between contractors, or owners on behalf of contractors, and labor unions in the construction industry. PLAs cover project terms and conditions of employment for construction trade workers, and are often used for major, multi-year construction projects. A standard public works project labor agreement between the Schools Construction Corporation (SCC), the New Jersey Building and Construction Trades Council and several construction trade unions was completed on February 28, 2003.

The PLA Act spells out New Jersey's compelling interest in carrying out public works projects to meet certain beneficial business and public policy performance objectives. PLA projects are expected to advance public interests with respect to cost; efficiency; quality; timeliness of completion; the use of skilled labor; guarantees against strikes, work stoppages, or similar actions; and the effective resolution of jurisdictional and labor disputes. These projects also require contractors and subcontractors to have an apprenticeship program and to implement set-aside goals for women and minority owned businesses. The Act also requires each agreement to achieve employment and apprenticeship shares for minorities and women in conformance with applicable requirements, as well as to allow the contracting agency or another State agency to monitor the amount and share of work done by minorities and women and their progression into apprentice and journey worker positions.

Starting in 2003, the PLA Act requires the Commissioner of Labor and Workforce Development (LWD) to annually provide an analysis of the effectiveness of all PLAs in meeting these objectives and to compare the performance of public works projects with and without PLAs. The report shall include a review and analysis of the available information. Further, the 2006 report shall include an analysis of the overall effectiveness of the implementation of the Act and shall contain recommendations deemed necessary to better effectuate its purpose.

PRIMARY AND SECONDARY DATA SOURCES

The obligation to evaluate and report on the effectiveness of the PLA Act entails, first and foremost, a considerable data collection effort and a comprehensive retrospective analysis of the many different public construction projects in New Jersey. When LWD research staff began to plan ways to compile the information needed for the annual reports, it was reasoned that it would not be in the best interest of New Jersey to create a new, costly, unfunded, computerized database if LWD could get access to appropriate existing data collection systems at other State agencies. Consequently, various State agencies were contacted to identify the availability and accessibility of suitable operational data collection systems which could serve the needs of LWD. After careful consideration, it was concluded that the New Jersey Department of the Treasury, Division of Contract Compliance and Equal Employment Opportunity in Public Contracts (DCC) and the Schools Construction Corporation (SCC) could be of valuable assistance as primary data sources. LWD believes that the use of these primary data providers is the best way to systematically, routinely, comprehensively and cost-effectively collect PLA and non-PLA project information.

Neither the DCC nor the SCC tracking system was originally designed with the objective to monitor the implementation of the PLA Act. The DCC database primarily functions as a workforce compliance and equal employment opportunity in public contracts monitoring system. The SCC tracking system mainly serves as an Abbott school construction planning and management tool. Therefore, project specific information on safety; strikes, lockouts or other similar actions; specific contractor and subcontractor apprenticeship programs; set-aside goals for contracts which should be issued to minority and women owned businesses; and other project performance indicators, such as final construction costs, building size, number of students served, efficiency, quality and in some instances timeliness will not be available.

Primary Data Sources

Division of Contract Compliance and Equal Employment Opportunity in Public Contracts, New Jersey Department of the Treasury

The Division of Contract Compliance and Equal Employment Opportunity in Public Contracts tracks certain information on all State construction contracts and has become a significant contributor of raw data. To formalize this critical relationship, a Memorandum of Understanding was negotiated and signed on February 11, 2004 between the New Jersey Department of the Treasury, the Office of Information Technology, and the New Jersey Department of Labor and Workforce Development. DCC agreed to modify its tracking forms to include the designation of all projects as PLA or non-PLA. Of great benefit is their information on the use of minority, female and apprentice employees in public works contracts. If the private construction contractors correctly and responsibly fill out the required reports, it should be possible to analyze this important public policy issue. Appropriate access to the DCC database has been completed. Thus, a crucial step in LWD capabilities to review PLA and non-PLA projects has been achieved.

On December 15, 2005, LWD received electronically the most recent updated information from DCC covering activities through September 30, 2005, which became the cut-off date for the analysis. Several screens and hundreds of individual examinations and queries were subsequently applied to obtain relevant information for the 104 Treasury monitored non-PLA projects included in this analysis.

Schools Construction Corporation

On July 29, 2002, Governor James E. McGreevey signed Executive Order No. 24, creating the New Jersey Schools Construction Corporation, as a subsidiary corporation of the New Jersey Economic Development Authority. Executive Order No. 24 spells out several objectives, with the essential purpose to ensure that the State's $8.6 billion schools construction program, required by the New Jersey Supreme Court's 1998 Abbott[2] decision, is implemented in an efficient and timely manner. While Executive Order No. 24 remains in full force, it was amended on February 7, 2003 with Executive Order No. 47 modifying the membership of the SCC's Board of Directors, adding the Attorney General to the Board. On February 7, 2006, Governor Jon S. Corzine signed Executive Order No. 3 creating a new working group that will oversee a full review of the school construction program. The group issued an initial written report on March 15, 2006, recommending various reforms. On March 27, 2006, Governor Jon S. Corzine signed Executive Order No. 7 rescinding Executive Order No. 24 which replaces the Attorney General as a member of the Board of Directors with a member of the Governor's Executive Staff who has law enforcement and/or prosecutorial experience.

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[2] Abbott refers to the 1998 New Jersey Supreme Court decision finding the State responsible for funding school facilities needs in special needs districts. Today there are 31 special needs districts in New Jersey. All Abbott schools are built by the SCC with a PLA in effect.

The SCC is responsible for financing, designing, and constructing all of the school facilities projects in the 31 Abbott districts (special needs districts); in districts which receive 55 percent or more in State funding for education; and in the districts that are in level II State monitoring (districts that failed to show sufficient educational progress and are required to develop and implement a remedial plan). In the Abbott districts, the State provides 100 percent of the funding without the need for a voter referendum and without any financial, operational or management responsibility by local stakeholders. All school projects in these districts are constructed by the SCC under a PLA. In addition, the SCC is responsible for providing grants to fund the State share of school facilities projects approved by the Department of Education in districts with a district aid percentage of less than 55 percent (Section 15 districts[3]). Those districts which receive less than 55 percent funding may elect to have the SCC undertake the financing and/or construction of their school facilities projects.

In the past, the DCC tracked all public works projects including Abbott and non-Abbott schools. The monitoring of Abbott school projects was transferred to the SCC in November 2003, and the SCC elected to start to develop its own data monitoring system to track all school projects under its oversight. In response to a March 10, 2004 letter from the Commissioner of Labor and Workforce Development to the SCC Chief Executive Officer, the SCC agreed to provide LWD appropriate access to its computerized database. The SCC supplied LWD with updated raw data on February 24, 2006. Following the application of various edits, a cumulative total of seventeen (17) SCC completed school projects remained for this LWD analysis and report.

The SCC is the only organization using PLAs. Sixteen (16) of the SCC's completed school projects were in Abbott districts, and one (1) school project in Manchester Township, Ocean County, which selected the SCC as their construction oversight agency, was in a non-Abbott district.

Other Data Sources

Some information contained in the 2005 report has been received from other sources, such as literature searches and press releases; telephone contacts and interviews with project owners (boards of education and municipalities, project management firms, architects, construction companies and others).

METHODOLOGY

The overall goal of the extraction and formatting efforts was to exclude all public works projects not covered under the PLA Act. This required the elimination of all projects awarded prior to July 25, 2002, and all projects not completed by the cut-off date of September 30, 2005. Other screens eliminated all pumping stations and water/sewerage treatment plants, as well as all non-buildings, such as roads (improvements, re-surfacing, paving and drainage), tunnels, bridges, and golf courses. Following this, projects with less than $5 million in estimated total costs were excluded. At the end of this process, there were a total of 121 projects which were organized by project type and by PLA and non-PLA designation.

Comparing a sufficient number of PLA and non-PLA projects with identical characteristics, such as location, type of project (elementary school, municipal building), construction mode (new, renovation or addition) and building size, is presently not possible. An additional challenge is the fact that all PLA projects except one are in Abbott districts; all are implemented by only one agency, the SCC. The SCC does not execute any non-PLA projects. This makes it impossible to carve out the impact of PLAs on the many performance factors, such as cost, employment, construction duration and timeliness. For instance, higher or lower award amount costs may not be due to the fact that a PLA is in place, but due to the

[3] Stipulated in the New Jersey Educational Facilities Construction and Financing Act which became law on July 18, 2000.

operating practices of the construction oversight organization. It would be desirable to have several organizations implement comparable PLA and non-PLA projects. This would allow for a valid PLA versus non-PLA comparison once there are a sufficient number of projects to compare.

All Abbott and "55 percent plus" school district projects must be covered by PLAs. Because districts differ with respect to population and occupational characteristics and workforce readiness, geographic location cost (urban versus suburban setting, North versus South Jersey) and construction work site environment/logistics (congested inner city versus open suburban space), differences between projects with and without PLAs could certainly be due to factors other than the use of PLAs. The difficulty increases with non-school projects where there is even less similarity among projects.

All information entered into the databases is self-reported and provided by the construction contractors themselves. The information is not audited. SCC and Treasury field representatives may occasionally catch an obvious error and question certain data, but, in the end, the responsibility for and ownership of the information's accuracy and quality rests with the reporting contractors. When pieces of information seem outside the norm, LWD has added explanatory notes at the appropriate places in Appendix II to this report. LWD checks the records and attempts to validate the information.

Since this analysis uses cumulative data, and does not make year-to-year comparisons, inflation adjustments are not considered critical.

PRESENTATION OF AVAILABLE DATA

The data available from the monitoring allows for the following reporting and review.

Use of Project Labor Agreements in Public Projects

By the end of 2003, there were no identifiable public works projects completed under a project labor agreement covered by the legislation. By the cut-off date of September 30, 2004, LWD identified for the purpose of this analysis, a combined total of 70 projects: 12 projects completed by the cut-off date had a PLA designation, and all of the other 58 projects were implemented without a PLA. By the cut-off date of September 30, 2005, LWD identified for analysis a cumulative total of 121 projects: 17 with a PLA and 104 without a PLA.

Individual project information of all public projects identified and completed by the cut-off date of September 30, 2005 is included in Appendix II. The list is organized by county and contains available information (breakdown by project type; award amounts; employment work-hours by job titles, minorities, females, apprentices; and by occupations and worker ethnicity/race; construction duration and completion timeliness; and information on apprenticeship training) for all 121 identifiable projects.

The project breakdown by type and Abbott/PLA/SCC and non-PLA designation is shown in Table 1.

The statistics show that for projects other than those constructed by the SCC, most owners elected not to use a project labor agreement for their construction projects. So far, only one non-Abbott school construction project, in Manchester Township, Ocean County, used a PLA. The construction of this school was completed under the oversight of the SCC.

TABLE 1

Projects by Type and PLA/Non-PLA Designation
July 25, 2002 – September 30, 2005

School Projects (86)	PLA/SCC Abbott Projects	Non-PLA Projects
New School Construction	8	17
New School Addition	3	3
School Renovation and Addition	4*	49
School Renovation	2	-
Total Number of School Projects	**17**	**69**
Other Projects (35)		
University/College Research & Education	-	11
Student Housing (College/University)	-	4
Municipal/Police/Public Works		4
Library	-	3
Parking Garage/Deck	-	3
Sports/Recreation/Community Center	-	3
Court House/Justice Center	-	2
Veterans Affairs/Long Term Care Facility	-	2
Theater	-	1
Railroad Terminal	-	1
Children Center	-	1
Total Other Projects	**0**	**35**
Total School and Other Projects	**17**	**104**
Grand Total of Projects	**121**	

*Includes one non-Abbott school implemented by the SCC.

Preliminary Findings of Projects with and without Project Labor Agreements

The following sections deal with the presentation and discussion of the project award amounts, total employment work hours for various subgroups (minorities, females, apprentices, and by job title and occupations), the utilization rate of minorities and ethnicity by trade, the construction duration and completion timeliness of the 121 identified and completed projects, and the LWD apprenticeship training efforts and results.

Project Award Amounts

The award amount (the term used in the DCC database) and the construction award (the term used in the SCC database) are essentially synonymous, and can be defined as the dollar amount originally approved by the awarding agency or project owner (e.g., Board of Education, Township, College/University, SCC) at the beginning of a construction project. It is the construction amount awarded to the prime contractors. The award amount does not include the cost of land acquisition; architectural design; engineering; project management; change orders, deviations and upgrades from the original design and construction plan; or cost-overruns. The award amount is not the final, total or complete actual cost of a construction project.

After examining the 121 completed projects, it was concluded that a PLA versus non-PLA comparison of the award amounts is not possible. The dissimilar and small number of projects in the categories of new schools, school additions, school renovations and additions, and non-school projects, like student housing, libraries, garages and laboratories, their respective location and other critical factors, precludes a comparative analysis. Even in the category of new school construction projects, the individual project dissimilarities are too great to allow for an "apple to apple" comparison. A valid cost comparison between PLA and non-PLA projects is further complicated by the fact that the SCC is the only entity using PLAs. This makes it impossible to conclusively determine the cost impact directly due to the use of a PLA.

The location of a project is significant because of the differences between the prevailing wages in northern and southern counties in New Jersey. For instance, the prevailing hourly wage and benefits for a journey electrician in Essex County is $64.21, as of July 21, 2005, but in Gloucester County, the prevailing compensation is $61.46, as of October 3, 2005, a 4.5 percent difference. For a journey structural ironworker, the prevailing wage and benefit is $61.39, as of September 15, 2005, in Essex County, 13.0 percent higher than the ironworker's pay of $54.35, as of July 1, 2005 in Gloucester County. Furthermore, it is unrealistic to compare different types of school projects. An early childhood center requires substantially different planning, construction design and execution, materials, size, furnishings, than a middle or high school. Additionally, the costs of every aspect of construction generally are substantially higher in urban districts due to factors such as greater costs in material supply handling and delivery, security issues and multi-story versus one floor construction.

Table 2 lists the completed PLA and non-PLA new school construction projects by county and demonstrates the small number and dissimilar types of new school construction projects. The twenty-five (8 PLA and 17 non-PLA) new school construction projects vary greatly by location and by type of facility. Because of the substantial variability among the identified and completed projects, a comparison of the award amounts of PLA/SCC and non-PLA new projects cannot be done.

TABLE 2

Project Award Amounts for New School Projects by County
(25 projects: 8 PLAs/17 Non-PLAs)

District/Board of Education	PLA Project	Project Name	Award Amount
BERGEN			
Garfield	X	Early Childhood Center	$8,875,000
BURLINGTON			
Medford		South 70 Elementary School	10,443,037
Medford		North 70 Elementary School	11,584,956
Riverside		Riverside Elementary School	6,594,610
CAPE MAY			
Dennis		Primary School	7,513,814
ESSEX			
Newark		Belmont Runyon Elementary School	19,989,000
GLOUCESTER			
Monroe		Williamstown Middle School	24,776,655
Woolwich		Elementary School	6,609,675
HUDSON			
Union City	X	Jose Marti Middle School	24,749,000
West New York	X	New Middle School	29,794,000
HUNTERDON			
Tewksbury		Tewksbury Elementary School	12,361,777
MERCER			
Trenton	X	Mott Elementary School	7,056,000
Washington		Washington Township High School	12,808,478
West Windsor		Elementary School/Reg.Special Serv.	25,303,940
MIDDLESEX			
Perth Amboy	X	Ignacio Cruz Early Childhood Center	11,922,535
South River		South River Primary School	11,053,456
MONMOUTH			
Freehold		K-5 Elementary School	15,506,203
OCEAN			
Berkeley		5-6 Elementary School	15,443,753
Plumsted		New Egypt Primary School	6,873,300
PASSAIC			
Clifton		K-5 Elementary School	12,139,881
Passaic	X	R. Clemente Elementary / K-1 Center	26,598,000
Paterson	X	PANTHER Academy High School	8,461,200
SOMERSET			
Franklin		Franklin High School	50,585,800
Montgomery		Montgomery High School	57,464,805
UNION			
Elizabeth	X	Early Childhood Center	11,377,736

Employment Work Hours for Minorities, Females, Apprentices

One strength of the data collection systems used is the recording of the total cumulative work hours for the completion of a construction project and the share of the total work hours for minorities, females, and apprentices. The reports further record the total hours worked by job classification, such as journey-workers, and, in the case of the SCC, by forepersons. As with the other data, this information is also self-reported by the various contractors based on payroll and other records. For some construction projects, the total cumulative work hours and the work hours for minorities appear unusual and outside the norm. LWD has made appropriate notations to the individual project information sheets in Appendix II. The term minority includes all minority males and all minority females. The category female is defined as all females, minority females as well as non-minority females. In other words, minority females are counted twice in the cumulative total employment statistics: once under females and a second time under minorities. The double count of minority females is inconsequential since their participation rate in the construction trades at the present time is extremely low.

As was mentioned, the lack of a sufficient number of truly similar projects precludes a PLA versus non-PLA analysis as far as the award amounts, the construction duration and completion timeliness are concerned. This is not the case for the participation rates for minorities, females and apprentices. Minority employment does not depend on the type and size of the construction projects. The county employment goal obligation formula (see below for explanation) accounts for the differences in location. For these reasons, a comparative analysis has been performed.

The participation rate of minorities, females and apprentices in the construction industry is of interest to many policy decision makers. To evaluate the extent to which minority, female and apprentice workers are included in these construction projects, the analysis uses two different measurements: the actually achieved participation rate on a project, and, because of substantial county differences in the population composition, the established minority employment goal obligation for the county in which the project is located.

The participation rates shown in Table 3 are calculated based on the established and well recognized concept of "minority and female employment goal obligation" for construction contractors and subcontractors in the counties in which the construction projects were implemented. Both the SCC and DCC use these goals. The minority and female goals for each county are determined by the New Jersey Department of the Treasury, DCC. The methodology takes into account the actual availability of qualified minorities and females utilizing census data for affirmative action programs. It should be noted that these are goals, and not quotas, and these goals do not have to be strictly satisfied if the contractor has made and documented good faith efforts to reach the applicable targets. The 2005 report again uses the county goals based on the 1990 census. The year 2000 census-based minority targets, which in some counties changed significantly, did not become available to Treasury's DCC until December 2004. The updated targets were revised in February 2005 and applied to new projects begun after the revision date. Projects already underway continued to be subject to the 1990 census-based minority targets. Since, for this report, the start of all projects began prior to the issuance of the of the 2000 census-based guidelines, LWD used the minority goal standards in existence at the beginning of the projects. The established female employment goal is 6.9 percent for all counties.

The projects shown in Table 3, provide insight into the participation rates achieved for minorities, females, apprentices, journey workers and forepersons in each of the 121 identified and completed PLA and non-PLA construction projects. Table 3 shows that 57.3 percent (59 out of 103) of the non-PLA projects, and 64.7 percent (11 out of 17) of the PLA projects matched or exceeded the county minority target goals.

TABLE 3
Minority, Female, Apprentice Construction Employment Participation by Project

District/Board of Education	Project Name	Total Project Work Hours	Actual Minority Participation	Minority County Goal Obligation	Actual Female Participation	Actual Apprentice Participation
Atlantic County						
Atlantic Cape Community College	Atlantic Cape Community College	65,712	13.3%	20%	0.0%	18.3%
Richard Stockton College	Student Housing / Academic Campus	35,085	22.4%	20%	0.5%	13.3%
Bergen County						
Bergen County College	Parking Deck	15,550	6.9%	10%	0.0%	5.4%
Demarest	Northern Valley Regional High School	38,335	7.8%	10%	0.0%	6.8%
Fort Lee	Community Center	47,708	6.2%	10%	1.1%	2.0%
Franklin Lakes	Colonial Road Elementary School	2,932	2.4%	10%	0.0%	4.7%
*Garfield	Early Childhood Center	56,530	18.0%	10%	0.3%	14.0%
Northern Valley	Northern Valley Regional High School	21,754	16.9%	10%	0.4%	28.9%
Northern Valley	Old Tappan High School	19,159	23.9%	10%	0.0%	5.9%
Ramapo College	Sports & Recreation Center	114,418	13.9%	10%	0.5%	9.5%
Ramapo College	Student Housing	89,755	16.6%	10%	1.1%	10.5%
Ramapo Indian Hills	Ramapo High School	93,692	17.3%	10%	0.9%	0.0%
Ramapo Indian Hills	Indian Hills High School	61,562	13.5%	10%	0.1%	4.6%
Rutherford	Lincoln Elementary School	54,028	7.8%	10%	0.2%	4.6%
Rutherford	Washington Elementary School	54,028	7.8%	10%	0.2%	4.6%
Burlington County						
Burlington County Institute of Tech	Burlington County Institute of Tech	146,172	20.6%	16%	1.1%	9.8%
Medford	North 70 Elementary School	58,786	9.8%	16%	0.3%	12.8%
Medford	South 70 Elementary School	41,382	10.7%	16%	2.3%	21.0%
Riverside	Riverside Elementary School	43,769	10.4%	16%	0.2%	17.1%
Camden County						
Berlin	Berlin Community Elementary School	42,211	14.7%	16%	0.0%	13.8%
Cherry Hill	Cherry Hill Library	82,627	12.9%	16%	0.5%	14.3%
*Gloucester	Cold Springs Elementary School	57,629	11.6%	16%	0.2%	13.1%

***Indicates PLA Project**

TABLE 3
Minority, Female, Apprentice Construction Employment Participation by Project
(Continued)

District/Board of Education	Project Name	Total Project Work Hours	Actual Minority Participation	Minority County Goal Obligation	Actual Female Participation	Actual Apprentice Participation
Cape May County						
Dennis	Primary School - New Construction	34,320	22.9%	8%	0.0%	15.4%
Lower Cape May	Lower Cape May Regional High School	79,168	10.6%	8%	0.0%	14.7%
Ocean City	Public Works / Engineering Center	22,243	3.2%	8%	0.0%	18.9%
Cumberland County						
Military Affairs & NJ Dept of Veterans	Veterans Memorial Home (Vineland)	303,608	10.1%	21%	1.3%	14.1%
*Bridgeton	Buckshutem Road Elementary School	62,593	17.8%	21%	0.8%	19.3%
Essex County						
County of Essex	Essex County Court House	66,014	29.0%	42%	5.7%	6.8%
County of Essex	South Mountain Arena Parking Garage	48,108	30.6%	42%	0.2%	7.5%
*East Orange	Clifford J. Scott High School	105,965	47.7%	42%	3.9%	16.0%
Glen Ridge	Glen Ridge High School	32,864	30.6%	42%	0.0%	10.7%
Montclair State University	Academic Building	195,653	14.4%	42%	1.2%	10.0%
Montclair State University	Alexander Kasser Theater	63,118	22.3%	42%	0.8%	10.7%
Montclair State University	Children's Center	26,659	27.8%	42%	0.7%	16.1%
Montclair State University	Student Resident Facility	160,994	17.5%	42%	1.3%	6.7%
Newark	Belmont Runyon Elementary School	77,037	25.0%	42%	1.2%	3.8%
North Caldwell	Grandview Elementary School	20,220	25.7%	42%	0.0%	1.8%
UMDNJ	Science Center	41,572	10.5%	42%	4.0%	13.4%
Gloucester County						
Clearview	Clearview Regional High School	110,915	10.6%	10%	0.0%	8.5%
Clearview	Clearview Regional Middle School	64,803	14.2%	10%	1.1%	19.2%
Gateway	Gateway Regional High School	49,436	13.9%	10%	0.3%	15.2%
Gloucester County Vo-Tech	Gloucester County Inst. Of Tech.	47,113	10.0%	10%	1.1%	17.9%
Monroe	Williamstown Middle School	129,109	14.0%	10%	0.8%	13.0%
Rowan College	College of Education Building	124,034	8.1%	10%	0.5%	10.9%
Rowan College	Student Modular / Townhome Housing	208,498	17.3%	10%	0.9%	12.2%
Woolwich	Elementary School	31,660	13.5%	10%	0.0%	3.9%

***Indicates PLA Project**

TABLE 3
Minority, Female, Apprentice Construction Employment Participation by Project
(Continued)

District/Board of Education	Project Name	Total Project Work Hours	Actual Minority Participation	Minority County Goal Obligation	Actual Female Participation	Actual Apprentice Participation
Hudson County Community College	Culinary Arts School	120,770	28.6%	38%	0.8%	12.1%
*Jersey City	Freshman Academy at Lincoln HS	100,949	41.1%	38%	3.2%	6.9%
NJ Division of Purchase & Property	Liberty State Park Railroad Terminal	44,531	29.1%	38%	0.0%	10.2%
New Jersey City University	University Academy High School	7,420	26.9%	38%	0.0%	0.0%
*Secaucus	Secaucus High / Middle School	53,338	26.1%	38%	0.0%	9.6%
*Union City	Jose Marti Middle School	107,926	20.3%	38%	1.0%	13.4%
West New York	New Middle School	171,470	23.8%	38%	0.8%	12.5%
Hunterdon County						
North Voorhees	North Hunterdon High School	45,167	6.1%	5%	0.0%	7.1%
Readington	Three Bridges Elementary School	28,565	13.2%	5%	1.1%	13.3%
Readington	Whitehouse Elementary School	38,677	18.2%	5%	0.0%	8.4%
Tewksbury	Tewksbury Elementary School	73,667	5.5%	5%	0.2%	7.5%
Mercer County						
East Windsor	Hightstown High School	21,381	14.0%	19%	12.9%	9.5%
East Windsor	Rogers Elementary School	23,677	14.4%	19%	0.0%	20.6%
Hamilton	Hamilton High School West	27,344	17.1%	19%	0.6%	17.3%
Hamilton	Steinert High School	19,408	8.6%	19%	0.0%	21.3%
Mercer County Special Services	Elementary School	164,148	13.7%	19%	0.6%	7.1%
NJ Department of Treasury	Hughes Justice Complex	32,308	31.6%	19%	3.5%	12.6%
Princeton	Spring Street Garage & Plaza	43,996	12.2%	19%	0.2%	4.4%
Princeton	John Witherspoon Middle School	128,505	13.1%	19%	0.3%	15.1%
Princeton	Princeton Library	21,618	14.1%	19%	0.0%	11.2%
*Trenton	Mott Elementary School	47,556	23.8%	19%	1.4%	7.2%
Washington	Washington Township High School	72,636	5.9%	19%	0.0%	22.6%
Middlesex County						
County of Middlesex	Middlesex County Long Term Care	140,926	21.2%	16%	0.1%	7.3%

***Indicates PLA Project**

TABLE 3
Minority, Female, Apprentice Construction Employment Participation by Project
(Continued)

District/Board of Education	Project Name	Total Project Work Hours	Actual Minority Participation	Minority County Goal Obligation	Actual Female Participation	Actual Apprentice Participation
Cranbury	Cranbury Elementary / Middle School	27,336	16.9%	16%	0.0%	4.2%
North Brunswick	North Brunswick High School	37,954	14.9%	16%	0.2%	8.2%
Old Bridge	Old Bridge High School	83,110	18.3%	16%	0.2%	7.7%
*Perth Amboy	Ignacio Cruz Early Childhood Center	83,784	29.3%	16%	1.0%	13.3%
Rutgers University	Hale Center (Athletic Center)	36,247	24.0%	16%	0.3%	8.4%
Rutgers University	Genetics & Bio Material Life Sciences	4,041	1.1%	16%	0.0%	0.0%
Sayreville	Samsel Upper Elementary School	53,305	2.9%	16%	1.2%	18.7%
South River	South River Primary School	21,464	34.7%	16%	0.0%	6.8%
Spotswood	Spotswood Elementary School	41,981	19.0%	16%	0.0%	7.6%
Monmouth County						
*Asbury Park	Bradley Primary School	51,855	19.1%	11%	2.9%	13.1%
Freehold	Freehold Borough High School	24,603	5.6%	11%	0.0%	12.0%
Freehold	K-5 Elementary School	84,567	28.5%	11%	1.3%	9.8%
Henry Hudson	Henry Hudson Middle / High School	34,969	26.4%	11%	0.0%	5.3%
Holmdel	Holmdel High School	21,323	12.8%	11%	0.2%	17.7%
Holmdel	Village Elementary School	59,374	24.7%	11%	0.0%	10.3%
Little Silver	Markham Place Middle School	41,082	20.2%	11%	1.2%	1.0%
*Neptune	New Neptune Early Childhood Center	47,700	18.8%	11%	0.0%	13.2%
*Neptune	Shark River Hills Elementary School	56,669	22.0%	11%	0.7%	9.4%
Red Bank	Red Bank Regional High School	23,846	8.0%	11%	2.0%	13.3%
Spring Lake	Spring Lake Heights Elementary School	19,163	21.3%	11%	0.0%	2.5%
Upper Freehold	Allentown High School	56,551	16.2%	11%	0.0%	10.3%
West Long Branch	Frank Antonides Middle School	2,072	12.0%	11%	0.0%	8.0%
Morris County						
Florham Park	Ridgedale Middle School	27,754	11.6%	7%	0.0%	3.8%
Jefferson	High School	12,951	4.6%	7%	0.0%	22.6%

***Indicates PLA Project**

TABLE 3
Minority, Female, Apprentice Construction Employment Participation by Project
(Continued)

District/Board of Education	Project Name	Total Project Work Hours	Actual Minority Participation	Minority County Goal Obligation	Actual Female Participation	Actual Apprentice Participation
Jefferson	Stanlick Elementary School	10,851	0.6%	7%	1.6%	6.3%
Kinnelon	Stonybrook Elementary School	30,152	14.2%	7%	0.0%	6.4%
Morris County Vo-Tech	Morris County Vocational School	29,350	6.8%	7%	0.1%	13.1%
Parsippany-Troy Hills	Police Headquarters & Municipal Court	39,473	9.7%	7%	0.5%	10.8%
Ocean County						
Berkeley	Grades 5-6 Elementary School	72,063	19.1%	6%	0.2%	10.6%
Little Egg Harbor	Municipal Complex	17,179	7.3%	6%	0.0%	13.6%
*Manchester	Manchester Middle School	60,004	18.6%	6%	2.6%	11.0%
Ocean County Board of Freeholders	Ocean County Library	60,736	12.0%	6%	0.0%	10.0%
Ocean County College	Technology Center	14,424	5.3%	6%	0.0%	8.3%
Plumsted	New Egypt Elementary School	16,582	4.5%	6%	0.0%	9.5%
Plumsted	New Egypt Primary School	42,669	20.6%	6%	0.7%	13.0%
Passaic County						
Clifton	Grades K-5 Elementary School	69,613	12.3%	24%	1.5%	6.0%
*Passaic	Number 3, Mario J. Drago	54,431	22.0%	24%	0.8%	13.4%
*Passaic	New Roberto Clemente School	177,017	29.8%	24%	0.1%	8.8%
Passaic County Technical Institute	Passaic County Technical Institute	95,829	18.7%	24%	0.8%	6.1%
*Paterson	PANTHER Academy	47,009	26.4%	24%	0.7%	8.8%
Wayne	Wayne Hills High School	45,232	8.6%	24%	0.0%	10.4%
Wayne	Wayne Valley High School	21,139	26.1%	24%	0.2%	5.9%
Somerset County						
Franklin	Franklin High School	304,923	18.9%	8%	0.1%	8.3%
Montgomery	Montgomery High School	262,637	5.2%	8%	1.0%	12.8%
Watchung	Bayberry Elementary School	55,502	27.7%	8%	0.0%	11.8%
Watchung Hills	Valley View Middle School	26,498	14.2%	8%	0.0%	16.5%

***Indicates PLA Project**

TABLE 3
Minority, Female, Apprentice Construction Employment Participation by Project
(Continued)

District/Board of Education	Project Name	Total Project Work Hours	Actual Minority Participation	Minority County Goal Obligation	Actual Female Participation	Actual Apprentice Participation
Sussex County						
Newton	Merriam Elementary School	5,725	0.9%	5%	3.5%	6.1%
Sparta	Municipal Building	31,839	NA	5%	NA	NA
Union County						
*Elizabeth	Early Childhood Center	116,411	20.6%	24%	1.5%	6.3%
Union	Union High School	35,176	20.7%	24%	0.0%	12.1%
Warren County						
Hackettstown	Hackettstown High School	40,503	59.8%	5%	0.0%	3.0%
Oxford	Oxford Elementary / Middle School	40,061	15.9%	5%	1.1%	16.1%

***Indicates PLA Project**

Table 4 summarizes the individual project minority, female and apprentice employment participation rates shown in Table 3. It depicts the overall actual goals achieved and compares them with the weighted county goal.

TABLE 4
Participation Rate for Minorities, Females, Apprentices
(Includes all 121 Projects)

	PLA Projects (17)		Non-PLA Projects (104)	
	Achieved	Goal*	Achieved	Goal*
Minority	25.8%	25.3%	16.3%	16.7%
Female	1.3%	6.9%	0.7%	6.9%
Apprentice	11.5%	-	10.5%	-

*Weighted State Average Minority Goal determined by multiplying each county's total work hours by the respective county minority goal percentage and summing these to determine goal hours. The total resulting goal hours is divided by the total statewide work hours.

Table 4 shows that based on all 121 completed projects in the 20 counties (no projects in Salem County), the actual minority participation rate of 25.8 percent in PLA projects slightly exceeded the weighted goal of 25.3 percent. The actual minority participation rate in the non-PLA projects was 16.3 percent, which was marginally below the 16.7 percent weighted county goal.

The female participation rates for PLA (1.3 percent) and non-PLA (0.7 percent) projects are far below the established State standard of 6.9 percent.

The apprentice participation rate of 11.5 percent for PLA projects is higher than the 10.5 percent apprentice participation for non-PLA projects.

Table 5 analyzes only the 86 school projects (17 PLA and 69 non-PLA) in the 19 counties with completed school projects. There were no projects in Atlantic and Salem counties. Both the actual PLA (25.8 percent achieved vs. 25.3 percent goal) and non-PLA (15.3 percent achieved vs. 13.3 percent goal) minority participation rates exceeded the weighted county goals. The female and apprentice participation rates actually achieved on school construction projects are low for both PLA and non-PLA projects.

TABLE 5

Participation Rate for Minorities, Females, Apprentices
(includes all 86 School Projects)

	PLA Projects (17)		Non-PLA Projects (69)	
	Achieved	Goal*	Achieved	Goal*
Minority	25.8%	25.3%	15.3%	13.3%
Female	1.3%	6.9%	0.5%	6.9%
Apprentice	11.5%	-	10.4%	-

*Weighted State Average Minority Goal determined by multiplying each county's total work hours by the respective county minority goal percentage and summing these to determine goal hours. The total resulting goal hours is divided by the total statewide work hours.

Employment Work Hours for Minorities and Apprentices by Construction Trade

This section of the report presents the participation rates for minorities and apprentices for the different construction trades or occupations. The female participation rates for all trades is not presented since they are very low. There are no set trade-specific minority county goal obligations, but the minority work hours for all trades combined should reach or exceed the established minority county goal obligation percentage. The analysis includes the following 20 trades or crafts: Asbestos Worker, Bricklayer or Mason, Carpenter, Electrician, Glazier, HVAC Mechanic, Ironworker, Laborer, Operating Engineer, Painter, Plumber, Primer, Roofer, Sheet Metal Worker, Sprinkler Fitter, Steamfitter, Surveyor, Tiler, Truck Driver, and Other.

Table 6 summarizes the work-hour-based weighted ten-county-wide minority participation rate for each trade. It ranks the actually achieved participation rate for minorities for each construction trade and compares it with the work-hour-based weighted ten-county-wide goal obligation. Rank 1 shows the trade which achieved the highest weighted minority trade participation percentage above the weighted county goal.

The calculations are based on the qualifying 60 school construction projects (new, addition, renovation, or addition and renovation) both for PLA (16) and non-PLA (44) school projects in the 10 counties with at least one PLA and one non-PLA project. The analysis is limited to school projects because they have a greater similarity in the occupational mix used compared with non-school types of projects, such as a parking deck (no roofers), a railroad terminal, or a theater. The 10 counties which meet these criteria are: Bergen (1 PLA/8 non-PLA projects); Camden (1and 1); Essex (1 and 3); Hudson (3 and 2); Mercer (1 and 7); Middlesex (1 and 6); Monmouth (3 and 10); Ocean (1 and 3); Passaic (3 and 3); Union (1 and 1). Cumberland county has no non-PLA school project; while the other 10 counties have no PLA school projects.

Table 6
Minority Participation by Construction Trade
(Includes 16 PLA and 44 non-PLA Projects in the
10 Counties with at least 1 PLA and 1 non-PLA Project)

PLA-SCC					NON-PLA			
Actual Minority Participation	Weighted Minority County Goal Obligation	Above/Below County Goal Obligation	Ranking*	Construction Trade	Ranking*	Above/Below County Goal Obligation	Weighted Minority County Goal Obligation	Actual Minority Participation
72.2%	21.2%	+240.6%	1	Asbestos Worker	19	-100.0%	16.0%	0%
25.8%	23.5%	+9.8%	6	Bricklayer	2	+39.9%	17.2%	23.9%
18.1%	25.2%	-28.2%	11	Carpenter	9	-50.0%	16.6%	8.3%
16.0%	25.2%	-36.5%	12	Electrician	12	-57.0%	15.8%	6.8%
9.6%	25.4%	-62.2%	16	Glazier	11	-50.5%	20.0%	9.9%
26.1%	27.5%	-5.1%	8	HVAC	16	-63.7%	20.1%	7.3%
13.1%	25.1%	-47.8%	14	Iron Worker	7	-42.8%	17.3%	9.9%
47.2%	26.5%	+78.1%	3	Laborer	1	+89.1%	18.3%	34.6%
11.6%	23.0%	-49.6%	15	Operating Engineer	5	-67.0%	16.3%	15.2%
32.2%	29.4%	+9.5%	7	Other	6	-42.7%	15.0%	8.6%
53.3%	26.3%	+102.7%	2	Painter	3	+3.4%	17.7%	18.3%
20.1%	25.1%	-19.9%	10	Plumber	17	-65.8%	15.8%	5.4%
42.3%	33.1%	+27.8%	5	Primer	20	INA	INA	INA
28.3%	20.8%	+36.1%	4	Roofer	4	-2.2%	18.4%	18.0%
22.7%	24.7%	-8.1%	9	Sheet Metal	10	-50.3%	15.9%	7.5%
14.3%	26.1%	-45.2%	13	Sprinkler	14	-60.6%	17.0%	6.7%
8.1%	33.6%	-75.9%	18	Steam Filter	18	-100.0%	23.1%	0%
0%	33.2%	-100.0%	20	Surveyor	13	-60.1%	14.8%	5.9%
11.1%	29.5%	-62.4%	17	Tiler	8	-49.4%	16.2%	8.2%
3.8%	22.9%	-83.4%	19	Truck Driver	15	-62.5%	15.5%	5.8%
26.2%	25.5%	+2.7%	-	Statewide (10 counties)	-	-3.5%	17.1%	16.5%

*Rank 1 indicates the trade with the highest weighted minority trade participation percentage above the weighted goal.
INA – Information not available.

Table 6 shows that among the PLA projects seven trades (asbestos workers, painters, laborers, roofers, primers, bricklayers and others) achieved a higher participation rate than the weighted county goal. All other occupations fell short of the requested goals. Among the non-PLA projects, only three trades (laborers, bricklayers and the painters) were above the county goal. Projects implemented with a PLA achieved a higher minority participation record in 13 out of 20 trades. These 13 trades showed either a more positive (above) or less negative (below) percent differential between the actual rate and the goal obligation rate. Six out of 19 trades implemented without a PLA showed a better minority participation rate. A higher minority trade participation rate in favor of PLA projects is also evident in the ten county weighted average: +2.7 percent for PLA projects versus -3.5 percent for non-PLA projects.

Employment Utilization Rate of Minorities by Trade and Race/Ethnicity

The term employment utilization is different from the term employment participation. The minority employment participation rate refers to the total hours worked by a minority group or sub-group as a percent of the total work hours for all employees on construction projects. Employment minority utilization rate refers to the number of minority persons such as Blacks, Hispanics, American Indians, Asians and females expressed as a percent of all workers employed for each month on a construction project. For instance, a minority painter employed on a construction project for ten months is counted ten times, regardless of the total hours worked each month.

The utilization information is reported monthly by all contractors. There are no established county or state utilization goals for minorities, females, or apprentices. The minority utilization data provides an overall employment profile over an extended period. The information can form the basis for determining the existence of possible systemic discrimination or minority underutilization. Underutilization can be defined as having fewer minorities on particular projects than would reasonably be expected by their availability. The data can complement the employment participation information. Table 8 presents the total and individual Black, Hispanic, American Indian, and Asian minority utilization rates for the 16 PLA and 44 non-PLA school projects in the ten counties with at least one PLA and one non-PLA school project. The female utilization is low and not shown.

TABLE 7

Utilization Rate for Minorities by Trade and Race/Ethnicity*

	Total Minority Utilization	Black	Hispanic	American Indian	Asian
Bricklayer or Mason					
PLA	26.5%	13.7%	11.5%	0.0%	1.3%
Non-PLA	24.4%	9.7%	13.9%	0.4%	0.1%
Carpenter					
PLA	18.2%	7.0%	10.3%	0.5%	0.4%
Non-PLA	7.9%	3.2%	4.0%	0.7%	0.0%
Electrician					
PLA	22.3%	8.3%	13.6%	0.0%	0.3%
Non-PLA	7.1%	3.3%	2.9%	0.8%	0.2%
Glazier					
PLA	9.2%	2.8%	6.4%	0.0%	0.0%
Non-PLA	10.4%	5.7%	4.7%	0.0%	0.0%
HVAC Mechanic					
PLA	25.9%	16.1%	8.8%	0.2%	0.8%
Non-PLA	12.5%	4.0%	7.8%	0.2%	0.4%
Ironworker					
PLA	14.4%	5.4%	7.9%	0.6%	0.5%
Non-PLA	11.1%	4.0%	6.0%	0.9%	0.3%
Laborer					
PLA	44.2%	14.7%	28.7%	0.1%	0.8%
Non-PLA	36.0%	14.0%	20.9%	0.3%	0.8%
Operating Engineer					
PLA	18.1%	4.1%	13.6%	0.2%	0.2%
Non-PLA	15.1%	4.3%	9.8%	1.0%	0.0%
Other					
PLA	28.5%	12.5%	15.7%	0.0%	0.2%
Non-PLA	11.9%	3.5%	8.0%	0.2%	0.2%
Painter					
PLA	45.1%	8.4%	33.7%	1.2%	1.8%
Non-PLA	32.7%	1.1%	31.0%	0.3%	0.2%
Plumber					
PLA	19.0%	9.6%	9.4%	0.0%	0.0%
Non-PLA	5.5%	3.0%	2.1%	0.4%	0.0%

*Includes 16 PLA and 44 non-PLA School Projects in the 10 counties with each at least one PLA and one non-PLA school project.

TABLE 7

**Utilization Rate for Minorities by Trade and Race/Ethnicity*
(Continued)**

	Total Minority Utilization	Black	Hispanic	American Indian	Asian
Roofer					
PLA	29.2%	13.8%	12.2%	2.9%	0.3%
Non-PLA	22.0%	8.2%	13.4%	0.4%	0.0%
Sheet Metal Worker					
PLA	25.8%	16.2%	8.6%	0.7%	0.3%
Non-PLA	12.3%	4.4%	6.6%	0.8%	0.7%
Sprinkler Fitter					
PLA	13.3%	6.3%	7.0%	0.0%	0.0%
Non-PLA	6.0%	4.0%	2.0%	0.0%	0.0%
Surveyor					
PLA	0.0%	0.0%	0.0%	0.0%	0.0%
Non-PLA	7.5%	7.5%	0.0%	0.0%	0.0%
Tiler					
PLA	13.6%	3.1%	10.5%	0.0%	0.0%
Non-PLA	11.1%	3.5%	7.5%	0.0%	0.0%
Truck Driver					
PLA	*10.2%*	*6.8%*	*3.4%*	0.0%	0.0%
Non-PLA	6.7%	2.5%	4.2%	0.0%	0.0%

*Includes 16 PLA and 44 non-PLA School Projects in the 10 counties with each at least one PLA and one non-PLA school project.

There are substantial variations in the minority utilization rates among the various trades, as well as between PLA and non-PLA projects. The total minority utilization on PLA projects was higher for 14 out of 17 trades listed. This is not surprising since PLA projects are implemented in the Abbott special needs districts, many of which have high minority populations. Glaziers, operating engineers, and surveyors are the exception.

The utilization rate of Black workers as compared with Hispanic workers on PLA projects is higher for six trades (bricklayer, HVAC mechanic, plumber, roofer, sheet metal worker and truck driver) while for 10 trades (carpenters, electricians, glazier, ironworker, laborer, operating engineer, other, painter, sprinkler fitter, and tiler), the Hispanic workers dominate. On non-PLA projects, Hispanic workers are more prevalent in 12 of the 17 listed trades. The utilization rate of American Indian and Asian workers is negligible both on PLA and non-PLA projects.

Construction Duration and Completion Timeliness

The final performance factor measured is the construction duration for all PLA and non-PLA projects, and in the case of non-PLA projects, the completion timeliness (Table 8). Timeliness data for PLA projects were not available from the SCC.

The SCC and DCC databases define construction start and construction completion slightly differently. The SCC's construction start is called "Construction Notice to Proceed" (NTP) and the completion date is called "Substantial Completion." It is understood that it may take a contractor several weeks after receiving the NTP certificate before actually starting work on the construction site. Substantial completion means that the project essentially is completed, but finishing and clean-up activities may still be ongoing. For the DCC, the "Award Date" is used as the official construction start date, even though the contractor may take several more weeks before actually beginning the work. The "Closed Date" is the DCC recorded construction end date, which usually is recorded when approximately 90 percent of the actual construction has been completed. Thus, construction duration is the time difference in weeks between the notice to proceed and the substantial completion dates for SCC projects, and the difference between award date and closed date for DCC monitored non-PLA projects.

Timeliness is measured as the difference in weeks between the projected completion date declared at the beginning of a project and the closed date or substantial completion date. Timeliness data are only available for non-PLA projects. Timeliness data provide a measure of how accurate the planners were in projecting the actual construction completion date of a specific project.

There are a myriad of factors that influence the construction duration. Variables such as project size and complexity, permitting, financing, material availability and delivery, change order requests, staffing and available resources, weather, unanticipated circumstances and more, play a crucial role in determining the projected and actual start and completion times of a construction project. Further, authorities with several school projects under construction may shift the priority from one construction site to another to accommodate the school calendar. Due to the disparity and variations in the recorded projects, a PLA versus non-PLA analysis is not indicated. Therefore, we present the results of all 121 identified and completed projects as to their individual construction duration and completion timeliness. The length of time indicated for the construction duration and timeliness are approximations based on how the start and completion dates are recorded. As a consequence, the findings should not be interpreted rigidly.

Table 8 shows that the average construction duration is 70 weeks for the 116 projects for which data is available (for the remaining five projects no timeliness information was provided). For the 98 completed projects for which timeliness information is available, 62 projects (63.3 percent) finished early or on time. Thirty-six projects were late, 12 of which were late by only four weeks or less.

Table 8
Project Construction Durations and Completion Timeliness
Includes all 121 Projects
PLA Projects are Marked with an Asterisk (*)

District/Board of Education	Project Name	Construction Duration (Weeks)	Timeliness
Atlantic County			
Richard Stockton College	Student Housing / Academic Campus	70	9 weeks late
Bergen County			
Bergen County College	Parking Deck	NA	12 weeks late
Demarest	Northern Valley Regional High School	75	31 weeks late
Fort Lee	Community Center	73	INA
Franklin Lakes	Colonial Road Elementary School	81	17 weeks late
*Garfield	Early Childhood Center	50	INA
Northern Valley	Northern Valley Regional High School	76	INA
Northern Valley	Old Tappan High School	72	3 weeks late
Ramapo College	Sports & Recreation Center	85	11 weeks late
Ramapo College	Student Housing	87	26 weeks late
Ramapo Indian Hills	Ramapo High School	91	On Time
Ramapo Indian Hills	Indian Hills High School	105	17 weeks late
Rutherford	Lincoln Elementary School	61	25 weeks early
Rutherford	Washington Elementary School	61	25 weeks early
Burlington County			
Burlington County Institute of Tech	Burlington County Institute of Tech	66	52 weeks early
Medford	North 70 Elementary School	60	7 weeks early
Medford	South 70 Elementary School	61	3 weeks early
Riverside	Riverside Elementary School	48	10 weeks early
Camden County			
Berlin	Berlin Community Elementary School	56	27 weeks early
Cherry Hill	Cherry Hill Library	81	11 weeks late
*Gloucester	Cold Springs Elementary School	86	INA
Cape May County			
Atlantic/Cape May County Community College	Atlantic/Cape May County Community College	84	32 weeks early
Dennis	Primary School – New Construction	156	86 weeks late
Lower Cape May	Lower Cape May Regional High School	NA	INA
Ocean City	Public Works / Engineering Center	53	6 weeks early
Cumberland County			
Military Affairs & Dept of Veterans	Veterans Memorial Home (Vineland)	120	1 week early
*Bridgeton	Buckshutem Road Elementary School	92	INA

Table 8
Project Construction Durations and Completion Timeliness
Includes all 121 Projects
PLA Projects are Marked with an Asterisk (*)
(Continued)

District/Board of Education	Project Name	Construction Duration (Weeks)	Timeliness
Essex County			
County of Essex	Essex County Court House	65	2 weeks late
County of Essex	South Mountain Arena Parking Garage	39	85 weeks early
*East Orange	Clifford J. Scott High School	48	INA
Glen Ridge	Glen Ridge High School	63	2 weeks late
Montclair State University	Academic Building	104	18 weeks early
Montclair State University	Alexander Kasser Theater	88	1 week early
Montclair State University	Children's Center	56	31 weeks late
Montclair State University	Student Resident Facility	NA	INA
Newark	Belmont Runyon Elementary School	82	6 weeks early
North Caldwell	Grandview Elementary School	17	38 weeks early
UMDNJ	Science Center	69	INA
Gloucester County			
Clearview	Clearview Regional High School	50	49 weeks early
Clearview	Clearview Regional Middle School	67	2 weeks early
Gateway	Gateway Regional High School	43	21 weeks early
Gloucester County Vo-Tech	Gloucester County Inst. Of Tech.	39	21 weeks early
Monroe	Williamstown Middle School	120	21 weeks early
Rowan College	College of Education Building	73	10 weeks early
Rowan College	Student Modular / Townhome Housing	51	On Time
Woolwich	Elementary School	53	5 weeks early
Hudson County			
Hudson County Community College	Culinary Arts School	51	85 weeks early
*Jersey City	Freshman Academy at Lincoln HS	80	INA
NJ Division of Purchase & Property	Liberty State Park Railroad Terminal	64	4 weeks late
NJ City University	University Academy High School	60	10 weeks late
Secaucus	Secaucus High / Middle School	65	25 weeks early
*Union City	Jose Marti Middle School	99	INA
*West New York	New Middle School	99	INA
Hunterdon County			
North Voorhees	North Hunterdon High School	45	9 weeks early
Readington	Three Bridges Elementary School	47	26 weeks early
Readington	Whitehouse Elementary School	45	29 weeks early
Tewksbury	Tewksbury Elementary School	96	8 weeks early
Mercer County			
East Windsor	Hightstown High School	66	20 weeks early
East Windsor	Rogers Elementary School	55	1 week late
Hamilton	Hamilton High School West	54	11 weeks late
Hamilton	Steinert High School	79	30 weeks late

Table 8
Project Construction Durations and Completion Timeliness
Includes all 121 Projects
PLA Projects are Marked with an Asterisk (*)
(Continued)

District/Board of Education	Project Name	Construction Duration (Weeks)	Timeliness
Mercer County (continued)			
Mercer County Special Services	Elementary School	60	8 weeks early
NJ Division of Purchase & Property	Hughes Justice Complex	68	On Time
Princeton	Spring Street Garage & Plaza	30	18 weeks early
Princeton	John Witherspoon Middle School	86	2 weeks late
Princeton	Princeton Library	NA	INA
*Trenton	Mott Elementary School	80	INA
Washington	Washington Township High School	75	18 weeks early
Middlesex County			
County of Middlesex	Middlesex County Long Term Care	93	4 weeks late
Cranbury	Cranbury Elementary / Middle School	81	30 weeks late
North Brunswick	North Brunswick High School	87	30 weeks early
Old Bridge	Old Bridge High School	64	61 weeks early
*Perth Amboy	Ignacio Cruz Early Childhood Center	85	INA
Rutgers University	Hale Center (Athletic Center)	74	15 weeks early
Rutgers University	Genetics & Bio Material Life Sciences	44	26 weeks early
Sayreville	Samsel Upper Elementary School	93	9 weeks early
South River	South River Primary School	45	63 weeks early
Spotswood	Spotswood Elementary School	58	2 weeks early
Monmouth County			
*Asbury Park	Bradley Primary School	79	INA
Freehold	Freehold Borough High School	36	6 weeks late
Freehold	K-5 Elementary School	42	21 weeks early
Henry Hudson	Henry Hudson Middle / High School	36	73 weeks early
Holmdel	Holmdel High School	80	24 weeks late
Holmdel	Village Elementary School	96	5 weeks late
Little Silver	Markham Place Middle School	73	14 weeks early
*Neptune	New Neptune Early Childhood Center	51	INA
*Neptune	Shark River Hills Elementary School	72	INA
Red Bank	Red Bank Regional High School	68	3 weeks late
Spring Lake	Spring Lake Heights Elementary School	45	66 weeks early
Upper Freehold	Allentown High School	87	15 weeks early
West Long Branch	Frank Antonides Middle School	66	2 weeks late
Morris County			
Florham Park	Ridgedale Middle School	42	18 weeks early
Jefferson	High School	77	14 weeks early
Jefferson	Stanlick Elementary School	55	25 weeks early
Kinnelon	Stonybrook Elementary School	56	8 weeks late
Morris County Vo-Tech	Morris County Vocational School	79	5 weeks early
Parsippany-Troy Hills	Police Headquarters & Municipal Court	68	13 weeks late

Table 8
Project Construction Durations and Completion Timeliness
Includes all 121 Projects
PLA Projects are Marked with an Asterisk (*)
(Continued)

District/Board of Education	Project Name	Construction Duration (Weeks)	Timeliness
Ocean County			
Berkeley	5-6 Elementary School	66	3 weeks late
Little Egg Harbor	Municipal Complex	NA	19 weeks late
*Manchester	Manchester Middle School	55	INA
Ocean County Board of Freeholders	Ocean County Library	108	5 weeks early
Ocean County College	Technology Center	124	25 weeks late
Plumsted	New Egypt Elementary School	100	2 weeks late
Plumsted	New Egypt Primary School	55	9 weeks early
Passaic County			
Clifton	K-5 Elementary School	90	12 weeks early
*Passaic	Number 3, Mario J. Drago	29	INA
*Passaic	New Roberto Clemente School	89	INA
Passaic County Technical Institute	Passaic County Technical Institute	80	2 weeks early
*Paterson	Panther Academy	69	INA
Wayne	Wayne Hills High School	49	5 weeks early
Wayne	Wayne Valley High School	50	9 weeks early
Somerset County			
Franklin	Franklin High School	97	6 weeks late
Montgomery	Montgomery High School	84	63 weeks early
Watchung	Bayberry Elementary School	104	6 weeks early
Watchung Hills	Valley View Middle School	65	32 weeks early
Sussex County			
Newton	Merriam Elementary School	63	4 weeks late
Sparta	Municipal Building	82	28 weeks late
Union County			
*Elizabeth	Early Childhood Center	69	INA
Union	Union High School	68	11 weeks late
Warren County			
Hackettstown	Hackettstown High School	102	4 weeks early
Oxford	Oxford Elementary / Middle School	51	12 weeks early

INA – information not available

LWD Apprenticeship Training Efforts and Results

LWD, together with its partner agencies, is actively engaged in the New Jersey Apprenticeship Program to promote and expand registered apprenticeships and other work-based learning initiatives. In addition, through the schools construction initiative, LWD is strongly committed to orientation and outreach activities to promote apprenticeship training for female and minority residents primarily in the Abbott districts.

Since its inception in March 2002 through October 5, 2005, the Construction Trades Training Program for Women and Minorities has enrolled a total of 1167 participants in training with 857 completions (73.4 percent) and 310 dropouts (26.6 percent). Of the 857 students who successfully completed the academic training 260 (30.3 percent) obtained a union apprenticeship, and 180 (21.0 percent) obtained non-union construction placements. This amounts to a total of 440 (51.3 percent) new personnel entering construction occupations. In addition, 166 (19.4 percent) training completers are waiting for apprenticeship testing. The remaining 251 (29.3 percent) participants enrolled in training chose other career options or their outcomes are unknown.

LWD continues to meet with all construction trade unions and program operators to encourage their participation and commitment in the recruitment of apprentices and in the preparation of the individuals currently in the training program.

2006 REPORT OUTLOOK

Past annual reports included project data up to the cut-off date of September 30. This was done to allow for the receipt and inclusion of all field reports, data entry, information transfer, data analysis, report writing, and with the expectation to issue the report early the following year. Experience has shown that the information gathering by DCC and the SCC, as well as the validation and analysis process is more time consuming than originally anticipated. It is planned to select June 30, 2006 as the cut-off date for the 2006 annual report to the Governor and Legislature. This will provide additional data collection and processing time, while allowing for a more timely release. It should also provide LWD time for the additionally required analysis of the overall effectiveness of the implementation of the Act from the time of its enactment, and to make recommendations regarding legislation to make changes to better effectuate the purposes of the PLA Act.

It is difficult to estimate how many construction projects falling under the PLA Act will be completed by the next cut-off date of June 30, 2006. It is particularly challenging to predict how many school construction projects will be implemented in the near future. Several factors contribute to this uncertainty: The depletion of the $8.6 billion school construction fund for the Abbott ($6 billion) and non-Abbott districts ($2.6 billion); the Inspector General's investigation and criticism of the SCC's management resulting in a lengthy construction moratorium; the lack of visibility about the timing and size of any additional school funding approval by the legislature; and the impact of Governor Jon S. Corzine's Executive Order No. 3, creating a new working group to reform the school construction program which is recommending transitioning the SCC corporation into a new educational facilities authority.

Another concern is the fact that the SCC so far is the only organization that utilizes PLA's for projects under their oversight. The past operational and fiscal practices by the SCC are well documented. With this in mind, it is not appropriate to fully ascribe positive or negative performance outcomes (award amount cost, project duration, timeliness) to the fact that a PLA was used. The results could be due to the construction management practices of the SCC, and not necessarily due to the use of a PLA. This dilemma precludes a fair and objective comparative PLA (SCC) versus non-PLA analysis.

APPENDIX 1

EMPLOYMENT WORK HOURS
FOR MINORITIES AND APPRENTICES
BY INDIVIDUAL CONSTRUCTION TRADE

APPENDIX I
Participation Rates for Minorities and Apprentices by Individual Construction Trade*
(Includes 60 School Projects)*

Asbestos Worker

	Minority County Goal	PLA Minority	Non-PLA Minority	PLA Apprentice	Non-PLA Apprentice
Camden	16.0%	0.0%	0.0%	0.0%	0.0%
Hudson	38.0%	27.9%	0.0%	0.0%	0.0%
Mercer	19.0%	38.8%	0.0%	0.0%	0.0%
Monmouth	11.0%	57.5%	0.0%	5.9%	0.0%
Passaic	24.0%	91.1%	0.0%	8.3%	0.0%

Bricklayer or Mason

	Minority County Goal	PLA Minority	Non-PLA Minority	PLA Apprentice	Non-PLA Apprentice
Bergen	10.0%	21.4%	11.3%	2.6%	0.6%
Camden	16.0%	9.9%	18.3%	8.6%	20.5%
Essex	42.0%	58.5%	35.3%	9.2%	3.3%
Hudson	38.0%	27.5%	9.8%	2.8%	13.8%
Mercer	19.0%	22.2%	9.9%	19.8%	9.3%
Middlesex	16.0%	20.3%	30.1%	4.8%	1.5%
Monmouth	11.0%	28.8%	42.8%	5.3%	2.6%
Ocean	6.0%	3.6%	29.1%	3.2%	1.5%
Passaic	24.0%	31.7%	9.3%	1.7%	3.4%
Union	24.0%	11.0%	123.6%	4.7%	0.0%

Carpenter

	Minority County Goal	PLA Minority	Non-PLA Minority	PLA Apprentice	Non-PLA Apprentice
Bergen	10.0%	15.1%	15.2%	9.5%	3.0%
Camden	16.0%	2.8%	4.2%	17.7%	8.6%
Essex	42.0%	18.1%	18.0%	3.0%	2.5%
Hudson	38.0%	17.9%	15.3%	8.1%	6.1%
Mercer	19.0%	6.8%	3.3%	0.3%	9.2%
Middlesex	16.0%	32.1%	3.8%	7.3%	21.5%
Monmouth	11.0%	16.3%	6.5%	11.2%	7.8%
Ocean	6.0%	11.0%	14.2%	12.8%	18.7%
Passaic	24.0%	26.8%	7.0%	7.7%	7.7%
Union	24.0%	13.4%	3.1%	5.2%	7.4%

APPENDIX I
Participation Rates for Minorities and Apprentices by Individual Construction Trade*
(Includes 60 School Projects)*
(Continued)

Electrician

	Minority County Goal	PLA Minority	Non-PLA Minority	PLA Apprentice	Non-PLA Apprentice
Bergen	10.0%	19.8%	6.6%	24.7%	19.4%
Camden	16.0%	11.8%	8.2%	22.9%	39.6%
Essex	42.0%	21.2%	18.1%	30.7%	41.2%
Hudson	38.0%	19.7%	20.8%	30.6%	31.4%
Mercer	19.0%	27.1%	7.2%	9.3%	20.5%
Middlesex	16.0%	9.7%	3.2%	37.2%	19.9%
Monmouth	11.0%	6.3%	2.4%	23.0%	21.2%
Ocean	6.0%	41.7%	14.7%	25.4%	28.7%
Passaic	24.0%	11.2%	17.2%	33.0%	12.5%
Union	24.0%	0.5%	0.0%	27.7%	0.0%

Glazier

	Minority County Goal	PLA Minority	Non-PLA Minority	PLA Apprentice	Non-PLA Apprentice
Bergen	10.0%	12.0%	22.0%	4.5%	0.0%
Camden	16.0%	11.2%	0.0%	46.7%	0.0%
Essex	42.0%	24.2%	21.3%	0.0%	0.0%
Hudson	38.0%	6.5%	54.6%	4.2%	0.0%
Mercer	19.0%	9.9%	2.3%	2.3%	5.1%
Middlesex	16.0%	0.0%	6.7%	19.9%	0.0%
Monmouth	11.0%	4.4%	5.9%	2.6%	2.7%
Ocean	6.0%	0.0%	3.5%	0.0%	6.0%
Passaic	24.0%	9.5%	9.9%	0.6%	3.6%
Union	24.0%	0.0%	0.0%	0.0%	12.5%

HVAC Mechanic

	Minority County Goal	PLA Minority	Non-PLA Minority	PLA Apprentice	Non-PLA Apprentice
Bergen	10.0%	2.8%	7.6%	25.3%	8.6%
Camden	16.0%	0.0%	0.0%	6.7%	0.0%
Essex	42.0%	47.3%	7.0%	15.5%	25.4%
Hudson	38.0%	0.0%	30.8%	18.4%	0.0%
Mercer	19.0%	0.0%	2.4%	0.0%	18.6%
Middlesex	16.0%	0.0%	0.0%	0.0%	22.3%
Monmouth	11.0%	4.2%	1.3%	6.8%	17.3%

APPENDIX I
Participation Rates for Minorities and Apprentices by Individual Construction Trade*
(Includes 60 School Projects)*
(Continued)

HVAC Mechanic (continued)

	Minority County Goal	PLA Minority	Non-PLA Minority	PLA Apprentice	Non-PLA Apprentice
Ocean	6.0%	6.5%	0.0%	23.9%	10.0%
Passaic	24.0%	65.2%	21.1%	19.6%	15.5%
Union	24.0%	25.7%	0.0%	14.0%	0.0%

Ironworker

	Minority County Goal	PLA Minority	Non-PLA Minority	PLA Apprentice	Non-PLA Apprentice
Bergen	10.0%	1.8%	12.0%	0.0%	1.1%
Camden	16.0%	3.3%	12.2%	6.7%	17.5%
Essex	42.0%	18.8%	11.0%	0.0%	0.0%
Hudson	38.0%	13.2%	0.0%	3.7%	0.0%
Mercer	19.0%	2.1%	5.9%	0.0%	1.7%
Middlesex	16.0%	21.0%	6.0%	0.0%	0.5%
Monmouth	11.0%	9.0%	25.9%	0.0%	0.0%
Ocean	6.0%	0.6%	19.3%	0.0%	0.7%
Passaic	24.0%	19.6%	23.2%	3.6%	0.0%
Union	24.0%	18.4%	0.0%	0.0%	0.0%

Laborer

	Minority County Goal	PLA Minority	Non-PLA Minority	PLA Apprentice	Non-PLA Apprentice
Bergen	10.0%	31.3%	21.0%	11.7%	0.1%
Camden	16.0%	17.7%	21.8%	1.7%	3.6%
Essex	42.0%	78.9%	27.7%	13.8%	1.4%
Hudson	38.0%	56.8%	48.0%	1.1%	0.7%
Mercer	19.0%	42.7%	40.6%	0.2%	4.6%
Middlesex	16.0%	51.0%	40.8%	1.0%	0.8%
Monmouth	11.0%	38.3%	45.7%	0.6%	1.6%
Ocean	6.0%	29.9%	24.7%	0.0%	1.7%
Passaic	24.0%	34.2%	19.1%	3.2%	1.4%
Union	24.0%	34.3%	19.6%	1.0%	0.0%

APPENDIX I
Participation Rates for Minorities and Apprentices by Individual Construction Trade*
(Includes 60 School Projects)*
(Continued)

Operating Engineer

	Minority County Goal	PLA Minority	Non-PLA Minority	PLA Apprentice	Non-PLA Apprentice
Bergen	10.0%	12.8%	9.8%	3.4%	0.0%
Camden	16.0%	5.4%	41.2%	0.0%	0.0%
Essex	42.0%	0.0%	49.6%	0.0%	5.7%
Hudson	38.0%	11.4%	5.4%	1.2%	0.0%
Mercer	19.0%	0.0%	19.0%	0.0%	3.1%
Middlesex	16.0%	17.3%	11.1%	0.0%	1.5%
Monmouth	11.0%	11.2%	15.3%	0.8%	0.0%
Ocean	6.0%	1.0%	7.9%	0.0%	3.7%
Passaic	24.0%	16.3%	0.9%	0.0%	0.0%
Union	24.0%	5.3%	0.0%	0.0%	0.0%

Other

	Minority County Goal	PLA Minority	Non-PLA Minority	PLA Apprentice	Non-PLA Apprentice
Bergen	10.0%	0.0%	13.5%	0.0%	3.2%
Camden	16.0%	0.0%	32.2%	0.0%	0.0%
Essex	42.0%	0.0%	8.6%	0.0%	1.5%
Hudson	38.0%	35.1%	6.3%	9.3%	0.0%
Mercer	19.0%	12.9%	3.7%	0.0%	3.2%
Middlesex	16.0%	0.0%	6.9%	0.0%	5.2%
Monmouth	11.0%	33.8%	4.1%	0.0%	2.4%
Ocean	6.0%	4.4%	1.1%	0.6%	12.6%
Passaic	24.0%	35.8%	12.6%	15.1%	0.0%
Union	24.0%	46.5%	75.8%	8.5%	19.4%

Painter

	Minority County Goal	PLA Minority	Non-PLA Minority	PLA Apprentice	Non-PLA Apprentice
Bergen	10.0%	2.1%	35.4%	0.0%	0.0%
Camden	16.0%	0.0%	0.0%	0.0%	0.0%
Essex	42.0%	54.7%	58.2%	0.0%	0.0%
Hudson	38.0%	26.0%	94.3%	10.0%	19.4%
Mercer	19.0%	0.0%	4.1%	0.0%	11.3%
Middlesex	16.0%	100.0%	6.7%	23.1%	6.3%
Monmouth	11.0%	51.3%	4.0%	5.9%	5.9%
Ocean	6.0%	0.6%	0.0%	20.8%	9.2%
Passaic	24.0%	68.6%	42.4%	13.9%	0.0%
Union	24.0%	100.0%	0.0%	13.4%	0.0%

APPENDIX I
Participation Rates for Minorities and Apprentices by Individual Construction Trade*
(Includes 60 School Projects)*
(Continued)

Plumber

	Minority County Goal	PLA Minority	Non-PLA Minority	PLA Apprentice	Non-PLA Apprentice
Bergen	10.0%	11.8%	2.5%	30.1%	4.3%
Camden	16.0%	20.1%	2.3%	12.8%	15.9%
Essex	42.0%	42.9%	45.2%	18.0%	5.2%
Hudson	38.0%	16.4%	0.0%	13.9%	0.0%
Mercer	19.0%	7.7%	8.1%	15.4%	30.5%
Middlesex	16.0%	6.5%	2.1%	25.9%	17.9%
Monmouth	11.0%	20.1%	1.1%	13.7%	19.9%
Ocean	6.0%	14.3%	1.3%	21.7%	31.5%
Passaic	24.0%	13.8%	3.9%	7.1%	35.0%
Union	24.0%	45.4%	0.0%	0.0%	0.0%

Primer

	Minority County Goal	PLA Minority	Non-PLA Minority	PLA Apprentice	Non-PLA Apprentice
Bergen	10.0%	0.0%	0.0%	0.0%	0.0%
Camden	16.0%	0.0%	0.0%	0.0%	0.0%
Essex	42.0%	63.6%	0.0%	0.0%	0.0%
Mercer	19.0%	0.0%	0.0%	0.0%	0.0%

Roofer

	Minority County Goal	PLA Minority	Non-PLA Minority	PLA Apprentice	Non-PLA Apprentice
Bergen	10.0%	0.0%	17.6%	27.1%	2.6%
Camden	16.0%	22.3%	20.3%	30.9%	0.0%
Essex	42.0%	0.0%	15.1%	0.0%	0.2%
Hudson	38.0%	21.5%	48.1%	7.7%	14.8%
Mercer	19.0%	22.8%	16.1%	8.8%	16.8%
Middlesex	16.0%	53.8%	11.9%	37.2%	11.7%
Monmouth	11.0%	30.2%	14.5%	29.4%	12.7%
Ocean	6.0%	21.5%	13.2%	19.1%	15.4%
Passaic	24.0%	39.0%	17.0%	7.2%	0.6%
Union	24.0%	9.9%	25.6%	2.7%	26.0%

APPENDIX I
Participation Rates for Minorities and Apprentices by Individual Construction Trade*
(Includes 60 School Projects)*
(Continued)

Sprinkler Fitter

	Minority County Goal	PLA Minority	Non-PLA Minority	PLA Apprentice	Non-PLA Apprentice
Bergen	10.0%	1.3%	0.0%	35.2%	33.7%
Camden	16.0%	0.0%	0.0%	41.5%	23.1%
Essex	42.0%	4.6%	0.0%	28.9%	0.0%
Hudson	38.0%	25.3%	0.0%	12.5%	0.0%
Mercer	19.0%	13.8%	4.6%	13.1%	22.8%
Middlesex	16.0%	0.0%	2.9%	42.2%	5.1%
Monmouth	11.0%	8.8%	21.7%	47.3%	0.0%
Ocean	6.0%	0.0%	0.0%	0.0%	42.7%
Passaic	24.0%	12.5%	7.8%	22.3%	23.5%
Union	24.0%	20.5%	0.0%	7.1%	0.0%

Steam Fitter

	Minority County Goal	PLA Minority	Non-PLA Minority	PLA Apprentice	Non-PLA Apprentice
Bergen	10.0%	17.1%	0.0%	25.6%	0.0%
Hudson	38.0%	9.5%	0.0%	16.9%	0.0%
Mercer	19.0%	0.0%	0.0%	0.0%	21.3%
Passaic	24.0%	3.0%	0.0%	16.6%	13.0%
Union	24.0%	0.0%	0.0%	0.0%	0.0%

Surveyor

	Minority County Goal	PLA Minority	Non-PLA Minority	PLA Apprentice	Non-PLA Apprentice
Camden	16.0%	0.0%	0.0%	0.0%	0.0%
Essex	42.0%	0.0%	0.0%	0.0%	0.0%
Hudson	38.0%	0.0%	0.0%	0.0%	0.0%
Middlesex	16.0%	0.0%	14.0%	0.0%	0.0%
Monmouth	11.0%	0.0%	0.0%	0.0%	0.0%
Ocean	6.0%	0.0%	6.3%	0.0%	0.0%
Passaic	24.0%	0.0%	0.0%	0.0%	0.0%
Union	24.0%	0.0%	0.0%	0.0%	0.0%

APPENDIX I
Participation Rates for Minorities and Apprentices by Individual Construction Trade*
(Includes 60 School Projects)*
(Continued)

Tiler

	Minority County Goal	PLA Minority	Non-PLA Minority	PLA Apprentice	Non-PLA Apprentice
Bergen	10.0%	6.6%	17.4%	0.0%	3.3%
Camden	16.0%	0.0%	0.7%	7.4%	26.0%
Essex	42.0%	11.8%	34.4%	0.0%	9.1%
Hudson	38.0%	16.4%	0.0%	19.3%	12.3%
Mercer	19.0%	0.0%	5.8%	17.3%	2.2%
Middlesex	16.0%	0.0%	0.1%	55.5%	13.2%
Monmouth	11.0%	8.9%	3.7%	16.0%	6.9%
Ocean	6.0%	0.0%	14.4%	49.4%	12.2%
Passaic	24.0%	8.8%	9.1%	7.0%	1.7%
Union	24.0%	4.4%	0.0%	17.3%	0.0%

Truck Driver

	Minority County Goal	PLA Minority	Non-PLA Minority	PLA Apprentice	Non-PLA Apprentice
Hudson	38.0%	0.0%	0.0%	0.0%	0.0%
Mercer	19.0%	0.0%	0.0%	0.0%	0.0%
Middlesex	16.0%	0.0%	10.5%	0.0%	0.0%
Monmouth	11.0%	9.1%	5.6%	0.0%	0.0%
Ocean	6.0%	16.7%	10.2%	0.0%	0.0%
Passaic	24.0%	0.0%	11.5%	0.0%	0.0%
Union	24.0%	0.0%	0.0%	0.0%	0.0%

*Includes 16 PLA and 44 Non-PLA school Projects in the 10 counties with at least 1 PLA and 1 non-PLA Project.

APPENDIX II

INDIVIDUAL PROJECT INFORMATION FOR ALL 121 PROJECTS

(APPENDIX II WHICH INCLUDES ALL 121 PROJECTS IS AVAILABLE UPON REQUEST. PLEASE CALL 609-292-2395 OR E-MAIL FRANZ.GROB@DOL.STATE.NJ.US)