

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

VOL 1: ECONOMIC AND STATISTICAL ANALYSIS

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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

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EUQUANT

FINAL REPORT

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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.



LEGAL, REGULATORY AND STATUTORY CONSIDERATIONS FOR NCDOT'S DISPARITY STUDY

The NCDOT is required to conduct a disparity study of the availability and utilization of disadvantaged minority-owned and women-owned business enterprises every five years. The study must 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. N.C.G.S.A. § Section 136-28.4(b). In this regard, this section provides an analysis of certain legal, regulatory and statutory considerations that are relevant to conducting a disparity study of the North Carolina Department of Transportation's ("NCDOT'S") contracting and procurement that occurred during State Fiscal Years 2004 - 2008.

The chapter begins with a review of the landmark United States Supreme Court decision in City of Richmond v. J.A. Croson.¹ Croson set forth the strict scrutiny legal analysis that is applicable when conducting disparity studies and evaluating NCDOT's contracting and procurement practices. The decision discusses evidence of discrimination that can establish a compelling interest for any remedial relief provided by NCDOT; it also discusses criteria and factors that are appropriate to narrowly tailor any remedial relief. The Croson Decision was followed by the United States Supreme Court decision in Adarand Constructors, Inc. v. Peña,² ("Adarand I"). Adarand applied the strict scrutiny analysis set forth in Croson to federal programs, including programs like those established by NCDOT-- a state government recipient of federal assistance.

¹ 488 U.S. 469 (1989).

² 515 U.S. 200 (1995).

The chapter focuses on and reviews Federal Regulations regarding the Federal Disadvantaged Business Enterprise Program (hereinafter referred to as the DBE Program). It is important to emphasize that when this disparity study discusses DBEs, the analysis refers to the Federal Program. North Carolina General Statutes and Administrative Provisions also regulate the State of North Carolina's Minority Business Enterprise Program (MBE Program) and Women Business Enterprise Program (WBE Program) for Highway and Bridge Construction Contracts. It is also important to emphasize that when MBEs or WBEs are discussed in this disparity study, the analysis refers to the State Program (and not the Federal Program). Furthermore, when the analysis combines MBEs and WBEs, the two categories will be referred to collectively as MWBEs. The chapter also reviews recent federal cases in the Fourth Circuit Court of Appeals--the federal appellate court whose decisions are controlling on NCDOT.

1.1 OVERVIEW OF REGULATIONS AND STATUTES GOVERNING NCDOT'S STATE MWBE PROGRAM

N.C.G.S.A. § 136-28.4 provides the State of North Carolina policy concerning participation by disadvantaged minority-owned and women-owned businesses in highway contracts. Section 136-28.4(a) provides that it is a policy of the State to encourage and promote participation by disadvantaged minority-owned and women-owned businesses in contracts led by NCDOT for the planning, design, preconstruction, construction, alteration, or maintenance of state highways, roads, streets, or bridges and in the procurement of materials for these projects.

The NCDOT has commissioned several disparity studies. The most recent study was done in 2004. *Id.* The 2004 study, which followed the study in 1998, concluded that disparities in utilization of MBE's persisted and that a basis remained for continuing the MWBE Program. The new MWBE statute, as revised, was approved in 2006. The program has an expiration or sunset date of August 31, 2009, unless it is renewed by an act of the legislature. *Id.* at § 136-28.4(e).

North Carolina General Statute § 143-128.2 provides that the State shall have a verifiable ten percent (10%) goal for participation by minority businesses in the total value of work for each State building project, including building projects done by a private entity on a facility to be leased or purchased by the State. A local government unit or other public or private entity that receives State appropriations for a building project or other State grant funds for a building project, where the project cost is one hundred thousand dollars (\$100,000) or more, is required to have a verifiable ten percent (10%) goal for participation by minority businesses in the total value of the work; however, a local government unit may apply a different goal that was adopted prior to December 1, 2001 if the local government unit had and continues to have a

sufficiently strong basis in evidence to justify the use of that goal. Section 143-128.2(a). On State building projects and building projects subject to the State goal requirement, the Secretary is required to identify the appropriate percentage goal, based on adequate data, for each category of minority business as defined in North Carolina G.S. 143-128.2(g)(l) based on the specific contract type. Id.

1.2 BRIEF OVERVIEW OF REGULATIONS GOVERNING NCDOT'S FEDERAL DBE PROGRAM

The Federal DBE Program established responsibility for implementing the DBE Program to state and local government recipients of federal funds. A recipient of federal financial assistance must set an annual DBE goal specific to conditions in the relevant marketplace. Even though an overall annual ten (10) percent aspirational goal applies at the federal level, it does not affect the goals established by individual state or local governmental recipients. Revisions to the Federal DBE Program outline certain steps a state or local government recipient can follow in establishing a goal. USDOT considers and must approve the goal as well as the recipient's DBE program. The implementation of the Federal DBE Program is substantially in the hands of the state or local government recipient and is set forth in detail in the federal regulations, including 49 C.F.R. § 26.45.

In 1998, Congress passed the Transportation Equity Act for the 21st Century ("TEA-21"), which authorized the United States Department of Transportation to expend funds for federal highway programs between 1998 and 2003. Pub.L. 105-178, Title I, § 1101(b), 112 Stat. 107, 113 (1998). The USDOT promulgated new regulations in 1999, contained at 49 C.F.R. Part 26, to establish the current Federal DBE Program. The TEA-21 was subsequently extended in both 2003 and 2005. The reauthorization of TEA-21 in 2005 was for a five (5) year period from 2005 to 2009. Pub.L. 109-59, Title I, § 1101(b), August 10, 2005, 119 Stat. 1153-57.

The Federal DBE Program, as amended, changed certain requirements for federal aid recipients and accordingly changed how recipients of federal funds implemented the Federal DBE Program for federally-assisted contracts. The federal government determined that there is a compelling governmental interest for race- and gender-based programs at the national level. The program is narrowly tailored because of federal regulations, including the flexibility in implementation provided to individual federal aid recipients by the regulations. State and local governments are not required to implement race- and gender-based measures where they are not necessary to achieve DBE goals and those goals may be achieved by race- and gender-neutral measures. 49 C.F.R. § 26.51.

1.3 RECENT COURT DECISIONS THAT ARE INSTRUCTIVE TO NCDOT

The following analysis of recent court decisions is instructive to NCDOT and to the disparity study methodology not only because it includes the most current and significant decisions by courts that have interpreted the validity of government programs involving MWBEs and DBEs but also because it has applied the compelling interest and narrow tailoring tests. The review is also instructive with regards to the preparation of any legislation by NCDOT that concerns contracting and procurement activity and seeks to provide non-discriminatory and equal business opportunity to contractors, vendors, and suppliers. The review is also relevant for DBE Program guidelines and goals prepared by NCDOT and submitted in compliance with the Federal DBE Regulations.

1.4 CITY OF RICHMOND V. J.A. CROSON Co., 488 U.S. 469 (1989)

In Croson, the U.S. Supreme Court struck down the City of Richmond's "set-aside" program as unconstitutional because it did not satisfy the strict scrutiny analysis as applied to "race-based" governmental programs. J.A. Croson Co. ("Croson") challenged the City of Richmond's minority contracting preference plan, which required prime contractors to subcontract at least 30 percent of the dollar amount of contracts to one or more Minority Business Enterprises ("MBE"). In enacting the plan, the City cited past discrimination and intent to increase minority business participation in construction projects as motivating factors.

The Supreme Court held the City of Richmond's "set-aside" action plan violated the Equal Protection Clause of the Fourteenth Amendment. The Court applied the "**strict scrutiny**" standard, generally applicable to any race-based classification. This requires a governmental entity to have a "**compelling governmental interest**" in remedying past identified discrimination, and it requires that any program adopted by a local or state government must be "**narrowly tailored**" to achieve the goal of remedying the identified discrimination.

The Court determined that the Richmond plan neither served a "compelling governmental interest" nor offered a "narrowly tailored" remedy for past discrimination. The Court did not find a "compelling governmental interest" because the

City had not provided “a strong basis in evidence for its conclusion that [race-based] remedial action was necessary.” The Court held that the City presented no direct evidence of any race discrimination on its part in awarding construction contracts; nor did it present any evidence that the City’s prime contractors had discriminated against minority-owned subcontractors. The Court found that the evidence, as presented, contained only generalized allegations of societal and industry discrimination coupled with positive legislative motives. The Court concluded that the evidence was insufficient to demonstrate a compelling interest in awarding public contracts on the basis of race.

Similarly, the Court held that the City failed to demonstrate that the plan was “narrowly tailored” for the following reasons: it did not appear that Richmond had given any consideration to race-neutral means as a way of increasing minority business participation in city contracting; and the City’s “preference” program appeared to be overly inclusiveness of certain (for example, Aleuts) without providing any evidence that such minorities had suffered discrimination in Richmond.

The Court further found “if the City could show that it had essentially become a ‘passive participant’ in a system of racial exclusion practiced by elements of the local construction industry . . . [i]t could take affirmative steps to dismantle such a system.” In particular, it noted that “[w]here there is a significant statistical disparity between the number of qualified minority contractors willing and able to perform a particular service and the number of such contractors actually engaged by the locality or the locality’s prime contractors, an inference of discriminatory exclusion could arise.” The Supreme Court noted that it did not intend its decision to preclude a state or local government from “taking action to rectify the effects of identified discrimination within its jurisdiction.”

1.5 ADARAND CONSTRUCTORS, INC. V. PENA (“ADARAND I”), 515 U.S. 200 (1995) AND THE FEDERAL DBE PROGRAM

In Adarand I, the U.S. Supreme Court extended the holding in Croson and ruled that all federal government programs that use racial or ethnic criteria as factors in procurement decisions must pass a test of strict scrutiny in order to survive constitutional muster. The cases interpreting Adarand I are the most recent and significant decisions by federal courts in so far as they have set forth the legal framework for disparity studies and the predicate for a constitutional review in accordance with the strict scrutiny standard. The recent decisions involving the Federal DBE Program are applicable to NCDOT and to

the disparity study because they concern the implementation of the DBE Program by recipients of Federal financial assistance (like NCDOT) based on 49 C.F.R. Part 26.

The US Department of Justice 1996 review of the evidence of discrimination in government construction procurement determined that there is a compelling governmental interest in race- and gender-based programs at the national level. Revised federal regulation established narrowly tailored and flexible requirements for federal aid recipients to follow in implementing the revised program. 49 C.F.R. § 26.51.

Federal Regulation 49 C.F.R. § 26.45 provides instructions to recipients of federal funds on setting overall goals for their DBE programs. In summary, recipients are instructed to establish a base figure for relative availability of DBEs. 49 C.F.R. § 26.45(a), (b), (c). This is accomplished by determining the number of ready, willing, and able DBEs in the recipient's market and then dividing that number by the number of all ready, willing, and able businesses in the recipient's market. *Id.* Second, the recipient must determine an appropriate adjustment, if any, to the base figure to arrive at the overall goal. *Id.* at § 26.45(d). The regulation recommends that various types of evidence be considered when determining if an adjustment is appropriate. 49 C.F.R. § 26.45(d). The following should be considered: the current capacity of DBEs to perform work on the recipient's contracts as measured by the volume of work they have performed in recent years; if available, consideration of evidence from related fields that point to restrictions in opportunities for DBEs to form, grow, and compete (such as statistical disparities between the capabilities of DBEs and their ability to obtain financing, bonding and insurance); as well as data on disparities in employment, education, and training. *Id.* In suggesting these procedures, the federal regulation seeks to establish a goal that reflects the level of DBE participation one would expect to occur in the absent the effects of discrimination. 49 C.F.R. § 26.45(b)-(d).

Furthermore, the Federal DBE Program requires state and local government recipients of federal funds to assess how much of the DBE goal can be met through race- and gender-neutral efforts and what percentage, if any, should be met through race- and gender-based efforts. 49 C.F.R. § 26.51.

A state or local government recipient is responsible for seriously identifying and considering race- and gender-neutral measures that can be implemented. 49 C.F.R. § 26.51(b). The Federal Regulation requires a recipient of federal funds to establish a contract clause requiring primes to pay subcontractors promptly (42 C.F.R. § 26.29); the regulation also established certain record-keeping requirements for federal aid recipients, such as maintaining a bidders list containing data on contractors and subcontractors who seek federally-assisted awards from the agency (42 C.F.R. § 26.11).

Federal aid recipients must certify DBEs according to their owners race/gender, personal net worth, establishment size, and other factors related to defining an economically and socially disadvantaged business as outlined in 49 C.F.R. §§ 26.61-26.73. Along with these requirements, the regulation specifies many other administrative requirements that recipients must comply with. 49 C.F.R. §§ 26.21-26.37.

1.6 STRICT SCRUTINY ANALYSIS

A race- and ethnicity-based program implemented by a state or local government is subject to the strict scrutiny constitutional analysis.³ NCDOT's implementation of the Federal DBE Program also is subject to the strict scrutiny standard. The strict scrutiny analysis of DBE and MWBEs programs consists of a two prong test:

- a. The program must serve an established compelling governmental interest; and
- b. The program must be narrowly tailored to achieve that compelling government interest.⁴

1.7 THE COMPELLING GOVERNMENTAL INTEREST REQUIREMENT

The first prong of the strict scrutiny analysis requires a governmental entity to have a **“compelling governmental interest”** in remedying past identified discrimination in order to implement a race- and ethnicity-based program. State and local governments cannot rely on national statistics of discrimination in an industry to draw conclusions about the prevailing market conditions in their own regions.⁵ Rather, state and local governments must measure discrimination in their state or local market, but the market is not necessarily confined by the jurisdiction’s boundaries.⁶

Regarding the Federal DBE Program, the federal courts have held that recipients of federal funds do not need to independently satisfy the first prong of the strict scrutiny standard because Congress has satisfied the compelling interest test of the strict scrutiny analysis.⁷ The federal courts have held that Congress had ample evidence of

³ Crosby, 448 U.S. at 493.

⁴ N. Contracting, 473 F.3d at 721; Western States Paving, 407 F.3d at 991; Sherbrooke Turf, 345 F.3d at 969; Adarand VII, 228 F.3d at 1176.; Associated Gen. Contractors of Ohio, Inc. v. Drabik (“Drabik II”), 214 F.3d 730 (6th Cir. 2000); Eng’g Constructors Ass’n of South Florida, Inc. v. Metro. Eng’g Contractors Ass’n, 122 F.3d 895 (11th Cir. 1997); Contractors Ass’n of E. Pa. v. City of Philadelphia (“CAEP I”), 6 F.3d 990 (3d Cir. 1993).

⁵ See e.g., Concrete Works, Inc. v. City and County of Denver (“Concrete Works I”), 36 F.3d 1513, 1520 (10th Cir. 1994).

⁶ Id.

⁷ N. Contracting, 473 F.3d at 721; Western States Paving, 407 F.3d at 991; Sherbrooke Turf, 345 F.3d at

discrimination in the transportation contracting industry to justify the Federal DBE Program (TEA-21) and the federal regulations implementing the program (49 C.F.R. Part 26).⁸ Specifically, the federal courts found Congress “spent decades compiling evidence of race discrimination in government highway contracting, of barriers to the formation of minority-owned construction businesses, and of barriers to entry.”⁹ The evidence was gathered through numerous congressional investigations and hearings and through independent statistical and anecdotal studies (e.g. disparity studies).¹⁰ The evidentiary basis on which Congress relied to support its finding of discrimination includes:

a. **Barriers to Minority Business Formation.** Congress found that discrimination by prime contractors, unions, and lenders has woefully impeded the formation of qualified minority business enterprises in the subcontracting market nationwide, noting the existence of “old boy” networks from which minority firms have traditionally been excluded, and the race-based denial of access to capital, which affects the formation of minority subcontracting enterprise.¹¹

969; Adarand VII, 228 F.3d at 1176.

⁸ Id. In the case of Rothe Dev. Corp. v. U.S. Dept. of Defense, 545 F.3d 1023 (Fed. Cir. 2008), the Federal Circuit Court of Appeals pointed out it had questioned in its earlier decision whether the evidence of discrimination before Congress was in fact so “outdated” so as to provide an insufficient basis in evidence for the Department of Defense program (i.e. whether a compelling interest was satisfied). 413 F.3d 1327 (Fed. Cir. 2005). The Federal Circuit Court of Appeals after its 2005 decision remanded the case to the district court to rule on this issue. Rothe considered the validity of race- and gender-conscious Department of Defense (“DOD”) regulations (2006 Reauthorization of the 1207 Program). The decisions in N. Contracting, Sherbrooke Turf, Adarand VII, and Western States Paving held the evidence of discrimination nationwide in transportation contracting was sufficient to find the Federal DBE Program on its face was constitutional. On remand, the district court in Rothe on August 10, 2007 issued its order denying Plaintiff Rothe’s Motion for Summary Judgment and granting Defendant United States Department of Defense’s Cross-Motion for Summary Judgment, holding the 2006 Reauthorization of the 1207 DOD Program constitutional. Rothe Devel. Corp. v. U.S. Dept. of Defense, 499 F.Supp.2d 775 (W.D.Tex. Aug 10, 2007). The district court found the data contained in the Appendix (The Compelling Interest, 61 Fed. Reg. 26050 (1996)), the Urban Institute Report, and the Benchmark Study – relied upon in part by the courts in Sherbrooke Turf, Adarand VII, and Western States Paving in upholding the constitutionality of the Federal DBE Program – was “stale” as applied to and for purposes of the 2006 Reauthorization of the 1207 DOD Program. This district court finding was not appealed or considered by the Federal Circuit Court of Appeals. 545 F.3d 1023, 1037. See the discussion of the recent 2008 Federal Circuit Court of Appeals decision in Rothe below in Section VI.I.

⁹ Sherbrooke Turf, 345 F.3d at 970, (citing Adarand VII, 228 F.3d at 1167 – 76); Western States Paving, 407 F.3d at 992-93.

¹⁰ See, e.g., Adarand VII, 228 F.3d at 1167– 76; see also Western States Paving, 407 F.3d at 992 (Congress “explicitly relied upon” the Department of Justice study that “documented the discriminatory hurdles that minorities must overcome to secure federally funded contracts”).

¹¹ Adarand VII, 228 F.3d. at 1168-70; Western States Paving, 407 F.3d at 992.

b. **Barriers to Competition for Existing Minority Enterprises.** Congress found evidence showing systematic exclusion and discrimination by prime contractors, private sector customers, business networks, suppliers, and bonding companies precluding minority enterprises from opportunities to bid. When minority firms are permitted to bid on subcontracts, prime contractors often resist working with them. Congress found evidence of the same prime contractor would use minority business enterprise on a government contract but not use that minority business enterprise on a private contract, despite being satisfied with that subcontractor's work. Congress found that informal, racially exclusionary business networks dominate the subcontracting construction industry.¹²

c. **Local Disparity Studies.** Congress found that local studies throughout the country tend to show a disparity between utilization and availability of minority-owned firms, raising an inference of discrimination.¹³

d. **Results of Removing Affirmative Action Programs.** Congress found evidence that when race-conscious public contracting programs are struck down or discontinued, minority business participation in the relevant market drops sharply or even disappears. The courts have found that such evidence strongly supports the government's claim that there are significant barriers to minority competition, raising the specter of discrimination.¹⁴

1.8 BURDEN OF PROOF

Under the strict scrutiny analysis, and to the extent a state or local governmental entity has implemented a race- and gender-conscious program, the governmental entity has the initial burden of showing a strong basis in evidence (including statistical and anecdotal evidence) to support its remedial action.¹⁵ If the government makes its initial

¹² Adarand VII, at 1170-72.

¹³ Id. at 1172-74.

¹⁴ Id. at 1174-75.

¹⁵ See Rothe Development Corp. v. Department of Defense, 545 F.3d 1023, 1036 (Fed. Cir. 2008); N. Contracting, Inc. Illinois, 473 F.3d at 715, 721 (7th Cir. 2007) (Federal DBE Program); Western States Paving Co. v. Washington State DOT, 407 F.3d 983, 991 (9th Cir. 2005) (Federal DBE Program); Sherbrooke Turf, Inc. v. Minnesota DOT, 345 F.3d 964, 969 (8th Cir. 2003) (Federal DBE Program); Adarand Constructors Inc. v. Slater ("Adarand VII"), 228 F.3d 1147, 1166 (10th Cir. 2000) (Federal DBE Program); Eng'g Contractors Ass'n, 122 F.3d at 916; Hershell Gill Consulting Engineers, Inc. v. Miami-Eng'g Contractors Ass'n, 333 F. Supp. 2d 1305, 1316 (S.D. Fla. 2004).

showing, the burden shifts to the challenger to rebut that showing.¹⁶ The challenger bears the ultimate burden of showing that the governmental entity's evidence "did not support an inference of prior discrimination."¹⁷

A. STATISTICAL EVIDENCE

Statistical evidence of discrimination is a primary method used to determine whether or not a strong basis in evidence exists to develop, adopt and support a remedial program (i.e. to prove a compelling governmental interest), or, in the case of a recipient complying with the Federal DBE Program, to prove narrow tailoring of program implementation at the state recipient level.¹⁸ The Croson Decision states that, "Where gross statistical disparities can be shown, they alone in a proper case may constitute prima facie proof of a pattern or practice of discrimination."¹⁹

One form of statistical evidence is the comparison of a government's utilization of MWBEs compared to the relative availability of qualified, willing and able MWBEs.²⁰ Other considerations regarding statistical evidence include the following:

1. **Availability Analysis:** A disparity index requires an availability analysis. Availability measures the relative number of MWBEs and DBEs among all firms ready, willing and able to perform a certain type of work within a particular geographic market area.²¹ Various measures of availability have been accepted and these measures approach the issue with different levels of specificity. The Courts have indicated that the practicality of various approaches must be considered and they have indicated that, "An analysis is not devoid of probative value simply because it may be possible theoretically to adopt a more refined approach."²²

¹⁶ Adarand VII, 228 F.3d at 1166; Eng'g Contractors Ass'n, 122 F.3d at 916.

¹⁷ See, e.g., Adarand VII, 228 F.3d at 1166; Eng'g Contractors Ass'n, 122 F.3d at 916; see also Sherbrooke Turf, 345 F.3d at 971; N. Contracting, 473 F.3d at 721.

¹⁸ See, e.g., Croson, 488 U.S. at 509; N. Contracting, 473 F.3d at 718-19, 723-24; Western States Paving, 407 F.3d at 991; Adarand VII, 228 F.3d at 1166.

¹⁹ Croson, 488 U.S. at 501, quoting Hazelwood School Dist. v. United States, 433 U.S. 299, 307-08 (1977).

²⁰ Croson, 488 U.S. at 509; see Rothe, 545 F.3d at 1041-1042; Concrete Works of Colo., Inc. v. City and County of Denver ("Concrete Works II"), 321 F.3d 950, 959 (10th Cir. 2003); Drabik II, 214 F.3d 730, 734-736.

²¹ See, e.g., Croson, 488 U.S. at 509; 49 C.F.R. § 26.35; Rothe, 545 F.3d at 1041-1042; N. Contracting, 473 F.3d at 718, 722-23; Western States Paving, 407 F.3d at 995.

²² Contractors Ass'n of Easton Pennsylvania, Inc. v. City of Philadelphia ("CAEP II"), 91 F.3d 586, 603 (3d Cir. 1996).

2. Utilization Analysis: Courts have accepted measures of utilization that are based on the proportion of an agency's contract dollars that are awarded to MWBEs and DBEs in comparison to comparably situated businesses that do not fall within these categories.²³

3. Disparity Index: An important component of statistical evidence is the "disparity index."²⁴ It is defined as the ratio of the percentage utilization to the percentage availability multiplied by 100. A disparity index value that is less than eighty (80) has been accepted as evidence that firms have been adversely affected. This threshold is often referred to as "The Rule of Thumb" or "The 80% Rule."²⁵

4. Statistically Significant Disparity: The federal courts have held that a statistically significant disparity between the number of qualified minority contractors willing and able to perform a particular service and the number of such contractors actually engaged by the local government or by prime contractors to the local government may raise an inference of discriminatory exclusion.²⁶ In contrast, a small statistical disparity, standing alone, may be sufficient to establish discrimination.²⁷

5. Two Standard Deviation Test: The two standard deviation test allows one to determine the probability that the numerical measure of disparity is the result of mere chance. Hence, measures of disparity that have absolute values exceeding two standard deviations have been deemed to be statistically significant and not due to chance. In contrast, measures of disparity having absolute values that are less than two standard deviations have are not considered statistically significant evidence of discrimination.²⁸

1.9 ANECDOTAL EVIDENCE

²³ See Eng'g Contractors Ass'n, 122 F.3d at 912; N. Contracting, 473 F.3d at 717-720; Sherbrooke Turf, 345 F.3d at 973.

²⁴ Eng'g Contractors Ass'n, 122 F.3d at 914; W.H. Scott Constr. Co. v. City of Jackson, 199 F.3d 206, 218 (5th Cir. 1999); Contractors Ass'n of Eastern Pennsylvania, Inc. v. City of Philadelphia, 6 F.3d 990 at 1005 (3rd Cir. 1993).

²⁵ See, e.g., Rothe, 545 F.3d at 1041; Eng'g Contractors Ass'n, 122 F.3d at 914, 923; Concrete Works I, 36 F.3d at 1524.

²⁶ See, e.g., Croson, 488 U.S. at 509; Rothe, 545 F.3d at 1041; Concrete Works II, 321 F.3d at 970; see Western States Paving, 407 F.3d at 1001.

²⁷ Western States Paving, 407 F.3d at 1001.

²⁸ Eng'g Contractors Ass'n, 122 F.3d at 914, 917, 923. The Eleventh Circuit has held that a disparity greater than two or three standard deviations has been held to be statistically significant and may create a presumption of discriminatory conduct.; Peightal v. Metropolitan Eng'g Contractors Ass'n, 26 F.3d 1545, 1556 (11th Cir. 1994).

Anecdotal evidence includes personal accounts of incidents, including accounts of discrimination, told from the witness' perspective. Anecdotal evidence, standing alone, is generally insufficient to show a systematic pattern of discrimination.²⁹ But personal accounts of actual discrimination may complement empirical evidence and play an important role in bolstering statistical evidence.³⁰ Anecdotal evidence that indicates how a local or state government's institutional practices have exacerbated discriminatory market conditions is often particularly probative.³¹

Examples of anecdotal evidence may include:

- a. Testimony of MWBE or DBE owners regarding whether or not they face difficulties or barriers;
- b. Descriptions of instances in which MWBE or DBE owners believe they were (or were not) treated unfairly or discriminated against because of their race, ethnicity, or gender;
- c. Statements regarding whether firms and contractors solicited or fail to solicit bids or price quotes from MWBE's or DBEs on projects that did not have goals; and
- d. Statements regarding whether or not vendors have encountered instances of discrimination in bidding on specific contracts and in the financing and insurance markets.³²
- e. Courts have accepted and recognize that anecdotal evidence is the witness' narrative of incidents including the witness' thoughts, feelings, and perceptions. These incidents are told from the witness's perspective and thus such evidence need not be verified.³³

²⁹ Eng'g Contractors Ass'n, 122 F.3d at 924-25; Coral Constr. Co. v. King County, 941 F.2d 910, 919 (9th Cir. 1991); O'Donnel Constr. Co. v. District of Columbia, 963 F.2d 420, 427 (D.C. Cir. 1992).

³⁰ See, e.g., Eng'g Contractors Ass'n, 122 F.3d at 925-26; Concrete Works, 36 F.3d at 1520; Contractors Ass'n, 6 F.3d at 1003; Coral Constr. Co. v. King County, 941 F.2d 910, 919 (9th Cir. 1991).

³¹ Concrete Works I, 36 F.3d at 1520.

³² See, e.g., Concrete Works, 321 F.3d at 989; Adarand VII, 228 F.3d at 1166-76. For additional examples of anecdotal evidence in recent cases, see Eng'g Contractors Ass'n, 122 F.3d at 924; Florida A.G.C. Council, Inc. v. State of Florida, 303 F. Supp. 2d 1307, 1325 (N.D. Fla. 2004); Webster v. Fulton County, Georgia, 51 F. Supp. 2d 1354, 1379 (N.D. Ga. 1999), aff'd per curiam 218 F.3d 1267 (11th Cir. 2000); Concrete Works, 36 F.3d at 1520; Cone Corp. v. Hillsborough County, 908 F.2d 908, 915 (11th Cir. 1990).

³³ See, e.g., Concrete Works II, 321 F.3d at 989; Eng'g Contractors Ass'n, 122 F.3d at 924-26; Cone Corp.,

1.10 THE NARROW TAILORING REQUIREMENT

The second prong of the strict scrutiny analysis requires that a race- or ethnicity-based program or legislation that is implemented to remedy past identified discrimination in the relevant market be "**narrowly tailored**" to reach that objective. Several factors are considered in determining whether or not a program or regulation satisfies the narrowly tailoring requirement. Those factors are as follows:

- a. The necessity for the relief and the efficacy of alternative race-, ethnicity-, and gender-neutral remedies;
- b. The flexibility and duration of the relief, including the availability of waiver provisions;
- c. The relationship of numerical goals to the relevant labor market; and
- d. The impact of a race-, ethnicity-, or gender-conscious remedy on the rights of third parties.³⁴

The Federal DBE Program must be "narrowly tailored" to remedy identified discrimination in the recipient's contracting and procurement market.³⁵ The narrow tailoring requirement has several components. First, according to Western States Paving, the recipient of federal funds must have independent evidence of discrimination within their own transportation contracting and procurement marketplace. This determination must be made so as to assess whether or not there is the need for race-, ethnicity-, or gender-conscious remedial action.³⁶

Thus, the Ninth Circuit held in Western States Paving that mere compliance with the Federal DBE Program does not satisfy strict scrutiny.³⁷ Second, in Western States Paving,

908 F.2d at 915; Northern Contracting, Inc. v. Illinois, 2005 WL 2230195 at *21, N. 32 (N.D. Ill. Sept. 8, 2005), aff'd 473 F.3d 715 (7th Cir. 2007).

³⁴ See, e.g., Rothe, 545 F.3d at 1036; Eng'g Contractors Ass'n, 122 F.3d at 927 (internal quotations and citations omitted).

³⁵ Western States Paving, 407 F.3d at 995-998; Sherbrooke Turf, 345 F.3d at 970-71.

³⁶ Western States Paving, 407 F.3d at 997-98, 1002-03.

³⁷ Id. at 995-1003. It should be pointed out that in the recent Northern Contracting decision (January 8, 2007), the Seventh Circuit Court of Appeals cited its earlier precedent in Milwaukee County Pavers v. Fielder to hold "that a state is insulated from [a narrow tailoring] constitutional attack, absent a showing that the state

the court found that even where evidence of discrimination is present in a recipient's market, a narrowly tailored program must apply only to those minority groups who have actually suffered discrimination. Thus, under a race- or ethnicity -conscious federal program there must be evidence that each minority group included has suffered discrimination within the recipient's marketplace.

To satisfy the narrowly tailored prong of the strict scrutiny analysis in the context of the Federal DBE Program, the federal courts that have evaluated state DOT DBE Programs have held that the following factors are pertinent:

- a. Evidence of discrimination or its effects in the state transportation contracting industry;
- b. Flexibility and duration of a race- or ethnicity-conscious remedy;
- c. Relationship of any numerical DBE goals to the relevant market;
- d. Effectiveness of alternative race- and ethnicity-neutral remedies;
- e. Impact of a race- or ethnicity-conscious remedy on third parties; and
- f. Application of any race- or ethnicity-conscious program to only those minority groups who have actually suffered discrimination.³⁸

The Eleventh Circuit described the “the essence of the ‘narrowly tailored’ inquiry [as] the notion that explicitly racial preferences . . . must only be a ‘last resort’ option.”³⁹

exceeded its federal authority. IDOT here is acting as an instrument of federal policy and Northern Contracting (NCI) cannot collaterally attack the federal regulations through a challenge to IDOT's program." 473 F.3d at 722. The Seventh Circuit Court of Appeals distinguished both the Ninth Circuit Court of Appeals decision in Western States Paving and the Eighth Circuit Court of Appeals decision in Sherbrooke Turf, relating to an as-applied narrow tailoring analysis. The Seventh Circuit Court of Appeals stated in a footnote that the court in Western States Paving "misread" the decision in Milwaukee County Pavers. *Id.* at 722, n.5. The Seventh Circuit Court of Appeals held instead that IDOT's application of a federally mandated program is limited to the question of whether the state exceeded its grant of federal authority under the Federal DBE Program. *Id.* at 722. The Seventh Circuit Court of Appeals analyzed IDOT's compliance with the federal regulations regarding calculation of the availability of DBEs, adjustment of its goal based on local market conditions and its use of race-neutral methods set forth in the federal regulations. *Id.* at 723-24. The court held NCI failed to demonstrate that IDOT did not satisfy compliance with the federal regulations (49 C.F.R. Part 26). *Id.* Accordingly, the Seventh Circuit Court of Appeals affirmed the district court's decision upholding the validity of IDOT's DBE program. See the discussion of the Northern Contracting decision below in Section VI.1.

³⁸ See, e.g., Western States Paving, 407 F.3d at 998; Sherbrooke Turf, 345 F.3d at 971; Adarand VII, 228 F.3d at 1181.

³⁹ Eng'g Contractors Ass'n, 122 F.3d at 926 (internal citations omitted); see also Virdi v. DeKalb County School District, 135 Fed. Appx. 262, 264, 2005 WL 138942 (11th Cir. 2005) (unpublished opinion); Webster v. Fulton County, 51 F. Supp. 2d 1354, 1380 (N.D. Ga. 1999), *aff'd per curiam* 218 F.3d 1267 (11th Cir. 2000).

Courts have found that "[w]hile narrow tailoring does not require exhaustion of every conceivable race-neutral alternative; it does require serious, good faith consideration of whether such alternatives could serve the governmental interest at stake."⁴⁰

Similarly, the Sixth Circuit Court of Appeals in Associated Gen. Contractors v. Drabik ("Drabik II"), stated: "Adarand teaches that a court called upon to address the question of narrow tailoring must ask, 'for example, whether there was 'any consideration of the use of race-neutral means to increase minority business participation' in government contracting, . . . or whether the program was appropriately limited such that it 'will not last longer than the discriminatory effects it is designed to eliminate.'"⁴¹

Recently, the Supreme Court in Parents Involved in Community Schools v. Seattle School District, 127 S.Ct. 2738, 2760-61 (2007) also found that race- and ethnicity-based measures should be employed as a last resort. The majority opinion stated: "Narrow tailoring requires 'serious, good faith consideration of workable race-neutral alternatives,' and yet in Seattle several alternative assignment plans—many of which would not have used express racial classifications—were rejected with little or no consideration." 127 S.Ct. at 2760-61; see also Grutter v. Bollinger, 539 U.S. 305 (2003). The Court found that the District failed to show it seriously considered race-neutral measures.

The "narrowly tailored" analysis is instructive for the NCDOT in terms of developing any legislation or programs that involve MWBEs and DBEs in regards to implementing the Federal DBE Program and State in WBE program or in connection with determining the appropriate remedial measures that should be employed to achieve legislative objectives.

1.11 RACE-, ETHNICITY-, AND GENDER-NEUTRAL MEASURES

To the extent that a "strong basis in evidence" exists concerning the degree of discrimination in a local or state government's relevant contracting and procurement market, the courts have analyzed several criteria or factors to determine whether a state's race- or ethnicity-conscious program is necessary and thus narrowly tailored to remedy the identified discrimination. One of the key factors is a consideration of race-, ethnicity- and gender-neutral measures.

⁴⁰ See Grutter v. Bollinger, 539 U.S. 306, 339 (2003), and Richmond v. J.A. Croson Co., 488 U.S. 469, 509-10 (1989).

⁴¹ Associated Gen. Contractors of Ohio, Inc. v. Drabik ("Drabik II"), 214 F.3d 730, 738 (6th Cir. 2000).

The courts require that a local or state government seriously consider race-, ethnicity- and gender-neutral efforts to remedy the identified discrimination,⁴² and the courts have found race- and ethnicity-conscious programs to be unconstitutional if they have been implemented without considering race- and ethnicity-neutral alternatives to increase minority business participation.⁴³ In Croson, as in decisions by federal courts of appeal, it was found that local and state governments have at their disposal a “whole array of race-neutral devices to increase the accessibility of city contracting opportunities to small entrepreneurs of all races.”⁴⁴

The federal regulations and the courts require that recipients of Federal financial assistance that is governed by 49 C.F.R. Part 26 seriously consider implementing race-, ethnicity-, and gender-neutral remedies prior to the implementation of race-, ethnicity-, and gender-conscious remedies.⁴⁵ The Ninth Circuit in Western States Paving also found that “the regulations require a state to ‘meet the maximum feasible portion of [its] overall goal by using race neutral means.’⁴⁶

Examples of race-, ethnicity-, and gender-neutral alternatives include, but are not limited to, the following:

- a. Providing assistance in overcoming bonding and financing obstacles;
- b. Relaxing bonding requirements;
- c. Providing technical, managerial and financial assistance;

⁴² See, e.g., Western States Paving, 407 F.3d at 993; Sherbrooke Turf, 345 F.3d at 972; Adarand VII, 228 F.3d at 1179; Eng’g Contractors Ass’n, 122 F.3d at 927; Coral Constr., 941 F.2d at 923.

⁴³ See Croson, 488 U.S. at 507; Drabik J, 214 F.3d at 738 (citations and internal quotations omitted); see also Eng’g Contractors Ass’n, 122 F.3d at 927; Virdi, 135 Fed. Appx. At 268.

⁴⁴ Croson, 488 U.S. at 509-510.

⁴⁵ 49 C.F.R. § 26.51(a) requires recipients of federal funds to “meet the maximum feasible portion of your overall goal by using race-neutral means of facilitating DBE participation.” See, e.g., Adarand VII, 228 F.3d at 1179; Western States Paving, 407 F.3d at 993; Sherbrooke Turf, 345 F.3d at 972. Additionally, in September of 2005, the United States Commission on Civil Rights (the “Commission”) issued its report entitled “Federal Procurement After Adarand” setting forth its findings pertaining to federal agencies’ compliance with the constitutional standard enunciated in Adarand. United States Commission on Civil Rights: Federal Procurement After Adarand (Sept. 2005), available at <http://www.usccr.gov>. The Commission found that ten years after the Court’s Adarand decision, federal agencies have largely failed to narrowly tailor their reliance on race-conscious programs and have failed to seriously consider race-neutral measures that would effectively redress discrimination. See discussion of USCCR Report at Section V.C. below. See also the discussion of Rothe below at Section VII.I, which notes the dissenting opinion by Commissioner Yaki. 499 F.Supp.2d at 864-66.

⁴⁶ 407 F.3d at 993 (citing 49 C.F.R. § 26.51(a)).

- d. Establishing programs to assist start-up firms;
- e. Simplifying bidding procedures;
- f. Providing training and financial aid to all disadvantaged entrepreneurs;
- g. Implementing non-discrimination provisions in contracts and in state law;
- h. Establishing Mentor-protégé programs;
- i. Improving efforts to make prompt payments to smaller businesses;
- j. Identifying small contract solicitations to make contracts more accessible to smaller businesses;
- k. Expanding the advertisement of business opportunities;
- l. Engaging in outreach programs and efforts;
- m. Conducting "How to do business" seminars;
- n. Sponsoring networking sessions throughout the state to acquaint small firms with large firms;
- o. Creating and distributing in MWBE and DBE directories; and
- p. Streamlining and improving the accessibility of contracts to increase small business participation.⁴⁷

Federal Regulation 49 C.F.R. § 26.51(b) provides examples of race-, ethnicity-, and gender-neutral measures that should be seriously considered and utilized. The Ninth Circuit Court of Appeals in Western States Paving held that while the narrow tailoring analysis does not require a governmental entity to exhaust every possible race-, ethnicity-, and gender-neutral alternative, it does “require serious, good faith consideration of workable race-neutral alternatives.”⁴⁸

1.12 ADDITIONAL FACTORS CONSIDERED UNDER NARROW TAILORING

In addition to the required consideration of the necessity for the relief and the efficacy of alternative remedies (race- and ethnicity-neutral efforts), the courts require evaluation of additional factors as listed above.⁴⁹ For example, to be considered

⁴⁷ See 49 C.F.R. § 26.51(b); see, e.g., Croson, 488 U.S. at 509-510; N. Contracting, 473 F.3d at 724; Adarand VII, 228 F.3d 1179; 49 C.F.R. § 26.51(b); Eng'g Contractors Ass'n, 122 F.3d at 927-29.

⁴⁸ Western States Paving, 407 F.3d at 993.

⁴⁹ Eng'g Contractors Ass'n, 122 F.3d at 927.

narrowly tailored, a MWBE- or DBE-type program should include: (1) built-in flexibility;⁵⁰ (2) a good faith efforts provisions;⁵¹ (3) waiver provisions;⁵² (4) a rational basis for goals;⁵³ (5) graduation provisions;⁵⁴ (6) remedies applied only to groups for which there were findings of discrimination;⁵⁵ (7) sunset provisions;⁵⁶ and (8) limitation in the geographical scope of the program to the boundaries of the enacting jurisdiction.⁵⁷

1.13 INTERMEDIATE SCRUTINY ANALYSIS

The Federal Courts of Appeal apply intermediate scrutiny to gender-conscious programs.⁵⁸ The Courts have interpreted this standard to require that gender-based classifications be:

- a. Supported by both "sufficient probative" evidence or "exceedingly persuasive justification" in support of the stated rationale for the program; and
- b. Substantially related to the achievement of that underlying objective.⁵⁹

Under the traditional intermediate scrutiny standard, the court reviews a gender-conscious program by analyzing whether the state actor has established a sufficient factual predicate for the claim that female-owned businesses have suffered discrimination and whether the gender-conscious remedy is an appropriate response to such discrimination. This standard requires the state actor to present "sufficient probative" evidence in support of its stated rationale for the program.⁶⁰ Intermediate

⁵⁰ CAEP I, 6 F.3d at 1009; Associated Gen. Contractors of Ca., Inc. v. Coalition for Economic Equality ("AGC of Ca."), 950 F.2d 1401, 1417 (9th Cir. 1991); Coral Constr. Co. v. King County, 941 F.2d 910, 923 (9th Cir. 1991); Cone Corp. v. Hillsborough County, 908 F.2d 908, 917 (11th Cir. 1990).

⁵¹ CAEP I, 6 F.3d at 1019; Cone Corp., 908 F.2d at 917.

⁵² CAEP I, 6 F.3d at 1009; AGC of Ca., 950 F.2d at 1417; Cone Corp., 908 F.2d at 917.

⁵³ Id.

⁵⁴ Id.

⁵⁵ Western States Paving, 407 F.3d at 998; AGC of Ca., 950 F.2d at 1417.

⁵⁶ Peightal, 26 F.3d at 1559.

⁵⁷ Coral Constr., 941 F.2d at 925.

⁵⁸ See generally, Western States Paving, 407 F.3d at 990 n. 6; Coral Constr. Co., 941 F.2d at 931-932; Equal. Found. v. City of Cincinnati, 128 F.3d 289 (6th Cir. 1997); Eng'g Contractors Ass'n, 122 F.3d at 905, 908, 910; Ensley Branch N.A.A.C.P. v. Seibels, 31 F.3d 1548 (11th Cir. 1994).

⁵⁹ Id.

⁶⁰ Id.

scrutiny, as interpreted by the federal circuit courts of appeal, requires a direct, substantial relationship between the objective of the gender preference and the means chosen to accomplish the objective. The measure of evidence required to satisfy intermediate scrutiny is less than that necessary to satisfy strict scrutiny. Unlike strict scrutiny, courts have found that the intermediate scrutiny standard does not require a showing of government involvement, active or passive, in the discrimination it seeks to remedy.⁶¹ Furthermore, the Eleventh Circuit has held that "[w]hen a gender-conscious affirmative action program rests on sufficient evidentiary foundation, the government is not required to implement the program only as a last resort. . . . Additionally, under intermediate scrutiny, a gender-conscious program need not tie its numerical goals closely to the proportion of qualified women in the market."⁶²

⁶¹ See Eng'g Contractors Ass'n, 122 F.3d at 910.

⁶² *Id.* at 929 (internal citations omitted.)

IV

GENERAL STATUTES AND PROVISIONS REGARDING NCDOT'S DBE, MBE AND WBE PROGRAMS AND H.B. ROWE V. TIPPETT, NCDOT, ET AL

Certain policies and procedures of the NCDOT have been developed in response to, and in accordance with, particular sections of North Carolina general statute [§ Section 136-28.4(b1)] that involve disadvantaged minority-owned businesses (MBEs) and women-owned businesses (WBEs) in highway contracts. Based upon the findings of the NCDOT's Second Generation Disparity Study completed in 2004, NCDOT is required by statute to design, to the extent reasonably practicable, narrowly tailored remedies as identified in the 2004 Study and implement a comprehensive antidiscrimination enforcement policy. In addition, NCDOT is required to review its budget and establish "annual aspirational goals," not "mandatory goals," for MBEs and WBEs. These goals should be expressed as percentages and reflect the overall participation of MBEs and WBEs in state contracts. Id. NCDOT is also required to establish contract-specific goals or project-specific goals for the participation of MWBEs in a manner that is consistent with their availability within each business category and with the degree of statistically significant disparity in contract utilization. Id. In addition, Section 136-28.4 requires that any program that is implemented be narrowly tailored to eliminate the effects of historical and continuing discrimination and their impacts on MWBEs, and to do so in a way that does not impose an undue burden on other contractors. Id.

"Disadvantaged business" is defined for purposes of §136-28.4 as having the same meaning as "disadvantaged business enterprise" in 49 C.F.R. § 26.5, which is a provision in the Federal DBE Program. "Minority" is defined as including only those racial or ethnic classifications identified by a study conducted in accordance with § 136-28.4 that have been subjected to discrimination in the relevant market place and that have been adversely affected in their ability to obtain contracts with NCDOT. North Carolina G.S.A. § 136-28.4(c)(1) and (2).

NCDOT is required to report semi-annually to the Joint Legislative Transportation Oversight Committee about the utilization of MBEs, WBEs, and any program adopted to promote contracting opportunities for those businesses. § 136-28.4(d). Furthermore, NCDOT is required to report to this Committee the results of any subsequent study of availability and utilization that is designed to determine whether the provisions of this section should continue in force and effect. § 136-28.4(d). Section 136-28.4 provides that the Section expires on August 31, 2009. Id. at § 136-28.4(e).

2.1 19A NCAC 02D.1100 – DBE, MBE AND WBE PROGRAMS FOR HIGHWAY AND BRIDGE CONSTRUCTION CONTRACTS

19A NCAC 02D.1101 sets forth the purpose and scope of the North Carolina DBE/MWBE program for highway and bridge construction contracts. NCDOT is required to ensure that DBEs have the opportunity to participate in the performance of contracts financed in whole or in part with Federal funds. NCAC 02D.1101(a). The NCDOT is also required to ensure that MBEs and WBEs have opportunity to participate in the performance of contracts financed with non-Federal funds. Id. at § 02D.1101(b). Contracts financed with Federal funds are required to comply with 49 C.F.R. 23 and 26. Contracts financed with non-Federal funds are required to comply with North Carolina General Statutes 136-28.4 and 49 C.F.R. 23 and 26. NCAC 02D.1101(c). 49 C.F.R. 23 and 26 are expressly incorporated by reference as provided in Section .1100. NCAC 02D.1101(d).

For purposes of the Rules applicable to the NCDOT, DBEs are defined as having the same meaning as shown in 49 C.F.R. § 26 Subpart A; Minority is defined in accordance with North Carolina G.S. 136-28.4; Women are defined in accordance with North Carolina G.S. 136-28.4; and Disadvantaged Minority-owned and Women-owned Business Enterprises have the same meaning as DBEs as shown in 49 C.F.R. 26 Subpart A. 19A NCAC 02D.1102.

NCDOT is required to determine the availability of ready, willing and able DBE, MBE and WBE firms relative to all businesses ready, willing and able to participate in NCDOT projects. 19A NCAC 02D.1108. Goals for DBEs are established in accordance with 49 C.F.R. 26, and goals for MBEs and WBEs are established in accordance with North Carolina G.S. 136-28.4(b1). 19A NCAC 02D.1108(a). The goal or goals are prescribed in the project proposal as a percent of the bidders' construction bid price. Id. The

Contractor is required to exercise all necessary and reasonable steps to ensure that eligible firms will participate in the contract at a percentage that is equal to or greater than that percentage required by the project proposal. 19A NCAC 02D.1108(b).

The participation of DBEs in federally funded projects is counted in accordance with 49 C.F.R. 26 Subpart C. For non-federally funded projects, MBE and WBE participation is counted in accordance with North Carolina G.S. 136-28.4. 19A NCAC 02D.1109. A contractor who does not meet the goals established for a project is considered in non-attainment and is required to comply with good faith obligations set forth in 49 C.F.R. 26 Subpart C and North Carolina G.S. 136-28.4. 19A NCAC 02D.1110.

2.2 NORTH CAROLINA GENERAL STATUTE § 143-128.2. MINORITY BUSINESS PARTICIPATION GOALS

North Carolina General Statute § 143-128.2 provides that the State shall have a verifiable ten percent (10%) goal for participation by minority businesses in the total value of work for each State building project, including building projects done by a private entity on a facility to be leased or purchased by the State. The statute is applicable to local government unit or other public or private entities that receives State appropriations for a building project or other State grant funds for a building project, if the project cost is one hundred thousand dollars (\$100,000) or more. Section 143-128.2(a).

Each city, county, or other local public entity is required to adopt an appropriate verifiable percentage goal for minority business participation in the total value of work for building projects. Id. Entities required to have goals under this subsection are required to make a good faith effort to recruit minority participation in accordance with this section or North Carolina G.S. 143-131(b), as applicable. Id.

A public entity is required to establish, prior to solicitation of bids, the good faith review steps that it will take to make it feasible for minority businesses to submit successful bids or proposals for building projects. § 143-128.2(b) A public entity is required to make good faith efforts as set forth in subsection (e) of this section, while contractors are required to make good faith efforts pursuant to subsection (f) of this section. Section 143-128.2(b).

Before awarding a contract, a public entity is required to develop and implement a minority business participation outreach plan to identify minority businesses that can perform public building projects. The outreach effort must include program activities such as education, recruitment, and interaction between minority businesses and nonminority businesses. Section 143-128.2(e)(1). In addition, at least ten (10) days

prior to the scheduled day of bid opening, the public entities are required to notify minority businesses that have requested to be notified of construction or repair work. Additionally, minority businesses should also be notified who have indicated to the Office of Historically Underutilized Businesses (HUB) an interest in the type of work being bid or the potential contracting opportunities listed in the proposal. *Id.* at (e)(3). Public entities are required to utilize other media likely to inform potential Minority businesses of the bid being sought. *Id.* at (4).

A public entity shall require bidders to undertake good faith efforts to utilize minority businesses, including measures specified by Section 143-128.2(f). The Secretary is required to adopt rules that establish a minimum standard (based on a pre-determined point allocation mechanism) for efforts of inclusion. The point allocations will depend upon the project size, cost, type, and other factors considered relevant by the Secretary. *Id.* The Secretary, in establishing the point system, may not require a contractor to earn more than fifty (50) points, and the Secretary must assign each of the efforts listed in (f) of this subsection at least 10 points. *Id.*

As used in this Section, the term "minority business" means a business in which at least fifty-one percent (51%) is owned by one or more minority persons or socially and economically disadvantaged individuals, or, in the case of a corporation, in which at least fifty-one percent (51%) of the stock is owned by one or more minority persons or socially and economically disadvantaged individuals. Section 143-128.2(g). In addition, the management and daily business operations must be controlled by one or more of the minority persons or socially and economically disadvantaged individuals who own it. *Id.* The term "minority person" is defined in Section 143-128.2(g)(2) as including specific racial and ethnic groups. The term "socially and economically disadvantaged individual" means the same as defined in 15 U.S.C. 637. *Id.* Section 143-128.2(g)(3).

It is provided that nothing in Section 143-128.2 shall be construed to require contractors or awarding authorities to award contracts or subcontracts to (or to make purchases of materials or equipment from) minority-business contractors or minority-business subcontractors who do not submit the lowest responsible, responsive bid or bids. Section 143-128.2(h).

2.3 H.B. ROWE CORP., INC. V. W. LYNDO TIPPETT, NORTH CAROLINA DOT, ET AL; 589 F. SUPP. 2D 587 (E.D.N.C. 2008)

In H.B. Rowe Company v. Tippett, North Carolina Department of Transportation, et al. ("Rowe"), the United States District Court for the Eastern District of North Carolina, Western Division heard a challenge to the State of North Carolina Minority Business

Enterprise and Woman Business Enterprise Program ("MBE Program" or "WBE Program"), which is a State of North Carolina "affirmative action" program administered by the North Carolina DOT ("NCDOT"). The NCDOT MWBE Program challenged in Rowe involves projects funded solely by the State of North Carolina and not projects funded by the Federal Department of Transportation. 589 F.Supp. 2d 587.

BACKGROUND

In this case the Plaintiff, a family-owned road construction business, bid on a NCDOT initiated state-funded project. The NCDOT rejected Plaintiff's bid in favor of the next low bid that had proposed higher minority participation on the project as part of its bid. According to NCDOT, the Plaintiff's bid was rejected because of Plaintiff's failure to demonstrate "good faith efforts" to obtain pre-designated levels of minority participation on the project.

As a prime contractor, Plaintiff Rowe was obligated under the MWBE Program to either obtain participation of specified levels of minority business enterprise and women business enterprise participation as subcontractors, or to demonstrate good faith efforts to do so. For this particular project, NCDOT had set MBE and WBE subcontractor participation goals of ten percent (10%) and five percent (5%), respectively. Plaintiff's bid included 6.6% WBE participation, but no MBE participation. The bid was rejected after a review of Plaintiff's good faith efforts to obtain MBE participation. The next lowest bidder submitted a bid that included 3.3% MBE participation and 9.3% WBE participation. While the next lowest bidder did not obtain the specified level of MBE participation, it was determined to have made good faith efforts to do so. (Order of the District Court, dated March 29, 2007).

North Carolina's MWBE Program "largely mirrors" the Federal Disadvantage Business Enterprise ("DBE") Program, which NCDOT is required to comply with in awarding construction contracts that utilize Federal funds. (589 F.Supp. 2d 587; Order of the District Court, dated September 28, 2007). Like the Federal DBE Program, under North Carolina's MWBE Program, the goals for minority and female participation are aspirational rather than mandatory. Id. An individual target for MBE participation was set for each project. Id.

The Plaintiff filed its complaint in 2003 against the NCDOT and individuals associated with the NCDOT, including the Secretary of the NCDOT, W. Lyndo Tippet. In its complaint, the Plaintiff alleged that the MWBE statute for NCDOT was unconstitutional on its face and as applied. 589 F.Supp. 2d 587.

MARCH 29, 2007 ORDER OF THE DISTRICT COURT

The matter came before the District Court initially on several motions, including the Defendants' Motion to Dismiss or for Partial Summary Judgment, Defendants' Motion to Dismiss the Claim for Mootness and Plaintiff's Motion for Summary Judgment. The Court, in its October 2007 Order, granted in part and denied in part Defendants' Motion to Dismiss or for partial summary judgment; denied Defendants' Motion to Dismiss the Claim for Mootness; and dismissed without prejudice Plaintiff's Motion for Summary Judgment.

The Court held that the Eleventh Amendment to the United States Constitution bars Plaintiff from obtaining any relief against Defendant NCDOT and from obtaining a retrospective damages award against any of the individual defendants in their official capacities. The Court ruled that Plaintiff's claims for relief against the NCDOT were barred by the Eleventh Amendment, and the NCDOT was dismissed from the case as a Defendant. Plaintiff's claims for interest, actual damages, compensatory damages and punitive damages against the individual defendants sued in their official capacities also was held barred by the Eleventh Amendment and were dismissed. But the Court held that Plaintiff was entitled to sue for an injunction to prevent state officers from violating a federal law, and, under the *Ex Parte Young* exception, Plaintiff's claim for declaratory and injunctive relief was permitted to go forward as against the individual defendants who were acting in an official capacity with the NCDOT. The Court also held that the individual defendants were entitled to qualified immunity and therefore dismissed plaintiff's claim for money damages against the individual defendants in their individual capacities. Order of the District Court, dated March 29, 2007.

Defendants argued that the recent amendment to the MWBE statute rendered Plaintiff's claim for declaratory injunctive relief moot. The new MWBE statute adopted in 2006, according to the Court, does away with many of the alleged shortcomings argued by the Plaintiff in this lawsuit. The Court found the amended statute has a sunset date in 2009; specific aspirational participation goals by women and minorities are eliminated; defines "minority" as including only those racial groups which disparity studies identify as subject to underutilization in state road construction contracts; explicitly references the findings of the 2004 Disparity Study and requires similar studies to be conducted at least once every five (5) years; and directs NCDOT to enact regulations targeting discrimination identified in the 2004 and future studies.

The Court held, however, that the 2004 Disparity Study and amended MWBE statute do not remedy the primary problem which the Plaintiff complained of: the use of remedial race- and gender- based preferences allegedly without valid evidence of past racial and gender discrimination. In that sense, the Court held that the amended MWBE statute

continued to present a live case or controversy and accordingly denied the Defendants' Motion to Dismiss Claim for Mootness as to Plaintiff's suit for prospective injunctive relief. Order of the District Court, dated March 29, 2007.

The Court also held that since there had been no analysis of the MWBE statute apart from the briefs regarding mootness, Plaintiff's pending Motion for Summary Judgment was dismissed without prejudice. Order of the District Court, dated March 29, 2007.

SEPTEMBER 28, 2007 ORDER OF THE DISTRICT COURT

On September 28, 2007, the District Court issued a new order in which it denied both the Plaintiff's and the Defendants' Motions for Summary Judgment. The Plaintiff claimed that the 2004 Disparity Study is the sole basis of the MWBE statute, that the study is flawed, and that it therefore does not satisfy the first prong of strict scrutiny review. The Plaintiff also argued that the 2004 study tends to prove the absence of discrimination in the case of women, and, finally, that the MWBE Program fails the second prong of strict scrutiny review in that it is not narrowly tailored.

The Court found summary judgment was inappropriate for either party and that there are genuine issues of material fact for trial. The first and foremost issue of material fact, according to the Court, was the adequacy of the 2004 Disparity Study as used to justify the MWBE Program. Therefore, because the Court found there was a genuine issue of material fact regarding the 2004 Study, summary judgment was denied on this issue.

The Court also held there was confusion surrounding the basis of the MWBE Program, whether it was based solely on the 2004 Study or also on the 1993 and 1998 Disparity Studies. Therefore, the Court held a genuine issue of material fact existed on this issue and denied summary judgment (Order of the District Court, dated September 28, 2007).

DECEMBER 9, 2008 ORDER OF THE DISTRICT COURT (589 F.SUPP. 2D 587)

The District Court on December 9, 2008, after a bench trial, issued an Order that found as a fact and concluded as a matter of law that the Plaintiff failed to satisfy its burden of proof...that the North Carolina Minority and Women's Business Enterprise program, enacted by the state legislature to affect the awarding of contracts and subcontracts in state highway construction, violated the United States Constitution.

The Plaintiff, in its Complaint filed against the NCDOT, alleged that N.C. Gen. St. § 136-28.4 is unconstitutional on its face and as applied and that the NCDOT, while administering the MWBE program, violated the Plaintiff's rights under the federal law and the United States Constitution. The Plaintiff requested a declaratory judgment that the MWBE program be invalidated, while also seeking actual and punitive damages.

As a prime contractor, the Plaintiff was obligated under the MWBE program to either obtain participation of specified levels of MBE and WBE subcontractors, or to demonstrate that good faith efforts were made to do so. Following a review of Plaintiff's good faith efforts to obtain minority participation on the particular contract that was the subject of Plaintiff's bid, the bid was rejected. The Plaintiff's bid was rejected in favor of the next lowest bid, which had proposed higher minority participation on the project as part of its bid. According to NCDOT, the Plaintiff's bid was rejected because of the Plaintiff's failure to demonstrate good faith efforts to obtain pre-designated levels of minority participation on the project. 589 F.Supp. 2d 587.

NORTH CAROLINA'S MWBE PROGRAM

The MWBE program was implemented following amendments to N.C. Gen. Stat. §136-28.4. Pursuant to the directives of the statute, the NCDOT promulgated regulations governing administration of the MWBE program. See N.C. Admin. Code tit. 19A, § 2D.1101, *et seq.* The regulations had been amended several times and provide that NCDOT shall ensure that MBEs and WBEs have the maximum opportunity to participate in the performance of contracts financed with non-Federal funds. N.C. Admin. Code Tit. 19A § 2D.1101.

North Carolina's MWBE program, which affected only highway bids and contracts funded solely with state money, according to the District Court, largely mirrored the federal DBE program that NCDOT is required to comply with in awarding construction contracts that utilize federal funds. 589 F.Supp. 2d 587. Like the federal DBE program under North Carolina's MWBE program, the targets for minority and female participation were aspirational rather than mandatory. Individual targets for disadvantaged business participation were set for each individual project. N.C. Admin. Code tit. 19A § 2D.1108. In determining what level of MBE and WBE participation was appropriate for each project, the NCDOT would take into account "the approximate dollar value of the contract, the geographical location of the proposed work, a number of the eligible funds in the geographical area, and the anticipated value of the items of work to be included in the contract." *Id.* The NCDOT would also consider "the annual goals mandated by Congress and the North Carolina General Assembly." *Id.*

A firm could be certified as a MBE or WBE by showing NCDOT that it is "owner controlled by one or more socially and economically disadvantaged individuals." NC Admin. Code tit. 19A, § 2D.1102.

The District Court stated the MWBE program did not directly discriminate in favor of minority and women contractors but rather "encouraged prime contractors to favor MBEs and WBEs in subcontracting before submitting bids to NCDOT." 589 F.Supp. 2d 587. In determining whether the lowest bidder is "responsible," NCDOT would consider whether the bidder obtained the level of certified MBE and WBE participation previously specified in the NCDOT project proposal. If not, NCDOT would consider whether the bidder made good faith efforts to solicit MBE and WBE participation. N.C .Admin. Code tit. 19A§ 2D.1108.

There were multiple studies presented to the North Carolina General Assembly in the years 1993, 1998 and 2004. The 1998 and 2004 studies concluded that disparities in the utilization of minority and women contractors persist and that there remains a basis for continuation of the MWBE program. The MWBE program, as amended after the 2004 study, includes provisions that replace the ten percent and five percent goals with contract-specific participation goals created by the NCDOT, establish a sunset provision whereby the statute expiring on August 31, 2009, and provide reliance on a disparity study produced in 2004.

The MWBE program, as it stood at the time of this decision, provides for the NCDOT to dictate "to prime contractors the express goal of MBE and WBE subcontractors to be used on a given project." The regulation continues to note that "instead of the state hiring the MBE and WBE subcontractors itself, the NCDOT makes the prime contractor solely responsible for vetting and hiring these subcontractors. If a prime contractor fails to hire the goal amount, it must submit efforts of 'good faith' attempts to do so." 589 F.Supp. 2d 587.

COMPELLING INTEREST

The District Court held that the NCDOT established a compelling governmental interest to have the MWBE program. The Court noted that the United States Supreme Court in Croson made clear that a State Legislature has a compelling interest in eradicating and remedying private discrimination in the private subcontracting inherent in the letting of road construction contracts. 589 F.Supp. 2d 587, citing Croson, 488 U.S. at 492. The District Court found that the North Carolina Legislature relied on a strong basis of evidence in concluding that prior race discrimination in North Carolina's road construction industry existed so as to require remedial action.

The Court held that the 2004 Disparity Study demonstrated the existence of previous discrimination in the specific industry and locality at issue. The Court stated that disparity ratios provided for in the 2004 Disparity Study highlighted the

underutilization of MBEs by prime contractors bidding on state funded highway projects. In addition, the Court found that evidence relied upon by the legislature demonstrated a dramatic decline in the utilization of MBEs during the program's suspension in 1991. The Court also found that anecdotal support relied upon by the legislature confirmed and reinforced the general data demonstrating the underutilization of MBEs. The Court held that the NCDOT established that, "based upon a clear and strong inference raised by this Study, they concluded minority contractors suffer from the lingering effects of racial discrimination." 589 F.Supp. 2d 587.

With regard to WBEs, the Court applied a different standard of review. The Court held legislative scheme, as it relates to MWBEs, must serve an important governmental interest and must be substantially related to the achievement of those objectives. The Court found that the NCDOT established an important governmental interest. The 2004 Disparity Study provided that the average contracts awarded to WBEs are significantly smaller than those awarded non-WBEs. The Court held that NCDOT established, based upon a clear and strong inference raised by the Study, women contractors suffer from past gender discrimination in the road construction industry.

NARROWLY TAILORED

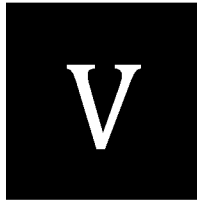
The District Court noted that the Fourth Circuit of Appeals lists a number of factors to consider while analyzing a statute for narrow tailoring: (1) the necessity of the policy and the efficacy of alternative race neutral policies; (2) the planned duration of the policy; (3) the relationship between the numerical goal and the percentage of minority group members in the relevant population; (4) the flexibility of the policy, including the provision of waivers if the goal cannot be met; and (5) the burden of the policy on innocent third parties. 589 F.Supp. 2d 587, quoting Belk v. Charlotte-Mecklenburg Board of Education, 269 F.3d 305, 344 (4th Cir. 2001).

The District Court held that the legislative scheme in N.C. Gen. Stat. § 136-28.4 is narrowly tailored to remedy private discrimination of minorities and women in the private subcontracting inherent in the letting of road construction contracts. The District Court's analysis focused on narrowly tailoring factors (2) and (4) above, namely the duration of the policy and the flexibility of the policy. With respect to the former, the Court held the legislative scheme provides the program be reviewed, at least every five years, to revisit the issue of utilization of MWBEs in the road construction industry. N.C. Gen. Stat. §136-28.4(b). Further, the legislative scheme that the District Court found provides a sunset provision so that the program will expire on August 31, 2009, unless renewed by an act of the legislature. Id. at § 136-28.4(e). The Court held these provisions ensured the legislative scheme last no longer than necessary.

The Court also found that the legislative scheme enacted by the North Carolina legislature provides flexibility insofar as the participation goals for a given contract or determined on a project by project basis. § 136-28.4(b)(1). Additionally, the court found the legislative scheme in question is not overbroad because the statute applies only to "those racial or ethnicity classifications identified by a study conducted in accordance with this section that had been subjected to discrimination in a relevant marketplace and that had been adversely affected in their ability to obtain contracts with the Department." § 136-28.4(c)(2). The Court found that Plaintiff failed to provide any evidence that indicates minorities from non-relevant racial groups had been awarded contracts as a result of the statute.

The Court held that the legislative scheme is narrowly tailored to remedy private discrimination of minorities and women in the private subcontracting inherent in the letting of road construction contracts and is therefore found that § 136-28.4 is constitutional.

☞ **Ongoing Review.** The analysis above represents a brief summary of the legal framework pertinent to implementation of MWBE, DBE, or race-, ethnicity-, or gender-neutral programs. Because this is a dynamic area of the law, the framework is subject to ongoing review as the law continues to evolve.



RACE- AND GENDER NEUTRAL PROGRAMS, GOAL SETTING AND GOOD FAITH EFFORTS OF NCDOT

Federal regulations and the courts 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, NCDOT has sought to achieve its overall goal by implementing an extensive range of race and gender-neutral programs and activities. This chapter describes the programs and activities that NCDOT has implemented in this regard.

3.1 NCDOT EXTENSIVE RACE AND GENDER-NEUTRAL PROGRAMS

The Ninth Circuit in Western States Paving also found that “the regulations require a state to ‘meet the maximum feasible portion of [its] overall goal by using race neutral means. While the narrow tailoring analysis does not require a governmental entity to exhaust every possible race-, ethnicity-, and gender-neutral alternative, it does “require serious, good faith consideration of workable race-neutral alternatives.”⁶³ 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. All firms must comply with applicable requirements of federal regulation 49 CFR part 26 in the award and administration of federally assisted contracts. A failure by the firm to comply with these requirements is a material breach of contract which will result in the termination of a contract or such other remedy, as the department deems necessary.

Even when DBE or MWBE goals are not set on all projects, NCDOT still encourages firms to utilize DBE and MWBE contractors and suppliers. If the advertised goal is zero, the

⁶³ Western States Paving, 407 F.3d at 993.

contractor is expected to continue to recruit DBEs and report the use of DBEs during 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

A general description of NCDOT's race and gender neutral programs includes the following:

- a. Establishing a Business Opportunity and Workforce Development (BOWD) Office that administers 13 outreach, marketing, training and financial assistance programs and activities
- b. 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
- c. Hiring 10 business consultants to assist in delivery of supportive services to DBEs and non-DBEs
- d. Establishing a Small Business Enterprise (SBE) Program that is race and gender-neutral
- e. Establishing a Small Professional Service Firm (SPSF) Program that is race and gender-neutral
- f. 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 have facilitated the development of 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). It also facilitates the unbundling of large contracts.
- g. Creating an electronic NCDOT Business Directory that contains the names and addresses of all firms (including DBEs, MWBEs and non-DBEs) along with their certification status, prequalification status, work code, Districts of the state in which the firm supplies services and contact information. And
- h. Continuous programmatic innovations, such as the SPSF Program, extension of the SBE program throughout the Department, and improvements in database tracking and monitoring.

3.2 DETAILED DESCRIPTION OF RACE AND GENDER-NEUTRAL PROGRAMS

RACE AND GENDER-NEUTRAL PROGRAMS OF BUSINESS OPPORTUNITY AND WORKFORCE DEVELOPMENT (BOWD)

BOWD's primary mission is to assist in creating a level playing field, administer programs that are designed to enhance business capacity, and monitor compliance with federal and state regulations aimed at eliminating discrimination. It sponsors the activities and programs described below on a regular basis:

- a. Outreach –ongoing outreach with DBEs and prime contractors to facilitate networking and business opportunities. The staff reviews potential contracting opportunities on a monthly basis and makes contact via email, phone, and in person with the prime contracting and DBE subcontractors. The staff also participates in numerous conferences, meetings, and programs sponsored by other agencies to promote an awareness of contracting opportunities for DBE and non-DBE firms. Throughout the year a series of workshops, entitled "Understanding of Government Small, Minority and Women Business Certification Programs", are conducted. These workshops seek to explain the certification process, describe services available to certified firms, define various categories of certification, explain eligibility criteria, and assist applicants with certification packages. The workshops are designed to assist contractors and vendors interested in doing business with NCDOT and increasing the probability of securing contracts to increase visibility, marketability and business development. During 2008, five workshops were held throughout the State. During 2007 and 2008, the NCDOT organized four outreach workshops that were held to acquaint small, minority and women-owned businesses with the project opportunities available through the SBE program. The workshops were held on March 29, 2007 in Greensboro North Carolina, March 31, 2008 in Wilson North Carolina, April 14, 2008 at RTP North Carolina, and January 15, 2008 in Winston-Salem North Carolina. NCDOT also held meetings with selected prime contractors who have achieved success in meeting DBE goals to help the department identify the best practices.
- b. Networking Conference –an annual conference for DBEs, transportation agencies, and prime contractors to facilitate networking, training and business opportunities.
- c. Business Financing –a partnership with a Raleigh-area nonprofit corporation to create a loan program for DBE firms. The loan program is administered by the United States Department of Agriculture's Rural Program. The USDA Intermediary Relending Program makes business loans available to small businesses.
- d. Business Training Program - a 9-day training program for highway construction firms. The Entrepreneurial Development Program has been in existence for twenty two (22) years and has provided firms opportunities in the highway construction industry.

- e. Executive Management Program – a partnership with a Durham-area non-profit corporation to establish the Construction Executive Management Program for firms in North Carolina. The One-week program provides DBE business owners with executive-level management training at the UNC Kenan-Flagler Business School in Chapel Hill, NC.
- f. Engineering Technical Assistance Program – management assistance for DBE firms completing contracts as a prime or subcontractor on a highway project with the assistance of construction project managers and licensed professional engineers.
- g. Plan Room and Technical Assistance –operation of three Plan Room locations in North Carolina that offer DBE firms access to plans and specification on NCDOT projects and technical assistance in preparing bid and quotations on NCDOT projects. Plan room consultants also offer assistance of DBE and non-DBE firms in marketing, finance, and operations management.
- h. DBE and non-DBE Training Curriculum –An array of business training courses for DBE and non-DBE firms to improve their operational skill and business acumen in the highway construction industry. Courses include but are not limited to:
 - 1. OSHA Safety
 - 2. Quick Books
 - 3. Sediment and Erosion Certification
 - 4. Flagger Certification
 - 5. Work zone Traffic Control Certification
 - 6. Highway General Contractors License Preparation Course
- i. Business Coaching Services–staff meets routinely with DBE and non-DBE firms to develop their business strategy and marketing efforts to secure NCDOT contracts.
- j. Financing and Bonding Application Assistance –referral and application preparation assistance to DBE and non-DBE firms seeking bonding or business financing. BOWD relies upon a partnership with a Durham-based non-profit corporation to expedite loan and bonding applications.
- k. Financial Accounting Assistance –financial assistance for select firms that are in need of financial support to improve their financial accounting in preparation for capital market access.
- l. Marketing Assistance –direct support to select DBE and non-DBE firms in need of increased marketing materials and a business website.

m. Mentor-Protégé Program –pursues Mentor/Protégé relationships for DBE firms to connect them with a mentor to provide guidance for business development and growth. NCDOT implements a Mentor protégé program in accordance with guidelines stipulated by the State Contractual Services Engineer. It is not mandatory that contractors participate in this program as a condition for bidding on projects. A Mentor is considered a contractor who teaches a DBE or MBE/WBE how to fully perform items of work and advises them on their professional growth over a period of time. A protégé is a DBE or MBE/WBE who received help, guidance, training and support from a contractor who has expertise in your chosen area of construction. The protégés professional growth is guided by the Mentor. Contractors seeking to participate in this program must be certified by NCDOT. The Mentor and protégé must have an approved application on file with the State Contractual Services Engineer.

n. Contractors are required to submit a Mentor Protégé Business Plan for review and approval by the Department. The plan outlines the following: commitment of both parties involved; the Mentor's role in the program; resources and manpower committed by the Mentor; personnel supplied by the Mentor for purposes of teaching and training; the protégés work crew that will be involved; timelines and milestones for the protégés work; the protégés role in the program; items of work that the protégés will perform; and the expectations in regards to education, supervision resources and man power.

NCDOT AND BOWD PARTNERSHIPS WITH SUPPORTIVE SERVICES ORGANIZATIONS

NCDOT and BOWD have established partnerships with 10 organizations that provide race and gender-neutral supportive services to DBEs and to non-DBEs in areas such as training, outreach and other race and gender neutral activities. The partners are listed below:

- a. Raleigh Business & Technology Center -Raleigh, NC
- b. North Carolina Institute of Minority Economic Development - Durham, NC
- c. Carolina Associated General Contractors - Charlotte, NC
- d. United Minority Contractors of North Carolina - Raleigh, NC
- e. Carolinas Minority Supplier Development Council - Charlotte, NC
- f. North Carolina MWBE Coordinators Network - Raleigh, NC
- g. Roanoke Development Corporation - Roanoke Rapids, NC
- h. Cumberland Regional Improvement Corporation - Fayetteville, NC

- i. North Carolina A&T State University - Greensboro, NC
- j. North Carolina State University Civil Engineering Extension - Raleigh, NC

CONSULTANTS RETAINED BY BOWD TO HELP IMPLEMENT RACE AND GENDER-NEUTRAL PROGRAMS

BOWD uses a number of Business Consultants to deliver DBE Supportive Services. Those consultants include the following:

- a. Nu Level Strategic Solutions -Charlotte, NC
- b. Summit Engineering Consultants - Hillsborough, NC
- c. Concept Construction - Charlotte, NC
- d. Harris Consulting - Louisville, KY
- e. V.K. Fields Public Relations - Raleigh, NC
- f. Wrighway International - Durham, NC
- g. Aldridge Consulting - Charlotte, NC
- h. Clark Jones Group - Wake Forest, NC
- i. Kellenberger Engineering - Raleigh, NC
- j. Fusion Multicultural Marketing - Durham, NC
- k. The Roper Group - Raleigh, NC
- l. Aswebpros - Raleigh, NC

ESTABLISHING A SMALL BUSINESS ENTERPRISE (SBE) PROGRAM THAT IS RACE AND GENDER-NEUTRAL

The Small Business Enterprise (SBE) Program provides contracting opportunities for firms that meet the eligibility criteria. The benefit is that SBEs compete against each other (i.e. firms that are comparably situated in their industries and markets). This program gives smaller businesses with annual gross incomes up to \$1.5 million(excluding materials) the opportunity to participate in the highway contracting industry. The goal of the program is for the contractor to gain experience and expand their knowledge base and opportunities.

The SBE program was created by G.S. 136-28.10 (Highway Fund and Highway Trust Fund Small Project Bidding). Specifically, 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. There is no prequalification for SBE contractors other than being certified as a small business. Completion of the "SBE Contractor's Self Certification" form is a requirement of certification.

NCDOT's CONTRACT MONITORING AND REPORTING ON MASTER DBE TRAINING SCHEDULE

NCDOT, through its internal contract monitoring and reporting unit, maintains a log of all presentations made to DBEs, contract monitoring assistance provided, assistance provided regarding the procurement of services, assistance provided to individual contractors, training assistance provided to DBEs, and assistance provided to municipal counties and school boards in regards to the utilization of DBE and MBE/WBE's. These logs record the date and division location at which assistance was rendered.

ESTABLISHING A SMALL PROFESSIONAL SERVICE FIRM (SPSF) PROGRAM THAT IS RACE- AND GENDER-NEUTRAL

The SPSF Program was implemented April 15, 2008. Contracts awarded through the SPSF Program contracts are race - and gender- neutral. The program does not weight preferences based on race, gender or ethnic status. Assuming that the outcome in of an evaluation of bidders is equal, the team using a SPSF is given priority consideration.

ELECTRONIC DATABASE AND ADVANCED TRACKING AND MONITORING SYSTEM

Creating an electronic NCDOT Business Directory that contains the names and addresses of all firms (including DBEs, MWBEs and non-DBEs) along with their certification status, prequalification status, work code, Districts of the state in which the firm supplies services and contact information. Real-time information about firms doing business with the NCDOT that are certified through the Unified Certification Program is available in the Directory of Transportation Firms. The Directory Can Be Accessed Electronically on the NCDOT's Home Page. Firms that have been DBEs certified or listed in the directory. The Department implemented SAP in 2003. The Steering Committee was formed in 2004 to spearhead the initiative to enhance the system. The system went live in December 2005. Since then, modifications have been made to the system to capture program participation. The Department captures DBE and MBE/WBE commitment, awards and attainment data for various categories of contracting, including prime contracting and subcontracting. Specific transactions are recorded, including the advertised goal, the final contract goal, and all subcontractor payments. Presentations have been held statewide in an effort to educate the DOT's employees about not only the Department's requirements but also requirements associated with third parties or municipalities. System course material has been revised to include system

enhancements for capturing the contract advertised goal, determining the final goal and subcontractor payments. Because this was a very large initiative and course materials updated if there are system enhancements. Every Division operates differently in different aspects (e.g. Transportation, Aviation, and Rail). NCDOT designates individuals who enter contract data into the Financial Systems. Those contracts are scanned and linked to Purchase Order Contracts. The contracts are monitored to ensure that the correct forms are scanned with the PO Contract. This Unit also works with the FHWA to ensure that all requirements are being met. A bi-annual Uniform FHWA Report is submitted to FHWA.

DESIGNING SIX “LEVELS OF CONTRACTING” RISK TO INCREASE RACE-NEUTRAL CONTRACTING, REDUCE BONDING REQUIREMENTS AND INCREASE SUBCONTRACTING OPPORTUNITIES

Designing six “Levels of Contracting” Risk that are associated with the risk inherent in a contract award (i.e. Level I – Level VI). The lowest levels of risk involve small value contracts, which do not require payment or performance bonds and are executed with informal bid procedures. In contrast, the highest level of risk involves contractor prequalification, payment and performance bonds, very large contracts, and formal bid procedures. The varying levels of risk have facilitated the development of 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). It also facilitates unbundling large contracts. The Levels are given below:

Level I: Fully Operated Rental Equipment (FORE) Contracts

This is the lowest level of risk to a contractor. In order to be considered by NCDOT, a contractor must complete a FORE proposal (Form RE-1) and submit competitive prices. If accepted, a purchase order is issued and the contractor is considered “on call.” District and County Maintenance offices maintain their own list of FORE contractors. No further prequalification or certification is needed to be considered for a FORE contract.

Level II: Subcontractor

This is the next level of risk for a contractor. A contractor can perform as a subcontractor on a Purchase Order Contract (POC) project let out of a field office or a larger Transportation Improvement Program (TIP) project centrally let out of Raleigh. As of January 1, 2009, to be qualified as a subcontractor or prime contractor on a POC, all contractors (with the exception of SBEs) must complete a subcontractor prequalification application or prime contractor prequalification application. Subcontractors must be prequalified prior to starting work on a POC, but they do not have to be bonded. All bonding requirements, if they exist, fall on the prime contractor.

Level III: Prime Contractor on Purchase Order Contracts Less than \$300,000

This level refers to prime contractors on small Purchase Order Contracts. To be qualified to be a prime contractor for NCDOT projects, the contractor must be prequalified. Purchase Order Contracts are prepared, let and awarded through the 14 Division Offices and specific units. In accordance with G.S. 136-28.1, these contracts are not to exceed one million two hundred thousand dollars (\$1,200,000). POCs require at least three informal bids to be solicited. The term “informal bids” in this regard refers to a written bid that is not advertised. The contract is awarded the lowest responsible bidder. A Contractor’s License (issued by the N.C. Licensing Board for General Contractors) is required in order to bid on any non-federal aid project where the contract value is \$50,000 or more. Typically, PO contracts that are \$300,000 or less do not require Performance or Payment bonds.

Most contracts at this level are self performed. If the contractor wishes to subcontract out any portion of the work, he must first get the approval of the Engineer, and the subcontractor must be prequalified as a Subcontractor. The contractor is also responsible for following the Department’s prompt payment policy to subcontractors and for meeting DBE or MWBE project specific goal(s).

Level IV: Small Business Enterprise (SBE) Contract

The Small Business Enterprise (SBE) Program provides contracting opportunities for firms that meet the eligibility criteria. The benefit is that SBEs compete against each other, i.e. firms that are comparably situated in their industries and markets. This program gives smaller businesses, with annual gross incomes up to \$1.5 million (excluding materials) the opportunity to participate in the highway contracting industry. The goal of the program is for the contractor to gain experience and expand their knowledge base and opportunities.

The SBE program was created by G.S. 136-28.10 (Highway Fund and Highway Trust Fund Small Project Bidding). Specifically, 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 to its have been received. There are no prequalification for SBE contracts other than being certified as a small business. Completion of the “SBE Contractor’s Self Certification” form is a requirement of certification.

Level V: Prime Contractor on Purchase Order Contract up to \$1.2 million

At this level contractors are considered prime on Purchase Order Contracts up the \$1.2 million threshold. The contractor must be prequalified as a prime contractor.

Consistent with the procedures for awarding purchase order contracts, they are let at the 14 Division offices and specific central units and do not exceed one million two hundred thousand dollars (\$1,200,000). POCs require that at least three informal bids be solicited.

When the total value of a Purchase Order Contract exceeds three hundred dollars (\$300,000), a performance bond and payment bond in the amount of 100 percent of the construction contract are required of the prime contractor. The contractor is also responsible for following the Department's prompt payment policy to subcontractors and for meeting DBE or MWBE project specific goal(s).

Level VI: Prime Contractor on Centrally Let Contracts

Centrally let projects are unlimited in the value and thereby carry the highest risk among all contracts. Typically, these projects have many subcontractors, including 2nd or 3rd tier subcontractors. Contractors must be bonded. The prequalification of prime contractors on Centrally Let project requires greater consistence with federal and state regulations. NCDOT engages in numerous race and gender-neutral activities and programs to increase opportunities for DBEs and MWBEs.



THE RELEVANT MARKET AREA AND THE AVAILABILITY OF QUALIFIED, WILLING AND ABLE FIRMS

Summary of Findings Regarding NCDOT's Relevant Market

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.

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. 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.

Detailed Explanation of how the Market area was Derived

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 analyzed each against the following criteria:

- a. The extent to which the goods and services in the categories are homogeneous, that is interchangeable one for the other;
- b. The extent to which qualified, willing and able producers of the goods and services are substitutable one for the other; and
- c. The extent to which qualified, willing and able producers are located within the affected area

The first requirement is that the goods and services that are provided by producers in the relevant market must be homogeneous. This means that they are interchangeable for each other; but not that they are identical. The homogeneity of products and services also requires producers to be substitutable for each other. These two conditions, i.e. homogeneity and substitutability, help to define the product market area. In addition to the product market, there is also the geographic market area. The geographic market defines the boundaries within which the competition among producers occurs. For example, if we were investigating monopoly power, we would have to identify the area that is affected by the anticompetitive practices. This area is considered to be the "affected market". Some studies of market concentration define the affected market as the region where 15% or more of the market is controlled by two

or slightly more producers. The important point is that firms providing similar goods and services within the affected market experience the adverse effects of monopoly power. Analogously, disparity studies have generally defined the "affected market" as the geographic area that contains the headquartered locations of 80% or more of the vendors that pursue work with the governmental agency under investigation.

With this in mind, the first step in determining the relevant market area is to identify the homogeneous goods and services that are provided to the NCDOT and the firms that provide them. The goods and services must be interchangeable, and the producers must be substitutable. The next step is to determine the "affected market". This area is defined as the geographic boundary within which 80% or more of the producers are located, who supply the homogeneous goods and services. In summary, 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.

NCDOT'S PRODUCT MARKET CHARACTERISTICS: CENTRALLY PRIME CONSTRUCTION PROJECTS VS CENTRALLY LET SUBCONTRACTS, POCs AND SBE CONTRACTS

In the analysis that follows, we will see 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 the first market while prequalified subcontractors and certified SBEs operate in the second 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 across the 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. To illustrate this point, consider the following two observations:

- a. Between fiscal year 2004 and fiscal years 2008, centrally let prime contract awards made to non-DBE/MWBEs have ranged in value from \$296,617 to \$192,040,143. For DBE/MWBEs, they have 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.

- b. In contrast to centrally let prime contracts, 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. POCs awarded to non-MWBEs ranged in value from \$1.00 to \$1,229,877. For MWBEs, they ranged from \$1.00 to \$222,700. The median value of a POC was \$3,083 for non-MWBEs and it was \$633 for MWBEs.
- c. 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 who perform centrally let projects, 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 the services provided by prequalified subcontractors are interchangeable on centrally let subcontracts, POC's and SBE awards, those services are not interchangeable with the ones provided by prequalified prime contractors on centrally let projects.
- d. The services provided by SBE contractors are interchangeable with those provided by prequalified subcontractors on centrally let projects and POCs. But SBE services are not interchangeable with the services provided by prequalified prime contractors on centrally let projects. Contracts awarded to SBEs who were non-MWBEs ranged in value from \$44 to \$495,000. SBE firms that were also 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. The average size of an SBE contract is smaller than is the average size of a centrally let prime contract. More importantly, certified SBE's do not have revenue study see \$1.5 million. The ceiling means that SBEs are not capable of performing most centrally let prime contracts. However, certified SBEs are capable of performing the majority of centrally let subcontracts because 75% of centrally let subcontracts awards were less than \$175,502.

NCDOT'S GEOGRAPHIC MARKET AREA: PREQUALIFIED PRIME CONTRACTORS VS PREQUALIFIED SUBCONTRACTORS AND CERTIFIED SBES

The geographic boundary, or "affected market" is defined as that region within which approximately 80 percent or more of the firms pursuing work with the NCDOT have a principal place of business. Using this criterion, the geographic market area for prequalified prime contractors is not necessarily contiguous with that for prequalified subcontractors and certified SBES. To illustrate this point, Figure 1 records the state location of prequalified prime contractors, prequalified subcontractors, certified SBE contractors and certified DBEs.

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 prime contractors in the states are 47.0%, 9.4%, 6.3%, 5.1%, 4.8%, and 3.6% respectively-- for 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 prequalified subcontractors (see Figure 1 and Map 1). Since 98.9% of SBES are located within the State of North Carolina, we let their affected area be contiguous with the State boundaries (see Map 2).

In summary, this section finds that the 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.

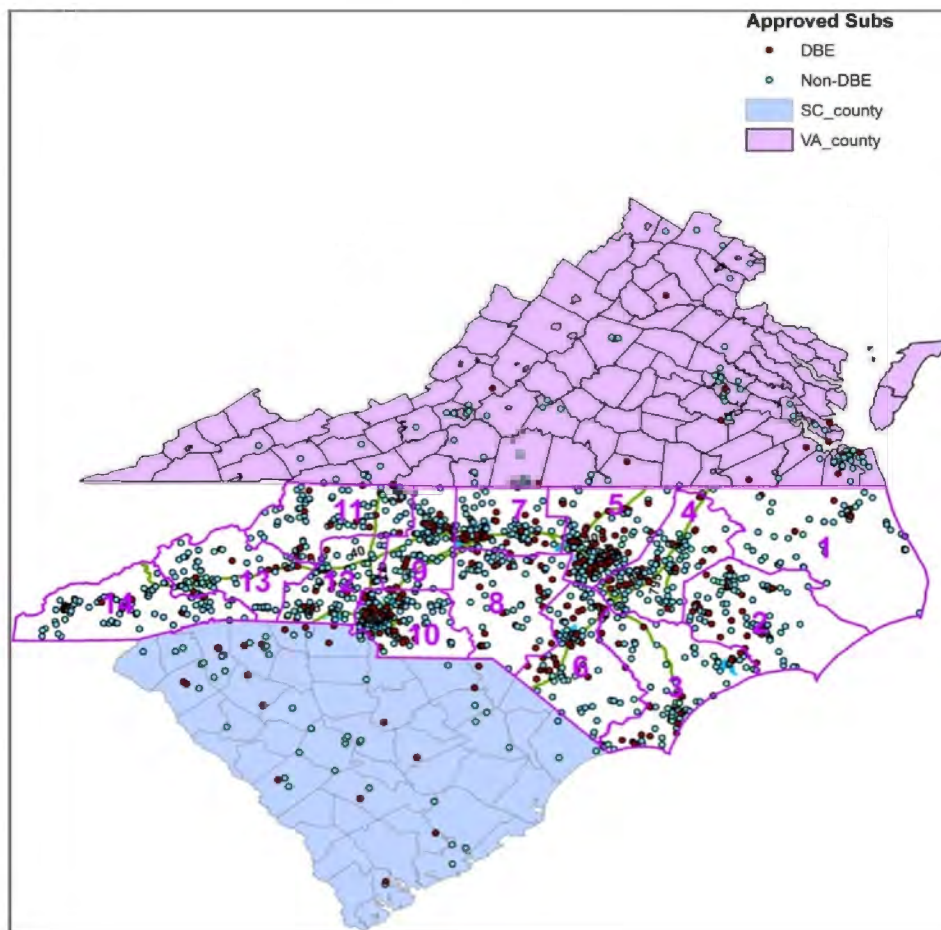
Figure 5.1: Geographic Location of Prequalified Primes, Subcontractors and Certified SBEs

State	No. Primes	% Primes	No. Subs	% Subs	No. SBEs	% SBEs
	No. Firms	Percentage	No. Firms	Percentage	No. Firms	Percentage
Total	413	100.0%	1285	100.0%	1002	100.0%
NC	194	47.0%	973	75.7%	991	98.9%
VA	39	9.4%	91	7.1%	5	.5%
SC	26	6.3%	68	5.3%	1	.1%
FL	21	5.1%	10	.8%		.0%
TN	20	4.8%	17	1.3%	1	.1%
GA	15	3.6%	27	2.1%	2	.2%
PA	13	3.1%	15	1.2%	1	.1%
OH	10	2.4%	10	.8%		.0%
MD	9	2.2%	12	.9%	1	.1%
NY	8	1.9%	6	.5%		.0%
IN	6	1.5%	3	.2%		.0%
MI	5	1.2%	5	.4%		.0%
TX	4	1.0%	5	.4%		.0%
IA	4	1.0%	1	.1%		.0%
KY	3	.7%	5	.4%		.0%
IL	3	.7%	4	.3%		.0%
AL	3	.7%	4	.3%		.0%
WI	3	.7%	3	.2%		.0%
MO	3	.7%	3	.2%		.0%
CT	3	.7%	3	.2%		.0%
CO	3	.7%	2	.2%		.0%
MN	3	.7%		.0%		.0%
CA	3	.7%		.0%		.0%
NE	2	.5%	1	.1%		.0%
MS	2	.5%	1	.1%		.0%
WV	1	.2%	3	.2%		.0%
NJ	1	.2%	2	.2%		.0%
MA	1	.2%	2	.2%		.0%
WA	1	.2%	1	.1%		.0%
NH	1	.2%	1	.1%		.0%
KS	1	.2%	1	.1%		.0%
OR	1	.2%		.0%		.0%
ME	1	.2%		.0%		.0%
LA		.0%	2	.2%		.0%
SK		.0%	1	.1%		.0%
OK		.0%	1	.1%		.0%
NS		.0%	1	.1%		.0%
BC		.0%	1	.1%		.0%

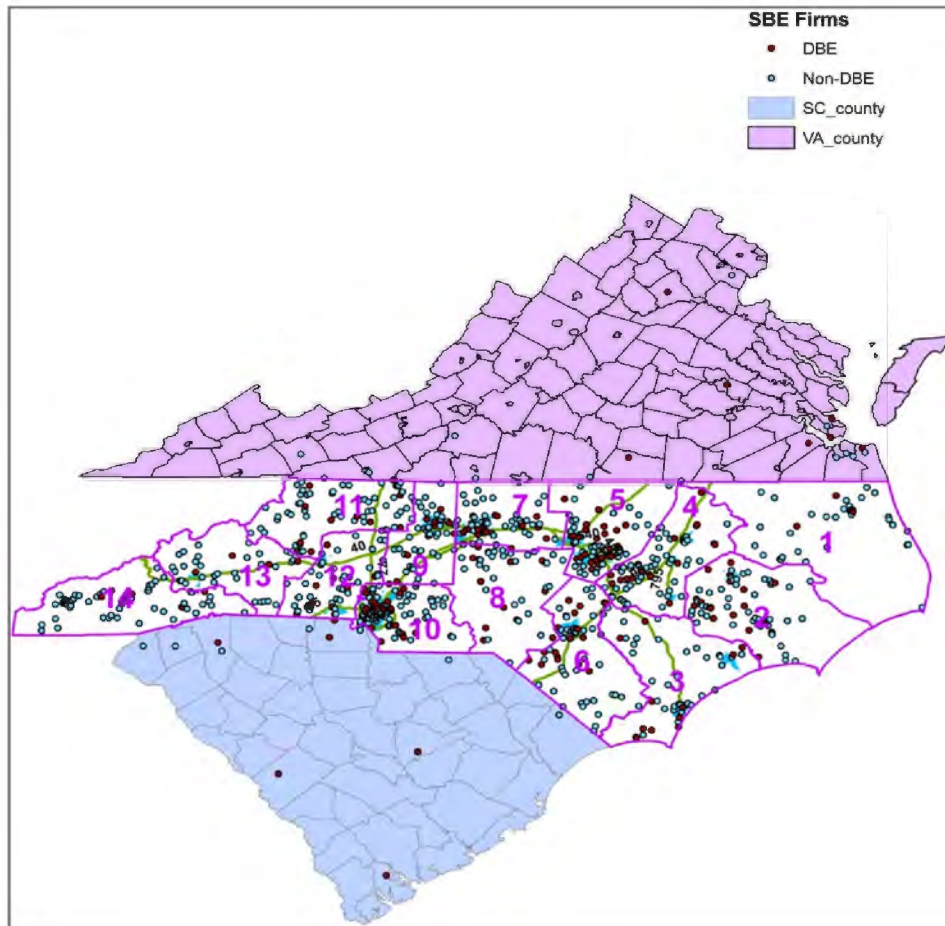
Figure 5.2: Percent Distribution of Available Firms by DBE Status and Market Area

Category	No. in	Percent in	No. In	Percent in
Prime Contractors				
Non-DBE	291	92.4%	174	89.7%
DBE	24	7.6%	20	10.3%
Total	315	100.0%	194	100.0%
Subcontractors				
Subs				
Non-DBE	816	72.1%	688	70.7%
DBE	316	27.9%	285	29.3%
Total	1132	100.0%	973	100.0%
Certified SBEs				
SBEs				
Non-DBE	755	75.7%	753	76.0%
DBE	242	24.3%	238	24.0%
Total	997	100.0%	991	100.0%

MAP 1 SPATIAL LOCATION OF PREQUALIFIED SUBCONTRACTORS TO NCDOT BY DBE STATUS



MAP 2 SPATIAL LOCATION OF CERTIFIED SBES BY DBE STATUS



THE AVAILABILITY OF DBEs AND MWBEs IN THE RELEVANT MARKET AREA AND THE STATE

Figure 2 provides a headcount of qualified, willing and able firms within NCDOT's market area and within the State of North Carolina by DBE Status. In 2008, there were 315 prequalified prime contractors who operated a principal place of business within NCDOT's relevant market area as defined above, which includes NC, SC, VA, TN, FL and GA. In contrast, if the market area is restricted to the State of North Carolina, there were 194 prequalified prime contractors. Similarly, there were 1132 prequalified subcontractors within NCDOT's market area, when that area is defined as including North Carolina, Virginia and South Carolina. If the market area for prequalified subcontractors is restricted to the State of North Carolina, there were 973 firms. Finally,

there were 997 certified SBEs within NCDOT's market area. Within the market area, DBE/MWBE prequalified prime contractors comprise 7.6% of all prime contractors; DBE prequalified subcontractors comprised 27.9% of all prequalified subcontractors and DBEs who were also certified as SBEs comprised 24.3% of all certified SBEs.

Disparity study consultants often restrict the relevant market area to the jurisdiction of the state when they examine state transportation agencies. As a result, it is instructive to see how the availability percentages above would change if we restricted the market area to be State of North Carolina. That approach would lead to the following outcomes: DBE/MWBE prequalified prime contractors 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.

When restricting the relevant market area to the state of North Carolina, it is also important to determine how that criterion would affect the relative capacity of DBE/MWBE prime contractors and subcontractors. Later in the report we will examine the methodology that is used to determine the capacity of available vendors. We define capacity as *the volume of work that qualified, willing and able firms are capable of performing in a nondiscriminatory environment*. The methodology we employ to determine the volume of work that a firm is capable of performing uses regression analysis and takes into consideration the following attributes of firms that are prequalified with NCDOT: the firm's prime contracting and subcontracting status, the number of years in which it has been operating, the industry (i.e. primary work code) within which it operates, the number NCDOT geographic divisions the firm is capable of working in, the DBE/MWBE status of the firm, and the operating revenue of the firm (where the latter has been adjusted to reflect the amount of revenue the firm would be expected to receive in a nondiscriminatory environment).

The methodology described above was used to determine the capacity of DBE/MWBEs within NCDOT's market area between fiscal year 2004 through fiscal year 2008. The total capacity of DBE/MWBEs was 15.0%; DBE/MWBE prime contracting capacity was 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 are 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 arguments can be made for using either definition of the relevant market, we did not use the State boundary because it was important to take into consideration the fact that the market characteristics of prime contractors differ from those of subcontractors and certified SBEs. The higher relative capacity of DBE/MWBEs when the market area is restricted to the State of North Carolina reflects the fact that the methodology includes the capacity of DBE/MWBEs but it does not include the capacity of firms that are not DBE/MWBEs if they are located outside of the State. However, many prequalified prime contractors are located out of the State.

VII

THE AVAILABILITY OF DBEs, MWBEs AND SBEs BY PRIME AND SUBCONTRACTING STATUS AND BY WORK CODES

This chapter examines the availability of DBEs in the Federal program, and MBEs, WBEs, and SBEs in the State program. The analysis is further broken down by work codes and by the race and ethnicity of available contractors. Figures 3 – 10 summarize the detail tables that are included in this chapter. The detail tables provide information on the availability of firms within 17 major work codes. The data 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.

Availability of DBE/End of DBE Prime Contractors in State Contractors in the Federal and State Programs

In the Federal program, DBEs comprise 20.3% of all prequalified prime contractors and subcontractors to NCDOT (see Summary of Figures 6 and Figure 6. 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 while 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, see Figure 6 Summary (and the detailed table provided at the end of the chapter). 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.

FIGURE 6: PRIME AND SUBCONTRACTOR AVAILABILITY ACROSS ALL WORK CODES	
	DBE = 20.3%
	MBE = 10.9%
	WBE = 10.4%

Summary Figure 7 (and the detailed table provided at the end of the chapter) examines prime contractors only. They show that in the federal program, DBEs represented 6.9% of all prequalified prime contractors while in the state program MBEs and WBEs represented 3.6% and 3.1% of prequalified prime contractors respectively.

FIGURE 7: PRIME AND CONTRACTOR AVAILABILITY ACROSS ALL WORK CODES
DBE = 6.9%
MBE = 3.6%
WBE = 3.1%

Figure 8 (and the detailed table provided at the end of the chapter) examines the availability of prequalified subcontractors by work code classification. Overall, DBE prequalified subcontractors in the federal program represented 21.6% of all prequalified subcontractors; MBE subcontractors represented 11.6% of all subcontractors and WBE subcontractors represented 11.1% of all subcontractors. The largest number of DBE subcontractors was in the hauling work code classification, where they represent 36.7% of all available subcontractors.

FIGURE 8: SUBCONTRACTOR AVAILABILITY
DBE = 21.6%
MBE = 11.6%
WBE = 11.1%

Availability of MWBEs that are certified SBEs

Some firms that are certified as DBEs are also eligible to be certified as SBEs. Since the disparity study is designed to identify the utilization of MBE's and WBE's and the State program, the disparity study subdivided SBEs by their MBE and that DBE status. Figure 9 (and the detailed table provided at the end of the chapter) examines SBEs by MWBEs Status. The Summary Figure indicates that 24.2% of all SBEs are MWBE certified; 15.5%

are MBE certified and 11.5% are WBE certified; the remaining percentage comprises non-MWBEs. The work code distribution of SBEs who are also MWBE certified, differs from the work code distribution of prequalified DBE subcontractors. In particular, 36.7% of DBE subcontractors operate in hauling, while 30.1% of MWBEs who are SBE certified operate in this work code. The figure also indicates that 23.9% of SBE contractors who are MWBE certified are available in utility installation and these vendors comprise 40.0% of available vendors in the Marine work code, 33.3% in saw cutting, 55.6% in vertical construction, and 42.4% in signals.

FIGURE 9: SBE AVAILABILITY ACROSS ALL WORK CODES
SBEs with MWBE Certification = 24.2%
SBEs with MBE Certification = 15.5%
SBEs with WBE Certification = 11.5%

Figure 10 (and the detailed table provided at the end of the chapter) record the availability of prequalified prime contractors and subcontractors by race and ethnic status as well as work code qualifications. Figure 10 records the number and percentages of contractors that are available in each major work code, and it breaks those figures down further by race and ethnicity. The race and ethnic categories are as follows: Asian/Pacific Americans (.04%), Black Americans (10.7%), Caucasian Americans (86.1%), Hispanic Americans (.9%), Native Americans/American Indians (1.7%), and subcontinent Asian Americans (.3%). Among the racial and ethnic groups, Black Americans ranked second to Caucasian Americans with respect to the percentage of prequalified prime contractors and sub contractors.

FIGURE 10: PRIME AND SUBCONTRACTOR AVAILABILITY ACROSS ALL WORK CODES BY RACE AND ETHNICITY
Asian/Pacific Americans = .04%
Black Americans = 10.7%
Caucasian Americans = 86.1%
Hispanic Americans = 0.9%
American Indians = 1.7%
Subcontinent Asian Americans = 0.3%

Figure 11 (and the detailed table provided at the end of the chapter) record race and ethnic distribution for prequalified subcontractors only. The results are as follows: Asian/Pacific Americans (.04%), Black Americans (11.4%), Caucasian Americans (85.2%), Hispanic Americans (.9%), Native Americans/American Indians (1.8%), and subcontinent Asian Americans (.3%).

FIGURE 11: SUBCONTRACTOR AVAILABILITY ACROSS ALL WORK CODES BY RACE AND ETHNICITY
Asian/Pacific Americans = 0.4%
Black Americans = 11.4%
Caucasian Americans = 85.2%
Hispanic Americans = 0.9%
American Indians = 1.8%

Subcontinent Asian Americans = 0.3%

Finally, Figure 12 (and the detailed table provided at the end of the chapter) provides information on the work code distribution of certified SBEs and that information is further broken down by race and ethnic classifications. The results are as follows: Asian/Pacific Americans (.05%), Black Americans (21.7%), Caucasian Americans (72.3%), Hispanic Americans (.7%), Native Americans/American Indians (3.6%), and the ethnic or racial identity of the other SBE vendors could not be determined.

FIGURE 12: CERTIFIED SBEs AVAILABILITY BY RACE AND ETHNIC STATUS ACROSS ALL WORK CODES
Asian/Pacific Americans = 0.5%
Black Americans = 21.7%
Caucasian Americans = 72.3%
Hispanic Americans = 0.7%
American Indians = 3.6%
Race Ethnicity Unknown = 1.0%

The disparity study also examined the availability of prequalified consultants. However, NCDOT's program for prequalified consultants (The Small Professional Service Program) Was Started in April of 2008. Therefore, information on this program was not available, beyond the distribution of prequalified consultants. That distribution is attached as Figure 1 of the Appendix to this study.



Availability of Prime Contractors and Subcontractors by Work Codes and Division

Availability by Work Code, DBE/MWBE Status and Race and Ethnicity

Figure 13 provides information on the percentage of available prequalified prime contractors and subcontractors to the NCDOT by detailed work codes. The percentage of DBEs available by work codes are as follows: Hauling, 35.0%; Landscaping, 20.6%; Concrete Drainage Structures, 19.0%; Concrete Structures, 15.8%; Drainage Installation, 13.7%; Utility Installation, 11.7%; Signals, 19.2%; Marine Construction, 16.7%; Vertical Construction, 71.4%; Site Preparation, 18.5%; Paving 20.9%; Highway Finishing, 29.1%; Work Zone Safety, 13.5%; Saw Cutting, 18.2%; and Welding, 18.6%. The largest number of prequalified DBE/MWBEs operated in Hauling; this work code also had the largest number of MBEs and WBEs. The work code having the second largest number of DBEs was Site Preparation.

Figure 14 records the number of prequalified prime contractors by work code for firms certified in the federal program and state programs. The figure indicates that the largest number of prequalified DBE prime contractors operated in Highway Finishing (16) While the Second Largest Number Operate in Utility Installation (12) and Landscaping and Erosion Control (12). Figure 15 records the number of prequalified subcontractors in the federal and state programs by MBE and WBE certification status.

Figure 16 provides the same information for SBE certified firms. The largest number of SBE certified firms that held MWBE certification status was in in Hauling, 30.1% while the second largest number operated in Site Preparation, 17.7%. This was also true for MBE certified firms as well as WBE certified firms. Figure 17 provides a breakdown of available firms by race and ethnic status, prime contracting and subcontracting status and detailed work code. The figure indicates that Black-owned firms comprised 25.3% of firms in the Hauling work code while Caucasian-owned firms comprised 70.8%. The Caucasian percentage includes firms that were WBE certified. Hispanic firms comprised 1.8%, Native American on firms 1.8% and Subcontinent Asian American-owned firms (as well as Asian Pacific American-owned firms) comprised .2% each. Figure 18 provides the same information for subcontractors while figure 19 provides that information for SBE certified firms. Firms owned by Black Americans comprised 28.8% of all certified SBEs while Native American-owned firms comprised 4.3%.

Availability by Work Code and Division

NCDOT has six divisional transportation modes; one of which is the Highway Division. The Highway Division is further subdivided into 14 geographic areas or Divisions. Each of the 14 Divisions is supervised by a Division Engineer. During the prequalification process, contractors

indicate each work code within which they have expertise and all of the geographic divisions within which they are interested in performing work.

The availability of DBEs who were prequalified prime and subcontractors varied according to geographic division. The availability of DBEs in Divisions 1 to 14 respectively was as follows: 15.8 percent, 16.0 percent, 17.5 percent, 16.0 percent, 18.5 percent, 18.2 percent, 17.8 percent, 17.8 percent, 17.1 percent, 17.0 percent, 16.5 percent, 16.3 percent, 15.8 percent, and 15.4 percent.

Figures 20 through 33 provide a detailed breakdown of available prequalified prime contractors and subcontractors by work code and DBE/MBE/WBE status within Divisions 1 through 14. For example, in Division 1 DBE certified firms comprise 15.8% of all prequalified prime contractors and subcontractors while MBE certified firms comprise 9.3% and WBE certified firms comprise 7.2%. The respective percentages in Division 14 were 15.4%, 8.0%, and 7.9%. Figure 32 provides an even more detailed breakdown of firms by work code while figures 34 through 48 provide a detailed breakdown of SBE firms by Division.

The respective availability of MBEs and WBEs in the respective 14 divisions is as follows: 9.3 percent and 7.2 percent; 8.9 percent and 7.7 percent; 9.6 percent and eight at seven percent; 8.9 percent and 7.7 percent; 11.3 percent and 8.2 percent; 10.7 percent and 8.2 percent; 9.8 percent and 9.1 percent; 9.5 percent and 9.1 percent; 9.2 percent and eight at five percent; 8.9 percent and 8.7 percent; 8.1 percent and 8.9 percent; 8.2 percent and 8.6 percent; 8.1 percent and 8.3 percent; and 8.0 percent and 7.9 percent.

Figure 34 records 91 work code classifications by MWBEs status for prequalified subcontractors. Each of the general work codes is broken down into detail subcategories. Figure 35 provides the same information for prequalified prime contractors and subcontractors while Figure 36 records the same information by detailed work code classification within Division 1. Note that only the breakdown for Division 1 has been included in this report. Finally, Figures 35 and the figures that follow Figure 35 record the availability of SBEs by detailed work code, MWBE status and Division. The availability of SBEs who are MWBE certified in Divisions 1 – 14 respectively is as follows: 17.8 percent; 31.0 percent; 30.6 percent; 32.6 percent; 33.3 percent; 31.0 percent; 32.1 percent; 31.6 percent; 28.5 percent; 29.9 percent; 25.5 percent; 26.5 percent; 26.5 percent; 23.4 percent; and 24.2 percent.

FIGURE 13: 2008 Availability of all Prequalified Prime and Subcontractors to NCDOT by Work Code, DBE and MWBE Status

	Federal DBE Program ⁶⁴				State MWBE Program ⁶⁵							
	Non-DBE		DBE		Non-MBE ⁶⁶		MBE		Non-WBE ⁶⁷		WBE	
	Firms	% of Work Code	Firms	% of Work Code	Firms	% of Work Code	Firms	% of Work Code	Firms	% of Work Code	Firms	% of Work Code
Hauling: Gravel and Asphalt	334	65.0%	180	35.0%	396	77.0%	118	23.0%	439	85.4%	75	14.6%
Landscaping and Erosion Control: Silk Detention, Mulching, Mowing	332	79.4%	86	20.6%	375	89.7%	43	10.3%	371	88.8%	47	11.2%
Concrete Drainage Structures and Masonry	345	81.0%	81	19.0%	382	89.7%	44	10.3%	384	90.1%	42	9.9%
Concrete Structures: Culverts, Bridges and Barriers	223	84.2%	42	15.8%	240	90.6%	25	9.4%	247	93.2%	18	6.8%
Drainage: Storm and Subsurface Drainage Installation	353	86.3%	56	13.7%	382	93.4%	27	6.6%	377	92.2%	32	7.8%
Utility Installation: Roadway Lighting, Power and Electric	323	88.3%	43	11.7%	344	94.0%	22	6.0%	345	94.3%	21	5.7%
Signals: Traffic Management, Fiber Optic Cable	42	80.8%	10	19.2%	48	92.3%	4	7.7%	46	88.5%	6	11.5%
Marine: Vessel Repair and Construction, Pier Construction	50	83.3%	10	16.7%	56	93.3%	4	6.7%	54	90.0%	6	10.0%
Vertical Construction	4	28.6%	10	71.4%	6	42.9%	8	57.1%	11	78.6%	3	21.4%
Site Preparation: Clearing, Demolition, Excavation, Surveying	470	81.5%	107	18.5%	517	89.6%	60	10.4%	524	90.8%	53	9.2%
Paving: Asphalt, Pavement Repair, Surface Treatment	193	79.1%	51	20.9%	213	87.3%	31	12.7%	220	90.2%	24	9.8%
Highway Finishing: Guard Rail, Fixed Installation, Pavement Marking	124	70.9%	51	29.1%	160	91.4%	15	8.6%	139	79.4%	36	20.6%
Work Zone Safety: Traffic Control Devices, Work Zone Signs	90	86.5%	14	13.5%	101	97.1%	3	2.9%	93	89.4%	11	10.6%
Geotechnical: Rock Blasting, Pile Driving, Foundation Testing	17	100.0%	0	.0%	17	100.0%	0	.0%	17	100.0%	0	.0%
Saw Cutting: Concrete and Asphalt	63	81.8%	14	18.2%	71	92.2%	6	7.8%	69	89.6%	8	10.4%
Welding	10	71.4%	4	28.6%	11	78.6%	3	21.4%	13	92.9%	1	7.1%
Other	221	80.7%	53	19.3%	251	91.6%	23	8.4%	240	87.6%	34	12.4%

⁶⁴ Federal Program pertains to DBEs and non-DBEs only

⁶⁵ State Program includes MBEs, WBEs and Non-MWBEs only (where MWBE= MBE + WBE)

⁶⁶ Non-MBE refers to all other Pre-qualifications in the States Program (Category including WBEs)

⁶⁷ Non-WBE refers to all other Pre-qualified firms in the States Program (Category includes MBEs)

FIGURE 14: 2008 Availability of all Prequalified Prime Contractors to NCDOT by Work Code, DBE and MWBE Status

	Federal DBE Program ⁶⁸				State MWBE Program ⁶⁹							
	Non-DBE		DBE		Non-MBE ⁷⁰		MBE		Non-WBE ⁷¹		WBE	
	Firms	% of Work Code	Firms	% of Work Code	Firms	% of Work Code	Firms	% of Work Code	Firms	% of Work Code	Firms	% of Work Code
Hauling: Gravel and Asphalt	129	94.9%	7	5.1%	132	97.1%	4	2.9%	133	97.8%	3	2.2%
Landscaping and Erosion Control: Silk Detention, Mulching, Mowing	152	92.7%	12	7.3%	158	96.3%	6	3.7%	158	96.3%	6	3.7%
Concrete Drainage Structures and Masonry	153	94.4%	9	5.6%	156	96.3%	6	3.7%	159	98.1%	3	1.9%
Concrete Structures: Culverts, Bridges and Barriers	139	95.2%	7	4.8%	141	96.6%	5	3.4%	144	98.6%	2	1.4%
Drainage: Storm and Subsurface Drainage Installation	168	94.9%	9	5.1%	171	96.6%	6	3.4%	174	98.3%	3	1.7%
Utility Installation: Roadway Lighting, Power an Electric	140	92.1%	12	7.9%	145	95.4%	7	4.6%	147	96.7%	5	3.3%
Signals: Traffic Management, Fiber Optic Cable	14	77.8%	4	22.2%	17	94.4%	1	5.6%	15	83.3%	3	16.7%
Marine: Vessel Repair and Construction, Pier Construction	20	83.3%	4	16.7%	23	95.8%	1	4.2%	21	87.5%	3	12.5%
Vertical Construction	2	66.7%	1	33.3%	2	66.7%	1	33.3%	3	100.0%	0	.0%
Site Preparation: Clearing, Demolition, Excavation, Surveying	200	95.2%	10	4.8%	203	96.7%	7	3.3%	207	98.6%	3	1.4%
Paving: Asphalt, Pavement Repair, Surface Treatment	101	96.2%	4	3.8%	101	96.2%	4	3.8%	105	100.0%	0	.0%
Highway Finishing: Guard Rail, Fixed Installation, Pavement Marking	56	77.8%	16	22.2%	66	91.7%	6	8.3%	62	86.1%	10	13.9%
Work Zone Safety: Traffic Control Devices, Work Zone Signs	56	96.6%	2	3.4%	58	100.0%	0	.0%	56	96.6%	2	3.4%
Geotechnical: Rock Blasting, Pile Driving, Foundation Testing	5	100.0%	0	.0%	5	100.0%	0	.0%	5	100.0%	0	.0%
Saw Cutting: Concrete and Asphalt	20	87.0%	3	13.0%	21	91.3%	2	8.7%	22	95.7%	1	4.3%
Welding	6	100.0%	0	.0%	6	100.0%	0	.0%	6	100.0%	0	.0%
Other	49	90.7%	5	9.3%	52	96.3%	2	3.7%	51	94.4%	3	5.6%

⁶⁸ Federal Program pertains to DBEs and non-DBEs only

⁶⁹ State Program includes MBEs, WBEs and Non-MWBEs only (where MWBE= MBE + WBE)

⁷⁰ Non-MBE refers to all other Pre-qualifications in the States Program (Category including WBEs)

⁷¹ Non-WBE refers to all other Pre-qualified firms in the States Program (Category includes MBEs)

FIGURE 15: 2008 Availability of all Prequalified Subcontractors to NCDOT by Work Code, DBE and MWBE Status

	Federal DBE Program ⁷²				State MWBE Program ⁷³							
	Non-DBE		DBE		Non-MBE ⁷⁴		MBE		Non-WBE ⁷⁵		WBE	
	Firms	% of Work Code	Firms	% of Work Code	Firms	% of Work Code	Firms	% of Work Code	Firms	% of Work Code	Firms	% of Work Code
Hauling: Gravel and Asphalt	310	63.3%	180	36.7%	372	75.9%	118	24.1%	415	84.7%	75	15.3%
Landscaping and Erosion Control: Silk Detention, Mulching, Mowing	304	77.9%	86	22.1%	347	89.0%	43	11.0%	343	87.9%	47	12.1%
Concrete Drainage Structures and Masonry	319	79.8%	81	20.3%	356	89.0%	44	11.0%	358	89.5%	42	10.5%
Concrete Structures: Culverts, Bridges and Barriers	199	82.6%	42	17.4%	216	89.6%	25	10.4%	223	92.5%	18	7.5%
Drainage: Storm and Subsurface Drainage Installation	325	85.3%	56	14.7%	354	92.9%	27	7.1%	349	91.6%	32	8.4%
Utility Installation: Roadway Lighting, Power an Electric	301	87.5%	43	12.5%	322	93.6%	22	6.4%	323	93.9%	21	6.1%
Signals: Traffic Management, Fiber Optic Cable	41	80.4%	10	19.6%	47	92.2%	4	7.8%	45	88.2%	6	11.8%
Marine: Vessel Repair and Construction, Pier Construction	46	82.1%	10	17.9%	52	92.9%	4	7.1%	50	89.3%	6	10.7%
Vertical Construction	4	28.6%	10	71.4%	6	42.9%	8	57.1%	11	78.6%	3	21.4%
Site Preparation: Clearing, Demolition, Excavation, Surveying	436	80.3%	107	19.7%	483	89.0%	60	11.0%	490	90.2%	53	9.8%
Paving: Asphalt, Pavement Repair, Surface Treatment	176	77.5%	51	22.5%	196	86.3%	31	13.7%	203	89.4%	24	10.6%
Highway Finishing: Guard Rail, Fixed Installation, Pavement Marking	119	70.0%	51	30.0%	155	91.2%	15	8.8%	134	78.8%	36	21.2%
Work Zone Safety: Traffic Control Devices, Work Zone Signs	83	85.6%	14	14.4%	94	96.9%	3	3.1%	86	88.7%	11	11.3%
Geotechnical: Rock Blasting, Pile Driving, Foundation Testing	15	100.0%	0	.0%	15	100.0%	0	.0%	15	100.0%	0	.0%
Saw Cutting: Concrete and Asphalt	58	80.6%	14	19.4%	66	91.7%	6	8.3%	64	88.9%	8	11.1%
Welding	9	69.2%	4	30.8%	10	76.9%	3	23.1%	12	92.3%	1	7.7%
Other	206	79.5%	53	20.5%	236	91.1%	23	8.9%	225	86.9%	34	13.1%

⁷² Federal Program pertains to DBEs and non-DBEs only

⁷³ State Program includes MBEs, WBEs and Non-MWBEs only (where MWBE= MBE + WBE)

⁷⁴ Non-MBE refers to all other Pre-qualifications in the States Program (Category including WBEs)

⁷⁵ Non-WBE refers to all other Pre-qualified firms in the States Program (Category includes MBEs)

FIGURE 16: 2008 Availability of Certified Small Business Enterprises (SBEs) to NCDOT by the MWBE Status of SBEs

	MWBE Status of all SBEs				MBE Status of SBEs				WBEs Status of SBE			
	Non-MWBE ⁷⁶		MWBE		Non-MBE ⁷⁷		MBE		Non-WBE ⁷⁸		WBE	
	Firms	% of Work Code	Firms	% of Work Code	Firms	% of Work Code	Firms	% of Work Code	Firms	% of Work Code	Firms	% of Work Code
Hauling: Gravel and Asphalt	327	69.9%	141	30.1%	372	79.5%	96	20.5%	409	87.4%	59	12.6%
Landscaping and Erosion Control: Silk Detention, Mulching, Mowing	401	82.3%	86	17.7%	437	89.7%	50	10.3%	442	90.8%	45	9.2%
Concrete Drainage Structures and Masonry	139	69.8%	60	30.2%	159	79.9%	40	20.1%	172	86.4%	27	13.6%
Concrete Structures: Culverts, Bridges and Barriers	74	75.5%	24	24.5%	78	79.6%	20	20.4%	92	93.9%	6	6.1%
Drainage: Storm and Subsurface Drainage Installation	247	82.1%	54	17.9%	272	90.4%	29	9.6%	270	89.7%	31	10.3%
Utility Installation: Roadway Lighting, Power an Electric	134	76.1%	42	23.9%	150	85.2%	26	14.8%	156	88.6%	20	11.4%
Signals: Traffic Management, Fiber Optic Cable	19	57.6%	14	42.4%	23	69.7%	10	30.3%	28	84.8%	5	15.2%
Marine: Vessel Repair and Construction, Pier Construction	21	60.0%	14	40.0%	25	71.4%	10	28.6%	30	85.7%	5	14.3%
Vertical Construction	8	44.4%	10	55.6%	9	50.0%	9	50.0%	12	66.7%	6	33.3%
Site Preparation: Clearing, Demolition, Excavation, Surveying	435	79.4%	113	20.6%	474	86.5%	74	13.5%	496	90.5%	52	9.5%
Paving: Asphalt, Pavement Repair, Surface Treatment	103	67.8%	49	32.2%	116	76.3%	36	23.7%	130	85.5%	22	14.5%
Highway Finishing: Guard Rail, Fixed Installation, Pavement Marking	132	75.0%	44	25.0%	149	84.7%	27	15.3%	155	88.1%	21	11.9%
Work Zone Safety: Traffic Control Devices, Work Zone Signs	30	68.2%	14	31.8%	35	79.5%	9	20.5%	38	86.4%	6	13.6%
Geotechnical: Rock Blasting, Pile Driving, Foundation Testing	2	100.0%	0	.0%	2	100.0%	0	.0%	2	100.0%	0	.0%
Saw Cutting: Concrete and Asphalt	12	66.7%	6	33.3%	16	88.9%	2	11.1%	14	77.8%	4	22.2%
Welding	0	.0%	2	100.0%	0	.0%	2	100.0%	2	100.0%	0	.0%
Other	219	77.9%	62	22.1%	251	89.3%	30	10.7%	242	86.1%	39	13.9%

⁷⁶ Refers to all SBEs that are not certified MWBEs

⁷⁷ Refers to all SBEs that are not certified MBEs (Category includes WBEs)

⁷⁸ Refers to all SBEs that are not certified WBEs (Category includes MBEs)

FIGURE 17: 2008 Availability of Prime and Subcontractors to NCDOT by Work Code, Race and Ethnic Status

	Race Ethnic Status											
	Asian/Pacific American		Black American		Caucasian American		Hispanic American		Native American		Subcontinent Asian American	
	Firms	% of Work Code	Firms	% of Work Code	Firms	% of Work Code	Firms	% of Work Code	Firms	% of Work Code	Firms	% of Work Code
Hauling: Gravel and Asphalt	1	.2%	130	25.3%	364	70.8%	9	1.8%	9	1.8%	1	.2%
Landscaping and Erosion Control: Silk Detention, Mulching, Mowing	1	.2%	42	10.0%	365	87.3%	0	.0%	9	2.2%	1	.2%
Concrete Drainage Structures and Masonry	2	.5%	43	10.1%	368	86.4%	6	1.4%	6	1.4%	1	.2%
Concrete Structures: Culverts, Bridges and Barriers	1	.4%	23	8.7%	234	88.3%	3	1.1%	3	1.1%	1	.4%
Drainage: Storm and Subsurface Drainage Installation	1	.2%	26	6.4%	373	91.2%	1	.2%	7	1.7%	1	.2%
Utility Installation: Roadway Lighting, Power an Electric	1	.3%	21	5.7%	336	91.8%	2	.5%	6	1.6%	0	.0%
Signals: Traffic Management, Fiber Optic Cable	1	1.9%	2	3.8%	47	90.4%	1	1.9%	1	1.9%	0	.0%
Marine: Vessel Repair and Construction, Pier Construction	1	1.7%	2	3.3%	55	91.7%	1	1.7%	1	1.7%	0	.0%
Vertical Construction	0	.0%	7	50.0%	5	35.7%	0	.0%	1	7.1%	1	7.1%
Site Preparation: Clearing, Demolition, Excavation, Surveying	3	.5%	60	10.4%	499	86.5%	3	.5%	10	1.7%	2	.3%
Paving: Asphalt, Pavement Repair, Surface Treatment	0	.0%	31	12.7%	207	84.8%	1	.4%	4	1.6%	1	.4%
Highway Finishing: Guard Rail, Fixed Installation, Pavement Marking	1	.6%	11	6.3%	158	90.3%	2	1.1%	2	1.1%	1	.6%
Work Zone Safety: Traffic Control Devices, Work Zone Signs	0	.0%	2	1.9%	100	96.2%	1	1.0%	0	.0%	1	1.0%
Geotechnical: Rock Blasting, Pile Driving, Foundation Testing	0	.0%	0	.0%	17	100.0%	0	.0%	0	.0%	0	.0%
Saw Cutting: Concrete and Asphalt	0	.0%	8	10.4%	67	87.0%	1	1.3%	1	1.3%	0	.0%
Welding	0	.0%	2	14.3%	11	78.6%	1	7.1%	0	.0%	0	.0%
Other	2	.7%	18	6.6%	244	89.1%	3	1.1%	7	2.6%	0	.0%

FIGURE 18: 2008 Availability of Subcontractors to NCDOT by Work Code, Race and Ethnic Status

Race Ethnic Status												
	Asian/Pacific American		Black American		Caucasian American		Hispanic American		Native American		Subcontinent Asian American	
	Firms	% of Work Code	Firms	% of Work Code	Firms	% of Work Code	Firms	% of Work Code	Firms	% of Work Code	Firms	% of Work Code
Hauling: Gravel and Asphalt	1	.2%	130	26.5%	340	69.4%	9	1.8%	9	1.8%	1	.2%
Landscaping and Erosion Control: Silk Detention, Mulching, Mowing	1	.3%	42	10.8%	337	86.4%	0	.0%	9	2.3%	1	.3%
Concrete Drainage Structures and Masonry	2	.5%	43	10.8%	342	85.5%	6	1.5%	6	1.5%	1	.3%
Concrete Structures: Culverts, Bridges and Barriers	1	.4%	23	9.5%	210	87.1%	3	1.2%	3	1.2%	1	.4%
Drainage: Storm and Subsurface Drainage Installation	1	.3%	26	6.8%	345	90.6%	1	.3%	7	1.8%	1	.3%
Utility Installation: Roadway Lighting, Power an Electric	1	.3%	21	6.1%	314	91.3%	2	.6%	6	1.7%	0	.0%
Signals: Traffic Management, Fiber Optic Cable	1	2.0%	2	3.9%	46	90.2%	1	2.0%	1	2.0%	0	.0%
Marine: Vessel Repair and Construction, Pier Construction	1	1.8%	2	3.6%	51	91.1%	1	1.8%	1	1.8%	0	.0%
Vertical Construction	0	.0%	7	50.0%	5	35.7%	0	.0%	1	7.1%	1	7.1%
Site Preparation: Clearing, Demolition, Excavation, Surveying	3	.6%	60	11.0%	465	85.6%	3	.6%	10	1.8%	2	.4%
Paving: Asphalt, Pavement Repair, Surface Treatment	0	.0%	31	13.7%	190	83.7%	1	.4%	4	1.8%	1	.4%
Highway Finishing: Guard Rail, Fixed Installation, Pavement Marking	1	.6%	11	6.5%	153	90.0%	2	1.2%	2	1.2%	1	.6%
Work Zone Safety: Traffic Control Devices, Work Zone Signs	0	.0%	2	2.1%	93	95.9%	1	1.0%	0	.0%	1	1.0%
Geotechnical: Rock Blasting, Pile Driving, Foundation Testing	0	.0%	0	.0%	15	100.0%	0	.0%	0	.0%	0	.0%
Saw Cutting: Concrete and Asphalt	0	.0%	8	11.1%	62	86.1%	1	1.4%	1	1.4%	0	.0%
Welding	0	.0%	2	15.4%	10	76.9%	1	7.7%	0	.0%	0	.0%
Other	2	.8%	18	6.9%	229	88.4%	3	1.2%	7	2.7%	0	.0%

FIGURE 19: 2008 Availability of SBEs to NCDOT by Work Code, Race and Ethnic Status

	Race Ethnic Status											
	Asian/Pacific American		Black American		Caucasian American		Hispanic American		Minority, Unknown Race/Ethnicity		Native American	
	Firms	% of Work Code	Firms	% of Work Code	Firms	% of Work Code	Firms	% of Work Code	Firms	% of Work Code	Firms	% of Work Code
Hauling: Gravel and Asphalt	0	.0%	135	28.8%	306	65.4%	3	.6%	4	.9%	20	4.3%
Landscaping and Erosion Control: Silk Detention, Mulching, Mowing	1	.2%	88	18.1%	379	77.8%	4	.8%	3	.6%	12	2.5%
Concrete Drainage Structures and Masonry	3	1.5%	51	25.6%	137	68.8%	1	.5%	2	1.0%	5	2.5%
Concrete Structures: Culverts, Bridges and Barriers	2	2.0%	25	25.5%	67	68.4%	0	.0%	2	2.0%	2	2.0%
Drainage: Storm and Subsurface Drainage Installation	2	.7%	33	11.0%	251	83.4%	0	.0%	1	.3%	14	4.7%
Utility Installation: Roadway Lighting, Power an Electric	1	.6%	29	16.5%	131	74.4%	1	.6%	2	1.1%	12	6.8%
Signals: Traffic Management, Fiber Optic Cable	0	.0%	11	33.3%	19	57.6%	0	.0%	2	6.1%	1	3.0%
Marine: Vessel Repair and Construction, Pier Construction	0	.0%	12	34.3%	20	57.1%	0	.0%	2	5.7%	1	2.9%
Vertical Construction	0	.0%	9	50.0%	8	44.4%	0	.0%	0	.0%	1	5.6%
Site Preparation: Clearing, Demolition, Excavation, Surveying	3	.5%	107	19.5%	409	74.6%	3	.5%	4	.7%	22	4.0%
Paving: Asphalt, Pavement Repair, Surface Treatment	1	.7%	49	32.2%	90	59.2%	3	2.0%	2	1.3%	7	4.6%
Highway Finishing: Guard Rail, Fixed Installation, Pavement Marking	1	.6%	34	19.3%	130	73.9%	2	1.1%	3	1.7%	6	3.4%
Work Zone Safety: Traffic Control Devices, Work Zone Signs	0	.0%	12	27.3%	30	68.2%	0	.0%	1	2.3%	1	2.3%
Geotechnical: Rock Blasting, Pile Driving, Foundation Testing	0	.0%	0	.0%	2	100.0%	0	.0%	0	.0%	0	.0%
Saw Cutting: Concrete and Asphalt	0	.0%	3	16.7%	15	83.3%	0	.0%	0	.0%	0	.0%
Welding	0	.0%	0	.0%	0	.0%	2	100.0%	0	.0%	0	.0%
Other	1	.4%	62	22.1%	202	71.9%	3	1.1%	3	1.1%	10	3.6%

FIGURE 20

DIVISION 1; 2008 Availability of Prime and Subcontractors to NCDOT by Work Code, Division, DBE and M/WBE Status

	DBE				MBE				WBE			
	Non-DBE		DBE		Non-MBE		MBE		Non-WBE		WBE	
	Firms	% of Work Code	Firms	% of Work Code	Firms	% of Work Code	Firms	% of Work Code	Firms	% of Work Code	Firms	% of Work Code
Hauling: Gravel and Asphalt	202	76.2%	63	23.8%	221	83.4%	44	16.6%	242	91.3%	23	8.7%
Landscaping and Erosion Control: Silk Detention, Mulching, Mowing	235	84.5%	43	15.5%	252	90.6%	26	9.4%	258	92.8%	20	7.2%
Concrete Drainage Structures and Masonry	241	84.6%	44	15.4%	259	90.9%	26	9.1%	265	93.0%	20	7.0%
Concrete Structures: Culverts, Bridges and Barriers	178	86.4%	28	13.6%	188	91.3%	18	8.7%	196	95.1%	10	4.9%
Drainage: Storm and Subsurface Drainage Installation	241	88.9%	30	11.1%	253	93.4%	18	6.6%	256	94.5%	15	5.5%
Utility Installation: Roadway Lighting, Power an Electric	216	88.9%	27	11.1%	227	93.4%	16	6.6%	232	95.5%	11	4.5%
Signals: Traffic Management, Fiber Optic Cable	33	80.5%	8	19.5%	38	92.7%	3	7.3%	36	87.8%	5	12.2%
Marine: Vessel Repair and Construction, Pier Construction	41	83.7%	8	16.3%	46	93.9%	3	6.1%	44	89.8%	5	10.2%
Vertical Construction	3	30.0%	7	70.0%	5	50.0%	5	50.0%	8	80.0%	2	20.0%
Site Preparation: Clearing, Demolition, Excavation, Surveying	324	85.9%	53	14.1%	340	90.2%	37	9.8%	358	95.0%	19	5.0%
Paving: Asphalt, Pavement Repair, Surface Treatment	139	85.8%	23	14.2%	145	89.5%	17	10.5%	154	95.1%	8	4.9%
Highway Finishing: Guard Rail, Fixed Installation, Pavement Marking	94	72.9%	35	27.1%	117	90.7%	12	9.3%	106	82.2%	23	17.8%
Work Zone Safety: Traffic Control Devices, Work Zone Signs	75	89.3%	9	10.7%	82	97.6%	2	2.4%	77	91.7%	7	8.3%
Geotechnical: Rock Blasting, Pile Driving, Foundation Testing	14	100.0%	0	.0%	14	100.0%	0	.0%	14	100.0%	0	.0%
Saw Cutting: Concrete and Asphalt	35	76.1%	11	23.9%	41	89.1%	5	10.9%	40	87.0%	6	13.0%
Welding	9	90.0%	1	10.0%	9	90.0%	1	10.0%	10	100.0%	0	.0%
Other	159	83.7%	31	16.3%	176	92.6%	14	7.4%	172	90.5%	18	9.5%
Average Availability across all Work Codes		84.2%		15.8%		90.7%		9.3%		92.8%		7.2%

FIGURE 21: DIVISION 2; 2008 AVAILABILITY OF PRIME AND SUBCONTRACTORS TO NCDOT BY WORK CODE, DIVISION, DBE AND MWBE STATUS

	DBE		DBE		MBE		MBE		WBE		WBE	
	Non-DBE	DBE	Non-MBE	MBE	Non-WBE	WBE	Non-WBE	WBE	Non-WBE	WBE	Non-WBE	WBE
	Firms	% of Work Code	Firms	% of Work Code	Firms	% of Work Code	Firms	% of Work Code	Firms	% of Work Code	Firms	% of Work Code
Hauling: Gravel and Asphalt	213	75.5%	69	24.5%	237	84.0%	45	16.0%	252	89.4%	30	10.6%
Landscaping and Erosion Control	240	83.6%	47	16.4%	260	90.6%	27	9.4%	265	92.3%	22	7.7%
Concrete Drainage Structures and Masonry	248	84.4%	46	15.6%	268	91.2%	26	8.8%	271	92.2%	23	7.8%
Concrete Structures: Culverts, Bridges	183	86.7%	28	13.3%	193	91.5%	18	8.5%	201	95.3%	10	4.7%
Drainage: Storm and Subsurface Drainage	250	88.3%	33	11.7%	265	93.6%	18	6.4%	266	94.0%	17	6.0%
Utility Installation: Roadway Lighting,	230	89.5%	27	10.5%	241	93.8%	16	6.2%	246	95.7%	11	4.3%
Signals: Traffic Management, Fiber Optic Cable	33	82.5%	7	17.5%	38	95.0%	2	5.0%	35	87.5%	5	12.5%
Marine: Vessel Repair and Construction	41	85.4%	7	14.6%	46	95.8%	2	4.2%	43	89.6%	5	10.4%
Vertical Construction	3	30.0%	7	70.0%	5	50.0%	5	50.0%	8	80.0%	2	20.0%
Site Preparation: Clearing, Excavation, Surveying	333	86.0%	54	14.0%	352	91.0%	35	9.0%	366	94.6%	21	5.4%
Paving: Asphalt, Pavement Repair, Treatment	143	86.7%	22	13.3%	150	90.9%	15	9.1%	157	95.2%	8	4.8%
Highway Finishing: Guard Rail, Pavement Marking	96	72.2%	37	27.8%	120	90.2%	13	9.8%	109	82.0%	24	18.0%
Work Zone Safety: Traffic Control Devices	76	88.4%	10	11.6%	84	97.7%	2	2.3%	78	90.7%	8	9.3%
Geotechnical: Rock Blasting, Pile Driving	14	100.0%	0	.0%	14	100.0%	0	.0%	14	100.0%	0	.0%
Saw Cutting: Concrete and Asphalt	40	76.9%	12	23.1%	47	90.4%	5	9.6%	45	86.5%	7	13.5%
Welding	9	90.0%	1	10.0%	9	90.0%	1	10.0%	10	100.0%	0	.0%
Other	166	83.4%	33	16.6%	184	92.5%	15	7.5%	180	90.5%	19	9.5%
Average Availability Across all Work Codes		84.0%		16.0%		91.1%		8.9%		92.3%		7.7%

FIGURE 22: DIVISION 3; 2008 AVAILABILITY OF PRIME AND SUBCONTRACTORS TO NCDOT BY WORK CODE, DIVISION, DBE AND MWBE STATUS

	DBE				MBE				WBE			
	Non-DBE		DBE		Non-MBE		MBE		Non-WBE		WBE	
	Firms	% of Work Code	Firms	% of Work Code	Firms	% of Work Code	Firms	% of Work Code	Firms	% of Work Code	Firms	% of Work Code
Hauling: Gravel and Asphalt	225	72.8%	84	27.2%	254	82.2%	55	17.8%	273	88.3%	36	11.7%
Landscaping and Erosion Control	246	82.6%	52	17.4%	270	90.6%	28	9.4%	271	90.9%	27	9.1%
Concrete Drainage Structures and Masonry	247	82.6%	52	17.4%	270	90.3%	29	9.7%	273	91.3%	26	8.7%
Concrete Structures: Culverts, Bridges	179	84.8%	32	15.2%	189	89.6%	22	10.4%	200	94.8%	11	5.2%
Drainage: Storm and Subsurface Drainage	252	87.5%	36	12.5%	270	93.8%	18	6.3%	268	93.1%	20	6.9%
Utility Installation: Roadway Lighting, Signals: Traffic Management, Fiber Optic Cable	231	87.8%	32	12.2%	245	93.2%	18	6.8%	249	94.7%	14	5.3%
Marine: Vessel Repair and Construction	33	82.5%	7	17.5%	38	95.0%	2	5.0%	35	87.5%	5	12.5%
Vertical Construction	41	85.4%	7	14.6%	46	95.8%	2	4.2%	43	89.6%	5	10.4%
Site Preparation: Clearing, Excavation, Surveying	3	27.3%	8	72.7%	5	45.5%	6	54.5%	8	72.7%	3	27.3%
Paving: Asphalt, Pavement Repair, Treatment	340	84.6%	62	15.4%	365	90.8%	37	9.2%	375	93.3%	27	6.7%
Highway Finishing: Guard Rail, Pavement Marking	144	84.7%	26	15.3%	153	90.0%	17	10.0%	160	94.1%	10	5.9%
Work Zone Safety: Traffic Control Devices	98	71.5%	39	28.5%	124	90.5%	13	9.5%	111	81.0%	26	19.0%
Geotechnical: Rock Blasting, Pile Driving	78	88.6%	10	11.4%	87	98.9%	1	1.1%	79	89.8%	9	10.2%
Saw Cutting: Concrete and Asphalt	15	100.0%	0	.0%	15	100.0%	0	.0%	15	100.0%	0	.0%
Welding	41	75.9%	13	24.1%	48	88.9%	6	11.1%	47	87.0%	7	13.0%
Other	9	90.0%	1	10.0%	9	90.0%	1	10.0%	10	100.0%	0	.0%
Average Availability Across all Work Codes	165	82.1%	36	17.9%	183	91.0%	18	9.0%	180	89.6%	21	10.4%
		82.5%		17.5%		90.4%		9.6%		91.3%		8.7%

FIGURE 23: DIVISION 4; 2008 AVAILABILITY OF PRIME AND SUBCONTRACTORS TO NCDOT BY WORK CODE, DIVISION, DBE AND MWBE STATUS

	DBE				MBE				WBE			
	DBE		Non-MBE		MBE		Non-WBE		WBE		Non-WBE	
	Firms	% of Work Code	Firms	% of Work Code	Firms	% of Work Code	Firms	% of Work Code	Firms	% of Work Code	Firms	% of Work Code
Hauling: Gravel and Asphalt	213	75.5%	69	24.5%	237	84.0%	45	16.0%	252	89.4%	30	10.6%
Hauling: Gravel and Asphalt	240	83.6%	47	16.4%	260	90.6%	27	9.4%	265	92.3%	22	7.7%
Landscaping and Erosion Control	248	84.4%	46	15.6%	268	91.2%	26	8.8%	271	92.2%	23	7.8%
Concrete Drainage Structures and Masonry	183	86.7%	28	13.3%	193	91.5%	18	8.5%	201	95.3%	10	4.7%
Concrete Structures: Culverts, Bridges	250	88.3%	33	11.7%	265	93.6%	18	6.4%	266	94.0%	17	6.0%
Drainage: Storm and Subsurface Drainage	230	89.5%	27	10.5%	241	93.8%	16	6.2%	246	95.7%	11	4.3%
Utility Installation: Roadway Lighting, Signals: Traffic Management, Fiber Optic Cable	33	82.5%	7	17.5%	38	95.0%	2	5.0%	35	87.5%	5	12.5%
Marine: Vessel Repair and Construction	41	85.4%	7	14.6%	46	95.8%	2	4.2%	43	89.6%	5	10.4%
Vertical Construction	3	30.0%	7	70.0%	5	50.0%	5	50.0%	8	80.0%	2	20.0%
Vertical Construction	333	86.0%	54	14.0%	352	91.0%	35	9.0%	366	94.6%	21	5.4%
Site Preparation: Clearing, Excavation, Surveying	143	86.7%	22	13.3%	150	90.9%	15	9.1%	157	95.2%	8	4.8%
Paving: Asphalt, Pavement Repair, Treatment	96	72.2%	37	27.8%	120	90.2%	13	9.8%	109	82.0%	24	18.0%
Highway Finishing: Guard Rail, Pavement Marking	76	88.4%	10	11.6%	84	97.7%	2	2.3%	78	90.7%	8	9.3%
Work Zone Safety: Traffic Control Devices	14	100.0%	0	.0%	14	100.0%	0	.0%	14	100.0%	0	.0%
Geotechnical: Rock Blasting, Pile Driving	40	76.9%	12	23.1%	47	90.4%	5	9.6%	45	86.5%	7	13.5%
Saw Cutting: Concrete and Asphalt	9	90.0%	1	10.0%	9	90.0%	1	10.0%	10	100.0%	0	.0%
Welding	166	83.4%	33	16.6%	184	92.5%	15	7.5%	180	90.5%	19	9.5%
Average Availability Across all Work Codes		84.0%		16.0%		91.1%		8.9%		92.3%		7.7%

FIGURE 24: DIVISION 5; 2008 AVAILABILITY OF PRIME AND SUBCONTRACTORS TO NCDOT BY WORK CODE, DIVISION, DBE AND MWBE STATUS

	DBE				MBE				WBE			
	Non-DBE		DBE		Non-MBE		MBE		Non-WBE		WBE	
	Firms	% of Work Code	Firms	% of Work Code	Firms	% of Work Code	Firms	% of Work Code	Firms	% of Work Code	Firms	% of Work Code
Hauling: Gravel and Asphalt	235	69.5%	103	30.5%	259	76.6%	79	23.4%	304	89.9%	34	10.1%
Landscaping and Erosion Control	250	82.8%	52	17.2%	270	89.4%	32	10.6%	279	92.4%	23	7.6%
Concrete Drainage Structures and Masonry	259	81.7%	58	18.3%	282	89.0%	35	11.0%	290	91.5%	27	8.5%
Concrete Structures: Culverts, Bridges	188	84.3%	35	15.7%	200	89.7%	23	10.3%	210	94.2%	13	5.8%
Drainage: Storm and Subsurface Drainage	264	88.6%	34	11.4%	278	93.3%	20	6.7%	282	94.6%	16	5.4%
Utility Installation: Roadway Lighting,	242	88.6%	31	11.4%	255	93.4%	18	6.6%	260	95.2%	13	4.8%
Signals: Traffic Management, Fiber Optic Cable	36	80.0%	9	20.0%	41	91.1%	4	8.9%	40	88.9%	5	11.1%
Marine: Vessel Repair and Construction	44	83.0%	9	17.0%	49	92.5%	4	7.5%	48	90.6%	5	9.4%
Vertical Construction	3	27.3%	8	72.7%	5	45.5%	6	54.5%	8	72.7%	3	27.3%
Site Preparation: Clearing, Excavation, Surveying	350	83.3%	70	16.7%	374	89.0%	46	11.0%	392	93.3%	28	6.7%
Paving: Asphalt, Pavement Repair, Treatment	152	82.2%	33	17.8%	164	88.6%	21	11.4%	171	92.4%	14	7.6%
Highway Finishing: Guard Rail, Pavement Marking	94	69.1%	42	30.9%	121	89.0%	15	11.0%	109	80.1%	27	19.9%
Work Zone Safety: Traffic Control Devices	77	89.5%	9	10.5%	84	97.7%	2	2.3%	79	91.9%	7	8.1%
Geotechnical: Rock Blasting, Pile Driving	14	100.0%	0	.0%	14	100.0%	0	.0%	14	100.0%	0	.0%
Saw Cutting: Concrete and Asphalt	37	75.5%	12	24.5%	44	89.8%	5	10.2%	42	85.7%	7	14.3%
Welding	9	69.2%	4	30.8%	10	76.9%	3	23.1%	12	92.3%	1	7.7%
Other	170	81.0%	40	19.0%	188	89.5%	22	10.5%	188	89.5%	22	10.5%
Average Availability Across all Work Codes		81.5%		18.5%		88.7%		11.3%		91.8%		8.2%

FIGURE 25: DIVISION 6; 2008 AVAILABILITY OF PRIME AND SUBCONTRACTORS TO NCDOT BY WORK CODE, DIVISION, DBE AND MWBE STATUS

	DBE				MBE				WBE			
	Non-DBE		DBE		Non-MBE		MBE		Non-WBE		WBE	
	Firms	% of Work Code	Firms	% of Work Code	Firms	% of Work Code	Firms	% of Work Code	Firms	% of Work Code	Firms	% of Work Code
Hauling: Gravel and Asphalt	225	71.2%	91	28.8%	249	78.8%	67	21.2%	286	90.5%	30	9.5%
Landscaping and Erosion Control	245	82.2%	53	17.8%	265	88.9%	33	11.1%	275	92.3%	23	7.7%
Concrete Drainage Structures and Masonry	244	81.9%	54	18.1%	265	88.9%	33	11.1%	273	91.6%	25	8.4%
Concrete Structures: Culverts, Bridges	181	84.6%	33	15.4%	192	89.7%	22	10.3%	202	94.4%	12	5.6%
Drainage: Storm and Subsurface Drainage	254	88.2%	34	11.8%	269	93.4%	19	6.6%	271	94.1%	17	5.9%
Utility Installation: Roadway Lighting,	235	87.4%	34	12.6%	250	92.9%	19	7.1%	254	94.4%	15	5.6%
Signals: Traffic Management, Fiber Optic Cable	33	80.5%	8	19.5%	38	92.7%	3	7.3%	36	87.8%	5	12.2%
Marine: Vessel Repair and Construction	41	83.7%	8	16.3%	46	93.9%	3	6.1%	44	89.8%	5	10.2%
Vertical Construction	3	30.0%	7	70.0%	5	50.0%	5	50.0%	7	70.0%	3	30.0%
Site Preparation: Clearing, Excavation, Surveying	341	83.8%	66	16.2%	366	89.9%	41	10.1%	380	93.4%	27	6.6%
Paving: Asphalt, Pavement Repair, Treatment	144	83.2%	29	16.8%	154	89.0%	19	11.0%	162	93.6%	11	6.4%
Highway Finishing: Guard Rail, Pavement Marking	98	70.0%	42	30.0%	126	90.0%	14	10.0%	112	80.0%	28	20.0%
Work Zone Safety: Traffic Control Devices	76	88.4%	10	11.6%	84	97.7%	2	2.3%	78	90.7%	8	9.3%
Geotechnical: Rock Blasting, Pile Driving	14	100.0%	0	.0%	14	100.0%	0	.0%	14	100.0%	0	.0%
Saw Cutting: Concrete and Asphalt	38	76.0%	12	24.0%	44	88.0%	6	12.0%	44	88.0%	6	12.0%
Welding	9	81.8%	2	18.2%	10	90.9%	1	9.1%	10	90.9%	1	9.1%
Other	160	81.2%	37	18.8%	177	89.8%	20	10.2%	177	89.8%	20	10.2%
Average Availability Across all Work Codes		81.8%		18.2%		89.3%		10.7%		91.8%		8.2%

FIGURE 26: DIVISION 7; 2008 AVAILABILITY OF PRIME AND SUBCONTRACTORS TO NCDOT BY WORK CODE, DIVISION, DBE AND MWBE STATUS

	DBE				MBE				WBE			
	Non-DBE		DBE		Non-MBE		MBE		Non-WBE		WBE	
	Firms	% of Work Code	Firms	% of Work Code	Firms	% of Work Code	Firms	% of Work Code	Firms	% of Work Code	Firms	% of Work Code
Hauling: Gravel and Asphalt	226	71.3%	91	28.7%	254	80.1%	63	19.9%	280	88.3%	37	11.7%
Landscaping and Erosion Control	256	83.4%	51	16.6%	279	90.9%	28	9.1%	281	91.5%	26	8.5%
Concrete Drainage Structures and Masonry	262	82.1%	57	17.9%	287	90.0%	32	10.0%	290	90.9%	29	9.1%
Concrete Structures: Culverts, Bridges	189	85.5%	32	14.5%	202	91.4%	19	8.6%	207	93.7%	14	6.3%
Drainage: Storm and Subsurface Drainage	265	88.0%	36	12.0%	282	93.7%	19	6.3%	282	93.7%	19	6.3%
Utility Installation: Roadway Lighting,	243	88.7%	31	11.3%	257	93.8%	17	6.2%	260	94.9%	14	5.1%
Signals: Traffic Management, Fiber Optic Cable	35	81.4%	8	18.6%	41	95.3%	2	4.7%	37	86.0%	6	14.0%
Marine: Vessel Repair and Construction	43	84.3%	8	15.7%	49	96.1%	2	3.9%	45	88.2%	6	11.8%
Vertical Construction	3	27.3%	8	72.7%	5	45.5%	6	54.5%	8	72.7%	3	27.3%
Site Preparation: Clearing, Excavation, Surveying	348	84.3%	65	15.7%	372	90.1%	41	9.9%	385	93.2%	28	6.8%
Paving: Asphalt, Pavement Repair, Treatment	147	83.1%	30	16.9%	160	90.4%	17	9.6%	162	91.5%	15	8.5%
Highway Finishing: Guard Rail, Pavement Marking	96	68.6%	44	31.4%	126	90.0%	14	10.0%	110	78.6%	30	21.4%
Work Zone Safety: Traffic Control Devices	79	89.8%	9	10.2%	87	98.9%	1	1.1%	80	90.9%	8	9.1%
Geotechnical: Rock Blasting, Pile Driving	14	100.0%	0	.0%	14	100.0%	0	.0%	14	100.0%	0	.0%
Saw Cutting: Concrete and Asphalt	41	77.4%	12	22.6%	48	90.6%	5	9.4%	46	86.8%	7	13.2%
Welding	9	81.8%	2	18.2%	10	90.9%	1	9.1%	10	90.9%	1	9.1%
Other	159	80.3%	39	19.7%	178	89.9%	20	10.1%	175	88.4%	23	11.6%
Average Availability Across all Work Codes		82.2%		17.8%		90.2%		9.8%		90.9%		9.1%

FIGURE 27: DIVISION 8; 2008 AVAILABILITY OF PRIME AND SUBCONTRACTORS TO NCDOT BY WORK CODE, DIVISION, DBE AND MWBE STATUS

	DBE				MBE				WBE			
	Non-DBE		DBE		Non-MBE		MBE		Non-WBE		WBE	
	Firms	% of Work Code	Firms	% of Work Code	Firms	% of Work Code	Firms	% of Work Code	Firms	% of Work Code	Firms	% of Work Code
Hauling: Gravel and Asphalt	229	71.1%	93	28.9%	257	79.8%	65	20.2%	287	89.1%	35	10.9%
Landscaping and Erosion Control	254	82.5%	54	17.5%	278	90.3%	30	9.7%	281	91.2%	27	8.8%
Concrete Drainage Structures and Masonry	259	82.5%	55	17.5%	284	90.4%	30	9.6%	285	90.8%	29	9.2%
Concrete Structures: Culverts, Bridges	186	86.5%	29	13.5%	198	92.1%	17	7.9%	202	94.0%	13	6.0%
Drainage: Storm and Subsurface Drainage	266	88.1%	36	11.9%	284	94.0%	18	6.0%	282	93.4%	20	6.6%
Utility Installation: Roadway Lighting,	246	88.2%	33	11.8%	262	93.9%	17	6.1%	263	94.3%	16	5.7%
Signals: Traffic Management, Fiber Optic Cable	35	79.5%	9	20.5%	41	93.2%	3	6.8%	38	86.4%	6	13.6%
Marine: Vessel Repair and Construction	43	82.7%	9	17.3%	49	94.2%	3	5.8%	46	88.5%	6	11.5%
Vertical Construction	4	40.0%	6	60.0%	6	60.0%	4	40.0%	7	70.0%	3	30.0%
Site Preparation: Clearing, Excavation, Surveying	351	84.4%	65	15.6%	377	90.6%	39	9.4%	388	93.3%	28	6.7%
Paving: Asphalt, Pavement Repair, Treatment	148	84.1%	28	15.9%	161	91.5%	15	8.5%	162	92.0%	14	8.0%
Highway Finishing: Guard Rail, Pavement Marking	99	68.8%	45	31.3%	131	91.0%	13	9.0%	112	77.8%	32	22.2%
Work Zone Safety: Traffic Control Devices	78	87.6%	11	12.4%	87	97.8%	2	2.2%	80	89.9%	9	10.1%
Geotechnical: Rock Blasting, Pile Driving	14	100.0%	0	.0%	14	100.0%	0	.0%	14	100.0%	0	.0%
Saw Cutting: Concrete and Asphalt	40	78.4%	11	21.6%	47	92.2%	4	7.8%	44	86.3%	7	13.7%
Welding	9	81.8%	2	18.2%	10	90.9%	1	9.1%	10	90.9%	1	9.1%
Other	162	81.0%	38	19.0%	180	90.0%	20	10.0%	179	89.5%	21	10.5%
Average Availability Across all Work Codes		82.2%		17.8%		90.5%		9.5%		90.9%		9.1%

FIGURE 28: DIVISION 9; 2008 AVAILABILITY OF PRIME AND SUBCONTRACTORS TO NCDOT BY WORK CODE, DIVISION, DBE AND MWBE STATUS

	DBE				MBE				WBE			
	Non-DBE		DBE		Non-MBE		MBE		Non-WBE		WBE	
	Firms	% of Work Code	Firms	% of Work Code	Firms	% of Work Code	Firms	% of Work Code	Firms	% of Work Code	Firms	% of Work Code
Hauling: Gravel and Asphalt	214	73.0%	79	27.0%	239	81.6%	54	18.4%	262	89.4%	31	10.6%
Landscaping and Erosion Control	251	84.2%	47	15.8%	274	91.9%	24	8.1%	273	91.6%	25	8.4%
Concrete Drainage Structures and Masonry	257	82.6%	54	17.4%	280	90.0%	31	10.0%	285	91.6%	26	8.4%
Concrete Structures: Culverts, Bridges	185	85.3%	32	14.7%	198	91.2%	19	8.8%	204	94.0%	13	6.0%
Drainage: Storm and Subsurface Drainage	258	88.4%	34	11.6%	274	93.8%	18	6.2%	274	93.8%	18	6.2%
Utility Installation: Roadway Lighting, Signals: Traffic Management, Fiber Optic Cable	240	88.9%	30	11.1%	253	93.7%	17	6.3%	257	95.2%	13	4.8%
Marine: Vessel Repair and Construction	36	81.8%	8	18.2%	42	95.5%	2	4.5%	38	86.4%	6	13.6%
Vertical Construction	44	84.6%	8	15.4%	50	96.2%	2	3.8%	46	88.5%	6	11.5%
Site Preparation: Clearing, Excavation, Surveying	3	30.0%	7	70.0%	5	50.0%	5	50.0%	8	80.0%	2	20.0%
Paving: Asphalt, Pavement Repair, Treatment	344	84.9%	61	15.1%	366	90.4%	39	9.6%	380	93.8%	25	6.2%
Highway Finishing: Guard Rail, Pavement Marking	146	84.4%	27	15.6%	154	89.0%	19	11.0%	163	94.2%	10	5.8%
Work Zone Safety: Traffic Control Devices	99	69.7%	43	30.3%	128	90.1%	14	9.9%	113	79.6%	29	20.4%
Geotechnical: Rock Blasting, Pile Driving	77	89.5%	9	10.5%	85	98.8%	1	1.2%	78	90.7%	8	9.3%
Saw Cutting: Concrete and Asphalt	14	100.0%	0	.0%	14	100.0%	0	.0%	14	100.0%	0	.0%
Welding	43	81.1%	10	18.9%	49	92.5%	4	7.5%	47	88.7%	6	11.3%
Other	9	81.8%	2	18.2%	10	90.9%	1	9.1%	10	90.9%	1	9.1%
Average Availability Across all Work Codes	161	80.5%	39	19.5%	185	92.5%	15	7.5%	174	87.0%	26	13.0%
		82.9%		17.1%		90.8%		9.2%		91.5%		8.5%

FIGURE 29: DIVISION 10; 2008 AVAILABILITY OF PRIME AND SUBCONTRACTORS TO NCDOT BY WORK CODE, DIVISION, DBE AND MWBE STATUS

	DBE				MBE				WBE			
	Non-DBE		DBE		Non-MBE		MBE		Non-WBE		WBE	
	Firms	% of Work Code	Firms	% of Work Code	Firms	% of Work Code	Firms	% of Work Code	Firms	% of Work Code	Firms	% of Work Code
Hauling: Gravel and Asphalt	215	74.9%	72	25.1%	237	82.6%	50	17.4%	261	90.9%	26	9.1%
Landscaping and Erosion Control	244	82.2%	53	17.8%	269	90.6%	28	9.4%	269	90.6%	28	9.4%
Concrete Drainage Structures and Masonry	256	83.7%	50	16.3%	280	91.5%	26	8.5%	280	91.5%	26	8.5%
Concrete Structures: Culverts, Bridges	184	85.6%	31	14.4%	196	91.2%	19	8.8%	202	94.0%	13	6.0%
Drainage: Storm and Subsurface Drainage	260	88.1%	35	11.9%	277	93.9%	18	6.1%	276	93.6%	19	6.4%
Utility Installation: Roadway Lighting,	237	87.8%	33	12.2%	253	93.7%	17	6.3%	254	94.1%	16	5.9%
Signals: Traffic Management, Fiber Optic Cable	36	81.8%	8	18.2%	42	95.5%	2	4.5%	38	86.4%	6	13.6%
Marine: Vessel Repair and Construction	44	84.6%	8	15.4%	50	96.2%	2	3.8%	46	88.5%	6	11.5%
Vertical Construction	3	33.3%	6	66.7%	5	55.6%	4	44.4%	7	77.8%	2	22.2%
Site Preparation: Clearing, Excavation, Surveying	345	85.4%	59	14.6%	368	91.1%	36	8.9%	379	93.8%	25	6.2%
Paving: Asphalt, Pavement Repair, Treatment	147	85.0%	26	15.0%	157	90.8%	16	9.2%	162	93.6%	11	6.4%
Highway Finishing: Guard Rail, Pavement Marking	98	69.5%	43	30.5%	127	90.1%	14	9.9%	112	79.4%	29	20.6%
Work Zone Safety: Traffic Control Devices	80	89.9%	9	10.1%	88	98.9%	1	1.1%	81	91.0%	8	9.0%
Geotechnical: Rock Blasting, Pile Driving	14	100.0%	0	.0%	14	100.0%	0	.0%	14	100.0%	0	.0%
Saw Cutting: Concrete and Asphalt	42	80.8%	10	19.2%	48	92.3%	4	7.7%	46	88.5%	6	11.5%
Welding	9	81.8%	2	18.2%	10	90.9%	1	9.1%	10	90.9%	1	9.1%
Other	158	79.4%	41	20.6%	184	92.5%	15	7.5%	172	86.4%	27	13.6%
Average Availability Across all Work Codes		83.0%		17.0%		91.1%		8.9%		91.3%		8.7%

FIGURE 30: DIVISION 11; 2008 AVAILABILITY OF PRIME AND SUBCONTRACTORS TO NCDOT BY WORK CODE, DIVISION, DBE AND MWBE STATUS

	DBE				MBE				WBE			
	Non-DBE		DBE		Non-MBE		MBE		Non-WBE		WBE	
	Firms	% of Work Code	Firms	% of Work Code	Firms	% of Work Code	Firms	% of Work Code	Firms	% of Work Code	Firms	% of Work Code
Hauling: Gravel and Asphalt	217	77.5%	63	22.5%	238	85.0%	42	15.0%	255	91.1%	25	8.9%
Landscaping and Erosion Control	251	82.8%	52	17.2%	278	91.7%	25	8.3%	274	90.4%	29	9.6%
Concrete Drainage Structures and Masonry	253	83.0%	52	17.0%	280	91.8%	25	8.2%	276	90.5%	29	9.5%
Concrete Structures: Culverts, Bridges	186	85.7%	31	14.3%	200	92.2%	17	7.8%	203	93.5%	14	6.5%
Drainage: Storm and Subsurface Drainage	262	87.6%	37	12.4%	281	94.0%	18	6.0%	278	93.0%	21	7.0%
Utility Installation: Roadway Lighting,	232	89.6%	27	10.4%	244	94.2%	15	5.8%	247	95.4%	12	4.6%
Signals: Traffic Management, Fiber Optic Cable	36	81.8%	8	18.2%	42	95.5%	2	4.5%	38	86.4%	6	13.6%
Marine: Vessel Repair and Construction	44	84.6%	8	15.4%	50	96.2%	2	3.8%	46	88.5%	6	11.5%
Vertical Construction	3	33.3%	6	66.7%	5	55.6%	4	44.4%	7	77.8%	2	22.2%
Site Preparation: Clearing, Excavation, Surveying	347	85.0%	61	15.0%	374	91.7%	34	8.3%	378	92.6%	30	7.4%
Paving: Asphalt, Pavement Repair, Treatment	143	85.1%	25	14.9%	153	91.1%	15	8.9%	156	92.9%	12	7.1%
Highway Finishing: Guard Rail, Pavement Marking	102	70.8%	42	29.2%	131	91.0%	13	9.0%	115	79.9%	29	20.1%
Work Zone Safety: Traffic Control Devices	80	89.9%	9	10.1%	88	98.9%	1	1.1%	81	91.0%	8	9.0%
Geotechnical: Rock Blasting, Pile Driving	15	100.0%	0	.0%	15	100.0%	0	.0%	15	100.0%	0	.0%
Saw Cutting: Concrete and Asphalt	42	80.8%	10	19.2%	48	92.3%	4	7.7%	46	88.5%	6	11.5%
Welding	10	83.3%	2	16.7%	11	91.7%	1	8.3%	11	91.7%	1	8.3%
Other	159	81.1%	37	18.9%	183	93.4%	13	6.6%	171	87.2%	25	12.8%
Average Availability Across all Work Codes		83.5%		16.5%		91.9%		8.1%		91.1%		8.9%

FIGURE 31: DIVISION 12; 2008 AVAILABILITY OF PRIME AND SUBCONTRACTORS TO NCDOT BY WORK CODE, DIVISION, DBE AND MWBE STATUS

	DBE				MBE				WBE			
	Non-DBE		DBE		Non-MBE		MBE		Non-WBE		WBE	
	% of Work		% of Work		% of Work		% of Work		% of Work		% of Work	
	Firms	Code	Firms	Code	Firms	Code	Firms	Code	Firms	Code	Firms	Code
Hauling: Gravel and Asphalt	222	76.3%	69	23.7%	245	84.2%	46	15.8%	264	90.7%	27	9.3%
Landscaping and Erosion Control	251	83.1%	51	16.9%	276	91.4%	26	8.6%	275	91.1%	27	8.9%
Concrete Drainage Structures and Masonry	257	84.0%	49	16.0%	280	91.5%	26	8.5%	280	91.5%	26	8.5%
Concrete Structures: Culverts, Bridges	186	86.5%	29	13.5%	198	92.1%	17	7.9%	203	94.4%	12	5.6%
Drainage: Storm and Subsurface Drainage	264	88.6%	34	11.4%	281	94.3%	17	5.7%	279	93.6%	19	6.4%
Utility Installation: Roadway Lighting,	239	89.5%	28	10.5%	252	94.4%	15	5.6%	254	95.1%	13	4.9%
Signals: Traffic Management, Fiber Optic Cable	39	83.0%	8	17.0%	45	95.7%	2	4.3%	41	87.2%	6	12.8%
Marine: Vessel Repair and Construction	47	85.5%	8	14.5%	53	96.4%	2	3.6%	49	89.1%	6	10.9%
Vertical Construction	3	37.5%	5	62.5%	5	62.5%	3	37.5%	6	75.0%	2	25.0%
Site Preparation: Clearing, Excavation, Surveying	353	84.9%	63	15.1%	379	91.1%	37	8.9%	387	93.0%	29	7.0%
Paving: Asphalt, Pavement Repair, Treatment	149	85.1%	26	14.9%	159	90.9%	16	9.1%	163	93.1%	12	6.9%
Highway Finishing: Guard Rail, Pavement Marking	103	72.0%	40	28.0%	132	92.3%	11	7.7%	114	79.7%	29	20.3%
Work Zone Safety: Traffic Control Devices	82	90.1%	9	9.9%	90	98.9%	1	1.1%	83	91.2%	8	8.8%
Geotechnical: Rock Blasting, Pile Driving	15	100.0%	0	.0%	15	100.0%	0	.0%	15	100.0%	0	.0%
Saw Cutting: Concrete and Asphalt	41	80.4%	10	19.6%	47	92.2%	4	7.8%	45	88.2%	6	11.8%
Welding	9	81.8%	2	18.2%	10	90.9%	1	9.1%	10	90.9%	1	9.1%
Other	156	80.4%	38	19.6%	181	93.3%	13	6.7%	168	86.6%	26	13.4%
Average Availability Across all Work Codes		83.7%		16.3%		91.8%		8.2%		91.4%		8.6%

FIGURE 32: DIVISION 13; 2008 AVAILABILITY OF PRIME AND SUBCONTRACTORS TO NCDOT BY WORK CODE, DIVISION, DBE AND MWBE STATUS

	DBE				MBE				WBE			
	Non-DBE		DBE		Non-MBE		MBE		Non-WBE		WBE	
	Firms	% of Work Code	Firms	% of Work Code	Firms	% of Work Code	Firms	% of Work Code	Firms	% of Work Code	Firms	% of Work Code
Hauling: Gravel and Asphalt	217	78.1%	61	21.9%	238	85.6%	40	14.4%	254	91.4%	24	8.6%
Landscaping and Erosion Control	250	83.1%	51	16.9%	275	91.4%	26	8.6%	274	91.0%	27	9.0%
Concrete Drainage Structures and Masonry	251	84.2%	47	15.8%	274	91.9%	24	8.1%	272	91.3%	26	8.7%
Concrete Structures: Culverts, Bridges	184	87.2%	27	12.8%	195	92.4%	16	7.6%	200	94.8%	11	5.2%
Drainage: Storm and Subsurface Drainage	258	87.8%	36	12.2%	275	93.5%	19	6.5%	275	93.5%	19	6.5%
Utility Installation: Roadway Lighting,	231	89.2%	28	10.8%	244	94.2%	15	5.8%	246	95.0%	13	5.0%
Signals: Traffic Management, Fiber Optic Cable	37	84.1%	7	15.9%	42	95.5%	2	4.5%	39	88.6%	5	11.4%
Marine: Vessel Repair and Construction	45	86.5%	7	13.5%	50	96.2%	2	3.8%	47	90.4%	5	9.6%
Vertical Construction	3	37.5%	5	62.5%	5	62.5%	3	37.5%	6	75.0%	2	25.0%
Site Preparation: Clearing, Excavation, Surveying	343	85.5%	58	14.5%	366	91.3%	35	8.7%	375	93.5%	26	6.5%
Paving: Asphalt, Pavement Repair, Treatment	144	86.7%	22	13.3%	152	91.6%	14	8.4%	156	94.0%	10	6.0%
Highway Finishing: Guard Rail, Pavement Marking	100	71.9%	39	28.1%	128	92.1%	11	7.9%	111	79.9%	28	20.1%
Work Zone Safety: Traffic Control Devices	83	90.2%	9	9.8%	91	98.9%	1	1.1%	84	91.3%	8	8.7%
Geotechnical: Rock Blasting, Pile Driving	16	100.0%	0	.0%	16	100.0%	0	.0%	16	100.0%	0	.0%
Saw Cutting: Concrete and Asphalt	41	80.4%	10	19.6%	47	92.2%	4	7.8%	45	88.2%	6	11.8%
Welding	10	83.3%	2	16.7%	11	91.7%	1	8.3%	11	91.7%	1	8.3%
Other	151	81.6%	34	18.4%	172	93.0%	13	7.0%	163	88.1%	22	11.9%
Average Availability Across all Work Codes		84.2%		15.8%		91.9%		8.1%		91.7%		8.3%

FIGURE 33: DIVISION 14; 2008 AVAILABILITY OF PRIME AND SUBCONTRACTORS TO NCDOT BY WORK CODE, DIVISION, DBE AND MWBE STATUS

	DBE				MBE				WBE			
	Non-DBE		DBE		Non-MBE		MBE		Non-WBE		WBE	
	Firms	% of Work Code	Firms	% of Work Code	Firms	% of Work Code	Firms	% of Work Code	Firms	% of Work Code	Firms	% of Work Code
Hauling: Gravel and Asphalt	212	79.4%	55	20.6%	229	85.8%	38	14.2%	247	92.5%	20	7.5%
Landscaping and Erosion Control	245	84.2%	46	15.8%	266	91.4%	25	8.6%	268	92.1%	23	7.9%
Concrete Drainage Structures and Masonry	246	84.2%	46	15.8%	268	91.8%	24	8.2%	267	91.4%	25	8.6%
Concrete Structures: Culverts, Bridges	183	87.1%	27	12.9%	194	92.4%	16	7.6%	199	94.8%	11	5.2%
Drainage: Storm and Subsurface Drainage	252	88.1%	34	11.9%	268	93.7%	18	6.3%	268	93.7%	18	6.3%
Utility Installation: Roadway Lighting, Signals: Traffic Management, Fiber Optic Cable	227	89.0%	28	11.0%	240	94.1%	15	5.9%	242	94.9%	13	5.1%
Marine: Vessel Repair and Construction	35	83.3%	7	16.7%	40	95.2%	2	4.8%	37	88.1%	5	11.9%
Vertical Construction	43	86.0%	7	14.0%	48	96.0%	2	4.0%	45	90.0%	5	10.0%
Site Preparation: Clearing, Excavation, Surveying	3	37.5%	5	62.5%	5	62.5%	3	37.5%	6	75.0%	2	25.0%
Paving: Asphalt, Pavement Repair, Treatment	339	86.3%	54	13.7%	359	91.3%	34	8.7%	370	94.1%	23	5.9%
Highway Finishing: Guard Rail, Pavement Marking	143	86.7%	22	13.3%	151	91.5%	14	8.5%	155	93.9%	10	6.1%
Work Zone Safety: Traffic Control Devices	97	71.3%	39	28.7%	125	91.9%	11	8.1%	108	79.4%	28	20.6%
Geotechnical: Rock Blasting, Pile Driving	81	90.0%	9	10.0%	89	98.9%	1	1.1%	82	91.1%	8	8.9%
Saw Cutting: Concrete and Asphalt	16	100.0%	0	.0%	16	100.0%	0	.0%	16	100.0%	0	.0%
Welding	41	80.4%	10	19.6%	47	92.2%	4	7.8%	45	88.2%	6	11.8%
Other	10	83.3%	2	16.7%	11	91.7%	1	8.3%	11	91.7%	1	8.3%
	152	82.6%	32	17.4%	171	92.9%	13	7.1%	164	89.1%	20	10.9%
Average Availability Across all Work Codes		84.6%		15.4%		92.0%		8.0%		92.1%		7.9%

FIGURE 34: 2008 AVAILABILITY OF SUBCONTRACTORS TO NCDOT BY DETAILED WORK CODE, DBE AND MWBE STATUS

	DBE				MBE				WBE			
	Non-DBE		DBE		Non-MBE		MBE		Non-WBE		WBE	
	Firms	% of Work Code	Firms	% of Work Code	Firms	% of Work Code	Firms	% of Work Code	Firms	% of Work Code	Firms	% of Work Code
Hauling: Gravel and Asphalt												
Hauling Gravel	303	63.4%	175	36.6%	364	76.2%	114	23.8%	406	84.9%	72	15.1%
Hauling Asphalt	130	49.6%	132	50.4%	172	65.6%	90	34.4%	208	79.4%	54	20.6%
Landscaping and Erosion Control												
Temporary Silt Fence	270	80.8%	64	19.2%	303	90.7%	31	9.3%	299	89.5%	35	10.5%
Seeding and Mulching	201	77.3%	59	22.7%	237	91.2%	23	8.8%	220	84.6%	40	15.4%
Landscape Planting	112	72.3%	43	27.7%	137	88.4%	18	11.6%	127	81.9%	28	18.1%
Mowing	29	58.0%	21	42.0%	40	80.0%	10	20.0%	38	76.0%	12	24.0%
Concrete Drainage Structures												
Incidental Concrete Construction	230	81.3%	53	18.7%	255	90.1%	28	9.9%	253	89.4%	30	10.6%
Brick Masonry Construction	145	81.9%	32	18.1%	158	89.3%	19	10.7%	162	91.5%	15	8.5%
Minor Drainage Structures	114	82.6%	24	17.4%	127	92.0%	11	8.0%	124	89.9%	14	10.1%
Curb and Gutter	199	79.9%	50	20.1%	219	88.0%	30	12.0%	228	91.6%	21	8.4%
Sidewalks and Driveways	75	74.3%	26	25.7%	85	84.2%	16	15.8%	90	89.1%	11	10.9%
Concrete Structures												
Box Culverts	167	87.9%	23	12.1%	176	92.6%	14	7.4%	181	95.3%	9	4.7%
Bridges	95	84.8%	17	15.2%	100	89.3%	12	10.7%	106	94.6%	6	5.4%
Steel Structures	19	100.0%	0	0.0%	19	100.0%	0	0.0%	19	100.0%	0	0.0%
Painting Steel Structures	20	83.3%	4	16.7%	20	83.3%	4	16.7%	24	100.0%	0	0.0%
Concrete Barriers	70	86.4%	11	13.6%	75	92.6%	6	7.4%	76	93.8%	5	6.2%
Cantilevers	29	90.6%	3	9.4%	31	96.9%	1	3.1%	30	93.8%	2	6.3%
Retaining Walls	4	100.0%	0	0.0%	4	100.0%	0	0.0%	4	100.0%	0	0.0%
Drainage: Storm and Subsurface												
Pipe Culverts/Storm Drain Installation	309	87.3%	45	12.7%	332	93.8%	22	6.2%	329	92.9%	25	7.1%
Surface Drainage Installation	202	84.2%	38	15.8%	222	92.5%	18	7.5%	218	90.8%	22	9.2%
Utility Installation												
Roadway Lighting	13	65.0%	7	35.0%	16	80.0%	4	20.0%	17	85.0%	3	15.0%
Trenching	56	86.2%	9	13.8%	61	93.8%	4	6.2%	60	92.3%	5	7.7%

FIGURE 34 CONTD.

	DBE				MBE				WBE			
	Non-DBE		DBE		Non-MBE		MBE		Non-WBE		WBE	
	Firms	% of Work Code	Firms	% of Work Code	Firms	% of Work Code	Firms	% of Work Code	Firms	% of Work Code	Firms	% of Work Code
Water Installation	248	89.2%	30	10.8%	263	94.6%	15	5.4%	263	94.6%	15	5.4%
Sanitary Sewer Installation	239	90.9%	24	9.1%	251	95.4%	12	4.6%	251	95.4%	12	4.6%
Bore and Jack	24	92.3%	2	7.7%	26	100.0%	0	0.0%	24	92.3%	2	7.7%
Utility Installation/Removal: Fiber Optic	20	87.0%	3	13.0%	23	100.0%	0	0.0%	20	87.0%	3	13.0%
Metal Pole Installation	12	63.2%	7	36.8%	15	78.9%	4	21.1%	16	84.2%	3	15.8%
Directional Boring	25	92.6%	2	7.4%	26	96.3%	1	3.7%	26	96.3%	1	3.7%
Utility Installation/Removal: Gas	3	100.0%	0	0.0%	3	100.0%	0	0.0%	3	100.0%	0	0.0%
Utility Installation/Removal: Power/Electric	11	68.8%	5	31.3%	14	87.5%	2	12.5%	13	81.3%	3	18.8%
Utility Installation/Removal: Telephone	17	94.4%	1	5.6%	18	100.0%	0	0.0%	17	94.4%	1	5.6%
Utility Installation/Removal: Cable	13	92.9%	1	7.1%	14	100.0%	0	0.0%	13	92.9%	1	7.1%
Signal and Traffic Management Systems	41	80.4%	10	19.6%	47	92.2%	4	7.8%	45	88.2%	6	11.8%
Marine Vessels and Construction												
Vehicle Construction: Ferry	1	100.0%	0	0.0%	1	100.0%	0	0.0%	1	100.0%	0	0.0%
Vehicle Repair: Ferry	1	100.0%	0	0.0%	1	100.0%	0	0.0%	1	100.0%	0	0.0%
Docs/Pier Construction	3	100.0%	0	0.0%	3	100.0%	0	0.0%	3	100.0%	0	0.0%
Vertical Construction												
Vertical Construction	4	28.6%	10	71.4%	6	42.9%	8	57.1%	11	78.6%	3	21.4%
Site Preparation												
Clearing and Grabbing	301	80.1%	75	19.9%	333	88.6%	43	11.4%	341	90.7%	35	9.3%
Ceiling Non-Environmental Wells	4	80.0%	1	20.0%	4	80.0%	1	20.0%	5	100.0%	0	0.0%
Building Removal and Demolition	223	79.1%	59	20.9%	244	86.5%	38	13.5%	261	92.6%	21	7.4%
Roadway Grading and Excavation	310	83.3%	62	16.7%	339	91.1%	33	8.9%	341	91.7%	31	8.3%
Lime Treated Soil	63	94.0%	4	6.0%	65	97.0%	2	3.0%	64	95.5%	3	4.5%
Cement Treated Base Course	41	93.2%	3	6.8%	43	97.7%	1	2.3%	42	95.5%	2	4.5%
Soil-Cement Base	10	83.3%	2	16.7%	11	91.7%	1	8.3%	10	83.3%	2	16.7%
Milling Asphalt Pavements	52	70.3%	22	29.7%	62	83.8%	12	16.2%	59	79.7%	15	20.3%
Construction Surveying	62	91.2%	6	8.8%	66	97.1%	2	2.9%	64	94.1%	4	5.9%
Paving												
Asphalt Concrete: Pavements	100	78.7%	27	21.3%	112	88.2%	15	11.8%	112	88.2%	15	11.8%
Asphalt Concrete: Pavement Repair	52	86.7%	8	13.3%	57	95.0%	3	5.0%	54	90.0%	6	10.0%

FIGURE 34 CONTD.

	DBE				MBE				WBE			
	Non-DBE		DBE		Non-MBE		MBE		Non-WBE		WBE	
	Firms	% of Work Code	Firms	% of Work Code	Firms	% of Work Code	Firms	% of Work Code	Firms	% of Work Code	Firms	% of Work Code
Asphalt Surface Treatment	60	75.9%	19	24.1%	69	87.3%	10	12.7%	67	84.8%	12	15.2%
Concrete Pavement: Highways	87	77.0%	26	23.0%	96	85.0%	17	15.0%	103	91.2%	10	8.8%
Guard Rail Installation	22	59.5%	15	40.5%	31	83.8%	6	16.2%	28	75.7%	9	24.3%
Guard Rail installation	2	28.6%	5	71.4%	7	100.0%	0	0.0%	2	28.6%	5	71.4%
Fence Installation	62	68.9%	28	31.1%	83	92.2%	7	7.8%	69	76.7%	21	23.3%
Permanent Signing	32	71.1%	13	28.9%	43	95.6%	2	4.4%	34	75.6%	11	24.4%
Pavement Markings	35	68.6%	16	31.4%	44	86.3%	7	13.7%	42	82.4%	9	17.6%
Pavement Markers	14	58.3%	10	41.7%	21	87.5%	3	12.5%	17	70.8%	7	29.2%
Work Zone Safety												
Work Zone Traffic Control Devices	27	87.1%	4	12.9%	30	96.8%	1	3.2%	28	90.3%	3	9.7%
Work Zone Signs	77	84.6%	14	15.4%	88	96.7%	3	3.3%	80	87.9%	11	12.1%
Geotechnical												
Rock Blasting	7	100.0%	0	0.0%	7	100.0%	0	0.0%	7	100.0%	0	0.0%
Retaining Walls	7	100.0%	0	0.0%	7	100.0%	0	0.0%	7	100.0%	0	0.0%
Foundation for Highway Signs	6	75.0%	2	25.0%	7	87.5%	1	12.5%	7	87.5%	1	12.5%
Contaminated Materials Removal	1	50.0%	1	50.0%	1	50.0%	1	50.0%	2	100.0%	0	0.0%
Drilling for Geotechnical Investigations	4	80.0%	1	20.0%	5	100.0%	0	0.0%	4	80.0%	1	20.0%
Pile Driving Analyzer	1	100.0%	0	0.0%	1	100.0%	0	0.0%	1	100.0%	0	0.0%
None-Destructive Foundation Testing	2	100.0%	0	0.0%	2	100.0%	0	0.0%	2	100.0%	0	0.0%
Foundation Testing	2	100.0%	0	0.0%	2	100.0%	0	0.0%	2	100.0%	0	0.0%
Drilled Piers	2	100.0%	0	0.0%	2	100.0%	0	0.0%	2	100.0%	0	0.0%
Micropiles	4	100.0%	0	0.0%	4	100.0%	0	0.0%	4	100.0%	0	0.0%
Marine Vessels and Construction	1	100.0%	0	0.0%	1	100.0%	0	0.0%	1	100.0%	0	0.0%
Vibration and Noise Monitoring	1	100.0%	0	0.0%	1	100.0%	0	0.0%	1	100.0%	0	0.0%
Structure Movement Monitoring	0											
Ground Improvement Methods	2	100.0%	0	0.0%	2	100.0%	0	0.0%	2	100.0%	0	0.0%
Saw Cutting												
Asphalt Saw Cutting	49	84.5%	9	15.5%	54	93.1%	4	6.9%	53	91.4%	5	8.6%
Concrete Cutting	47	79.7%	12	20.3%	54	91.5%	5	8.5%	52	88.1%	7	11.9%

FIGURE 34 CONTD.

	DBE				MBE				WBE			
	Non-DBE		DBE		Non-MBE		MBE		Non-WBE		WBE	
	Firms	% of Work Code	Firms	% of Work Code	Firms	% of Work Code	Firms	% of Work Code	Firms	% of Work Code	Firms	% of Work Code
Welding	9	69.2%	4	30.8%	10	76.9%	3	23.1%	12	92.3%	1	7.7%
Other												
Other	206	79.5%	53	20.5%	236	91.1%	23	8.9%	225	86.9%	34	13.1%
Average Availability Across all Work Codes		79.2%		20.8%		88.9%		11.1%		89.2%		10.8%

FIGURE 35: 2008 Availability of Prime and Subcontractors to NCDOT by Detailed Work Code, DBE and MWBE Status

	DBE				MBE				WBE			
	Non-DBE		DBE		Non-MBE		MBE		Non-WBE		WBE	
	Firms	% of Work Code	Firms	% of Work Code	Firms	% of Work Code	Firms	% of Work Code	Firms	% of Work Code	Firms	% of Work Code
Hauling: Gravel and Asphalt												
Hauling Gravel	326	65.1%	175	34.9%	387	77.2%	114	22.8%	429	85.6%	72	14.4%
Hauling Asphalt	142	51.8%	132	48.2%	184	67.2%	90	32.8%	220	80.3%	54	19.7%
Landscaping and Erosion Control		.%		.%		.%		.%		.%		.%
Temporary Silt Fence	292	82.0%	64	18.0%	325	91.3%	31	8.7%	321	90.2%	35	9.8%
Seeding and Mulching	218	78.7%	59	21.3%	254	91.7%	23	8.3%	237	85.6%	40	14.4%
Landscape Planting	120	73.6%	43	26.4%	145	89.0%	18	11.0%	135	82.8%	28	17.2%
Mowing	30	58.8%	21	41.2%	41	80.4%	10	19.6%	39	76.5%	12	23.5%
Concrete Drainage Structures												
Incidental Concrete Construction	248	82.4%	53	17.6%	273	90.7%	28	9.3%	271	90.0%	30	10.0%
Brick Masonry Construction	153	82.7%	32	17.3%	166	89.7%	19	10.3%	170	91.9%	15	8.1%
Minor Drainage Structures	123	83.7%	24	16.3%	136	92.5%	11	7.5%	133	90.5%	14	9.5%
Curb and Gutter	215	81.1%	50	18.9%	235	88.7%	30	11.3%	244	92.1%	21	7.9%
Sidewalks and Driveways	86	76.8%	26	23.2%	96	85.7%	16	14.3%	101	90.2%	11	9.8%
Concrete Structures												
Box Culverts	187	89.0%	23	11.0%	196	93.3%	14	6.7%	201	95.7%	9	4.3%
Bridges	107	86.3%	17	13.7%	112	90.3%	12	9.7%	118	95.2%	6	4.8%
Steel Structures	25	100.0%	0	.0%	25	100.0%	0	.0%	25	100.0%	0	.0%
Painting Steel Structures	23	85.2%	4	14.8%	23	85.2%	4	14.8%	27	100.0%	0	.0%
Concrete Barriers	79	87.8%	11	12.2%	84	93.3%	6	6.7%	85	94.4%	5	5.6%
Cantilevers	35	92.1%	3	7.9%	37	97.4%	1	2.6%	36	94.7%	2	5.3%
Retaining Walls	5	100.0%	0	.0%	5	100.0%	0	.0%	5	100.0%	0	.0%
Drainage: Storm and Subsurface												
Pipe Culverts/Storm Drain Installation	335	88.2%	45	11.8%	358	94.2%	22	5.8%	355	93.4%	25	6.6%
Surface Drainage Installation	219	85.2%	38	14.8%	239	93.0%	18	7.0%	235	91.4%	22	8.6%
Utility Installation												
Roadway Lighting	14	66.7%	7	33.3%	17	81.0%	4	19.0%	18	85.7%	3	14.3%

FIGURE 35 CONTD.

	DBE				MBE				WBE			
	Non-DBE		DBE		Non-MBE		MBE		Non-WBE		WBE	
	Firms	% of Work Code	Firms	% of Work Code	Firms	% of Work Code	Firms	% of Work Code	Firms	% of Work Code	Firms	% of Work Code
Trenching	62	87.3%	9	12.7%	67	94.4%	4	5.6%	66	93.0%	5	7.0%
Water Installation	267	89.9%	30	10.1%	282	94.9%	15	5.1%	282	94.9%	15	5.1%
Sanitary Sewer Installation	258	91.5%	24	8.5%	270	95.7%	12	4.3%	270	95.7%	12	4.3%
Bore and Jack	26	92.9%	2	7.1%	28	100.0%	0	.0%	26	92.9%	2	7.1%
Utility Installation/Removal: Fiber Optic	22	88.0%	3	12.0%	25	100.0%	0	.0%	22	88.0%	3	12.0%
Metal Pole Installation	13	65.0%	7	35.0%	16	80.0%	4	20.0%	17	85.0%	3	15.0%
Directional Boring	27	93.1%	2	6.9%	28	96.6%	1	3.4%	28	96.6%	1	3.4%
Utility Installation/Removal: Gas	3	100.0%	0	.0%	3	100.0%	0	.0%	3	100.0%	0	.0%
Utility Installation/Removal: Power/Electric	12	70.6%	5	29.4%	15	88.2%	2	11.8%	14	82.4%	3	17.6%
Utility Installation/Removal: Telephone	19	95.0%	1	5.0%	20	100.0%	0	.0%	19	95.0%	1	5.0%
Utility Installation/Removal: Cable	15	93.8%	1	6.2%	16	100.0%	0	.0%	15	93.8%	1	6.3%
Signals												
Signal and Traffic Management Systems	42	80.8%	10	19.2%	48	92.3%	4	7.7%	46	88.5%	6	11.5%
Marine Vessels and Construction		.%		.%		.%		.%		.%		.%
Vehicle Construction: Ferry	1	100.0%	0	.0%	1	100.0%	0	.0%	1	100.0%	0	.0%
Vehicle Repair: Ferry	1	100.0%	0	.0%	1	100.0%	0	.0%	1	100.0%	0	.0%
Docs/Pier Construction	6	100.0%	0	.0%	6	100.0%	0	.0%	6	100.0%	0	.0%
Vertical Construction												
Vertical Construction	4	28.6%	10	71.4%	6	42.9%	8	57.1%	11	78.6%	3	21.4%
Clearing and Grabbing	328	81.4%	75	18.6%	360	89.3%	43	10.7%	368	91.3%	35	8.7%
Ceiling Non-Environmental Wells	4	80.0%	1	20.0%	4	80.0%	1	20.0%	5	100.0%	0	.0%
Building Removal and Demolition	237	80.1%	59	19.9%	258	87.2%	38	12.8%	275	92.9%	21	7.1%
Roadway Grading and Excavation	337	84.5%	62	15.5%	366	91.7%	33	8.3%	368	92.2%	31	7.8%
Lime Treated Soil	73	94.8%	4	5.2%	75	97.4%	2	2.6%	74	96.1%	3	3.9%
Cement Treated Base Course	48	94.1%	3	5.9%	50	98.0%	1	2.0%	49	96.1%	2	3.9%
Soil-Cement Base	12	85.7%	2	14.3%	13	92.9%	1	7.1%	12	85.7%	2	14.3%
Milling Asphalt Pavements	56	71.8%	22	28.2%	66	84.6%	12	15.4%	63	80.8%	15	19.2%

FIGURE 35 CONTD.

	DBE				MBE				WBE			
	Non-DBE		DBE		Non-MBE		MBE		Non-WBE		WBE	
	Firms	% of Work Code	Firms	% of Work Code	Firms	% of Work Code	Firms	% of Work Code	Firms	% of Work Code	Firms	% of Work Code
Construction Surveying	73	92.4%	6	7.6%	77	97.5%	2	2.5%	75	94.9%	4	5.1%
Paving												
Asphalt Concrete: Pavements	111	80.4%	27	19.6%	123	89.1%	15	10.9%	123	89.1%	15	10.9%
Asphalt Concrete: Pavement Repair	58	87.9%	8	12.1%	63	95.5%	3	4.5%	60	90.9%	6	9.1%
Asphalt Surface Treatment	62	76.5%	19	23.5%	71	87.7%	10	12.3%	69	85.2%	12	14.8%
Concrete Pavement: Highways	99	79.2%	26	20.8%	108	86.4%	17	13.6%	115	92.0%	10	8.0%
Highway Finishing												
Guard Rail Installation	23	60.5%	15	39.5%	32	84.2%	6	15.8%	29	76.3%	9	23.7%
Guard Rail Installation	3	37.5%	5	62.5%	8	100.0%	0	.0%	3	37.5%	5	62.5%
Fence Installation	64	69.6%	28	30.4%	85	92.4%	7	7.6%	71	77.2%	21	22.8%
Permanent Signing	33	71.7%	13	28.3%	44	95.7%	2	4.3%	35	76.1%	11	23.9%
Pavement Markings	38	70.4%	16	29.6%	47	87.0%	7	13.0%	45	83.3%	9	16.7%
Pavement Markers	17	63.0%	10	37.0%	24	88.9%	3	11.1%	20	74.1%	7	25.9%
Work Zone Safety												
Work Zone Traffic Control Devices	29	87.9%	4	12.1%	32	97.0%	1	3.0%	30	90.9%	3	9.1%
Work Zone Signs	84	85.7%	14	14.3%	95	96.9%	3	3.1%	87	88.8%	11	11.2%
Rock Blasting	7	100.0%	0	.0%	7	100.0%	0	.0%	7	100.0%	0	.0%
Retaining Walls	9	100.0%	0	.0%	9	100.0%	0	.0%	9	100.0%	0	.0%
Foundation for Highway Signs	7	77.8%	2	22.2%	8	88.9%	1	11.1%	8	88.9%	1	11.1%
Contaminated Materials Removal	1	50.0%	1	50.0%	1	50.0%	1	50.0%	2	100.0%	0	.0%
Drilling for Geotechnical Investigations	4	80.0%	1	20.0%	5	100.0%	0	.0%	4	80.0%	1	20.0%
Pile Driving Analyzer	1	100.0%	0	.0%	1	100.0%	0	.0%	1	100.0%	0	.0%
None-Destructive Foundation Testing	2	100.0%	0	.0%	2	100.0%	0	.0%	2	100.0%	0	.0%
Foundation Testing	2	100.0%	0	.0%	2	100.0%	0	.0%	2	100.0%	0	.0%
Drilled Piers	3	100.0%	0	.0%	3	100.0%	0	.0%	3	100.0%	0	.0%
Micropiles	6	100.0%	0	.0%	6	100.0%	0	.0%	6	100.0%	0	.0%
Marine Vessels and Construction	1	100.0%	0	.0%	1	100.0%	0	.0%	1	100.0%	0	.0%

FIGURE 35 CONTD.

	DBE				MBE				WBE			
	Non-DBE		DBE		Non-MBE		Non-DBE		DBE		Non-MBE	
	Firms	% of Work Code	Firms	% of Work Code	Firms	% of Work Code	Firms	% of Work Code	Firms	% of Work Code	Firms	% of Work Code
Vibration and Noise Monitoring	1	100.0%	0	.0%	1	100.0%	0	.0%	1	100.0%	0	.0%
Structure Movement Monitoring	0											
Ground Improvement Methods	2	100.0%	0	.0%	2	100.0%	0	.0%	2	100.0%	0	.0%
Saw Cutting												
Asphalt Saw Cutting	53	85.5%	9	14.5%	58	93.5%	4	6.5%	57	91.9%	5	8.1%
Concrete Cutting	52	81.2%	12	18.8%	59	92.2%	5	7.8%	57	89.1%	7	10.9%
Welding												
Welding	10	71.4%	4	28.6%	11	78.6%	3	21.4%	13	92.9%	1	7.1%
Other												
Other	221	80.7%	53	19.3%	251	91.6%	23	8.4%	240	87.6%	34	12.4%
Average Availability Across all Work Codes		80.6%		19.4%		89.6%		10.4%		89.9%		10.1%

FIGURE 36: DIVISION 1: 2008 Availability of Primes and Subcontractors to NCDOT by Detailed Work Code, Division, DBE and MWBE Status

	DBE				MBE				WBE			
	Non-DBE		DBE		Non-MBE		MBE		Non-WBE		WBE	
	Firms	% of Work Code	Firms	% of Work Code	Firms	% of Work Code	Firms	% of Work Code	Firms	% of Work Code	Firms	% of Work Code
Hauling: Gravel and Asphalt												
Hauling Gravel	198	76.2%	62	23.8%	217	83.5%	43	16.5%	238	91.5%	22	8.5%
Hauling Asphalt	80	67.2%	39	32.8%	88	73.9%	31	26.1%	108	90.8%	11	9.2%
Temporary Silt Fence	202	87.1%	30	12.9%	213	91.8%	19	8.2%	219	94.4%	13	5.6%
Seeding and Mulching	150	83.3%	30	16.7%	164	91.1%	16	8.9%	163	90.6%	17	9.4%
Landscape Planting	80	78.4%	22	21.6%	91	89.2%	11	10.8%	89	87.3%	13	12.7%
Mowing	20	64.5%	11	35.5%	26	83.9%	5	16.1%	25	80.6%	6	19.4%
Incidental Concrete Construction	186	84.5%	34	15.5%	201	91.4%	19	8.6%	203	92.3%	17	7.7%
Brick Masonry Construction	112	84.2%	21	15.8%	117	88.0%	16	12.0%	127	95.5%	6	4.5%
Minor Drainage Structures	87	87.9%	12	12.1%	94	94.9%	5	5.1%	92	92.9%	7	7.1%
Curb and Gutter	156	85.7%	26	14.3%	164	90.1%	18	9.9%	174	95.6%	8	4.4%
Sidewalks and Driveways	60	81.1%	14	18.9%	65	87.8%	9	12.2%	69	93.2%	5	6.8%
Concrete Structures												
Box Culverts	153	91.6%	14	8.4%	157	94.0%	10	6.0%	163	97.6%	4	2.4%
Bridges	93	86.9%	14	13.1%	97	90.7%	10	9.3%	103	96.3%	4	3.7%
Steel Structures	25	100.0%	0	.0%	25	100.0%	0	.0%	25	100.0%	0	.0%
Painting Steel Structures	20	83.3%	4	16.7%	20	83.3%	4	16.7%	24	100.0%	0	.0%
Concrete Barriers	64	90.1%	7	9.9%	67	94.4%	4	5.6%	68	95.8%	3	4.2%
Cantilevers	33	94.3%	2	5.7%	34	97.1%	1	2.9%	34	97.1%	1	2.9%
Retaining Walls	4	100.0%	0	.0%	4	100.0%	0	.0%	4	100.0%	0	.0%
Pipe Culverts/Storm Drain Installation	225	90.7%	23	9.3%	234	94.4%	14	5.6%	237	95.6%	11	4.4%
Surface Drainage Installation	158	88.3%	21	11.7%	166	92.7%	13	7.3%	169	94.4%	10	5.6%
Roadway Lighting	10	62.5%	6	37.5%	13	81.3%	3	18.8%	13	81.3%	3	18.8%
Trenching	48	85.7%	8	14.3%	52	92.9%	4	7.1%	52	92.9%	4	7.1%
Water Installation	179	89.9%	20	10.1%	187	94.0%	12	6.0%	191	96.0%	8	4.0%
Sanitary Sewer Installation	171	91.4%	16	8.6%	177	94.7%	10	5.3%	181	96.8%	6	3.2%
Bore and Jack	21	95.5%	1	4.5%	22	100.0%	0	.0%	21	95.5%	1	4.5%
Utility Installation/Removal:												
Fiber Optic	16	84.2%	3	15.8%	19	100.0%	0	.0%	16	84.2%	3	15.8%
Metal Pole Installation	8	57.1%	6	42.9%	11	78.6%	3	21.4%	11	78.6%	3	21.4%
Directional Boring	18	94.7%	1	5.3%	19	100.0%	0	.0%	18	94.7%	1	5.3%
Utility Installation/Removal: Gas	3	100.0%	0	.0%	3	100.0%	0	.0%	3	100.0%	0	.0%
Utility Installation/Removal: Power/Electric	7	70.0%	3	30.0%	9	90.0%	1	10.0%	8	80.0%	2	20.0%
Utility Installation/Removal: Telephone	12	92.3%	1	7.7%	13	100.0%	0	.0%	12	92.3%	1	7.7%
Utility Installation/Removal: Cable	10	90.9%	1	9.1%	11	100.0%	0	.0%	10	90.9%	1	9.1%
Signal and Traffic Management Systems	33	80.5%	8	19.5%	38	92.7%	3	7.3%	36	87.8%	5	12.2%
Vehicle Construction: Ferry												
Vehicle Construction: Ferry	1	100.0%	0	.0%	1	100.0%	0	.0%	1	100.0%	0	.0%
Vehicle Repair: Ferry												
Vehicle Repair: Ferry	1	100.0%	0	.0%	1	100.0%	0	.0%	1	100.0%	0	.0%
Docs/Pier Construction												
Docs/Pier Construction	6	100.0%	0	.0%	6	100.0%	0	.0%	6	100.0%	0	.0%
Vertical Construction												
Vertical Construction	3	30.0%	7	70.0%	5	50.0%	5	50.0%	8	80.0%	2	20.0%

Site Preparation Clearing and Grabbing	234	86.0%	38	14.0%	244	89.7%	28	10.3%	260	95.6%	12	4.4%
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FIGURE 36 CONTD.

DIVISION 1: 2008 Availability of Primes and Subcontractors to NCDOT by Detailed Work Code, Division, DBE and MWBE Status

	DBE				MBE				WBE			
	Non-DBE		DBE		Non-MBE		MBE		Non-WBE		WBE	
	Firms	% of Work Code	Firms	% of Work Code	Firms	% of Work Code	Firms	% of Work Code	Firms	% of Work Code	Firms	% of Work Code
Ceiling Non-Environmental Wells	1	50.0%	1	50.0%	1	50.0%	1	50.0%	2	100.0%	0	.0%
Building Removal and Demolition	169	84.5%	31	15.5%	174	87.0%	26	13.0%	195	97.5%	5	2.5%
Roadway Grading and Excavation	237	88.8%	30	11.2%	248	92.9%	19	7.1%	254	95.1%	13	4.9%
Lime Treated Soil	63	98.4%	1	1.6%	63	98.4%	1	1.6%	64	100.0%	0	.0%
Cement Treated Base Course	47	94.0%	3	6.0%	49	98.0%	1	2.0%	48	96.0%	2	4.0%
Soil-Cement Base	12	92.3%	1	7.7%	13	100.0%	0	.0%	12	92.3%	1	7.7%
Milling Asphalt Pavements	44	83.0%	9	17.0%	46	86.8%	7	13.2%	48	90.6%	5	9.4%
Construction Surveying	60	96.8%	2	3.2%	60	96.8%	2	3.2%	62	100.0%	0	.0%
Paving												
Asphalt Concrete: Pavements	82	86.3%	13	13.7%	86	90.5%	9	9.5%	90	94.7%	5	5.3%
Asphalt Concrete: Pavement Repair	38	88.4%	5	11.6%	41	95.3%	2	4.7%	40	93.0%	3	7.0%
Asphalt Surface Treatment	46	85.2%	8	14.8%	49	90.7%	5	9.3%	50	92.6%	4	7.4%
Concrete Pavement: Highways	72	83.7%	14	16.3%	76	88.4%	10	11.6%	81	94.2%	5	5.8%
Guard Rail Installation	18	58.1%	13	41.9%	25	80.6%	6	19.4%	24	77.4%	7	22.6%
Guard Rail installation	3	42.9%	4	57.1%	7	100.0%	0	.0%	3	42.9%	4	57.1%
Fence Installation	47	70.1%	20	29.9%	60	89.6%	7	10.4%	54	80.6%	13	19.4%
Permanent Signing	28	75.7%	9	24.3%	35	94.6%	2	5.4%	30	81.1%	7	18.9%
Pavement Markings	28	73.7%	10	26.3%	34	89.5%	4	10.5%	32	84.2%	6	15.8%
Pavement Markers	16	72.7%	6	27.3%	21	95.5%	1	4.5%	17	77.3%	5	22.7%
Work Zone Safety												
Work Zone Traffic Control Devices	25	86.2%	4	13.8%	28	96.6%	1	3.4%	26	89.7%	3	10.3%
Work Zone Signs	69	88.5%	9	11.5%	76	97.4%	2	2.6%	71	91.0%	7	9.0%
Geotechnical												
Rock Blasting	5	100.0%	0	.0%	5	100.0%	0	.0%	5	100.0%	0	.0%
Retaining Walls	8	100.0%	0	.0%	8	100.0%	0	.0%	8	100.0%	0	.0%
Foundation for Highway Signs	6	75.0%	2	25.0%	7	87.5%	1	12.5%	7	87.5%	1	12.5%
Contaminated Materials Removal	1	50.0%	1	50.0%	1	50.0%	1	50.0%	2	100.0%	0	.0%
Drilling for Geotechnical Investigations	4	80.0%	1	20.0%	5	100.0%	0	.0%	4	80.0%	1	20.0%
Pile Driving Analyzer	1	100.0%	0	.0%	1	100.0%	0	.0%	1	100.0%	0	.0%
None-Destructive Foundation Testing	2	100.0%	0	.0%	2	100.0%	0	.0%	2	100.0%	0	.0%
Foundation Testing	2	100.0%	0	.0%	2	100.0%	0	.0%	2	100.0%	0	.0%
Drilled Piers	3	100.0%	0	.0%	3	100.0%	0	.0%	3	100.0%	0	.0%
Micropiles	6	100.0%	0	.0%	6	100.0%	0	.0%	6	100.0%	0	.0%
Marine Vessels and Construction	1	100.0%	0	.0%	1	100.0%	0	.0%	1	100.0%	0	.0%
Vibration and Noise Monitoring	1	100.0%	0	.0%	1	100.0%	0	.0%	1	100.0%	0	.0%
Structure Movement Monitoring	0	.%	0	.%	0	.%	0	.%	0	.%	0	.%

Ground Improvement Methods	2	100.0%	0	.0%	2	100.0%	0	.0%	2	100.0%	0	.0%
Asphalt Saw Cutting	27	79.4%	7	20.6%	30	88.2%	4	11.8%	31	91.2%	3	8.8%
Concrete Cutting	30	75.0%	10	25.0%	36	90.0%	4	10.0%	34	85.0%	6	15.0%
Welding	9	90.0%	1	10.0%	9	90.0%	1	10.0%	10	100.0%	0	.0%
Other	159	83.7%	31	16.3%	176	92.6%	14	7.4%	172	90.5%	18	9.5%
Average Availability Across		85.0%		15.0%		91.1%		8.9%		93.3%		6.7%

FIGURE 37: DIVISION 1; 2008 AVAILABILITY OF SBES TO NCDOT BY WORK CODE, DIVISION MWBE STATUS

	MWBE				MBE				WBE			
	Non- MWBE		MWBE		Non-MBE		MBE		Non-WBE		WBE	
	Firms	% of Work Code	Firms	% of Work Code	Firms	% of Work Code	Firms	% of Work Code	Firms	% of Work Code	Firms	% of Work Code
Hauling: Gravel and Asphalt	143	74.1%	50	25.9%	157	81.3%	36	18.7%	176	91.2%	17	8.8%
Landscaping and Erosion Control: Silk Detention, Mulching, Mowing	173	82.4%	37	17.6%	189	90.0%	21	10.0%	192	91.4%	18	8.6%
Concrete Drainage Structures and Masonry	177	81.9%	39	18.1%	196	90.7%	20	9.3%	194	89.8%	22	10.2%
Concrete Structures: Culverts, Bridges and Barriers	128	85.3%	22	14.7%	137	91.3%	13	8.7%	141	94.0%	9	6.0%
Drainage: Storm and Subsurface Drainage Installation	173	86.1%	28	13.9%	186	92.5%	15	7.5%	186	92.5%	15	7.5%
Utility Installation: Roadway Lighting, Power an Electric	167	87.9%	23	12.1%	178	93.7%	12	6.3%	179	94.2%	11	5.8%
Signals: Traffic Management, Fiber Optic Cable	32	82.1%	7	17.9%	37	94.9%	2	5.1%	34	87.2%	5	12.8%
Marine: Vessel Repair and Construction, Pier Construction	37	84.1%	7	15.9%	42	95.5%	2	4.5%	39	88.6%	5	11.4%
Vertical Construction	2	28.6%	5	71.4%	4	57.1%	3	42.9%	5	71.4%	2	28.6%
Site Preparation: Clearing, Demolition, Excavation, Surveying	248	84.1%	47	15.9%	265	89.8%	30	10.2%	275	93.2%	20	6.8%
Paving: Asphalt, Pavement Repair, Surface Treatment	87	82.1%	19	17.9%	95	89.6%	11	10.4%	96	90.6%	10	9.4%
Highway Finishing: Guard Rail, Fixed Installation, Pavement Marking	80	70.8%	33	29.2%	105	92.9%	8	7.1%	88	77.9%	25	22.1%
Work Zone Safety: Traffic Control Devices, Work Zone Signs	59	88.1%	8	11.9%	66	98.5%	1	1.5%	60	89.6%	7	10.4%
Geotechnical: Rock Blasting, Pile Driving, Foundation Testing	13	100.0%	0	.0%	13	100.0%	0	.0%	13	100.0%	0	.0%
Saw Cutting: Concrete and Asphalt	29	76.3%	9	23.7%	35	92.1%	3	7.9%	32	84.2%	6	15.8%
Welding	8	80.0%	2	20.0%	9	90.0%	1	10.0%	9	90.0%	1	10.0%
Other	130	81.8%	29	18.2%	148	93.1%	11	6.9%	140	88.1%	19	11.9%
Average Availability Across all Work Codes		82.2%		17.8%		90.8%		9.2%		90.6%		9.4%

FIGURE 38: DIVISION 2; 2008 AVAILABILITY OF SBEs TO NCDOT BY WORK CODE, DIVISION AND MWBE STATUS

	MWBE				MBE				WBE			
	Non- MWBE		MWBE		Non-MBE		MBE		Non-WBE		WBE	
	Firms	% of Work Code	Firms	% of Work Code	Firms	% of Work Code	Firms	% of Work Code	Firms	% of Work Code	Firms	% of Work Code
Hauling: Gravel and Asphalt	94	61.8%	58	38.2%	111	73.0%	41	27.0%	131	86.2%	21	13.8%
Landscaping and Erosion Control: Silk Detention, Mulching, Mowing	156	76.5%	48	23.5%	173	84.8%	31	15.2%	182	89.2%	22	10.8%
Concrete Drainage Structures and Masonry	53	59.6%	36	40.4%	62	69.7%	27	30.3%	76	85.4%	13	14.6%
Concrete Structures: Culverts, Bridges and Barriers	34	69.4%	15	30.6%	37	75.5%	12	24.5%	45	91.8%	4	8.2%
Drainage: Storm and Subsurface Drainage Installation	75	69.4%	33	30.6%	89	82.4%	19	17.6%	90	83.3%	18	16.7%
Utility Installation: Roadway Lighting, Power and Electric	45	68.2%	21	31.8%	51	77.3%	15	22.7%	57	86.4%	9	13.6%
Signals: Traffic Management, Fiber Optic Cable	11	57.9%	8	42.1%	13	68.4%	6	31.6%	17	89.5%	2	10.5%
Marine: Vessel Repair and Construction, Pier Construction	13	61.9%	8	38.1%	15	71.4%	6	28.6%	19	90.5%	2	9.5%
Vertical Construction	6	66.7%	3	33.3%	6	66.7%	3	33.3%	8	88.9%	1	11.1%
Site Preparation: Clearing, Demolition, Excavation, Surveying	149	73.4%	54	26.6%	164	80.8%	39	19.2%	183	90.1%	20	9.9%
Paving: Asphalt, Pavement Repair, Surface Treatment	37	58.7%	26	41.3%	43	68.3%	20	31.7%	52	82.5%	11	17.5%
Highway Finishing: Guard Rail, Fixed Installation, Pavement Marking	57	66.3%	29	33.7%	66	76.7%	20	23.3%	73	84.9%	13	15.1%
Work Zone Safety: Traffic Control Devices, Work Zone Signs	21	75.0%	7	25.0%	23	82.1%	5	17.9%	25	89.3%	3	10.7%
Geotechnical: Rock Blasting, Pile Driving, Foundation Testing	2	100.0%	0	.0%	2	100.0%	0	.0%	2	100.0%	0	.0%
Saw Cutting: Concrete and Asphalt	2	28.6%	5	71.4%	5	71.4%	2	28.6%	4	57.1%	3	42.9%
Welding	0	.0%	1	100.0%	0	.0%	1	100.0%	1	100.0%	0	.0%
Other	92	76.0%	29	24.0%	107	88.4%	14	11.6%	106	87.6%	15	12.4%
Average Availability Across all Work Codes		69.0%		31.0%		78.7%		21.3%		87.2%		12.8%

FIGURE 39: DIVISION 3; 2008 AVAILABILITY OF SBES TO NCDOT BY WORK CODE, DIVISION AND MWBE STATUS

	MWBE				MBE				WBE			
	Non- MWBE		MWBE		Non-MBE		MBE		Non-WBE		WBE	
	Firms	% of Work Code	Firms	% of Work Code	Firms	% of Work Code	Firms	% of Work Code	Firms	% of Work Code	Firms	% of Work Code
Hauling: Gravel and Asphalt	99	61.5%	62	38.5%	118	73.3%	43	26.7%	137	85.1%	24	14.9%
Landscaping and Erosion Control: Silk Detention, Mulching, Mowing	170	77.3%	50	22.7%	189	85.9%	31	14.1%	196	89.1%	24	10.9%
Concrete Drainage Structures and Masonry	58	61.7%	36	38.3%	68	72.3%	26	27.7%	80	85.1%	14	14.9%
Concrete Structures: Culverts, Bridges and Barriers	40	71.4%	16	28.6%	43	76.8%	13	23.2%	52	92.9%	4	7.1%
Drainage: Storm and Subsurface Drainage Installation	89	72.4%	34	27.6%	103	83.7%	20	16.3%	105	85.4%	18	14.6%
Utility Installation: Roadway Lighting, Power an Electric	52	66.7%	26	33.3%	59	75.6%	19	24.4%	68	87.2%	10	12.8%
Signals: Traffic Management, Fiber Optic Cable	9	50.0%	9	50.0%	11	61.1%	7	38.9%	16	88.9%	2	11.1%
Marine: Vessel Repair and Construction, Pier Construction	11	55.0%	9	45.0%	13	65.0%	7	35.0%	18	90.0%	2	10.0%
Vertical Construction	5	55.6%	4	44.4%	5	55.6%	4	44.4%	7	77.8%	2	22.2%
Site Preparation: Clearing, Demolition, Excavation, Surveying	161	73.2%	59	26.8%	179	81.4%	41	18.6%	197	89.5%	23	10.5%
Paving: Asphalt, Pavement Repair, Surface Treatment	43	63.2%	25	36.8%	49	72.1%	19	27.9%	57	83.8%	11	16.2%
Highway Finishing: Guard Rail, Fixed Installation, Pavement Marking	68	68.7%	31	31.3%	78	78.8%	21	21.2%	85	85.9%	14	14.1%
Work Zone Safety: Traffic Control Devices, Work Zone Signs	20	71.4%	8	28.6%	23	82.1%	5	17.9%	24	85.7%	4	14.3%
Geotechnical: Rock Blasting, Pile Driving, Foundation Testing	2	100.0%	0	.0%	2	100.0%	0	.0%	2	100.0%	0	.0%
Saw Cutting: Concrete and Asphalt	3	37.5%	5	62.5%	6	75.0%	2	25.0%	5	62.5%	3	37.5%
Welding	0	.0%	1	100.0%	0	.0%	1	100.0%	1	100.0%	0	.0%
Other	96	74.4%	33	25.6%	112	86.8%	17	13.2%	111	86.0%	18	14.0%
Average Availability Across all Work Codes		69.4%		30.6%		79.3%		20.7%		87.0%		13.0%

FIGURE 40: DIVISION 4; 2008 AVAILABILITY OF SBES TO NCDOT BY WORK CODE, DIVISION AND MWBE STATUS

	MWBE				MBE				WBE			
	Non- MWBE		MWBE		Non-MBE		MBE		Non-WBE		WBE	
	Firms	% of Work Code	Firms	% of Work Code	Firms	% of Work Code	Firms	% of Work Code	Firms	% of Work Code	Firms	% of Work Code
Hauling: Gravel and Asphalt	96	59.3%	66	40.7%	113	69.8%	49	30.2%	136	84.0%	26	16.0%
Landscaping and Erosion Control: Silk Detention, Mulching, Mowing	159	75.7%	51	24.3%	176	83.8%	34	16.2%	187	89.0%	23	11.0%
Concrete Drainage Structures and Masonry	53	57.6%	39	42.4%	62	67.4%	30	32.6%	78	84.8%	14	15.2%
Concrete Structures: Culverts, Bridges and Barriers	33	66.0%	17	34.0%	36	72.0%	14	28.0%	46	92.0%	4	8.0%
Drainage: Storm and Subsurface Drainage Installation	77	70.0%	33	30.0%	90	81.8%	20	18.2%	92	83.6%	18	16.4%
Utility Installation: Roadway Lighting, Power and Electric	49	69.0%	22	31.0%	55	77.5%	16	22.5%	62	87.3%	9	12.7%
Signals: Traffic Management, Fiber Optic Cable	10	50.0%	10	50.0%	12	60.0%	8	40.0%	18	90.0%	2	10.0%
Marine: Vessel Repair and Construction, Pier Construction	11	52.4%	10	47.6%	13	61.9%	8	38.1%	19	90.5%	2	9.5%
Vertical Construction	5	62.5%	3	37.5%	5	62.5%	3	37.5%	7	87.5%	1	12.5%
Site Preparation: Clearing, Demolition, Excavation, Surveying	154	72.0%	60	28.0%	171	79.9%	43	20.1%	189	88.3%	25	11.7%
Paving: Asphalt, Pavement Repair, Surface Treatment	35	54.7%	29	45.3%	41	64.1%	23	35.9%	52	81.3%	12	18.8%
Highway Finishing: Guard Rail, Fixed Installation, Pavement Marking	60	66.7%	30	33.3%	70	77.8%	20	22.2%	76	84.4%	14	15.6%
Work Zone Safety: Traffic Control Devices, Work Zone Signs	19	70.4%	8	29.6%	21	77.8%	6	22.2%	24	88.9%	3	11.1%
Geotechnical: Rock Blasting, Pile Driving, Foundation Testing	2	100.0%	0	.0%	2	100.0%	0	.0%	2	100.0%	0	.0%
Saw Cutting: Concrete and Asphalt	3	37.5%	5	62.5%	6	75.0%	2	25.0%	5	62.5%	3	37.5%
Welding	0	.0%	2	100.0%	0	.0%	2	100.0%	2	100.0%	0	.0%
Other	102	75.0%	34	25.0%	119	87.5%	17	12.5%	117	86.0%	19	14.0%
Average Availability Across all Work Codes		67.4%		32.6%		77.1%		22.9%		86.4%		13.6%

FIGURE 41: DIVISION 5; 2008 AVAILABILITY OF SBES TO NCDOT BY WORK CODE, DIVISION AND MWBE STATUS

	MWBE				MBE				WBE			
	Non-MWBE		MWBE		Non-MBE		MBE		Non-WBE		WBE	
	Firms	% of Work Code	Firms	% of Work Code	Firms	% of Work Code	Firms	% of Work Code	Firms	% of Work Code	Firms	% of Work Code
Hauling: Gravel and Asphalt	104	58.4%	74	41.6%	120	67.4%	58	32.6%	150	84.3%	28	15.7%
Landscaping and Erosion Control: Silk Detention, Mulching, Mowing	165	76.0%	52	24.0%	180	82.9%	37	17.1%	195	89.9%	22	10.1%
Concrete Drainage Structures and Masonry	60	58.8%	42	41.2%	69	67.6%	33	32.4%	87	85.3%	15	14.7%
Concrete Structures: Culverts, Bridges and Barriers	38	65.5%	20	34.5%	41	70.7%	17	29.3%	53	91.4%	5	8.6%
Drainage: Storm and Subsurface Drainage Installation	82	72.6%	31	27.4%	93	82.3%	20	17.7%	98	86.7%	15	13.3%
Utility Installation: Roadway Lighting, Power an Electric	49	66.2%	25	33.8%	56	75.7%	18	24.3%	64	86.5%	10	13.5%
Signals: Traffic Management, Fiber Optic Cable	13	52.0%	12	48.0%	15	60.0%	10	40.0%	22	88.0%	3	12.0%
Marine: Vessel Repair and Construction, Pier Construction	14	53.8%	12	46.2%	16	61.5%	10	38.5%	23	88.5%	3	11.5%
Vertical Construction	6	42.9%	8	57.1%	7	50.0%	7	50.0%	9	64.3%	5	35.7%
Site Preparation: Clearing, Demolition, Excavation, Surveying	163	71.2%	66	28.8%	180	78.6%	49	21.4%	202	88.2%	27	11.8%
Paving: Asphalt, Pavement Repair, Surface Treatment	42	56.8%	32	43.2%	50	67.6%	24	32.4%	60	81.1%	14	18.9%
Highway Finishing: Guard Rail, Fixed Installation, Pavement Marking	62	63.9%	35	36.1%	73	75.3%	24	24.7%	83	85.6%	14	14.4%
Work Zone Safety: Traffic Control Devices, Work Zone Signs	21	70.0%	9	30.0%	23	76.7%	7	23.3%	27	90.0%	3	10.0%
Geotechnical: Rock Blasting, Pile Driving, Foundation Testing	2	100.0%	0	.0%	2	100.0%	0	.0%	2	100.0%	0	.0%
Saw Cutting: Concrete and Asphalt	4	44.4%	5	55.6%	7	77.8%	2	22.2%	6	66.7%	3	33.3%
Welding	0	.0%	2	100.0%	0	.0%	2	100.0%	2	100.0%	0	.0%
Other	109	72.2%	42	27.8%	127	84.1%	24	15.9%	128	84.8%	23	15.2%
Average Availability Across all Work Codes		66.7%		33.3%		75.6%		24.4%		86.4%		13.6%

FIGURE 42: DIVISION 6; 2008 AVAILABILITY OF SBES TO NCDOT BY WORK CODE, DIVISION AND MWBE STATUS

	MWBE				MBE				WBE			
	Non- MWBE		MWBE		Non-MBE		MBE		Non-WBE		WBE	
	Firms	% of Work Code	Firms	% of Work Code	Firms	% of Work Code	Firms	% of Work Code	Firms	% of Work Code	Firms	% of Work Code
Hauling: Gravel and Asphalt	88	57.5%	65	42.5%	102	66.7%	51	33.3%	134	87.6%	19	12.4%
Landscaping and Erosion Control: Silk Detention, Mulching, Mowing	157	78.1%	44	21.9%	169	84.1%	32	15.9%	184	91.5%	17	8.5%
Concrete Drainage Structures and Masonry	56	64.4%	31	35.6%	63	72.4%	24	27.6%	76	87.4%	11	12.6%
Concrete Structures: Culverts, Bridges and Barriers	35	67.3%	17	32.7%	38	73.1%	14	26.9%	48	92.3%	4	7.7%
Drainage: Storm and Subsurface Drainage Installation	81	74.3%	28	25.7%	90	82.6%	19	17.4%	96	88.1%	13	11.9%
Utility Installation: Roadway Lighting, Power an Electric	52	68.4%	24	31.6%	59	77.6%	17	22.4%	66	86.8%	10	13.2%
Signals: Traffic Management, Fiber Optic Cable	11	52.4%	10	47.6%	13	61.9%	8	38.1%	19	90.5%	2	9.5%
Marine: Vessel Repair and Construction, Pier Construction	12	54.5%	10	45.5%	14	63.6%	8	36.4%	20	90.9%	2	9.1%
Vertical Construction	5	55.6%	4	44.4%	5	55.6%	4	44.4%	7	77.8%	2	22.2%
Site Preparation: Clearing, Demolition, Excavation, Surveying	154	73.3%	56	26.7%	170	81.0%	40	19.0%	189	90.0%	21	10.0%
Paving: Asphalt, Pavement Repair, Surface Treatment	36	59.0%	25	41.0%	42	68.9%	19	31.1%	51	83.6%	10	16.4%
Highway Finishing: Guard Rail, Fixed Installation, Pavement Marking	64	69.6%	28	30.4%	75	81.5%	17	18.5%	78	84.8%	14	15.2%
Work Zone Safety: Traffic Control Devices, Work Zone Signs	19	70.4%	8	29.6%	21	77.8%	6	22.2%	24	88.9%	3	11.1%
Geotechnical: Rock Blasting, Pile Driving, Foundation Testing	2	100.0%	0	.0%	2	100.0%	0	.0%	2	100.0%	0	.0%
Saw Cutting: Concrete and Asphalt	4	50.0%	4	50.0%	6	75.0%	2	25.0%	6	75.0%	2	25.0%
Welding	0	.0%	1	100.0%	0	.0%	1	100.0%	1	100.0%	0	.0%
Other	94	72.3%	36	27.7%	110	84.6%	20	15.4%	111	85.4%	19	14.6%
Average Availability Across all Work Codes		69.0%		31.0%		77.6%		22.4%		88.2%		11.8%

FIGURE 43: DIVISION 7; 2008 AVAILABILITY OF SBES TO NCDOT BY WORK CODE, DIVISION AND MWBE STATUS

	MWBE				MBE				WBE			
	Non- MWBE		MWBE		Non-MBE		MBE		Non-WBE		WBE	
	Firms	% of Work Code	Firms	% of Work Code	Firms	% of Work Code	Firms	% of Work Code	Firms	% of Work Code	Firms	% of Work Code
Hauling: Gravel and Asphalt	101	59.8%	68	40.2%	121	71.6%	48	28.4%	139	82.2%	30	17.8%
Landscaping and Erosion Control: Silk Detention, Mulching, Mowing	167	77.7%	48	22.3%	184	85.6%	31	14.4%	191	88.8%	24	11.2%
Concrete Drainage Structures and Masonry	59	60.2%	39	39.8%	70	71.4%	28	28.6%	82	83.7%	16	16.3%
Concrete Structures: Culverts, Bridges and Barriers	40	69.0%	18	31.0%	43	74.1%	15	25.9%	53	91.4%	5	8.6%
Drainage: Storm and Subsurface Drainage Installation	83	70.9%	34	29.1%	96	82.1%	21	17.9%	100	85.5%	17	14.5%
Utility Installation: Roadway Lighting, Power an Electric	53	67.1%	26	32.9%	61	77.2%	18	22.8%	68	86.1%	11	13.9%
Signals: Traffic Management, Fiber Optic Cable	12	50.0%	12	50.0%	15	62.5%	9	37.5%	20	83.3%	4	16.7%
Marine: Vessel Repair and Construction, Pier Construction	13	52.0%	12	48.0%	16	64.0%	9	36.0%	21	84.0%	4	16.0%
Vertical Construction	5	41.7%	7	58.3%	5	41.7%	7	58.3%	8	66.7%	4	33.3%
Site Preparation: Clearing, Demolition, Excavation, Surveying	169	74.1%	59	25.9%	186	81.6%	42	18.4%	202	88.6%	26	11.4%
Paving: Asphalt, Pavement Repair, Surface Treatment	45	58.4%	32	41.6%	56	72.7%	21	27.3%	60	77.9%	17	22.1%
Highway Finishing: Guard Rail, Fixed Installation, Pavement Marking	67	67.7%	32	32.3%	80	80.8%	19	19.2%	83	83.8%	16	16.2%
Work Zone Safety: Traffic Control Devices, Work Zone Signs	21	70.0%	9	30.0%	24	80.0%	6	20.0%	26	86.7%	4	13.3%
Geotechnical: Rock Blasting, Pile Driving, Foundation Testing	2	100.0%	0	.0%	2	100.0%	0	.0%	2	100.0%	0	.0%
Saw Cutting: Concrete and Asphalt	4	50.0%	4	50.0%	7	87.5%	1	12.5%	5	62.5%	3	37.5%
Welding	0	.0%	1	100.0%	0	.0%	1	100.0%	1	100.0%	0	.0%
Other	102	69.9%	44	30.1%	123	84.2%	23	15.8%	120	82.2%	26	17.8%
Average Availability Across all Work Codes		67.9%		32.1%		78.5%		21.5%		85.1%		14.9%

FIGURE 44: DIVISION 8; 2008 AVAILABILITY OF SBES TO NCDOT BY WORK CODE, DIVISION AND MWBE STATUS

	MWBE				MBE				WBE			
	Non-MWBE		MWBE		Non-MBE		MBE		Non-WBE		WBE	
	Firms	% of Work Code	Firms	% of Work Code	Firms	% of Work Code	Firms	% of Work Code	Firms	% of Work Code	Firms	% of Work Code
Hauling: Gravel and Asphalt	101	59.1%	70	40.9%	124	72.5%	47	27.5%	141	82.5%	30	17.5%
Landscaping and Erosion Control: Silk Detention, Mulching, Mowing	156	78.0%	44	22.0%	172	86.0%	28	14.0%	179	89.5%	21	10.5%
Concrete Drainage Structures and Masonry	59	62.1%	36	37.9%	70	73.7%	25	26.3%	80	84.2%	15	15.8%
Concrete Structures: Culverts, Bridges and Barriers	37	71.2%	15	28.8%	40	76.9%	12	23.1%	48	92.3%	4	7.7%
Drainage: Storm and Subsurface Drainage Installation	81	71.7%	32	28.3%	94	83.2%	19	16.8%	95	84.1%	18	15.9%
Utility Installation: Roadway Lighting, Power an Electric	48	64.9%	26	35.1%	58	78.4%	16	21.6%	60	81.1%	14	18.9%
Signals: Traffic Management, Fiber Optic Cable	10	47.6%	11	52.4%	13	61.9%	8	38.1%	18	85.7%	3	14.3%
Marine: Vessel Repair and Construction, Pier Construction	11	50.0%	11	50.0%	14	63.6%	8	36.4%	19	86.4%	3	13.6%
Vertical Construction	5	50.0%	5	50.0%	5	50.0%	5	50.0%	8	80.0%	2	20.0%
Site Preparation: Clearing, Demolition, Excavation, Surveying	160	74.1%	56	25.9%	179	82.9%	37	17.1%	192	88.9%	24	11.1%
Paving: Asphalt, Pavement Repair, Surface Treatment	46	61.3%	29	38.7%	56	74.7%	19	25.3%	62	82.7%	13	17.3%
Highway Finishing: Guard Rail, Fixed Installation, Pavement Marking	65	69.1%	29	30.9%	79	84.0%	15	16.0%	78	83.0%	16	17.0%
Work Zone Safety: Traffic Control Devices, Work Zone Signs	20	69.0%	9	31.0%	24	82.8%	5	17.2%	24	82.8%	5	17.2%
Geotechnical: Rock Blasting, Pile Driving, Foundation Testing	2	100.0%	0	.0%	2	100.0%	0	.0%	2	100.0%	0	.0%
Saw Cutting: Concrete and Asphalt	5	55.6%	4	44.4%	8	88.9%	1	11.1%	6	66.7%	3	33.3%
Welding	0	.0%	1	100.0%	0	.0%	1	100.0%	1	100.0%	0	.0%
Other	104	71.2%	42	28.8%	124	84.9%	22	15.1%	122	83.6%	24	16.4%
Average Availability Across all Work Codes		68.4%		31.6%		79.8%		20.2%		85.3%		14.7%

FIGURE 45: DIVISION 9; 2008 AVAILABILITY OF SBES TO NCDOT BY WORK CODE, DIVISION AND MWBE STATUS

	MWBE				MBE				WBE			
	Non- MWBE		MWBE		Non-MBE		MBE		Non-WBE		WBE	
	Firms	% of Work Code	Firms	% of Work Code	Firms	% of Work Code	Firms	% of Work Code	Firms	% of Work Code	Firms	% of Work Code
Hauling: Gravel and Asphalt	101	65.6%	53	34.4%	118	76.6%	36	23.4%	131	85.1%	23	14.9%
Landscaping and Erosion Control: Silk Detention, Mulching, Mowing	167	81.1%	39	18.9%	182	88.3%	24	11.7%	186	90.3%	20	9.7%
Concrete Drainage Structures and Masonry	57	64.0%	32	36.0%	65	73.0%	24	27.0%	77	86.5%	12	13.5%
Concrete Structures: Culverts, Bridges and Barriers	34	66.7%	17	33.3%	37	72.5%	14	27.5%	46	90.2%	5	9.8%
Drainage: Storm and Subsurface Drainage Installation	78	75.7%	25	24.3%	88	85.4%	15	14.6%	90	87.4%	13	12.6%
Utility Installation: Roadway Lighting, Power and Electric	52	74.3%	18	25.7%	58	82.9%	12	17.1%	62	88.6%	8	11.4%
Signals: Traffic Management, Fiber Optic Cable	12	52.2%	11	47.8%	15	65.2%	8	34.8%	19	82.6%	4	17.4%
Marine: Vessel Repair and Construction, Pier Construction	13	54.2%	11	45.8%	16	66.7%	8	33.3%	20	83.3%	4	16.7%
Vertical Construction	4	40.0%	6	60.0%	4	40.0%	6	60.0%	7	70.0%	3	30.0%
Site Preparation: Clearing, Demolition, Excavation, Surveying	159	76.8%	48	23.2%	174	84.1%	33	15.9%	186	89.9%	21	10.1%
Paving: Asphalt, Pavement Repair, Surface Treatment	44	65.7%	23	34.3%	49	73.1%	18	26.9%	58	86.6%	9	13.4%
Highway Finishing: Guard Rail, Fixed Installation, Pavement Marking	66	71.7%	26	28.3%	79	85.9%	13	14.1%	78	84.8%	14	15.2%
Work Zone Safety: Traffic Control Devices, Work Zone Signs	19	70.4%	8	29.6%	22	81.5%	5	18.5%	23	85.2%	4	14.8%
Geotechnical: Rock Blasting, Pile Driving, Foundation Testing	2	100.0%	0	.0%	2	100.0%	0	.0%	2	100.0%	0	.0%
Saw Cutting: Concrete and Asphalt	6	75.0%	2	25.0%	8	100.0%	0	.0%	6	75.0%	2	25.0%
Welding	0	.0%	1	100.0%	0	.0%	1	100.0%	1	100.0%	0	.0%
Other	98	69.5%	43	30.5%	122	86.5%	19	13.5%	113	80.1%	28	19.9%
Average Availability Across all Work Codes		71.5%		28.5%		81.5%		18.5%		86.7%		13.3%

FIGURE 46: DIVISION 10; 2008 AVAILABILITY OF SBEs TO NCDOT BY WORK CODE, DIVISION AND MWBE STATUS

	MWBE				MBE				WBE			
	Non- MWBE		MWBE		Non-MBE		MBE		Non-WBE		WBE	
	Firms	% of Work Code	Firms	% of Work Code	Firms	% of Work Code	Firms	% of Work Code	Firms	% of Work Code	Firms	% of Work Code
Hauling: Gravel and Asphalt	100	65.8%	52	34.2%	115	75.7%	37	24.3%	131	86.2%	21	13.8%
Landscaping and Erosion Control: Silk Detention, Mulching, Mowing	152	78.4%	42	21.6%	167	86.1%	27	13.9%	173	89.2%	21	10.8%
Concrete Drainage Structures and Masonry	57	63.3%	33	36.7%	67	74.4%	23	25.6%	75	83.3%	15	16.7%
Concrete Structures: Culverts, Bridges and Barriers	36	66.7%	18	33.3%	39	72.2%	15	27.8%	49	90.7%	5	9.3%
Drainage: Storm and Subsurface Drainage Installation	81	73.6%	29	26.4%	93	84.5%	17	15.5%	95	86.4%	15	13.6%
Utility Installation: Roadway Lighting, Power and Electric	54	71.1%	22	28.9%	63	82.9%	13	17.1%	65	85.5%	11	14.5%
Signals: Traffic Management, Fiber Optic Cable	11	50.0%	11	50.0%	14	63.6%	8	36.4%	18	81.8%	4	18.2%
Marine: Vessel Repair and Construction, Pier Construction	12	52.2%	11	47.8%	15	65.2%	8	34.8%	19	82.6%	4	17.4%
Vertical Construction	3	27.3%	8	72.7%	3	27.3%	8	72.7%	6	54.5%	5	45.5%
Site Preparation: Clearing, Demolition, Excavation, Surveying	164	76.6%	50	23.4%	180	84.1%	34	15.9%	192	89.7%	22	10.3%
Paving: Asphalt, Pavement Repair, Surface Treatment	41	62.1%	25	37.9%	47	71.2%	19	28.8%	56	84.8%	10	15.2%
Highway Finishing: Guard Rail, Fixed Installation, Pavement Marking	65	71.4%	26	28.6%	76	83.5%	15	16.5%	78	85.7%	13	14.3%
Work Zone Safety: Traffic Control Devices, Work Zone Signs	19	70.4%	8	29.6%	21	77.8%	6	22.2%	24	88.9%	3	11.1%
Geotechnical: Rock Blasting, Pile Driving, Foundation Testing	2	100.0%	0	.0%	2	100.0%	0	.0%	2	100.0%	0	.0%
Saw Cutting: Concrete and Asphalt	7	77.8%	2	22.2%	9	100.0%	0	.0%	7	77.8%	2	22.2%
Welding	0	.0%	1	100.0%	0	.0%	1	100.0%	1	100.0%	0	.0%
Other	100	68.0%	47	32.0%	126	85.7%	21	14.3%	117	79.6%	30	20.4%
Average Availability Across all Work Codes		70.1%		29.9%		80.4%		19.6%		86.0%		14.0%

FIGURE 47: DIVISION 11; 2008 AVAILABILITY OF SBES TO NCDOT BY WORK CODE, DIVISION AND MWBE STATUS

	MWBE				MBE				WBE			
	Non- MWBE		MWBE		Non-MBE		MBE		Non-WBE		WBE	
	Firms	% of Work Code	Firms	% of Work Code	Firms	% of Work Code	Firms	% of Work Code	Firms	% of Work Code	Firms	% of Work Code
Hauling: Gravel and Asphalt	116	73.0%	43	27.0%	128	80.5%	31	19.5%	143	89.9%	16	10.1%
Landscaping and Erosion Control: Silk Detention, Mulching, Mowing	177	80.5%	43	19.5%	197	89.5%	23	10.5%	197	89.5%	23	10.5%
Concrete Drainage Structures and Masonry	55	64.0%	31	36.0%	66	76.7%	20	23.3%	72	83.7%	14	16.3%
Concrete Structures: Culverts, Bridges and Barriers	38	71.7%	15	28.3%	42	79.2%	11	20.8%	48	90.6%	5	9.4%
Drainage: Storm and Subsurface Drainage Installation	108	80.0%	27	20.0%	120	88.9%	15	11.1%	120	88.9%	15	11.1%
Utility Installation: Roadway Lighting, Power and Electric	64	81.0%	15	19.0%	69	87.3%	10	12.7%	72	91.1%	7	8.9%
Signals: Traffic Management, Fiber Optic Cable	13	54.2%	11	45.8%	17	70.8%	7	29.2%	20	83.3%	4	16.7%
Marine: Vessel Repair and Construction, Pier Construction	14	56.0%	11	44.0%	18	72.0%	7	28.0%	21	84.0%	4	16.0%
Vertical Construction	3	42.9%	4	57.1%	3	42.9%	4	57.1%	6	85.7%	1	14.3%
Site Preparation: Clearing, Demolition, Excavation, Surveying	182	80.5%	44	19.5%	198	87.6%	28	12.4%	206	91.2%	20	8.8%
Paving: Asphalt, Pavement Repair, Surface Treatment	34	64.2%	19	35.8%	39	73.6%	14	26.4%	45	84.9%	8	15.1%
Highway Finishing: Guard Rail, Fixed Installation, Pavement Marking	72	73.5%	26	26.5%	85	86.7%	13	13.3%	84	85.7%	14	14.3%
Work Zone Safety: Traffic Control Devices, Work Zone Signs	21	72.4%	8	27.6%	24	82.8%	5	17.2%	25	86.2%	4	13.8%
Geotechnical: Rock Blasting, Pile Driving, Foundation Testing	2	100.0%	0	.0%	2	100.0%	0	.0%	2	100.0%	0	.0%
Saw Cutting: Concrete and Asphalt	6	75.0%	2	25.0%	8	100.0%	0	.0%	6	75.0%	2	25.0%
Welding	0	.0%	1	100.0%	0	.0%	1	100.0%	1	100.0%	0	.0%
Other	84	68.3%	39	31.7%	108	87.8%	15	12.2%	99	80.5%	24	19.5%
Average Availability Across all Work Codes		74.5%		25.5%		84.6%		15.4%		87.9%		12.1%

FIGURE 48: DIVISION 12; 2008 AVAILABILITY OF SBES TO NCDOT BY WORK CODE, DIVISION AND MWBE STATUS

	MWBE				MBE				WBE			
	Non-MWBE		MWBE		Non-MBE		MBE		Non-WBE		WBE	
	Firms	% of Work Code	Firms	% of Work Code	Firms	% of Work Code	Firms	% of Work Code	Firms	% of Work Code	Firms	% of Work Code
Hauling: Gravel and Asphalt	114	71.3%	46	28.8%	126	78.8%	34	21.3%	143	89.4%	17	10.6%
Landscaping and Erosion Control: Silk Detention, Mulching, Mowing	175	81.4%	40	18.6%	191	88.8%	24	11.2%	194	90.2%	21	9.8%
Concrete Drainage Structures and Masonry	56	65.1%	30	34.9%	65	75.6%	21	24.4%	73	84.9%	13	15.1%
Concrete Structures: Culverts, Bridges and Barriers	34	68.0%	16	32.0%	37	74.0%	13	26.0%	45	90.0%	5	10.0%
Drainage: Storm and Subsurface Drainage Installation	97	78.9%	26	21.1%	108	87.8%	15	12.2%	109	88.6%	14	11.4%
Utility Installation: Roadway Lighting, Power and Electric	60	78.9%	16	21.1%	66	86.8%	10	13.2%	68	89.5%	8	10.5%
Signals: Traffic Management, Fiber Optic Cable	12	52.2%	11	47.8%	16	69.6%	7	30.4%	18	78.3%	5	21.7%
Marine: Vessel Repair and Construction, Pier Construction	13	54.2%	11	45.8%	17	70.8%	7	29.2%	19	79.2%	5	20.8%
Vertical Construction	3	33.3%	6	66.7%	3	33.3%	6	66.7%	6	66.7%	3	33.3%
Site Preparation: Clearing, Demolition, Excavation, Surveying	178	78.8%	48	21.2%	192	85.0%	34	15.0%	206	91.2%	20	8.8%
Paving: Asphalt, Pavement Repair, Surface Treatment	38	62.3%	23	37.7%	42	68.9%	19	31.1%	52	85.2%	9	14.8%
Highway Finishing: Guard Rail, Fixed Installation, Pavement Marking	66	73.3%	24	26.7%	78	86.7%	12	13.3%	76	84.4%	14	15.6%
Work Zone Safety: Traffic Control Devices, Work Zone Signs	20	74.1%	7	25.9%	23	85.2%	4	14.8%	23	85.2%	4	14.8%
Geotechnical: Rock Blasting, Pile Driving, Foundation Testing	2	100.0%	0	.0%	2	100.0%	0	.0%	2	100.0%	0	.0%
Saw Cutting: Concrete and Asphalt	6	75.0%	2	25.0%	8	100.0%	0	.0%	6	75.0%	2	25.0%
Welding	0	.0%	1	100.0%	0	.0%	1	100.0%	1	100.0%	0	.0%
Other	92	68.7%	42	31.3%	116	86.6%	18	13.4%	107	79.9%	27	20.1%
Average Availability Across all Work Codes		73.5%		26.5%		82.9%		17.1%		87.3%		12.7%

FIGURE 49: DIVISION 13; 2008 AVAILABILITY OF SBES TO NCDOT BY WORK CODE, DIVISION AND MWBE STATUS

	MWBE				MBE				WBE			
	Non- MWBE		MWBE		Non-MBE		MBE		Non-WBE		WBE	
	Firms	% of Work Code	Firms	% of Work Code	Firms	% of Work Code	Firms	% of Work Code	Firms	% of Work Code	Firms	% of Work Code
Hauling: Gravel and Asphalt	121	76.1%	38	23.9%	130	81.8%	29	18.2%	147	92.5%	12	7.5%
Landscaping and Erosion Control: Silk Detention, Mulching, Mowing	170	81.7%	38	18.3%	186	89.4%	22	10.6%	189	90.9%	19	9.1%
Concrete Drainage Structures and Masonry	52	66.7%	26	33.3%	61	78.2%	17	21.8%	66	84.6%	12	15.4%
Concrete Structures: Culverts, Bridges and Barriers	32	71.1%	13	28.9%	35	77.8%	10	22.2%	41	91.1%	4	8.9%
Drainage: Storm and Subsurface Drainage Installation	112	81.8%	25	18.2%	122	89.1%	15	10.9%	124	90.5%	13	9.5%
Utility Installation: Roadway Lighting, Power an Electric	62	80.5%	15	19.5%	68	88.3%	9	11.7%	69	89.6%	8	10.4%
Signals: Traffic Management, Fiber Optic Cable	10	52.6%	9	47.4%	13	68.4%	6	31.6%	16	84.2%	3	15.8%
Marine: Vessel Repair and Construction, Pier Construction	11	55.0%	9	45.0%	14	70.0%	6	30.0%	17	85.0%	3	15.0%
Vertical Construction	3	42.9%	4	57.1%	3	42.9%	4	57.1%	5	71.4%	2	28.6%
Site Preparation: Clearing, Demolition, Excavation, Surveying	180	82.2%	39	17.8%	192	87.7%	27	12.3%	203	92.7%	16	7.3%
Paving: Asphalt, Pavement Repair, Surface Treatment	38	71.7%	15	28.3%	41	77.4%	12	22.6%	47	88.7%	6	11.3%
Highway Finishing: Guard Rail, Fixed Installation, Pavement Marking	64	74.4%	22	25.6%	75	87.2%	11	12.8%	74	86.0%	12	14.0%
Work Zone Safety: Traffic Control Devices, Work Zone Signs	21	80.8%	5	19.2%	22	84.6%	4	15.4%	24	92.3%	2	7.7%
Geotechnical: Rock Blasting, Pile Driving, Foundation Testing	2	100.0%	0	.0%	2	100.0%	0	.0%	2	100.0%	0	.0%
Saw Cutting: Concrete and Asphalt	4	66.7%	2	33.3%	6	100.0%	0	.0%	4	66.7%	2	33.3%
Welding	0	.0%	1	100.0%	0	.0%	1	100.0%	1	100.0%	0	.0%
Other	85	70.8%	35	29.2%	105	87.5%	15	12.5%	98	81.7%	22	18.3%
Average Availability Across all Work Codes		76.6%		23.4%		85.1%		14.9%		89.2%		10.8%

FIGURE 50: DIVISION 14; 2008 AVAILABILITY OF SBES TO NCDOT BY WORK CODE, DIVISION AND MWBE STATUS

	MWBE				MBE				WBE			
	Non- MWBE		MWBE		Non-MBE		MBE		Non-WBE		WBE	
	Firms	% of Work Code	Firms	% of Work Code	Firms	% of Work Code	Firms	% of Work Code	Firms	% of Work Code	Firms	% of Work Code
Hauling: Gravel and Asphalt	110	75.9%	35	24.1%	117	80.7%	28	19.3%	134	92.4%	11	7.6%
Landscaping and Erosion Control: Silk Detention, Mulching, Mowing	169	83.3%	34	16.7%	181	89.2%	22	10.8%	186	91.6%	17	8.4%
Concrete Drainage Structures and Masonry	46	63.9%	26	36.1%	54	75.0%	18	25.0%	60	83.3%	12	16.7%
Concrete Structures: Culverts, Bridges and Barriers	36	72.0%	14	28.0%	39	78.0%	11	22.0%	45	90.0%	5	10.0%
Drainage: Storm and Subsurface Drainage Installation	101	81.5%	23	18.5%	110	88.7%	14	11.3%	112	90.3%	12	9.7%
Utility Installation: Roadway Lighting, Power and Electric	56	78.9%	15	21.1%	62	87.3%	9	12.7%	63	88.7%	8	11.3%
Signals: Traffic Management, Fiber Optic Cable	9	47.4%	10	52.6%	12	63.2%	7	36.8%	15	78.9%	4	21.1%
Marine: Vessel Repair and Construction, Pier Construction	10	50.0%	10	50.0%	13	65.0%	7	35.0%	16	80.0%	4	20.0%
Vertical Construction	3	37.5%	5	62.5%	3	37.5%	5	62.5%	5	62.5%	3	37.5%
Site Preparation: Clearing, Demolition, Excavation, Surveying	164	81.6%	37	18.4%	174	86.6%	27	13.4%	185	92.0%	16	8.0%
Paving: Asphalt, Pavement Repair, Surface Treatment	37	68.5%	17	31.5%	40	74.1%	14	25.9%	46	85.2%	8	14.8%
Highway Finishing: Guard Rail, Fixed Installation, Pavement Marking	60	73.2%	22	26.8%	70	85.4%	12	14.6%	70	85.4%	12	14.6%
Work Zone Safety: Traffic Control Devices, Work Zone Signs	20	80.0%	5	20.0%	21	84.0%	4	16.0%	23	92.0%	2	8.0%
Geotechnical: Rock Blasting, Pile Driving, Foundation Testing	2	100.0%	0	.0%	2	100.0%	0	.0%	2	100.0%	0	.0%
Saw Cutting: Concrete and Asphalt	3	60.0%	2	40.0%	5	100.0%	0	.0%	3	60.0%	2	40.0%
Welding	0	.0%	1	100.0%	0	.0%	1	100.0%	1	100.0%	0	.0%
Other	78	70.9%	32	29.1%	95	86.4%	15	13.6%	91	82.7%	19	17.3%
Average Availability Across all Work Codes		75.8%		24.2%		83.7%		16.3%		88.7%		11.3%



**Subcontract Utilization Analysis:
DBE/MWBEs Utilization on State and Federal Subcontracts, Race-Gender Neutral
Contracting and the Size Distribution of Awards**

State Funded and Federal Aid subcontracting

Figure 50.1 records the total value of awards across all areas of state and federal contracting including POCS, SBE contracts, centrally let State and Federal prime contracts and centrally let State and Federal subcontracts. The total value of all awards between fiscal year 2004 and 2008 was \$5.286 billion. Of the total amount, \$4.828 billion went to non-MWBEs, \$457.3 million went to DBEs through federal aid projects, 160 million went to MBEs group state contracts awarded, and 293 million went to WBEs and stay contract goal.

When total awards are broken down by the type of contracting, the breakdown indicates that POC's amounted to \$490.2 million, of which \$486.6 million went to non-MWBEs and \$3.6 million went to MWBEs. Of the amount that went to MWBEs, \$1.74 million went to MBEs and \$1.91 million went to WBEs. Total SBE contract awards amounted to \$144.6 million; in total \$29.4 million went to MWBEs. More specifically, \$10.9 million that went to MBEs and \$22.8 million that went to WBEs.

Total federal aid contracts amounted to \$2.86 billion and of that amount \$913.1 million was awarded as Federal subcontracts. DBEs received only \$5.97 million of total federal aid prime contracts. More specifically, \$2.68 million went to DBEs who are MBE certified and \$3.3 million went to DBEs who were WBE certified. DBEs received most of their federal aid awards through subcontracting opportunities. In particular, they received \$222.5 million in subcontracts awards (\$47.2 million went to DBEs who are MBE certified and \$175.3 million went to DBEs who were WBE certified).

Total state funded contracts amounted to \$2.42 billion, of that amount \$471.9 million was awarded as state funded subcontracts. MWBEs received \$39.3 million of total state funded prime contracts and of that amount, \$33.3 million went to MBEs. MWBEs received most of their state funded awards through subcontracting opportunities. In particular, they received \$156.5 million in subcontracts awards (\$66.8 million went to MBEs and \$89.7 million went to WBEs). Figure 50.2 shows these awards in more detail by percentages going to DBEs, MBEs and WBEs. Overall the figure indicates that 8.7% of all NCDOT awards went to DBEs or MWBEs. This can be broken down further as 3.0% which went to MBEs and 5.5% which went to WBEs.

MWBEs received the smallest percentage of awards in the prime contracting category of federal aid contracts, where they received only .2% of all prime contracts. The next lowest percentage was recorded for purchase order awards where MWBEs received .7% of all POC's. However, SBE awards were taken out of purchase order awards and caused the percent of POC's that went to MWBEs to be very low. MWBEs received 20.3% of all SBE contracts, 24.4% of federal aid subcontracts (this amount went to DBEs firms that were also certified as either MBEs or WBEs) and 33.2% of state funded subcontracts. DBEs received 8.0% of federal aid contracts and 9.4% of state contracts. Among SBE awards, MBEs received 7.5% and their DBEs received 15.8%. Among federal aid subcontracts, DBEs who are also certified as MBEs received 5.2% while DBEs who are certified as WBEs received 19.2%. Among state aid contracts, MBEs received 13.6% and WBEs received 18.3%.

When awards were broken down by race and ethnicity (see Figure 51) the data indicated that Blacks received \$141.7 million or 3.5%, Native Americans received \$45.4 million or 1.1%, Hispanic Americans received \$11.3 million or .3%, Asian and Pacific Islanders received \$2.4 million or .1%, and Caucasians received \$3.8 billion or 95.0% (see Figure 52).

Subcontracting on Centrally Let State and Federal Projects

Figure 53 indicates that on state projects and federal aid projects, MWBEs received 27.4% of all subcontracting awards. In the hauling work code they received 77.7% and in the landscaping and erosion control work code they received 66.7%. On state funded projects (Figure 54), MWBEs received 33.2% and on federal aid projects, and DBEs received 24.4% (Figure 55).

Figure 56 records the total awards to MWBEs on federal aid and state funded projects by race and ethnicity. Overall, Blacks received \$70.6 million of all federal funded and state aid subcontracts, Caucasians received \$1.3 billion or 89.3%, and Hispanics received \$17.8 million or 1.3%. When state funded contracts are considered exclusively, Blacks received \$46.9 million or 9.9% and Caucasian Americans received \$392.6 million or 83.2% (Figure 57). It should be noted that the Caucasian figure includes women who are certified as WBEs (Figure 58). On federal aid subcontracts, Blacks received \$23.7 million or 2.6% while Caucasian Americans received \$844.9 million or 92.5% (Figure 59). Figure 60 continues to break down federal aid subcontracts by race and ethnic city and indicates that Native Americans received \$463,900 or 1.1%.

Figure 61 records MWBE utilization on state funded projects and indicates that MBEs received 14.2% of state funded subcontracts (\$66.8 million) and WBEs received 19.0% (\$89.7 million). Figure 62 provides similar information for federal aid projects and indicates that DBEs that were also certified as MBEs received 5.2% of federal aid subcontracts (\$47.2 million) and DBEs that were also certified as WBEs received 19.2% (\$175.3 million).

Race and Gender Neutral Awards

Figures 63 records the total amount of race- and gender-neutral subcontracting awards on state funded and federal aid projects. Race- and gender-neutral awards are defined as

subcontracting awards received by DBE/MWBEs on which the advertised goal was zero, and subcontracting awards advertised goals were greater than zero and the DBE/MWBEs utilization percentage exceeded the advertised goal. Figure 63 indicates that DBE/MBEs received \$28.9 million in race- and gender-neutral subcontracting awards while WBE/DBEs received \$66.6 million in race- and gender-neutral subcontracting awards. On state funded awards, MBEs race neutral contracting amounted to \$14.3 million while WBE gender neutral contracting amounted to \$21.2 million. Figure 65 provides the same information for federal aid projects. It indicates that of the \$60 million in race and gender neutral federal aid subcontracting, DBE/MBEs received \$14.6 million and DBE/WBEs received \$45.4 million.

Size Distribution of State Funded and Federal Funded Subcontracts Awards

Figure 66 provides information on the size of awards by work code. The figure records the total value of awards, mean value, maximum, minimum value, the 25th percentile, the median value, the 75th percentile, the 95th percentile and the total number of awards. Figure 67 and Figure 68 provide information on award activity for various ranges. The ranges include subcontracting awards from \$0-\$300,000, awards from \$300,001-\$500,000, awards of \$500,001 to \$1.2 million, and the mean value of awards greater than \$1.2 million. Figure 68 provides the number of awards in each size distribution category while Figures 69 and 70 provide the same information broken down by DBE/MWBE and non-DBE/MWBE status. Note that the award distribution includes information on federal aid and state funded subcontracts.

Figure 50.1: 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

Figure 50.2: 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%

Figure 51: 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

Figure 52: Percentage of awards by type of program and and race and ethnic 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%

Figure 53: State and Federal Aid Centrally Let Projects: Total Subcontract Utilization by DBE/MWBE Status and Work Codes: 2004 - 2008

	DBE/MWBE Status			
	DBE/MWBE		Non-DBE/MWBE	
	Subcontract Amount		Subcontract Amount	
	Sum	Row Sum %	Sum	Row Sum %
	HAULING	\$71,815,270	77.7%	\$20,555,515	22.3%
LANDSCAPING AND EROSION CONTROL	\$31,331,084	66.7%	\$15,671,570	33.3%
INCIDENTAL CONCRETE AND MASONRY STRUCTURES	\$13,828,882	31.0%	\$30,718,403	69.0%
DRAINAGE	\$77,673,964	25.8%	222,861,051	74.2%
UTILITY INSTALLATION	\$12,310,748	30.5%	\$28,040,890	69.5%
SIGNALS AND ITS	\$8,092,893	30.3%	\$18,574,181	69.7%
MARINE	\$15,361,709	27.1%	\$41,302,664	72.9%
BUILDINGS VERTICAL CONSTRUCTION	.	.0%	\$8,764,084	100.0%
PREPARATION AND GRADING	\$19,258,856	18.8%	\$82,916,463	81.2%
PAVING	\$24,984,047	19.9%	100,657,665	80.1%
HIGHWAY FINISHING	\$49,925,398	14.7%	289,744,297	85.3%
WORK ZONE SAFETY	\$31,430,122	38.9%	\$49,382,069	61.1%
GEOTECHNICAL	\$28,059	46.9%	\$31,800	53.1%
SAW CUTTING	\$20,521,355	72.1%	\$7,940,598	27.9%
WELDING	\$2,009,844	43.1%	\$2,655,365	56.9%
OTHER	.	.0%	\$29,650	100.0%
Total	\$455,798	.5%	\$86,202,519	99.5%
	379,028,027	27.4%	1,006,048,785	72.6%

Figure 54: State Aid Centrally Let Projects: Total Subcontract Utilization by MBE/WBE Status and Work Codes: 2004 - 2008

	MWBE Status			
	MWBE		Non-MWBE	
	Subcontract Amount		Subcontract Amount	
	Sum	Row Sum %	Sum	Row Sum %
HAULING	\$39,358,894	79.9%	\$9,881,180	20.1%
LANDSCAPING AND EROSION CONTROL	\$14,642,860	71.0%	\$5,990,112	29.0%
INCIDENTAL CONCRETE AND MASONRY	\$8,673,452	31.8%	\$18,592,806	68.2%
STRUCTURES	\$19,340,936	21.6%	\$70,284,467	78.4%
DRAINAGE	\$3,302,340	37.6%	\$5,487,671	62.4%
UTILITY INSTALLATION	\$601,406	12.9%	\$4,046,998	87.1%
SIGNALS AND ITS	\$2,124,370	22.3%	\$7,384,037	77.7%
MARINE	.	.0%	\$263,604	100.0%
BUILDINGS VERTICAL CONSTRUCTION	\$7,560,293	15.7%	\$40,684,880	84.3%
PREPARATION AND GRADING	\$15,339,004	39.7%	\$23,252,534	60.3%
PAVING	\$19,619,462	21.8%	\$70,365,256	78.2%
HIGHWAY FINISHING	\$14,461,831	32.8%	\$29,600,162	67.2%
WORK ZONE SAFETY	.	.0%	.	.0%
GEOTECHNICAL	\$11,423,155	89.0%	\$1,405,500	11.0%
SAW CUTTING	\$97,059	17.6%	\$454,946	82.4%
WELDING	.	.0%	\$3,520	100.0%
OTHER	.	.0%	\$27,655,357	100.0%
Total	156,545,062	33.2%	315,353,030	66.8%

Figure 55: Federal Aid Centrally Let Projects: Total Subcontract Utilization by DBE Status and Work Codes: 2004 - 2008

	DBE Status			
	DBE		Non-DBE	
	Subcontract Amount		Subcontract Amount	
	Sum	Row Sum %	Sum	Row Sum %
HAULING	\$32,456,376	75.3%	\$10,674,335	24.7%
LANDSCAPING AND EROSION CONTROL	\$16,688,223	63.3%	\$9,681,457	36.7%
INCIDENTAL CONCRETE AND MASONRY	\$5,155,429	29.8%	\$12,125,597	70.2%
STRUCTURES	\$58,333,028	27.7%	\$152,576,584	72.3%
DRAINAGE	\$9,008,408	28.5%	\$22,553,219	71.5%
UTILITY INSTALLATION	\$7,491,487	34.0%	\$14,527,184	66.0%
SIGNALS AND ITS	\$13,237,339	28.1%	\$33,918,627	71.9%
MARINE	.	.0%	\$8,500,480	100.0%
BUILDINGS VERTICAL CONSTRUCTION	\$11,698,563	21.7%	\$42,231,584	78.3%
PREPARATION AND GRADING	\$9,645,044	11.1%	\$77,405,130	88.9%
PAVING	\$30,305,936	12.1%	219,379,041	87.9%
HIGHWAY FINISHING	\$16,968,291	46.2%	\$19,781,907	53.8%
WORK ZONE SAFETY	\$28,059	46.9%	\$31,800	53.1%
GEOTECHNICAL	\$9,098,199	58.2%	\$6,535,098	41.8%
SAW CUTTING	\$1,912,785	46.5%	\$2,200,419	53.5%
WELDING	.	.0%	\$26,130	100.0%
OTHER	\$455,798	.8%	\$58,547,162	99.2%
Total	222,482,965	24.4%	690,695,754	75.6%

Figure 56: State and Federal Centrally Let Projects: Total Subcontract Utilization by Race and Ethnic Status and Work Codes: 2004 - 2008

	Asian/Pacific American		Black American		Caucasian American		Hispanic American	
	Subcontract Amount		Subcontract Amount		Subcontract Amount		Subcontract Amount	
	Sum	Row Sum %	Sum	Row Sum %	Sum	Row Sum %	Sum	Row Sum %
HAULING	.	.0%	\$30,374,722	32.9%	\$56,983,395	61.7%	\$266,121	.3%
LANDSCAPING AND EROSION CONTROL	.	.0%	\$1,402,961	3.0%	\$44,038,418	93.7%	.	.0%
INCIDENTAL CONCRETE AND MASONRY STRUCTURES	\$918,661	2.1%	\$5,775,366	13.0%	\$35,236,896	79.1%	\$1,221,805	2.7%
DRAINAGE	.	.0%	\$117,985	.0%	298,553,334	99.3%	\$1,557,256	.5%
UTILITY INSTALLATION	.	.0%	.	.0%	\$40,351,638	100.0%	.	.0%
SIGNALS AND ITS	\$1,080,422	1.9%	.	.0%	\$24,074,702	90.3%	.	.0%
MARINE	.	.0%	.	.0%	\$50,559,780	89.2%	.	.0%
BUILDINGS VERTICAL CONSTRUCTION	.	.0%	\$8,761,522	100.0%	\$2,562	.0%	\$717,677	.7%
PREPARATION AND GRADING	.	.0%	\$6,053,496	5.9%	\$87,848,300	86.0%	\$9,560,665	7.6%
PAVING	.	.0%	\$6,795,499	5.4%	103,401,942	82.3%	\$9,560,665	7.6%
HIGHWAY FINISHING	.	.0%	\$16,316,401	4.8%	315,691,420	92.9%	\$2,073,127	.6%
WORK ZONE SAFETY	.	.0%	\$1,547,684	1.9%	\$76,853,040	95.1%	\$2,411,466	3.0%
GEOTECHNICAL	.	.0%	.	.0%	\$59,859	100.0%	.	.0%
SAW CUTTING	.	.0%	.	.0%	\$7,940,598	27.9%	.	.0%
WELDING	.	.0%	\$343,019	7.4%	\$4,322,190	92.6%	.	.0%
OTHER	.	.0%	.	.0%	\$29,650	100.0%	.	.0%
Total	\$1,999,083	.1%	\$70,654,878	5.1%	1,237,476,046	89.3%	\$17,810,680	1.3%

Figure 57: State Aid Centrally Let Projects: Total Subcontract Utilization by Race and Ethnic Status and Work Codes: 2004 - 2008

	Asian/Pacific American		Black American		Caucasian American		Hispanic American	
	Subcontract Amount		Subcontract Amount		Subcontract Amount		Subcontract Amount	
	Sum	Row Sum %	Sum	Row Sum %	Sum	Row Sum %	Sum	Row Sum %
HAULING	.	.0%	\$21,175,897	43.0%	\$23,524,909	47.8%	\$256,621	.5%
LANDSCAPING AND EROSION CONTROL	.	.0%	\$549,550	2.7%	\$18,736,318	90.8%	.	.0%
INCIDENTAL CONCRETE AND MASONRY	\$624,170	2.3%	\$4,600,432	16.9%	\$21,647,154	79.4%	\$90,028	.3%
STRUCTURES	.	.0%	\$117,985	.1%	\$89,284,847	99.6%	\$222,572	.2%
DRAINAGE	.	.0%	.	.0%	\$8,790,011	100.0%	.	.0%
UTILITY INSTALLATION	.	.0%	.	.0%	\$4,143,949	89.1%	.	.0%
SIGNALS AND ITS	.	.0%	.	.0%	\$9,508,407	100.0%	.	.0%
MARINE	.	.0%	.	.0%	\$263,604	100.0%	.	.0%
BUILDINGS VERTICAL CONSTRUCTION	.	.0%	\$2,651,389	5.5%	\$40,998,160	85.0%	.	.0%
PREPARATION AND GRADING	.	.0%	\$4,231,001	11.0%	\$30,082,932	78.0%	.	.0%
PAVING	.	.0%	\$11,068,220	12.3%	\$77,783,907	86.4%	\$318,670	.4%
HIGHWAY FINISHING	.	.0%	\$983,745	2.2%	\$40,956,649	93.0%	\$2,121,599	4.8%
WORK ZONE SAFETY	.	.0%	.	.0%	.	.0%	.	.0%
GEOTECHNICAL	.	.0%	.	.0%	\$1,405,500	11.0%	.	.0%
SAW CUTTING	.	.0%	\$343,019	62.1%	\$208,986	37.9%	.	.0%
WELDING	.	.0%	.	.0%	\$3,520	100.0%	.	.0%
OTHER	\$624,170	.1%	\$1,231,856	4.5%	\$25,212,205	91.2%	.	.0%
	\$624,170	.1%	\$46,953,093	9.9%	392,551,057	83.2%	\$3,009,490	.6%

Figure 58: State Aid Centrally Let Projects: Total Subcontract Utilization by Race and Ethnic Status and Work Codes: 2004 – 2008 Continued

	Native American		Race/Ethnicity Unknown		Subcontinent Asian American	
	Subcontract Amount		Subcontract Amount		Subcontract Amount	
	Sum	Row Sum %	Sum	Row Sum %	Sum	Row Sum %
	HAULING	\$4,282,647	8.7%	.	.0%	.	.0%
LANDSCAPING AND EROSION CONTROL	\$1,347,104	6.5%	.	.0%	.	.0%
INCIDENTAL CONCRETE AND MASONRY STRUCTURES	\$61,600	.2%	\$242,875	.9%	.	.0%
DRAINAGE	.	.0%	.	.0%	.	.0%
UTILITY INSTALLATION	\$419,455	9.0%	\$85,000	1.8%	.	.0%
SIGNALS AND ITS	.	.0%	.	.0%	.	.0%
MARINE	.	.0%	.	.0%	.	.0%
BUILDINGS VERTICAL CONSTRUCTION	\$4,101,781	8.5%	.	.0%	\$493,843	1.0%
PREPARATION AND GRADING	\$4,249,305	11.0%	\$28,300	.1%	.	.0%
PAVING	\$579,889	.6%	\$234,033	.3%	.	.0%
HIGHWAY FINISHING	.	.0%	.	.0%	.	.0%
WORK ZONE SAFETY	.	.0%	.	.0%	.	.0%
GEOTECHNICAL	\$11,423,155	89.0%	.	.0%	.	.0%
SAW CUTTING	.	.0%	.	.0%	.	.0%
WELDING	.	.0%	.	.0%	.	.0%
OTHER	\$1,211,296	4.4%	.	.0%	.	.0%
Total	\$27,676,233	5.9%	\$590,207	.1%	\$493,843	.1%

Figure 59: Federal Aid Centrally Let Projects: Total Subcontract Utilization by Race and Ethnic Status and Work Codes: 2004 – 2008

	Asian/Pacific American		Black American		Caucasian American		Hispanic American	
	Subcontract Amount		Subcontract Amount		Subcontract Amount		Subcontract Amount	
	Sum	Row Sum %	Sum	Row Sum %	Sum	Row Sum %	Sum	Row Sum %
HAULING	.	.0%	\$9,198,825	21.3%	\$33,458,486	77.6%	.	.0%
LANDSCAPING AND EROSION CONTROL	.	.0%	\$853,411	3.2%	\$25,302,100	96.0%	.	.0%
INCIDENTAL CONCRETE AND MASONRY STRUCTURES	\$294,491	1.7%	\$1,174,934	6.8%	\$13,589,742	78.6%	\$294,491	1.7%
DRAINAGE	.	.0%	.	.0%	209,268,487	99.2%	.	.0%
UTILITY INSTALLATION	.	.0%	.	.0%	\$31,561,627	100.0%	.	.0%
SIGNALS AND ITS	\$1,080,422	2.3%	.	.0%	\$19,930,753	90.5%	.	.0%
MARINE	.	.0%	.	.0%	\$41,051,374	87.1%	\$1,080,422	2.3%
BUILDINGS VERTICAL CONSTRUCTION	.	.0%	\$3,402,107	6.3%	\$8,497,918	100.0%	.	.0%
PREPARATION AND GRADING	.	.0%	\$2,564,498	2.9%	\$46,850,140	86.9%	.	.0%
PAVING	.	.0%	\$5,248,181	2.1%	\$73,319,010	84.2%	.	.0%
HIGHWAY FINISHING	.	.0%	\$237,907,514	95.3%	\$237,907,514	95.3%	.	.0%
WORK ZONE SAFETY	.	.0%	\$563,939	1.5%	\$35,896,391	97.7%	.	.0%
GEOTECHNICAL	.	.0%	.	.0%	\$59,859	100.0%	.	.0%
SAW CUTTING	.	.0%	.	.0%	\$6,535,098	41.8%	.	.0%
WELDING	.	.0%	.	.0%	\$4,113,204	100.0%	.	.0%
OTHER	.	.0%	\$26,130	100.0%	\$26,130	100.0%	.	.0%
	.	.0%	\$695,890	1.2%	\$57,557,159	97.5%	.	.0%
	\$1,374,913	.2%	\$23,701,785	2.6%	844,924,990	92.5%	\$1,374,913	.2%

Figure 60: Federal Aid Centrally Let Projects: Total Subcontract Utilization by Race and Ethnic Status and Work Codes: 2004 – 2008 Continued

	Native American		Race/Ethnicity Unknown		Subcontinent Asian American	
	Subcontract Amount		Subcontract Amount		Subcontract Amount	
	Sum	Row Sum %	Sum	Row Sum %	Sum	Row Sum %
HAULING	\$463,900	1.1%	.	.0%	.	.0%
LANDSCAPING AND EROSION CONTROL	\$214,170	.8%	.	.0%	.	.0%
INCIDENTAL CONCRETE AND MASONRY STRUCTURES	\$143,352	.8%	\$946,730	5.5%	.	.0%
DRAINAGE	.	.0%	.	.0%	.	.0%
UTILITY INSTALLATION	\$2,087,918	9.5%	.	.0%	.	.0%
SIGNALS AND ITS	\$4,573,368	9.7%	\$450,803	1.0%	.	.0%
MARINE	.	.0%	.	.0%	.	.0%
BUILDINGS VERTICAL CONSTRUCTION	\$2,503,221	4.6%	.	.0%	\$457,002	.8%
PREPARATION AND GRADING	\$1,199,501	1.4%	\$406,500	.5%	.	.0%
PAVING	\$4,774,825	1.9%	.	.0%	.	.0%
HIGHWAY FINISHING	.	.0%	.	.0%	.	.0%
WORK ZONE SAFETY	.	.0%	.	.0%	.	.0%
GEOTECHNICAL	\$9,098,199	58.2%	.	.0%	.	.0%
SAW CUTTING	.	.0%	.	.0%	.	.0%
	.	.0%	.	.0%	.	.0%
WELDING	\$400,005	.7%	.	.0%	\$349,906	.6%
OTHER	\$25,764,900	2.8%	\$1,804,033	.2%	\$806,908	.1%
Total	\$463,900	1.1%	.	.0%	.	.0%

Figure 61: State Aid Centrally Let Projects: Total Subcontract Utilization by MBE and WBE Status and Work Codes: 2004 – 2008

	MBE WBE Status					
	Non-WMBE		MBE		WBE	
	Subcontract Amount		Subcontract Amount		Subcontract Amount	
	Sum	Row Sum %	Sum	Row Sum %	Sum	Row Sum %
HAULING	\$9,881,180	20.1%	\$23,163,935	47.0%	\$16,194,958	32.9%
LANDSCAPING AND EROSION CONTROL	\$5,990,112	29.0%	\$517,880	2.5%	\$14,124,980	68.5%
INCIDENTAL CONCRETE AND MASONRY	\$18,592,806	68.2%	\$5,111,185	18.7%	\$3,562,267	13.1%
STRUCTURES	\$70,284,467	78.4%	\$222,572	.2%	\$19,118,365	21.3%
DRAINAGE	\$5,487,671	62.4%	.	.0%	\$3,302,340	37.6%
UTILITY INSTALLATION	\$4,046,998	87.1%	\$419,455	9.0%	\$181,951	3.9%
SIGNALS AND ITS	\$7,384,037	77.7%	.	.0%	\$2,124,370	22.3%
MARINE	\$263,604	100.0%	.	.0%	.	.0%
BUILDINGS VERTICAL CONSTRUCTION	\$40,684,880	84.3%	\$2,459,201	5.1%	\$5,101,093	10.6%
PREPARATION AND GRADING	\$23,252,534	60.3%	\$8,469,006	21.9%	\$6,869,998	17.8%
PAVING	\$70,365,256	78.2%	\$11,931,979	13.3%	\$7,687,483	8.5%
HIGHWAY FINISHING	\$29,600,162	67.2%	\$3,105,343	7.0%	\$11,356,488	25.8%
WORK ZONE SAFETY	.	.0%	.	.0%	.	.0%
GEOTECHNICAL	\$1,405,500	11.0%	\$11,423,155	89.0%	.	.0%
SAW CUTTING	\$454,946	82.4%	.	.0%	\$97,059	17.6%
WELDING	\$3,520	100.0%	.	.0%	.	.0%
OTHER	\$27,655,357	100.0%	.	.0%	.	.0%
Total	315,353,030	66.8%	\$66,823,711	14.2%	\$89,721,351	19.0%

Figure 62: Federal Aid Centrally Let Projects: Total Subcontract Utilization by Minority and Women Status and Work Codes: 2004 - 2008
 (Note: Minority is defined as certified MBEs and Women are defined as certified WBEs)

	Minority/Women/Non-DBE Status					
	Non-DBE		Minority (certified MBEs)		Women (Certified WBEs)	
	Subcontract Amount		Subcontract Amount		Subcontract Amount	
	Sum	Row Sum %	Sum	Row Sum %	Sum	Row Sum %
	HAULING	\$10,674,335	24.7%	\$6,923,015	16.1%	\$25,533,361	59.2%
LANDSCAPING AND EROSION CONTROL	\$9,681,457	36.7%	\$851,085	3.2%	\$15,837,139	60.1%
INCIDENTAL CONCRETE AND MASONRY STRUCTURES	\$12,125,597	70.2%	\$2,449,521	14.2%	\$2,705,908	15.7%
DRAINAGE	152,576,584	72.3%	\$1,355,873	.6%	\$56,977,155	27.0%
UTILITY INSTALLATION	\$22,553,219	71.5%	.	.0%	\$9,008,408	28.5%
SIGNALS AND ITS	\$14,527,184	66.0%	\$2,087,918	9.5%	\$5,403,569	24.5%
MARINE	\$33,918,627	71.9%	\$4,573,368	9.7%	\$8,663,971	18.4%
BUILDINGS VERTICAL CONSTRUCTION	\$8,500,480	100.0%	.	.0%	.	.0%
PREPARATION AND GRADING	\$42,231,584	78.3%	\$3,109,974	5.8%	\$8,588,589	15.9%
PAVING	\$77,405,130	88.9%	\$3,665,133	4.2%	\$5,979,911	6.9%
HIGHWAY FINISHING	219,379,041	87.9%	\$11,777,463	4.7%	\$18,528,473	7.4%
WORK ZONE SAFETY	\$19,781,907	53.8%	\$851,345	2.3%	\$16,116,946	43.9%
GEOTECHNICAL	\$31,800	53.1%	.	.0%	\$28,059	46.9%
SAW CUTTING	\$6,535,098	41.8%	\$9,098,199	58.2%	.	.0%
WELDING	\$2,200,419	53.5%	.	.0%	\$1,912,785	46.5%
OTHER	\$26,130	100.0%	.	.0%	.	.0%
Total	\$58,547,162	99.2%	\$455,798	.8%	.	.0%
	690,695,754	75.6%	\$47,198,690	5.2%	175,284,274	19.2%

Figure 63: State and Federal Centrally Let Projects: Total Race and Gender Neutral Subcontract Commitments by DBE/MBE/WBE Status and Work Codes: 2004 - 2008

	DBE/MBE/WBE Status					
	DBE/MBE		DBE/WBE		Total	
	Subcontract Amount		Subcontract Amount		Subcontract Amount	
	Sum	Row Sum %	Sum	Row Sum %	Sum	Row Sum %
	HAULING	\$5,548,212	36.9%	\$9,477,049	63.1%	\$15,025,261	100.0%
LANDSCAPING AND EROSION CONTROL	\$189,243	2.8%	\$6,579,594	97.2%	\$6,768,836	100.0%
INCIDENTAL CONCRETE AND MASONRY	\$1,662,918	44.2%	\$2,101,324	55.8%	\$3,764,242	100.0%
STRUCTURES	\$10,298	.1%	\$15,807,522	99.9%	\$15,817,820	100.0%
DRAINAGE	.	.0%	\$5,004,885	100.0%	\$5,004,885	100.0%
UTILITY INSTALLATION	\$2,254,718	67.1%	\$1,103,516	32.9%	\$3,358,234	100.0%
SIGNALS AND ITS	\$298,626	8.5%	\$3,232,180	91.5%	\$3,530,806	100.0%
MARINE	.	.0%	.	.0%	.	.0%
BUILDINGS VERTICAL CONSTRUCTION	\$2,340,525	56.6%	\$1,794,571	43.4%	\$4,135,096	100.0%
PREPARATION AND GRADING	\$5,896,689	79.9%	\$1,481,169	20.1%	\$7,377,858	100.0%
PAVING	\$5,634,602	32.7%	\$11,574,079	67.3%	\$17,208,680	100.0%
HIGHWAY FINISHING	\$1,615,906	17.0%	\$7,889,628	83.0%	\$9,505,534	100.0%
WORK ZONE SAFETY	.	.0%	\$9,956	100.0%	\$9,956	100.0%
GEOTECHNICAL	\$2,966,929	100.0%	.	.0%	\$2,966,929	100.0%
SAW CUTTING	.	.0%	\$590,641	100.0%	\$590,641	100.0%
WELDING	.	.0%	.	.0%	.	.0%
OTHER	\$455,798	100.0%	.	.0%	\$455,798	100.0%
Total	\$28,874,463	30.2%	\$66,646,113	69.8%	\$95,520,576	100.0%

Figure 64: State Aid Centrally Let Projects: Total Race and Gender Neutral Subcontract Commitments by MWBE Status and Work Codes: 2004 - 2008
 (Note: Race Neutral Utilization Defines as Commitments that Exceed Advertised Goals)

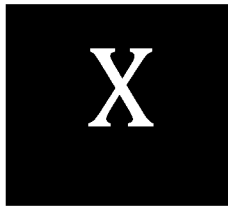
	MBE WBE Status							
	Non-WMBE		MBE		WBE		Total	
	Subcontract Amount		Subcontract Amount		Subcontract Amount		Subcontract Amount	
	Sum	Row Sum %	Sum	Row Sum %	Sum	Row Sum %	Sum	Row Sum %
HAULING	.	.0%	\$4,293,286	55.9%	\$3,384,659	44.1%	\$7,677,944	100.0%
LANDSCAPING AND EROSION CONTROL	.	.0%	\$124,904	4.1%	\$2,921,736	95.9%	\$3,046,640	100.0%
INCIDENTAL CONCRETE AND MASONRY	.	.0%	\$26,906	2.5%	\$1,030,560	97.5%	\$1,057,466	100.0%
STRUCTURES	.	.0%	.	.0%	\$3,462,893	100.0%	\$3,462,893	100.0%
DRAINAGE	.	.0%	.	.0%	\$275,631	100.0%	\$275,631	100.0%
UTILITY INSTALLATION	.	.0%	\$166,800	51.4%	\$157,951	48.6%	\$324,751	100.0%
SIGNALS AND ITS	.	.0%	.	.0%	\$659,314	100.0%	\$659,314	100.0%
MARINE	.	.0%	.	.0%	.	.0%	.	.0%
BUILDINGS VERTICAL CONSTRUCTION	.	.0%	\$683,635	45.2%	\$827,886	54.8%	\$1,511,521	100.0%
PREPARATION AND GRADING	.	.0%	\$4,785,212	79.2%	\$1,256,284	20.8%	\$6,041,496	100.0%
PAVING	.	.0%	\$3,180,895	46.4%	\$3,679,104	53.6%	\$6,860,000	100.0%
HIGHWAY FINISHING	.	.0%	\$1,006,297	22.6%	\$3,444,480	77.4%	\$4,450,776	100.0%
WORK ZONE SAFETY	.	.0%	.	.0%	.	.0%	.	.0%
GEOTECHNICAL	.	.0%	.	.0%	.	.0%	.	.0%
SAW CUTTING	.	.0%	.	.0%	\$97,059	100.0%	\$97,059	100.0%
WELDING	.	.0%	.	.0%	.	.0%	.	.0%
OTHER	.	.0%	.	.0%	.	.0%	.	.0%
Total	.	.0%	\$14,267,934	40.2%	\$21,197,556	59.8%	\$35,465,490	100.0%

Figure 65: Federal Aid Centrally Let Projects: Total Race and Gender Neutral Subcontract Commitments to DBEs by Minority and Women Status and Work Codes: 2004 - 2008
 (Note: Race Neutral Utilization Defines as Commitments that Exceed Advertised Goals)

	DBE Status					
	DBEs (also MBE Certified)		DBEs (also WBE Certified)		Total	
	Subcontract Amount		Subcontract Amount		Subcontract Amount	
	Sum	Row Sum %	Sum	Row Sum %	Sum	Row Sum %
HAULING	\$1,254,927	17.1%	\$6,092,390	82.9%	\$7,347,317	100.0%
LANDSCAPING AND EROSION CONTROL	\$64,339	1.7%	\$3,657,858	98.3%	\$3,722,197	100.0%
INCIDENTAL CONCRETE AND MASONRY	\$1,636,011	60.4%	\$1,070,764	39.6%	\$2,706,776	100.0%
STRUCTURES	\$10,298	.1%	\$12,344,629	99.9%	\$12,354,927	100.0%
DRAINAGE	.	.0%	\$4,729,254	100.0%	\$4,729,254	100.0%
UTILITY INSTALLATION	\$2,087,918	68.8%	\$945,565	31.2%	\$3,033,483	100.0%
SIGNALS AND ITS	\$298,626	10.4%	\$2,572,866	89.6%	\$2,871,492	100.0%
MARINE	.	.0%	.	.0%	.	.0%
BUILDINGS VERTICAL CONSTRUCTION	\$1,656,890	63.2%	\$966,685	36.8%	\$2,623,575	100.0%
PREPARATION AND GRADING	\$1,111,478	83.2%	\$224,885	16.8%	\$1,336,363	100.0%
PAVING	\$2,453,706	23.7%	\$7,894,974	76.3%	\$10,348,681	100.0%
HIGHWAY FINISHING	\$609,609	12.1%	\$4,445,149	87.9%	\$5,054,757	100.0%
WORK ZONE SAFETY	.	.0%	\$9,956	100.0%	\$9,956	100.0%
GEOTECHNICAL	\$2,966,929	100.0%	.	.0%	\$2,966,929	100.0%
SAW CUTTING	.	.0%	\$493,582	100.0%	\$493,582	100.0%
WELDING	.	.0%	.	.0%	.	.0%
OTHER	\$455,798	100.0%	.	.0%	\$455,798	100.0%
Total	\$14,606,529	24.3%	\$45,448,557	75.7%	\$60,055,086	100.0%

Figure 66: Relation Between Amount Committed to Subcontractors and Amount Agreed Upon on Subcontract, 2008				
	Contract Amount	Committed Dollars	Difference (Contract - Attained)	% Diff of Contract Total
DBE	\$105,796,529	\$98,384,870	\$7,411,659	0.08
NON-DBE	\$588,936,867	\$607,321,289	-\$18,384,421	-0.03
Total	\$694,733,396	\$705,706,159	-\$10,972,762	-0.02

Figure 67: Relation Between Amount Committed to Subcontractors at Bid Opening and Amount Paid for Fully Closed Out Projects in 2008				
	Attained Amount	Committed Dollars	Difference (Committed - Attained)	% Diff of Contract Total
DBE	\$35,921,302	\$24,190,872	\$11,730,431	0.48
NON-DBE	\$54,425,967	\$66,454,076	-\$12,028,109	-0.18
Total	\$90,347,269	\$90,644,948	-\$297,679	0.00



Utilization Analysis: Prime Contracting Centrally Let, POCs and SBE Awards

Centrally Let Prime Contracting

Figure 68 has three panels. The top panel summarizes the dollar value and percent of awards on federal aid and state funded centrally let prime contracts. The table indicates that that between fiscal year 2004 and 2008, \$4.2 billion in contracts was awarded and of that amount DBEs received point nine percent or \$39.3 million. In total, non-DBEs received 866 prime contracts while DBEs received nine. The second panel of the figure records the total awards related to State funded projects. Of the total awards, MBEs received 2.1% or \$33.3 million of the \$1.59 billion while WBEs did not receive any state funded centrally let prime contracts.

MWBE Utilization on POCs

Figure 69 records the total number and amount of Purchase Order Contracts (POCs) awarded through Divisions and other centers. In total, \$486,577,456 was awarded via POCs. Of this amount, MWBEs received .7% or \$3.6 million. 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). 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 a 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.

MBE/WBE Utilization on SBE Awards

The utilization of minority and women owned vendors in the SBE program exceeds that achieved in all other prime contracting areas substantially. 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 WBE utilization.

Figure 68: Centrally Let Prime Contract Awards by DBE Status and Recipient Work Code, FY2004 - 2008

	Award Amount							
	Non-DBE				DBE			
	Sum	Row Sum %	Firms	Row Firms %	Sum	Row Sum %	Firms	Row Firms %
Hauling and Site Prep	\$234,624,210	100.0%	35	100.0%	.	.0%		0.0%
Bridges and Highway Structures	\$3,391,543,661	99.9%	674	99.9%	\$2,685,262	.1%	1	0.1%
Engineering and Roadway Design	.	.0%		0.0%	.	.0%		0.0%
Paving and Highway Finishing	\$342,238,311	90.3%	117	93.6%	\$36,598,423	9.7%	8	6.4%
Non-Highway Construction Svcs	\$186,280,430	100.0%	21	100.0%	.	.0%		0.0%
Other Services; Professional and Consulting	\$72,387,298	100.0%	19	100.0%	.	.0%		0.0%
Total	\$4,227,073,910	99.1%	866	99.0%	\$39,283,685	.9%	9	1.0%

Figure 69: State Aid Centrally Let Prime Contract Awards by MBE Status and Recipient Work Code, FY2004 - 2008

	Award Amount							
	Non-DBE				DBE			
	Sum	Row Sum %	Firms	Row Firms %	Sum	Row Sum %	Firms	Row Firms %
Hauling and Site Prep	\$118,638,411	100.0%	24	100.0%	.	.0%		0.0%
Bridges and Highway Structures	\$1,152,473,535	100.0%	288	100.0%	.	.0%		0.0%
Engineering and Roadway Design	.	.0%		0.0%	.	.0%		0.0%
Paving and Highway Finishing	\$266,796,193	88.9%	100	97.1%	\$33,312,952	11.1%	3	2.9%
Non-Highway Construction Svcs	\$32,652,224	100.0%	14	100.0%	.	.0%		0.0%
Other Services; Professional and Consulting	\$20,281,025	100.0%	10	100.0%	.	.0%		0.0%
Total	\$1,590,841,386	97.9%	436	99.3%	\$33,312,952	2.1%	3	0.7%

Figure 70: State Aid Centrally Let Prime Contract Awards by WBE Status and Recipient Work Code, FY2004 - 2008

	Award Amount							
	Non-WBE				WBE			
	Sum	Row Sum %	Firms	Row Firms %	Sum	Row Sum %	Firms	Row Firms %
Hauling and Site Prep	\$118,638,411	100.0%	24	100.0%	.	.0%		0.0%
Bridges and Highway Structures	\$1,152,473,535	100.0%	288	100.0%	.	.0%		0.0%
Engineering and Roadway Design	.	.0%		0.0%	.	.0%		0.0%
Paving and Highway Finishing	\$300,109,145	100.0%	103	100.0%	.	.0%		0.0%
Non-Highway Construction Svcs	\$32,652,224	100.0%	14	100.0%	.	.0%		0.0%
Other Services; Professional and Consulting	\$20,281,025	100.0%	10	100.0%	.	.0%		0.0%
Total	\$1,624,154,339	100.0%	439	100.0%	.	.0%		0.0%

Figure 71: Purchase Order Awards FY 2004-2008

	Award Amount											
	Non-DBE				DBE				Total			
	Sum	Row Sum %	Firms	Row Firms %	Sum	Row Sum %	Firms	Row Firms %	Sum	Row Sum %	Firms	Row Firms %
Highway Division 1	\$6,779,246	99.9%	720	99.3%	\$9,867	.1%	5	0.7%	\$6,789,112	100.0%	725	100.0%
Highway Division 2	\$5,875,641	99.6%	979	98.9%	\$22,108	.4%	11	1.1%	\$5,897,749	100.0%	990	100.0%
Highway Division 3	\$11,871,978	99.5%	1132	98.9%	\$63,349	.5%	13	1.1%	\$11,935,327	100.0%	1145	100.0%
Highway Division 4	\$13,826,575	86.9%	776	98.9%	\$2,083,104	13.1%	9	1.1%	\$15,909,679	100.0%	785	100.0%
Highway Division 5	\$8,749,750	99.6%	951	99.4%	\$31,978	.4%	6	0.6%	\$8,781,728	100.0%	957	100.0%
Highway Division 6	\$7,491,151	99.7%	1189	99.3%	\$19,862	.3%	8	0.7%	\$7,511,013	100.0%	1197	100.0%
Highway Division 7	\$30,614,640	99.9%	919	99.8%	\$24,640	.1%	2	0.2%	\$30,639,280	100.0%	921	100.0%
Highway Division 8	\$7,293,891	99.4%	885	99.3%	\$44,165	.6%	6	0.7%	\$7,338,056	100.0%	891	100.0%
Highway Division 9	\$7,823,396	99.6%	1095	98.7%	\$33,382	.4%	14	1.3%	\$7,856,778	100.0%	1109	100.0%
Highway Division 10	\$4,208,457	99.5%	678	99.0%	\$22,174	.5%	7	1.0%	\$4,230,631	100.0%	685	100.0%
Highway Division 11	\$3,635,139	99.8%	702	99.4%	\$6,799	.2%	4	0.6%	\$3,641,938	100.0%	706	100.0%
Highway Division 12	\$6,209,107	99.6%	973	99.7%	\$24,987	.4%	3	0.3%	\$6,234,094	100.0%	976	100.0%
Highway Division 13	\$8,537,006	99.8%	836	99.1%	\$18,311	.2%	8	0.9%	\$8,555,316	100.0%	844	100.0%
Highway Division 14	\$6,378,556	98.9%	1260	98.6%	\$69,700	1.1%	18	1.4%	\$6,448,256	100.0%	1278	100.0%
Ferry Division	\$12,284,308	100.0%	3360	100.0%	.	.0%		0.0%	\$12,284,308	100.0%	3360	100.0%
Motor Vehicle Division	\$102,288,183	100.0%	1522	99.9%	\$3,740	.0%	2	0.1%	\$102,291,923	100.0%	1524	100.0%
Aviation Division	\$5,770,373	100.0%	110	99.1%	\$	.0%	1	0.9%	\$5,770,373	100.0%	111	100.0%
Public Transportation	\$1,007,955	99.4%	57	93.4%	\$6,506	.6%	4	6.6%	\$1,014,461	100.0%	61	100.0%
Rail Division	\$8,150	100.0%	4	100.0%	.	.0%		0.0%	\$8,150	100.0%	4	100.0%
General Services	\$19,727,136	99.7%	967	99.7%	\$60,675	.3%	3	0.3%	\$19,787,811	100.0%	970	100.0%
Professional Services	\$54,922,070	99.3%	1919	99.2%	\$411,165	.7%	15	0.8%	\$55,333,235	100.0%	1934	100.0%
Horizontal Construction	\$144,435	100.0%	36	100.0%	.	.0%		0.0%	\$144,435	100.0%	36	100.0%
Vertical Construction	\$3,598,054	100.0%	178	100.0%	.	.0%		0.0%	\$3,598,054	100.0%	178	100.0%
Equipment and Supplies	\$94,303,212	99.9%	32643	99.9%	\$139,204	.1%	22	0.1%	\$94,442,416	100.0%	32665	100.0%
Appraisal Services	.	.0%		0.0%	.	.0%		0.0%	.	.0%		0.0%
Maintenance Services: Highways and Bridges	\$26,334,571	99.9%	2661	99.7%	\$15,213	.1%	8	0.3%	\$26,349,784	100.0%	2669	100.0%
Maintenance, Management and Administration	\$8,084,239	95.1%	940	99.1%	\$419,552	4.9%	9	0.9%	\$8,503,791	100.0%	949	100.0%
Surveys	\$7,157,794	98.6%	557	99.6%	\$104,939	1.4%	2	0.4%	\$7,262,733	100.0%	559	100.0%
Other Services	\$1,285,455	100.0%	56	100.0%	.	.0%		0.0%	\$1,285,455	100.0%	56	100.0%
Design and Planning	\$17,265,056	100.0%	351	99.4%	\$4,609	.0%	2	0.6%	\$17,269,665	100.0%	353	100.0%
Traffic Analysis	\$3,101,929	100.0%	221	100.0%	.	.0%		0.0%	\$3,101,929	100.0%	221	100.0%
Total	\$486,577,456	99.3%	58677	99.7%	\$3,640,027	.7%	182	0.3%	\$490,217,482	100.0%	58859	100.0%

Figure 72: SBE Awards by MWBE Status and Division/Cost Center, FY2004 - 2008

	Award Amount							
	Non-MWBE				MWBE			
	Sum	Row Sum %	Firms	Row Firms %	Sum	Row Sum %	Firms	Row Firms %
Highway Division 1	\$3,509,324	79.7%	40	76.9%	\$891,760	20.3%	12	23.1%
Highway Division 2	\$2,055,577	48.7%	37	62.7%	\$2,168,976	51.3%	22	37.3%
Highway Division 3	\$5,256,912	62.7%	31	66.0%	\$3,126,196	37.3%	16	34.0%
Highway Division 4	\$7,265,683	88.1%	56	82.4%	\$979,725	11.9%	12	17.6%
Highway Division 5	\$6,152,028	61.8%	55	67.1%	\$3,803,638	38.2%	27	32.9%
Highway Division 6	\$7,256,061	89.7%	87	87.0%	\$829,585	10.3%	13	13.0%
Highway Division 7	\$4,708,350	75.1%	93	78.2%	\$1,559,785	24.9%	26	21.8%
Highway Division 8	\$4,946,567	62.1%	66	65.3%	\$3,020,148	37.9%	35	34.7%
Highway Division 9	\$28,267,409	92.7%	151	89.3%	\$2,211,724	7.3%	18	10.7%
Highway Division 10	\$5,854,905	87.4%	30	75.0%	\$840,466	12.6%	10	25.0%
Highway Division 11	\$8,960,380	62.0%	78	73.6%	\$5,483,127	38.0%	28	26.4%
Highway Division 12	\$5,081,934	87.6%	56	88.9%	\$719,038	12.4%	7	11.1%
Highway Division 13	\$5,337,440	72.0%	74	77.1%	\$2,071,488	28.0%	22	22.9%
Highway Division 14	\$11,474,497	89.5%	99	94.3%	\$1,350,828	10.5%	6	5.7%
Ferry Division	.	.0%		0.0%	.	.0%		0.0%
Motor Vehicle Division	.	.0%		0.0%	.	.0%		0.0%
Aviation Division	.	.0%		0.0%	.	.0%		0.0%
Public Transportation	.	.0%		0.0%	.	.0%		0.0%
Rail Division	.	.0%		0.0%	.	.0%		0.0%
General Services	\$1,727,215	100.0%	30	100.0%	.	.0%		0.0%
Professional Services	\$324,024	100.0%	5	100.0%	.	.0%		0.0%
Horizontal Construction	.	.0%		0.0%	.	.0%		0.0%
Vertical Construction	.	.0%		0.0%	.	.0%		0.0%
Equipment and Supplies	.	.0%		0.0%	.	.0%		0.0%
Appraisal Services	.	.0%		0.0%	.	.0%		0.0%
Maintenance Services: Highways and Bridges	\$7,109,664	95.9%	71	91.0%	\$300,817	4.1%	7	9.0%
Maintenance, Management and Administration	.	.0%		0.0%	.	.0%		0.0%
Surveys	.	.0%		0.0%	.	.0%		0.0%
Other Services	.	.0%		0.0%	.	.0%		0.0%
Design and Planning	.	.0%		0.0%	.	.0%		0.0%
Traffic Analysis	.	.0%		0.0%	.	.0%		0.0%
Total	\$115,287,968	79.7%	1059	80.2%	\$29,357,302	20.3%	261	19.8%

Figure 73: SBE Awards by MBE Status and Division/Cost Center, FY2004 - 2008

	Award Amount							
	Non-M BE (category includes WBEs)				M BE			
	Sum	Row Sum %	Firms	Row Firms %	Sum	Row Sum %	Firms	Row Firms %
Highway Division 1	\$4,098,974	93.1%	48	92.3%	\$302,110	6.9%	4	7.7%
Highway Division 2	\$2,855,042	67.6%	48	81.4%	\$1,369,511	32.4%	11	18.6%
Highway Division 3	\$6,756,840	80.6%	38	80.9%	\$1,626,268	19.4%	9	19.1%
Highway Division 4	\$7,740,870	93.9%	62	91.2%	\$504,537	6.1%	6	8.8%
Highway Division 5	\$8,531,620	85.7%	71	86.6%	\$1,424,046	14.3%	11	13.4%
Highway Division 6	\$7,899,646	97.7%	95	95.0%	\$186,000	2.3%	5	5.0%
Highway Division 7	\$5,608,649	89.5%	102	85.7%	\$659,486	10.5%	17	14.3%
Highway Division 8	\$6,639,313	83.3%	90	89.1%	\$1,327,402	16.7%	11	10.9%
Highway Division 9	\$29,830,739	97.9%	166	98.2%	\$648,394	2.1%	3	1.8%
Highway Division 10	\$6,375,462	95.2%	35	87.5%	\$319,909	4.8%	5	12.5%
Highway Division 11	\$12,725,620	88.1%	97	91.5%	\$1,717,887	11.9%	9	8.5%
Highway Division 12	\$5,653,079	97.5%	60	95.2%	\$147,893	2.5%	3	4.8%
Highway Division 13	\$6,828,187	92.2%	89	92.7%	\$580,742	7.8%	7	7.3%
Highway Division 14	\$12,825,325	100.0%	105	100.0%	.	.0%	.	0.0%
Ferry Division	.	.0%	.	0.0%	.	.0%	.	0.0%
Motor Vehicle Division	.	.0%	.	0.0%	.	.0%	.	0.0%
Aviation Division	.	.0%	.	0.0%	.	.0%	.	0.0%
Public Transportation	.	.0%	.	0.0%	.	.0%	.	0.0%
Rail Division	.	.0%	.	0.0%	.	.0%	.	0.0%
General Services	\$1,727,215	100.0%	30	100.0%	.	.0%	.	0.0%
Professional Services	\$324,024	100.0%	5	100.0%	.	.0%	.	0.0%
Horizontal Construction	.	.0%	.	0.0%	.	.0%	.	0.0%
Vertical Construction	.	.0%	.	0.0%	.	.0%	.	0.0%
Equipment and Supplies	.	.0%	.	0.0%	.	.0%	.	0.0%
Appraisal Services	.	.0%	.	0.0%	.	.0%	.	0.0%
Maintenance Services: Highways and Bridges	\$7,321,259	98.8%	74	94.9%	\$89,222	1.2%	4	5.1%
Maintenance, Management and Administration	.	.0%	.	0.0%	.	.0%	.	0.0%
Surveys	.	.0%	.	0.0%	.	.0%	.	0.0%
Other Services	.	.0%	.	0.0%	.	.0%	.	0.0%
Design and Planning	.	.0%	.	0.0%	.	.0%	.	0.0%
Traffic Analysis	.	.0%	.	0.0%	.	.0%	.	0.0%
Total	\$133,741,863	92.5%	1215	92.0%	\$10,903,407	7.5%	105	8.0%

Figure 74: SBE Awards by WBE Status and Division/Cost Center, FY2004 - 2008

	Award Amount							
	Non-M BE (category includes WBEs)				M BE			
	Sum	Row Sum %	Firms	Row Firms %	Sum	Row Sum %	Firms	Row Firms %
Highway Division 1	\$3,775,421	85.8%	43	82.7%	\$625,663	14.2%	9	17.3%
Highway Division 2	\$2,929,828	69.4%	44	74.6%	\$1,294,725	30.6%	15	25.4%
Highway Division 3	\$6,835,580	81.5%	39	83.0%	\$1,547,528	18.5%	8	17.0%
Highway Division 4	\$7,538,516	91.4%	60	88.2%	\$706,892	8.6%	8	11.8%
Highway Division 5	\$6,906,907	69.4%	63	76.8%	\$3,048,759	30.6%	19	23.2%
Highway Division 6	\$7,368,561	91.1%	89	89.0%	\$717,085	8.9%	11	11.0%
Highway Division 7	\$4,881,028	77.9%	102	85.7%	\$1,387,107	22.1%	17	14.3%
Highway Division 8	\$5,720,925	71.8%	75	74.3%	\$2,245,790	28.2%	26	25.7%
Highway Division 9	\$28,915,803	94.9%	154	91.1%	\$1,563,330	5.1%	15	8.9%
Highway Division 10	\$6,174,814	92.2%	35	87.5%	\$520,557	7.8%	5	12.5%
Highway Division 11	\$8,981,630	62.2%	79	74.5%	\$5,461,877	37.8%	27	25.5%
Highway Division 12	\$5,229,827	90.2%	59	93.7%	\$571,145	9.8%	4	6.3%
Highway Division 13	\$5,826,929	78.6%	79	82.3%	\$1,582,000	21.4%	17	17.7%
Highway Division 14	\$11,474,497	89.5%	99	94.3%	\$1,350,828	10.5%	6	5.7%
Ferry Division	.	.0%		0.0%	.	.0%		0.0%
Motor Vehicle Division	.	.0%		0.0%	.	.0%		0.0%
Aviation Division	.	.0%		0.0%	.	.0%		0.0%
Public Transportation	.	.0%		0.0%	.	.0%		0.0%
Rail Division	.	.0%		0.0%	.	.0%		0.0%
General Services	\$1,727,215	100.0%	30	100.0%	.	.0%		0.0%
Professional Services	\$324,024	100.0%	5	100.0%	.	.0%		0.0%
Horizontal Construction	.	.0%		0.0%	.	.0%		0.0%
Vertical Construction	.	.0%		0.0%	.	.0%		0.0%
Equipment and Supplies	.	.0%		0.0%	.	.0%		0.0%
Appraisal Services	.	.0%		0.0%	.	.0%		0.0%
Maintenance Services: Highways and Bridges	\$7,198,886	97.1%	75	96.2%	\$211,595	2.9%	3	3.8%
Maintenance, Management and Administration	.	.0%		0.0%	.	.0%		0.0%
Surveys	.	.0%		0.0%	.	.0%		0.0%
Other Services	.	.0%		0.0%	.	.0%		0.0%
Design and Planning	.	.0%		0.0%	.	.0%		0.0%
Traffic Analysis	.	.0%		0.0%	.	.0%		0.0%
Total	\$121,810,389	84.2%	1130	85.6%	\$22,834,881	15.8%	190	14.4%

XIa

REGRESSION ANALYSES, MWBE CAPACITY and SIZE DISTRIBUTION OF AWARDS

Regression analyses were used to determine whether or not any of the identified disparities in contracting could be attributed to factors unrelated to MWBE status. We also used regression analysis to determine the capacity of NCDOT contracting that MWBEs are capable of performing if they are treated the same as similarly situated non-MWBEs. Finally, after estimating the capacity of DBEs, WBEs and MBEs in each work code; we used those estimates to adjust the simple disparity index and to generate the standard deviation analysis.

Capacity was defined as the volume of work a contractor is capable of performing given the contractor's business related attributes, such as the following: 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 the effects of discrimination, and whether the contractor is a WBE as opposed to a non-MWBE or an MBE as opposed to a non-MWBE.

The regression analysis determined that the overall capacity of MWBEs would have been 15.1% had the compensation they received for their characteristics (i.e. return on attributes) been the same as that of non-MWBEs. This was further decomposed into WBE and MBE capacity as 8.0 percent and 7.1 percent, respectively (see Figure 77). Several different regression models were estimated to derive this capacity figure. 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 sector. The results revealed that the revenue of MBEs was lower than that of non-DBEs by 99% percent and the difference was statistically significant. The revenue of WBEs was lower than that of non-DBEs by 50% and the difference was statistically significant (see regression model 1, Figure 73). The results of the model give rise to an inference of disparate treatment of MBEs and WBEs in the general market place. This same result is

achieved when DBEs were examined. Specifically, the revenue of DBEs was lower than that of Non-DBEs by 53% and the difference was statistically significant.

Using decomposition analysis (models 2 and 3, Figures 74 and 75), 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.

Regression Model Specification

The regression models are listed in the figures below. The first model seeks to determine whether or not the receipts of businesses (i.e. their annual revenue) differ by non-DBE, WBE and MBE status after controlling for differences in the business related attributes of firms. Business revenue consists of both earnings in the private sector and earnings in the public sector. Revenue constitutes the dependent variable in the model and to improve the regression estimates we used the logarithmic transformation of each firm's revenue. The independent variables of the model were as follows: work codes (five work codes were included in the regression equation. These include the following: engineering and other professional; Hauling; Bridges and Structures; Paving; and Non-highway Construction. The last four work codes were each compared to the first work code (engineering and other professional services). Other variables in the equation included the number of geographic divisions a contractor was willing to worked in; the number of years the contractor has been operating; whether the firm was owned by a WBE in comparison to a non-DBE; whether the firm was owned by an MBE in comparison to a non-DBE; and the total value of awards the firm received from NCDOT between fiscal year 2004 and 2008 (the total value of awards was entered in the form of a logarithmic transformation).

MBEs and WBEs Experience Significant Disparities in Total Revenue (both Public and Private Sector)

The regression equation in Model 1 (Figure 73/Figure 75) investigates whether the public and private sector revenue received by MBEs and WBEs was significantly lower than that received by non-MWBEs after the investigation controlled for the firm related attributes described above. In this regression equation all firms analyzed received an award from NCDOT between fiscal year 2004 and fiscal years 2008. The primary objective was to determine whether or not the general revenue of non-MWBEs exceeds that of MBEs by an amount that was statistically significant. In addition, we sought to determine whether or not the revenue non-MWBEs exceeded the revenue of WBEs by an amount that was statistically significant. The results indicated that the annual revenue of MBEs was 98 percent lower than the annual revenue of non-MWBEs and the difference was statistically significant. Additionally, the annual revenue of WBEs was 49 percent lower than the annual revenue of non-MWBEs and the difference was also statistically significant. It is important to note that in explaining the total revenue of firms, the regression model found the most important explanatory variable was the total amount of awards received from NCDOT. The Beta coefficient or explanatory power of that variable was 0.289. More precisely, that the total value of awards received from NCDOT explained 29% of the variation in the annual revenue of contractors. The regression equation also indicates that MBEs and WBEs experience significantly lower revenue which is not attributable to the business related attributes of those firms that are included in the regression equation. Hence the results suggest that MBEs and WBEs experience disparate treatment in the general marketplace.

MBE and WBE Experience Statistically Significant Lower Returns on Business Related Attributes

In regression Model 2 and Model 3 (Figure 74/76 and 75/77) we used a decomposition approach to determine the level of revenue that DBEs would receive if they were treated the same as non-DBEs are treated. To do this we first selected only non-DBEs and regressed the general revenue they received on their firm related attributes. That regression produced coefficients for each variable. Each coefficient represents the amount of revenue that is generated by a unit increase in the particular attribute. The same procedure was then conducted for DBEs. The coefficients in the two models explain how the return on business related attributes differ between non-DBEs and DBEs. For example, non-DBEs experienced a 4.0 percent increase in revenue for every additional year of operations, while DBEs experienced only a 3.0 percent increase in revenue. For every one additional geographic division that a non-DBE worked in, that firm's revenue increased by 4.3 percent, while the revenue of DBEs increased by only 1.8 percent. When non-DBEs work in hauling as opposed to engineering and other professional services, their revenue was 20.7 percent lower; for DBEs, the same revenue

decrease was 50.8 percent. Among firms that operate in bridges and structures, the revenue of non-DBEs increased by 111 percent over the revenue of firms that worked in engineering and other related professions. In comparison, the revenue of DBEs in bridges and structures was no different than it was in engineering and other related professions. For non-DBEs, the revenue in the paving was 24.3 percent higher than it was for non-DBEs that operated in engineering and other professional services. For DBEs it was 9 percent lower. Finally, in the non-highway construction work code, the revenue for non-DBEs was 2.6 percent lower than it was for non-DBEs in engineering and professional services, but it was 92 percent lower for DBEs. Clearly, DBEs experience a much lower return on all business related attributes than did non-DBEs and this difference was, for the most part, statistically significant.

The NCDOT Contracting Capacity of MBEs and WBEs (Adjusted for Disparities in Revenue)

Finally, we used regression analysis to determine what DBE/MWBE capacity (or volume of NCDOT contracting) would be expected if they received the same return on attributes as non-DBEs received Figures 76/78 and 77/79. To do this we applied the coefficients derived in the decomposition equation for non-MWBEs to MBEs and WBEs and use the product of the individual coefficients and their attribute values to adjust the total revenue of DBEs. That is, our objective was to determine the level of revenue that DBEs would have received had they receive the same treatment as non-MWBEs. The estimated revenue (controlling for discrimination) is then assigned to each DBE, and, afterwards, a new regression equation was estimated. The new adjusted estimate yield the actual volume of work that non-DBEs were capable of performing, assuming they were treated the same as non-DBEs. Estimates were generated separately for WBEs and for MBEs. The results show that WBEs had an overall capacity of 8.0 percent, when compared to the capacity of all firms, while MBEs had a capacity was 7.1 percent. Overall, the capacity of DBEs was 15.1 percent.

Capacity Distribution Relative to the Size Distribution of Awards

Figures 78/80 record the distribution capacity by MWBE status, prime contracting, subcontracting and SBE capacity. Of subcontracting awards by DBE/MWBEs and non-DBE/MWBE and remaining three panels of the table record statistics on the distribution of DBE capacity as prime contractors, subcontractors and SBE contractors. By comparing this table with the contract award size distribution statistics provided in Figures 79/81 – 84/86, it is possible to determine how many DBE/MWBEs have the capacity to perform contract awards of various sizes. This information may be particularly helpful to contracting officers in setting project based goals.

Figure 75

Regression Model 1:

Log of Firm Receipts is the Dependent Variable. It is regressed on the following variables: work codes (the reference code is engineering and other professional services. The work code dummy variable categories included in the regression equations are Hauling, Bridges and Structures, Paving and Non-highway Construction,); The Number of Divisions a Contractor Works in; the number of years the contractor has been operating; whether the firm is owned by a WBE as opposed to a non-MWBE; whether the firm is owned by MBE as opposed to a non-MWBE; and log of total NCDOT awards.

FIGURE 148

Model 2 Coefficients^a						
Model		Unstandardized Coefficients		Standardized	t	Sig.
		B	Std. Error	Coefficients		
1	(Constant)	11.202	.513		21.838	.000
	Hauling	-.156	.323	-.040	-.483	.629
	Bridges and Structures	.411	.333	.090	1.236	.217
	Paving	.361	.328	.084	1.102	.271
	Construction, Non-Highway	.312	.395	.046	.790	.430
	Number of Division Work in	.014	.015	.039	.894	.372
	Years in Operation	.036	.005	.337	7.404	.000
	WBE Firm vs. Non-MWBE	-.498	.230	-.095	-2.167	.031
	MBE Firm vs. Non-MWBE	-.988	.226	-.200	-4.365	.000
	Log of Total NCDOT Awards	.214	.034	.289	6.266	.000

a. Dependent Variable: Log of Firm Receipts

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.624 ^a	.389	.373	1.486

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	480.219	9	53.358	24.171	.000 ^a
	Residual	754.955	342	2.207		
	Total	1235.175	351			

Figure 76

Regression Model 2: Regression Results on Non-MWBEs Only

Log of Firm Receipts is the Dependent Variable. It is regressed on the following variables: work codes (the reference code is engineering and other professional services. The work code dummy variable categories included in the regression equations are Hauling, Bridges and Structures, Paving and Non-highway Construction,); The Number of Divisions a Contractor Works in; and the number of years the contractor has been operating.

MODEL 2

		Model 2 Coefficients^a				
		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
Model		B	Std. Error	Beta		
1	(Constant)	13.351	.290		46.113	.000
	Hauling	-.207	.282	-.048	-.736	.462
	Bridges and Structures	1.118	.296	.228	3.772	.000
	Paving	.243	.297	.049	.819	.413
	Construction, Non-Highway	-.026	.330	-.004	-.078	.938
	Number of Division Work in	.043	.014	.117	2.968	.003
	Years in Operation	.039	.004	.359	9.020	.000

a. Dependent Variable: Log of Firm Receipts

Model 2 Summary^b				
Model 2	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.495 ^a	.245	.236	1.783

Model 2 ANOVA^b						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	511.763	6	85.294	26.841	.000 ^a
	Residual	1576.174	496	3.178		
	Total	2087.937	502			

Figure 77

Regression Model 3: Regression Results for DBEs Only:

Log of Firm Receipts is the Dependent Variable. It is regressed on the following variables: work codes (the reference code is engineering and other professional services. The work code dummy variable categories included in the regression equations are Hauling, Bridges and Structures, Paving and Non-highway Construction); The Number of Divisions a Contractor Works in; and the number of years the contractor has been operating.

MODEL 3

		Model 3 Coefficients ^a				
		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
Model		B	Std. Error	Beta		
1	(Constant)	13.618	.450		30.291	.000
	Hauling	-.508	.411	-.196	-1.235	.219
	Bridges and Structures	-.278	.449	-.078	-.620	.536
	Paving	-.090	.423	-.030	-.213	.831
	Construction, Non-Highway	-.920	.672	-.121	-1.369	.173
	Number of Division Work in	.018	.020	.071	.901	.369
	Years in Operation	.031	.010	.234	3.058	.003

a. Dependent Variable: Log of Firm Receipts

Model 3 Summary ^b				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.336 ^a	.113	.080	1.245

Model 3 ANOVA ^b						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	31.836	6	5.306	3.425	.003 ^a
	Residual	249.422	161	1.549		
	Total	281.258	167			

Figure 78

Regression Model 4 Estimating capacity: Using decomposition techniques, the receipts for MBEs and WBE have been adjusted to the level they would had they received the same return on attributes as Non-DBEs, i.e. DBEs were assigned the regression coefficients of non-DBEs. Log of total awards received from NCDOT is the Dependent Variable. It is regressed on the following variables: work codes (the reference code is engineering and other professional services. The work code dummy variable categories included in the regression equations are Hauling, Bridges and Structures, Paving and Non-highway Construction); The Number of Divisions a Contractor Works in; the number of years the contractor has been operating; whether the firm is a prime contractor or subcontractor; the logarithm of adjusted receipts (where the effects of discrimination have been removed); whether the firm is owned by a WBE or non-MWBE; and whether the firm is owned by an MBE as opposed to a non-MWBE.

MODEL 4

		Model 4 Coefficients ^a				
		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta		
1	(Constant)	7.364	1.333		5.524	.000
	Hauling	.321	.480	.061	.669	.504
	Bridges and Structures	.252	.510	.041	.494	.622
	Paving	.175	.491	.030	.357	.721
	Construction, Non-Highway	-1.288	.579	-.143	-2.223	.027
	Number of Division Work in	.049	.022	.105	2.209	.028
	Years in Operation	.001	.008	.010	.171	.865
	Prime Contractor vs. Subcontractor	1.858	.349	.329	5.322	.000
	Log Adjusted Receipts (missing removed)	.302	.092	.203	3.271	.001
	WBE Firm vs. Non-DBE	.712	.350	.099	2.034	.043
	MBE Firm vs. Non-DBE	.403	.338	.061	1.191	.234

a. Dependent Variable: Log of Total NCDOT Awards

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.534 ^a	.285	.264	2.173

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	635.979	10	63.598	13.474	.000 ^a
	Residual	1595.330	338	4.720		
	Total	2231.310	348			

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

Note: The final capacity estimate is determined by taking the exponent of the mean estimated value of the log of total receipts: in the table below, that value is expressed as a percentage of total capacity for WBEs and a percentage of total capacity for MBEs. Note, total NCDOT program capacity for DBEs is 15.1 percent.

Capacity of MBEs, WBE and non-MWBEs		
	Estimated Sum of Awards	
	Sum	Column Sum %
Non-DBE	\$604,453,635	85.0%
WBE	\$56,727,252	8.0%
MBE	\$50,176,976	7.1%
Total	\$711,357,863	100.0%

Award size distributions

Figure 80: State and Federal Centrally Let Subcontracts

	Subcontract Amount												
	Maximum	Mean	Minimum	Mode	5th Percentile	25th Percentile	Median	75th Percentile	95th Percentile	Sum	Column Sum %	Firms	Column %
DBE	\$10,073,140	\$113,374	\$48	\$5,000	\$3,309	\$9,745	\$24,720	\$80,856	\$437,515	\$460,412,225	26.9%	4061	52.1%
Non-DBE	\$38,772,714	\$336,293	\$100	\$21,080	\$2,899	\$14,060	\$59,235	\$175,502	\$1,091,772	\$1,253,364,057	73.1%	3727	47.9%

Capacity Size distribution

Capacity of All Contractors

	Exponentiated Natural log of Awards												
	Maximum	Mean	Minimum	Mode	5th Percentile	25th Percentile	Median	75th Percentile	95th Percentile	Sum	Column Sum %	Firms	Column %
Non-DBE	\$4,926,455	\$636,335	\$61,300	\$415,798	\$194,481	\$256,615	\$379,768	\$584,846	\$2,861,181	\$106,904,228	15.0%	168	25.0%
DBE	\$13,163,942	\$1,201,697	\$3,378	\$228,407	\$45,585	\$139,571	\$241,320	\$1,747,970	\$4,869,591	\$604,453,635	85.0%	503	75.0%

Capacity of All SubContractors

	Exponentiated Natural log of Awards												
	Maximum	Mean	Minimum	Mode	5th Percentile	25th Percentile	Median	75th Percentile	95th Percentile	Sum	Column Sum %	Firms	Column %
Non-DBE	\$1,231,941	\$407,105	\$61,300	\$415,798	\$190,741	\$248,758	\$349,642	\$521,612	\$830,672	\$ 63,101,342.29	47.93%	155	31.44%
DBE	\$1,110,823	\$202,840	\$3,378	\$228,407	\$31,155	\$118,050	\$164,407	\$243,985	\$466,546	\$ 68,559,961.95	52.07%	338	68.56%

Capacity of All Prime Contractors

	Exponentiated Natural log of Awards												
	Maximum	Mean	Minimum	Mode	5th Percentile	25th Percentile	Median	75th Percentile	95th Percentile	Sum	Column Sum %	Firms	Column %
Non-DBE	\$4,926,455	\$3,369,453	\$560,446	\$560,446	\$560,446	\$2,857,961	\$3,573,116	\$4,140,009	\$4,926,455	\$ 43,802,885.48	7.56%	13	7.30%
DBE	\$13,163,942	\$3,247,840	\$233,418	\$1,797,230	\$839,040	\$1,757,737	\$2,553,242	\$4,248,834	\$8,038,842	\$ 535,893,673.42	92.44%	165	92.70%

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

	Subcontract Amount			
	Subcontract Sizes			
	\$0.00 to \$300,000	\$300,001 to \$500,000	\$500,001 to \$1,200,000	Greater than \$1,200,000
	Mean	Mean	Mean	Mean
HAULING	\$52,326	\$395,704	\$744,711	\$2,246,449
LANDSCAPING AND EROSION CONTROL	\$36,219	\$382,324	\$766,505	\$1,742,769
INCIDENTAL CONCRETE AND MASONRY STRUCTURES	\$77,511	\$391,581	\$716,825	\$2,171,842
DRAINAGE	\$39,352	\$372,250	\$747,693	\$6,705,944
UTILITY INSTALLATION	\$69,818	\$390,628	\$821,134	\$2,627,518
SIGNALS AND ITS	\$93,802	\$382,638	\$853,143	\$2,437,470
MARINE	\$55,896	\$403,060	\$741,111	\$2,450,334
BUILDINGS VERTICAL CONSTRUCTION	\$91,130	\$419,592	\$679,720	\$3,747,619
PREPARATION AND GRADING	\$64,079	\$355,933	\$751,684	\$3,742,826
PAVING	\$77,192	\$384,971	\$730,922	\$3,166,952
HIGHWAY FINISHING	\$79,525	\$394,030	\$771,889	\$3,788,430
WORK ZONE SAFETY	\$64,338	\$374,910	\$656,579	\$2,376,731
GEOTECHNICAL	\$14,965	.	.	.
SAW CUTTING	\$67,346	\$414,803	\$859,323	\$3,309,503
WELDING	\$27,022	\$344,644	\$589,801	.
OTHER	\$9,250	.	.	.
	\$72,947	\$394,331	\$818,145	\$4,434,296

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

	Subcontract Amount									
	Subcontract Sizes									
	\$0.00 to \$300,000		\$300,001 to \$500,000		\$500,001 to \$1,200,000		Greater than \$1,200,000		Total	
	Valid N	Row Valid N %	Valid N	Row Valid N %	Valid N	Row Valid N %	Valid N	Row Valid N %	Valid N	Row Valid N %
HAULING	789	91.60%	22	2.60%	34	3.90%	16	1.90%	861	100.00%
LANDSCAPING AND EROSION CONTROL	785	94.90%	23	2.80%	17	2.10%	2	0.20%	827	100.00%
INCIDENTAL CONCRETE AND MASONRY STRUCTURES	179	80.60%	22	9.90%	11	5.00%	10	4.50%	222	100.00%
DRAINAGE	1687	92.50%	32	1.80%	57	3.10%	48	2.60%	1824	100.00%
UTILITY INSTALLATION	118	76.60%	14	9.10%	14	9.10%	8	5.20%	154	100.00%
SIGNALS AND ITS	62	77.50%	5	6.30%	7	8.80%	6	7.50%	80	100.00%
MARINE	348	85.90%	24	5.90%	27	6.70%	6	1.50%	405	100.00%
BUILDINGS VERTICAL CONSTRUCTION	30	83.30%	3	8.30%	2	5.60%	1	2.80%	36	100.00%
PREPARATION AND GRADING	296	79.40%	23	6.20%	34	9.10%	20	5.40%	373	100.00%
PAVING	666	88.00%	43	5.70%	33	4.40%	15	2.00%	757	100.00%
HIGHWAY FINISHING	735	78.70%	52	5.60%	89	9.50%	58	6.20%	934	100.00%
WORK ZONE SAFETY	808	93.30%	36	4.20%	20	2.30%	2	0.20%	866	100.00%
GEOTECHNICAL	4	100.00%		0.00%		0.00%		0.00%	4	100.00%
SAW CUTTING	56	69.10%	5	6.20%	10	12.30%	10	12.30%	81	100.00%
WELDING	101	95.30%	3	2.80%	2	1.90%		0.00%	106	100.00%
OTHER	5	100.00%		0.00%		0.00%		0.00%	5	100.00%
Total	6874	88.30%	319	4.10%	369	4.70%	226	2.90%	7788	100.00%

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

Non-DBE/Non-WMBE Firms										
	Subcontract Amount									
	Subcontract Sizes									
	\$0.00 to \$300,000		\$300,001 to \$500,000		\$500,001 to \$1,200,000		Greater than \$1,200,000		Total	
	Valid N	Row Valid N %	Valid N	Row Valid N %	Valid N	Row Valid N %	Valid N	Row Valid N %	Valid N	Row Valid N %
HAULING	165	92.20%	3	1.70%	6	3.40%	5	2.80%	179	100.00%
LANDSCAPING AND EROSION CONTROL	265	94.00%	8	2.80%	9	3.20%		0.00%	282	100.00%
INCIDENTAL CONCRETE AND MASONRY	96	79.30%	11	9.10%	7	5.80%	7	5.80%	121	100.00%
STRUCTURES	411	82.50%	18	3.60%	32	6.40%	37	7.40%	498	100.00%
DRAINAGE	34	58.60%	7	12.10%	11	19.00%	6	10.30%	58	100.00%
UTILITY INSTALLATION	54	78.30%	5	7.20%	6	8.70%	4	5.80%	69	100.00%
SIGNALS AND ITS	180	80.40%	19	8.50%	20	8.90%	5	2.20%	224	100.00%
MARINE	30	83.30%	3	8.30%	2	5.60%	1	2.80%	36	100.00%
BUILDINGS VERTICAL CONSTRUCTION	175	73.80%	19	8.00%	26	11.00%	17	7.20%	237	100.00%
PREPARATION AND GRADING	517	88.20%	33	5.60%	23	3.90%	13	2.20%	586	100.00%
PAVING	410	72.40%	32	5.70%	71	12.50%	53	9.40%	566	100.00%
HIGHWAY FINISHING	461	92.40%	22	4.40%	15	3.00%	1	0.20%	499	100.00%
WORK ZONE SAFETY	1	100.00%		0.00%		0.00%		0.00%	1	100.00%
GEOTECHNICAL	50	86.20%	3	5.20%	4	6.90%	1	1.70%	58	100.00%
SAW CUTTING	59	96.70%	1	1.60%	1	1.60%		0.00%	61	100.00%
WELDING	5	100.00%		0.00%		0.00%		0.00%	5	100.00%
OTHER	200	81.00%	11	4.50%	12	4.90%	24	9.70%	247	100.00%
Total	3113	83.50%	195	5.20%	245	6.60%	174	4.70%	3727	100.00%

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

MBE Firms										
Subcontract Amount										
Subcontract Sizes										
	\$0.00 to \$300,000		\$300,001 to \$500,000		\$500,001 to \$1,200,000		Greater than \$1,200,000		Total	
	Valid N	Row Valid N %	Valid N	Row Valid N %	Valid N	Row Valid N %	Valid N	Row Valid N %	Valid N	Row Valid N %
HAULING	311	94.20%	9	2.70%	8	2.40%	2	0.60%	330	100.00%
LANDSCAPING AND EROSION CONTROL	29	96.70%		0.00%	1	3.30%		0.00%	30	100.00%
INCIDENTAL CONCRETE AND MASONRY STRUCTURES	25	73.50%	5	14.70%	2	5.90%	2	5.90%	34	100.00%
DRAINAGE	10	90.90%		0.00%		0.00%	1	9.10%	11	100.00%
UTILITY INSTALLATION		0.00%		0.00%		0.00%		0.00%		0.00%
SIGNALS AND ITS	3	75.00%		0.00%		0.00%	1	25.00%	4	100.00%
MARINE	5	83.30%		0.00%		0.00%	1	16.70%	6	100.00%
BUILDINGS VERTICAL CONSTRUCTION		0.00%		0.00%		0.00%		0.00%		0.00%
PREPARATION AND GRADING	34	85.00%	3	7.50%	3	7.50%		0.00%	40	100.00%
PAVING	77	90.60%	5	5.90%	1	1.20%	2	2.40%	85	100.00%
HIGHWAY FINISHING	173	87.80%	12	6.10%	11	5.60%	1	0.50%	197	100.00%
WORK ZONE SAFETY	66	98.50%	1	1.50%		0.00%		0.00%	67	100.00%
GEOTECHNICAL		0.00%		0.00%		0.00%		0.00%		0.00%
SAW CUTTING	6	26.10%	2	8.70%	6	26.10%	9	39.10%	23	100.00%
WELDING		0.00%		0.00%		0.00%		0.00%		0.00%
OTHER		0.00%		0.00%		0.00%		0.00%		0.00%
Total	5	83.30%	1	16.70%		0.00%		0.00%	6	100.00%
	744	89.30%	38	4.60%	32	3.80%	19	2.30%	833	100.00%

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

WBE Firms										
	Subcontract Amount									
	Subcontract Sizes									
	\$0.00 to \$300,000		\$300,001 to \$500,000		\$500,001 to \$1,200,000		Greater than \$1,200,000		Total	
	Valid N	Row Valid N %	Valid N	Row Valid N %	Valid N	Row Valid N %	Valid N	Row Valid N %	Valid N	Row Valid N %
HAULING	313	88.90%	10	2.80%	20	5.70%	9	2.60%	352	100.00%
LANDSCAPING AND EROSION CONTROL	491	95.30%	15	2.90%	7	1.40%	2	0.40%	515	100.00%
INCIDENTAL CONCRETE AND MASONRY STRUCTURES	58	86.60%	6	9.00%	2	3.00%	1	1.50%	67	100.00%
DRAINAGE	1266	96.30%	14	1.10%	25	1.90%	10	0.80%	1315	100.00%
UTILITY INSTALLATION	84	87.50%	7	7.30%	3	3.10%	2	2.10%	96	100.00%
SIGNALS AND ITS	5	71.40%		0.00%	1	14.30%	1	14.30%	7	100.00%
MARINE	163	93.10%	5	2.90%	7	4.00%		0.00%	175	100.00%
BUILDINGS VERTICAL CONSTRUCTION		0.00%		0.00%		0.00%		0.00%		0.00%
PREPARATION AND GRADING	87	90.60%	1	1.00%	5	5.20%	3	3.10%	96	100.00%
PAVING	72	83.70%	5	5.80%	9	10.50%		0.00%	86	100.00%
HIGHWAY FINISHING	152	88.90%	8	4.70%	7	4.10%	4	2.30%	171	100.00%
WORK ZONE SAFETY	281	93.70%	13	4.30%	5	1.70%	1	0.30%	300	100.00%
GEOTECHNICAL	3	100.00%		0.00%		0.00%		0.00%	3	100.00%
SAW CUTTING		0.00%		0.00%		0.00%		0.00%		0.00%
WELDING	42	93.30%	2	4.40%	1	2.20%		0.00%	45	100.00%
OTHER		0.00%		0.00%		0.00%		0.00%		0.00%
Total	3017	93.50%	86	2.70%	92	2.90%	33	1.00%	3228	100.00%



Disparity Index Analysis

Statistical evidence of discrimination is a primary method used to determine whether or not a strong basis in evidence exists to develop, adopt and support a remedial program (i.e. to prove a compelling governmental interest), or, in the case of a recipient complying with the Federal DBE Program, to prove narrow tailoring of program implementation at the state recipient level. The Croson Decision states that, "Where gross statistical disparities can be shown, they alone in a proper case may constitute prima facie proof of a pattern or practice of discrimination."¹

The considerations regarding statistical evidence include the following:

1. **Availability Analysis:** A disparity index requires an availability analysis. Availability measures the relative number of MWBEs and DBEs among all firms ready, willing and able to perform a certain type of work within a particular geographic market area. Various measures of availability have been accepted and these measures approach the issue with different levels of specificity. The Courts have indicated that the practicality of various approaches must be considered and they have indicated that, "An analysis is not devoid of probative value simply because it may be possible theoretically to adopt a more refined approach.
2. **Utilization Analysis:** Courts have accepted measures of utilization that are based on the proportion of an agency's contract dollars that are awarded to MWBEs and DBEs in comparison to comparably situated businesses that do not fall within these categories.
3. **Disparity Index:** An important component of statistical evidence is the "disparity index." It is defined as the ratio of the percentage utilization to the percentage availability multiplied by 100. A disparity index value that is less than eighty (80) has

¹ Croson, 488 U.S. at 501, quoting Hazelwood School Dist. v. United States, 433 U.S. 299, 307-08 (1977).

been accepted as evidence that firms have been adversely affected. This threshold is often referred to as “The Rule of Thumb” or “The 80% Rule.”²

4. **Statistically Significant Disparity:** The federal courts have held that a statistically significant disparity between the number of qualified minority contractors willing and able to perform a particular service and the number of such contractors actually engaged by the local government or by prime contractors to the local government may raise an inference of discriminatory exclusion.³ In contrast, a small statistical disparity, standing alone, may be sufficient to establish discrimination.⁴
5. **Two Standard Deviation Test:** The two standard deviation test allows one to determine the probability that the numerical measure of disparity is the result of mere chance. Hence, measures of disparity that have absolute values exceeding two standard deviations have been deemed to be statistically significant and not due to chance. In contrast, measures of disparity having absolute values that are less than two standard deviations have are not considered statistically significant evidence of discrimination.⁵

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 comprised 20.3% of all prequalified prime contractors and subcontractors to the NCDOT. In the State program, the availability of prequalified prime contractors and prequalified subcontractors that were certified MBEs was 10.9% in 2008 and WBEs represented 10.4% of all prequalified prime contractors and subcontractors to NCDOT.

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

² See, e.g., Rothe, 545 F.3d at 1041; Eng'g Contractors Ass'n, 122 F.3d at 914, 923; Concrete Works I, 36 F.3d at 1524.

³ See, e.g., Croson, 488 U.S. at 509; Rothe, 545 F.3d at 1041; Concrete Works II, 321 F.3d at 970; see Western States Paving, 407 F.3d at 1001.

⁴ Western States Paving, 407 F.3d at 1001.

⁵ Eng'g Contractors Ass'n, 122 F.3d at 914, 917, 923. The Eleventh Circuit has held that a disparity greater than two or three standard deviations has been held to be statistically significant and may create a presumption of discriminatory conduct.; Peightal v. Metropolitan Eng'g Contractors Ass'n, 26 F.3d 1545, 1556 (11th Cir. 1994).

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.

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.

DBEs and MWBE's were 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.

Figure 86 records the disparity indexes for all categories of NCDOT contracting including prime contracting, subcontracting, SBE awards and POCs. The simple disparity index measures

the percent of MBE or DBE utilization in each category and it divides that percentage by the “availability” of those firms with in that category. A second disparity index, substitutes the capacity of firms in the category in place of their availability. A third disparity measure is the standard deviation analysis. The disparity in this case is expressed in standard deviation units and is based on measuring the gap between the awards that DBEs actually receive and the amount that they would be expected to receive, given their capacity.

Figure 86 indicates that DBE, MBEs, WBEs, and all categories of racial and ethnic minorities experienced statistically significant disparities based on the availability and capacity approach with the exception of Caucasians. This is confirmed by virtue of the index value in every case having a value of less than .80. All remaining figures in this section reinforce this fundamental finding. They reveal that the NCDOT has attempted to reduce the contracting disparities experienced by BDEs, MBEs and WBEs by establishing goals on centrally let subcontracting and by implementing race- and gender- neutral contracting procedures in SBE awards. In those two categories of contracting, i.e. centrally let subcontracts and SBE awards, the statistical disparities where they exist are less severe. Even with those programs however, DBE/MWBEs still encounter statistically significant disparities.

Figure 86: Disparity Indexes for All NCDOT Contracting	
Based on the Availability and Capacity of Contractors	
Category of Contractor	Disparity Index
DBE Disparity (Availability)	0.394
DBE Disparity (Capacity)	0.53
MBE Disparity (Availability)	0.156
MBE Disparity (Capacity)	0.239
WBE Disparity (Availability)	0.452
WBE Disparity (Capacity)	0.588
Race and Ethnicity (Availability)	
Asian Americans	0.294
Black	0.327
Caucasian	1.103
Hispanic	0.333
Native Americans	0.647

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

		Award Amount				Disparity Index Information				
		Sum	Group Row %	Firms	Standard Deviation	Availability %	Capacity %	Simple Index Disparity	Capacity Adjusted Disparity Index	Standard Deviation
DBE Status	Non-DBE	\$ 4,227,073,910.19	99.08%	866	\$12,795,094	6.90%	7.60%	0.13	0.12	-13.76
	DBE	\$ 39,283,684.79	.92%	9	\$7,319,663					
	Total	\$ 4,266,357,594.98	100.00%	875	\$12,748,401					
MBE Status	Non-MBE	\$ 4,230,359,380.64	99.16%	871	\$12,762,279	3.60%	3.20%	0.23	0.26	-6.08
	MBE	\$ 35,998,214.34	.84%	4	\$9,552,341					
	Total	\$ 4,266,357,594.98	100.00%	875	\$12,748,401					
WBE Status	Non-WBE	\$ 4,263,072,124.53	99.92%	870	\$12,780,985	3.10%	4.40%	0.02	0.02	-394.17
	WBE	\$ 3,285,470.45	.08%	5	\$233,952					
	Total	\$ 4,266,357,594.98	100.00%	875	\$12,748,401					
Race & Ethnicity	Caucasian American	\$ 4,225,754,367.01	99.05%	870	\$12,769,617					
	Black American	\$ 35,998,214.34	.84%	4	\$9,552,341					
	Hispanic American	.	.00%		.					
	Subcontinent Asian American	.	.00%		.					
	Asian/Pacific American	.	.00%		.					
	Native American	\$ 4,605,013.63	.11%	1	\$.					
	Total	\$ 4,266,357,594.98	100.00%	875	\$12,748,401					

Figure 88: Disparity Index Statistics for POC Awards

		Award Amount				Disparity Index Information				
		Sum	Group Row %	Firms	Standard Deviation	Availability %	Capacity %	Simple Index Disparity	Capacity Adjusted Disparity Index	Standard Deviation
DBE Status	Non-DBE	\$ 303,889,756.70	99.43%	58633	\$32,133					
	DBE	\$ 1,735,026.54	.57%	181	\$27,513	21.60%	15.10%	0.03	0.04	-120.32
	Total	\$ 305,624,783.24	100.00%	58814	\$32,121					
MBE Status	Non-MBE	\$ 304,905,390.37	99.76%	58767	\$32,116					
	MBE	\$ 719,392.87	.24%	47	\$36,077	11.60%	7.10%	0.02	0.03	-85.74
	Total	\$ 305,624,783.24	100.00%	58814	\$32,121					
WBE Status	Non-WBE	\$ 304,501,644.80	99.63%	58678	\$32,135					
	WBE	\$ 1,123,138.44	.37%	136	\$24,896	11.10%	8.00%	0.03	0.05	-80.64
	Total	\$ 305,624,783.24	100.00%	58814	\$32,121					
Race & Ethnicity	Caucasian American	\$ 298,975,919.09	97.82%	58390	\$32,028	85.20%		1.15		4.99
	Black American	\$ 2,860,800.78	.94%	230	\$24,987	11.40%		0.08		-84.58
	Hispanic American	\$ 56,985.66	.02%	25	\$2,398	0.90%		0.02		-229.25
	Subcontinent Asian American	\$ 367,303.80	.12%	6	\$30,481	0.30%		0.4		-8.06
	Asian/Pacific American	\$ 3,046,763.61	1.00%	134	\$64,315	4%		0.25		-12.37
	Native American	\$ 317,010.30	.10%	29	\$19,992	1.80%				
	Total	\$ 305,624,783.24	100.00%	58814	\$32,121					

Figure 89: Disparity Index Statistics for SBE Awards

		Award Amount				Disparity Index Information				
		Sum	Group Row %	Firms	Standard Deviation	Availability %	Capacity %	Simple Index Disparity	Capacity Adjusted Disparity Index	Standard Deviation
DBE Status	Non-DBE	\$ 115,287,968.15	79.70%	1059	\$108,536					
	DBE	\$ 29,357,301.52	20.30%	261	\$100,941	24.20%	47.90%	0.84	0.42	-24.53
	Total	\$ 144,645,269.67	100.00%	1320	\$107,049					
MBE Status	Non-MBE	\$ 133,741,862.67	92.46%	1215	\$108,076					
	MBE	\$ 10,903,407.00	7.54%	105	\$94,637	15.50%	21.40%	0.49	0.35	-20.78
	Total	\$ 144,645,269.67	100.00%	1320	\$107,049					
WBE Status	Non-WBE	\$ 121,810,388.65	84.21%	1130	\$107,308					
	WBE	\$ 22,834,881.02	15.79%	190	\$105,153	11.50%	23.90%	1.37	0.66	-8.12
	Total	\$ 144,645,269.67	100.00%	1320	\$107,049					
Race & Ethnicity	Caucasian American	\$ 120,500,937.14	83.31%	1075	\$109,331	72.30%		1.15		4.44
	Black American	\$ 16,195,558.59	11.20%	161	\$93,799	21.70%		0.52		-12.8
	Hispanic American	\$ 1,024,447.80	.71%	9	\$105,316	7.00%		0.1		-30.55
	Subcontinent Asian American	\$ 47,600.00	.03%	1	\$.	1.00%		0.03		
	Asian/Pacific American	\$ 65,065.00	.04%	2	\$34,129	50%		0.09		-19.28
	Native American	\$ 6,811,661.14	4.71%	72	\$101,250	3.60%		1.31		1.88
	Total	\$ 144,645,269.67	100.00%	1320	\$107,049					

Figure 90

Disparity Analysis for Centrally Let Federal Aid Subcontracts

	Subcontract Amount								DBE Availability %	DBE Simple Disparity Index	DBE Standard Deviation
	DBE Status										
	DBE				Non-DBE						
	Sum	Row Sum %	Firms	Standard Deviation	Sum	Row Sum %	Valid N	Standard Deviation			
HAULING	\$71,815,270	77.7%	617	\$ 282,514.06	\$20,555,515	22.3%	166	\$ 456,073.42	35.00%	2.22	5.63
LANDSCAPING AND EROSION CONTROL	\$31,331,084	66.7%	516	\$ 163,643.26	\$15,671,570	33.3%	259	\$ 115,329.23	20.60%	3.24	5.83
INCIDENTAL CONCRETE AND MASONRY STRUCTURES	\$13,828,882	31.0%	92	\$ 346,589.94	\$30,718,403	69.0%	115	\$ 548,000.29	19.00%	1.63	1.62
DRAINAGE	\$77,673,964	25.8%	1218	\$ 291,991.19	\$222,861,051	74.2%	462	\$ 2,395,529.77	15.80%	1.64	2.96
UTILITY INSTALLATION	\$12,310,748	30.5%	90	\$ 262,565.37	\$28,040,890	69.5%	56	\$ 869,779.13	13.70%	2.23	2.74
SIGNALS AND ITS	\$8,092,893	30.3%	10	\$ 1,424,103.81	\$18,574,181	69.7%	64	\$ 514,300.71	11.70%	2.59	1.16
MARINE	\$15,361,709	27.1%	172	\$ 307,880.33	\$41,302,664	72.9%	209	\$ 416,515.14	19.20%	1.41	1.11
BUILDINGS VERTICAL CONSTRUCTION	.	.0%	.	.	\$8,764,084	100.0%	33	\$ 649,591.11	16.70%	.00	
PREPARATION AND GRADING	\$19,258,856	18.8%	124	\$ 411,409.82	\$82,916,463	81.2%	208	\$ 1,191,717.68	71.40%	.26	-11.77
PAVING	\$24,984,047	19.9%	150	\$ 261,359.99	\$100,657,665	80.1%	548	\$ 624,763.96	18.50%	1.07	.55
HIGHWAY FINISHING	\$49,925,398	14.7%	338	\$ 307,402.00	\$289,744,297	85.3%	533	\$ 1,640,797.03	20.90%	.70	-3.73
WORK ZONE SAFETY	\$31,430,122	38.9%	349	\$ 204,276.42	\$49,382,069	61.1%	488	\$ 152,654.22	29.10%	1.34	2.08
GEOTECHNICAL	\$28,059	46.9%	3	\$ 4,727.41	\$31,800	53.1%	1	\$.	13.50%	3.47	2.99
SAW CUTTING	\$20,521,355	72.1%	14	\$ 2,581,618.46	\$7,940,598	27.9%	56	\$ 244,068.45	0.00%		2.20
WELDING	\$2,009,844	43.1%	40	\$ 118,355.26	\$2,655,365	56.9%	60	\$ 93,999.67	18.20%	2.37	1.57
OTHER	.	.0%	.	.	\$29,650	100.0%	4	\$ 6,190.01	28.60%	.00	
Total	\$455,798	.5%	2	\$ 172,544.17	\$86,202,519	99.5%	198	\$ 1,329,402.50	19.30%	.03	-94.29
	\$79,028,027	27.4%	3735	\$ 334,942.83	\$1,006,048,785	72.6%	3460	\$ 1,230,549.97	21.6%	1.27	3.90

Figure 91

Disparity Analysis for State Funded Centrally Let Subcontracts

	Subcontract Amount								MWBE Availability %	Simple Disparity Index	Standard Deviation
	MWBE				Non-MWBE						
	Sum	Row Sum %	Firms	Standard Deviation	Sum	Row Sum %	Firms	Standard Deviation			
HAULING	\$39,358,894	79.9%	433	\$ 203,596.68	\$9,881,180	20.1%	91	\$ 444,228.20	35.00%	2.28	5.23
LANDSCAPING AND EROSION CONTROL	\$14,642,860	71.0%	190	\$ 221,485.94	\$5,990,112	29.0%	106	\$ 110,576.66	20.60%	3.45	3.41
INCIDENTAL CONCRETE AND MASONRY STRUCTURES	\$8,673,452	31.8%	32	\$ 543,376.44	\$18,592,806	68.2%	45	\$ 816,473.11	19.00%	1.67	1.15
DRAINAGE	\$19,340,936	21.6%	347	\$ 196,641.17	\$70,284,467	78.4%	126	\$ 1,929,981.56	15.80%	1.37	1.42
UTILITY INSTALLATION	\$3,302,340	37.6%	17	\$ 277,179.40	\$5,487,671	62.4%	11	\$ 912,663.07	13.70%	2.74	1.89
SIGNALS AND ITS	\$601,406	12.9%	4	\$ 94,444.01	\$4,046,998	87.1%	13	\$ 653,984.15	11.70%	1.11	.35
MARINE	\$2,124,370	22.3%	69	\$ 82,638.65	\$7,384,037	77.7%	106	\$ 115,787.30	19.20%	1.16	.44
BUILDINGS VERTICAL CONSTRUCTION	.	.0%	.	.	\$263,604	100.0%	6	\$ 45,625.58	16.70%	.00	
PREPARATION AND GRADING	\$7,560,293	15.7%	79	\$ 282,647.22	\$40,684,880	84.3%	76	\$ 1,730,481.67	71.40%	.22	-10.77
PAVING	\$15,339,004	39.7%	104	\$ 236,851.50	\$23,252,534	60.3%	224	\$ 245,265.60	18.50%	2.15	3.41
HIGHWAY FINISHING	\$19,619,462	21.8%	191	\$ 112,375.48	\$70,365,256	78.2%	170	\$ 1,456,224.87	20.90%	1.04	.52
WORK ZONE SAFETY	\$14,461,831	32.8%	112	\$ 105,973.54	\$29,600,162	67.2%	231	\$ 145,573.98	29.10%	1.13	1.47
GEOTECHNICAL	.	.0%	.	.	.	.0%	.	.	13.50%	.00	
SAW CUTTING	\$11,423,155	89.0%	3	\$ 5,448,576.85	\$1,405,500	11.0%	11	\$ 177,735.28	0.00%		1.48
WELDING	\$97,059	17.6%	2	\$ 33,624.14	\$454,946	82.4%	8	\$ 116,443.05	18.20%	.97	-1.10
OTHER	.	.0%	.	.	\$3,520	100.0%	1	\$.	28.60%	.00	
Total	156,545,062	33.2%	1583	\$ 328,081.56	315,353,030	66.8%	1290	\$ 985,067.71	21.6%	1.54	4.19

Figure 92

Disparity Analysis for State Aid Centrally Let Subcontracts by MBE and WBE Status

	Subcontract Amount																	
	MBE/WBE Status																	
	Non-WM BE				MBE				WBE									
	Sum	RowSum %	Firms	Standard Deviation	Sum	RowSum %	Firms	Standard Deviation	Sum	RowSum %	Firms	Standard Deviation	MBE Availability	MBESimple Disparity Index	MBEStd Deviation	WBE Availability	WBE Simple Disparity Index	WBE Standard Deviation
HAULING	\$9,881,180	20.1%	91	\$ 444,228.20	\$23,163,935	47.0%	205	\$ 259,916.08	\$16,194,958	32.9%	228	\$131,670.16	23.00%	2.05	3.19	14.60%	2.25	4.54
LANDSCAPING AND EROSION CONTROL	\$5,990,112	29.0%	106	\$ 110,576.66	\$517,880	2.5%	14	\$ 42,504.91	\$14,124,980	68.5%	176	\$229,581.32	10.30%	.24	-10.49	11.20%	6.11	3.89
INCIDENTAL CONCRETE AND MASONRY STRUCTURES	\$18,592,806	68.2%	45	\$ 816,473.11	\$5,111,185	18.7%	16	\$ 642,245.01	\$3,562,267	13.1%	16	\$439,002.16	10.30%	1.82	.93	9.90%	1.32	.51
DRAINAGE	\$70,284,467	78.4%	126	\$1,929,981.56	\$222,572	.2%	3	\$ 20,276.25	\$19,118,365	21.3%	344	\$197,485.57	9.40%	.03	-286.04	6.80%	3.14	3.56
UTILITY INSTALLATION	\$5,487,671	62.4%	11	\$ 912,663.07	.	.0%		.	\$3,302,340	37.6%	17	\$277,179.40	6.60%	.00		7.80%	4.82	
SIGNALS AND ITS	\$4,046,998	87.1%	13	\$ 653,984.15	\$419,455	9.0%	2	\$ 60,708.65	\$181,951	3.9%	2	\$ 94,717.78	6.00%	1.50	2.32	5.70%	.69	-.88
MARINE	\$7,384,037	77.7%	106	\$ 115,787.30	.	.0%		.	\$2,124,370	22.3%	69	\$ 82,638.65	7.70%	.00		11.50%	1.94	
BUILDINGS VERTICAL CONSTRUCTION	263604.1142	100.0%	6	\$ 45,625.58	.	.0%		.	.	.0%		.	6.70%	.00		10.00%	.00	
PREPARATION AND GRADING	\$40,684,880	84.3%	76	\$1,730,481.67	\$2,459,201	5.1%	15	\$ 162,338.33	\$5,101,093	10.6%	64	\$302,796.12	57.10%	.09	-41.30	21.40%	.49	-2.17
PAVING	\$23,252,534	60.3%	224	\$ 245,265.60	\$8,469,006	21.9%	61	\$ 255,991.95	\$6,869,998	17.8%	43	\$209,033.87	10.40%	2.11	2.25	9.20%	1.93	2.45
HIGHWAY FINISHING	\$70,365,256	78.2%	170	\$1,456,224.87	\$11,931,979	13.3%	106	\$ 130,428.15	\$7,687,483	8.5%	85	\$ 83,813.01	12.70%	1.04	.38	9.80%	.87	-1.47
WORK ZONE SAFETY	\$29,600,162	67.2%	231	\$ 145,573.98	\$3,105,343	7.0%	30	\$ 94,552.20	\$11,356,488	25.8%	82	\$108,890.65	8.60%	.82	-1.34	20.60%	1.25	2.33
GEOTECHNICAL	.	.0%		.	.	.0%		.	.	.0%		.	2.90%	.00		10.60%	.00	
SAW CUTTING	\$1,405,500	11.0%	11	\$ 177,735.28	\$11,423,155	89.0%	3	\$ 5,448,576.85	.	.0%		.	0.00%		0.00%			
WELDING	\$454,946	82.4%	8	\$ 116,443.05	.	.0%		.	\$97,059	17.6%	2	\$ 33,624.14	7.80%	.00		10.40%	1.69	
OTHER	3520	100.0%	1	\$.	.	.0%		.	.	.0%		.	21.40%	.00		7.10%	.00	
Total	\$27,655,357	100.0%	65	\$1,085,742.44	.	.0%		.	.	.0%		.	8.40%	.00		12.40%		
	315,353,030	66.8%	1290	\$ 985,067.71	66,823,711	14.2%	455	\$ 528,934.65	89,721,351	19.0%	1128	\$192,578.66						