

**MEASURING BUSINESS OPPORTUNITY:
A DISPARITY STUDY OF NCDOT'S STATE AND FEDERAL PROGRAMS**

EXECUTIVE SUMMARY AND RECOMMENDATIONS

AUGUST 1, 2009

STUDY ORGANIZATION

EXECUTIVE SUMMARY & RECOMMENDATIONS

VOL 1: ECONOMIC AND STATISTICAL ANALYSIS

VOL 2: SUMMARY OF QUALITATIVE EVIDENCE

VOL 3: LEGAL ANALYSIS

VOL 4: DETAILED SUMMARY OF ANECDOTAL INTERVIEWS

ASSISTED BY SUBCONTRACTORS:

HOLLAND & KNIGHT, LLP

KEN WEEDEN & ASSOCIATES

DR. JAMES JOHNSON

PROFESSIONAL TECHNOLOGY INTEGRATION, INC

EUQUANT

FINAL REPORT

TABLE OF CONTENTS

LIST OF FIGURES AND MAPS

SECTION I: EXECUTIVE SUMMARY

SECTION II: RECCOMENDATIONS

**SECTION III: LEGAL, REGULATORY, AND STATUTORY CONSIDERATIONS FOR
NCDOT'S DISPARITY STUDY**

**SECTION IV: GENERAL STATUTES AND PROVISION REGARDING NCDOT'S DBE, MBE
AND WBE PROGRAMS AND H.B. ROWE V TIPPETT, NCDOT, et.al**

**SECTION V: RACE-GENDER NUETRAL PROGRAMS, GOAL SETTING AND GOOD FAITH
EFFORTS OF NCDOT**

**SECTION VI: THE RELEVANT MARKET AREA AND THE AVAILABILITY OF QUALIFIED,
WILLING AND ABLE FIRMS**

**SECTION VII: THE AVAILABILITY OF DBE'S, MWBE'S AND SBE'S BY PRIME AND
SUBCONTRACTING STATES AND BY WORK CODES**

**SECTION VIII: AVALIBILITY OF PRIME CONTRACTORS AND SUBCONTRACTORS BY
WORK CODES AND DIVISION**

**SECTION IX: SUBCONTRACTOR UTILIZATION ANALYSIS: DBEs/MWBEs UTILIZATION
ON STATE AND FEDERAL SUBCONTRACTS, RACE-GENDER NEUTRAL
CONTRACTING AND THE SIZE DISTRIBUTIONG OF AWARDS**

**SECTION X: UTILIZATION ANALYSIS: PRIME CONTRACTING CENTRALLY LET, POCs
AND SBE AWARDS**

**SECTION XIa: REGRESSION ANALYSES, MWBE CAPACITY AND SIZE OF DISTRIBUTION
AWARDS**

SECTION XIb: DISPARITY INDEX ANALYSIS

LIST OF FIGURES AND MAPS

Table 1: Percentages of firms by DBE, MBE, WBE status and race and ethnicity (FY2004 - 2008)	page 21
Table 2: Dollar value of awards by type of program and DBE, MBE and WBE status	page 22
Table 3: Percentage of awards by type of program and DBE, MBE and WBE status	page 23
Table 4: Percentage of awards by type of program and DBE, MBE and WBE status	page 23
Table 5: Dollar value of awards by type of program and race and ethnic status	page 24
Figure 5.1: Geographic Location of Prequalified Primes, Subcontractors and Certified SBEs	page 76
Figure 5.2: Percent Distribution of Available Firms by DBE Status and Market Area	page 77
Map 1: Spatial Location of Prequalified Subcontractors to NCDOT by DBE Status	page 77
Map 2: Spatial Location of Certified SBEs by DBE Status	page 78
Figure 6: Prime and Subcontractor Availability Across All Work Codes	page 82
Figure 7: Prime and Contractor Availability Across All Work Codes	page 83
Figure 8: Subcontractor Availability	page 83
Figure 9: SBE Availability Across All Work Codes	page 84
Figure 10: Prime and Subcontractor Availability Across all Work Codes by Race and Ethnicity	page 85
Figure 11: Subcontractor Availability Across all Work Codes by Race and Ethnicity	page 85
Figure 12: Certified SBEs Availability by Race and Ethnic Status Across all Work Codes	page 86
Figure 13 2008 Availability of all Prequalified Prime and Subcontractors to NCDOT by Work Code, DBE and MWBE Status	page 89
Figure 14: 2008 Availability of all Prequalified Prime Contractors to NCDOT by Work Code, DBE and MWBE Status	page 90
Figure 15: 2008 Availability of all Prequalified Subcontractors to NCDOT by Work Code, DBE and MWBE Status	page 91
Figure 16: 2008 Availability of Certified Small Business Enterprises (SBEs) to NCDOT by the MWBE Status of SBEs	page 92
Figure 17: 2008 Availability of Prime and Subcontractors to NCDOT by Work Code, Race and Ethnic Status	page 93
Figure 18: 2008 Availability of Subcontractors to NCDOT by Work Code, Race and Ethnic Status	page 94
Figure 19: 2008 Availability of SBEs to NCDOT by Work Code, Race and Ethnic Status	page 95
Figure 20: DIVISION 1; 2008 Availability of Prime and Subs to NCDOT by Work Code, Division, DBE and M/WBE Status	page 96
Figure 21: DIVISION 2; 2008 Availability of Prime and Subs to NCDOT by Work Code, Division, DBE and MWBE Status	page 97
Figure 22: DIVISION 3; 2008 Availability of Prime and Subs to NCDOT by Work Code, Division, DBE and MWBE Status	page 98
Figure 23: DIVISION 4; 2008 Availability of Prime and Subs to NCDOT by Work Code, Division, DBE and MWBE Status	page 99
Figure 24: DIVISION 5; 2008 Availability of Prime and Subs to NCDOT by Work Code, Division, DBE and MWBE Status	page 100
Figure 25: DIVISION 6; 2008 Availability of Prime and Subs to NCDOT by Work Code, Division, DBE and MWBE Status	page 101
Figure 26: DIVISION 7; 2008 Availability of Prime and Subs to NCDOT by Work Code, Division, DBE and MWBE Status	page 102
Figure 27: DIVISION 8; 2008 Availability of Prime and Subs to NCDOT by Work Code, Division, DBE and MWBE Status	page 103
Figure 28: DIVISION 9; 2008 Availability of Prime and Subs to NCDOT by Work Code, Division, DBE and MWBE Status	page 104
Figure 29: DIVISION 10; 2008 Availability of Prime and Subs to NCDOT by Work Code, Division, DBE and MWBE Status	page 105
Figure 30: DIVISION 11; 2008 Availability of Prime and Subs to NCDOT by Work Code, Division, DBE and MWBE Status	page 106
Figure 31: DIVISION 12; 2008 Availability of Prime and Subs to NCDOT by Work Code, Division, DBE and MWBE Status	page 107
Figure 32: DIVISION 13; 2008 Availability of Prime and Subs to NCDOT by Work Code, Division, DBE and MWBE Status	page 108
Figure 33: DIVISION 14; 2008 Availability of Prime and Subs to NCDOT by Work Code, Division, DBE and MWBE Status	page 109
Figure 34: 2008 Availability of Subcontractors to NCDOT by Detailed Work Code, DBE and MWBE Status	page 110
Figure 35: 2008 Availability of Prime and Subs to NCDOT by Detailed Work Code, DBE and MWBE Status	page 114
Figure 36: DIVISION 1: 08 Availability of Primes and Subs to NCDOT by Work Code, Division, DBE and MWBE Status	page 118

Figure 37: DIVISION 1; 2008 Availability of SBEs to NCDOT by Work Code, Division MWBE Status	page 121
Figure 38: DIVISION 2; 2008 Availability of SBEs to NCDOT by Work Code, Division and MWBE Status	page 122
Figure 39: DIVISION 3; 2008 Availability of SBEs to NCDOT by Work Code, Division and MWBE Status	page 123
Figure 40: DIVISION 4; 2008 Availability of SBEs to NCDOT by Work Code, Division and MWBE Status	page 124
Figure 41: DIVISION 5; 2008 Availability of SBEs to NCDOT by Work Code, Division and MWBE Status	page 125
Figure 42: DIVISION 6; 2008 Availability of SBEs to NCDOT by Work Code, Division and MWBE Status	page 126
Figure 43: DIVISION 7; 2008 Availability of SBEs to NCDOT by Work Code, Division and MWBE Status	page 127
Figure 44: DIVISION 8; 2008 Availability of SBEs to NCDOT by Work Code, Division and MWBE Status	page 128
Figure 45: DIVISION 9; 2008 Availability of SBEs to NCDOT by Work Code, Division and MWBE Status	page 129
Figure 46: DIVISION 10; 2008 Availability of SBEs to NCDOT by Work Code, Division and MWBE Status	page 130
Figure 47: DIVISION 11; 2008 Availability of SBEs to NCDOT by Work Code, Division and MWBE Status	page 131
Figure 48: DIVISION 12; 2008 Availability of SBEs to NCDOT by Work Code, Division and MWBE Status	page 132
Figure 49: DIVISION 13; 2008 Availability of SBEs to NCDOT by Work Code, Division and MWBE Status	page 133
Figure 50: DIVISION 14; 2008 Availability of SBEs to NCDOT by Work Code, Division and MWBE Status	page 134
Figure 50.1: Dollar value of awards by type of program and DBE, MBE and WBE status	page 138
Figure 50.2: Percentage of awards by type of program and DBE, MBE and WBE status	page 138
Figure 51: Dollar value of awards by type of program and race and ethnic status	page 139
Figure 52: Percentage of awards by type of program and race and ethnic status	page 140
Figure 53: State and Federal Aid Centrally Let: Total Sub Utilization by DBE/MWBE Status and Work Codes: 2004 - 2008	page 140
Figure 54: State Aid Centrally Let Projects: Total Sub Utilization by MBE/WBE Status and Work Codes: 2004 - 2008	page 141
Figure 55: Federal Aid Centrally Let Projects: Total Sub Utilization by DBE Status and Work Codes: 2004 - 2008	page 141
Figure 56: State and Federal Centrally Let : Total Sub Utilization by Race and Ethnic Status and Work Codes: 04 - 08	page 142
Figure 57: State Aid Centrally Let Projects: Total Sub Utilization by Race and Ethnic Status and Work Codes: 04 - 08	page 143
Figure 58: State Aid Centrally Let: Total Sub Utilization by Race and Ethnic Status and Work Codes: 04 - 08 Cont	page 144
Figure 59: Federal Aid Centrally Let Projects: Total Sub Utilization by Race and Ethnic Status and Work Codes: 04 - 08	page 145
Figure 60: Federal Aid Centrally Let: Total Sub Utilization by Race and Ethnic Status and Work Codes: 04 - 08 Cont	page 146
Figure 61: State Aid Centrally Let: Total Sub Utilization by MBE and WBE Status and Work Codes: 04 - 08	page 147
Figure 62: Federal Aid Centrally Let : Total Sub Utilization by Minority and Women Status and Work Codes: 2004 - 2008	page 148
Figure 63: St. and Fed. Centrally Let: All Race and Gndr Neutral Sub Commits by D/M/WBE Status and Wk Codes: 04 - 08	page 149
Figure 64: State Aid Centrally Let: All Race and Gndr Neutral Sub Commits by MWBE Status and Work Codes: 2004 - 2008	page 150
Figure 65: Fed. Aid Centrally Let: Race & Gndr Neutral Sub Commits to DBEs by Min. & Gndr Status & Wrk Codes: 04 - 08	page 151
Figure 66: Relation Between Amount Committed to Subcontractors and Amount Agreed Upon on Subcontract, 2008	page 152
Figure 67: Relation (Amount Committed to Subs at Bid Opening and Amt Paid for Fully Closed Out Projects) in 2008	page 152
Figure 68: Centrally Let Prime Contract Awards by DBE Status and Recipient Work Code, FY2004 - 2008	page 157
Figure 69: State Aid Centrally Let Prime Contract Awards by MBE Status and Recipient Work Code, FY2004 - 2008	page 157
Figure 70: State Aid Centrally Let Prome Contract Awards by WBE Status and Recipient Work Code, FY2004 - 2008	page 157
Figure 71: Purchase Order Awards FY 2004-2008	page 158
Figure 72: SBE Awards by MWBE Status and Division/Cost Center, FY2004 - 2008	page 159
Figure 73: SBE Awards by MBE Status and Division/Cost Center, FY2004 - 2008	page 160
Figure 74: SBE Awards by WBE Status and Division/Cost Center, FY2004 - 2008	page 161
Figure 75: Regression Model 1	page 166
Figure 76: Regression Model 2 Regression Results on Non-MWBEs Only	page 167
Figure 77: Regression Model 3 Regression Results for DBEs Only	page 168

Figure 78: Regression Model 4 Estimating Capacity _____ page 169

Figure 79 Relative Capacities of MBEs, WBEs and Non-MWBEs _____ page 170

Figure 80: State and Federal Centrally Let Subcontracts _____ page 171

Figure 81: Average Size of Subcontracts by Size Distribution and Work Codes _____ page 172

Figure 82: Count of State and Federal Centrally Let Subcontracts by Size Distribution and Work Code _____ page 173

Figure 83: Count of State and Federal Centrally Let Subcontracts by Size Distribution and Work Code for Non-MWBEs _____ page 174

Figure 84: Count of State and Federal Centrally Let Subcontracts by Size Distribution and Work Code for MBEs _____ page 175

Figure 85: Count of State and Federal Centrally Let Subcontracts by Size Distribution and Work Code for WBEs _____ page 176

Figure 86: Disparity Indexes for All NCDOT Contracting _____ page 182

Figure 87: Disparity Index Statistics for Centrally Let Prime Contract Awards by DBE, MWBE and Race _____ page 183

Figure 88: Disparity Index Statistics for POC Awards _____ page 184

Figure 89: Disparity Index Statistics for SBE Awards _____ page 185

Figure 90: Disparity Analysis for Centrally Let Federal Aid Subcontracts _____ page 186

Figure 91: Disparity Analysis for State Funded Centrally Let Subcontracts _____ page 187

Figure 92 Disparity Analysis for State Aid Centrally Let Subcontract by MBE and WBE Status _____ page 188

PREFACE

This Disparity Study was mandated by North Carolina State Statute N.C.G.S.A. § 136-28.4(b). The objective is to examine relevant evidence related to the effects of race-based or gender-based discrimination upon the utilization of disadvantaged Minority-owned Business Enterprises (MBEs) and disadvantaged Women-owned Business Enterprises (WBEs) by the North Carolina Department of Transportation (NCDOT). The Department is a recipient of federal transportation funds. As such, it is also required by Federal Regulation 49 C.F.R. § 26 to implement a Disadvantaged Business Enterprise (DBE) Program. Accordingly, this Disparity Study examines the NCDOT's State MBE and WBE Program and its Federal DBE Program. The examination covers state fiscal years 2004 - 2008. The study found that the NCDOT has implemented the State and Federal Programs in accordance with the governing statutes and regulations. Furthermore, NCDOT has sought to narrowly tailor its remedies for discrimination by implementing an impressive number of race- and gender-neutral programs. These have included the establishment of a Business Opportunity and Workforce Development (BOWD) Office, which administers 13 activities designed to improve the outreach, marketing, training, and financial assistance provided to MBEs, WBEs, DBEs and other firms. BOWD also operates a very effective Executive Management Program and it provides Engineering Technical Assistance and a Business Financing Program. The NCDOT partnered with 10 organizations to provide supportive services to DBEs, MBEs and WBE and other firms. The Department has also established race- and gender-neutral procurement programs; including the Small Professional Service Firm Program (SPSF) and the Small Business Enterprise Program (SBE).

Despite the significant number of race- and gender-neutral activities, the study found that most utilization of MBEs, WBEs and DBEs is achieved through aspirational goals that are set on State and Federal projects. Total MBE and WBE utilization on state projects was 9.4% while race- and gender-neutral utilization was 1.9% and 1.7% respectively for MBEs and WBEs. Total DBE utilization on federal projects was 8.0% and race- and gender-neutral utilization was 1.7%. One inference of the findings is that absent the State and Federal Programs, total utilization of MBEs, WBEs and DBEs might be significantly lower. The Disparity Study also determined that the capacity of work that MBEs, WBEs and DBEs were capable of performing was 15.1%.

The consulting team wishes to thank hundreds of business owners who provided input into the study through vendor surveys, anecdotal interviews, public hearings and focus groups. We also thank the Secretary of Transportation and the senior leadership of the Department for the notable steps they took to support the study. The members

of the Disparity Study Advisory Committee provided very insightful feedback to the research team and we greatly appreciated their support. Most importantly, we thank the State Contractual Services Engineer and her staff for responding promptly and efficiently to every request for data and information made by the consulting team. Without that support, this study would not have been possible.

I

EXECUTIVE SUMMARY

The North Carolina General Statutes and Administrative Provisions require that the North Carolina Department of Transportation (NCDOT) conduct a Disparity Study of the availability and utilization of disadvantaged Minority-owned Business Enterprises (MBEs) and disadvantaged Women-owned Business Enterprises (WBEs) every five years. State statute N.C.G.S.A. § 136-28.4(b) stipulates that the Disparity Study examine relevant evidence related to the effects of race-based or gender-based discrimination upon the utilization of such business enterprises in contracts for planning, design, preconstruction, construction, alteration, or maintenance of State highways, roads, streets, or bridges, and in the procurement of materials for these projects. Accordingly, this Disparity Study examines the NCDOT's contracting and procurement activity that occurred during State Fiscal Years 2004 - 2008. For simplicity, the report refers to MBEs and WBEs collectively as MWBEs, and it refers to the NCDOT program that implements the State statutes, as the "State Program".

Federal Regulation 49 C.F.R. § 26 requires state and local government recipients of federal transportation funds to implement a Disadvantaged Business Enterprise (DBE) Program. Recipients must set annual aspirational DBE goals for the program in accordance with guidelines set forth in the federal regulation and conditions in their relevant marketplace. Revisions to the Federal DBE Program outline certain steps a state or local government recipient can follow in establishing the goal. While the goal is reviewed and approved by the USDOT, but the implementation of the Federal DBE Program is substantially in the hands of the state or local government recipient. This report refers frequently to the Federal DBE Program as simply the DBE Program. The reader should be mindful that all references to DBEs relate to the Federal Program and references to MWBEs, MBEs or WBEs relate to the State Program.

This disparity study seeks to examine the NCDOT's State and Federal Programs in relationship to the statutes and regulations governing them and with respect to certain case law and legal decisions pertaining to the implementation of such programs.

I. HOW THE STUDY WAS CONDUCTED

The disparity study involved several discrete tasks:

1. A legal analysis and review. This analysis was conducted by the law firm of **Holland and Knight LLP** and was supervised by Attorney Keith Weiner. The legal review examined relevant US Supreme Court cases; the legal framework as it applies to state and local government MWBE and DBE programs; recent Fourth Circuit decisions involving state and local governments, including H.B. Rowe Company v. Tippett, North Carolina Department of Transportation; recent decisions in other circuit courts of appeals; recent district court decision; recent state court decisions; and recent decisions involving the Federal DBE Program.
2. EuQuant conducted the economic and statistical analysis of contracting activity that was commissioned by the NDCOT between state fiscal year 2004 and 2008. The quantitative analysis examined the following major activities of the State and Federal Programs: the NCDOT's relevant market; race- and gender-neutral contracting activity; the availability and capacity of contractors by work code, the geographic location of available firms, the DBE/MWBE status of firms, their owners' race and ethnicity; the utilization of contractors on State and Federal projects, and whether or not there were statistically significant disparities in the utilization of DBE and MWBE contractors. The quantitative analysis examined prime contracts and sub-contracts that were awarded out of the Raleigh office (Centrally Let Contracts); Purchase Order Contracts for awards of less than \$1,200,000 (POCs), which were awarded by the 14 Division Offices and specific central units; and Small Business Enterprise (SBE) awards made in accordance with program guidelines for amounts of \$500,000 and below. The empirical examination of contracts was supplemented by a survey, to which responses were received from 388 randomly selected contractors.
3. Public hearings were organized in seven locations throughout the State of North Carolina by **Ken Weeden & Associates**. The purpose was to gather the perceptions and anecdotes of contractors about their experiences in pursuing and performing work for the NCDOT. Along with public announcements placed in local media, post card invitations were mailed to 4,122 registered vendors.

4. Personal interviews were conducted by attorneys at the law firm of **Holland and Knight, LLP** and 50 business owners were randomly selected from the population of contractors who pursue work with the NCDOT. The contractors were randomly selected from among the 14 geographic Divisions of NCDOT. The purpose of the interviews was to explore, in greater detail, the perceptions and anecdotes of business owners who are qualified, willing and able to work for the NCDOT.
5. Seventeen (17) focus groups of NCDOT registered contractors were held in six locations across the State. Again, the purpose was to gather the perceptions and anecdotes of contractors regarding their experience in pursuing and/or performing work for the NCDOT. The focus groups were organized by **Drs James Johnson and Alan Parnell**.
6. Information technology assistance and assistance in database organization was provided by **Professional Technology Integration**.
7. Preliminary findings of the disparity study were carefully reviewed for accuracy and validity. This final report reflects the outcome of all of the steps described above.

II. SUMMARY OF FINDINGS

A. District Court's Order finds NCDOT's Implementation of the State Program Constitutional and Narrowly Tailored

After a bench trial in the case of H.B. Rowe Company v. Tippett, North Carolina Department of Transportation, the District Court Order of December 9, 2008 found as a fact and concluded as a matter of law that the Plaintiff (H.B. Rowe and Company) failed to satisfy its burden of proof that the NCDOT's MWBE Program, as enacted by the state legislature to affect the awarding of contracts and subcontracts in state highway construction, violated the United States Constitution. The District Court held that the NCDOT established a compelling governmental interest to have the MWBE Program. The Court found that the North Carolina Legislature relied on a strong basis of evidence in concluding that prior race discrimination against MBEs in North Carolina's road construction industry existed, so as to require remedial action. The 2004 Disparity Study demonstrated the existence of previous discrimination in specific industries and localities, and the court found that the disparity ratios derived in the study highlighted the underutilization of MBEs by prime contractors bidding on state funded highway projects. The Court applied a different standard of review to WBEs and looked

specifically at whether or not the program served an important governmental interest and was substantially related to the achievement of those objectives. The Court held that the NCDOT established, based upon a clear and strong inference raised by the Study, that women contractors suffer from past gender discrimination in the road construction industry.

Furthermore, the District Court held that the legislative statute implementing the State Program is narrowly tailored to remedy private discrimination against minorities and women in road construction contracts. The Court gave special attention to several narrowly tailoring provisions of the statute: the fact that the program has a planned duration (sunset provision) and is reviewed every five years; and the fact that the program is restricted to racial or ethnic classifications identified in the study as having been adversely affected and that the goals of the program are flexible and implemented on a project by project basis according to the availability and capability of MWBE's in specific geographic areas.

B. Since 2004, the NCDOT has Continued to Implement Additional Steps to Narrowly Tailor its State and Federal Programs

Federal court decisions regarding the implementation of DBE/MWBE programs require recipients of Federal financial assistance to seriously consider implementing race-, ethnicity-, and gender-neutral remedies prior to the implementation of race-, ethnicity-, and gender-conscious remedies. To this end, the NCDOT has sought to achieve its overall goal by implementing a range of race and gender-neutral programs and activities. These efforts are among the most extensive that this consultant has encountered at the state and local agency level. The most impressive in this regard is the Small Business Enterprise (SBE) Program.

The SBE Program provides contracting opportunities for firms that meet small business eligibility criteria, as defined by G.S. 136-28.10. The Board of Transportation may award Highway Fund or Highway Trust Fund projects of five hundred thousand dollars (\$500,000) or less to the lowest responsible bidder after at least three informal written bids have been received from certified SBEs. The Disparity Study found that certified SBEs that also hold MWBE certification status account for 24.2% of all SBEs (15.5% of which hold MBE certification and 11.5% hold WBE certification). Although the SBE Program is race- and gender-neutral, the study found that 20.3% of all SBE awards were made to firms having MWBE certification (7.5% to MBEs and 15.8% to WBE's). When SBE awards are broken down by race and ethnicity, the results are as follows:

11.2% went to Black Americans, .7% went to Hispanic Americans, and 4.7% went to Native Americans. Because of the success of this program, in May of 2009 the Secretariat of Transportation issued guidelines for the program to be used more broadly throughout the entire NCDOT.

C. Some of the NCDOT's other race- and gender-neutral programs are as follows:

1. Establishing a Business Opportunity and Workforce Development (BOWD) Office that administers 13 outreach, marketing, training and financial assistance programs, including a very effective Executive Management Program, an Engineering Technical Assistance Program, a Business Financing program in partnership with a Raleigh area nonprofit corporation to create loans for small businesses in partnership with the USDA Intermediary Relending Program, many networking conferences and several training courses for DBEs and non-DBEs to improve operational skills
2. Establishing NCDOT-BOWD partnerships with 10 organizations to provide supportive services to DBEs and non-DBEs in areas such as training, outreach and other race and gender neutral activities
3. Hiring 10 business consultants to assist in delivery of supportive services to DBEs and non-DBEs
4. Establishing a Small Professional Service Firm (SPSF) Program that is race- and gender-neutral
5. Designing six "Levels of Contracting" that are associated with the risk inherent in a contract award (i.e. Level I – Level VI). The varying levels of risk coincide with the development of certain race- and gender- neutral programs (e.g. the SBE program is Level IV) and subcontracting opportunities that do not require bonding (Level II and Level III).
6. Creating an efficient electronic database system for generating the on-line NCDOT Business Directory. The Directory contains the names and addresses of all firms (including DBEs, MWBEs and non-minority-owned firms) along with their certification status, prequalification status, work code, and Districts of the State in which their services are available. The database system also allows more efficient tracking and monitoring of contracting activity.
7. Continuous race-and gender-neutral programmatic innovations, such as the SPSF Program, extension of the SBE program throughout the Department and improvements in database tracking and monitoring to better capture

subcontracting attainment and more accurate data related to Purchase Order Contracts (POCs).

8. In 2004, the NCDOT received final approval from the FHWA to be the central point of certification. Since then, it has implemented the Unified Certification Program (UCP) statewide in accordance with the federal regulation. The purpose of the UCP is to provide “one-stop shopping” to applicants for certification, so that an applicant is required to apply only once (to NCDOT) for a DBE certification that will be honored by all federal recipients in the state.

D. MWBE/DBE Goals are Narrowly Tailored, Flexible and Waived when Warranted

The NCDOT obligates bidders, subcontractors, consultants, and sub consultants not to discriminate on the basis of race, religion, color, national origin, age, disability or sex in the performance of transportation contracts. Consistent with federal and state regulations, the NCDOT's Goal Setting Committee meets to discuss the subcontractor opportunities for DBEs and MWBEs and sets goals on centrally let projects. Where sufficient DBE or MBEWBE availability and capacity exists, the bidder is required to meet the contract goal by creating subcontracting opportunities. Where sufficient availability and capacity does not exist, the advertised goal may be set at zero. Nevertheless, even when DBE or MWBE goals are not set on projects, the NCDOT still encourages firms to utilize DBE and MWBE contractors and suppliers. If the advertised goal is zero, the contractor is expected to continue to recruit DBEs and report the use of DBEs doing the execution of the project. A good-faith effort is not required on contracts that have zero goals. Firms are also encouraged to give every opportunity to DBEs and MWBEs to participate in supplemental agreements

The NCDOT requires a Letter of Intent for each DBE listed in fulfillment of the goal. The bidder and DBE/MWBE must sign the Letter. The bidder is also required to submit Form RS-1-D attesting to the agreed-upon unit price and contract terms between the bidder and DBE/MBE. If the bidder fails to submit the Data for each committed DBE/MWBE, the participation will not count towards meeting the goal. The Goal Setting Committee also assists in setting goals on projects let by the Aviation, Ferry, and Rail Divisions. Projects that are let in the field Divisions have goals that are set by those Divisions. Recently, all field Divisions were assigned a Contract Officer who has the responsibility of setting goals in coordination with the Goal Setting Committee. That person is also responsible for leading the Division's good-faith committee.

If the apparent lowest bidder does not meet or exceed the DBE contract goal, the bidder must submit documentation of its good-faith efforts to reach the advertised goal. Documentary evidence of MWBE/ DBE quotations is expected to be part of the good-faith submittal, along with telephone logs and notes of verbal quotations or other appropriate documentation. After considering the documentation and discussing each case at length, Goal Compliance Committee makes a determination of the adequacy of a bidder's good-faith effort. If the effort is adequate, the goal requirement is waived or reduced appropriately.

E. MWBE/DBE attainment has almost reached the annual aspirational goals in the State and Federal Programs, but is still significantly lower than capacity.

In fiscal year 2008, the MWBE goal for the State Program was 11.0%; 3.5% of this amount was planned to be achieved in a race-and gender-neutral manner. The goal was divided between MBEs (5.8% with 1.9% race- and gender-neutral) and WBEs (5.2% with 1.7% race-and gender-neutral). Contracts awarded to MWBEs in the State Program over the study period averaged 9.4%, with 4.7% awarded to MBEs and 4.7% awarded to WBEs. Race-and gender-neutral attainment for MBEs in the State Program amounted to 2.4% of all state contracts. Similarly, WBE race neutral awards totaled 1.8% of all State aid contracts. This means that the NCDOT's race-and gender-neutral awards met and exceeded the goal. Overall, contracting fell short of the goal by 1.6 percentage points.

In fiscal year 2008, the DBE goal for the Federal Program averaged 10.1%; 3.5% of this amount was planned to be achieved in a race-and gender-neutral manner. Contracts awarded to DBEs in the Federal Program over the study period averaged 8.0% (1.7% was awarded to DBEs who also held MBE certification, while 6.2% was awarded to DBEs who also held WBEs certification). Race-and gender-neutral attainment for DBEs in the Federal Program amounted to 2.3% of all federal aid contracts. This means that the NCDOT's race-and gender-neutral awards fell short of the goal by 1.2 percentage points. Overall contracting fell short of the goal by 2.1 percentage points.

- F. The utilization of minority and women owned vendors in the SBE program exceeds that achieved in all other areas of procurement and is close to that achieved in centrally let subcontracting. This program represents a best in class race-neutral program that can serve as a model for other state and local programs.**

Awards in the SBE program are race-and gender-neutral. Between FY 2004 and FY 2008 this program awarded \$144,645,270 in contracts. Total MWBE utilization was 20.3%, divided as 7.5% MBE utilization and 15.8% of DBE utilization. Attainment in this program compared favorably to attainment in the Federal DBE subcontracting program where total awards represented 24.4% of all subcontracting awards, divided as 5.2% to DBEs that held MBE certification and 19.2% to DBEs that held WBE certification. Total awards to subcontractors in the State program amounted to 33.2% of all subcontract awards, divided as 13.6% to MBEs and 18.3% to WBE.

- G. Regression analysis determined that the capacity of MBEs and WBEs would be significantly greater if they were treated the same way as similarly situated Non-MWBEs are treated. It also determined that total revenue (private sector and public sector) of MBEs and WBEs was significantly lower than that of non-MWBEs after controlling for relevant firm and performance related attributes.**

We used regression models to determine whether or not any of the identified disparities in contracting could be attributed to factors other than MWBE status. The models controlled for the following attributes of firms: the work codes in which he or she operates, the geographic divisions of the state in which he or she is available to do work, the number of years the contractor has been operating, whether the contractor is a prime or subcontractor, the revenue of a firm (after adjusting for any effects of disparate treatment or discrimination), and whether the contractor is a WBE as opposed to a non-DBE or an MBE as opposed to a non-DBE. We also used regression analysis to determine the capacity of NCDOT contracting that MWBEs were capable of performing if they were treated the same as similarly situated non-MWBEs.

Capacity was defined as the dollar volume of work a contractor is capable of performing given the contractor's business related attributes. Specifically, the work codes in which he or she operates, the geographic divisions of the state in which he or she is available to do work, the number of years the contractor has been operating,

whether the contractor is a prime or subcontractor, the revenue of a firm (after adjusting for any effects of disparate treatment or discrimination), and whether the contractor is a WBE as opposed to a non-DBE or an MBE as opposed to a non-DBE.

The regression analysis determined that the overall capacity of MWBEs would have been 15.1% had the revenue they received for their productive characteristics been the same as that of non-MWBEs. Total capacity was further decomposed into WBE and MBE capacity as 8.0 percent and 7.1 percent, respectively. Several different regression models were estimated to derive this capacity value. The first model examined whether, after controlling for relevant performance related factors, WBEs and MBEs (who were prequalified contractors and who received awards from NCDOT) experienced lower total revenue in the private and public sectors. The results revealed that the revenue of MBEs was lower than that of non-MWBEs by 99% percent and the difference was statistically significant. The revenue of WBEs was lower than that of non-MWBEs by 50% and the difference was statistically. The results suggested they experienced disparate treatment in the general market place.

Using decomposition analysis, we found that non-DBEs experienced a 4.0 percent increase in revenue for every additional year of operations, while DBEs experience only a 3.0 percent increase in revenue. For every one additional geographic division that a non-DBE works in, that firms revenue increases by 4.3 percent, while the revenue of DBEs increases by only 1.8 percent. When non-DBEs work in hauling as opposed to engineering and other professional services, their revenue on average is 20.7 percent lower, while for DBEs the revenue is on average 50.8 percent lower. In bridges and structures, the revenue of non-DBEs increases by 111 percent over the revenue of firms working in engineering and other related professions. In comparison, the revenue of DBEs in bridges and structures decreases by 27.8 percent compared to the revenue they earn in engineering and other related professions. For non-DBEs the revenue in the paving work code is 24.3 percent higher than in engineering and other professional services, while for DBEs it is 9 percent lower. Finally, in non-highway construction work codes, the revenue for non-DBEs is 2.6 percent lower than it is when they work in engineering and professional services; it is 92 percent lower for DBEs. Clearly, DBEs experienced a much lower return on all business related attributes than did non-DBEs, other things equal.

- H. In the State Program firms are certified as MBEs and WBEs, but the Federal Program certifies firms as DBEs only. In the State Program, the percentages of all awards received by MBEs and WBEs were similar. To determine how the percentages of awards varied between minority-owned and women-owned firms in the Federal Program, we cross-referenced firms' Federal DBE status to their State MBE and/or WBE status. The results indicated that the percentage of all awards received by DBE/WBE certified firms greatly exceeded the percentage received by DBE/MBE certified firms.**

Considering all categories of State funded projects, MBEs received 4.7% and WBEs received 4.7% of the total dollar value. For Federal aid projects, DBE/MBE certified firms received 1.7% and DBE/WBE certified firms received 6.2%. Similarly, among State funded projects, MWBEs received 33.2% of all subcontracting dollars (13.6% went to MBEs and 18.3% went to WBEs. Among Federal projects, DBEs received 24.4% of the dollar value of all subcontracts (5.2% went to DBE/MBEs and 19.2% went to DBE/WBEs). In summary, the race and gender distribution of awards was more balanced in the State Program than it was in the Federal Program. Furthermore, the differences in the Federal Program could not be attributed exclusively to capacity differences between the groups because DBE/MBE capacity was 7.1% while DBE/WBEs capacity was 8.0%. It is more likely that the balance achieved in the State Program was because State statues allowed NCDOT to establish separate MBE and WBE project goals. This was not done in the Federal Program. Instead, only DBE project goals were set.

- I. DBEs and MWBE are substantially underutilized on State and Federal Prime contracts.**

DBEs and MWBE's are substantially underutilized on prime contracts, with the exception of SBE contracts. Centrally let prime contracts and POCs DBEs received only 0.2% of centrally let federal contracts and 2.4% of centrally let state contracts; they received only 0.7% of POCs. The utilization rates on prime contracts are substantially below capacity. POCs give rise to particular concerns because the capability required to successfully perform these contracts does not differ much from that required to perform centrally let subcontracts and SBE awards.

J. Under utilization of MBEs and WBEs on Purchase Contracts (POCs) was investigated extensively (both empirically and by speaking with numerous individuals familiar with Division bidding and contracting award procedures). Overall, data indicates that MBEs received 0.7% of the \$490,217,483 in purchase order awards. It is also true that many of the complaints collected and anecdotes were related to Division POCs. The results, while inconclusive, point to some of the following factors listed below as contributing to the disparity.

The low percentage utilization of MBEs and WBEs on POCs raises concern because MWBEs have high percentage utilization on SBE awards and centrally let subcontracts and the median contract size in both cases exceeds the median size of POCs. This means that MWBE have the capacity to perform the average size POCs. For example, centrally let subcontracts awarded to non-DBE/MWBE ranged in value from \$100 to \$38,772,714. For DBE/MWBEs, they ranged from \$48 to \$10,073,140. The median value of a centrally let subcontract was \$59,235 for non-DBE/MWBEs and \$24,720 for DBE/MWBEs. Also, Contracts awarded to SBEs who were non-MWBEs ranged in value from \$44 to \$495,000. SBE firms that were certified as MWBEs received awards which ranged from \$93 to \$452,677. The median value of an SBE award was \$68,325 for non-MWBEs and \$75,650 for MWBEs. In comparison, POCs awarded to non-MWBEs ranged in value from \$1 to \$1,229,877. For MWBEs, they ranged from \$1 to \$222,700. The median value of a POC was \$3,083 for non-MWBEs and it was \$633 for MWBEs. Likewise, 95% of POCs awarded to non-MWBEs were for amounts of less than \$16,000.

The results above indicate that while some categories of POCs may require special capabilities, the majority should fall within the capabilities of prequalified MWBEs to perform. Note that the disparity study team attempted to exclude from the analysis POCs in the data whose value or award center suggested that they were not competitively bid.

The major problem/s causing the underutilization of MWBEs on POCs is unclear. Below, we present explanations that have been provided by administrators at the NCDOT, and we follow that presentation with the perceptions of vendors and contractors that were collected through the anecdotal evidence process. We reiterate that, at present, it is impossible to determine why there is such a significant disparity in the utilization of MWBEs. One factor of great concern relates to data quality.

Some possible explanations of the underutilization are as follows:

1. During the period under investigation, NCDOT awarded \$114.6 million in SBE contracts. Each contract was less than \$500,000. State statutes authorize the SBE program and NCDOT officials indicated that projects that are set aside for SBE letting are taken from the population of POC projects. If this is the case, then the low utilization of MWBEs on SBE contracts is explainable in part by the high utilization of MWBEs on SBE awards because had the projects not been set aside, the MWBE utilization that is currently reflected on SBE awards would have been reflected on POCs.
2. POC data may include awards that are not related to State contracting but instead to procurement of commodities and supplies. If such awards are mixed with contracting awards, the effect might result in lower MWBE utilization percentages because the State MBE/WBE program statutes do not apply.
3. Division contracting offices are required to set goals on POCs and those goals are designed to be reached through subcontracting opportunities. The absence of subcontracting data therefore is potentially a major problem. For example, if subcontracting award data were missing for centrally let prime contracts, it would be impossible to conduct an accurate Disparity Study. Since POCs are a minor part of NCDOT contracting activity, we are able to complete the study but must make note of the fact that data on this program appears to be less than accurate.
4. The Department still lacks accurate tracking of POC data and has no award data on POC subcontract activity. This means that data collection of POCs may be incomplete and/or inaccurate.
5. The centrally let contracting process at the State Office has a long history of operation and is very structured. It typically involves the same individuals and has operated with a great deal of consistency and regularity. The Division POC process is a relatively new program that has experienced a great deal of personnel turnover. In response to this, the NCDOT recently assigned a Contracting Officer to each Division for the purpose of setting goals for POC's, implementing its good faith effort process, and coordinating with the Goal Setting Committee of the Central Office. They should create greater consistency of practices across Divisions.

6. In the past some NCDOT Division procurement officers may not have been as careful as is required in identifying qualified MWBEs from which to solicit bids. Others may have lacked sufficient training and understanding of the goal setting objectives in the State Program.
7. Although the Division Contracting Officer is required to solicit three bids and award the contract to the lowest of the three bids, in practice, over the last four years, TOC bid opportunities have been advertised on the Internet. This means that all firms should be aware of the opportunities to submit bids for POCs.

Some of the perceptions of contractors that were expressed during the anecdotal evidence collection process were as follows:

1. Some contractors believe that Division procurement officers operate a “buddy system” in which they solicit three bids from the same vendors repeatedly.
2. Some Division contractors are not perceived as being open and fair in awarding contracts.
3. Some contract awards do not appear to adhere to bid solicitation criteria.
4. Some interviewees suggested that procurement practices vary significantly from one division to the other and that the award process is not transparent.
5. Some contractors perceive there to be a wide variation across divisions in the distribution of information on new POC bids and that information is distributed within a small network—“good-old boys.”
6. Some contractors perceive that there is a wide variation in the interpretation and application of “good faith efforts” at the Division level.
7. Some contractors perceive that the goal setting process at the division level was not consistent with the way in which goals were set at the central office.
8. It was the perception of some contractors that some Division offices and worksites are hostile environments to minorities and women.
9. Certain DBE/MWBE contractors perceive there is difficulty in obtaining PO payments until jobs are complete.

10. Some contractors believe that prime contractors who received POC awards rely on an established network that excludes minorities and women.

11. Some contractors believe that some WBE certified firms are not legitimately owned or controlled by women and some DBEs are not controlled by minorities.

K. The relevant market refers to the physical area where the delivery of products and services takes place. Within this area, producers supply goods and services that are interchangeable or homogeneous, and the producers themselves are substitutable. The market area is also bounded by the "affected market". This area is defined as the geographic boundary within which 80% or more of the producers, who supply the homogeneous goods and services, are located. The report found that the relevant market for prequalified prime contractors is North Carolina, Virginia, South Carolina, Tennessee, Florida and Georgia. Furthermore, this relevant market differs from the relevant market for prequalified subcontractors, which includes North Carolina, Virginia and South Carolina. Finally, the relevant market for prequalified SBEs is the State of North Carolina because 98.9% of all certified SDBs are headquartered within the State.

The NCDOT's procurement of goods and services can be divided into several distinct product categories. These include centrally let prime contract awards, centrally let subcontract awards, POCs and SBE awards. In order to determine whether or not these categories define one product market or several markets, we applied several criteria. The results indicated that the market for centrally let prime contracts differs from the market for centrally let subcontracts, POCs and SBE awards. Prequalified prime contractors operate in one market while prequalified subcontractors and certified SBEs operate in a different market. Within each of the two markets, the goods and services that are provided are homogeneous, and the producers are interchangeable one for the other. However, these characteristics do not exist between or across the two markets. In particular, the goods and services provided by prequalified prime contractors on centrally let projects are not interchangeable with the goods and services provided by subcontractors on centrally let projects, nor are they interchangeable with goods or services procured through POCs or SBE awards. Similarly, the firms that perform centrally let subcontracts, POCs and SBE projects are usually not capable of performing centrally let prime contracts. This means that prime contractors and subcontractors are not necessarily interchangeable. However, firms that perform

centrally let subcontracts, POCs and SBE contracts are substitutable. Consider the following results:

1. Between fiscal years 2004 and 2008, centrally let prime contract awards made to non-DBE/MWBEs ranged in value from \$296,617 to \$192,040,143. For DBE/MWBEs, they ranged from \$332,060 to \$21,866,100. The median value of a centrally let prime contract was \$1,790,064 for non-DBE/MWBEs, and it was \$825,155 for DBE/MWBEs. The median value is the midpoint or the amount such that one-half of the projects are greater in value and one-half are less in value.
2. In contrast to centrally let prime contracts, we illustrated above how the size distribution of subcontracts, SBE awards and POCs are similar among themselves but different from that of prime contracts.
3. In most cases, firms that are capable of performing centrally let prime contracts are also capable of performing centrally let subcontracts, SBE contracts and POCs. In fact, 80% of NCDOT's prequalified prime contractors are also prequalified as subcontractors, but the reverse is not true. That is, most prequalified subcontractors and contractors who perform POCs and SBE contracts are not capable of performing centrally let prime contracts. For example, only 21% of subcontractors are also prequalified as prime contractors. While many of the services provided by prequalified subcontractors are interchangeable with POC's and SBE awards, those services are not interchangeable with the ones provided by prequalified prime contractors on centrally let projects.
4. The "affected market" for prequalified prime contractors is defined as the area within which approximately 80 percent or more of the firms pursuing NCDOT work have a principal place of business. As such, the market for prime contractors includes North Carolina, Virginia, South Carolina, Tennessee, Florida and Georgia. The percentages of all prequalified NCDOT prime contractors in the states are 47.0%, 9.4%, 6.3%, 5.1%, 4.8%, and 3.6%, respectively, resulting in a combined total of 76.2%. Similarly, the affected market for prequalified subcontractors includes North Carolina (75.7%), Virginia (7.1%) and South Carolina (5.3%). Combined, these areas contain 88.1% of all NCDOT prequalified subcontractors. Since 98.9% of SBEs are located within the State of North Carolina, their affected area is contiguous with the State boundaries.

The Disparity Study determined that within the market area as defined above, DBE/MWBE prequalified prime contractors comprise 7.6% of all prequalified prime contractors; DBE sites and the DBE prequalified subcontractors comprised 27.9% of all prequalified subcontractors; and DBE sites and WBE firms that are also certified as SBEs comprised 24.3% of all certified SBEs.

Disparity study consultants often restrict the relevant market area to state boundaries when they examine state transportation agencies. As a result, the disparity study also examined how the availability percentages above would change if we restricted the market area to be the State of North Carolina. That approach would lead to the following outcomes: DBE/MWBE prequalified prime contractors would comprise 10.3% of all prequalified prime contractors; DBE/MWBE prequalified subcontractors would comprise 29.3% of all prequalified subcontractors; and DBE/MWBE firms that are also certified as SBEs would comprise 24.0% of all certified SBEs. The results indicate that by restricting the relevant market area to the State of North Carolina, the percentages of available DBE prime contractors and subcontractors would increase while the percentage of SBEs would remain almost unchanged.

The restriction would also affect the capacity of available DBEs and MWBEs. The results are as follows: For the market area as used in the Disparity Study, DBE/MWBE total capacity was 15.10%; DBE/MWBE prime contracting capacity is 7.6%; and DBE/MWBE subcontracting capacity was 47.9%. When the relevant market area was restricted to the State of North Carolina, the results were as follows: DBE/MWBE total capacity was 18.3%; DBE/MWBE prime contracting capacity was 9.6%; and DBE/MWBE subcontracting capacity was 45.1%.

Although there are strong rationales for using either approach to defining the relevant market area, we used the market area as defined in the study because it takes into consideration the unique relevant market characteristics of prime contractors. Those characteristics are distinctly different from those of subcontractors and certified SBEs. Furthermore, if we restrict the market area to the State of North Carolina, we would increase the size of measured disparities because it would increase the capacity of MWBEs.

L. General Availability of Firms to NCDOT

The availability of firms was derived from prequalification forms completed by prime contractors and subcontractors as well as from certification forms completed by SBEs. Prime contractors, subcontractors and SBEs are assigned to every work code

classification that their prequalification and certification form indicated that they had an expertise in. As such, the availability tables are not simply based on the primary work code of vendors. Instead the tables reflect all work codes within which vendors have expertise as indicated by their prequalification records.

In the Federal program, DBEs comprise 20.3% of all prequalified prime contractors and subcontractors to the NCDOT. The largest concentration of DBEs is in the hauling work code, which includes gravel and asphalt; 35.0% of DBEs indicated an expertise in this area. There were 180 firm DBEs and 334 non-DBEs that indicated an expertise in the area of hauling. The second largest category of available vendors was in landscaping and erosion control. Within this work code, 20.6% of the prequalified contractors are DBEs and 79.4% are non-DBEs. While the largest availability percentage recorded by DBEs is in the vertical construction work code, overall, only 10 DBEs listed this as their area of expertise and only four non-DBEs did. The number of contractors in site preparation, which includes clearing, demolition, excavation and surveying, exceeded other categories. Among DBEs, 107 contractors, or 18.5%, have expertise in this work code. In addition, 479 DBEs, or 81.5%, indicated an expertise in this area.

In the State program, the availability of prequalified prime contractors and prequalified subcontractors that are certified MBEs was 10.9% in 2008. The work code classification of MBEs displays a similar pattern as that of DBEs, except there are fewer MBEs in every work code classification. Hauling continues to be the work code that has the largest number of MBEs (118); these firms represent 23.0% of the available contractors in this work code. The largest number of WBEs is also in the hauling work code classification, 14.6%. Overall, WBEs represent 10.4% of all prequalified prime contractors and subcontractors to NCDOT. The tables provided below summarize many relevant findings of the Disparity Study regarding the availability, capacity and utilization of MBEs, WBEs, and DBEs.

Table 1: Percentages of firms by DBE, MBE, WBE status and race and ethnicity (FY2004 - 2008)

	Availability and Capacity Estimates				
	Contract Type				
	Prime & Sub Contracts	Prime Contracts	Subcontractors	SBE Contracts	POCs
DBE Availability	20.30%	6.90%	21.60%	24.20%	21.60%
DBE Capacity	15.10%	7.60%	47.90%	47.90%	
MBE Availability	10.90%	3.60%	11.60%	15.50%	11.60%
MBE Capacity	7.10%	3.20%	21.40%	21.40%	
WBE Availability	10.40%	3.10%	11.10%	11.50%	11.10%
WBE Capacity	8.00%	4.40%	23.90%	23.90%	
	Availability Figures				
Asian/Pacific Islander	0.04%		0.04%	0.50%	0.04%
Black	10.70%		11.40%	21.70%	11.40%
Caucasian	86.10%		85.20%	72.30%	85.20%
Hispanic	0.90%		0.90%	0.70%	0.90%
Native Americans	1.70%		1.80%	3.60%	1.80%
Subcontinent Asians	0.30%		0.30%	1.00%	0.30%

Table 2: Dollar value of awards by type of program and DBE, MBE and WBE status

	DBE/MWBE Status of Recipient				
	Dollar Value of Awards				
	Total Value of Awards (in Category)	Non-MWBE Awards	DBE (or MWBE) Awards	MBE Awards	WBE Awards
Purchase Order contracts	\$ 490,217,483.00	\$ 486,577,456.00	\$ 3,640,027.00	\$ 1,735,027.00	\$ 1,905,000.00
SBE Contracts	\$ 144,645,270.00	\$ 115,287,968.00	\$ 29,357,302.00	\$ 10,903,407.00	\$ 22,834,881.00
Federal Prime Contracts	\$ 2,642,203,256.00	\$ 2,636,232,524.00	\$ 5,970,732.00	\$ 268,262.00	\$ 3,285,470.00
Federal Subcontract	\$ 913,178,719.00	\$ 690,695,754.00	\$ 222,482,965.00	\$ 47,198,690.00	\$ 175,284,274.00
Total Federal Contracts	\$ 2,864,686,221.00	\$ 2,636,232,524.00	\$ 228,453,697.00	\$ 47,466,952.00	\$ 178,569,744.00
State Prime Contract	\$ 1,630,125,071.00	\$ 1,590,841,386.00	\$ 39,283,685.00	\$ 33,312,952.00	\$ -
State Subcontract	\$ 471,898,092.00	\$ 315,353,030.00	\$ 156,545,062.00	\$ 66,823,711.00	\$ 89,721,351.00
State Total	\$ 2,421,532,886.36	\$ 2,192,706,810.00	\$ 228,826,076.36	\$ 112,775,097.16	\$ 114,461,232.19
State and Federal Total	\$ 5,286,219,107.37	\$ 4,828,939,334.00	\$ 457,279,773.37	\$ 160,242,049.16	\$ 293,030,976.19

Table 3: Percentage of awards by type of program and DBE, MBE and WBE status			
	DBE/MWBE Status of Recipient		
	Percentage Value of Awards		
	DBE (or MWBE) Awards	MBE Awards	WBE Awards
Purchase Order contracts	0.7%	0.4%	0.4%
SBE Contracts	20.3%	7.5%	15.8%
Federal Prime Contracts	0.2%	0.0%	0.1%
Federal Subcontract	24.4%	5.2%	19.2%
Total Federal Contracts	8.0%	1.7%	6.2%
State Prime Contract	2.4%	2.0%	0.0%
State Subcontract	33.2%	13.6%	18.3%
State Total Contracts	9.4%	4.7%	4.7%
State and Federal Total	8.7%	3.0%	5.5%

Table 4: Percentage of awards by type of program and DBE, MBE and WBE status					
	Percentage Value of Awards				
	Race and ethnicity				
	Asian/Pacific	Black	Caucasian	Hispanic	Native American
Centrally Let Prime and Sub Contracts	0.1%	2.8%	95.7%	0.3%	1.2%
SBE Contracts	0.0%	11.2%	83.3%	0.7%	4.7%
POC Awards (approximate totals by race/ethnicity)					
Federal subcontracts	0.2%	2.7%	96.9%	0.2%	0.1%
State Subcontracts	0.1%	10.0%	83.4%	0.6%	5.9%
Federal and State subcontract	0.1%	5.1%	89.6%	1.3%	3.9%
Total Awards, all Categories	0.1%	3.5%	95.0%	0.3%	1.1%

Table 5: Dollar value of awards by type of program and race and ethnic status

	Dollar Value of Awards					
	Total Value of Awards (in Category)	Race and ethnicity				
		Asian/Pacific	Black	Caucasian	Hispanic	Native American
Centrally Let Prime and Sub Contracts	\$ 3,343,022,222.00	\$ 2,343,290.00	\$ 92,245,625.00	\$ 3,199,575,770.00	\$ 10,277,215.00	\$ 38,580,322.00
SBE Contracts	\$ 144,597,670.00	\$ 65,065.00	\$ 16,195,559.00	\$ 120,500,937.00	\$ 1,024,448.00	\$ 6,811,661.00
POC Awards (approximate totals by race/ethnicity)			\$ 33,312,952.00	\$ 489,862,926.00		
State Subcontracts	\$ 470,764,043.00	\$ 624,170.00	\$ 46,903,093.00	\$ 392,551,057.00	\$ 3,009,490.00	\$ 27,676,233.00
Federal subcontracts	\$ 871,840,501.00	\$ 1,374,913.00	\$ 23,701,785.00	\$ 844,924,990.00	\$ 1,374,913.00	\$ 463,900.00
Federal and State subcontract	\$ 1,381,381,820.00	\$ 1,999,083.00	\$ 70,654,878.00	\$ 1,237,476,046.00	\$ 17,810,680.00	\$ 53,441,133.00
Total Awards, all Categories	\$ 4,010,795,770.00	\$ 2,408,355.00	\$ 141,754,136.00	\$ 3,809,939,633.00	\$ 11,301,663.00	\$ 45,391,983.00

III

RECOMMENDATIONS

The NCDOT has taken significant step to implement policies and procedures in accordance with State statutes governing the MWBE Program and Federal regulations regarding the DBE Program. It should be commended for those steps. The agency has continued to narrowly tailor its programs so as to conform to legal and regulatory requirements. In general, the State and Federal Programs have allowed DBEs, MBEs and WBEs to achieve a level of utilization that might not have occurred otherwise. The significant number of race and gender neutral programs and the continuous modification of these programs are reflective of the attention that the NCDOT continues to give to the narrowly tailoring its program. While certain areas might be improved as noted in the above findings, it is the general opinion of the consulting team that the State and Federal programs are effective at achieving the goals and objectives designated in the statutes and regulations. The recommendations below are therefore designed to give attention to areas that might assist the NCDOT in continuing to narrowly tailor its programs.

1. The NCDOT should continue to implement the broad range of race-and gender-neutral programs that it currently operates. It should consider putting greater emphasis on programs that are designed to build capacity among DBE/MWBE firms. For example, the Business Opportunity and Workforce Development (BOWD) Office currently administers the Executive Management Program. The consultant had an opportunity to observe this program through the in operation and found it to be enormously effective at building capacity. We recommend that this program be continued and expanded so that a larger number of DBEs/MWBEs can participate.
2. The NCDOT should be commended for establishing the Small Business Enterprise Program and, more recently, for extending its scope beyond the 14 Divisions to all State Transportation offices. The effectiveness of this program, along with the fact that it is race-and gender-neutral, suggests that it should be employed wherever it can be done so efficiently. We therefore

recommend exploring other areas of contracting and procurement that might be compatible with the SBE program.

3. The NCDOT has implemented a Small Professional Service Firm (SPSF) Program that is race- and gender-neutral. This program is designed to assist DBE/MWBE consultants win contracts in a race-and gender-neutral manner. We therefore recommend that the NCDOT closely monitor the prime contracting and subcontracting awards received by firms as a result of participating in this program. This will determine whether or not the awards accurately depict their qualifications, willingness and readiness of these firms or whether more appropriate measures are needed.
4. The NCDOT has assigned a Contracting Officer to every Division. These officers have the responsibility of implementing the Divisions' MWBE Program in coordination with the Central office. Training sessions have been scheduled for these officers to ensure that their policies and procedures are consistent with statutory guidelines. We recommend that the NCDOT monitor the outcome of the training and carefully monitor the implementation of Purchase Order Contracting. It is important to determine what caused the disparity in the utilization of MWBEs in POCs. An examination should be undertaken to determine the accuracy of POC data and the actual extent of MWBE utilization on POCs as prime contractors and subcontractors. If an underutilization is determined to exist, efforts should be made to determine the cause and in particular, determine whether or not the problem is one of unfair practices and procedures, sufficient data or other institutional barriers.
5. The NCDOT should consider implementing procedures that would randomize names of vendors from whom POC quotes are received and provide Division contracting officers an easily accessible pool of qualified, willing, and able MWBEs to solicit quotes from. In this regard, it is important to note that the NCDOT is currently evaluating a "bid runner" electronic system for soliciting electronic bids more efficiently. We encourage the NCDOT to continue investigating alternatives that might enhance this process. Also, on July 1, 2009 the NCDOT began requiring all firms pursuing POCs to become prequalified. This requirement will greatly improve data collection and tracking.
6. The study found that DBE attained dollars and contractual dollars exceeded dollars committed to DBEs in the bid documents. To better understand the relationship between these outcomes, the NCDOT has implemented a

DBE/MWBE data tracking procedure that records attainments in line with how it currently tracks awards. It is extremely important that attainment data be collected, since this is required by the Federal regulation. The disparity study collected data on attainment for every federal project awarded in FY 2008 and found that for DBEs, the percent of total subcontract dollars they received, as specified in subcontract documents, exceeded the percent of dollars committed to DBEs on the bid documents by 8%. The study also measured the variation in attained dollars from committed dollars on projects that were fully closed out in 2008. The results indicated that for fully closed out projects, attained dollars by DBEs exceeded committed dollars by 48%. This amount, however, reflected only projects that were fully closed out and therefore gives only a partial view of the relationship between attained dollars and committed dollars. In the future, the NCDOT's new data tracking procedures should add greater clarity to this issue. We strongly encourage the Department to implement these new procedures.

7. The NCDOT must determine why in the State Program the percentages of awards received by MBEs and WBEs are approximately equal while there is a significant imbalance in the Federal Program; because awards to DBEs who are also certified as MWBEs greatly exceed the awards to DBEs who are also certified as MBEs. If regulatory guidelines allow policies and practices that are used in the State program to be used in the Federal program, the NCDOT should consider adopting such policies and practices to improve the balance in the Federal Program.
8. In the collection of anecdotal evidence, a number of interviewees suggested that some firms may be inaccurately certified because they are not owned or controlled by a woman. The NCDOT should make known to all contractors expressing such sentiments that there is a "NCDOT Fraud Hotline" available for reporting these concerns. The hotline number (1-888-436-8847) and website address (<HTTPS://NCDOT.ethicaladvocate.gov>) have been established for reporting fraud, waste, abuse and misconduct. This information should also be publicized by the BOWD during its regular outreach sessions to vendors; if it is not already done.
9. The NCDOT's UCP provides "one-stop shopping" for certification; applicants only have to apply once for DBE/MWBE certification that will be honored by all federal recipients in the state. Some certified firms, seeking to conduct work with municipalities, must also become prequalified by NCDOT. In this regard, NCDOT's program administrators have expressed concerns that not

all prequalified firms are interested in conducting work with the agency, but only with municipalities. This issue is important because the availability analysis that comprises a fundamental element of the disparity study is based on prequalified firms. To determine the validity of this concern, we randomly surveyed 247 prequalified vendors of the NCDOT and asked if they are interested in engaging in work with the agency; 98% of respondents indicated that they are interested. The NCDOT might still consider adding a question to the prequalification application that would allow it to more clearly distinguish between firms interested in working only with municipalities and those interested in working also with the Department.

10. A preliminary examination suggests that the trucking and hauling industry may be overly concentrated. The analysis indicated that there were 180 prequalified DBE subcontractors in the trucking and hauling work code, who comprised 36.7% of all available firms. When available firms were broken down by race and ethnicity, Black firms that were also certified as DBEs comprised 32.9% of all available firms in the work code. Similarly, there were 118 MBE certified firms in the work code and they comprised 24.1% of all available firms. Finally there were 75 WBE prequalified subcontractors in the trucking and hauling work code and they comprised 15.3% of all available firms. Within this work code, DBEs received 75.3% of all subcontracting dollars while MBEs and WBEs received 47.0% and 32.9%, respectively. The NCDOT should conduct an examination to determine whether or not this is the case and, if so, develop a range of options that might address the overconcentration. An important point is that the options be implemented in a manner that will not cause an adverse shock to DBE/MWBEs who depend heavily on contracting opportunities in trucking. The BOWD may also be engage in this process to consider ways to assist DBE/MBEs in diversifying into related industries.

11. At present, the NCDOT's policies require prime contractors, to follow the same procedures for the race- and gender-neutral attainment that apply to race- and gender-conscious attainment. Specially, those who commit to using DBE/MWBEs in excess of the advertised goal (even if it is zero) must follow these guidelines. It should be determined whether or not this policy creates a disincentive for using DBE/MWBE in a race- and gender- neutral manner. If so, options should be explored that will achieve the same objective without creating a disincentive for the prime contractor.

12. Develop database procedures to classify and code the categories of work performed on POC awards. At present, POC awards are classified by the Division and Center that commissioned the work. Knowing the work codes within which POCs are awarded would make POC opportunities more attractive and planning and evaluations more effective. One option to consider is the possibility of using a procurement coding system.
13. The large and growing number of race-and gender-neutral programs operated by the Department are very important to creating more narrowly tailored State and Federal programs. However, the number of programs and program criteria are so extensive that they may confuse vendors and contractors who are not familiar with them. The NCDOT is in the process of creating a brochure that would explain the objectives and requirements of each program. We strongly encourage this action item so that the statutory requirements of various programs are clearer.
14. The NCDOT's goal setting procedures are set on a project by project basis and are based on examining the availability and capability of vendors in various Divisions of the State. Zero advertised goals are set on projects where qualified, willing and able DBE/MWBEs are not available. The Good Faith Effort Committee has very extensive review procedures to determine the appropriateness of waivers from the advertised goal. The goal setting and good faith effort deliberations are very consistent with requirements of federal regulations and case law that requires goals to be flexible. We recommend continuing to apply these procedures. It is also important to maintain a documentary record of the actions of the Good Faith Effort Committee review procedures. This helps to document the outcome of decisions and the rationale and evidence used to reach them.
15. The NCDOT should build into its database the capability to classify and track categories of race-and gender-neutral attainment. This information is essential for setting federal and state race- and gender-neutral goals.