JOINT HIGHWAY RESEARCH PROJECT
JHRP-87/4
Final Report/Executive Summary
AN EVALUATION OF DISADVANTAGED BUSINESS ENTERPRISE REQUIREMENTS FOR INDIANA DEPARTMENT OF HIGHWAYS CONSTRUCTION PROJECTS

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Patrick A. Killian
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The attached report is the Final report on the JHRP study entitled "An Evaluation of Disadvantaged Business Enterprise Requirements for Indiana Department of Highways Construction Projects." The report has been authored by Mr. Pat Killian and myself. Also included are the Executive Summary and the Implementation Plan.

This project involved the evaluation of the IDOH D.B.E. Program for federally-funded highway construction projects. The programs of other transportation departments in FHWA's Region V were also studied and compared to Indiana's. Past IDOH project data were evaluated to estimate the impact of the D.B.E. requirements on Indiana's highway construction industry. Several conclusions and recommendations are covered in the final report. All objectives of the research project were accomplished.

The findings of the study were reviewed with the Indiana Department of Highways and implementation of recommended actions would be possible, should the Department desire. This report is submitted for review and approval to fulfill the objectives of this project.

Respectfully Submitted,

Donn E. Hancher, P.E.
Research Engineer

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EXECUTIVE SUMMARY

AN EVALUATION OF DISADVANTAGED BUSINESS ENTERPRISE REQUIREMENTS FOR INDIANA DEPARTMENT OF HIGHWAYS CONSTRUCTION PROJECTS

by

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Graduate Instructor in Research

and

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Joint Highway Research Project
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File No.: 9-11-18

Prepared as Part of an Investigation Conducted by Joint Highway Research Project Engineering Experiment Station Purdue University

in cooperation with the Indiana Department of Highways

Purdue University
West Lafayette, Indiana
May 12, 1987
EXECUTIVE SUMMARY

1.1 Introduction

This report represents an overall review of the Disadvantaged Business Enterprise Program implemented by the Indiana Department of Highways (IDOH) in response to the passage of the Surface Transportation Assistance Act, Section 105(f), which set a national goal of expending at least ten percent (10%) of Federal highway funds with socially and economically disadvantaged businesses (D.B.E.'s). The preparation of this report was in response to the desire of the IDOH to investigate the impact of this program on the Indiana highway construction industry. On the national, state and local levels, there has been considerable opposition to the D.B.E. program, and many claims have been made regarding negative effects of the program. The purpose of this study was to investigate these claims in Indiana by documenting any evidence supporting or disproving their validity. This report also discusses the D.B.E. programs of all FHWA Region V states, and highlights some of the variations in these programs for review and consideration by the IDOH.
The majority of information for this report came from the following three sources.

1. Questionnaires, personal interviews, and telephone conversations with IDOH personnel, non-minority contractors and D.B.E. firms throughout the State of Indiana.

2. Records from the IDOH that included the type of work, dollar volume, location of work, and contractor name for all approved minority subcontracts since the D.B.E. program's inception.

3. Conversations with the FHWA Region V state DOT personnel involved with the respective D.B.E. programs, as well as review of each of the state's programs.

Other sources of information included, a report on the impact of the D.B.E. program on the Federal-aid highway construction program which was prepared for the FHWA by Abt Associates, Inc., a similar report prepared by the American Association of State Highway and Transportation Officials, and numerous reports on the D.B.E. program prepared by contractor organizations.

E.1.2 Objectives

The stated objectives of the study were as follows:
1. To evaluate the current D.B.E. program operated by the Indiana Department of Highways.

2. To review the D.B.E. programs of all FHWA Region V states.

3. To survey Indiana highway construction firms, both non-minority and D.B.E. firms, to evaluate the impact the Federal regulations have made on the highway construction industry in Indiana.

4. To review past contract information to identify the volume of work and type of work that D.B.E.'s have performed since the inception of the program.

5. To develop recommendations for improvement of the IDOH D.B.E. program to assure that it fulfills the Federal requirements as fairly as possible to all parties involved.

The first and second objectives were jointly completed and a comparison was made between the IDOH D.B.E. program and the programs of the other FHWA Region V states. In general, the ongoing supportive activities for D.B.E.'s in Indiana is among the best of any state in the region. Minority contractors in this state can receive assistance in almost any area of highway construction, and most of this assistance is free of charge. The IDOH has developed a
cooperative relationship with the Indiana Constructors, Inc., and together these two organizations have done an excellent job at pinpointing the specific areas of highway construction that D.B.E.'s lack experience and training in, and have appropriately focused their supportive services on these areas.

All of the D.B.E. programs of the Region V states have basic similarities, yet each state also has its own unique subprograms or specifications that make the D.B.E. program more effective and workable for that particular state. For example, Minnesota and Wisconsin have implemented Mentor-Protege programs, Ohio has established a unique certification process, and Wisconsin is developing a financial assistance program for minority contractors. Aside from these unique aspects, there are strong similarities between the programs. In fact, five of the six states in Region V which have very similar certification processes have developed a regional certification application which is discussed in detail in Chapter Five.

In general, all of the states in the region have been very cooperative in sharing ideas, experiences and other information relevant to the D.B.E. program with their sister states.

The third objective of this study was completed through the development of a questionnaire that addressed many of the
controversial claims made against the D.B.E. program. The
questionnaire was then used in a random survey of non-
minority and D.B.E. contractors throughout the State of
Indiana. IDOH personnel directly involved with the D.B.E.
program were also contacted during the survey. Response to
the survey was tremendous, with nearly sixty percent (60%)
of the questionnaires returned. Many of the respondents
were also interviewed personally, or by telephone, which
gave them a chance to elaborate on their ideas and feelings
toward the program. Opinions and ideas of the participants
were varied, but the majority of respondents agreed on the
following issues regarding the IDOH D.B.E. program:

• There are not enough certified D.B.E. firms in Indiana
to handle ten percent (10%) of the work on Federal-aid
highway projects.

• D.B.E.'s lack proper training and education in many
areas of highway construction, especially in the areas
of estimating, scheduling, and finances.

• The D.B.E. program has led to increased project costs.

• The D.B.E. program has taken traditional work away from
non-minority specialty contractors.

These claims against the IDOH D.B.E. program formed the
basis of the investigation in objective four, which included
the review of all D.B.E. subcontracts approved since the program's inception. The results of this investigation as well as some recommendations for improvement of the IDOH D.B.E. program are discussed in the following sections.

El.3 Conclusions

Conclusion 1. The IDOH D.B.E. program has significantly increased minority participation in the Indiana highway construction industry. Data on this participation is presented in detail in Section 6.1. In FY 82 which was prior to the implementation of the current D.B.E. program, the total value of D.B.E. subcontracts was just over two million dollars. By FY 86, this number had increased to over 28 million dollars. This tremendous increase in minority participation is undoubtedly largely due to the D.B.E. program.

Conclusion 2. The number and dollar volume of D.B.E. subcontract awards have been uniformly distributed throughout the six districts in Indiana. This conclusion is supported by data in Section 6.2 which shows the number and dollar value of D.B.E. subcontract awards for each district from FY 83-86. The average contract sizes for these districts for the same period is also shown, which again supports the effort of the IDOH in distributing D.B.E. dollars throughout the state.
Conclusion 3. D.B.E. firms are being awarded an increasing number of large contracts per year, indicating that the capacity of the average minority firm is steadily increasing. The average size subcontract awarded to D.B.E.'s has increased by nearly 76% since the first year the program was implemented. This information suggests that the capacity of D.B.E.'s in the state has been growing and they are capable of managing larger jobs. By analyzing the data in Section 6.3 it can be seen that there has been a significant increase in the number of larger awards per year, and there has been a continual decrease in the number of awards less than $25,000 which suggests growth in the capacity of the average D.B.E. firm. However, it should be noted that much of this growth has been limited to a small percentage of D.B.E. firms as is discussed in Conclusion 5.

Conclusion 4. Repeat award winning D.B.E. firms in Indiana have consistently been awarded the majority of D.B.E. dollars. This reflects the fact that these firms have established a solid reputation for themselves and have gained the confidence of the prime contractors they have worked for. Overall, the data in Section 6.5 indicates that the positive impact of the D.B.E. program is measured not only by the impressive growth in the number of D.B.E. awards and volume of highway construction dollars going to numbe
that win awards in one fiscal year, will successfully win awards in future years.

**Conclusion 5.** A large percentage of the minority work in Indiana is being performed by a small group of minority contractors. Data presented in Section 6.4 shows that in each of the fiscal years 83-86, at least thirty percent (30%) of the total D.B.E. subcontract volume was performed by three minority contractors. Also, the top 10 minority contractors have performed over sixty percent (60%) of the minority work over the same period. Since at any one time of the D.B.E. program's existence, there have been approximately 100 firms certified for minority work in the State of Indiana, this means that on the average, ten percent (10%) of the eligible firms are performing over half of the available work.

**Conclusion 6.** A majority of the work performed by D.B.E. s in Indiana is in low capital intensive specialty areas. The types of work performed by D.B.E. s in Indiana has for the most part varied from year to year. However, in the area of guardrail, miscellaneous concrete, and construction signs, D.B.E. participation has been consistently high since the program was implemented. Guardrail especially has been a popular trend among new minority firms. The dollar value of awards in this area has grown every year from FY 83-86. In FY 86, over twenty percent (20%) of all D.B.E. subcontract
dollars was awarded in this area. However recently, other areas of highway construction not usually associated with D.B.E.'s have shown considerable increases in dollar volume and participation. This suggests that some minority firms have truly benefited from the program and are learning to manage and perform larger and more difficult jobs, while most firms are content to stay specialized and perform in those traditional areas of subcontracted highway construction.

Conclusion 7. The D.B.E. program in Indiana appears to be at least partially responsible for the severe reduction in the amount of guardrail work awarded to two non-minority guardrail contractors since the program's inception. While it is difficult to measure the impact the D.B.E. program has had on all non-minority specialty subcontractors, data shown in Section 6.7 was collected on two large non-minority guardrail contractors from Indiana. By comparing the two companies' number of awards and work volume in guardrail and other areas for a period of four years, before and after the D.B.E. program was implemented, it can be seen that both companies have experienced a significant decrease in their volume of guardrail work. Both companies have also experienced considerable gains in the volume of other work not related to guardrail items, which has partially offset their losses in the guardrail area. The evidence is not
totally conclusive, however this information combined with the fact that an increasing amount of dollars is awarded to D.B.E.'s in the guardrail area annually, suggests that the D.B.E. program may be at least partially responsible for these two companies reduction in guardrail work.

Conclusion 8. Although it was not possible to document, survey respondents believe that the D.B.E. program in Indiana has led to increased project costs. Many contractors and IDOH personnel alike, listed several areas in which they felt project costs have increased, but no hard evidence on this matter was obtained. Since the good faith efforts of the program does include accepting a minority bid if it is within ten percent (10%) of the nearest non-minority bid, respondents felt it is inevitable that the program has to some extent led to increased costs, however it would be very difficult to estimate the extent to which this claim is valid.

Conclusion 9. Passage of the 1987 Highway bill may significantly effect the IDOH D.B.E. program. With the passage of the 1987 highway bill, the only changes in the D.B.E. program are that it will now include women's (or W.B.E.) firms as disadvantaged, and the limit on gross annual volume of D.B.E. firms has been reduced from $17 million to $14 million. Including women as disadvantaged may seem like a minor change, however it may have a
significant impact on the program depending upon the interpretation of this change by state agencies. Some states may soon experience a high level of W.B.E. participation. Since the change in the program does not specify a specific percentage of W.B.E. participation, some legal cases may arise concerning the legitimacy of this change. Nevertheless, state agencies across the country are experiencing a flood of new W.B.E. applicants.

**E1.4 Recommendations**

**Recommendation 1.** The IDOH should keep better records and collect data on the D.B.E. program, such as the data in Chapter Six, so that its full impacts can be measured. All of the Region V states' programs including Indiana, did not collect data or statistics that measured the impact of the D.B.E. programs on the highway construction industry in their respective states. Most states did have information on the minority firms certified, but none had the information consolidated or summarized so that inferences could be drawn on the effect the program was having outside the minority community.

All of the information in Chapter Six of this report was gathered at the IDOH office in Indianapolis. Unfortunately though, the information was not summarized or tabulated, therefore it was impossible to completely measure all
impacts of the program. Another type of statistic that could be kept is the impact that the program has had on increased project costs. Any time a minority bid is accepted that is higher than the next lowest non-minority bid, this data should be documented so that its effects could be analyzed. This type of information is most important in determining what the real underlying impacts of the D.B.E. program are.

Recommendation 2. The IDOH should consider and discuss the possibility of implementing a Mentor-Protege program. Currently, the IDOH does not support the idea of a Mentor-Protege program, while several of the surrounding states do. This type of program can benefit D.B.E. and non-minority contractors alike if it is managed properly. The two key aspects of managing a successful Mentor-Protege program are monitoring of activities, and establishing a rigid graduation period.

Monitoring of the Mentor-Program is essential to its success. Without sufficient monitoring and control of this program, it can soon become a way of legalizing "front" activity which the IDOH has worked very hard at eliminating. But, with proper guidelines and control of this program, it can become a viable alternative for increasing minority participation in the state. It can also help develop firms into general contractors, which would help in reducing the
number of specialty D.B.E.'s in Indiana.

A rigid graduation period is another important aspect of a successful Mentor-Protege program. The IDOH should develop a time frame, for example three to five years, after which time there should be no further assistance provided to the D.B.E. by the Mentor firm. If the D.B.E. cannot survive on its own after this amount of time, then it should not be considered a candidate for certification by the IDOH. These are the two most important aspects of a Mentor-Protege program that should be identified when the IDOH is discussing the possibility of such a program. It is fortunate for Indiana, that it has a state in its region that has already implemented a successful Mentor-Protege program. This state is Wisconsin, and its program was discussed in detail in Chapter Four. It is suggested that if the IDOH does seriously consider implementing a Mentor-Protege program, it should model its program after the Wis/DOT program.

Recommendation 3. The IDOH should loosen up its D.B.E. certification restrictions to promote an increase in the number of new firms certified each year. Since the D.B.E. program was implemented in Indiana, there has been a continuous increase in the dollar volume of subcontract awards to minority firms. However, there has not been as significant an increase in the number of firms being
certified each year. Therefore, the firms in the program are doing a significantly larger volume of work today than they were in FY 83. Since the program's inception, there have always been approximately 100 firms certified in Indiana. This number has fluctuated from year to year, but it has always remained at or around this level. It is interesting that this number has not increased as more dollars are awarded to D.B.E. firms each year. It may very well be that the IDOH's certification procedure is too restrictive. Certainly the IDOH has done an outstanding job of controlling the "front" and "sham" firm population in Indiana, but it seems that they may also have made it more difficult for legitimate firms to obtain certification with the IDOH. This recommendation does not imply that monitoring of firms should be reduced, only that the initial restrictions be more flexible. It is important for the program as well as for maintaining a competitive market, that more legitimate and capable firms be allowed entry into the program.

Recommendation 4. The IDOH should maintain the relationships that it currently shares with the surrounding Region V states as well as the Indiana Constructors, Inc. It is important to the Indiana program that it stay informed and up to date on all current issues related to the D.B.E. program. These relationships in the past have helped make
the IDOH program one of the most effective in the region, and in no way should these relationships be severed in the future. Both relationships provide unique viewpoints and ideas on topics related to the program, and are mutually beneficial to all of the parties involved.

Throughout this report, reference is made to the IDOH awarding subcontracts to DBE's. In actuality, prime contractors award the subcontracts to DBE's and the IDOH approves these awards.
FINAL REPORT

AN EVALUATION OF
DISADVANTAGED BUSINESS ENTERPRISE
REQUIREMENTS FOR INDIANA
DEPARTMENT OF HIGHWAYS
CONSTRUCTION PROJECTS

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CHAPTER 1 - INTRODUCTION

On January 6, 1983, President Reagan signed into law the Surface Transportation Assistance Act (S.T.A.A.) of 1982. Section 105(f) of the S.T.A.A. stated that, "except to the extent that the Secretary determines otherwise, not less than 10 percentum of the amounts authorized to be appropriated under this Act shall be expended with small business concerns owned and controlled by socially and economically disadvantaged individuals as defined by Section 8(d) of the Small Business Act and relevant subcontracting regulations promulgated pursuant thereto." These small business concerns as stated in the Act are more commonly referred to as Disadvantaged Business Enterprises or D.B.E.'s, and the program implemented by the Federal Highway Administration (FHWA) to fulfill the requirements of section 105(f) has become known as the D.B.E. Program.

The D.B.E. Program was announced on February 18, 1983 in a memorandum from the Federal Highway Administrator to the FHWA Regional Administrators. Rules and Regulations for
implementing the programs were published in July of 1983 and became effective as of August 22, 1983. Thus the first full fiscal year of the program implementation under these regulations was fiscal year 1984 (October 1983-September 1984).

Before the S.T.A.A. was passed, the Federal Highway Administration had tried other methods aimed at increasing minority participation in highway construction. In 1969, the FHWA began requiring contractors to utilize their "best efforts" to subcontract work to minority businesses. Also, in 1977, nationwide goals for minority participation were introduced which were followed by a comprehensive Minority Business Enterprise Program established by the Department of Transportation in 1980. In fiscal year 1981, the State of Indiana reported over $5,600,000 in awards to MBE's under this program.

Since the passage of the S.T.A.A., each state has established their own goals for D.B.E. participation. In fiscal year 1986, five states had received approval of goals less than 10%, and four states submitted goals of greater than 10%. All other states followed the 10% goal (1).

Once a goal has been set by a state, it is the state's responsibility to meet or exceed this goal by implementing its own D.B.E. program within the guidelines issued by the
FHWA. This means that the overall Federal D.B.E. program is in actuality a combination of 52 separate programs run by the states (plus the District of Columbia and the Commonwealth of Puerto Rico). Each state is responsible for most of the important dimensions of the program including - certification process, prequalification and licensing procedures, project monitoring and enforcement of regulations.

Although each state does have a considerable amount of independence in establishing its own D.B.E. program, there are some specific regulations developed by the Department of Transportation that must be followed when determining the eligibility of a firm to participate in the program (2).

For a firm to be recognized as a legitimate D.B.E., it must meet three basic qualifications:

1. It must be owned and controlled by individuals who are socially disadvantaged.

2. It must be owned and controlled by individuals who are economically disadvantaged.

3. It must be a small business as defined by section 3 of the Small Business Act.

Usually, an individual's racial or ethnic heritage is the key to meeting the socially or economically
disadvantaged qualification. By law, members of the following groups automatically have such eligibility if they are socially or economically disadvantaged:

- **Black Americans**

- **Hispanic Americans** (Mexicans, Puerto Ricans, Cubans, Central or South Americans, or others of Spanish culture)

- **Native Americans** (American Indian, Eskimos, Aleuts, and native Hawaiians)

- **Asian Pacific Americans** (Japanese, Chinese, Taiwanese, Koreans, Vietnamese, Laotians, Cambodians, Filipinos, Samoans, Gaumanians, Northern Marianas, and the U.S. Trust Territory of the Pacific Islands)

- **Asian Indian Americans** (India, Pakistan and Bangladesh).

The definition of a small business varies according to the type of business, such as General Contractor, Consultant, Vendor, or Supplier. Each business category is measured by different criteria, such as dollar receipts or number of employees.
Generally speaking, a company would be eligible for certification as a D.B.E. if it meets the following standards:

- For subcontracts of $10,000 or less, a company is determined to be small if it does not have more than 500 employees, including employees at all affiliates.

- For subcontracts of $10,000 or more and for all prime contracts, a firm is classified as small under the following circumstances:
  
a. For General Construction Work, if the firm's average receipts have not exceeded $12 million for each of the last 3 years.

b. For Special Trade Construction Work, if the firm's average receipts have not exceeded $5 million dollars for each of the last 3 years.

c. For Manufacturing Plants and Suppliers, a firm must have no more than 500 employees, including all affiliates.

d. All other contractor categories - such as architects, engineers, janitorial firms, etc. - are recommended to contact the Small Business Administration for specific details on size limitations.
Along with meeting these qualifications, a firm must also be certified. To become a certified D.B.E. firm, at least 51 percent of the business must actually and legally be owned by a socially and economically disadvantaged individual or individuals. In addition, the active management and daily operations of the firm must be controlled by one or more of those individuals.

These are the specific guidelines set by the Department of Transportation. It is the responsibility of each individual state to follow these guidelines when developing or amending their own D.B.E. programs.

1.1. Objectives of the Study

The objectives of this study are listed below as a guideline to the primary focus of the study.

1. To evaluate the current D.B.E. Program operated by the Indiana Department of Highways.

2. To review the D.B.E. Programs of all FHWA Region V states.

3. To survey Indiana highway construction firms, both non-minority and D.B.E. firms, to evaluate the impact the Federal regulations have had on the highway construction industry in Indiana.
4. To review past contract information to identify the volume of work and type of work that D.B.E.'s have performed since the inception of the program.

5. To develop recommendations for improvement of the current IDOH D.B.E. Program to assure that it fulfills the Federal requirements as fairly as possible to all parties involved.

1.2 Scope of Study

Since the S.T.A.A. of 1982 was passed and the D.B.E. program implemented, this subject has become a highly controversial and political topic throughout the country. Contractor organizations have fiercely debated with the Federal Highway Administration about the effects of the D.B.E. program on the free-enterprise system of this country. Several papers have been written on this subject, but the underlying theme behind most of them was to abandon the D.B.E. program.

The intent of this study was not to take any one side in the debate, but rather to take a nonpartisan look at the current program so as to give an understanding of its strong points as well as its weaknesses. It has become evident that the D.B.E. program is going to be a part of the highway construction industry for the next several years, and it is time that all parties involved in this field realize this
fact and make every effort to facilitate the D.B.E. programs' implementation.

The scope of this study can most easily be presented by a discussion of the phases involved in completing the research. The initial phase of research involved an in-depth literature search to review Federal D.B.E. regulations and practices. Following this, an extensive review was conducted on the current IDOH D.B.E. program, which included personal interviews with several IDOH personnel that are directly involved with the D.B.E. program.

The information gathered in the initial phase was used to develop a comprehensive survey questionnaire that addressed many of the claims made against the D.B.E. program. Two hundred of these questionnaires were then mailed out to Indiana highway contractors, D.B.E.'s and IDOH personnel across the state. A review of the D.B.E. programs in the surrounding states was also conducted in this phase.

The second phase of the research involved compiling the data obtained from the questionnaires and review of other D.B.E. programs. Also during this phase, many survey participants who displayed an interest in discussing the D.B.E. program personally, were interviewed in person, which gave them the opportunity to elaborate on their answers to the questionnaire, and express any other ideas they had.
concerning the program. Another area of research of this study was the review of contract/subcontract information of fiscal years 1983-86 that revealed the volume of work and type of work that each D.B.E. firm certified in the State of Indiana had undertaken since the D.B.E. program inception.

The final phase of the research was an evaluation of all the data gathered previously. This data was studied and summarized, and was ultimately used to develop the conclusions and recommendations for this study.

The ultimate purpose of this study was to present the IDOH with a comprehensive evaluation of their D.B.E. program. The data collected in this study was intended for use by the IDOH in helping them assess the strengths and weaknesses in their program, and identify alternatives to alleviate any problems as quickly and fairly as possible.
CHAPTER 2 - SURVEY RESULTS

In order to give a better understanding and feeling for the D.B.E. Program in Indiana, a questionnaire was developed that addressed many of the controversial claims made against the program. The major topics addressed in the questionnaire are listed below:

- Adequate number of D.B.E.'s to handle work load.
- Problems in finding prequalified D.B.E.'s.
- Areas where D.B.E.'s need more training and education.
- Effects of D.B.E. program on project cost.
- Effects of D.B.E. program on quality of work performed.
- Effects of D.B.E. program on non-minority contractors.
- Effectiveness of program in generating successful D.B.E. firms.

Three different groups were surveyed so that a wide view of opinions and insight could be obtained. The first
and largest group was non-minority highway contractors in Indiana. The second group was D.B.E. contractors certified in the State of Indiana. The final group was IDOH personnel that had direct involvement with the D.B.E. program. Random samples from all these groups were chosen and the questionnaires were mailed out to these selected participants.

Although the questionnaires sent to each of the three groups was basically the same, some changes were made in the wording of questions so that they pertained more directly to each individual group. Copies of all three of the questionnaires used in the survey are included in Appendix A of this report. In an attempt to promote as high a percentage of response as possible, a stamped, self addressed envelope was included with each questionnaire. Also, most questions were of the multiple choice or yes - no answer type which was designed to expedite the response time. Ample space was provided below each question so that the respondent could elaborate on any answer.

2.1 Non-Minority Response

Non-minority highway contractors was the largest group surveyed, therefore the majority of questionnaires were sent to this group. One hundred twenty-five questionnaires were
sent out to non-minority highway contractors across the state of Indiana. These participants were chosen randomly from a list supplied by the IDOH.

Of the one hundred twenty-five questionnaires sent to the non-minority highway contractors, 72 or almost fifty-eight percent (58%) were returned. This is an excellent response for this type of survey which usually yields a thirty to forty percent (30-40%) response. The high level of participation in the survey is an indication of the concern that contractors have for this issue.

The first question asked of the non-minority contractors was whether they had any experience with or had any association with minority contractors. All respondents indicated that they had experience at one time or another with D.B.E.'s. The second question then asked how often was this experience, and sixty percent (60%) responded very often, thirty percent (30%) sometimes and ten percent (10%) rarely.

The next question asked contractors was whether there were enough certified D.B.E. firms in Indiana to handle 10% of the work on all Federal-aid highway projects. Seventy-eight percent (78%) of the respondents answered "no" to this question while the remaining twenty-two percent (22%) were split between "yes" and "unsure". Several of the
respondents that did answer "yes" added that there were enough D.B.E. firms to handle the work load, but there were not enough qualified firms to do the work. Also, some respondents added that if all "sham" firms were eliminated, there would not be nearly enough firms left to handle the work load.

The following question was very similar to the previous one except that it addressed the issue of whether there was a shortage of prequalified D.B.E. firms in Indiana. Once again an overwhelming number of respondents, seventy-five percent (75%), felt that there was a shortage. Many of the respondents that did not feel there was a shortage added that the reason for this is because not enough minority firms bid subcontracts large enough ($100,000) to require prequalification.

With respect to training and education, the following list of specific areas of highway construction was shown and the respondents were asked to check those areas in which they felt D.B.E.'s lacked adequate experience:

- Reading Blueprints
- Estimating and Bidding
- Bookkeeping
- Handling Finances
- Personnel Management
- Scheduling
- Construction Methods
- Testing Procedures
- Other (specify)
Many of the respondents checked all the areas listed, but the most common areas checked were Estimating and Bidding fifty-four percent (54%), Construction Methods fifty-three percent (53%), Scheduling forty-seven percent (47%) and Handling Finances forty-seven percent (47%).

The next question listed eight D.B.E. education alternatives and asked the respondent’s opinion on whether the programs would be helpful to the D.B.E.’s or not. In general, respondents felt that most of the programs would be helpful. However, the two most popular alternatives were; (a) providing technical and managerial consulting programs to help minority contractors and (b) encouraging banks and lending institutions to conduct training sessions on financing for minorities. Forty-six percent (46%) of the respondents felt that these two types of programs would be most beneficial to D.B.E.’s.

The following question was open in that the participants were asked if they had, experienced any problems with D.B.E. firms that they had worked with. Eighty-three (83%) of the respondents said "yes", and the most common problems cited were that D.B.E.’s did not have the work force necessary to complete the required work on time and within budget, and that most D.B.E. firms were underfinanced.
With respect to the effect on project costs, the participants were asked their opinion of whether the D.B.E. program has led to increased project costs. Ninety-three percent (93%) of the respondents answered "yes", while only 1 out of the 72 responded "no". The other six percent (6%) were "unsure". Many contractors responded by saying that when it is documented as part of the good faith efforts to accept a minority bid that is within ten percent (10%) of the closest bid, then undoubtedly this program is going to increase project cost. Other contractors stated that they are forced to subcontract work to minorities that they could have done much cheaper themselves. Still other respondents said that they increase bid prices of other items to compensate for the uncertainties involved in working with an inexperienced D.B.E.

The effect of the D.B.E. program on the quality of work performed on Federal highway projects was addressed in the next question. Sixty-four percent (64%) of the contractors responding felt that the program has reduced the quality in some areas of construction projects. The main reason listed for this reduction in quality of work was the opinion that state inspectors were more lenient in accepting work of minority contractors. Many contractors that said the program has not affected the quality of work, went on to say that the reason is that the prime contractor is still
responsible for all work done on a project. Several respondents said that they were forced to re-do work that was performed by a D.B.E. and declared unacceptable by state inspectors.

Participants were next asked whether their volume of work has been affected since the initiation of the D.B.E. program. Fifty-seven percent (57%) of the respondents stated that their work load has remained the same, thirty-four percent (34%) said that it had decreased, and the remainder stated that their volume has actually increased. Those that said they had experienced a decrease in volume were mostly small subcontractors who felt that D.B.E. firms were unfairly receiving a large portion of this work.

The specified intent of the D.B.E. program is to develop minorities into successful prime or general contractors. The next question asked the participants if they felt that this intent was being served. Eighty-six percent (86%) of the respondents answered "no", stating that at best, some D.B.E.'s will make it as specialty subcontractors.

The next subject addressed in the questionnaire pertained to the future of the D.B.E. program and consisted of four short yes-no-unsure questions. The first question was whether or not the ten percent (10%) goal should be
mandatory. Seventy-eight percent (78%) responded negatively. The next question asked whether the ten percent (10%) goal should be changed, and what percentage would be appropriate. Sixty-one percent (61%) of the respondents answered "yes", the goal should be changed, and most felt that the goal should be between zero and five percent (0-5%). The third question asked if the current program should be modified. Fifty-six percent (56%) said "yes" and there was a wide variety of modifications suggested. The final part of the question asked the participants if the program should be eliminated. Seventy-five percent (75%) of the participants said "yes".

The last question asked was whether the participants felt that more affirmative action such as increased hiring goals, would be a better alternative than the current D.B.E. program. An overwhelming seventy-two percent (72%) did not feel that this was an acceptable alternative.

At the end of the questionnaire, participants were given an opportunity to discuss alternatives to the D.B.E. program that they felt would increase minority participation in the highway construction industry. Almost half of the respondents contributed ideas which were both helpful and informative.
2.2 D.B.E. Response

The second largest group surveyed was the D.B.E. contractors. Fifty questionnaires were mailed to this group and twenty-six responses (or 52%) were returned. It should be noted that in order to increase participation from this group, a second letter and questionnaire were sent to participants who did not respond within four weeks after the first questionnaire was sent out.

Although basically the same issues were addressed in the questionnaires sent to all the groups, there were some questions that were unique to each group. For example, D.B.E. contractors which asked if the firm was in business before the D.B.E. program was implemented. Fifty-eight (58%) of the respondents had in fact been in business before the program was started.

The next question asked if the participant's volume of work had been increased by the program. An overwhelming eighty-one (81%) felt that the program had definitely added to their work load. In fact some respondents went on to say that they could not have survived had it not been for the D.B.E. program.

Just as in the questionnaire to non-minority contractors, the question was asked of the D.B.E.'s "in what area of highway construction do you feel that you need more
training and education." The same categories were listed, and the results were very similar to those of the non-minority contractor survey. Forty-six percent (46%) felt they needed more training in Estimating and Bidding, forty-two percent (42%) checked Handling Finances, and thirty-five percent (35%) checked Construction Methods.

Another question that was unique to this group addressed the problem of financing for D.B.E.'s. A list of common financial problem areas was given and the participants were asked to check those that they had the most difficulty with. The areas were:

- Obtaining Interim Working Capital
- Meeting Requirements for Loans
- Obtaining Credit for Supplies
- High Interest Rates
- Other

By far the most common problem area checked was obtaining interim working capital, which seventy-three percent (73%) of the respondents felt was their most severe financial problem. The second most common area which only thirty-five (35%) of the respondents checked was High Interest Rates.
When given the same list as the non-minority contractors, of educational alternatives that might be helpful, D.B.E.'s felt much more positive about the benefits of these types of programs. One similarity between the D.B.E. and non-minority contractors, was that both groups chose the alternative of encouraging banks and lending institutions to conduct training sessions for minorities, as their first choice. In fact, eighty-five percent (85%) of the D.B.E. firms felt that this would be a helpful program. Other programs considered beneficial were, increasing construction training opportunities by using local school and college facilities, and also, encouraging trade and contractor associations to provide training programs. It was felt that weekends and local meeting facilities would be the most convenient time and place for these programs.

Payment delays from prime contractors was the issue addressed in the next question. Seventy-three percent (73%) of the respondents stated that at one time or another they had in fact experienced substantial delays in payment from prime contractors. In fact, many D.B.E.'s went on to say that this problem has led to serious deficiencies in their working capital.

The rest of the questionnaire was identical to that sent to the non-minority contractors. The next question asked the D.B.E.'s was whether they felt the program has
helped develop them into successful contracting firms. There was not a strong response either way to this question, with thirty-nine percent (39%) answering "yes", thirty percent (30%) answering "no", and the rest were "unsure". Many D.B.E. firms felt they were successful subcontractors, but did not feel that they would ever become a successful prime contractor.

With respect to the future of the D.B.E. program, answers to the next 4 questions were almost exactly opposite of the answers given by the non-minority contractors. The first question was whether the ten percent (10%) contracting goal should be mandatory to which seventy-three percent (73%) of the respondents answered "yes". The second question asked whether the ten percent (10%) goal should be changed. Twenty-three percent (23%) of the firms responded "yes", thirty-five percent (35%) responded "no", and thirty-five percent (35%) responded "unsure". Several respondents recommended increasing the goal. The third question asked was if the current program should be modified. Thirty-nine percent (39%) said "yes", twenty-seven percent (27%) "no" and twenty-seven percent (27%) "unsure". And finally, the question of whether the program should be eliminated was asked, which sixty-two percent (62%) responded "no" to, and fifteen (15%) responded "yes" while the rest were "unsure".
When asked if more affirmative action such as enforced hiring goals would be a better alternative then the current program, fifty percent (50%) of the respondents answered negatively. Twenty percent (20%) of the respondents said "yes", and the remainder were "unsure". Many respondents that answered "no", went on to say that this alternative would never produce minority contractors, only minority laborers.

At the end of the questionnaire, the participants were given an opportunity to discuss any other alternatives or ideas that they had concerning the D.B.E. program. About thirty-five percent (35%) of the respondents shared their thoughts, which were again helpful and informative.

2.3 IDOH Response

The third group surveyed was personnel of the Indiana Department of Highways who were in some way directly involved with the D.B.E. program. Participants were chosen randomly, with at least two of the participants chosen from each of the six districts in the state. Twenty-five questionnaires were mailed to this group, with a response of sixty percent (60%) or fifteen responses.

The first question asked the participants was "Do you feel that there are enough certified D.B.E. firms to handle ten percent (10%) of the work on Federal-aid highway
projects?" An overwhelming number of participants, eighty percent (80%), said "no". Many respondents provided additional comments which in general stated that there is such a shortage that the qualified D.B.E.'s are getting spread too thinly and their performance is beginning to slip.

Similarly, sixty-seven percent (67%) of the respondents felt there was also a shortage of prequalified D.B.E.'s in the state of Indiana. Several respondents said that this is especially a problem on multi-million dollar projects.

With respect to administering contracts to D.B.E. firms, seventy-three percent (73%) of the respondents stated that they had in fact encountered contractual problems while administering contracts to D.B.E. firms. The most common problem cited was the D.B.E.'s unfamiliarity with the specifications and administrative paperwork that comes with a Federal contract.

In response to the next question, "In what areas do you feel D.B.E.'s need more training and education," IDOH personnel identified Scheduling as the most common area, which ninety-three percent (93%) of the respondents felt D.B.E.'s lacked adequate training. The next area was Bookkeeping - eighty percent (80%), followed by Construction
Methods - seventy-three percent (73%), and Estimating and Bidding, - sixty-seven percent (67%).

In evaluation of education and training programs, IDOH personnel agreed with responses from D.B.E. firms and were much more optimistic than the non-minority contractors. In fact, seventy-four percent (74%) of the IDOH personnel respondents felt that encouraging trade and contractor association to help minority contractors, as well as providing technical and managerial consulting programs for D.B.E.'s would both provide valuable training for minority firms.

When addressed with the question of whether the D.B.E. program has led to increased project cost, seventy-six percent (76%) felt that "yes", it definitely has. Some respondents stated that undoubtedly, many primes could do their own work cheaper and quicker. Others said that whenever a portion of work is set aside for a certain group exclusively, the costs of that work will increase.

The following question pertained to the effect of the program on quality of work performed. Sixty percent (60%) of the respondents felt that quality has indeed decreased since the implementation of the D.B.E. program. Many respondents said the reason is that prime contractors are forced to use unqualified subcontractors. Other respondents
felt that although D.B.E.'s work may be of less quality than past contractors, it still does not make the work unacceptable. Many respondents that felt the quality is unchanged went on to say that the reason is that prime contractors are still ultimately responsible for all work on a project and often times "fix" work performed by minority contractors.

The next issue addressed in the questionnaires was whether or not the program was serving its intention of developing successful minority contracting firms. Thirty-three percent (33%) answered "no", the main reason being that D.B.E.'s were only entering into specialty areas and were not further developing. Forty-seven percent (47%) of the respondents did feel the program was producing successful minority contractors, while the remaining twenty percent (20%) were unsure because they felt it was too early to tell. In answer to the final question of whether more affirmative action such as increased hiring goals would be a better alternative then the current program, every single respondent answered "no". Most added that this type of action would never develop minorities into general contractors.

Just like the questionnaires sent to the other two groups, respondents were given the opportunity to elaborate on their ideas concerning the D.B.E. program. About one
third of the respondents in this group provided additional comments.

Response to this questionnaire survey was excellent, which indicates the interest and concern that all parties involved in highway construction have for this issue. The number of questionnaires sent out and returned by each group is shown in the table below.

<table>
<thead>
<tr>
<th>GROUP</th>
<th>NUMBER OF QUESTIONNAIRES</th>
<th>NUMBER RETURNED</th>
<th>% RESPONSE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Non-Minority Contractors</td>
<td>125</td>
<td>72</td>
<td>57.6</td>
</tr>
<tr>
<td>D.B.E.'s</td>
<td>50</td>
<td>26</td>
<td>52.0</td>
</tr>
<tr>
<td>IDOH Personnel</td>
<td>25</td>
<td>15</td>
<td>60.0</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>200</strong></td>
<td><strong>113</strong></td>
<td><strong>56.5</strong></td>
</tr>
</tbody>
</table>

2.4 Personal Interviews

At the end of every questionnaire, participants were asked if they would be willing to discuss their views on the D.B.E. program in person. If so, they were asked to give their name, affiliated company or organization name, address and telephone number. If a respondent did not want to be interviewed, then the questionnaire response was totally anonymous since there was no way of knowing who returned the questionnaire.
Of the one hundred thirteen questionnaires returned, sixty-two respondents indicated an interest in discussing the topic personally. Several respondents who did not give their name or telephone number stated that they were reluctant to give this information because of the consequences of the state discovering their views toward the D.B.E. program. Others who did not want to be interviewed remarked that they simply had nothing further to add.

Approximately one half of the sixty-two respondents that were interested in discussing that matter personally were contacted either by phone or at an actual personal interview. These contacts provided a wealth of information on the topic. The value of the contacts cannot be measured appropriately nor can sufficient credit be given to those individuals willing to discuss the issues. Often the individuals noted that what they were saying was personal opinion and not an official posture of the organization for which they worked. Other individuals would not begin speaking unless they were assured that their anonymity would be protected. Therefore, the names of individuals contacted are not included as part of this research. Some of their opinions are included since they have experienced the D.B.E. program first hand and have highlighted the various strengths and weaknesses of the current program.
The most common concern about "negative impacts" of the program addressed by contractors and IDOH personnel during the interviews were:

1. 10% goal is too high

2. Because the goals are not sensitive to D.B.E. capacity in a region, widespread fraud and abuse of the program has developed.

3. The program is increasing costs of Federal-aid highway projects.

4. Non-D.B.E. specialty contractors are being forced out of business.

5. The D.B.E. program is costing contractors more money by increasing construction costs and thereby reducing profit margins.

These and other concerns are discussed in other sections of this report.
CHAPTER 3 - OVERVIEW OF D.B.E. PROGRAM ON NATIONAL LEVEL

There have been several other studies or surveys relevant to assessment of the D.B.E. issue and program. Contractor organizations have conducted studies and surveyed their memberships in an attempt to determine the effects of the program on their industry. In addition, the American Association of State Highway and Transportation Officials (AASHTO) and the Federal Highway Administration also completed reports assessing the impact of section 105(f) of the Surface Transportation Assistance Act.

3.1 Contractor Organizations

Since the inception of the current D.B.E. program, several national contractor organizations have conducted their own studies in attempt to determine what impacts the program has had on the highway construction industry. Two of the largest organization, the Associated General Constructors of the United States (AGC), and the American
Road and Transportation Builders Association (ARTBA), each conducted surveys of their members, principally general contractors, who were generally very critical of the D.B.E. requirement (3). A majority of the respondents to these surveys felt that were not enough qualified minority construction firms in their state to satisfy the 10% goal. In general, however, respondents indicated that the availability of qualified minority businesses had increased since the enactment of Section 105(f). A majority of the respondents also felt that Section 105(f) had significantly increased highway project costs. Overall the consensus among contractors was that the 10% goal was unrealistic and that the D.B.E. program should be eliminated.

3.2 AASHTO Study

In February of 1986, AASHTO released a report titled, "AASHTO Report on the Disadvantaged Business Enterprise Program, Section 105(f)," that was prepared by a special AASHTO Task Force assigned to investigate this issue (4). The charge to the Task Force was to evaluate problems associated with the program, and to report back to the Policy Committee with findings and recommendations.
The policy resolution adopted identified the following eight specific problem statements associated with the D.B.E. program:

1. Determining how to get more small, disadvantaged businesses involved in highway contracting work.

2. Increasing the number of employees working for D.B.E.'s.

3. Clearly defining ownership requirements for D.B.E.'s.

4. Evaluating the impact of the program on the established subcontracting community.

5. Providing meaningful training programs and technical assistance.

6. Defining "good faith efforts".

7. Evaluating the process of applying D.B.E. program goals to areas consistent with the availability of minority contractors.

8. Determining ways to minimize project delays and additional costs that are being experienced.

The Task Force evaluated each of the problem statements and its findings and recommendations are contained in Appendix B of this report.
During its deliberations, the AASHTO Task Force agreed to continue to support the underlying purpose of Section 105(f) which is to sufficiently increase the participation of small business concerns owned and controlled by socially and economically disadvantaged individuals in highway and transportation business activity to a point where their share of this activity be considered fair and reasonable under the laws of the nation and the principles accepted by the American society. Given this underlying purpose of Section 105(f), the Task Force concluded that the program should be considered as temporary, and that the state and Federal government should work toward transitioning to a time when D.B.E.'s will function as full-fledged participants in the free enterprise system. A major finding of the AASHTO Report was the acknowledgement of the transitory nature of the Section 105(f) program.

3.3 FHWA Report

In March of 1986, a report assessing the impacts of the D.B.E. program on the Federal-aid Highway Construction Program was released by the FHWA. This report was prepared by Abt Association Inc. under contract to the Federal Highway Administration (5).
The objective of this report was to assess the impact of the D.B.E. program on:

a. The D.B.E. Contracting Community
b. Non-D.B.E. Firms
c. State Highway Program Costs

Impacts on the D.B.E. community were expressed principally in terms of increasing D.B.E. participation in Federal-aid highway construction and various parameters of that participation (e.g. types of work performed, function of participating D.B.E.'s, sizes of contracts and subcontracts, etc.). The question of the legitimate D.B.E. capacity to perform highway construction work was also addressed at length.

Impacts on non-D.B.E. contractors included several areas. First, the overall participation of prime contractors and subcontractors was considered. Second, the potential negative impacts upon non-D.B.E. specialty contractors was examined. And finally, the consequences of state D.B.E. goals, increased costs and other impacts (e.g. hassles and paperwork, bonding problems, responsibility and quality control, extra time, etc.) were addressed.

Impacts on state highway program costs included increases in administrative burden and cost and the very
complex question of whether the D.B.E. requirement has led to increases in the project costs of highway construction.

In addition to the three principal impact areas, the following impacts of the D.B.E. requirement were also addressed in the report:

- front activity
- limiting competition to local firms
- minority employment
- quality of construction
- delayed project completion.

The main source of data for this report was obtained in nine different states that were chosen as a random, representative sample of the diverse highway agencies. The nine states were visited in June and July of 1985. All states and respondents were guaranteed confidentiality in order to encourage their full and candid participation. Several hundred individuals directly involved with implementing or directly affected by state D.B.E. programs were interviewed during the visits. Respondents included, state agency officials, FHWA regional and divisional office officials, association representatives, supportive service
contractors and a wide variety of D.B.E. and non-D.B.E. contractors and subcontractors.

Based upon data and observations from national and state-level sources, the Abt consultants presented their assessment of the D.B.E. program impacts. The following excerpt was taken directly from the Executive Summary of this report:

"The D.B.E. requirement and its implementation have triggered very strong emotions from proponents and opponents, whether they be state officials and administrators, D.B.E. contractors, association representatives, non-D.B.E. contractors or Congressional staff. Beliefs about the effects of the D.B.E. requirement and the principles underlying its application to highway construction are deep. Yet, all recognize that their beliefs are based upon partial and imprecise information and that both the impacts and contexts of the D.B.E. requirement are complex. This report is intended to provide information to those who will make or influence decisions on the future of the D.B.E. requirement.

The positive direct impacts of the D.B.E. requirement have been substantial and have been confined to the D.B.E. contracting community. In FY 84, D.B.E. participation in Federal-aid highway construction was more that three times
greater than in FY 82. Over this period, the number of awards to D.B.E.'s grew from about 4,000 to almost 12,000. The dollar value of these awards (in constant 1984 dollars) increased more than threefold from about $430 million to over $1.36 billion. The number of D.B.E. firms participating in the program has more than doubled from about 1,600 in FY 82 to over 3,300 in FY 84.

D.B.E. participation increases are notable in all parts of the highway construction industry and in virtually every state. Substantial increases are evident in major work categories as well as in most of the less capital-intensive specialty trades. D.B.E.'s owned by members of all ethnic groups have increased their participation, with Hispanic-owned firms showing the largest increases. Although highway construction participation by D.B.E.'s is primarily through subcontracts (85-90 percent), the value of prime contracts awarded to D.B.E.'s has also increased (by over 135 percent). This is double the overall growth in the Federal-aid highway construction program, FY 82 to FY 84. Out-of-state D.B.E.'s participate in state programs at a reasonably consistent 10-16 percent level, and their shares of D.B.E. awards and award dollars have not changed dramatically since the D.B.E. program was implemented.

The capacity of legitimate D.B.E.'s to perform highway construction work has also increased. Capacity is the
volume of work in a given market that can be performed by known, legitimate and capable D.B.E. firms, being constrained by access to labor and capital and, in the case of prime contractors, by bonding capacity. D.B.E. capacity varies widely from state to state, can change rapidly and cannot be measured with exactness using available data. Nonetheless, it is estimated that the percentage of Federal-aid highway work which could be successfully completed by legitimate D.B.E.'s has increased nationwide from about 6.6 percent at the beginning of the program to 8.6 percent in 1984. Undoubtedly, current D.B.E. capacity is greater and is not much out of line with the Congressional objective of ten percent.

The gains in D.B.E. participation and legitimate capacity are impressive. Thus far, however, they are considered only short-term. Almost no one interviewed in this study—contractors, state officials, D.B.E. contractors, ABC representatives—believes that the current D.B.E. participation level has been consolidated in ways that suggest permanency.

The strongly positive impacts of increased D.B.E. participation have also been accompanied by negative impacts on the D.B.E. contracting community. Although turnover in the construction industries has been high historically, particularly for small firms and most D.B.E.'s, there is
substantial evidence that the D.B.E. requirement has contributed to an increased number of D.B.E. failures. This counterintuitive and unintended impact has usually been the consequence of business growth which has been too rapid. D.B.E.'s have occasionally been unable to resist the temptations to accept too much work and have become overextended, with negative consequences for their businesses, or have resorted to "brokering" their names without actually performing work. As a secondary impact, some established D.B.E.'s resent being labeled as "special" and complain about what they perceive to be inordinately low bids by new D.B.E.'s brought about by the requirement.

Other impacts of D.B.E. programs, including impacts on non-D.B.E.'s and on costs, have been largely negative, though with some mixed patterns. The market for non-D.B.E. subcontractors in general has been relatively flat and may have decreased slightly for some non-D.B.E. specialty contractors. Clearly, however, non-D.B.E. market shares of subcontracting markets have decreased substantially because the D.B.E. requirement is being met principally through subcontracts with D.B.E.'s. A ten percent D.B.E. goal which is achieved principally through D.B.E. subcontracts, in an industry in which prime contractors subcontract 20 percent of the work, on the average, means that the D.B.E. share of subcontract markets will be up to 50 percent.
Particular non-D.B.E. specialty subcontractors have seen their Federal-aid highway construction markets shrink or even virtually disappear. These negative impacts of the D.B.E. requirement upon non-D.B.E. specialty contractors appear to vary both in intensity and in the types of work affected from state to state. There is some evidence to suggest that, in some instances, increasing W.B.E. (Women Business Enterprise) market strength is also a cause of non-D/WBE specialty contractor difficulties.

D.B.E. programs have definitely increased costs. State and Federal administrative and support costs increased by an estimated $60 million nationwide during FY 83 and FY 84, though this cost increase is only about five cents per constant dollar increase in D.B.E. awards over the same time period. Costs to non-D.B.E. contractors have increased substantially, in a wide variety of ways. It is very likely that these costs are passed on to governments in increased bid prices and award amounts. Although it is a complicated analytic issue, the D.B.E. requirement, directly and indirectly, appears to be responsible for increasing the costs of highway construction by about 0.65 percent from April 1983 to September 1984. This translates into increased construction costs of about $120 million in constant 1984 dollars. Counting increases in both construction costs and administrative/support costs, one
arrives at about $180 million in FY 83 - FY 84, which represents about 15 cents per constant 1984 dollar increase in awards to D.B.E.'s.

Most of the construction cost increase ($107.7 million) appeared in FY 84, suggesting that prime contractors were increasingly able to pass D.B.E. costs on to states in their bid prices. It should be noted that a majority of the cost increases in the highway construction industry have been the consequence of other factors, principally the large growth in highway construction outlays and consequent effects of increased demand on prices.

Other negative impacts upon non-D.B.E.'s, especially non-D.B.E. prime contractors, have been widely experienced. The increased nuisances and costs associated with finding D.B.E. subcontractors either not appearing on the work site, appearing but requiring inordinate supervision, failing to complete their work, or performing with substandard quality levels has increased markedly, creating more cost, schedule and operational problems for prime contractors. Perhaps most important, the prime contractors' perceptions of risk and increased liabilities have expanded substantially, largely as a function of being contractually liable and accountable for all parts of a construction job, including those parts performed by firms which the prime feels coerced into using.
D.B.E. programs have also led to the creation of D.B.E. front firms or to illicit brokering behavior. These phenomena appear to have reached their peak late in FY 83 - mid FY 84, but are now under better control for several reasons. First, the overall early priority to identify and certify D.B.E.'s so the D.B.E. goals could be reached has been replaced in most locations by an emphasis upon on-site verification, investigation, monitoring and enforcement. Second, additional staff time has been dedicated to perform these functions, though it should be observed that, in many states, limitations of manpower and funds do place constraints upon the D.B.E. certification process and assistance to legitimate D.B.E.'s. Third, state highway agencies have become more knowledgeable about front behavior, with the result that some situations that went unnoticed earlier are now subjects for verification and possible investigation. Fourth, the risks to non-D.B.E. contractors of engaging in illegal activities have grown with the increased use of penalties of suspension, debarment, and criminal prosecution of offending firms.

There are several impacts which, though hypothesized as positive or negative, either are not significant or are not amenable to being analyzed at this time. First, there has been no major impact of the D.B.E. requirement upon bidding competition among prime contractors. In subcontractor
markets, competition has, however, changed, mainly due to the effective division of subcontractor markets into D.B.E. and open-bid opportunities. Second, the possibly negative impact of the requirement on the quality of highway or bridge construction is almost never cited by state officials and is not possible to assess independently with available data. If there has been no quality of construction impact, it is likely because prime contractors have conscientiously maintained the quality standards required by states. Third, there is little evidence to suggest that the D.B.E. program has had a major positive impact upon minority employment. Although it is rational to assume that impacts have been positive, many at the state and contractor levels are skeptical. In any case, data do not currently exist to confirm or refute the hypothesis. Fourth, there are no data to support an analysis of the impacts of the D.B.E. requirement upon project completion times."

3.4 T.R.B. D.B.E. Task Force

The Transportation Research Board also approved the establishment of a Task Force on Disadvantaged Business Enterprises. The T.R.B. Executive Committee approved the formation of the Task Force in 1986, and the first meeting was held on January 20, 1987, in Washington D.C. during the annual T.R.B. meeting.
Members of the Task Force included state agency officials, university professors, association representatives, and a wide variety of D.B.E. and non-D.B.E. contractors. The role of the Task Force was defined as "To initiate activities through TRB which could be a positive influence on resolving some of the misunderstandings, problems and controversies associated with the D.B.E. requirements for transportation construction projects."

During the meeting, all Task Force members reported on activities in their states concerning the D.B.E. requirements and any other concern or ideas that they felt were important to discuss. Several key points that were mentioned which required further attention were:

a. Establishing a uniform certification procedure for D.B.E. and W.B.E. firms throughout the country.

b. Clarifying Federal D.B.E. regulations and FHWA guidelines to eliminate the misunderstandings and varying interpretations of these documents.

c. Establishing a uniform prequalification procedure for D.B.E. firms throughout the country.

d. Requiring State Highway Agencies to be liable for the validity of lists of certified D.B.E. and W.B.E. firms that they publish and distribute.
e. Requiring State Highway Agencies to continue recognizing "good faith efforts" of contractors in obtaining D.B.E.'s and W.B.E.'s until the program stabilizes.

f. Encouraging the use and promotion of Mentor-Protege programs with uniform D.O.T. guidelines.

g. Establishing support groups to assist D.B.E. firms with cash flow problems.

h. Requiring D.O.T. and the FHWA participation in the financial costs of resolving problems due to D.B.E.'s on projects so that all the burden is not placed on the contractors.

i. Attracting more minority students into formal educational programs such as Civil Engineering to prepare them for professional careers in construction.

j. Concentrating on the development of qualified D.B.E./W.B.E. highway construction firms so that eventually the Federal D.B.E. requirements can be eliminated.

The Task Force members also discussed several possible future activities with the following believed most feasible:
• Sponsoring sessions on D.B.E. at TRB, plus possibly AASHTO or other Rational meetings.

• Developing position papers, reports or articles for publication in professional journals.

• Organizing and seeking financial support for conferences or workshops at the National and local levels.

• Developing research needs statements for D.B.E. topics needing in-depth study.

• Performing National surveys of all parties involved in D.B.E. issues to provide better data bases and insight for evaluation of D.B.E. programs.

• Working with other professional organization involved with D.B.E. activities to share information and coordinate activities where possible.

Currently the Task Force is organizing a session on D.B.E. for the 1988 annual TRB Meeting, and are making arrangements for the next Task Force meeting scheduled for this May.
CHAPTER 4 SURROUNDING STATES' D.B.E. PROGRAMS

One of the objectives of this research study was to examine other FHWA Region V state D.B.E. programs and identify any features in them that may be beneficial to the IDOH D.B.E. program. The five other states aside from Indiana that make up Region V are, Illinois, Ohio, Michigan, Minnesota, and Wisconsin. Although each of these states' D.B.E. programs closely adheres to the guidelines set forth by the FHWA, there are some differences in the programs that make them unique. Each of these five programs will be discussed in this chapter, however, first a little background information is given on the Mentor-Protege program which is growing in popularity among the Region V states.

4.1 Mentor-Protege Program

Since the passage of the S.T.A.A., there has been a substantial nationwide interest regarding relationships between established contractors and new D.B.E.'s which was
generated as a result of increased pressure to meet minority goals. Many established contractors today began their business experience as subcontractors and received various types of assistance from the then established contractors. This relationship, which has been defined as that of Mentor-Protege as applied to D.B.E.'s, is envisioned as providing help to increase the number and capacity of D.B.E. firms in certain areas of highway construction which have only a slight representation of D.B.E.'s. Other objectives of this program are to broaden the experience of D.B.E.'s, and to expand their capacity as members of the contracting community to enable states to meet their goals and to encourage established contractors to increase the amount of work which they subcontract to D.B.E.'s.

In January of 1985, the FHWA issued the final guidelines for states to develop their own Mentor-Protege programs. These guidelines are listed in Appendix C of this report. This program is not mandatory, but optional for the states and contractors. Also, the state may impose more stringent requirements than the Federal guidelines. The FHWA suggested the Mentor-Protege relationship as a means of potentially expanding minority participation in the highway construction industry. However, the FHWA has advised state departments to closely monitor the Mentor-Protege relationship to assure the integrity of the D.B.E. program.
The Mentor-Protege relationship has generally been defined as an arrangement in which a contractor (Mentor) establishes a relationship with a D.B.E. (Protege) resulting in assistance to the D.B.E. The nature and duration which grow out of such an arrangement may vary from a one-time subcontract situation to an on-going relationship which involves a specific length of time but is not limited to, that of contractor/subcontractor. The objective of any Mentor-Protege arrangement should be to provide guidance, advice, and assistance to a D.B.E. firm with a view toward the same D.B.E. firm achieving the degree of self sufficiency enjoyed by an established contractor (6).

The type of assistance provided by contractors to D.B.E.'s is usually one or more of the following types:

1. Financial - this type of assistance can include providing working capital either in a lump sum or an open-ended direct payment to the D.B.E. Another form of financial assistance is that the contractor may provide for advance payments to the Protege on a particular subcontract. Such a payment must be conditioned on the Protege actually performing the necessary work. Bonding is another area in which the Mentor can provide financial assistance. The Mentor can do this by bonding the entire job and charging a prorated share of the cost, or by bonding the entire
job and carrying the Protege by absorbing the cost of the bond.

2. Technical and Management - there are numerous areas where technical and management assistance can be given by the Mentor to the Protege. The following list is not intended to be all-inclusive, however, it does include the important areas where assistance can be vital to the successful continuance of a Protege.

   a. Making Protege aware of, and assisting in compliance with, applicable laws, regulations and rules.

   b. Guidance in the interpretation of plans and specifications, and subsequent bidding, estimating, and pricing.

   c. Guidance and/or implementation of procedure for budgeting, projecting cash flows, bookkeeping and accounting, and general money management.

   d. Assistance and guidance on project-related matters, such as project management, field supervision, on-the-job training and safety.

   e. Assistance in prequalification matters.
3. **Equipment** - the Mentor can provide assistance in this area by providing guidance to the Protege on questions of purchase or lease of equipment. Also, it is possible for the Protege to lease equipment from the Mentor provided that such leasing is done pursuant to a valid written agreement and further provided that payments pursuant to that agreement are actually made by the Protege.

4. **Personnel** - there are certain circumstances when a Protege may be better able to complete a particular subcontract by employing personnel provided by the Mentor. This type of assistance is expected only to occur in limited instances, and the personnel should be those with a highly specialized area of expertise (7).

This brief discussion on the Mentor-Protege program is given to provide a general background and understanding of the program itself. This idea was also discussed because it is now becoming popular among several of the states in Region V.

Of the six states that make up FHWA Region V, Minnesota and Wisconsin are the only two that have fully implemented Mentor-Protege programs, however the Michigan D.O.T. is in the final stages of approving its program and hopes to have it implemented during this year's construction season. The
Illinois and Ohio D.O.T.'s are currently discussing the possibility of implementing Mentor-Protege programs but no formal action has yet been taken. Currently, the IDOH does not support the idea of a Mentor-Protege program. Each of these states' programs is discussed separately in the remainder of this chapter.

4.2 Illinois D.B.E. Program

The Illinois Department of Transportations D.B.E. program is very similar to the Indiana D.B.E. program. In fact, the Illinois program probably bares a closer resemblance to the Indiana program then other states in Region V. This fact will become quite evident in the next chapter which discusses the IDOH D.B.E. program in detail.

In Illinois, any business which desires certification as a disadvantaged business must fill out a certification application and all supporting information with the Department of Prequalification and the Equal Opportunity Employment Section. The application is then examined by the Department of Prequalification and if all information is complete and in order, it is then forwarded to the Department Standing Committee on Disadvantaged Business Enterprise Certification. This Committee then examines the application and conducts any such investigations as appear
necessary in order to fully examine the business seeking certification. Firms which meet the eligibility standards and guidelines set by the Department are then legally certified.

Once certified, a firm shall update its submission annually by filing a new Certification Application or by certifying that the application on file is still accurate. If at any time there is a change in the ownership or control of the firm, the certification lapses and a new application must be filed.

Any firm, which believes that it has been wrongly denied certification as a disadvantaged business, may file an appeal in writing, signed and dated, with the United States Department of Transportation within 180 days after the date of denial.

If at any time after a firm's certification the Committee has reason to believe that the firm's size, circumstances, organization, ownership or control has changed, resulting in a once eligible firm becoming ineligible, the Committee will decertify the firm. The firm will then be given the opportunity to respond to the decision in person at a meeting with the Committee. The Committee will then render a decision decertifying or continuing certification of the firm. If the firm feels it
has been wrongly decertified, it can appeal the decision in the same manner as a firm originally denied certification.

D.B.E. goals in Illinois are established on an annual basis, and are specified by district. Generally, the Chicago area (Cook County) has a goal much higher than 10 percent, while the Southern portion of the state has goals well below the 10% level. A majority of the D.B.E. work is performed in and around the Chicago area, where almost half of the D.B.E. firms are located.

For all competitive bid contracts in which disadvantaged business goals have been established, the Department will require the apparent successful bidder to submit participation information before the contract is awarded. This information must consist of a Utilization Plan which identifies D.B.E.'s to be used, the work to be done by the D.B.E., and the price to be paid the D.B.E. This plan must be submitted within 5 days of the date of bidding.

In order to assist contractors in locating D.B.E.'s, the Illinois D.O.T. publishes an M.B.E./D.B.E./W.B.E. directory which is updated every six months. The directory lists the minority firms in alphabetical order, and by the work categories that the firms have indicated they are available to perform.
The Illinois D.O.T. also offers a supportive service program to minorities which provides advice on a variety of technical and management questions. The scope of the services offered by the program include but are not limited to the following:

1. Management Assistance:

   I. Financial Management Services

      A. Cash Flow Schedule Preparation

      B. Business Plan Development

      C. Financial Package Preparation

      D. Accounting System Development

      E. Surety Bonding Assistance

   II. Administrative Service

      A. IDOT Prequalifications


III. Marketing

2. Technical Assistance

   I. Pre-award Services
A. Review and Analysis of Plans and Specifications

B. Project Site Inspections

C. Preparing Estimates

D. Securing Material Quotes

E. Determining Overhead Costs

F. Preparing and Submitting Bids

II. Post-award Services

A. Submitting Preconstruction Documents

B. Preparing Schedules

C. Executing Purchase Orders.

D. Project Site Negotiations.

Performance of D.B.E. firms is monitored and evaluated by the resident engineer on the project. This information is then made available to the EEO Section and the Bureau of Small Business. All statistics relevant to the D.B.E. program, such as the number of firms requesting certification, number of firms certified and annual work volume of firms are kept by the Bureau of Small Business (8).
Currently, the Illinois DOT is discussing the possibility of implementing a Mentor-Protege program, but no formal action has yet been taken.

4.3 Ohio D.B.E. Program

The Office of Human Resources Development (OHRD), Ohio Department of Transportation (ODOT), is in charge of the D.B.E. certification process for the State of Ohio. In January of 1985, a new certification process and application were implemented that instituted more stringent reviews and requirements for documentation whether a firm was previously certified or is a new applicant. In other words, everyone starts off as a new applicant for there is no longer a recertification process. Also, in Ohio, all construction firms including all D.B.E.'s, must be prequalified prior to being permitted to do work for ODOT. Prequalification procedures are handled by the ODOT Construction Division.

Applications for Certification are received by the OHRD. Stringent reviews are then conducted to render a determination of eligibility. If the application is complete and properly filled out, and the information on the application meets with the programs requirements, the application is then approved and the firm is granted certification for one year. Submission of a new application
at that time is the responsibility of the firm.

In the event that an application is disapproved or denied, the firm may appeal the decision to the Director, Ohio DOT. A hearing will then be provided for the applicant.

Certified firms are monitored throughout the year to assure that all laws, rules and regulations are complied with. Periodic intensive reviews may also be accomplished with extensive documentation required and on-site reviews conducted. If it is discovered that changes have been made in the firm, a new application is required immediately as the firm's status reverts to a non-certified status.

Participation goals are established by ODOT for D.B.E.'s on selected transportation construction projects. It is the responsibility of a bidder wishing to contract with ODOT to meet the goals for utilization of D.B.E. subcontractors set forth in the proposal for the project on which he bids. The bidder to whom a contract has been awarded must, prior to execution of the contract by the director, submit properly executed requests to sublet and execute subcontracts with the names of the D.B.E. subcontractors, a description of the work each is to perform, and the dollar value of their work.
A D.B.E. firm's performance on a specific project is evaluated by the resident engineer of the project. The resident engineer then discusses this evaluation with the OHRD. If any deficiencies on the part of the D.B.E. are reported, a training officer is available to provide D.B.E.'s with management and technical advice on day-to-day issues. Formal training programs offering both technical and managerial classes are offered to all D.B.E.'s prior to the construction season.

The Office of Human Resources and Development is also responsible for keeping all statistics of the D.B.E. program, such as number of firms certified/recertified/decertified, work volume per firm, and other pertinent data. In addition, a directory of certified minority firms is published and updated on a monthly basis, and is made available to contractors and other interested parties (9).

Recently, ODOT has discussed the idea of implementing a Mentor-Protege program, but to this date no formal action has been taken on the subject.

4.4 Michigan D.B.E. Program

The Office of Small Business Liaison (OSBL) with the Michigan Department of Transportation (MDOT) is responsible
for the D.B.E. program in Michigan. Applications for certification are submitted to a Certification Review Team consisting of representatives from other divisions within the department that closely scrutinize each application. Once an application has been examined, the review team can either approve or deny certification, or they can perform an on-site review of the firm to obtain more information.

Applicants that are denied certification, can appeal the decision to the Liaison Officer and an informal hearing committee. If the firm is once again denied certification, the next appeal must go to the U.S. Secretary of Transportation.

Certification applications for firms are issued for one year and must be renewed by filing a recertification application. The review team is responsible for processing these applications as renewals, unless changes in the structures of the firm call for a new determination. Denials of recertification can be appealed in the same manner as denials of original certification.

Investigations are conducted on firms that may be in non-compliance with the program regulation. These investigations are to insure that only bonafide D.B.E. firms are certified to contract with the Michigan DOT. Also, orientation sessions are conducted throughout the entire
state to ensure that firms currently in the program and those seeking certification are aware of the requirements for participating in the program.

A Field Monitoring Unit physically monitors field projects and other work sites where minority firms are involved. The main duties of this unit are to ensure contract compliance, help eliminate program abuse, detect "sham/front" organizations, and to provide early detection of potential D.B.E. needs.

The Michigan DOT also employs an Educational and Training Unit that provides training and educational formats and programs geared toward the needs of minority firms in the transportation industry. It also provides D.B.E.'s with information regarding contracting opportunities with MDOT.

A Management and Technical Assistance Unit is also made available by the Department to provide management and technical assistance to D.B.E.'s in their day-to-day operations. This unit utilizes the services of departmental personnel and specialized consultants to prepare development plans for certified D.B.E. firms. These plans include in part, a review and evaluation of the firm's financial status and its needed managerial and/or technical skills.

The Contract Coordination and Selection Unit is responsible for coordinating, selecting and insuring that
contracts, in accordance with department policy, goals, and objectives are tailored towards the needs and qualifications of certified D.B.E. contractors. This function is performed so that the percentage of contract work to be designated to D.B.E. firms in MDOT projects matches the availability of certified and qualified contractors.

The performance of D.B.E.'s is evaluated by the Compliance Unit of the Department, in conjunction with the resident engineer on a project. Evaluations include the review of paperwork submitted by the D.B.E. as well as the construction performance of the firm.

The OSBL is also responsible for preparing statistical reports on statewide D.B.E. activities and accomplishments. A quarterly newsletter and directory of firms is also published and distributed to all interested parties (10).

The Michigan DOT will soon be implementing a Mentor-Protege program into their D.B.E. program. In fact, the Mentor-Protege program is in its final review stages and will become a part of the D.B.E. program during this year's construction season.
4.5 Minnesota D.B.E. Program

The Minnesota Department of Transportation (Mn/DOT) utilizes a two part certification process. Part one is the completion of the Certification of Eligibility form. Once all the information has been provided in application form, it is reviewed by the Mn/DOT EEO staff for accuracy and completeness. Part two of the certification process is the "on-site" review that is conducted by the EEO Unit. Information provided in part one is verified as well as the gathering of subsequent information and a series of interview questions. A report is then submitted to the Assistant to the Commissioner along with a recommendation regarding certification. The final decision is then made by the Assistant to the Commissioner. Once certified, a D.B.E. firm must update its submission annually by submitting an application for recertification. Also, if at any time there is a change in ownership or control of the firm, the D.B.E. must submit a new application for certification to Mn/DOT within thirty days of the change.

Any time Mn/DOT has reason to believe that a certified firm is not complying with the program certification standards, the firm will be issued a letter of "intent to decertify" with specific reason given for violation of Federal requirements and will be given an opportunity to
respond in writing and in person prior to the final determination.

Any firm which believes that it has been wrongly denied certification, recertification or unjustly decertified, may request an informal departmental hearing on the matter. The hearing panel consists of a 3 person committee comprised of Mn/DOT's senior management who makes a final decision. A further appeal is provided by the U.S. Department of Transportation.

Although Mn/DOT has established a 10% D.B.E. goal for the entire state, individual projects are evaluated on a case by case basis so that attainable goals are set. The following criteria are used department-wide for setting goals:

- Geographic location of the project.
- Availability of certified D.B.E.'s
- Diversification of the work involved.

In contracts where D.B.E. goals are established, all bidders must sign a certification sheet committing to specific goals in their bids. Within five (5) working days following the opening of the bids and prior to award of the contracts, all apparent low bidders shall submit executed
agreements or signed affidavits with D.B.E. subcontractors, a description of the work to be performed and a dollar amount of each D.B.E. subcontract. The EEO Unit completes a project summary form and verifies the D.B.E. agreement if all goal requirements or good faith efforts have been met and notifies Contract Administration of EEO approval to award.

Mn/DOT has developed a three tier system to assure that minority contractors are actually performing the work assigned to them. The three tier system is comprised of field monitoring, project site visits and random project audits. This system of monitoring has significantly increased the Department's ability to eliminate pass through situations, which in essence transfer work from D.B.E. subcontractors to non-minority firms. The EEO Contract Management Section is responsible for the monitoring system.

In an effort to increase awareness of contract opportunities for D.B.E.'s, Mn/DOT publishes and periodically updates a directory of certified minority firms. Also, a monthly newsletter is published and distributed to all interested parties. In addition, Mn/DOT has formed a joint committee with contractor organizations to provide a forum for communications regarding D.B.E. program operations.
Mn/DOT also makes available supportive services, technical assistance and training opportunities for all minority firms interested in obtaining work on Mn/DOT administered projects. The Department utilizes external consultants and internal resources to provide management and technical assistance throughout the state. Workshops and seminars are also provided. Topics include bidding, estimating, marketing, legal aspects, business planning, accounting and numerous other business topics. A highway contracting manual has also been developed that provides the new D.B.E. firm with information about contracting on Mn/DOT projects and the highway industry (11).

The Minnesota Department of Transportation has also developed and implemented a Mentor-Protege program. This program basically follows the guidelines set by the FHWA, and allows for established non-minority contractors to provide the types of assistance to D.B.E.'s that was discussed earlier in this chapter. The program itself is similar to the Wisconsin program which is presented in detail in the next section, however in Minnesota, very few minority firms have utilized the Mentor-Protege program.
4.6 Wisconsin D.B.E. Program

The certification process in the State of Wisconsin begins with submittal of an application to the district office. The district office then conducts a desk review of the application, and schedules a site visit to the firm. The site visit is held at the physical location of the firm, and the firm's owners and employees are interviewed. After the visit, the district completes the certification report form and transmits it to the MBE Programs Office with a recommendation for approval or denial of certification. The M.B.E. Certification Review Committee then reviews the application and district recommendation. The Minority Programs Director makes the final decision. The applicant is then notified of final action of the M.B.E. Program Director. In cases of denial of an application or decertification, the applicant is offered an opportunity to respond in writing or at an informal hearing.

The Wisconsin DOT (Wis/DOT) establishes two types of minority goals. The first is an overall percentage goal for total D.B.E. participation for Federal aid and state highway construction work. The overall goals are established based on the following considerations:

b. Availability of D.B.E.'s in desired area of expertise.

c. Projections of the number and type of contracts to be awarded by the Wisconsin DOT, and the projection of the number and types of D.B.E.'s likely to be available to compete for contracts during the period.

The second type of minority goal established is for individual highway construction contracts with D.B.E. subcontracting possibilities. Each district identifies items of work on which it expects competition by D.B.E. firms for projects in the district. This information is made available to the Central Office Construction Section who reviews the information and assigns goals on the projects for all districts.

For all contracts which contract goals have been established, WisDOT will, in the solicitation, inform contractors that the apparent successful contractor will be required to submit D.B.E. information to WisDOT, and that the award of the contract will be conditioned upon satisfaction of the requirements by WisDOT. These requirements are listed below:

i. The names and addresses of D.B.E. firms that will participate in the contract.
ii. A description of the work each named D.B.E. will perform.

iii. The dollar amount of participation by each named D.B.E. firm.

WisDOT will select the time at which it requires D.B.E. information to be submitted, provided that the time of the submission will be before WisDOT commits itself to the performance of the contract by the apparent successful contractor.

To aid contractors in locating D.B.E. firms, WisDOT publishes a directory of certified minority firms which is updated every six months. This directory is made available to all bidders and contractors, and shall specify the firms that WisDOT has determined to be eligible D.B.E.'s.

WisDOT also utilizes a D.B.E. Supportive Services Program and other financial agencies to help D.B.E.'s in bidding and bonding. A consultant is also available to assist WisDOT in increasing minority participation, as well as providing assistance to D.B.E.'s in bidding, scheduling, bookkeeping, and a variety of work elements.

The Minority Business Programs Office tabulates all data concerning D.B.E. construction contracts. This data consists of the gross value of all contracting opportunities
and awards to D.B.E. firms, so that percentages can be calculated.

WisDOT was the first state in Region V to implement a Mentor-Protege program, and today it is recognized as one of the finest of its type in the country. The program generally follows the guidelines that were established by the FHWA in terms of the type of assistance that the non-minority contractor can provide to the D.B.E., which was discussed earlier in this chapter. However, the general guidelines established by WisDOT for their Mentor-Protege program are listed below:

1. All Mentor-Protege firms must be approved by the WisDOT MBE Certification Review Committee.

2. The Protege firm must be certifiable with WisDOT as a D.B.E. or W.B.E.

3. A written Mentor-Protege agreement must be completed by both parties to the Mentor-Protege arrangement and approved by WisDOT.

4. Protege firms will not be permitted to resubcontract any of their work to the Mentor firm. The Protege firm will not resubcontract or assign any of its work to any other contractor without the prior approval of WisDOT.
5. Protege firms can be used to satisfy 100 percent of the total contract DBE or WBE requirement(s).

6. After contract completion, the Mentor and Protege must each provide WisDOT with a summary of the kinds of Mentor skills provided to the Protege including hours and areas of involvement such as managerial, technical or financial. This report is due within 30 days of contract completion.

7. In general, only one Mentor-Protege arrangement will be allowed per majority contractor.

8. Mentor-Protege relationships will be limited to the length of time necessary to establish independence, but normally for not more than three (3) years.

9. Mentor-Protege firms will be approved in all areas of highway construction in which Mentor assistance is needed to develop DBE capacity. If DBE or WBE capacity in an area or type of work is developing or can be developed without a Mentor-Protege firm, then WisDOT approval is unlikely.

10. No officer, director, employee or member of the Protege firm will be allowed to participate independently on a contract where the Mentor-Protege firm is participating (12).
The Mentor-Protege program in Wisconsin has been very effective in increasing minority participation, as well as producing capable, independent minority firms. Several states have modeled their own Mentor-Protege program after the WisDOT program.

Another unique aspect of the WisDOT D.B.E. program is the development of an M.B.E. Financial Assistance Guarantee Program. Although this program has not been formally implemented yet, it is currently being considered by the Department. The remainder of this chapter discusses this unique program.

Under the current WisDOT program, over 90 percent of the minority participation is attained through subcontracting with a prime contractor. Many of the certified D.B.E.'s are specialty subcontractors in low capital and high labor intensive areas of highway construction. The lack of sufficient operating capital is a major barrier which most minority firms face in becoming prime contractors or obtaining subcontracts with WisDOT. This is a problem for most new and inexperienced businesses, but especially for minority business persons who usually do not have the personal assets to secure traditional financing.
With a significant number of D.B.E.'s experiencing working capital and financially related problems, it was decided that a financial assistance program for minorities was needed. The Minority Business Programs Office was determined to be the best suited division to provide the necessary guidance and monitoring of subsequent establishment of such a program. The following description of the proposed program is taken directly from the official proposal of the program itself.

"The proposed program addresses providing financial support to minority businesses. The MBE Financial Assistance Guarantee Program is designed to loan short-term working capital to Minority Business Enterprises (MBE's) in order to increase the number of MBE's that enter into transportation related contracts and to strengthen the competitive and productive capabilities of the MBE's that currently do business with the Department. Through this program, MBE's who have had difficulty obtaining financing now have the opportunity to acquire working capital assistance.

The Financial Assistance Guarantee Program would place $300,000 in an interest-bearing account in a specific lending institution and would be used to guarantee working capital loans to certified minority firms. The lending
institution would make the loans based on contracts or subcontracts held by the minority firms for WisDOT projects. The determination of the firms eligible to participate in this loan program would begin with the WisDOT MBE Support Services staff in consultation with the lending institution.

In this business of lending money, we are concerned with credit worthiness and credit usages and the ability to repay. The following are key aspects of the program:

1. WisDOT would not act as a direct lender, but would work through a recognized financial institution (ideally North Milwaukee Bank, Wisconsin's only minority bank).

2. WisDOT would carefully screen the firms that would participate in the guarantee program.

3. This program would not be for financing new businesses for start-up, but would be available for firms with a minimum of 2 years of participation on WisDOT projects.

4. Loans would be made based on a percentage (50-60%) of contracts held by the MBE.

5. Firms considered for loans would be required to have certain management capabilities as verified by our Support Services Office.
6. Firms defaulting on loans would be subject to immediate decertification by the Department.

Establishing the MBE Financial Assistance Guarantee Program should result in the following for the Department's MBE program:

- Increase in the number of MBE prime contractors on WisDOT projects.

- Increase in the number of MBE firms on WisDOT projects in the nontraditional areas of construction such as concrete and bridge work.

- Increase in the number of nonminority specialty contractors on WisDOT projects.

- Increase in the competitiveness of MBE firms on WisDOT projects.

- Increase in the capacity of existing MBE firms.

- Increase in the ability of existing MBE firms to participate in more parts of the State.

- Decrease in MBE nonperformance on WisDOT projects due to financial considerations.

- Decrease in the number of MBE firms in the low capital and high labor intensive areas.
- Decrease in the number of WisDOT construction project delays due to MBE firms that cannot obtain the required materials due to financial considerations.

Administration of the program will be handled by the MBE Programs Office. No additional positions will be required to carry out the functions relating to the program.

ALTERNATIVES

1. Implement the program and fully fund at the $300,000 level. The funding would be incorporated into the current appropriation.

   * This alternative would not have an adverse economic impact on the budget but would have a significant impact on the future growth and the development of minority firms on WisDOT projects.

2. Require that each non-MBE prime contractor provide financial assistance to MBE subcontractors on the prime's project.

   * This alternative would unfairly shift the burden of financial responsibility for MBE firms from the State to the primes. There is also some legal question as to whether this alternative would be enforceable. Establish the program but at a reduced level in 1987-89 (i.e., $150,000).
annually), provided in a separate appropriation.

* This alternative does not provide enough initial capital to make the program effective. It would also not be attractive enough to the lending institutions to merit their participation (13).

If the program is implemented, the state of Wisconsin will be one of the major beneficiaries through the increased ability to meet its M.B.E. goals and develop valuable minority owned businesses.

In summary, all of the FHWA Region V states' D.B.E. programs have basic similarities, although each state also has its own unique subprograms or specifications that make the D.B.E. program more effective and workable for that particular state. For example, Minnesota and Wisconsin have implemented Mentor-Protege programs, Ohio has a unique certification process, and Wisconsin is developing a financial assistance program for minority firms. Aside from these unique aspects, there are some strong similarities between the programs. In fact, five of the six states in the region which have very similar certification processes have joined together and developed a regional certification application which is discussed in detail in the next chapter. In general, all of the states in Region V have been very cooperative in sharing ideas, experiences and other information relevant to the D.B.E. program with their sister states.
CHAPTER 5 D.B.E. PROGRAM IN INDIANA

Since the passage of the Surface Transportation Assistance Act, it has became each state's responsibility to implement its own D.B.E. program within guidelines set by the FHWA, to meet or exceed the minority goal on all Federal-aid highway projects. Each year since the passage of this act, the State of Indiana has exceeded the national 10% goal.

The purpose of this chapter is to present an outline of the Indiana Department of Highways D.B.E. Program, and to discuss the relationship between the IDOH D.B.E. personnel and the Indiana Constructors Inc., which is an association of heavy/highway and utility contractors from Indiana and the surrounding area. Also, the recent supportive service contract awarded to the Indiana Department of Commerce will be addressed in this chapter.
5.1 Certification Procedure for D.B.E.'s

Any business that desires to be certified by the IDOH as a D.B.E. must first properly complete and submit the appropriate Request for Certification. Certifications are reviewed according to the month received, with recertifications given priority. Any applicant that appears to satisfy all qualifications and responds to any questions in a positive manner may receive certification approval in less time than those with questionable qualifications. Applicants from outside the state will not receive certification in Indiana unless certified by their home state first.

The following steps are a brief description of the certification review process performed by the IDOH.

1. Initial review by the D.B.E. Coordinator to determine if all questions are answered properly and the proper documentation is submitted.

2. The application is next reviewed to determine if the business is at least 51% owned and controlled by an individual or individuals who are or have been determined to be socially and economically disadvantaged.
3. Applicants whose qualifications for D.B.E. status are questionable will be interviewed by the D.B.E. Field Coordinator and/or the District EEO Officers. Applicants whose qualifications are in accordance with the criteria shall be issued a certification from the EEO Manager.

If the EEO Manager determines that the applicant does not meet the certification criteria, a recommendation is submitted to the Chief, Divisions of Contracts and Legal. The Chief, Divisions of Contracts and Legal shall then issue a letter of denial if he concurs with the recommendation of the EEO Manager. The letter will include the specific reasons for denial as well as a notice of the applicants right of appeal.

Should the applicant decide to appeal the denial, this individual shall request in writing a hearing before the D.B.E. Certification Panel. At this hearing, the applicant will be requested to present any evidence, with appropriate documentation, to substantiate that the business, as initially submitted, was wrongfully denied D.B.E. status.

Should the applicant provide satisfactory evidence for the panel to reverse the initial decision, a certification shall be issued to the applicant. If the panel decides that the applicant has not provided evidence to substantiate
approval as a D.B.E., the initial denial shall be upheld.

Any applicant who has been denied certification as a D.B.E. by the D.B.E. Certification Panel, may elect one of the following procedures to appeal the adverse final determination.

1. The applicant may request in writing a hearing before the director of the IDOH. At this hearing the applicant will bear the burden of proof to establish the factual basis for the objection. Subsequent to the hearing, the hearing officer will make written findings of fact and written notice of the recommended determination to the Director and all persons who were parties to the hearing.

2. The applicant of the firm may appeal the adverse final determination to the Federal Department of Transportation.

5.2 Recertification and Decertification Procedures

Each certified D.B.E. firm is responsible for submitting on an annual basis, their application for recertification. The recertification of a D.B.E. is not automatic and may not be assumed. Any changes of ownership or management of the business will cause the application to
be reviewed as a new request for certification. Should the review of an application for recertification, submitted in a timely manner, extend until the applicants previous certification has expired, the IDOH may grant a temporary certification for no more than thirty days or until a determination has been made and the applicant appropriately notified.

A determination by the EEO Manger, based on the information provided by the applicant, that there is reason to believe that the applicant is not eligible for recertification results in a recommendation for denial to the Chief, Divisions of Contracts and Legal. The Chief, Division of Contracts and Legal will then notify the applicant of the denial for recertification if he concurs with the recommendation. The applicant will then have the same opportunities for an appeal that an applicant denied original certification has.

Should the IDOH, after certification of a D.B.E. firm, determine that sufficient evidence exists that gives them reasonable doubt concerning the validity of the firm's certification, they shall notify the D.B.E. of their concern. The EEO Manager will make a recommendation to the Chief, Divisions of Contracts and Legal, who will in turn notify the D.B.E. firm of his determination, if he concurs with the recommendation. The firm will then have the same
opportunities to appeal the decision that an applicant denied original certification has.

5.3 Establishment of Annual and Contract Goals

D.B.E. goals are established on an annual basis. Annual goals are submitted to the FHWA and a public notice is published. The factors used to establish an annual goal include but are not limited to:

- The number of potential contracts and subcontracts.
- The potential availability of D.B.E.'s to perform such work.
- The capacity of available D.B.E. firms.
- The relative location of contracts to available D.B.E.'s.
- The results of past efforts to achieve goals.

Once the annual goal has been established, the D.B.E. Goal Committee shall meet throughout the year to establish individual contract goals.

The contract goals are established as a percent of the general contractor's bid price. In setting these goals, each contract is evaluated individually with appropriate
goals set on each. Contract goals may be determined to be from zero percent for contracts that do not provide an equitable amount of work or services that may be performed by other than the prime contractor, or where there are no D.B.E. contractors to perform the work or services on the contract, to a reasonable maximum based on possible D.B.E. utilization. The intent of this procedure is to ultimately obtain at least the amount established as an annual goal. The factors considered when establishing contract goals include, but are not limited to:

1. Geographic location of contract.
2. Size of contract.
3. Number of items that can be performed by certified D.B.E.'s.
4. Number of certified D.B.E.'s that can perform the work.
5. Relative location of certified D.B.E.'s that can and are willing to work in that area.
6. The current workload of D.B.E.'s in 4 and 5.

5.4 Administration of the IDOH D.B.E. Program

The administration of the Disadvantaged Business Enterprise Program is primarily the responsibility of the
Division of and Construction. The program is developed by the Equal Opportunity Section under the Chief, Divisions of Contracts and Legal with input from the Division of Construction. Although all divisions of the IDOH are affected and involved, the majority of the D.B.E. program involves Construction. The primary responsibility for implementation of the program lies with the Division of Construction. The EEO Section of the Divisions of Contracts and Legal is responsible for the monitoring, record keeping, and reporting of the program.

D.B.E. goals can be set on any contract with Federal-Aid participation. In order to bid on a contract with a D.B.E. goal, the contractor must include a special provision with the bid. This provision must be completed indicating proposed D.B.E. utilization or stating the reasons why no D.B.E.'s are listed. If this certification is left blank, the bid will be rejected. If the goal is achieved by the low bidder and all other contract requirements are met, the contract will be awarded. If the goal is not met, the contractor is given seven days to respond. The response shall include documentation of the "good faith efforts" taken, and may include a revised certification including additional D.B.E.'s. This documentation is submitted to the Contracts Engineer who will forward the documentation to the EEO Manager. A review is then performed to ascertain if
good faith efforts have been taken. A list of the IDOH D.B.E. program good faith efforts is included in Appendix D of this report. The EEO Manager documents the findings and makes a recommendation to the Director. The recommendation may be to award the contract to the low bidder based on the good faith efforts taken, to reject all bids and readvertise, or to award to the next lowest bidder. The Director then has the final determination of the appropriate action to be taken.

When a contract is awarded, the Divisions of Contracts and Legal share the administrative responsibilities with the assistance of the appropriate District Construction and Administrative personnel. These administrative responsibilities actually begin with the award of a contract to a D.B.E. The Construction and Contracts and Legal personnel have advised the district personnel of their responsibilities under the D.B.E. program. The Project Engineer/Supervisors and the District EEO Officer under the direction of the District Administrative Manager will be knowledgeable of the goals incorporated into each contract, and the D.B.E.'s and items that the prime contractor has indicated will be utilized to achieve the contract goal. The district personnel continuously monitor the status of the prime contractor's program toward having the appropriate items that have been identified in the contract performed by
the identified D.B.E.'s. There items are not to be performed by anyone, including the prime contractor, except the identified D.B.E. firm.

While the actual work is in progress, the D.B.E. shall be monitored to determine if the D.B.E. is actually performing the work with their own work force, including supervisors. Should the D.B.E. not be performing, it will be reported to the Construction Division. The D.B.E.'s progress shall also be noted in a monthly report to be submitted through the district office. Appropriate actions shall be taken by the Divisions of Contracts and Legal to correct any deficiencies that may be determined to exist.

The Division of Construction reviews the dollar amount of the work to be performed by the D.B.E. as indicated in the contract bid proposal and compares it with the subcontract amount approved for the D.B.E., and subsequently with the amount actually received by the D.B.E. at the end of the job. Any discrepancies will be resolved by Construction. Once the D.B.E. subcontract is approved, it will also be the responsibility of the D.B.E. Field Coordinator to periodically visit the project sites, and review the status of the D.B.E.'s performance.
5.5 D.B.E. Directory and Newsletter

The IDOH has developed and publishes, on a monthly basis, a directory of firms who have applied and received certification as a D.B.E., W.B.E. or D.B.E./W.B.E. from the IDOH. The D.B.E. directory is distributed by the EEO Section to each prospective bidder who requests bidding proposals on federal-aid contracts during the month. The Directory is distributed as a convenience to prospective bidders in locating certified minority firms. It also assists those bidders in meeting their control goals. The EEO Section distributes copies to contractors associations, D.B.E.'s and W.B.E.'s, federal, state and local agencies, and anyone who may request a copy.

In an effort to maintain a communication link with Disadvantaged Business Enterprises, the IDOH publishes a "D.B.E. Newsletter" on a monthly basis. The articles published include, but are not limited to, problems being encountered by any facet of the program, advice to D.B.E.'s that may be considered essential for their development or to help increase their utilization on highway projects, information concerning the IDOH's programs and policies, a list of those firms who have become certified, recertified or prequalified during the month, supportive services news, contracts containing D.B.E. and W.B.E. goals, achievements,
and any other articles which would benefit program participants.

This newsletter is issued to each D.B.E., W.B.E., the contractor associations, other agencies and organizations, governmental officials and others who request a copy. An effort is made to publish the newsletter no later than two weeks prior to the IDOH bid lettings. This should provide the minority firms with sufficient time to receive, digest, and utilize any of the information contained in the newsletter to increase their potential for acquiring IDOH contract work that they are qualified to perform (14).

5.6 Regional Certification Application.

The Indiana Department of Highways, in conjunction with four of its five FHWA Region V sister states, has developed a regional D.B.E./W.B.E. Certification Application. The five states, Illinois, Indiana, Michigan, Minnesota, and Wisconsin, developed this application in an effort to encourage businesses owned and controlled by disadvantaged persons, minorities and/or women to participate in transportation related contracts. It is also an effort to determine the eligibility of applicants for the program, including the adequacy of the resources for those applicants, to perform the work or services they have designated (15).
By having the regional application, the cooperating states will be able to work together in an effort to ensure that those disadvantaged, minority and/or women owned and controlled businesses, who legitimately qualify for the program, are given that opportunity for which the program was developed.

Applicants who wish to be considered for the application must first properly complete the application and submit it with all required appropriate documentation to the home state in which the business is legally located. The home state will thoroughly review and investigate the applicant's qualifications, including an on-site review of the applicant's business. All applicants located in Region V must be certified by their home state prior to certification consideration by other Region V states. Each state, however, has the right to refuse certification, based on information they have, despite the fact that the applicant business may be certified in another Region V state. Once certified, certification in the other Region V states should be easier and more expedient.

The Region V Certification Application became effective on September 1, 1986, and is applicable to those interested firms located in the five participating Region V states of Illinois, Indiana, Michigan, Minnesota, and Wisconsin.
5.7 **Indiana Constructors, Inc. and the D.B.E. Program**

Indiana Constructors Inc., (I.C.I.) is an association of heavy/highway and utility contractors who perform work in the State of Indiana. This association is an affiliate of three national organizations which are: the Associated General Contractors of America (AGC), the American Road and Transportation Builders Association (ARTBA) and the National Utility Contractors Association (NUCA). There are currently 64 active members and 115 associate members of I.C.I.

Approximately four times a year, IDOH personnel involved with the D.B.E. program meet with members of ICI to discuss problems or ideas regarding any facet of the D.B.E. program. These meetings sometime lead into rather strong debates, but as an outcome, much fruitful information is usually brought out into the open, with both parties contributing to the decisions or recommendations made.

The working relationship developed between the IDOH and ICI has grown strong due to extreme cooperation between the two. Both parties, although at times they may be on totally different sides of an issue, have learned to work together and compromise so that the D.B.E. program in Indiana can be workable and fair to all involved.

When the S.T.A.A.A. was passed, most highway contractors in Indiana were against the D.B.E. program and believed the
only solution was to eliminate it. However, as time passed and contractors began to realize that the program was here to stay for awhile, many contractors have changed their attitudes and have begun to cooperate with the IDOH in attaining its goal. This in turn has made the IDOH much more cooperative with the highway contractors, and today, associations like ICI are very much a part of the D.B.E. program and its success in Indiana.

Since the larger highway contractors actually work with D.B.E. firms, these organizations are aware of the weaknesses and inefficiencies that plague many minority firms. Last year, the ICI polled its membership to determine the most common weaknesses of D.B.E.'s. The responses were tabulated and summarized, and this data was shared with the IDOH. From this information, the IDOH was able to assess what types of training and education programs would be most helpful to minorities. This is just one example of the type of cooperation that both parities have demonstrated over the past 2 years.

5.8 Supportive Service Contract with the Indiana Department of Commerce

In July of 1986, the Indiana Department of Commerce signed a contract with the Highway Department to provide
supportive service for the D.B.E. program. Along with providing comprehensive and continuous business support and assistance to D.B.E.'s and W.B.E.'s, the Department of Commerce is responsible for enhancing the potential for minority businesses to engage in and become integrated into the financial and economic mainstream of the Indiana business climate.

The purpose of this contract is to provide a high level of assistance to Indiana's established, developing, and proposed minority/women owned and operated businesses with special emphasis directed to areas of management and technical assistance, planning, contract procurement, education and training, financial and economic development, marketing, loan package assistance planning, bidding and estimating. Also, to provide additional assistance as requested.

The procurement goals of the IDOH were spelled out specifically in the contract. The Department of Commerce must fulfill the contractual obligations listed below:

a. Directly responsible for the certification of 10 new D.B.E.'s (not including recertifications) and 5 new W.B.E.'s (not including recertification);
b. Directly responsible for 10 certified D.B.E.'s and 5 certified W.B.E.'s entering into highway industry agreements for the first time.

c. Directly responsible for increasing the work commitments within the highway industry of 8 certified D.B.E.'s and/or W.B.E.'s.

d. Directly responsible for increasing the prequalification and/or the addition of 10 new prequalified D.B.E.'s and 3 new prequalified W.B.E.'s.

The business development goals of the contract were not as specific as the procurement goals. These goals were broken down into the three areas and are listed below in outline form.

I. To assist minority and women owned businesses in the search for financial resources.

   A. To maintain at least a surface knowledge of potential lenders for client referral.

   B. Have interactions with the lending sources.

   C. Be aware of alternative sources such as insurance companies, venture capitalists, bond companies, etc.
II. To provide assistance in the preparation of business and loan package.

A. Use Field Representatives and other agencies in the department to alert business persons about this type of assistance.

B. Attempt to assist or become involved with 7-12 prime projects for the year.

III. To be a business information resource center for MBE/WBE's.

A. This category not only covers I and II, but will also cover other types of information needs.

B. Try to sponsor two seminars a year on topics pertinent to small businesses.

The education and training goals stated in the contract consisted of holding workshops in the following 4 locations throughout the State of Indiana: Fort Wayne, January 6-7, 1987, Gary, January 20-21, 1987, Evansville, January 27-28, 1987 and Indianapolis, February 4-5, 1987. The subjects of the workshops were:
1. Business Administration (marketing, financial record keeping, government reporting)

2. Estimating

3. Project Scheduling

4. Construction Procedures and Techniques

5. Labor/Contractor Relations

Presentation and training at the workshop was provided by staffs contributed by prime contractors, educational institutions, management consultants, financial concerns and IDOH officials.

IV. The Department of Commerce will also be publishing newsletters to announce upcoming programs sponsored by themselves and other organizations that are of interest to minority firms. In addition, frequently throughout the year, intermittent training programs will be held in various areas of the state. Subjects featured will be Marketing and Motivation, Incubator System, Financial Assistance and Record Keeping, Blue Print Reading and various other topics will be presented as interest is created.

In comparison to the other FHWA Region V states, the ongoing supportive activities available to D.B.E.'s in
Indiana are among the best. Minority contractors in this state can receive assistance in almost any area of highway construction, and most of this assistance is available free of charge. The IDOH, in conjunction with the Indiana Constructors, Inc., has done an excellent job at pinpointing the specific areas of highway construction that D.B.E.'s lack experience and training, and has appropriately focused its supportive services on these areas.
CHAPTER 6 IMPACT OF THE D.B.E. PROGRAM ON THE INDIANA HIGHWAY CONSTRUCTION INDUSTRY

The increase in D.B.E. participation in response to the S.T.A.A. is the key measure of the short run effectiveness and impact of the program. This chapter presents the results of an analysis that focused on the growth in D.B.E. participation over the FY 83 - FY 86 period, and also examines the changes over time in the type of work performed by D.B.E.'s, both contract size and function. It is the change in these parameters and their combinations that permit an assessment of the full short-run impact of Section 105(f). Are D.B.E.'s getting more involved in heavy/highway and bridge construction, or has their apparent increase in participation been confined to the less capital intensive specialty areas? Are their average contract sizes growing, indicating an ability to perform and manage larger jobs? Are certain areas of the state being used to meet the majority of the 10% minority goal? These are the type of questions to be answered in this chapter.
6.1 Overall D.B.E. Participation in the State of Indiana

Nationwide, over eighty percent (80%) of the D.B.E. goal is met through subcontracts. In Indiana, this is also the case, with very few prime contracts awarded to D.B.E.'s. Therefore, the data presented in this chapter reflects the analysis of all D.B.E. subcontracts approved from FY 83 through FY 86. This data excludes W.B.E. approved subcontracts.

Figure 6.1 illustrates the number of D.B.E. subcontract awards beginning in FY 83 up through FY 86. In the first fiscal year of the current programs inception, there were 221 subcontracts approved to D.B.E.'s. Recall that the D.B.E. program was not formally implemented until June of 1983, therefore these 221 contracts were approved in only a 4 month span, June through September.

In fiscal year 1984, 657 subcontracts were approved to D.B.E.'s which is the largest number of subcontracts approved in the four years analyzed, and represented an enormous increase of almost two hundred percent (200%) over the previous fiscal year. In FY 85, the number of subcontracts approved to D.B.E.'s decreased ten percent (10%) from 657 to 591 and in FY 86, the number once again increased to 624 subcontracts representing a six percent (6%) increase.
Even though since the first year of the program's inception, the number of D.B.E. subcontract awards has fluctuated, the dollar volume of these some awards has steadily increased over the same period. This fact is illustrated in Figure 6.2. Represented in this graph is the total dollar volume in thousands, of D.B.E. subcontract awards from FY 83 - FY 86.

In FY 83, D.B.E. subcontracts totaled $5,805,000. This represented a one hundred and seventy-eight percent (178%) increase in D.B.E. participation over FY 82, which was the last full fiscal year prior to the implementation of the program. In FY 84, the dollar volume of D.B.E. subcontracts rose by a dramatic three hundred and twenty-eight percent (328%) to $24,820,000. This was the first full fiscal year of the program. The next year, FY 85, the total value of D.B.E. subcontract awards again rose, this time by ten percent (10%) to $27,382,000. In FY 86 this number was increased by another five percent (5%) to $28,853,000.

In terms of increasing minority participation in the highway construction industry, without a doubt the D.B.E. program in Indiana has been a huge success. In FY 82, the total value of D.B.E. subcontracts was $2,086,859, by FY 86, this number had risen to $28,853,000. Even though during this time span, the amount of Federal-aid highway dollars available to states also increased, the tremendous rise in
D.B.E. dollars is primarily due to the implementation of the D.B.E. program. The following section describes the distribution of D.B.E. subcontracts over the six different districts in Indiana.

6.2 Distribution of D.B.E. Subcontracts by District in Indiana

The objective of this portion of the analysis were threefold. The first objective was to determine if any specific location in the state was receiving a disproportionate amount of D.B.E. subcontract awards. The second objective was to calculate the actual dollar volume of the subcontracts for each district and compare it with the number of awards for that district. This information was then used to satisfy the third objective which was to compute the average subcontract size for each of the six districts for fiscal years 83-86. Tables 6.1, 6.2, and 6.3 summarize the information from this analysis.

As illustrated in Table 6.1, the distribution of D.B.E. subcontract awards throughout the districts in the state has been relatively uniform except for one district in particular, the Greenfield District, which over the past three fiscal years has received from five to ten percent (5-10%) more D.B.E. awards than the next closest district.
### Table 6.1 Distribution of D.B.E. Subcontract Awards by District

<table>
<thead>
<tr>
<th>DISTRICT</th>
<th>FY83</th>
<th>FY84</th>
<th>FY85</th>
<th>FY86</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>%</td>
<td>#</td>
<td>%</td>
<td>#</td>
</tr>
<tr>
<td>Crawfordsville</td>
<td>21.7</td>
<td>48</td>
<td>16.7</td>
<td>110</td>
</tr>
<tr>
<td>Fort Wayne</td>
<td>22.6</td>
<td>50</td>
<td>14.6</td>
<td>96</td>
</tr>
<tr>
<td>Greenfield</td>
<td>16.6</td>
<td>41</td>
<td>22.8</td>
<td>150</td>
</tr>
<tr>
<td>Laporte</td>
<td>12.2</td>
<td>27</td>
<td>17.7</td>
<td>116</td>
</tr>
<tr>
<td>Seymour</td>
<td>11.3</td>
<td>25</td>
<td>13.4</td>
<td>88</td>
</tr>
<tr>
<td>Vincennes</td>
<td>13.6</td>
<td>30</td>
<td>14.8</td>
<td>97</td>
</tr>
<tr>
<td><strong>Totals</strong></td>
<td>100</td>
<td>221</td>
<td>100</td>
<td>657</td>
</tr>
</tbody>
</table>
TABLE 6.2 DISTRIBUTION OF D.B.E. SUBCONTRACT DOLLARS BY DISTRICT

<table>
<thead>
<tr>
<th>DISTRICT</th>
<th>FY83</th>
<th>FY84</th>
<th>FY85</th>
<th>FY86</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>%</td>
<td>$</td>
<td>%</td>
<td>$</td>
</tr>
<tr>
<td>CRAWFORDSVILLE</td>
<td>15.5</td>
<td>898</td>
<td>19.5</td>
<td>4842</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>19.9</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>17.8</td>
<td>5124</td>
</tr>
<tr>
<td>FORT WAYNE</td>
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<td>1426</td>
<td>13.3</td>
<td>3306</td>
</tr>
<tr>
<td></td>
<td></td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>17.7</td>
<td>5110</td>
</tr>
<tr>
<td>GREENFIELD</td>
<td>21.8</td>
<td>1268</td>
<td>25.4</td>
<td>6293</td>
</tr>
<tr>
<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
<td>20.0</td>
<td>5763</td>
</tr>
<tr>
<td>LAPORTE</td>
<td>12.0</td>
<td>696</td>
<td>23.8</td>
<td>5905</td>
</tr>
<tr>
<td></td>
<td></td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>19.3</td>
<td>5573</td>
</tr>
<tr>
<td>SEYMOUR</td>
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<td>529</td>
<td>9.1</td>
<td>2250</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>10.0</td>
<td>2744</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>7.2</td>
<td>2082</td>
</tr>
<tr>
<td>VINCENNES</td>
<td>17.0</td>
<td>988</td>
<td>9.0</td>
<td>2224</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>14.6</td>
<td>3999</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>18.0</td>
<td>5201</td>
</tr>
<tr>
<td>TOTALS</td>
<td>100</td>
<td>5805</td>
<td>100</td>
<td>24820</td>
</tr>
<tr>
<td></td>
<td>100</td>
<td>27382</td>
<td>100</td>
<td>26853</td>
</tr>
<tr>
<td>DISTRICT</td>
<td>FY83</td>
<td>FY84</td>
<td>FY85</td>
<td>FY86</td>
</tr>
<tr>
<td>--------------</td>
<td>-------</td>
<td>-------</td>
<td>-------</td>
<td>-------</td>
</tr>
<tr>
<td>CRAWFORDS-</td>
<td>$18,700</td>
<td>$44,000</td>
<td>$51,400</td>
<td>$48,300</td>
</tr>
<tr>
<td>VILLE</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>FORT WAYNE</td>
<td>$28,500</td>
<td>$34,400</td>
<td>$54,100</td>
<td>$53,800</td>
</tr>
<tr>
<td>GREENFIELD</td>
<td>$30,900</td>
<td>$42,000</td>
<td>$43,700</td>
<td>$34,500</td>
</tr>
<tr>
<td>LAPORTE</td>
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<td>$50,900</td>
<td>$49,900</td>
<td>$85,700</td>
</tr>
<tr>
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<td>$33,100</td>
<td>$24,800</td>
</tr>
<tr>
<td>VINCENNES</td>
<td>$32,900</td>
<td>$22,900</td>
<td>$48,800</td>
<td>$48,600</td>
</tr>
</tbody>
</table>
In general though, the IDOH D.B.E. program has been successful in distributing the D.B.E. subcontracts evenly throughout the state. This point is made even more evident by Table 6.2. This table shows the distribution of the dollar volume of these subcontracted awards throughout the six districts in Indiana. Although the Greenfield district does still show higher percentages of D.B.E. dollars, the percentages are much closer to the other five districts. The only district that consistently showed a low percentage of D.B.E. subcontract dollars was the Seymour district which has never had more than ten percent (10%) of the total D.B.E. subcontract dollar volume.

Table 6.3 is a combination of the information in Tables 6.1 and 6.2 and shows the average D.B.E. subcontract size for each district for the same period. Of the four years analyzed, the LaPorte district had the largest average size subcontracts for 2 years. In fact, in FY 86, the average subcontract size in the LaPorte district was almost sixty percent (60%) larger than the nearest district. In general though, the fluctuation in average contract size for each and every district was substantial, which reflects the fact that no district in particular has received inordinately large subcontracts. Once again this suggests that the IDOH has done a good job at distributing the number and size of contracts throughout the state.
6.3 D.B.E. Participation by Contract Size

Tables 6.4 lists D.B.E. participation by subcontract size in each of ten different contract size categories. The bottom two lines of these tables show the average D.B.E. subcontract size for each fiscal year, and the percentage increase or decrease from the previous fiscal year. Looking at this information alone, suggests that indeed, D.B.E.'s have been taking on larger jobs because the average subcontract size has grown tremendously since 1983. In fact, the average size subcontract for a D.B.E. has grown almost seventy-six percent (76%) since the first year of the program's inception. But, these figures alone can be misleading.

Further analysis of the data presented in Tables 6.4 reveals that in each of the past four fiscal years, between fifty-seven and sixty-nine percent (57-69%) of all D.B.E. subcontract awards were less than $25,000. This information suggests that the majority of D.B.E. subcontracts are still small, and that in general, D.B.E.'s do not have the ability to perform and manage larger jobs.

Although the information in these tables may seem to produce conflicting ideas, the real value of this data is in identifying trends in the size of subcontract awards to D.B.E.'s. For example, although the majority of D.B.E.
### TABLE 6.4 D.B.E. PARTICIPATION BY CONTRACT SIZE FY 83-86

<table>
<thead>
<tr>
<th>Subcontract Size</th>
<th>FY 83</th>
<th></th>
<th></th>
<th></th>
<th>FY 84</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Number</td>
<td>%</td>
<td>Value (000's)</td>
<td>%</td>
<td>Number</td>
<td>%</td>
<td>Value (000's)</td>
<td>%</td>
</tr>
<tr>
<td>&gt; 1,000,000</td>
<td>0</td>
<td>0</td>
<td>00</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>00</td>
<td>0</td>
</tr>
<tr>
<td>750000-999999</td>
<td>0</td>
<td>0</td>
<td>00</td>
<td>0</td>
<td>1</td>
<td>0.2</td>
<td>965</td>
<td>3.9</td>
</tr>
<tr>
<td>500000-749999</td>
<td>0</td>
<td>0</td>
<td>00</td>
<td>0</td>
<td>3</td>
<td>0.5</td>
<td>1814</td>
<td>7.3</td>
</tr>
<tr>
<td>250000-499999</td>
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<td>0</td>
<td>00</td>
<td>0</td>
<td>7</td>
<td>1.1</td>
<td>2270</td>
<td>9.1</td>
</tr>
<tr>
<td>100000-249999</td>
<td>13</td>
<td>5.9</td>
<td>1751</td>
<td>30.2</td>
<td>39</td>
<td>5.9</td>
<td>5506</td>
<td>22.2</td>
</tr>
<tr>
<td>50000-99999</td>
<td>17</td>
<td>7.7</td>
<td>1103</td>
<td>19.0</td>
<td>85</td>
<td>12.9</td>
<td>6118</td>
<td>24.6</td>
</tr>
<tr>
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<td>17.7</td>
<td>1340</td>
<td>23.1</td>
<td>108</td>
<td>16.4</td>
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<td>10000-24999</td>
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<td>1151</td>
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<td>3371</td>
<td>13.5</td>
</tr>
<tr>
<td>5000-9999</td>
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<td>14.9</td>
<td>300</td>
<td>5.2</td>
<td>101</td>
<td>15.4</td>
<td>705</td>
<td>2.8</td>
</tr>
<tr>
<td>&lt; 5000</td>
<td>52</td>
<td>23.5</td>
<td>160</td>
<td>2.8</td>
<td>121</td>
<td>18.4</td>
<td>356</td>
<td>1.4</td>
</tr>
<tr>
<td>Totals</td>
<td>221</td>
<td>100.0</td>
<td>5805</td>
<td>100.0</td>
<td>657</td>
<td>100.0</td>
<td>24820</td>
<td>100.0</td>
</tr>
</tbody>
</table>

**Average Size**

- FY 83: $26,300.00
- FY 84: $37,800.00

**% Increase/Decrease**

+ 43.7 %
TABLE 6.4 (Continued).

<table>
<thead>
<tr>
<th>Subcontract Size</th>
<th>FY 85</th>
<th></th>
<th></th>
<th>FY 86</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Number</td>
<td>%</td>
<td>Value (OOO's)</td>
<td>%</td>
<td>Number</td>
<td>%</td>
</tr>
<tr>
<td>&gt; 1,000,000</td>
<td>1</td>
<td>0.2</td>
<td>1050</td>
<td>3.8</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>750000-999999</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
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<td>0.2</td>
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<tr>
<td>500000-749999</td>
<td>2</td>
<td>0.3</td>
<td>1286</td>
<td>4.7</td>
<td>4</td>
<td>0.5</td>
</tr>
<tr>
<td>250000-499999</td>
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<td>2.7</td>
<td>5112</td>
<td>18.7</td>
<td>12</td>
<td>1.9</td>
</tr>
<tr>
<td>100000-249999</td>
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<td>7.8</td>
<td>6616</td>
<td>24.2</td>
<td>48</td>
<td>7.7</td>
</tr>
<tr>
<td>50000-999999</td>
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<td>14.2</td>
<td>6048</td>
<td>22.1</td>
<td>84</td>
<td>13.5</td>
</tr>
<tr>
<td>25000-499999</td>
<td>95</td>
<td>16.1</td>
<td>3453</td>
<td>12.6</td>
<td>118</td>
<td>18.9</td>
</tr>
<tr>
<td>10000-249999</td>
<td>173</td>
<td>29.3</td>
<td>2982</td>
<td>10.9</td>
<td>153</td>
<td>24.5</td>
</tr>
<tr>
<td>5000-9999</td>
<td>74</td>
<td>12.5</td>
<td>526</td>
<td>1.9</td>
<td>98</td>
<td>15.7</td>
</tr>
<tr>
<td>&lt; 5000</td>
<td>100</td>
<td>16.9</td>
<td>309</td>
<td>1.1</td>
<td>106</td>
<td>17.0</td>
</tr>
<tr>
<td>Totals</td>
<td>591</td>
<td>100.0</td>
<td>27382</td>
<td>100.0</td>
<td>624</td>
<td>100.0</td>
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<tr>
<td>Average Size</td>
<td></td>
<td></td>
<td>$46,300.00</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

% Incr./Decr.     | + 22.5 % | | - 0.2 % |
approved subcontracts are less than $25,000, this percentage has decreased from sixty-nine to fifty-seven percent (69 to 57%) over the past four fiscal years.

Also, in the first year of the D.B.E. program there were no D.B.E. approved subcontracts over $250,000. In FY 86, there were 17, but more importantly, this represented twenty-five percent (25%) of all D.B.E. subcontracted work for that year. This is an important trend because it shows that well-established D.B.E.s are benefiting from the program and are beginning to undertake larger contracts. Although the examination of total subcontracts approved is interesting, it tends to understate the gains made by some of the more well-established minority firms. Much of the increase in D.B.E. participation has come from new and relatively small D.B.E. firms. These young firms are not capable of performing and managing a large contract. But, this does not hold for all D.B.E.'s in the program. Some have grown rapidly and are successfully undertaking larger projects. This was one of the objectives of the D.B.E. program and the data in this section suggests that this objective has been met.

In summary, the average size D.B.E. subcontract award has increased since FY 83. Although a large percentage of these awards are for less than this average figure, the increase in larger awards and the continued decrease in
awards less than $25,000, suggests growth in the capacity of the average D.B.E. firm in Indiana.

6.4 Distribution of D.B.E. Subcontracts by Contractor

The data presented in the previous section of this chapter indicated that some minority firms have grown substantially since the D.B.E. program was implemented. These firms have experienced a dramatic increase in their annual volume of work, and are continually being awarded larger and larger contracts.

Although one objective of the program was to develop D.B.E.'s into large contracting firms, one major concern throughout the country has been that large D.B.E. firms will get so big, that they will be used almost exclusively in some states to meet the ten percent (10%) minority goal. Opponents of the D.B.E. program add that several minority firms across the country are getting rich while the majority of D.B.E.'s are struggling to survive. The researcher decided to investigate this situation in Indiana, and determine if these claims are valid.

Since the D.B.E. program was fully implemented in 1983, at any one time there have been approximately 100 firms certified with the Indiana Department of Highways to do work on Federally funded highway projects. The number of
certified firms has gone above and below 100, but on the average has remained at or near this level. This number also includes W.B.E.'s and minority firms from other states that are certified in Indiana.

Table 6.5 shows the percentage of D.B.E. subcontract work performed by various numbers of minority contractors in the state of Indiana for FY 83-86. The data presented in this table definitely supports the claim that a small percentage of D.B.E. firms are performing a majority of the minority work in the state. For instance, in each of the four fiscal years analyzed, thirty percent (30%) of the total D.B.E. subcontract volume was performed by 3 minority contractors. In fact, in FY 85, this number reached forty percent (40%).

To continue, the top five minority contractors have performed over forty percent (40%) of the D.B.E. subcontract volume for the past 4 years, and the top 10 have performed over sixty percent (60%). This means that of all the D.B.E. approved subcontract work, well over sixty percent (60%) of it has gone to ten percent (10%) of the eligible firms. Further analysis of the information presented in Table 6.5 shows that since FY 83, ninety percent (90%) of the dollar volume of D.B.E. subcontracts has been performed by 35 minority firms or less. Eighty percent (80%) of this volume of work has been performed by 20 firms or less.
TABLE 6.5 DISTRIBUTION OF D.B.E. SUBCONTRACTS BY CONTRACTOR

<table>
<thead>
<tr>
<th>NUMBER OF CONTRACTORS</th>
<th>FY 83</th>
<th>FY 84</th>
<th>FY 85</th>
<th>FY 86</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>%</td>
<td>$(000's)</td>
<td>%</td>
<td>$(000's)</td>
</tr>
<tr>
<td>3</td>
<td>29.5</td>
<td>1712</td>
<td>32.3</td>
<td>8010</td>
</tr>
<tr>
<td>5</td>
<td>41.8</td>
<td>2428</td>
<td>44.7</td>
<td>11085</td>
</tr>
<tr>
<td>10</td>
<td>63.4</td>
<td>3681</td>
<td>67.2</td>
<td>16682</td>
</tr>
<tr>
<td>15</td>
<td>76.9</td>
<td>4462</td>
<td>77.8</td>
<td>19322</td>
</tr>
<tr>
<td>20</td>
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<tr>
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<tr>
<td>35</td>
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<tr>
<td>50</td>
<td>100.0</td>
<td>5805</td>
<td>96.0</td>
<td>24319</td>
</tr>
</tbody>
</table>

*PERCENTAGES AND DOLLAR AMOUNTS SHOWN ARE CUMULATIVE
As mentioned in the previous section, much of the increase in D.B.E. participation in the State of Indiana has come from small firms who are incapable of handling larger projects. But, it is questionable that even if these firms were able to develop and take on larger contracts, would they be able to due to the dominance of some of the larger existing D.B.E. firms. It seems obvious that these large firms make it very difficult for younger firms to be competitive. In fact, this may be the reason why so many firms are forced to accept smaller contracts, because they cannot compete with the larger, more dominant firms.

It is important that D.B.E.'s develop and grow into successful contracting firms. But it is equally as important that all minority firms have the same opportunities to grow, which does not seem to be the case when a few firms can control such a large percentage of the work. It is obvious that the D.B.E. program has been an overwhelming help to some minority firms in Indiana. But the program has in fact met a large percentage of its goal through these same successful firms. This situation tends to agree with the philosophy of opponents of the program who insist that only a few well established minority firms will benefit from the program.
6.5 D.B.E. Repeat Award Winners

One indicator of the stability of D.B.E. firms and markets is the degree to which D.B.E. firms winning awards in an early fiscal year continue to win awards in late fiscal years. Another good indicator of a program that is stimulating increased participation is the degree to which increased numbers of D.B.E. firms are being awarded contracts per year. Also of interest, are the average number of subcontracts per firm and the average dollar volume per firm on an annual basis. This section describes the analysis of these indicators for all D.B.E. approved subcontracts from FY 83 - FY 86.

The number of D.B.E. approved subcontracts over the past four fiscal years has fluctuated considerably. In FY 83, 42 minority firms were awarded subcontracts. This averaged out to 5.3 subcontracts per firm. In FY 84, 67 D.B.E. firms were awarded subcontracts, and on the average, each firm received 9.8 awards. This dramatic increase was partially due to the fact that FY 83 was not a complete year of the program.

In FY 85, the number of minority firms receiving subcontracts dropped by thirty percent (30%) to 47 firms. This decrease was probably partly due to the ten percent (10%) decrease in number of D.B.E. subcontract awards for
that year. Although the number of firms receiving awards in FY 85 dropped, the average number of awards per firm increased by nearly twenty-nine percent (29%) to 12.6 awards per firm.

In FY 86, 60 D.B.E. firms were awarded subcontracts which represented a twenty-eight (28%) increase over the previous year. However, the increased number of award winning firms also decreased the average number of awards per firm by seventeen percent (17%) to 10.4 awards per firm.

Overall, these numbers are good indicators of the success of the IDOH D.B.E. program. Since FY 83, the number of award winning minority firms has increased by forty-three percent (43%) and the average number of awards per firm has nearly section of this chapter concluded that several large D.B.E. contractors were doing a disproportionate amount of work, evidence in this section suggests that despite this fact, small firms are still managing to get increasing numbers of the subcontract awards.

Probably the best indication of the stability of a D.B.E. firm is its ability to win awards year after year. Although there is variation between states, the general logic is that states and general contractors cannot and usually will not make awards to firms that have proven to be incapable of performing previous work. Firms that win
highway awards over successive years are considered to be more qualified than firms that do not, and usually these firms make up a large percentage of the minority work done in the state. Table 6.6 shows the number and dollar volume of subcontract awards received by firms which won awards in any of the four fiscal years analyzed, (FY 83 – FY 86).

In FY 83, 19 of the 42 or forty-five percent (45%) of the award winning firms also won awards in FY 84, 85 and 86. The significance of this data is that these 19 firms accounted for 67, 66, 65 and 52 percent of the total D.B.E. subcontract work over the next four fiscal years respectively. Also, the awards to these repeating firms increased in size as they won awards in subsequent years. For example, firms that won awards in all four successive fiscal years averaged $206,000 per firm in FY 83, $865,000 per firm in FY 84, and $938,000 per firm in FY 85. However, this figure did decrease to $796,000 per firm in FY 86. The decrease in dollar volume per firm in FY 86 was largely due to the increases in dollar volume that repeating firms that began business in FY 85 were experiencing.

The information in Table 6.6 clearly demonstrates the point that indeed in Indiana, repeat award winning D.B.E. firms are doing nearly all of the minority work. Firms only in existence for one year have never done more than 4.2 percent of the total volume of subcontract work for a year.
<table>
<thead>
<tr>
<th>FIRMS WINNING</th>
<th>FY 83</th>
<th>FY 84</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No.</td>
<td>%</td>
</tr>
<tr>
<td>FY 83, 84, 85, 86</td>
<td>19</td>
<td>45.2</td>
</tr>
<tr>
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<td>7.1</td>
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<td>FY 83, 84, 86</td>
<td>3</td>
<td>7.1</td>
</tr>
<tr>
<td>FY 83, 85, 86</td>
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<td>0</td>
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<tr>
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<td>11</td>
<td>26.2</td>
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<tr>
<td>FY 83, 85</td>
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<td>0</td>
</tr>
<tr>
<td>FY 83, 86</td>
<td>1</td>
<td>2.4</td>
</tr>
<tr>
<td>FY 84, 85</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>FY 84, 86</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>FY 85, 86</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>FY 83 ONLY</td>
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<td>11.9</td>
</tr>
<tr>
<td>FY 84 ONLY</td>
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<td>0</td>
</tr>
<tr>
<td>FY 85 ONLY</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>FY 86 ONLY</td>
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<tr>
<td>TOTALS</td>
<td>42</td>
<td>100</td>
</tr>
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</table>
### TABLE 6.6 (Continued)

<table>
<thead>
<tr>
<th>FIRMS WINNING D.B.E. AWARDS IN:</th>
<th>FY 85</th>
<th>FY 86</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No.</td>
<td>%</td>
</tr>
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<td>40.4</td>
</tr>
<tr>
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<td>FY 84, 85, 86</td>
<td>9</td>
<td>19.1</td>
</tr>
<tr>
<td>FY 83, 84, 86</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>FY 83, 85, 86</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>FY 83, 84</td>
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<td>0</td>
</tr>
<tr>
<td>FY 83, 85</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>FY 83, 86</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>FY 84, 85</td>
<td>3</td>
<td>6.4</td>
</tr>
<tr>
<td>FY 84, 86</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>FY 85, 86</td>
<td>8</td>
<td>17.0</td>
</tr>
<tr>
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<td>FY 85 ONLY</td>
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<td>10.6</td>
</tr>
<tr>
<td>FY 86 ONLY</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>TOTALS</td>
<td>47</td>
<td>100</td>
</tr>
</tbody>
</table>
This excludes FY 86, since undoubtedly many of the firms in this subgroup will go on to do work in future years.

The data in Table 6.6 is interesting with respect to the number of firms that did work for a year or two and then stopped completely or skipped a year (it is not unusual for a firm to skip an award year, particularly if the firm's earlier awards have the firm working at capacity). The two most puzzling subgroups are the group of firms that did work in FY 83 and 84 only and the 18 firms that did work in FY 84 only. The first group, made up of 11 firms, accounted for twenty-six (26%) of the award winning firms in FY 83. The second group of firms, the 18 that only did work in FY 84 accounted for twenty-seven percent (27%) of the award winning firms in FY 84. Without further evidence, it is difficult to characterize this group further. Lack of success in subsequent fiscal years would suggest that these firms have either gone out of business or have left the Federal-aid highway construction market. A turnover of more than 25 percent of the firms in a fiscal year, however, is too large to be believed. Some firms may have left the market, but it is very possible that several of these firms may have accepted too large a volume of work and subsequently went bankrupt. This is not an uncommon situation among new minority firms or new firms in general. Other possible explanations for the large turnover of firms
in these years are that some firms may have merged with another, or reorganized under a new name, and some may have been unmasked fronts. No single explanation can account for the large number of non repeating firms.

The data in this section indicated that the positive impact of the D.B.E. requirement on D.B.E.'s is measured not only by the impressive growth in the number of D.B.E. awards and volume of highway construction dollars going to D.B.E.'s, but also by the large increases in the number of D.B.E.'s participating in the program. The data suggests that by and large the majority of D.B.E. firms that win awards in one fiscal year, will successfully win awards in future years.

6.6 Distribution of D.B.E. Subcontracts by Type of Work

One of the strongest complaints registered against the D.B.E. program, is that minority forms are only entering into noncapital-intensive specialty trades, and these firms are not growing, and subsequently taking on any other type of highway work. Since it is the objective of the D.B.E. program to develop these minority firms into successful highway contractors, this is a serious claim made against the program, and this section of the chapter investigates the validity of this claim in Indiana.
While it is the case that, depending on whom you talk to and what the job is, almost any construction work is considered a "specialty trade," the complaints generally center upon those noncapital-intensive functions which it is felt by most that new firms, especially most D.B.E. firms, have entered. The specialty trades most frequently mentioned are guardrail, signing, pavement marking and landscaping.

Although this complaint against the D.B.E. program is supported by many contractors across the country, there are several factors and practices that reinforce the potential for this situation to arise. One factor is that it is common practice in the highway construction industry for prime contractors to consider only certain items for subcontracting. Also, costs and competitive considerations often make it important that a prime contractor subcontract as little of the total work as possible. Thirdly, D.B.E. goals are met mainly through subcontracting. And finally, with these D.B.E. goals to satisfy, state highway authorities are putting increased pressure upon low-bid primes to increase their subcontracting activities with D.B.E.'s. The product of all these factors may be part of the cause of why there is such a disproportionate number of minority firms entering into these specialty areas. Since these are the areas that are most commonly subcontracted,
added to the fact that most new firms lack the capital and experience to be prime contractors, undoubtedly these areas will seem the most attractive to firms entering into the highway construction industry.

To investigate the extent of this problem in Indiana, information was collected on the type of work subcontracted to all D.B.E. firms over the past four fiscal years. Table 6.7 shows the dollar volume and the percentage of total subcontract work for that year that was performed in that category. The specialty areas were broken up into seventeen specific categories, and an "other" category which was made up of miscellaneous work performed by minority firms during the same period.

The specialty trade most frequently mentioned concerning the flood of new D.B.E. entrants, is the guardrail business. From Table 6.7 it is quite obvious that this is a valid complaint in Indiana. Every fiscal year since the D.B.E. program was implemented, over fifteen percent (15%) of all work subcontracted to minority firms has been in the area of guardrail. The past two fiscal years, this number has grown to better than twenty percent (20%). The dollar volume of these awards has increased tremendously over this period. Table 6.8 shows the percentage increase or decrease in the dollar volume of awards of each of the seventeen categories. From FY 83-84,
### TABLE 6.7 DISTRIBUTION OF D.B.E. SUBCONTRACT AWARDS
### BY TYPE OF WORK (000's)

<table>
<thead>
<tr>
<th>TYPE OF WORK</th>
<th>FY 83</th>
<th>FY 84</th>
<th>FY 85</th>
<th>FY 86</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>%</td>
<td>$</td>
<td>%</td>
<td>$</td>
</tr>
<tr>
<td>GUARDRAIL</td>
<td>14.5</td>
<td>840</td>
<td>17.2</td>
<td>4261</td>
</tr>
<tr>
<td>MISC. CONC. &amp; CONC. FIN.</td>
<td>19.2</td>
<td>1112</td>
<td>12.6</td>
<td>3125</td>
</tr>
<tr>
<td>CONSTR. SIGNS</td>
<td>11.6</td>
<td>675</td>
<td>8.8</td>
<td>2174</td>
</tr>
<tr>
<td>PAVEMENT MARKING</td>
<td>5.0</td>
<td>293</td>
<td>5.5</td>
<td>1359</td>
</tr>
<tr>
<td>PIPES, SEWERS &amp; DRAINS</td>
<td>3.9</td>
<td>225</td>
<td>6.1</td>
<td>1525</td>
</tr>
<tr>
<td>BRIDGE WORK</td>
<td>2.8</td>
<td>162</td>
<td>3.7</td>
<td>924</td>
</tr>
<tr>
<td>CONSTR. ENG.</td>
<td>1.5</td>
<td>87</td>
<td>1.5</td>
<td>364</td>
</tr>
<tr>
<td>EXCAVATION</td>
<td>2.3</td>
<td>132</td>
<td>5.5</td>
<td>1372</td>
</tr>
<tr>
<td>HAULING</td>
<td>15.1</td>
<td>878</td>
<td>6.4</td>
<td>1579</td>
</tr>
<tr>
<td>REINFORCING STEEL</td>
<td>2.3</td>
<td>134</td>
<td>2.1</td>
<td>524</td>
</tr>
<tr>
<td>SEED/SOD, LANDSCAPING</td>
<td>3.0</td>
<td>174</td>
<td>6.3</td>
<td>1560</td>
</tr>
<tr>
<td>TRAFFIC CONTROL</td>
<td>3.5</td>
<td>206</td>
<td>2.7</td>
<td>665</td>
</tr>
<tr>
<td>UNDERSEALING</td>
<td>0.0</td>
<td>0</td>
<td>9.9</td>
<td>2467</td>
</tr>
<tr>
<td>CONC. MBRS., STR. STEEL</td>
<td>4.3</td>
<td>250</td>
<td>4.2</td>
<td>1049</td>
</tr>
<tr>
<td>FENCE</td>
<td>1.6</td>
<td>90</td>
<td>0.6</td>
<td>141</td>
</tr>
<tr>
<td>CONC. PVMNT</td>
<td>1.1</td>
<td>66</td>
<td>1.7</td>
<td>417</td>
</tr>
<tr>
<td>OTHER</td>
<td>8.3</td>
<td>483</td>
<td>5.3</td>
<td>1314</td>
</tr>
<tr>
<td>TOTALS</td>
<td>100</td>
<td>5805</td>
<td>100</td>
<td>24820</td>
</tr>
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</table>

Note: All values in thousands ($1,000's).
<table>
<thead>
<tr>
<th>TYPE OF WORK</th>
<th>FY 83-84</th>
<th>FY 84-85</th>
<th>FY 85-86</th>
</tr>
</thead>
<tbody>
<tr>
<td>GUARDRAIL</td>
<td>407.3</td>
<td>35.6</td>
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</tr>
<tr>
<td>MISC. CONC. &amp; CONC. FIN.</td>
<td>181.0</td>
<td>-42.9</td>
<td>111.3</td>
</tr>
<tr>
<td>CONSTR. SIGNS</td>
<td>223.0</td>
<td>14.1</td>
<td>-29.5</td>
</tr>
<tr>
<td>PAVEMENT MARKING</td>
<td>363.6</td>
<td>6.2</td>
<td>-20.2</td>
</tr>
<tr>
<td>PIPES, SEWERS &amp; DRAINS</td>
<td>577.8</td>
<td>70.4</td>
<td>17.7</td>
</tr>
<tr>
<td>BRIDGE WORK</td>
<td>470.4</td>
<td>34.3</td>
<td>-11.6</td>
</tr>
<tr>
<td>CONSTR. ENG.</td>
<td>318.4</td>
<td>14.3</td>
<td>79.1</td>
</tr>
<tr>
<td>EXCAVATION</td>
<td>939.4</td>
<td>-30.1</td>
<td>-22.6</td>
</tr>
<tr>
<td>HAULING</td>
<td>79.8</td>
<td>16.6</td>
<td>-5.2</td>
</tr>
<tr>
<td>REINFORCING STEEL</td>
<td>291.0</td>
<td>169.5</td>
<td>90.2</td>
</tr>
<tr>
<td>SEED/SCD. LANDSCAPING</td>
<td>796.6</td>
<td>-24.6</td>
<td>-41.2</td>
</tr>
<tr>
<td>TRAFFIC CONTROL</td>
<td>222.8</td>
<td>-37.6</td>
<td>96.6</td>
</tr>
<tr>
<td>UNDERSEALING</td>
<td>—</td>
<td>22.3</td>
<td>-97.8</td>
</tr>
<tr>
<td>CONC. MBRS., STR. STEEL</td>
<td>319.6</td>
<td>-26.7</td>
<td>94.0</td>
</tr>
<tr>
<td>FENCE</td>
<td>56.7</td>
<td>368.8</td>
<td>-77.5</td>
</tr>
<tr>
<td>CONC. PVMNT</td>
<td>531.8</td>
<td>-34.3</td>
<td>200.7</td>
</tr>
<tr>
<td>OTHER</td>
<td>172.0</td>
<td>-15.0</td>
<td>103.4</td>
</tr>
</tbody>
</table>
the dollar volume of guardrail awards increased by over forty percent (40%). Clearly most of this increase was due to the large increase in total dollars awarded to D.B.E.'s, but this was still an overwhelming increase. From FY 84-85, this dollar volume again increased by a significant thirty-six percent (36%), and from FY 85-86, the volume pretty much leveled off and increased by less than one percent (1%). An interesting note about the volume of guardrail work is that it has increased every single year since the program's inception. Further examination of Table 6.8 reveals that most categories of work have experienced a decline in volume at one time or another. This is not the case in the guardrail area, which indicates that this is a popular area among D.B.E. firms in Indiana.

Another common specialty area among the minority firms is in miscellaneous concrete and concrete finishing which consists of curb and gutter work, sidewalks, slope and headwalls and other small concrete items. In FY 83, more work was performed by D.B.E.'s in this area than any other, including guardrail. The dollar volume awarded in this category has fluctuated considerably over the past 4 years, but in FY 86, the volume was considerably higher than in any other year. In three of the four fiscal years analyzed, this specialty area has either been the first or second largest dollar volume business among minority subcontracted work.
Construction signs is another common area of work among D.B.E. firms. It has accounted for as little as six percent (6%) but as much as twelve percent (12%) of the total volume of minority subcontracted work over the past four fiscal years. Like the miscellaneous concrete area, dollar volume in this category has varied greatly through the years. In FY 86, the volume decreased by thirty percent (30%) representing the lowest level since the beginning of the D.B.E. program.

Hauling has been a fairly stable business for minority firms throughout the past four years. Although it does not account for such a large percentage of total dollar volume as it did in FY 83, its volume has leveled off and has not varied appreciably. Several firms in this business are well established and do a majority of the work in this area.

Pavement marking is similar to the hauling business in that its total dollar volume has not fluctuated very much since the second year of the program. This area has consistently accounted for approximately five percent (5%) of the total D.B.E. work volume for each of the past four fiscal years. This is another area of construction where there are a few firms that do the majority of work in this area.
Seed and sod, or landscaping as it is also known, is another area that is frequently mentioned as a trade flooded with new minority firms. In the State of Indiana though, with the exception of one year, FY 84, there have not been real large volumes of work awarded in this area. Even in its peak year, its volume accounted for only six percent (6%) of the total amount of work. In the past two fiscal years, the volumes of work awarded to D.B.E.'s in this area has decreased by twenty-five and forty-one percent (25% and 41%) respectively.

Traffic control is another area similar to seed and sod in the respect that it is frequently identified as a D.B.E. dominated area, but in fact does not account for a substantial portion of minority work. This area of work reached its peak dollar volume in FY 86, but still only made up less than three percent (3%) of the total subcontract dollar volume awarded to D.B.E.'s.

Three areas of highway construction that are not usually associated with D.B.E.'s have shown significant consistent increases over each of the past four years. One of the areas is piping, which includes the placement of sewers and drains. The dollar volume awarded to D.B.E.'s in this area has increased by five hundred and seventy-eight percent (578%), seventy percent (70%), and eighteen percent (18%) over the past three years respectively. This is an
area of construction that does require a considerable amount of capital and is a good indication that some firms are indeed being helped by the program and are continually growing and accepting work traditionally not done by D.B.E. firms. In the past two years, ten percent (10%) of the amount of work awarded to D.B.E.'s has been in this area.

Another area of highway construction work that is not commonly associated with minority firms is construction engineering. Although this category of work has never made up more than three percent (3%) of the total subcontract volume, it has grown consistently over the past four years. In fact, in FY 86, the dollar volume in this area was nearly nine times what it was in the first year of the program. This also is another area that has undoubtedly benefited by the existence of the D.B.E. program. The tremendous increase in dollar volume over the first year and consistently increasing percentage of total work, indicate that more and more prime contractors are beginning to subcontract work in this area.

Placement of reinforcing steel is also becoming an increasingly popular area of work for D.B.E. firms. In FY 85 and 86, the dollar volume awarded in this trade increased by one hundred and seventy percent (170%) and ninety percent (90%) respectively. This past year it also accounted for over nine percent (9%) of the total amount of work.
subcontracted to D.B.E.'s. This is also in area that is not mentioned frequently as being popular among D.B.E.'s, but none the less, has attracted a great amount of attention from minority firms in Indiana.

An intersting area of work in Table 6.7 is that of undersealing. For two years, FY 84 and 85, this area accounted for over ten percent (10%) of the total volume of work, and in the other two years made up less than one percent (1%). Incidentally, all of this work was performed by 1 firm. It is difficult to explain this situation but it is likely that either the firm went out of business after those two years, or the state had no other undersealing jobs at that time. Regardless, this does illustrate an important point. Many D.B.E. firms take on a large volume of work when they are young, and subsequently lose control of their business and end up going bankrupt. Another problem is that many of the minority firms that are very specialized and dependent on one item in highway construction, are hurt severely or forced out of business when this type of work is cut back. These are common situations among D.B.E. firms and account for much of the turnover that was discussed in an earlier section.

Other categories of work listed in Table 6.7 such as bridge work, excavation and the placing of concrete and structural steel members, have consistently accounted for
three to five percent (3-5%) of total dollar volumes. Fencing and concrete pavement also, have each made up one to three percent (1-3%) of the total dollar volumes.

In summary, the information presented in this section does suggest to some extent that the claim that most D.B.E. work is performed in low capital-intensive functions is valid. Areas such as guardrail, construction signs, and miscellaneous concrete have in fact made up a large percentage of the minority work performed in Indiana. However, other areas of highway construction not usually associated with D.B.E.'s have shown considerable increases in dollar volume and participation. In particular, pipe, drain and sewer work, construction engineering, and placement of reinforcing steel have shown tremendous increases in dollar volume of awards. This information suggests that some minority firms have truly benefited from the program and are learning to manage and perform larger more difficult jobs, while many firms are content to stay specialized and perform in there traditional D.B.E. areas of highway construction work.

6.7 Impact of Program on Non-Minority Specialty Contractors

During discussions with highway contractors throughout the State of Indiana, the most commonly addressed concern
over the D.B.E. program was the impact that this program has had on non-minority specialty contractors. Many contractors and highway officials alike, believe that the distribution of D.B.E. firms and growth in D.B.E. subcontracted awards, when combined with the desire of prime contractors to minimize subcontracting, is resulting in extreme hardship for non-D.B.E. firms in particular specialty areas. The specialty area most commonly mentioned was guardrail.

Generally, more than eighty percent (80%) of the D.B.E. requirement is met through subcontracting. Although this percentage may vary from year to year, the historical average for work subcontracted is around twenty percent (20%). What this means is that, in order to meet the ten percent (10%) minority goal, at least fifty percent (50%) of all subcontract dollars must be awarded to D.B.E. firms. This percentage does not include W.B.E.'s, which are also principally subcontractors. Given these circumstances, it is not difficult to imagine that some non-D.B.E. firms, particularly in specialty areas, are under intense pressure.

It is very difficult to prove or disprove this case because it is difficult to directly pinpoint what the market is for a particular specialty trade. In other words, a decrease in the work volume of a non-minority specialty contractor does not necessarily imply that the D.B.E. program is responsible. The overall market for that
specialty area may have decreased, or the specialty contractor may simply have not been competitive in his bids. These are just a few of the reasons why it is difficult to assess the magnitude of this problem in Indiana.

In spite of these difficulties, data was gathered on two large guardrail contractors from Indiana who have complained of decreasing work volumes due to the disproportionate rise of D.B.E. contractors in the guardrail business. Table 6.9 lists the number of contracts that each company was awarded by the IDOH, and the dollar volume of these contracts, for the period of FY 79-86. This period was chosen because it is representative of each company's work volume for four years before and after the D.B.E. program was implemented. Recall that the D.B.E. program did not formally begin until June of 1983.

Table 6.9 breaks down the total volume of each company's work into guardrail work, and other work which included any other type of work the company performed that was not associated with guardrail items. The data was broken down in this fashion so that it could be determined if the company was experiencing a decrease in total volume, or just in the guardrail area.

As illustrated in the tables, the number of awards and volume, in both the guardrail and other work areas,
<table>
<thead>
<tr>
<th>COMPANY &amp; TYPE OF WORK</th>
<th>FY 79</th>
<th>FY 80</th>
<th>FY 81</th>
<th>FY 82</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No. %</td>
<td>Value (000's) %</td>
<td>No. %</td>
<td>Value (000's) %</td>
</tr>
<tr>
<td>COMPANY &quot;A&quot; GUARDRAIL AWARDS &amp; $</td>
<td>60 75.0 3032 76.8</td>
<td>40 80.0 1420 74.2</td>
<td>49 83.1 1602 74.0</td>
<td>53 89.8 1807 91.0</td>
</tr>
<tr>
<td>% CHANGE IN $</td>
<td>-32.9</td>
<td>+12.2</td>
<td>+12.8</td>
<td></td>
</tr>
<tr>
<td>COMPANY &quot;A&quot; OTHER AWARDS &amp; $</td>
<td>20 23.0 916 23.2</td>
<td>10 20.0 498 25.8</td>
<td>10 16.9 562 26.0</td>
<td>6 10.2 179 9.0</td>
</tr>
<tr>
<td>% CHANGE IN $</td>
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<td>-68.1</td>
<td></td>
</tr>
<tr>
<td>COMPANY &quot;A&quot; TOTAL AWARDS &amp; $</td>
<td>80 100 3948 100</td>
<td>50 100 1926 100</td>
<td>59 100 2164 100</td>
<td>59 100 1986 100</td>
</tr>
<tr>
<td>% CHANGE IN $</td>
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<td>+12.4</td>
<td>-8.2</td>
<td></td>
</tr>
<tr>
<td>COMPANY &quot;B&quot; GUARDRAIL AWARDS &amp; $</td>
<td>50 89.3 2962 96.3</td>
<td>28 90.3 1742 94.3</td>
<td>33 79.5 2458 92.0</td>
<td>36 85.7 1612 96.9</td>
</tr>
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<td>% CHANGE IN $</td>
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<td>+41.1</td>
<td>-34.4</td>
<td></td>
</tr>
<tr>
<td>COMPANY &quot;B&quot; OTHER AWARDS &amp; $</td>
<td>6 10.7 111 3.7</td>
<td>3 9.7 105 5.7</td>
<td>9 20.5 214 8.0</td>
<td>6 14.3 51 3.1</td>
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<tr>
<td>% CHANGE IN $</td>
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</tr>
<tr>
<td>COMPANY &quot;B&quot; TOTAL AWARDS &amp; $</td>
<td>56 100 2973 100</td>
<td>31 100 1847 100</td>
<td>44 100 2672 100</td>
<td>42 100 1663 100</td>
</tr>
<tr>
<td>% CHANGE IN $</td>
<td>-37.9</td>
<td>+44.7</td>
<td>-37.8</td>
<td></td>
</tr>
<tr>
<td>COMPANY &amp; TYPE OF WORK</td>
<td>FY 83</td>
<td>FY 84</td>
<td>FY 85</td>
<td>FY 86</td>
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<td>------------------------</td>
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<td></td>
<td>% No</td>
<td>Value (000's)</td>
<td>% No</td>
<td>Value (000's)</td>
</tr>
<tr>
<td>COMPANY &quot;A&quot; QUADRAIL AWARDS &amp; $</td>
<td>65 22.3</td>
<td>215.4</td>
<td>81.3</td>
<td>27 64.3</td>
</tr>
<tr>
<td>% CHANGE IN $</td>
<td>+19.2</td>
<td>-48.1</td>
<td>+59.8</td>
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</tr>
<tr>
<td>COMPANY &quot;A&quot; OTHER AWARDS &amp; $</td>
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<td>496.7</td>
<td>18.7</td>
<td>15 35.7</td>
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<tr>
<td>% CHANGE IN $</td>
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<td>+145.7</td>
<td>-23.1</td>
</tr>
<tr>
<td>COMPANY &quot;A&quot; TOTAL AWARDS &amp; $</td>
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<td>2650.0</td>
<td>100</td>
<td>42 100</td>
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<tr>
<td>% CHANGE IN $</td>
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<td>-41.1</td>
<td>+84.3</td>
<td>-53.0</td>
</tr>
<tr>
<td>COMPANY &quot;B&quot; QUADRAIL AWARDS &amp; $</td>
<td>44 83.0</td>
<td>1663.0</td>
<td>81.0</td>
<td>40 75.5</td>
</tr>
<tr>
<td>% CHANGE IN $</td>
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<td>-8.3</td>
<td>-55.1</td>
<td>+183.9</td>
</tr>
<tr>
<td>COMPANY &quot;B&quot; OTHER AWARDS &amp; $</td>
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<td>370.0</td>
<td>18.2</td>
<td>13 24.5</td>
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<tr>
<td>% CHANGE IN $</td>
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<td>+12.7</td>
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<td>-6.2</td>
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<tr>
<td>COMPANY &quot;B&quot; TOTAL AWARDS &amp; $</td>
<td>53 100</td>
<td>2023.0</td>
<td>100</td>
<td>53 100</td>
</tr>
<tr>
<td>% CHANGE IN $</td>
<td>+22.2</td>
<td>-4.5</td>
<td>-16.1</td>
<td>+73.6</td>
</tr>
</tbody>
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### TABLE 6.10 COMPARISON OF NUMBER OF AWARDS & ANNUAL DOLLAR VOLUME OF 2 NON-MINORITY SPECIALTY SUBCONTRACTORS BETWEEN THE PERIODS FY 79-82 & FY 83-86

<table>
<thead>
<tr>
<th>COMPANY &amp; TYPE OF WORK</th>
<th>FY 79-82</th>
<th>FY83-86</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No. of Awards</td>
<td>$ Value (000's)</td>
</tr>
<tr>
<td>COMPANY &quot;A&quot; GUARDRAIL AWARDS &amp; $</td>
<td>202</td>
<td>7869</td>
</tr>
<tr>
<td>% CHANGE</td>
<td>-27.2</td>
<td>-29.9</td>
</tr>
<tr>
<td>COMPANY &quot;A&quot; OTHER AWARDS &amp; $</td>
<td>46</td>
<td>2155</td>
</tr>
<tr>
<td>% CHANGE</td>
<td>+106.5</td>
<td>+33.2</td>
</tr>
<tr>
<td>COMPANY &quot;A&quot; TOTAL AWARDS &amp; $</td>
<td>248</td>
<td>10024</td>
</tr>
<tr>
<td>% CHANGE</td>
<td>-2.4</td>
<td>-16.4</td>
</tr>
<tr>
<td>COMPANY &quot;B&quot; GUARDRAIL AWARDS &amp; $</td>
<td>149</td>
<td>8674</td>
</tr>
<tr>
<td>% CHANGE</td>
<td>-7.4</td>
<td>-33.0</td>
</tr>
<tr>
<td>COMPANY &quot;B&quot; OTHER AWARDS &amp; $</td>
<td>24</td>
<td>481</td>
</tr>
<tr>
<td>% CHANGE</td>
<td>+162.5</td>
<td>+444.7</td>
</tr>
<tr>
<td>COMPANY &quot;B&quot; TOTAL AWARDS &amp; $</td>
<td>173</td>
<td>9155</td>
</tr>
<tr>
<td>% CHANGE</td>
<td>+16.2</td>
<td>-7.9</td>
</tr>
</tbody>
</table>
increased and decreased considerably both before and after the program was implemented. There is no pattern to the data, therefore Table 6.10 was constructed which is a summary of the data presented in the previous table.

Table 6.10 shows the cumulative number of awards and dollar volume of each company for the four year period before and after the program was implemented. The information in this table is much more helpful than table 6.10 because it compares the data over a large period of time which eliminates the effects of the yearly fluctuations in number of awards and dollar volume.

The information in Table 6.10 does in fact show that both companies experienced a significant decrease in the number of awards and dollar volume of guardrail contracts since FY 83 when the D.B.E. program was implemented. Company"A" saw their number of guardrail contracts decrease over twenty-seven percent (27%) for the cumulative period of FY 83-86 along with a decrease in the dollar volume of these contracts of almost thirty percent (30%). Likewise, Company"B" experienced a 7.4 percent decrease in number of guardrail contracts, and a thirty-three percent (33%) decrease in dollar volume in this area over the same period.

Although each company did lose a significant amount of work in the guardrail area, total volume for the two
companies decreased also but not as severely as in the guardrail area. Compared to FY 79-82, Company "A" experienced a 16.4 percent decrease in total volume over the last four years, while Company "B" has seen its total dollar volume drop by 7.9 percent. These decreases are significant, but not as devastating as the reduction in guardrail work. What this implies is that each company has been awarded an increasing amount of work outside the guardrail area. As shown in Table 6.10, this has been the case for both companies. Company A has increased the number of "other" awards over the past four years by 106.5 percent. Similarly, Company B has increased this number by 162.5 percent. Dollar volumes in the areas have also risen significantly, with Company A experiencing a 33.2 percent increase while Company B has seen its work volume in this area increase by well over 400 percent over the past 4 years.

As was pointed out earlier, this type of analysis is very difficult because there are many variables that can affect the volume of work of any company. However, the information in Table 6.10, combined with the information in Tables 6.7 and 6.8 which display the increasing percentage of guardrail work performed by D.B.E.'s since the program began, suggests that the D.B.E. program is at least partly responsible for these two companies reduction in guardrail work.
However, in a general sense, this should be the case if Section 105(f) is working. The D.B.E. requirement is basically met through subcontracting, and twenty percent (20%) of most highway construction jobs are subcontracted out by the prime contractors. As was stated earlier, in order to meet this ten percent (10%) goal, at least fifty percent (50%) of all subcontract dollars must go to D.B.E.'s. Therefore, inevitably, someone is going to have to give up work in some area. The real question is, are these non-minority specialty subcontractors able to increase work in other areas sufficient enough to offset their losses in their specialty area. From Table 6.10, it is obvious that these two subcontractors were partially able to offset their losses by accepting awards in other areas.

From the two companies that were studied, it is impossible to make the generalization that this problem is a predominate one. The information was presented to illustrate that the program may have decreased business opportunities for some contractors in the guardrail area. This information does not pertain to other specialty trades. It should also be noted here that the increase in the W.B.E. work volume may have as much of an impact on non-minority contractors as the increased D.B.E. work volume.
6.8 Cost Impacts of the D.B.E. Program on Non-Minority Prime Contractors

This section and the next address the issue of cost increases due to the D.B.E. requirement for non-minority contractors as well as the IDOH. This a very controversial topic, and one which is hard to prove or disprove. Much of the information presented in the next two sections was obtained during discussions with highway contractors and IDOH personnel.

Many contractors feel that the D.B.E. requirement has cost them considerable money. From discussion with these contractors, as well as through information and ideas shared on the questionnaires, contractors cited six different reasons why the D.B.E. requirement has increased their construction costs. These reasons are listed below:

1. Extra supervision of D.B.E.'s, and redoing of D.B.E. work.

2. Having to accept D.B.E. bids which are not the lowest bid.

3. Work delays caused by D.B.E.'s.

4. Finishing work not completed by a D.B.E.

5. Having to subcontract work that previously would not have been subbed out.

6. Finding enough D.B.E.'s to do the work.
Many contractors discussed the inordinate amount of extra time and effort that they must spend when supervising a D.B.E. as compared to a previous subcontractor used. These contractors also explained that usually the reason for this was that the D.B.E. firm was young and inexperienced, and lacked the proper technical expertise to perform the task. Additional supervision by the contractor was necessary to carry out the job properly, which added to construction costs. On the other hand, some contractors who refused to provide this extra supervision, stated that they ended up redoing the D.B.E.'s work because it was unsatisfactory. This again led to increased construction costs.

Having to accept D.B.E.'s bids that were not the lowest bid was another reason for increased construction costs that almost all contractors interviewed, discussed. This is one claim that is in fact documented. As part of the good faith efforts to find sufficient D.B.E.'s for a project, contractors are obliged to accept a D.B.E.'s bid if it is within ten percent (10%) of the nearest non-minority's bid. This fact was brought up many times during the discussions, and it will undoubtedly lead to some degree of increased costs.

Work delays caused by D.B.E.'s was another reason mentioned by contractors that caused their construction
costs to increase. Many contractors said that often the successful D.B.E. firms had so much work, that they had problems allocating resources between different jobs. This led the D.B.E.'s to having insufficient resources on certain jobs, causing them to fall behind schedule which in turn causes the prime contractor to fall behind schedule. Many contractors even said that they no longer schedule D.B.E.'s for work that must be performed early in the project for this very reason.

Although less frequently mentioned, some contractors did cite examples of instances when they had to complete work started by a D.B.E. firm, because the D.B.E. went bankrupt on a job. The additional costs in these cases depended on the amount of work left by the D.B.E., as well as the extent of unpaid bills to suppliers left behind by the D.B.E. firm. Inevitably, this situation will also cause work delays.

Several prime contractors stated that due to the D.B.E. requirement, they are now forced to subcontract work that they previously had performed themselves. Extra costs in this situation were said to stem from the fact that the prime could perform the work cheaper and quicker with his own forces, as well as extra costs incurred from keeping resources idle.
The final reason for additional costs mentioned by contractors was the cost associated with finding a sufficient number of D.B.E.'s to handle the minority goal on a project. Soliciting D.B.E. participation through advertising, letters, and phone calls can be both time consuming and costly. Contractors also mentioned that this process can be very frustrating, especially when it produces an insufficient number of qualified D.B.E.'s.

There were other causes of contract cost increases but those presented were the most prevalent. As was mentioned earlier, these costs are hard to document, but certainly cannot be overlooked. Early in the D.B.E. program, when most contractors had limited experience with additional D.B.E.-related costs, the prime contractor was the one who had to bear the brunt of these increased costs. However, today, contractors say that they make allowances for such costs in their bids, and the additional costs are now being passed on to the state in the form of higher bid prices. Regardless of who is paying for these extra costs, it is important that these ideas be discussed and brought out into the open.
6.9 **Cost Impact of the D.B.E. Requirement on the State Highway Program**

Similar to the previous section, the impact of the additional costs of the D.B.E. requirement on the State Highway Program is debatable. It is hard to produce data that can verify increased costs, but it is reasonable to estimate that there are areas of the State Highway Program that have incurred increased costs since the D.B.E. requirement was implemented.

One of these areas is staffing, to carry out the D.B.E. program. In order for the program to be successful, the State must have sufficient personnel to monitor and enforce program rules and regulations. The extent to which the D.B.E. program has increased personnel at the Department of Highways is debatable. However, the state has done an excellent job of assisting D.B.E.'s and controlling "fronts", which is a direct function of the size of staff that they have employed.

There is one area of D.B.E.-related federal cost that is more definable, and that is the appropriation of funds for supportive services. These Federal funds are distributed to states for use in providing or contracting services in support of the D.B.E. program. The contract with the Indiana Department of Commerce that was discussed
earlier in this report is a good example of the use of this type of funding.

Although there may be added costs to the Department of Highways due to the D.B.E. program, it must be remembered that the quality and success of this program is dependent on the funding and personnel that are involved with this program. Without a solid program by the IDOH to monitor and enforce the regulations, the D.B.E. requirement would undoubtedly lead to widespread abuse of the program, as well as causing the contractors more additional costs.

6.10 D.B.E. "Front" or "Sham" Firms

Another impact of the D.B.E. requirement is the creation of "front" or "sham" firms. These firms are created by non-minority contractors to cash in on the 10 percent of Federal highway funds intended for minorities, or to meet the required 10 percent goal. Generally, these fronts are created in one of three ways: (1) a prime contractor may establish a new specialty enterprise by setting up a trusted minority employee as owner, (2) an established non-minority subcontractor, recognizing the additional business opportunities of minority certification, may ostensibly transfer controlling ownership of his business to a trusted minority employee, or (3)
alternatively, the established subcontractor may choose to create a separate but parallel organization, placing a trusted minority employee in charge as apparent owner. Often these parallel D.B.E.'s are operated out of the same location with both sharing the same employees and equipment. Other contractors have devised additional ways to use properly certified minority firms to front on operation. This involves the appearance that the minority firm is performing the work when in actuality it is being performed by a non-minority (16).

Hard data pertaining to the existence of fronts and related activities is, not surprisingly, scarce. In fact, the principal measure of success of a front is whether there is enough data to prove the illegality of such an organization. Never the less, this issue is brought up because it is one that has plagued the D.B.E. program since its inception.

The impact of these front activities, however are much less severe now than in the early years of the program. The IDOH D.B.E. program personnel have done an excellent job of weeding out these front organizations by increasing the number of on site visits, as well as requiring more stringent proof of ownership and control on the part of the apparent owners. The program run by the IDOH has become so investigative, that it now causes many D.B.E.'s to claim
that the requirements are too strict, and the program is now too selective. However, the Indiana program has gained control over the front phenomenon, and front activity in this state is on the wane.

6.11 **Impact of D.B.E. Requirement on Quality of Construction**

This is an issue that has also been considerably debated since the D.B.E. requirement was initiated. Some contractors interviewed felt that the quality of work performed by D.B.E.'s on Federal-aid highway projects was unsatisfactory, and that state inspectors were more lenient with those minority firms. However, the majority of contractors and IDOH personnel did agree that the prime contractor is ultimately responsible for all work performed on the project. Therefore, it is the prime's responsibility to make sure that all work must meet approved standards, which many contractors said has caused them to have to redo work that was done poorly by a minority firm.

It is doubtful then, that the D.B.E. requirement has had a significant impact on the quality of work performed on Federal-aid highway projects. This again is a difficult position to prove, but it is generally agreed that if the requirement has had an impact on quality of work, this impact will be reflected in additional costs to the contractor and to the IDOH.
CHAPTER 7 - CONCLUSIONS AND RECOMMENDATIONS

The D.B.E. program has been a controversial and fiercely debated topic since the passage of the S.T.A.A. in January of 1983. Strong opinions on this subject combined with a shortage of fully relevant data has increased the vulnerability of the program to criticism. It is hoped that this report presents a fair and balanced view of the positive and negative impacts of the IDOH D.B.E. program, and that it minimizes the temptations to make unwarranted claims for or against the program.

Although Section 105(f) was only one small aspect of the S.T.A.A., it has become a very large and complex issue in the highway construction industry, much more complex than can be reflected in this report. It is quite obvious that one's judgement of the D.B.E. program depends on one's attitude toward history, beliefs about the appropriate role of government, and circumstances of being part of a group that is involved with or impacted by the D.B.E. program itself. Hopefully, the information presented in this study
will help those who are called upon to make or influence decisions on the future of the D.B.E. program in the State of Indiana.

7.1 Conclusions

Conclusion 1. The IDOH D.B.E. program has significantly increased minority participation in the Indiana highway construction industry. Data on this participation is presented in detail in Section 6.1. In FY 82 which was prior to the implementation of the current D.B.E. program, the total value of D.B.E. subcontracts was just over two million dollars. By FY 86, this number had increased to over 28 million dollars. This tremendous increase in minority participation is undoubtedly largely due to the D.B.E. program.

Conclusion 2. The number and dollar volume of D.B.E. subcontract awards have been uniformly distributed throughout the six districts in Indiana. This conclusion is supported by data in Section 6.2 which shows the number and dollar value of D.B.E. subcontract awards for each district from FY 83-86. The average contract sizes for these districts for the same period is also shown, which again supports the effort of the IDOH in distributing D.B.E. dollars throughout the state.
Conclusion 3. D.B.E. firms are being awarded an increasing number of large contracts per year, indicating that the capacity of the average minority firm is steadily increasing. The average size subcontract awarded to D.B.E.'s has increased by nearly 76% since the first year the program was implemented. This information suggests that the capacity of D.B.E.'s in the state has been growing and they are capable of managing larger jobs. By analyzing the data in Section 6.3 it can be seen that there has been a significant increase in the number of larger awards per year, and there has been a continual decrease in the number of awards less than $25,000 which suggests growth in the capacity of the average D.B.E. firm. However, it should be noted that much of this growth has been limited to a small percentage of D.B.E. firms as is discussed in Conclusion 5.

Conclusion 4. Repeat award winning D.B.E. firms in Indiana have consistently been awarded the majority of D.B.E. dollars. This reflects the fact that these firms have established a solid reputation for themselves and have gained the confidence of the prime contractors they have worked for. Overall, the data in Section 6.5 indicates that the positive impact of the D.B.E. program is measured not only by the impressive growth in the number of D.B.E. awards and volume of highway construction dollars going to number that by and large the majority of D.B.E. firms in Indiana
that win awards in one fiscal year, will successfully win awards in future years.

**Conclusion 5.** A large percentage of the minority work in Indiana is being performed by a small group of minority contractors. Data presented in Section 6.4 shows that in each of the fiscal years 83-86, at least thirty percent (30%) of the total D.B.E. subcontract volume was performed by three minority contractors. Also, the top 10 minority contractors have performed over sixty percent (60%) of the minority work over the same period. Since at any one time of the D.B.E. program's existence, there have been approximately 100 firms certified for minority work in the State of Indiana, this means that on the average, ten percent (10%) of the eligible firms are performing over half of the available work.

**Conclusion 6.** A majority of the work performed by D.B.E.'s in Indiana is in low capital intensive specialty areas. The types of work performed by D.B.E.'s in Indiana has for the most part varied from year to year. However, in the area of guardrail, miscellaneous concrete, and construction signs, D.B.E. participation has been consistently high since the program was implemented. Guardrail especially has been a popular trend among new minority firms. The dollar value of awards in this area has grown every year from FY 83-86. In FY 86, over twenty
percent (20%) of all D.B.E. subcontract dollars was awarded in this area. However recently, other areas of highway construction not usually associated with D.B.E.'s have shown considerable increases in dollar volume and participation. This suggests that some minority firms have truly benefited from the program and are learning to manage and perform larger and more difficult jobs, while most firms are content to stay specialized and perform in those traditional areas of subcontracted highway construction.

**Conclusion 7.** The D.B.E. program in Indiana appears to be at least partially responsible for the severe reduction in the amount of guardrail work awarded to two non-minority guardrail contractors since the program's inception. While it is difficult to measure the impact the D.B.E. program has had on all non-minority specialty subcontractors, data shown in Section 6.7 was collected on two large non-minority guardrail contractors from Indiana. By comparing the two companies' number of awards and work volume in guardrail and other areas for a period of four years, before and after the D.B.E. program was implemented, it can be seen that both companies have experienced a significant decrease in their volume of guardrail work. Both companies have also experienced considerable gains in the volume of other work not related to guardrail items, which has partially offset their losses in the guardrail area. The evidence is not
totally conclusive, however this information combined with the fact that an increasing amount of dollars is awarded to D.B.E.'s in the guardrail area annually, suggests that the D.B.E. program may be at least partially responsible for these two companies reduction in guardrail work.

Conclusion 8. Although it was not possible to document, survey respondents believe that the D.B.E. program in Indiana has led to increased project costs. Many contractors and IDOH personnel alike, listed several areas in which they felt project costs have increased, but no hard evidence on this matter was obtained. Since the good faith efforts of the program does include accepting a minority bid if it is within ten percent (10%) of the nearest non-minority bid, respondents felt it is inevitable that the program has to some extent led to increased costs, however it would be very difficult to estimate the extent to which this claim is valid.

Conclusion 9. Passage of the 1987 Highway bill may significantly effect the IDOH D.B.E. program. With the passage of the 1987 highway bill, the only changes in the D.B.E. program are that it will now include women's (or W.B.E.) firms as disadvantaged, and the limit on gross annual volume of D.B.E. firms has been reduced from $17 million to $14 million. Including women as disadvantaged may seem like a minor change, however it may have a
significant impact on the program depending upon the interpretation of this change by state agencies. Some states may soon experience a high level of W.B.E. participation. Since the change in the program does not specify a specific percentage of W.B.E. participation, some legal cases may arise concerning the legitimacy of this change. Nevertheless, state agencies across the country are experiencing a flood of new W.B.E. applicants.

7.2 Recommendations

**Recommendation 1.** The IDOH should keep better records and collect data on the D.B.E. program, such as the data in Chapter Six, so that its full impacts can be measured. All of the Region V states' programs including Indiana, did not collect data or statistics that measured the impact of the D.B.E. programs on the highway construction industry in their respective states. Most states did have information on the minority firms certified, but none had the information consolidated or summarized so that inferences could be drawn on the effect the program was having outside the minority community.

All of the information in Chapter Six of this report was gathered at the IDOH office in Indianapolis. Unfortunately though, the information was not summarized or
tabulated, therefore it was impossible to completely measure all impacts of the program. Another type of statistic that could be kept is the impact that the program has had on increased project costs. Any time a minority bid is accepted that is higher than the next lowest non-minority bid, this data should be documented so that its effects could be analyzed. This type of information is most important in determining what the real underlying impacts of the D.B.E. program are.

Recommendation 2. The IDOH should consider and discuss the possibility of implementing a Mentor-Protege program. Currently, the IDOH does not support the idea of a Mentor-Protege program, while several of the surrounding states do. This type of program can benefit D.B.E. and non-minority contractors alike if it is managed properly. The two key aspects of managing a successful Mentor-Protege program are monitoring of activities, and establishing a rigid graduation period.

Monitoring of the Mentor-Program is essential to its success. Without sufficient monitoring and control of this program, it can soon become a way of legalizing "front" activity which the IDOH has worked very hard at eliminating. But, with proper guidelines and control of this program, it can become a viable alternative for increasing minority participation in the state. It can also help develop firms
into general contractors, which would help in reducing the number of specialty D.B.E.'s in Indiana.

A rigid graduation period is another important aspect of a successful Mentor-Protege program. The IDOH should develop a time frame, for example three to five years, after which time there should be no further assistance provided to the D.B.E. by the Mentor firm. If the D.B.E. cannot survive on its own after this amount of time, then it should not be considered a candidate for certification by the IDOH. These are the two most important aspects of a Mentor-Protege program that should be identified when the IDOH is discussing the possibility of such a program. It is fortunate for Indiana, that it has a state in its region that has already implemented a successful Mentor-Protege program. This state is Wisconsin, and its program was discussed in detail in Chapter Four. It is suggested that if the IDOH does seriously consider implementing a Mentor-Protege program, it should model its program after the Wis/DOT program.

Recommendation 3. The IDOH should loosen up its D.B.E. certification restrictions to promote an increase in the number of new firms certified each year. Since the D.B.E. program was implemented in Indiana, there has been a continuous increase in the dollar volume of subcontract awards to minority firms. However, there has not been as
significant an increase in the number of firms being certified each year. Therefore, the firms in the program are doing a significantly larger volume of work today than they were in FY 83. Since the program's inception, there have always been approximately 100 firms certified in Indiana. This number has fluctuated from year to year, but it has always remained at or around this level. It is interesting that this number has not increased as more dollars are awarded to D.B.E. firms each year. It may very well be that the IDOH's certification procedure is too restrictive. Certainly the IDOH has done an outstanding job of controlling the "front" and "sham" firm population in Indiana, but it seems that they may also have made it more difficult for legitimate firms to obtain certification with the IDOH. This recommendation does not imply that monitoring of firms should be reduced, only that the initial restrictions be more flexible. It is important for the program as well as for maintaining a competitive market, that more legitimate and capable firms be allowed entry into the program.

Recommendation 4. The IDOH should maintain the relationships that it currently shares with the surrounding Region V states as well as the Indiana Constructors, Inc. It is important to the Indiana program that it stay informed and up to date on all current issues related to the D.B.E.
program. These relationships in the past have helped make the IDOH program one of the most effective in the region, and in no way should these relationships be severed in the future. Both relationships provide unique viewpoints and ideas on topics related to the program, and are mutually beneficial to all of the parties involved.
REFERENCES


8. Indiana Department of Highways Disadvantaged Business Enterprise Programs, Indiana Department of Highways.


11. Minnesota Department of Transportation Disadvantaged and Women's Business Enterprise Program, Minnesota Department of Transportation, May 6, 1986.


Appendix A  Survey Questionnaires
Questionnaire Sent To Non-Minority Contractors

PURDUE UNIVERSITY

"Questionnaire on The Evaluation of D.B.E. Requirements for IDOH Construction Projects"

June 23, 1986

1. Have you had any experience with, or had any association with minority contractors?
   yes  no (PLEASE CIRCLE YOUR CHOICE FOR ALL QUESTIONS)

2. If yes, how often?
   very often  sometimes  rarely

3. Do you feel that there are enough certified D.B.E. firms in Indiana to handle 10% of the work on Federal-Aid highway projects?
   yes  no  unsure
   Comment: (Attach added pages if more space is needed)

4. Prequalification is required to bid as a prime contractor or to be awarded subcontracts in excess of $100,000.00. Have you experienced any problems with a shortage of prequalified D.B.E. firms?
   yes  no
   Comment:

5. In what areas do you feel that D.B.E.'s need more training and education? (please check all that apply)
   ( ) Reading Blueprints  ( ) Scheduling
   ( ) Estimating and Bidding  ( ) Construction Methods
   ( ) Bookkeeping  ( ) Testing Procedures
   ( ) Handling Finances  ( ) Other (specify)
   ( ) Personnel Management
   Comment:
6. Which of the following alternatives do you think would be helpful to D.B.E. firms?

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Comment:

7. How does payment by the county compare to payment by the state (quickness of payment)?
   faster  relatively the same  slower  N.A.

Comment:
Questionnaire Sent To Non-Minority Contractors

PURDUE UNIVERSITY

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June 23, 1986

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3. Do you feel that there are enough certified D.B.E. firms in Indiana to handle 10% of the work on Federal-Aid highway projects?
   yes   no   unsure

   Comment: (Attach added pages if more space is needed)

4. Prequalification is required to bid as a prime contractor or to be awarded subcontracts in excess of $100,000.00. Have you experienced any problems with a shortage of prequalified D.B.E. firms?
   yes   no

   Comment:

5. In what areas do you feel that D.B.E.’s need more training and education? (please check all that apply)

   ( ) Reading Blueprints    ( ) Estimating and Bidding    ( ) Bookkeeping
   ( ) Scheduling             ( ) Construction Methods        ( ) Handling Finances
   ( ) Testing Procedures     ( ) Other (specify)               ( ) Personnel Management

   Comment:
6. Which of the following alternatives do you think would be helpful to D.B.E. firms?

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Comment:

7. How does payment by the county compare to payment by the state (quickness of payment)?
   - Faster
   - Relatively the same
   - Slower
   - N.A.

Comment:
8. Have you in general, experienced any types of problems with D.B.E. firms that you have worked with?
yes  no  unsure
Comment:

9. Do you feel the D.B.E. program has led to increased project costs?
yes  no  unsure
Comment:

10. Do you feel the D.B.E. program has affected the quality of work performed on Federal highway projects?
yes  no  unsure
Comment:

11. Has your volume of work been affected since the initiation of the D.B.E. program?
increased  remained the same  decreased
Comment:

12. Do you feel the current program has helped develop D.B.E.'s into successful contracting firms?
yes  no  unsure
Comment:
13. In general, what do you think of the current program? (please check any of the applicable responses)

   The 10% goal should be mandatory.............. ( ) ( ) ( )
   The 10% goal should be changed............... ( ) ( ) ( )
   If yes, please give recommendation:
   The current program should be modified........ ( ) ( ) ( )
   If yes, please comment:
   The current program should be eliminated....... ( ) ( ) ( )

14. Do you feel that more Affirmative Action (such as enforced hiring goals) would be a better alternative than the current D.B.E. program?
yes no unsure
Comment:

15. Do you feel that there are any other alternatives to the current D.B.E. program that would increase minority participation in the Highway Construction Industry?
yes no unsure
If yes, please state your alternative below.

16. Would you be willing to discuss this subject in person with me; if so, please complete the following information:

   Name:
   Company:
   Address:
   Telephone: ( )
Please make any additional comments you wish concerning the D.B.E. program, problems or solutions.

Thank you for completing this questionnaire.
Please return to: Patrick Killian
Purdue University
Civil Engineering Bldg.
West Lafayette IN. 47907
Questionnaire Sent To D.B.E. Firms

PURDUE UNIVERSITY

"Questionnaire on The Evaluation of D.B.E. Requirements for IDOH Construction Projects"

June 23, 1986

1. Were you in business before the D.B.E. program was initiated?  
   yes  no  (PLEASE CIRCLE YOUR CHOICE FOR ALL QUESTIONS)
   Comment: (Attach added pages if more space is needed)

2. Do you feel that this program has increased your volume of work?  
   yes  no  unsure
   Comment:

3. In what areas do you feel that you need more training or education? (please check all that apply)
   ( ) Reading Blueprints  ( ) Scheduling
   ( ) Estimating and Bidding  ( ) Construction Methods
   ( ) Bookkeeping  ( ) Testing Procedures
   ( ) Handling Finances  ( ) Other (specify)
   ( ) Personnel Management
   Comment:

4. What types of financing problems have you experienced in the past? (please check all that apply)
   ( ) Obtaining interim Working Capital
   ( ) Meeting Requirements For Loans
   ( ) Obtaining Credit For Supplies
   ( ) High Interest Rates
   ( ) Other (specify)
   Comment:
5. Which of the following alternatives do you think would be helpful to your business?

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6. What would be the most convenient time and place for you to attend a training session?

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June 23, 1986

1. Were you in business before the D.B.E. program was initiated? 
   yes    no (PLEASE CIRCLE YOUR CHOICE FOR ALL QUESTIONS)  
Comment: (Attach added pages if more space is needed)

2. Do you feel that this program has increased your volume of work? 
   yes    no    unsure  
Comment: 

3. In what areas do you feel that you need more training or education? (please check all that apply) 
   ( ) Reading Blueprints    ( ) Scheduling 
   ( ) Estimating and Bidding    ( ) Construction Methods 
   ( ) Bookkeeping    ( ) Testing Procedures 
   ( ) Handling Finances    ( ) Other (specify) 
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Comment: 

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Comment:
7. Have you experienced problems with delays in payment from prime contractors?
   yes  no  unsure
Comment:

8. How does payment by the county compare to payment by the state (quickness of payment)?
   faster  relatively the same  slower  N.A.
Comment:

9. Do you feel the current program has helped develop D.B.E.'s into successful contracting firms?
   yes  no  unsure
Comment:

10. In general, what do you think of the current program? (please check any of the applicable responses)
    Yes  No  Unsure
    The 10% goal should be mandatory............(  )  (  )  (  )
    The 10% goal should be changed.............(  )  (  )  (  )
    If yes, please give recommendation:
    The current program should be modified......(  )  (  )  (  )
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11. Do you feel that more Affirmative Action (such as enforced hiring goals) would be a better alternative than the current D.B.E. program?
   yes  no  unsure
Comment:

12. Do you feel that there are any other alternatives to the current D.B.E. program that would increase minority participation in the Highway Construction Industry?
   yes  no  unsure
   If yes, please state your alternatives below.

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   yes  no  unsure (PLEASE CIRCLE YOUR CHOICE FOR ALL QUESTIONS)
   Comment: (Attach added pages if more space is needed)

2. Prequalification is required to bid as a prime contractor or to be awarded subcontracts in excess of $100,000.00. Have you experienced any problems with a shortage of prequalified D.B.E. firms?
   yes  no
   Comment:

3. Have you experienced any problems with the administration of contracts to D.B.E. firms?
   yes  no
   Comment:

4. In what areas do you feel that D.B.E.'s need more training and education? (please check all that apply)
   ( ) Reading Blueprints  ( ) Scheduling
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Comment:

6. Do you feel the D.B.E. program has led to increased project costs?

- yes
- no
- unsure

Comment:
1. Do you feel that there are enough certified D.B.E. firms in Indiana to handle 10% of the work on Federal-Aid highway projects?
   yes  no  unsure (PLEASE CIRCLE YOUR CHOICE FOR ALL QUESTIONS)
   Comment: (Attach added pages if more space is needed)

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   yes  no
   Comment:

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   yes  no  unsure
Comment:
7. Do you feel the D.B.E. program has affected the quality of work performed on Federal highway projects?
   yes  no  unsure
   Comment:

8. Do you feel the current program has helped develop D.B.E.'s into successful contracting firms?
   yes  no  unsure
   Comment:

9. In general, what do you think of the current program?
   (Please check any of the applicable responses)
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     | ( ) | ( ) | ( ) |

10. Do you feel that more Affirmative Action (such as enforced hiring goals) would be a better alternative than the current D.B.E. program?
    yes  no  unsure
    Comment:
11. Do you feel that there are any other alternatives to the current D.B.E. program that would increase minority participation in the Highway Construction Industry? 
   yes    no    unsure
If yes, please state your alternative below.

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Appendix B  AASHTO D.B.E. Task Force Findings and Recommendations
I. A. ISSUE/PROBLEM STATEMENT: Determining how to get more small, disadvantaged businesses involved in contracting work.

B. BACKGROUND/DISCUSSION: While the Federal Department of Transportation "DBE" implementing rule provides minimum standards, criteria, and general guidelines for "Certifying" bonafide socially and economically disadvantaged business enterprises, each state basically has tailored their certification process around the unique character and makeup of their operating environment (social, economic, and political). Thus, for the most part, there is very limited compatibility of the certification processes between adjoining states, albeit the majority of information elements are similar but to some extent different. Therefore, states generally do not accept, on face value, the certification status of a DBE certified by another state. The DBE must file a separate certification application form in each state where certification is sought.

Additionally, a great number of DBE's certified by each state appear not to be participating in the solicitation of bid requests, for whatever the reasons. This issue is further compounded to the extent that the majority of DBE's certified perform in a very limited number of work areas, such as fencing; landscaping (grassing, seeding, and sodding); guardrail; hauling; demolition; curb and gutter, etc.

This issue was therefore thought to embrace two separate themes: (1) encouragement of DBE's to participate in the program where participation is currently limited, and (2) enhancement of the capabilities of those DBE firms already participating in the program.

C. ALTERNATIVE SOLUTIONS:

1. INFORMATION SHARING (Jurisdictionally independent, but consolidated DBE/WBE Directories): One approach that may prove advantageous would be for the FHWA or AASHTO (since AASHTO is pursuing "electronic mailing" with members) to assume a "clearinghouse role" for the purpose of collecting DBE/WBE directories of firms certified by each state and consolidating into a single directory: clearly identifying the state(s) each
DBE/WBE has been certified in; sorted according to specialty type; and computerized for periodic updating. The consolidated directory would then be made available to each state, upon request, with appropriate qualification statements for appropriate interpretation. The sole purpose of consolidating this information is to share the identification, location, and specialty of DBE's/WBE's among states. Those experiencing a limited supply or voids of certain DBE/WBE specialty type contractors available to perform transportation facility contracting, will thus have an opportunity to solicit DBE's/WBE's to consider applying for certification in their jurisdictions, if interested and able.

While it is neither intended nor suggested that the role of AASHTO or FHWA be one of establishing reciprocity arrangements between states, it may be appropriate for either or both to encourage reciprocal relationships, starting with arrangements between two states, three or more states, regions (FHWA or AASHTO), etc. Such relationships/arrangements must be the result of voluntary initiatives on the part of each state.

2. DETERMINE INTEREST AND ABILITY OF DBE'S/WBE'S TO PERFORM IN OTHER STATES: States should survey their population of certified DBE's/WBE's to determine those that may be seriously interested, available, and able to perform work in other states. It may be that most legitimate DBE/WBE firms will not be able to perform work in other states, in which case, Alternative 1 (above) could prove a waste of time, effort and expense. For those DBE/WBE firms responding in the affirmative, however, each should identify those states where they are interested and able to work.

In certain states, experience has indicated that most small DBE/WBE firms are very limited in the geographic areas in which they can or will perform work. States have also experienced instances where DBE's/WBE's have difficulty moving to job sites in different parts of the same state.

Upon conclusion of such surveys, states would then be in a better position to exchange and share potentially more reliable information, productively.
3. **ONE-STOP (RECI PROCAL) CERTIFICATION:** One factor potentially inhibiting DBE's/WBE's certified in one state from wanting to participate in transportation facility construction contracting programs in adjoining states may be the time and costs incurred in applying for certification in the adjoining state(s). As stated earlier, while each state's certification process is similar, there are differences.

One solution would be the establishment of a "one-stop certification process." In effect, any DBE/WBE certified by one jurisdiction automatically would be accepted as certified by all other jurisdictions (who are a party to such reciprocal arrangements), with full reciprocity. Conversely, if denied certification or if decertified by one jurisdiction, all other jurisdictions reciprocally would honor and not accept for certification in their jurisdictions. This process can be applied within a single jurisdiction, between several mutually agreeable jurisdictions or regions, or on a nationwide basis.

4. **IMPLEMENT AN AGGRESSIVE "OUTREACH" PROGRAM:** Another approach that may be advantageous would be to implement aggressive and reasonably-funded "Outreach" programs in each state to identify, train, and develop small, disadvantaged businesses to perform transportation facility construction/maintenance contracting work, by specialty areas, according to program voids and needs of each respective state. Proposed target groups could be those firms that may now be performing "building-type" construction, or residential type work, such as driveways, walkways, patios, sidewalks, etc.

5. **SERVICE PROVIDER TECHNICAL ASSISTANCE PROGRAM:** Consideration may also be given to implementing a front-end technical assistance program, where service providers assist DBE's/WBE's in putting together more responsible bid quotations (which is an OJT-type service).

By reviewing DBE/WBE bids prior to submission (as primes/subs), the service provider can get firsthand knowledge of certain problems DBE's/WBE's may be experiencing, i.e., using outdated costs guides or no guide at all; failing to consider other costs to be
incurred; overstating actual costs; etc., and thus be in a position to educate and assist the DBE/WBE directly.

D. RECOMMENDATION: It is recommended that alternative numbers 2, 3, and 4 be adopted as reasonable means to resolve this issue/problem statement.

E. FORUM REQUIRED TO AFFECT CHANGE(S) AND IMPLEMENTATION RESPONSIBILITIES:

1. Administrative:

a. State transportation agencies should survey their universe of certified DBE's/WBE's to determine the interest and ability of each firm to perform work in other states. Those firms expressing an interest should then be listed and forwarded to AASHTO Headquarters for tabulating into a single directory that can then be shared by each state expressing an interest in potentially increasing their supply, both in terms of numbers and specialty areas.

b. States should be encouraged to utilize existing and available line-item and/or discretionary federal and state funds to implement a goal-oriented and an aggressive and effective "Outreach" program. The intent would be to identify and attract potentially certifiable DBE's/WBE's who perform the types of work subject to contracting by state transportation agencies.

c. States are encouraged to consider entering into mutually agreeable one-stop reciprocal certification arrangements with other jurisdictions (within and outside of state boundaries).
II. A. ISSUE/PROGRAM STATEMENT: Increasing the number of minority employees working for DBE's.

NOTE: This issue was eliminated from any further consideration by the Task Force inasmuch as there was no documentation trail to suggest who introduced this problem statement or why it should be considered an issue of national scope or prominence. Additionally, none of the Task Force members could relate the problem to their own state experiences or believed it was an issue unique to Section 105(f).
III. A. ISSUE/PROBLEM STATEMENT: Clearly defining ownership requirements for DBE's.

NOTE: There was unanimity among Task Force Members that this issue statement, as stated above, is relatively easy to determine, and thus does not constitute a problem. However, the other two major elements required for DBE/WBE certification (day to day management and control; and independence) are not so easy to determine or define and, therefore, must be viewed on a case by case basis.

B. RECOMMENDATION:

It was the consensus of the Task Force that this and other issues could be more fully addressed in a "Practice Manual," to be developed by the Association. The Task Force recommends that the AASHTO Executive Committee appoint a Special Committee on DBE/WBE programs with the following charge:

Special Committee on DBE/WBE Programs - The Special Committee shall review, evaluate and make recommendations to the Executive Committee on techniques and approaches for member departments to consider in carrying out Disadvantaged Business Enterprise and Women Business Enterprise (DBE/WBE) programs: gather, evaluate and report to the member departments useful information on DBE/WBE programs; and prepare and maintain a DBE/WBE suggested practices manual for use by member departments, which shall be submitted to the Executive Committee for approval and publication by the Association. The suggested practices manual shall address at minimum the following DBE/WBE program areas: certification, acceptable good faith efforts, contract compliance and enforcement methods, training and financial assistance opportunities. The Special Committee shall comprise a Chairman, Vice-Chairman, and four persons from each region of the Association, appointed by its President to two-year terms, with reappointment possible. The Executive Director or his designee shall be Secretary to the Special Committee.
IV. A. ISSUE/PROBLEM STATEMENT: Evaluating the impact of the program on the established subcontracting community.

B. BACKGROUND/DISCUSSION: There have been several iterations and charges alleging that since implementation of the DBE Program, the established non-minority subcontracting community has been negatively impacted. More specifically, representatives of the construction contracting industry have indicated that quite a few well established non-minority specialty subcontractors have been put out of business as a direct result of implementation of the DBE program. In effect, the work that used to be performed by such non-minority specialty subcontractors, is now being targeted for and performed by DBE's/WBE's, in order to meet state established DBE/WBE goals. Generally, such work is in the areas of fencing, landscaping (grassing, seeding, and sodding), guardrail, hauling, demolition, curb and gutter, and a few other select subcontracting specialty areas.

When Section 105(f) was being considered, the Congressional Record clearly reflects there was anticipation of some degree of negative impact on the existing industry. By the very nature of Section 105(f), one can readily deduce that in order to achieve ten percent (10%) of existing authorized and appropriated federal funds to a specifically targeted group (that traditionally has not enjoyed a reasonable opportunity to participate and share in the economic flow of federal funds), means that some percent of those who have been receiving and benefiting from such funds may and probably will be affected. However, it was further anticipated that the increased amounts of authorized and appropriated federal funds would, for the most part, offset the degree and extent of negative impacts on the existing subcontracting community.

C. RECOMMENDATION:

Given the structure of the federal highway program, the Task Force recognized that the DBE Program has caused certain negative impacts on the established subcontracting community, since DBE participation has been limited primarily to certain specialty areas, i.e., fencing, landscaping, guardrail, hauling, etc. However, a survey undertaken among states on the Task Force, seeking data and information to address this and related issues, was inconclusive as to the degree of impact which has occurred. After much discussion, it was concluded that for a variety of reasons, it would be very difficult to gather fully reliable and objective data on a state or national basis.
Among the problems identified related to data collection in general are:

1. Practices differ among prime contractors in how they construct a bid, and how they approach and negotiate with prospective subcontractors.

2. There is very limited historical information available on subcontractors and how they have functioned under state highway programs in past years.

3. State highway programs themselves change in both size and emphasis, from year to year, resulting in significant variations in the amount of contractual work available, and often a combination of reasons results in a decision to cease operations.

AASHTO's existing policy statement encourages fairness and equity in the implementation of the DBE Program as a means to minimize negative impacts on the established subcontracting community. The Task Force reaffirms the concept of fairness and, to that end, recommends several specific items for consideration by the states:

1) Data Collection: States are encouraged to undertake data collection efforts to gain a better understanding of the degree and nature of impacts on the established subcontracting community, recognizing that fully reliable and determinative data will be difficult to obtain.

2) Program Management/Administration:

   a) States are encouraged to work with their prime contractors in a joint effort to assist DBE subcontractors to become proficient in specialty areas other than the limited and saturated areas in which they currently participate.

   b) States are encouraged to provide open forums to enhance communications: both between state agencies and subcontractors, who believe their business has been negatively impacted; and between prime contractors and subcontractors in general. This type of open communication
will serve as a means to evaluate and document impacts on a case study basis and add to existing data and information related to this issue.

c) States should strive to remove barriers to and assist with the development of DBE subcontractors to prime contractor status and with the creation of joint ventures to increase contracting opportunities.

d) Similarly, individual construction projects, where feasible, should be disaggregated so that the number of potential contract opportunities is increased and the dollar value per contract is decreased, to encourage DBE participation in non-traditional areas.
V. A. ISSUE/PROBLEM STATEMENT: Providing meaningful training programs and technical assistance.

B. BACKGROUND/DISCUSSION: On its merits, this statement deductively suggests that either existing training and technical assistance programs are not meaningful, or that there are "no" meaningful training and technical assistance programs being provided. This has to be viewed on a state by state basis.

For any training and technical assistance programs to be meaningful and effective, one must first establish program goals and objectives, and a fixed timeframe for accomplishment, based on appropriate funding caps, and then develop meaningful and reasonable measures and milestones to assess periodic program achievement. Existing funding levels for training are considered to be woefully inadequate and have not kept pace proportionate with the size of programs being administered by the states. To establish "meaningful training and technical assistance programs" with meaningful and measurable goals and objectives will require a significant increase in funding level authorizations. Most DBE supportive services training programs are provided by consultants and service providers. The one comment heard consistently from DBE's/WBE's is that the only group that can effectively provide meaningful training to DBE's/WBE's is transportation facility construction contractors themselves. DBE's/WBE's and other small contractors have also complained that they are unable to attend any classroom training programs because, as small contractors, they put in an average 16 to 18 hour workday during weekdays. Weekends are devoted to cleaning up office administrative chores, such as paying bills, ordering supplies, writing letters and memos, filing, reproducing documents, etc.

C. ALTERNATIVE SOLUTIONS:

1. STRUCTURED ON-THE-JOB TRAINING AND MANAGEMENT DEVELOPMENT PROGRAM: This concept would establish a structured and intense "hands-on" training and technical assistance program, tailored to specific needs of each certified DBE/WBE. A "Needs Assessment Proficiency Mechanism" (to determine technical, administrative, and managerial competence to successfully compete for and
perform transportation facility construction contracting work) would need to be developed and administered to existing certified DBE's/WBE's and those to be certified in the future, in order to identify specific competencies, deficiencies, and training needs of each DBE/WBE. Those with identified deficiencies would be scheduled for tailored hands-on training, to be administered by state contracted "service-providers," while performing an actual construction project, based on the competitive awarding and subsequent conduct of a transportation facility construction contract or subcontract.

a. In the case of a direct award from a transportation agency to a certified DBE/WBE, training and technical assistance (both skillcraft and administrative/managerial) would be provided by other contracted service providers (could be one or more, depending on specific needs), and would be administered during the conduct of the contract, in a fashion similar to the "CEI" concept (construction management, engineering, and inspection).

Upon conclusion of a construction project (programmed not to fail, based on specialized technical training and assistance provided), the DBE/WBE would receive a certificate attesting to each of the specific training modules successfully completed. After completing all required training modules, according to the results of the initial "needs assessment," and upon subsequent passing of the "proficiency mechanism," DBE's/WBE's would be certificated by each state as being reasonably and adequately competent and able to compete with other contractors in the marketplace. This certification would not preclude the DBE/WBE from continuing to participate in the overall DBE Program.

b. In the case where the DBE/WBE is a subcontractor, the prime would be responsible for providing certain training and technical assistance, based on specific needs that the prime can adequately satisfy and is appropriately compensated by the state transportation agency, through a bid item contract provision (for further discussion of this provision, see Alternative #2 below). Additionally, the DBE/WBE would receive
additional training and technical assistance from other providers of business and project management services, such as CPA's, auditors, attorneys, etc. This approach is an expansion of the "Mentor-Protege" concept.

It is proposed that this concept (explained in more detail in Appendix B), if seriously considered, be adequately financed to ensure program success and achievement of legislative intent and eventual elimination of the need for legislation such as Section 105(f).

2. CONTRACT PAY ITEM: This potential solution suggests the establishment of a construction contract pay item (fixed hourly rates with a maximum amount to be paid), according to identified needs and specialized training and technical assistance to be provided to the DBE/WBE. Such training and assistance would be monitored and evaluated for quality control and compliance, by either (a) state agency project personnel; and/or (b) civil rights contract compliance personnel. While this training provides technical assistance in the actual carryout of the work effort, the most crucial training needed is in the area of putting together reasonably responsible bid quotations, without which, there is no contract to carry out any work whatsoever. Great care should be exercised by states in drafting appropriate contract provisions.

3. BID DOCUMENT ASSISTANCE: As stated above, the most crucial training and assistance needed by DBE's/WBE's has to start with compiling a technically sound and responsible bid quotation. Under this concept, DBE's/WBE's would be notified, on a monthly letting basis, that the state transportation agency has retained a number and variety of multi-disciplined service providers, who are strategically and geographically located around the state (generally in SMSA's), and are available to assist them (does not mean the service provider will do the work), upon request, whenever DBE's/WBE's may be requested by a prime to respond to a bid solicitation. After this service has been made available (XXX) times the specific DBE/WBE would no longer be eligible for this particular service. This type of service would help to ensure that the DBE/WBE learns to subscribe to certain technical guides and manuals needed to perform a viable business according to the specialty of the firm; how to
read, interpret, and use the proper industry standards and costing guides; how to interpret the full scope of work to be performed; considers all costs to be incurred; understands critical scheduling of resource needs; how to read plans and specs; how to do takeoffs and estimates; etc.

This program effort is deemed to be extremely critical, in that a major complaint normally received from DBE's/WBE's involves the prime negotiating the DBE's/WBE's prices down. Normally, DBE's/WBE's do not realize that they will be losing money until after the fact. Therefore, as a part of assisting the DBE/WBE put together a technically sound and financially responsible bid quotation, contracted service providers would also educate DBE's/WBE's on break-even costing. The DBE/WBE should then be reasonably knowledgeable of the extent of costs negotiations with primes, and should be better prepared and equipped to stop negotiations, based on a fixed percent or dollar value, either above or below the break-even threshold, depending on market influences and conditions.

D. RECOMMENDATION: It is recommended that all three of the above alternatives be considered for adoption at the state level as a single recommendation.

E. FORUM REQUIRED TO AFFECT CHANGE(S) AND IMPLEMENTATION RESPONSIBILITIES:

1. Administrative:

   a. State - Each state interested in implementing any or all of the above alternatives would be responsible for:

      (1) Development of:

          (a) A Proficiency Mechanism;
          (b) Service Provider Contracts;
          (c) A Structured On-The-Job Training and Management Development Program;
          (d) Contract Monitoring Responsibilities;
          (e) A Tailored Mentor-Protege Program; and
          (f) Contract Pay Item Specifications.
(2) Potential Revisions to:

(a) state statutes;
(b) rules, policies, and governing procedures;
(c) bid documents;
(d) monitoring and reporting forms, etc.

States would also be responsible for administering and managing "service-provider" contracts throughout the state.

b. Industry - On contracts with a designated pay item for DBE/WBE training and technical assistance, successful prime contractors, who subcontract with certified DBE's assessed as requiring specific technical training, would be responsible for providing the required training and technical assistance, and would be monitored and evaluated for compliance, for cost reimbursement, just like any other contract bid item specification.
VI. A. ISSUE/PROBLEM STATEMENT: Defining "good faith efforts."

B. BACKGROUND/DISCUSSION: For the most part, the term "good faith efforts" took on a distinctly different meaning when the program was converted from a MBE Goal program, to a DBE Mandated Goal program. In this respect, "ONLY CERTIFIED DBE'S/WBE'S" could be used to satisfy DBE/WBE contract goals. To this extent, most states and the contracting industry have tried to come up with improved guidance, directions, instructions, and/or formats for documenting "demonstrable" good faith efforts that would be clearly understood by all and acceptable by the states.

As an example, it appears to be quite ludicrous and a waste of time, effort, and money to require a prime contractor, as a valid and acceptable good faith effort, to advertise in local newspapers, magazines, periodicals, trade publications, and other minority-focus media, concerning subcontracting opportunities, when it is clear that the only firms eligible for use in satisfying the mandated goals are state-certified DBE's (a listing of which is available from the state transportation agency). However, such an effort would certainly be a valid consideration when the prime submits, for approval, the firm's "Annual Affirmative Action Program Plan."

C. ALTERNATIVE SOLUTIONS:

1. THE IDAHO PROPOSAL: Building on a reasonably comprehensive "DBE/WBE Commitment" proposal package, designed by the State of Idaho to assist contractors in identifying and documenting efforts expended to achieve pre-determined DBE/WBE contract goals, the Task Force endorsed a formatted guide concept, found in Appendix C, as a means to improve methods for documenting good faith efforts.

2. CLEARLY DEFINE AND PROVIDE EXAMPLES: While "advertising" was previously considered to be a non-demonstrable "good faith effort" related to the DBE Program, it is also not considered to be a good faith effort when a prime contractor sends a bid solicitation for bridge pilings and foundation work to a DBE whose critical specialty is fencing. While these examples suggest those deeds not considered to be demonstrable "good faith efforts," it becomes incumbent to define, by example, what are considered to be demonstrable good faith efforts, using clearly understood examples.
D. RECOMMENDATION: This issue is recommended to be more fully addressed by inclusion in the proposed "Practice Manual" referred to under issue/problem statement #3. The "Practice Manual" was thought to be appropriate for documentation of clearly understood examples of acceptable good faith efforts, and for displaying suggested information formats such as those found in Appendix C.
VII. A. ISSUE/PROBLEM STATEMENT: Evaluating the process of applying DBE program goals to areas consistent with the availability of minority contractors.

B. BACKGROUND/DISCUSSION: The "key" to a full understanding and appreciation for the profoundness of this issue/problem statement appears to lie in the term: "Availability." While a firm may be listed as a certified DBE/WBE, and appears to be available for work; there is presently no information being maintained that identifies whether a DBE/WBE firm has enough work under way and/or committed to that will keep the firm busy for an extended period of time (which may and probably does include county work, city work, and/or private enterprise work).

In most states, DBE's/WBE's are certified as bonafide socially and economically disadvantaged individuals "ONLY," in which case certification does not verify the capability nor capacity of specialty work the firm alleges it is qualified to perform. However, if the firm performs work in excess of specified threshold amounts (in certain states), then the firm must seek to be "prequalified" in order to assess the full range of the firm's capabilities, allowing the state to assign the firm a capacity rating. Since prequalification can be an expensive proposition, even for large prime contractors (approximately $40,000 for a certified financial statement, among other things), to impose such a process on DBE's/WBE's, who generally do not perform at the higher dollar volumes, would be cost-prohibitive and potentially discriminatory (unless such a process were to be extended to all other non-DBE/WBE contractors and subcontractors).

Additionally, in order for a "goal" program to work effectively and efficiently, there must be a reasonable mix of the supply part of the equation in the marketplace to meet the work demand. Without such a mix, the probability of opportunists (fronts and frauds) seeking to capitalize on a program's vulnerability is heightened.

C. ALTERNATIVE SOLUTIONS:

1. AMEND CERTIFICATION APPLICATION FORM - One approach to consider would be to amend existing certification application forms to provide for a "mini prequalification" provision. By requiring a minimum number of additional information elements, agencies will be able to provide some unqualified indication of the alleged capability
and potential capacity of each certified DBE/WBE, without an unequivocable and fully validated "qualification" statement. In fact, from a liability point of view, it is strongly suggested that all states consider placing disclaimer statements in their DBE/WBE Directories, that have been thoroughly reviewed by legal technicians.

2. **ESTABLISH "GOAL-SETTING" COMMITTEES** - This approach suggests the appointment of a multi-disciplined and experienced committee. Committee makeup should be determined by each state desiring to implement this approach. In determining committee composition, states may want to consider appointments, according to: knowledgeable and experienced personnel within the diverse organization structure of the transportation agency; industry makeup and desire to participate (including DBE representation); and FHWA Division Office representation.

The Committee would meet the month before each bid-letting, for the purpose of reviewing each contract going to bid, to identify the potential match between the "assumed availability, capability, and capacity" of certified DBE's/WBE's, and work items contained in projects to be let. Such a process helps to ensure that contracts with goals provide a reasonable and realistic opportunity for DBE/WBE participation.

It must be made clear that neither the Committee nor the highway or transportation agency should dictate to the prime contractor which work items the prime should subcontract.

When the Committee finishes setting goals for those projects to be let the following month, they must then tabulate the total dollar value and percent of goals set against the net dollar value and percent of all contracts to be let. If the goals set are at least at the minimum of the state's committed annual goal, with a reasonable "cushion" to allow for some degree of acceptable "good faith efforts," then the Committee has done a good job. If not, they must revisit, reassess, and possibly consider increasing certain goals.
D. **RECOMMENDATION**: The Task Force recommends that both alternatives be pursued, as each provides unique merits to resolving this issue/problem.

E. **FORUM REQUIRED TO AFFECT CHANGE(S):**

This recommendation can be resolved administratively.

F. **IMPLEMENTATION RESPONSIBILITIES:**

1. **States** - Each state desiring to implement these recommendations would have to revise their certification application forms and appoint members to a "Goal Setting Committee."

2. **Industry** - DBE's/WBE's would have to provide additional information in seeking certification from each state.
VIII. A. ISSUE/PROBLEM STATEMENT: Determining ways to minimize project delays and additional costs that are being experienced.

B. BACKGROUND/DISCUSSION: The above statement suggests that state transportation agencies and construction contractors are experiencing project delays and additional costs as a direct result of problems associated with administering the DBE/WBE Program. While several efforts have been made to attempt to qualify and quantify the degree and extent of these problems, such efforts have produced little or no meaningful or conclusive documentation. The most recent effort was undertaken and conducted by the chief financial officers of the nine states represented by members of the AASHTO DBE Task Force. The result of this latest effort reflected there is no reliable existing data to be able to factually and conclusively document project delays and additional costs directly related to the DBE Program.

C. RECOMMENDATION:

1. It is recommended that AASHTO consider assigning the task of developing uniform and standardized data collection tools and techniques to the Special Committee on DBE/WBE Programs proposed under issue/problem statement #3. The product to be designed and developed can then be utilized by interested states to attempt collection of factual and conclusive data and information to substantiate, qualify, and quantify the cause and scope of project delays and additional costs directly attributable to administration of the DBE Program.

2. It is further recommended that states experiencing these type problems and who express an interest in undertaking the implementation of project-specific data collection efforts and techniques, be provided with the product to be developed by the Special Committee.
Appendix C  FHWA Mentor-Protege Guidelines
Mentor-Protege
A DBE/WBE Development Program

Many of the firms now recognized as leaders in the transportation industry started their business experience as subcontractors or suppliers of specialized services in response to specific needs. Lacking in sufficient capital or the technical and managerial experience necessary to assure long-term success of their ventures, special relationships often developed between engineers, contractors, suppliers, and others. Simply stated, established firms provided fledgling firms with specialized assistance when the arrangement was mutually beneficial: a mentor/protege relationship in response to a special need.

When the Congress enacted the Surface Transportation Assistance Act (STAA) of 1982 and mandated that a substantial share of the annual allocations from the Federal Highway Trust Fund shall be expended with disadvantaged businesses, it created a national special need: a need to insure the availability of sufficient numbers of qualified Disadvantaged Business Enterprises (DBE) capable of working in highway related activities to not only meet the congressionally mandated goals but to do so without compromising the competitive bid process.

The Federal Highway Administration (FHWA) believes that the mentor/protege partnership can be a legitimate relationship with potential to greatly expand disadvantaged or women owned businesses (DBE/WBE) participation in the Federal-aid Highway Program.

General Program Guidelines

The mentor/protege concept is an optional approach available to assist the State Highway Agencies (SHA) and contractors to meet the requirements of both the Surface Transportation Assistance Act (STAA) of 1982 and 49 CFR Part 23. It offers an opportunity to gain information and experience in a productive work situation to both (a) established DBE/WBEs working to expand their present capacity, and (b) less experienced DBE/WBEs needing training and assistance.

Should a State Highway Agency (SHA) choose to recognize mentor/protege relationships, formal statewide guidelines should be developed. The guidelines should be submitted to FHWA for review and approval. The following information is acceptable guidance in the development of a DBE/WBE mentor/protege program:

1. DBE/WBEs who meet the certification requirements of 49 CFR 23 are eligible for participation in a mentor/protege arrangement. An SHA may grant approval of a DBE/WBE application for certification concurrently with its approval of a mentor/protege arrangement.

2. In all cases, the DBE/WBE firm must be an independent organization, and the ownership by the disadvantaged individual(s) must be real. This does not preclude other employment and/or business interests by the disadvantaged or women owners of the DBE/WBE firms, provided such employment or business interests do not conflict with the power of the minority or women owners to direct or cause the direction of the management and policies of the DBE/WBE firm to make the day-to-day as well as major decisions on matters of management, policy, and operations (see 49 CFR 23.53 Eligibility Standards).
3. The mentor/protege program is intended to provide DBE/WBE firms with advice and assistance and/or training. The program is not intended to provide DBEs and WBEs with a means to avoid management and operational responsibilities. Therefore, the mentor cannot be responsible for the management of the DBE/WBE firm. Under the program, administrative functions must be performed by personnel responsible to or employed by the DBE/WBE at facilities or locations under the control of the DBE/WBE. Such facilities or locations may be provided the DBE/WBE by the mentor; however, a separate written lease agreement covering such arrangements should be utilized. The mentor and the DBE/WBE must remain separate and independent business entities.

4. Part ownership in a DBE/WBE by a non-disadvantaged entity, including a mentor, is permitted by the regulations (49 CFR 23). However, any property, equipment, supplies, or other services which are sold, rented, or donated to the DBE as well as any investment by non-disadvantaged individuals must be reported to the SHA in the mentor/protege development plan and should further be covered by bills of sale, lease agreements, etc. Furthermore, any financial investment by the mentor must not create a situation wherein the mentor may assume control over the protege.

5. The mentor/protege relationship may include, when not in conflict with State law, an arrangement by mutual consent in which an independent third party, such as a bank or an accountant, is designated as an agent for the DBE. Such agents could receive progress payments for work accomplished by the DBE, made out jointly to the agent and the DBE, and make payments, on behalf of the DBE, to material suppliers or for Federal and State payroll taxes, etc.

6. There are several common types of assistance which a mentor might provide to a DBE/WBE contractor. These include:

(a) Financial Arrangements:

   A common type of assistance provided by a mentor would be working capital. Time notes and stock issuance are generally accepted legal instruments by which a DBE/WBE may obtain working capital. Demand notes, referenced in earlier guidance, also fall into this category; however, their use is less desirable due to the inherent susceptibility for abuse through their recall feature. If stock issuance is the method chosen by the parties to arrange for the financing, the total amount of the DBE/WBE stock ownership must be at least 51 percent in order to retain its DBE/WBE certification. In no case can the day-to-day control of the firm be relinquished by the disadvantaged owner as a requirement of the loan.
(b) Technical and Management Assistance:

A successful mentor can provide valuable training in the technical aspects of operating a highway construction, material supply, engineering or other transportation related business to a DBE/WBE firm which may be relatively inexperienced. In addition, the mentor can also provide advice on project management and in particular make the DBE/WBE aware of techniques which may improve productivity and competitiveness. Other areas where training may be of benefit are in plan interpretation, estimating, and cost accounting metrics. In each of these areas, however, the DBE/WBE contractor must retain the final decisionmaking responsibility.

(c) Equipment Rental and Use of Personnel:

A DBE/WBE contractor may need to lease equipment or augment its workforce with additional skilled personnel in order to perform certain work. It may work to the mutual benefit of the mentor and the DBE/WBE protege to arrange for the needed equipment through leasing agreements. Likewise, in limited instances, the mentor may provide personnel (with specialized expertise) to the DBE/WBE protege, provided the worker is under the direct supervision of the DBE/WBE firm for the performance of the particular contract work. Under such a relationship, the mentor should provide not more than a small portion of the personnel needed by the DBE/WBE. Long-term, continual, or repetitive use by a DBE/WBE subcontractor of personnel primarily employed by the mentor will be construed as an attempt to artificially inflate DBE/WBE participation. The extent to and conditions under which the DBE/WBE utilizes personnel or equipment of the mentor should be specifically outlined in the development plan (See Development Plan subpart 5).

(d) Bonding:

In the long term, it is desirable for the DBE/WBE to bond jobs on their own, in order to establish a relationship and track record with a surety company. The DBE/WBE will eventually need to obtain bonding on its own if it anticipates working in highway contracting as a prime contractor after a mentor/protege relationship is dissolved. This notwithstanding, there are at least two ways in which a prime contractor commonly assists subcontractors with bonding. In many instances, the prime contractor will bond the entire job and will in turn charge his subcontractors their prorata share of the bond cost. In other instances, the prime contractor may bond the entire job and "carry" its subcontractors, absorbing the cost of the bond itself. Either of these instances may be applicable to a prime contractor/mentor and DBE/WBE subcontractor relationship.
7. The examples discussed in paragraph 6 are not meant to be exclusive. Other methods of encouraging and supporting DBE/WBEs may be allowable under the regulations.

8. An area of special concern is exclusive arrangements. While State statutes may vary somewhat, Federal antitrust statutes are concerned with contracting arrangements which may limit competition. Any relationship in which a mentor requires a DBE/WBE contractor to have an exclusive bidding agreement may violate Federal antitrust laws with respect to limiting competition. During the course of the relationship, the DBE/WBE contractor must have the latitude to contract with others.

9. Unacceptable Practices Include:

   (a) Any subcontracting arrangement which artificially inflates DBE/WBE participation is not acceptable. Of particular concern are the interjection of DBE/WBE middlemen or passive conduits and arrangements in which a DBE/WBE prime or subcontractor is acting essentially as a broker.

   (b) The mentor firm shall not enter into any agreement on behalf of the DBE/WBE.

   (c) Backcharges for equipment, etc., exceeding customary prices.

   (d) Any agreement written or oral which gives the mentor undue control or leverage over the protege.

IT MUST BE NOTED THAT THE MENTOR/PROTEGE ASSISTANCE PROGRAM IS NOT INTENDED TO DIMINISH OR CIRCUMVENT EXISTING DBE/WBE RULES OR REGULATIONS, BUT RATHER IS INTENDED TO INCREASE LEGITIMATE DBE/WBE ACTIVITIES. ABUSE OF THIS PROGRAM MAY BE USED AS THE BASIS FOR ACTIONS AGAINST BOTH CATEGORIES OF FIRMS INCLUDING SUSPENSION OR DEBARRMENT.

Development Plan

All mentor/protege relationships should be evidenced by a written development plan, approved by the SHA. The following guidance should be considered in the development of such plans:

1. Copies of the development plan should be retained by all parties to it, and by the SHA.

2. The development plan should clearly set forth the objective of the parties and their respective roles.

3. The development plan should be for a specified length of time, e.g., 3 years, or for the duration of a specified contract or series of contracts (subcontracts).
4. The development plan should describe measurable benchmarks to be reached by the DBE/WBE at successive stages of the plan.

5. The development plan should provide that if resources of the mentor are utilized by the DBE/WBE firm in the performance of contracts or subcontracts for the mentor or for another contractor, the resources must be separately identified, accounted for, and compensated directly by the DBE/WBE to the mentor. If the plan provides for extensive use of the mentor's resources by the DBE/WBE firm, the arrangement should be closely scrutinized.

6. The development plan may also include training to be provided by the mentor to the DBE/WBE. Such training include:
   - Business planning
   - Recordkeeping
   - Technical
   - Capital formation
   - Loan packaging
   - Financial counseling
   - Bonding
   - Equipment utilization

7. The development plan should contain a provision that it may be terminated by mutual consent or by the SHA upon determination that:
   (a) The protege firm no longer meets the eligibility standards for certification as a DBE/WBE.
   (b) Either party has failed or is unable to meet its obligations under the development plan.
   (c) The DBE/WBE is not progressing or is not likely to progress in accordance with the development plan.
   (d) The DBE/WBE has reached a satisfactory level of self-sufficiency to compete without resorting to special treatment provided in the development plan.
   (e) The plan or provisions thereof are contrary to the requirements of Federal, State or local law or regulation, or otherwise inimical to public policy.

8. The development plan may include a provision that the arrangement may be dissolved by either party for reason by notifying the SHA.
Mentor-Protege Programs Progress Report

The Federal Highway Administration issued its Mentor-Protege Guidelines on January 25, 1985. This is a summary of the status of State adoption of programs under these guidelines.

1. State programs submitted and approved (9)
   - Arkansas
   - Kansas
   - Minnesota
   - Missouri
   - New Hampshire
   - Oklahoma
   - Tennessee
   - Vermont
   - Wisconsin

   (Maine is operating under a pre-existing program previously approved).

2. State programs submitted pending FHWA approval (3)
   - Arizona
   - Louisiana
   - Pennsylvania

3. State programs under active development, but not yet submitted (5)
   - California
   - Connecticut
   - Delaware
   - New Jersey
   - Rhode Island

4. State programs under consideration for development (10)
   - Alabama
   - Alaska
   - Michigan
   - New York
   - Oregon
   - South Dakota
   - Utah
   - Virginia
   - Washington
   - West Virginia

5. States indicating no present interest in the development of programs (23)
   - Colorado
   - D.C.
   - Florida
   - Georgia
   - Hawaii
   - Idaho
   - Illinois
   - Indiana
   - Iowa
   - Kentucky
   - Maryland
   - Massachusetts
   - Mississippi
   - Montana
   - Nebraska
   - Nevada
   - New Mexico
   - North Carolina
   - North Dakota
   - Ohio
   - South Carolina
   - Texas
   - Wyoming
Appendix D  IDOH D.B.E. Program Good Faith Efforts
The following represents factors which will be considered in determining good faith efforts. The Contractor is required to be prepared to respond and submit evidence on each of the factors.

1. The Contractor shall contact all OBEs and/or WBEs interested in bidding on items selected by the Contractor for subcontracting. To effectively participate, the OBE or WBE should be able to analyze and submit bids prior to letting. Contacts shall be either by telephone or written notice. Telephone contacts should be followed up through written confirmation of telephone conversation.

2. All other active certified OBEs and/or WBEs that perform the type of work to be subcontracted and who will perform in the geographic location shall be notified if efforts taken in paragraph H.1. do not result in the Contractor meeting the OBE and/or WBE goal.

3. Information provided by the Contractor to the OBE or WBE shall include at a minimum, contract number, location of contract, letting date, items and quantities of those items to be subcontracted, date subcontract bid desired, and date of bid.

4. The Contractor shall notify the OBE or WBE at least 7 days prior to date the Contractor desires quotes in hand. (Extra days should be considered for holidays).

5. The Contractor shall follow up initial written solicitations with telephone contacts to determine if OBEs and/or WBEs that had not responded received written notice of contract and were interested. Telephone contact should also be made with OBEs and/or WBEs that had indicated through initial contact that they would submit a bid, but had not had desired time. These telephone contacts are not necessary if the Contractor has received satisfactory bids from other OBEs and/or WBEs on the old items in question. Although goals may be obtained through one item, positive affirmative actions are required on all subcontractors.

6. The Contractor shall select portions of work to be performed by OBEs and/or WBEs which will increase the likelihood of OBE and/or WBE participation.

7. The Contractor shall attempt to break down the contract into economically feasible units to facilitate OBE and/or WBE participation.

8. The Contractor shall provide the interested OBEs and/or WBEs with complete information about the plans, specifications and requirements of the contract, especially potential problem areas. Attempts should be made to have plans available and to notify the OBE and/or WBE of the location of available plans. The Contractor shall notify the OBE and/or WBE of revisions to the contract which could be overlooked or not received by subcontractors.

9. The Contractor shall apply affirmative action to his/her review and award of subcontractors.

   a. Bids received from OBEs and/or WBEs which are within 10 percent of the low bid of a majority firm shall be considered by the prime contractor in awarding subcontracts when necessary to meet the goal on joint contracts.

   b. Contractors not subletting to OBEs and/or WBEs because it may require subletting some of the work they may do is not an acceptable reason not to sublet to OBEs and/or WBEs.
10. The Contractor shall consult in good faith with interested DBEs and WBEs, not rejecting the DBEs or WBEs as unqualified without sound reasons based on a thorough investigation of their capabilities. Sound reason is defined as confirmed documentation that the DBE or WBE has not been able to perform previous jobs through no fault of others. Criteria that is not acceptable includes but is not limited to face value hearsay, and unsigned documentation.

11. The Contractor shall make efforts to assist interested DBEs and/or WBEs in obtaining bonding, lines of credit, or insurance required by the State or Contractor. Bonding is not required for subcontractors by the Indiana Department of Highways, however the Contractor shall affirmatively consider waiving any requirements they may have, to assist the DBE and/or WBE.

12. In addition to the Indiana Department of Highways, the Contractor should effectively use, when feasible, the services of available minority community organizations, minority contractors' groups, local, State and Federal minority business assistance offices, and other organizations that provide assistance in the recruitment and placement of DBEs and WBEs. The Indiana Department of Highways certified DBE/WBE list is the only accepted list for the Indiana Department of Highways DBE Program. However, the State Office of Minority Business Enterprise or other agencies or organizations lists may be used as long as the Indiana Department of Highways confirms that the certification is comparable to the Indiana Department of Highways certification and the applicant submits a request for certification to the Indiana Department of Highways. If a DBE or WBE is referred by another organization and is not certified, efforts to certify the DBE or WBE could be initiated in sufficient time to meet the requirements.
IMPLEMENTATION PLAN

AN EVALUATION OF
DISADVANTAGED BUSINESS ENTERPRISE
REQUIREMENTS FOR INDIANA
DEPARTMENT OF HIGHWAYS
CONSTRUCTION PROJECTS

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Purdue University
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IMPLEMENTATION PLAN

The conclusion of the researchers concerning the Disadvantaged Business Enterprise Program of the Indiana Department of Highways is that the IDOH is doing a good job in managing its D.B.E. program and in complying with the Surface Transportation Assistance Act requirements. Several specific conclusions are outlined in the final report on the project. There were four recommendations suggested for improvement of the program which should be easy to implement if desired; the four recommendations are:

Recommendation 1. The IDOH should keep better records and collect data on the D.B.E. program, such as the data in Chapter Six, so that its full impacts can be measured. All of the Region V states' programs including Indiana, did not collect data or statistics that measured the impact of the D.B.E. programs on the highway construction industry in their respective states. Most states did have information on the minority firms certified, but none had the information consolidated or summarized so that inferences
could be drawn on the effect the program was having outside the minority community.

All of the information in Chapter Six of this report was gathered at the IDOH office in Indianapolis. Unfortunately though, the information was not summarized or tabulated, therefore it was impossible to completely measure all impacts of the program. Another type of statistic that could be kept is the impact that the program has had on increased project costs. Any time a minority bid is accepted that is higher than the next lowest non-minority bid, this data should be documented so that its effects could be analyzed. This type of information is most important in determining what the real underlying impacts of the D.B.E. program are.

Recommendation 2. The IDOH should consider and discuss the possibility of implementing a Mentor-Protege program. Currently, the IDOH does not support the idea of a Mentor-Protege program, while several of the surrounding states do. This type of program can benefit D.B.E. and non-minority contractors alike if it is managed properly. The two key aspects of managing a successful Mentor-Protege program are monitoring of activities, and establishing a rigid graduation period.

Monitoring of the Mentor-Program is essential to its
success. Without sufficient monitoring and control of this program, it can soon become a way of legalizing "front" activity which the IDOH has worked very hard at eliminating. But, with proper guidelines and control of this program, it can become a viable alternative for increasing minority participation in the state. It can also help develop firms into general contractors, which would help in reducing the number of specialty D.B.E.'s in Indiana.

A rigid graduation period is another important aspect of a successful Mentor-Protege program. The IDOH should develop a time frame, for example three to five years, after which time there should be no further assistance provided to the D.B.E. by the Mentor firm. If the D.B.E. cannot survive on its own after this amount of time, then it should not be considered a candidate for certification by the IDOH. These are the two most important aspects of a Mentor-Protege program that should be identified when the IDOH is discussing the possibility of such a program. It is fortunate for Indiana, that it has a state in its region that has already implemented a successful Mentor-Protege program. This state is Wisconsin, and its program was discussed in detail in Chapter Four. It is suggested that if the IDOH does seriously consider implementing a Mentor-Protege program, it should model its program after the Wis/DOT program.
Recommendation 3. The IDOH should loosen up its D.B.E. certification restrictions to promote an increase in the number of new firms certified each year. Since the D.B.E. program was implemented in Indiana, there has been a continuous increase in the dollar volume of subcontract awards to minority firms. However, there has not been as significant an increase in the number of firms being certified each year. Therefore, the firms in the program are doing a significantly larger volume of work today than they were in FY 83. Since the program's inception, there have always been approximately 100 firms certified in Indiana. This number has fluctuated from year to year, but it has always remained at or around this level. It is interesting that this number has not increased as more dollars are awarded to D.B.E. firms each year. It may very well be that the IDOH's certification procedure is too restrictive. Certainly the IDOH has done an outstanding job of controlling the "front" and "sham" firm population in Indiana, but it seems that they may also have made it more difficult for legitimate firms to obtain certification with the IDOH. This recommendation does not imply that monitoring of firms should be reduced, only that the initial restrictions be more flexible. It is important for the program as well as for maintaining a competitive market, that more legitimate and capable firms be allowed entry into the program.
Recommendation 4. The IDOH should maintain the relationships that it currently shares with the surrounding Region V states as well as the Indiana Constructors, Inc. It is important to the Indiana program that it stay informed and up to date on all current issues related to the D.B.E. program. These relationships in the past have helped make the IDOH program one of the most effective in the region, and in no way should these relationships be severed in the future. Both relationships provide unique viewpoints and ideas on topics related to the program, and are mutually beneficial to all of the parties involved.