

# **MONTANA DEPARTMENT OF TRANSPORTATION 2016 AVAILABILITY AND DISPARITY STUDY DRAFT REPORT**

## **Prepared for**

Montana Department of Transportation  
2701 Prospect Ave  
Helena, MT 59620

## **Prepared by**

Keen Independent Research LLC  
172 N. Washington Street  
Wickenburg AZ 85390

100 Fillmore Street, 5th Floor  
Denver CO 80206

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DRAFT

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## EXECUTIVE SUMMARY

### MDT 2016 Availability and Disparity Study

The federal government requires agencies such as the Montana Department of Transportation (MDT) to implement the Federal Disadvantaged Business Enterprise (DBE) Program if they received certain federal funds. MDT periodically conducts disparity studies to help it make decisions concerning its future operation of the Program for its federally-funded contracts.

MDT engaged a team led by Keen Independent Research LLC (Keen Independent) to prepare the 2016 Availability and Disparity Study, which focuses on participation of minority- and women-owned firms in MDT's contracts from October 2009 through September 2014. The disparity study also analyzes conditions for minorities and women, and minority- and women-owned firms within the Montana marketplace. The study examines steps to encourage utilization of all small businesses in MDT contracts as well as programs specific to DBEs. Information from the disparity study will be useful as MDT:

- Sets an overall annual goal for DBE participation in its contracts using funds from the Federal Highway Administration (FHWA) for the three federal fiscal years beginning October 1, 2016;
- Considers whether or not the overall DBE goal can be attained solely through neutral measures (or whether race- or gender-based measures are also needed); and
- Determines the specific race, ethnic and gender groups that may be eligible for any race- or gender-conscious program elements such as DBE contract goals.

This study did not examine contracts using Federal Transit Administration (FTA) or Federal Aviation Administration (FAA) funds, however, MDT and other agencies might review information in this report regarding DBE availability and operation of the Federal DBE Program for FHWA-funded contracts as they relate to operating the Program for FTA- and FAA-funded contracts.

#### A. Background

At the time of this study, MDT had an overall goal of 3.55 percent participation of DBEs on its FHWA-funded contracts, and is attempting to meet that goal solely through neutral measures.

MDT's operation of the Federal DBE Program is guided by regulations in Title 49 Code of Federal Regulations (CFR) Part 26 and instructions from the U.S. Department of Transportation (USDOT).

The 2005 Ninth Circuit Court of Appeals decision in *Western States Paving Co. v. Washington State DOT* is also important for this study.<sup>1</sup> The Court upheld the constitutionality of the Federal DBE Program, but it found that the Washington State DOT failed to show its implementation of the Federal DBE Program to be narrowly tailored (see Chapter 2 of this report).

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<sup>1</sup> *Western States Paving Co. v. Washington State DOT*, 407 F.3d 983 (9th Cir. 2005), cert. denied, 546 U.S. 1170 (2006).

In response to the *Western States Paving* decision, state and local agencies affected by the decision, including MDT, discontinued use of race- and gender-conscious elements of the Federal DBE Program such as setting goals for DBE participation on individual federally-funded contracts. The USDOT recommended that agencies implementing the Federal DBE Program conduct disparity studies. MDT completed a study in 2009. MDT began setting DBE contract goals again in 2012, but discontinued use of contract goals in 2014. There were two legal challenges to MDT's operation of the Federal DBE Program in recent years, in both instances MDT's program implementation was upheld (Chapter 2 discusses these cases).

Key members of the Keen Independent team were involved in supporting the California Department of Transportation (Caltrans) disparity study when a contractors association challenged its operation of the Federal DBE Program. As discussed in more detail in Appendix B, the Ninth Circuit favorably reviewed the methodology and information provided in the disparity study and determined that the information justified Caltrans' operation of the Federal DBE Program.<sup>2</sup> Keen Independent applied a methodology in the MDT Disparity Study that is very similar to what the court favorably reviewed in the Caltrans case.

The Disparity Study provides information for MDT to ensure that its operation of the Federal DBE Program meets these legal requirements.

## **B. Summary of the Disparity Study Research**

The Disparity Study began in early 2015.

- Throughout the study, Keen Independent consulted with a Technical Panel that included internal industry representatives and FHWA staff. A study website, dedicated email address and a telephone hotline were established for the study.
- The study team collected information about past FHWA- and state-funded contracts awarded by MDT or by local agencies from October 2009 through September 2014. There were 6,679 contracts and subcontracts totaling \$1.9 billion in the utilization data. Keen Independent identified the race, ethnicity and gender ownership of companies receiving MDT prime contracts and subcontracts through a combination of sources, including telephone interviews with those firms. The utilization analysis examined minority-owned firms (by race and ethnicity), white women-owned firms and majority-owned firms (firms that are not minority- or women-owned). MDT reviewed these data before Keen Independent completed the disparity analysis.
- Because 89 percent of MDT contract dollars during the study period went to firms with Montana offices, the study team defined Montana as the study area. Keen Independent examined quantitative and qualitative information about the Montana transportation contracting industry gathered through survey research, secondary data and in-depth interviews with 43 companies and trade associations throughout the state.

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<sup>2</sup> *Associated General Contractors of America, San Diego Chapter, Inc. v. California Department of Transportation, et al.*, 713 F. 3d 1187, 2013 WL 1607239 (9<sup>th</sup> Cir. April 16, 2013).

- The study team completed telephone interviews with businesses to determine the availability of different types of businesses for individual MDT prime contracts and subcontracts. The availability analysis also examined the size and location of prime contracts and subcontracts when determining firms available for specific MDT contracts. The study team supplemented availability analysis from these detailed availability interviews by constructing a comprehensive bidders list for MDT transportation contracts.
- The study team then compared the percentage of contract dollars going to white women-owned firms and to minority-owned firms, by group, with benchmarks for the utilization that might be expected given the results of the availability analysis.
- Finally, Keen Independent prepared analyses that would help MDT set an overall goal for DBE participation on FHWA-funded contracts, project the portion to be met through neutral means, and determine which groups of DBEs might be eligible for any race- and gender-conscious programs such as DBE contract goals.

The full Disparity Study report is more than 600 pages in length. Please see the full study for a complete discussion of methodology and results. The following presents a brief summary of study findings.

### **C. Availability Results and Base Figure for MDT DBE Goal**

Keen Independent examined the relative availability of minority-, women- and majority-owned firms for MDT contracts to establish benchmarks for comparison with actual MBE and WBE utilization for those contracts. The study team also used availability analyses as inputs to analyzing an overall DBE goal for FHWA-funded contracts.

**Bidders list.** Keen Independent created a master MDT bidders list from a number of different sources that totaled 959 firms. This bidders list provides one estimate of the number of minority-, women- and majority-owned firms available for MDT contracts.

Of the 959 firms on the master bidders list, 216 were identified as minority-owned businesses (MBEs) or white women-owned businesses (WBEs). The percentage availability from this “headcount” analysis is 22.5 percent. Figure ES-1 shows these results.

Figure ES-1.  
Number of businesses included in the master bidders list

Note:  
Numbers rounded to nearest tenth of 1 percent. Percentages may not add to totals due to rounding.

Source:  
Keen Independent availability analysis.

| Race/ethnicity and gender         | Number of firms | Percent of firms |
|-----------------------------------|-----------------|------------------|
| African American-owned            | 3               | 0.3 %            |
| Asian-Pacific American-owned      | 7               | 0.7              |
| Subcontinent Asian American-owned | 3               | 0.3              |
| Hispanic American-owned           | 11              | 1.1              |
| Native American-owned             | 36              | 3.8              |
| <b>Total MBE</b>                  | <b>60</b>       | <b>6.2 %</b>     |
| WBE (white women-owned)           | 156             | 16.3             |
| <b>Total MBE/WBE</b>              | <b>216</b>      | <b>22.5 %</b>    |
| Total majority-owned firms        | 743             | 77.5             |
| <b>Total firms</b>                | <b>959</b>      | <b>100.0 %</b>   |

Because results are based on a simple count of firms with no analysis of availability for specific MDT contracts, they only reflect “headcount availability” and are not used in this study to determine a base figure for the overall DBE goal or as a benchmark for the disparity analysis. As the master bidders list does indicate some availability of Subcontinent Asian American-owned firms for MDT contracts, this fact is used in the disparity analysis.

**Dollar-weighted availability from detailed survey of Montana companies.** After completing detailed interviews and online surveys with 435 businesses, the study team developed a database of information about businesses that are available for specific types, sizes and locations of MDT prime contracts and subcontracts.

For each of the availability analyses prepared for this study, Keen Independent took the following steps:

- The study team identified the specific characteristics of each of the prime contracts and subcontracts included in the set of contracts being analyzed (in the case of all contracts, there were 6,679 prime contracts and subcontracts).
- For each prime contract and subcontract, Keen Independent identified the minority-, women- and majority-owned businesses in the detailed availability database that indicated that they performed the type of work, size of work and locations of work pertinent to that prime contract or subcontract.
- Once the available firms for a prime contract or subcontract were identified, Keen Independent calculated the percentage of available firms that were minority-owned (by group), white women-owned and majority-owned. At this point, the study team had a database of 6,679 prime contracts and subcontracts for which percentage availability of MBEs, WBEs and majority-owned firms had been calculated (and summed to 100% for each prime contract or subcontract).

- Keen Independent then developed aggregate availability results across all prime contracts and subcontracts. The first step was to determine dollar weights for each prime contract and subcontract by dividing the value of that prime contract (dollars retained by the prime) or subcontract by the total dollars of contracts (\$1.9 billion when examining all contracts). For example, the weight for a \$19 million prime contract would be 0.01 as it comprised 1 percent of total dollars.
- The study team calculated multiple availability for each prime contract and subcontract by the dollar weights for each prime contract and subcontract and summed the results.

Including all 6,679 prime contracts and subcontracts, dollar-weighted MBE/WBE availability was 19.22 percent. Dollar-weighted availability was lower than MBE/WBE representation in either the master bidders list or the detailed availability database (both 22%) because minority- and women-owned firms comprised a somewhat smaller portion of firms available for large highway construction prime contracts compared with specialty trade prime contracts or subcontracts.

For FHWA-funded contracts, dollar-weighted MBE/WBE availability was 18.97 percent, as shown in Figure ES-2. Keen Independent used these and other dollar-weighted availability results as benchmarks in the disparity analyses.

For FHWA-funded contracts, Keen Independent also performed the above dollar-weighted availability calculations for currently-certified DBEs compared with non-DBEs. The dollar-weighted availability of currently-certified DBEs was 7.41 percent (including one majority-owned DBE).

Figure ES-2.  
Results of dollar-weighted availability analysis for MDT FHWA- and state-funded contracts, October 2009-September 2014

Note:

\*Includes white male-owned DBEs.

Numbers rounded to nearest hundredth of 1 percent. Percentages may not add to totals due to rounding.

| Group                    | Total contracts | FHWA-funded contracts |
|--------------------------|-----------------|-----------------------|
| MBE                      | 8.13 %          | 7.69 %                |
| WBE                      | <u>11.10</u>    | <u>11.28</u>          |
| Total MBE/WBE            | 19.23 %         | 18.97 %               |
| Currently certified DBE* | --              | 7.41 %                |

Source:

Keen Independent availability analysis.

If its mix of future FHWA-funded contracts is expected to be similar to FHWA-funded contracts from October 2009 through September 2014, Keen Independent recommends that MDT use the 7.41 percent DBE availability figure as the “base figure” when determining its overall DBE goal for FFY 2017 through FFY 2019.

## D. Potential Adjustments to Calculate the Overall DBE Goal

Per the Federal DBE Program, MDT must consider potential adjustments to the base figure as part of determining its overall annual DBE goal for FHWA-funded contracts. The Federal DBE Program outlines factors that an agency must consider when assessing whether to make any adjustments to its base figure:

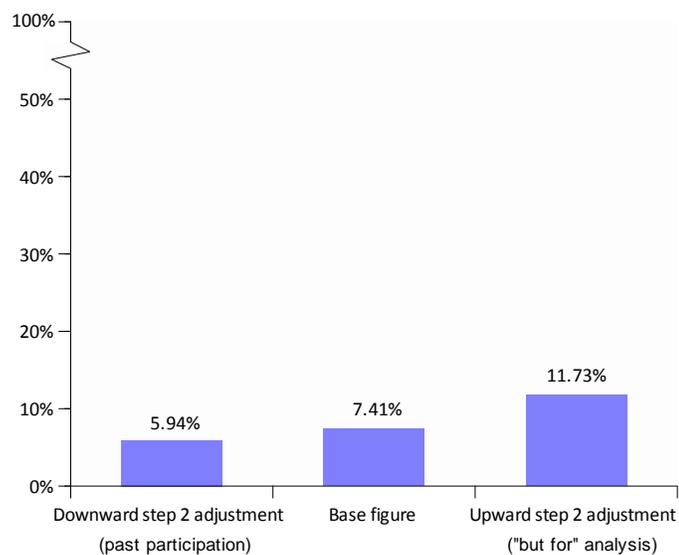
1. Current capacity of DBEs to perform work, as measured by the volume of work DBEs have performed in recent years;
2. Information related to employment, self-employment, education, training and unions;
3. Any disparities in the ability of DBEs to get financing, bonding and insurance; and
4. Other relevant factors.

If MDT makes a downward step 2 adjustment reflecting current capacity to perform work, its overall DBE goal for FHWA-funded contracts might be 5.94 percent as calculated in Figure 9-4. If MDT decides to not make a downward adjustment and to make an upward adjustment that reflects analyses of business ownership rates, its overall DBE goal might be 11.73 percent. MDT might also choose to not make a step 2 adjustment, which would mean a DBE goal of 7.41 percent. Figure ES-3 summarizes this information and Chapter 9 further explains these calculations.

Figure ES-3  
Potential step 2 adjustments  
to overall DBE goal for  
FHWA-funded contracts,  
FFY 2017–FFY 2019

Note:  
For further explanation see Chapter 9.

Source:  
Keen Independent analysis.



## E. Projecting the Portion of the Overall Goal to be Met through Neutral Means

The Federal DBE Program requires state and local transportation agencies to meet the maximum feasible portion of their overall DBE goals using race- and gender-neutral measures.<sup>3</sup> Race- and gender-neutral measures are initiatives that encourage the participation of all businesses, or all small businesses, and are not specifically limited to MBE/WBEs or DBEs. Agencies must determine whether they can meet their overall DBE goals solely through neutral means or whether race- and gender-conscious measures — such as DBE contract goals — are also needed. As part of doing so, agencies must project the portion of their overall DBE goals that they expect to meet (a) through race- and gender-neutral means, and (b) through race- and gender-conscious programs (if any).

- If an agency determines that it can meet its overall DBE goal solely through race- and gender-neutral means, then it would propose using only neutral measures as part of its program. MDT employed this approach between 2006 and 2012 as well as after June 2014.
- If an agency determines that a combination of race- and gender-neutral and race- and gender-conscious measures are needed to meet its overall DBE goal, then the agency would propose using a combination of neutral and conscious measures as part of its program. MDT took this approach between 2012 and June 2014.

**Projections of goal attainment through neutral means.** USDOT offers guidance concerning how transportation agencies should make these projections. Using this information, Keen Independent analyzed different approaches MDT could apply when making its projection for FFY 2017 through FFY 2019. For example, if MDT achieved the same level of race-neutral participation in FFY 2017 through FFY 2019 as it did in the four most recent fiscal years in which it had entirely neutral participation (3.96 percent median), it would need to achieve 1.98 percentage points of a 5.94 percent overall DBE goal through race- and possibly gender-conscious means.

Using this 3.96 percentage point projection for illustration, Figure ES-4 summarizes this analysis for different levels of overall DBE goals that MDT might select. In each column, the neutral projection (row 2) is subtracted from the overall DBE goal (row 1) to derive the race-conscious projection (row 3). The left-most column of results presents MDT's overall goal and neutral projection for the current time period (FFY 2014 through FFY 2016).

Figure ES-4.

Current MDT overall DBE goal and projections of race-neutral for FHWA-funded contracts and examples of overall goal and projections for FFY 2017 through FFY 2019

| Component of overall goal <sup>3</sup> | FFY 2014-<br>FFY 2016 | FFY 2017- FFY 2019     |             |                      |
|--|-----------------------|------------------------|-------------|----------------------|
|  |                       | Downward<br>adjustment | Base figure | Upward<br>adjustment |
| Overall goal                           | 3.55 %                | 5.94 %                 | 7.41 %      | 11.73 %              |
| Neutral projection                     | - 3.55                | - 3.96                 | - 3.96 %    | - 3.96               |
| Race-conscious projection              | 0.00 %                | 1.98 %                 | 3.45 %      | 7.77 %               |

Source: Keen Independent analysis.

<sup>3</sup> 49 CFR Section 26.51.

**Determining whether there is evidence of discrimination.** Before making the projection of neutral attainment and determining whether it will use DBE contract goals for any group, or which groups, MDT must consider whether there is evidence of discrimination within the local transportation contracting marketplace for any racial, ethnic or gender groups.

In *Western States Paving*, the Ninth Circuit Court of Appeals held the recipient of federal funds must have independent evidence of discrimination within the recipient's own transportation contracting marketplace in order to determine whether or not there is the need for race-, ethnicity-, or gender-conscious remedial action.<sup>4</sup> In *Western States Paving*, and in *AGC, SDC v. Caltrans*, the Ninth Circuit Court found that even where evidence of discrimination is present in a recipient's market, a narrowly tailored program must apply only to those minority groups that suffered discrimination. Thus, under a race- or ethnicity-conscious program, for each of the minority groups to be included in any race- or ethnicity-conscious elements in a recipient's implementation of the Federal DBE Program, there must be evidence that the minority group suffered discrimination within the recipient's marketplace.<sup>5</sup>

The disparity study report also explains the different legal standards pertaining to the evidence required to support programs for minority-owned firms and programs for white women-owned firms (the measure of evidence required to satisfy "intermediate scrutiny" for gender-based programs is less than that necessary to satisfy "strict scrutiny" for race-conscious programs).

MDT should review the results of this disparity study and other information it has when making this determination. The balance of this Executive Summary briefly outlines the types of information provided in this report concerning:

- Quantitative and qualitative information for the Montana marketplace; and
- Results of the disparity analysis for minority- and white women-owned firms for MDT contracts, focusing on those without DBE contract goals.

## **F. Quantitative and Qualitative Information for the Montana Marketplace**

As discussed in Chapter 5 of this report and in supporting appendices, there is quantitative and qualitative information suggesting that there is not a level playing field for minorities and women, and minority- and women-owned businesses, in the Montana transportation contracting industry.

There is quantitative information indicating disparities regarding entry and advancement as employees within the industry, disparities in business ownership for certain groups, disparities concerning access to capital and bonding, and certain disparities in success of minority- and women-owned construction firms. Also, relatively more minority- and women-owned firms report difficulties networking with prime contractors or customers based on survey data.

Business owners and managers interviewed in this study also discussed examples of overt discrimination against minorities and women, and minority- and women-owned firms. There is also substantial qualitative evidence that a "good ol' boy" network negatively affects opportunities for businesses including those owned by minorities and women.

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<sup>4</sup> *Western States Paving*, 407 F.3d at 997-98, 1002-03; see *AGC, SDC v. Caltrans*, 713 F.3d at 1197-1199.

<sup>5</sup> 407 F.3d at 996-1000; See *AGC, SDC v. Caltrans*, 713 F.3d at 1197-1199.

## G. Disparity Analysis for MDT Contracts

Keen Independent compared the share of MDT contract dollars going to minority- and women-owned firms with what might be expected from the availability analysis.

**Utilization.** Considering all FHWA- and state-funded MDT transportation construction and engineering contracts from October 2009 through September 2014, minority- and women-owned firms received \$226 million out of the \$1.9 billion in contract dollars, or 11.7 percent of total dollars. As shown in Figure ES-5:

- About 10 percent of total dollars went to white women-owned firms and 1.9 percent went to minority-owned firms (including businesses owned by minority women).
- DBEs received 4.0 percent of total dollars. More than one-half of the MBE/WBE utilization was firms not DBE-certified at the time of the contract. Some of this utilization was former DBEs that are now too large to be certified or have otherwise let their certifications expire.

Results are very similar if limited to FHWA-funded contracts (results not shown in Figure ES-5 but found in Chapter 7).

Figure ES-5.  
MBE/WBE and DBE share of prime contract/subcontract dollars for MDT FHWA- and state-funded transportation contracts, October 2009-September 2014

Note:  
Numbers rounded to nearest tenth of 1 percent. Percentages may not add to totals due to rounding.

| Group | Total  | With DBE goals | Without DBE goals |
|-------|--------|----------------|-------------------|
| MBEs  | 1.9 %  | 3.0 %          | 1.6 %             |
| WBEs  | 9.9    | 13.0           | 9.2               |
| Total | 11.8 % | 16.0 %         | 10.8 %            |
| DBE   | 4.0 %  | 6.2 %          | 3.5 %             |

Source:  
Keen Independent availability analysis.

Figure ES-5 also presents the percentage of contract dollars going to MBE/WBEs and DBEs on MDT contracts that had DBE contract goals and those without goals. Overall participation of MBE/WBEs was higher for contracts with goals (16%) than those without goals (about 11%). Most of the contract dollars during the study period (\$1.6 billion) pertained to contracts without goals.

**Disparity analysis.** To conduct the disparity analysis, Keen Independent compared the actual utilization of MBE/WBEs on MDT contracts with the percentage of contract dollars that MBEs and WBEs might be expected to receive based on their availability for that work. Keen Independent made those comparisons for individual MBEs, WBEs and individual MBE groups.

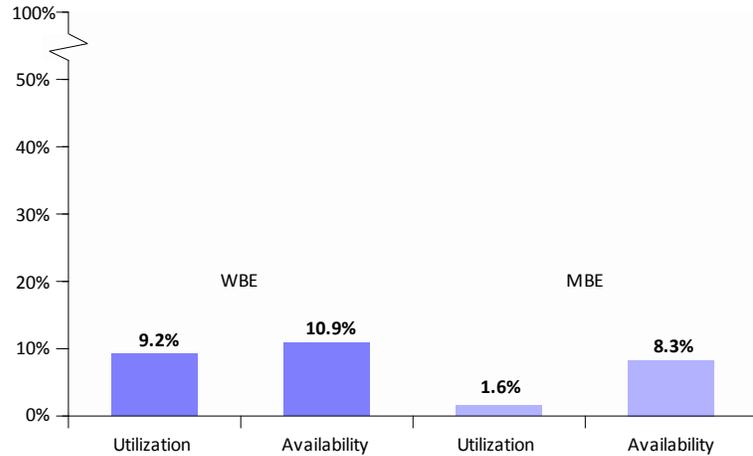
**Utilization and availability for MDT contracts without DBE goals.** Figure ES-6 presents the utilization and availability results for MDT contracts without DBE contract goals. White women-owned firms received 9.2 percent of MDT contract dollars, which was below the 10.9 percent that might be expected from the availability analysis for the non-goals contracts. Minority-owned firms received

1.6 percent of the contract dollars, also below what the 8.3 percent level that might be expected based on the availability analysis.

**Figure ES-6.**  
**MBE/WBE utilization**  
**and availability for MDT**  
**FHWA- and**  
**state-funded contracts**  
**without DBE contract**  
**goals,**  
**October 2009-**  
**September 2014**

Note:  
 Number of  
 contracts/subcontracts analyzed  
 is 5,993.

Source:  
 Keen Independent disparity analysis



**Calculation of disparity indices.** Keen Independent then calculated a “disparity index” to help compare utilization and availability results among MBE/WBE groups and across different sets of contracts.

- A disparity index of “100” indicates an exact match between actual utilization and what might be expected based on MBE/WBE availability for a specific set of contracts (often referred to as “parity”). Figure ES-7, on the following page, includes a centerline showing “100” or “parity.”
- A disparity index of less than 100 may indicate a disparity between utilization and availability, and disparities of less than 80 in this report are described as “substantial” based on relevant court decisions.

The resulting disparity index for WBEs for MDT contracts without DBE contract goals is 84.<sup>6</sup> The disparity index for MBEs is 19. There are substantial disparities for each MBE group, as shown in Figure ES-7.

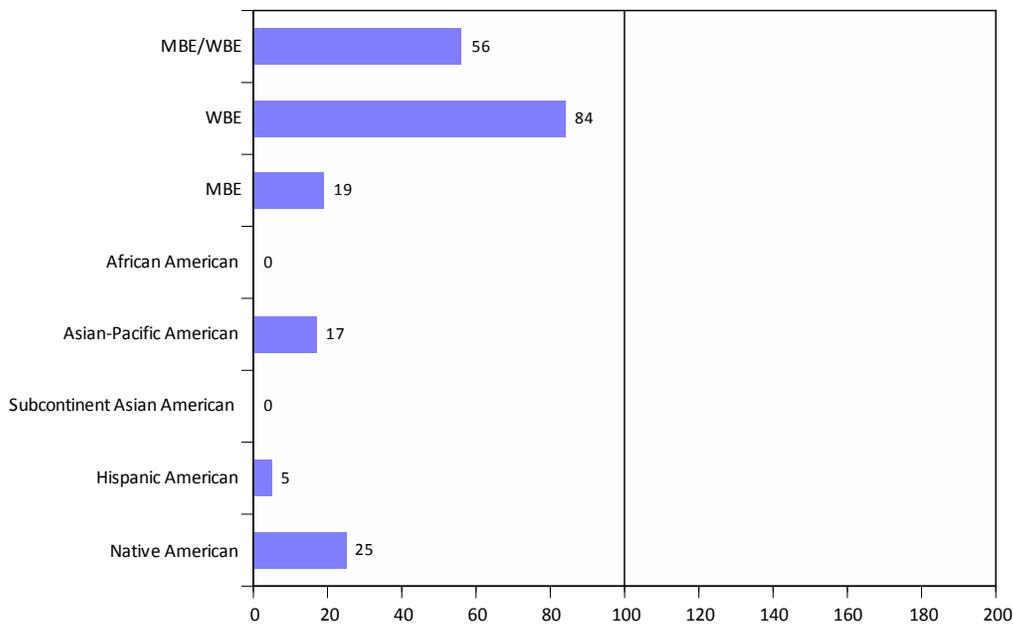
- As there was no utilization of firms identified as African American-owned or Subcontinent Asian-owned on MDT transportation-related contracts, the disparity indices for these groups are “0.” (There was some availability for these two groups for MDT work based on analysis of the MDT bidders list.)
- Utilization of Asian-Pacific American-owned firms (0.3%) was substantially less than what might be expected from the availability analysis (1.9%), and the corresponding disparity index was 17 for this group.

<sup>6</sup> (9.2%÷10.9%=.84 x 100=84).

- Hispanic American-owned firms obtained less than 0.1 percent of MDT contract dollars, substantially below what might be expected from the availability analysis (1.5%), resulting in a disparity index of 5.
- Native American-owned firms had utilization of 1.2 percent, substantially below what might be expected based on the availability analysis (4.8%). The disparity index for this group was 25.

Overall, the disparity index for MBE/WBEs combined was 56. The disparity index for WBEs (84) is also shown in Figure ES-7.

Figure ES-7. Disparity indices for MBE/WBEs, by group, for MDT FHWA- and state-funded contracts without DBE contract goals, October 2009-September 2014



Note: Number of contracts/subcontracts analyzed is 5,993.

Source: Keen Independent disparity analysis.

**Statistical significance of disparities.** Keen Independent also examined whether the disparities for MBEs and for WBEs could be replicated simply through “chance” in award of prime contracts and subcontracts to available firms. Through statistical simulations, the study team can reject the possibility that chance could explain the disparities for MBEs (at the 95 percent confidence level) and that chance could explain the disparities for white women-owned firms (at the 90 percent confidence level).

**Other disparity analyses.** Keen Independent analyzed the utilization and availability of minority- and women-owned firms for additional subsets of MDT prime contracts and subcontracts. The study team identified a pattern of disparities in the utilization of MBEs across different subsets of MDT contracts. With the exception of contracts with DBE contract goals and contracts in eastern Montana, utilization of white women-owned firms also tended to be less than availability across different subsets of MDT contracts.

## **H. Recommendations**

The body of the report provides Keen Independent suggestions for MDT regarding:

1. Consideration of the Draft 2016 Disparity Study Report;
2. MDT development of overall DBE goal and neutral projections;
3. MDT utilization data collection and reporting procedures;
4. Future maintenance of an MDT bidders list;
5. Extension of payment notification information to consultant contracts;
6. Further review of consultant selection procedures;
7. New small business goals program;
8. Other neutral measures;
9. Operation of DBE contract goals if MDT chooses to resume their use;
10. DBE and other certification; and
11. Schedule for future availability and disparity studies;

## **I. Next Steps**

There is substantially more quantitative and qualitative information in the full report, which MDT should review when making decisions about its future operation of the Program.

MDT is making this draft report available for public comment and holding public meetings to solicit input. Keen Independent will augment the study with this input before finalizing the report.

# **CHAPTER 1.**

## **Introduction**

The federal government requires state and local governments to operate the Federal Disadvantaged Business Enterprise (DBE) Program if they receive U.S. Department of Transportation (USDOT) funds for transportation projects. The Montana Department of Transportation (MDT) has been operating some version of the Federal DBE Program since the 1980s.

Every three years, MDT must set an overall annual goal for participation of DBEs in those contracts. The goal is expressed as the percentage of contract dollars that will go to firms certified as DBEs. MDT's overall DBE goal for FHWA-funded contracts from FFY 2014 through FFY 2016 is 3.55 percent. Since summer 2014, MDT has been operating a race-neutral program and has not set DBE contract goals on any projects.

The USDOT recommends that agencies such as MDT conduct disparity studies to develop the information needed to effectively implement the Program, including setting overall DBE goals. MDT last conducted a disparity study in 2009.

MDT retained Keen Independent Research LLC (Keen Independent) to conduct the 2016 Availability and Disparity Study (referred to as the “disparity study” in this report).

- MDT can use the study results to set a three-year overall DBE goal for FHWA-funded contracts for the three federal fiscal years starting October 1, 2016.
- MDT can also use information from the report, and other sources, to project the portion of its goal to be met through race-neutral means and any race- and gender-conscious measures such as DBE contract goals, and if so, what racial, ethnic and gender groups of DBEs will be eligible to participate in the contract goals program.
- Keen Independent's analyses may also be useful if MDT considers reinstating any race- or gender-conscious measures prior to expiration of its current three-year DBE goal for FHWA-funded contracts.

Chapter 1 of the Disparity Study:

- A. Introduces the study team;
- B. Provides background on the Federal DBE Program;
- C. Outlines the analyses and describes where results appear in the report; and
- D. Describes the public comment process for the draft Disparity Study report.

## A. Study Team

David Keen, Principal of Keen Independent, directed this study. He has conducted similar studies for more than 90 public agencies throughout the country, including a number of state transportation departments. Keith Wiener from Holland & Knight provided the legal framework for this study. Mr. Wiener has extensive experience with disparity studies as well. Mr. Keen and Mr. Wiener have helped public agencies successfully defend DBE and minority business enterprise programs in court.

The Keen Independent study team includes the five companies listed below. Three of the team members are minority- and/or women-owned firms.

Figure 1-1.  
2016 Disparity Study team

| Firm  | Location                     | Team Leader                                 | Responsibilities                        |
|---|------------------------------|---|---|
| Keen Independent Research LLC, prime consultant | Wickenburg, AZ<br>Denver, CO | David Keen<br>Principal                     | All study phases                        |
| Holland & Knight LLP (H&K)                      | Atlanta, GA                  | Keith Wiener<br>Partner                     | Legal framework                         |
| Fagan Law Office PC                             | Missoula, MT                 | Lynn Fagan<br>Principal                     | In-depth interviews                     |
| Olson Communications                            | Billings, MT                 | Merry Lee Olson<br>Chief Consulting Officer | In-depth interviews,<br>public outreach |
| Customer Research International (CRI)           | San Marcos, TX               | Sanjay Vrudhula<br>President                | Availability telephone interviews       |

## B. Federal DBE Program

MDT has been operating some version of a Federal DBE Program since the 1980s. After enactment of the Transportation Equity Act for the 21<sup>st</sup> Century (TEA-21) in 1998, USDOT established a new Federal DBE Program to be operated by state and local agencies receiving USDOT funds. USDOT last revised the Federal DBE Program in 2014. The “Fixing America’s Surface Transportation Act” (FAST Act) signed into law in December 2015 reauthorized the Federal DBE Program.

Federal regulations in Title 49 Code of Federal Regulations (CFR) Part 26 state how state and local governments must operate the Federal DBE Program.<sup>1</sup> If necessary, under the federal regulations, the Program allows state and local agencies to use DBE contract goals, which MDT in some years has set on certain FHWA-funded contracts. When awarding those contracts, MDT considered whether or not a bidder or proposer meets the DBE goal set for the contract or shows good faith efforts to do so.

<sup>1</sup> 49 CFR Part 26 [http://www.ecfr.gov/cgi-bin/text-idx?tpl=/ecfrbrowse/Title49/49cfr26\\_main\\_02.tpl](http://www.ecfr.gov/cgi-bin/text-idx?tpl=/ecfrbrowse/Title49/49cfr26_main_02.tpl).

The Federal DBE Program also applies to cities, towns, counties, transportation authorities, tribal governments and other jurisdictions that receive USDOT funds through agencies such as MDT.

**Key Program elements.** Components of the Federal DBE Program include the following elements.

**Setting an overall goal for DBE participation.** MDT must develop an overall three-year goal for DBE participation in its USDOT-funded contracts. The Federal DBE Program sets forth the steps an agency must follow in establishing its goal, including development of a “base figure” and consideration of possible “step 2” adjustments to the goal.<sup>2</sup>

The 2016 Disparity Study provides MDT information to help it set its overall DBE goal for FHWA-funded contracts for the next three federal fiscal years beginning October 2016 (federal fiscal years 2017, 2018 and 2019).

**Establishing the portion of the overall DBE goal to be met through neutral means.** Regulations governing operation of the Federal DBE Program allow for state and local governments to operate the program without the use or with limited use of race- or gender-based measures such as DBE contract goals. According to program regulations 49 CFR Section 26.51, a state or local agency must meet the maximum feasible portion of its overall goal for DBE participation through “race-neutral means.” Race-neutral program measures include removing barriers to participation of firms in general or promoting use of small or emerging businesses (see 49 CFR Section 26.51(b) for more examples of race-neutral program measures). If an agency can meet its goal solely through race-neutral means, it must not use race-conscious program elements. For example, a state DOT operating a 100 percent race- and gender-neutral program would not apply DBE contract goals.

The Federal DBE Program requires that an agency project the portion of its overall DBE goal that it will meet through neutral measures and the portion, if any, to be met through race-conscious measures such as DBE contract goals. USDOT has outlined a number of factors for an agency to consider when making that determination.<sup>3</sup>

Many state DOTs project that they will meet their overall DBE goal through a combination of race-neutral and race-conscious measures. Some DOTs have operated the Federal DBE Program solely through neutral measures and without the use of DBE contract goals (state DOTs in Florida, Idaho, Maine, New Hampshire and Vermont are examples). These agencies projected that 100 percent of their overall DBE goal will be met through neutral means.

The 2016 Disparity Study provides information to help MDT project the portion of its overall DBE goal to be met through race-neutral means.

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<sup>2</sup> 49 CFR Section 26.45.

<sup>3</sup> See Chapter 7 of this report for an in-depth discussion of these factors.

Determining whether all racial/ethnic/gender groups will be eligible for race- or gender-conscious elements of the Federal DBE Program. Under the Federal DBE Program, the following race/ethnic/gender groups can be presumed to be socially disadvantaged:

- Black Americans (or “African Americans” in this study);
- Hispanic Americans;
- Native Americans;
- Asian-Pacific Americans;
- Subcontinent Asian Americans; and
- Women of any race or ethnicity.

To be economically disadvantaged, a company must be below revenue limits and its firm owner(s) must be below net worth limits.<sup>4</sup> White male-owned firms and other ethnicities not listed above can also meet the federal certification requirements and be certified as DBEs if they demonstrate that they are both socially and economically disadvantaged, as described in 49 CFR Part 26.67 (d). (This has occurred in Montana.)

MDT’s past operation of the Program, similar to most states, included DBEs owned by each of the above minority groups and women as eligible for race- and gender-conscious measures including meeting DBE contract goals. However, USDOT provides a waiver provision if an agency determines that it does not need to include certain racial, ethnic or gender groups in the race- or gender-conscious portions of the Federal DBE Program. Some state DOTs have set contract goals for “Underutilized DBEs” (UDBEs), which does not include all DBE groups. These states count the participation of all DBEs toward their overall DBE goals, but only UDBEs can be used to meet individual contract goals. Each state determined the DBE groups that were UDBEs in part by examining results of disparity analyses for each racial, ethnic and gender group.

Agencies that operate UDBE contract goals programs:

- Only count UDBEs toward meeting the goal set on an individual contract. For example, Oregon DOT only counts African American- and Subcontinent Asian American-owned DBEs toward meeting a DBE goal it sets on an FHWA-funded construction contract (as of January 2016).
- Include utilization of other DBEs as neutral participation and count it toward the agency’s overall DBE goal. For example, ODOT counts any participation of DBEs other than African American- or Subcontinent Asian-owned firms toward its overall DBE goal for FHWA-funded contracts.

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<sup>4</sup> 49 CFR 26 Subpart D provides certification requirements. There is a gross receipts limit (currently not more than \$23,980,000 annual three-year average revenue and lower limits for certain lines of business, and both are periodically updated) and a personal net worth limit (at the time of this report, \$1.32 million excluding equity in the business and primary personal residence) that firms and firm owners must fall below to be able to be certified as a DBE. <http://www.ecfr.gov/cgi-bin/text-idx?SID=5423bdfc26e2255aef5fb43e3f450a13&node=49:1.0.1.1.20.4&rgn=div6>.

There is no difference in how agencies with UDBE contract goals programs certify firms as DBEs. Any DBE can participate in all aspects of the DBE Program except for DBE contract goals for that agency.

The 2016 Disparity Study will include information for MDT as it considers whether all groups or only some of the groups listed above might be eligible for any race- and gender-conscious portions of the Program.

**Promoting DBE participation as prime contractors.** The Federal DBE Program calls for agencies to remove any barriers to DBE participation as prime contractors and consultants, but does not require agencies to operate programs that give preference to DBE primes. Quotas are prohibited, but under extreme circumstances, an agency can request USDOT approval to use preference programs related to prime contractors.

The Federal DBE Program requires agencies such as MDT to develop programs to assist all small businesses.<sup>5</sup> For example, small business preference programs, including reserving contracts on which only small businesses can bid, are allowable under the Federal DBE Program.

**Promoting DBE participation as subcontractors.** In accordance with federal regulations and subject to USDOT approval, an agency can decide that it will use DBE contract goals as part of its operation of the Federal DBE Program. MDT does not currently use DBE contract goals for certain FHWA-funded contracts. (MDT did set DBE contract goals on certain FHWA-funded contracts during the June 2012 through June 2014 time period.)

**Past court challenges to the Federal DBE Program and to state and local agency implementation of the Program.** Although agencies are required to operate the Federal DBE Program in order to receive USDOT funds, different groups have challenged program operation in court.

- A number of courts have held the Federal DBE Program to be constitutional, as discussed in Chapter 2 and Appendix B of this report, including courts in Montana.
- State transportation departments in California, Illinois, Montana, Minnesota and Nebraska successfully defended their operation of the Federal DBE Program, as have several cities and other local government agencies. The Washington State Department of Transportation was not able to successfully defend its operation of the Federal DBE Program. (See Chapter 2 and Appendix B.)

In *Associated General Contractors of America, San Diego Chapter, Inc. v. California Department of Transportation*, the Ninth Circuit Court of Appeals examined the methodology and results of the disparity study David Keen directed for the California Department of Transportation (Caltrans).<sup>6</sup> (Mr. Keen also provided expert testimony in this case.) As discussed in more detail in Appendix B, the Ninth Circuit favorably reviewed the methodology and the quantitative and qualitative information provided in the disparity study, and determined that the information justified Caltrans' operation of the Federal DBE

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<sup>5</sup> 49 CFR Section 26.39.

<sup>6</sup> *Associated General Contractors of America, San Diego Chapter, Inc. v. California Department of Transportation, et al.*, 713 F. 3d 1187 (9<sup>th</sup> Cir. 2013).

Program. Keen Independent applied a methodology in the 2016 Disparity Study that is very similar to what the court favorably reviewed in the Caltrans case.

As discussed in Chapter 2 of this Disparity Study, MDT also succeeded when facing a legal challenge to its implementation of the Federal DBE Program.

### **C. Analyses Performed in the Disparity Study**

The MDT 2016 Disparity Study provides information to assist MDT as it:

1. Establishes a new three-year goal for DBE participation in its FHWA-funded contracts; and
2. Estimates the portion of its overall DBE goal to be met through race- and gender-neutral means and any portion to be met through race- and gender-conscious means.

Keen Independent conducted the following analyses to prepare the Disparity Study.

#### **Collection of prime contract and subcontract information for past FHWA-funded contracts.**

The study team collected information about past FHWA-funded contracts awarded by MDT or by local agencies from October 2009 through September 2014. Chapter 3 of the 2016 Disparity Study outlines the data collection process and describes these contract data.

These data were needed in the 2016 Disparity Study to identify the relevant geographic market area and types of work involved in MDT's FHWA-funded contracts. With this information, Keen Independent could then design the availability data collection and analysis, as described below. The information about individual prime contracts and subcontracts was also used to develop dollar-weighted estimates of overall availability of current and potential DBEs.

The Disparity Study also examines utilization of minority- and women-owned firms on MDT's past contracts and whether there were any disparities between past utilization and what might be expected from the availability analysis.

**Availability analysis.** Keen Independent's availability analysis generates a benchmark to use when assessing MDT's utilization of minority- and women-owned firms.

The availability results also provide information for MDT to consider when setting its three-year goal for DBE participation on FHWA-funded contracts. The 2016 Disparity Study focuses on the availability results for establishing this overall DBE goal. Discussion of results is organized as follows:

- Chapter 6 describes the methods used to collect and analyze availability of minority-, women- and majority-owned firms, and also presents information relevant to MDT's "base figure" for its overall DBE goal.
- Chapter 9 outlines the base figure and potential step 2 adjustments for MDT consideration.

- Chapter 10 provides information that MDT might use when projecting the portion of the goal to be met through neutral measures. Appendix D provides further information about the availability interviews with Montana businesses.

**Analysis of local marketplace conditions.** The study team also examined conditions within the Montana marketplace. In accordance with USDOT guidance, Keen Independent analyzed:

- Any evidence of barriers for minorities and women to enter and advance in their careers in the construction and engineering industries in Montana (Appendix E);
- Any differences in rates of business ownership in Montana (discussed in Appendix F);
- Access to business credit, insurance and bonding (Appendix G);
- Any differences in measures of business success and access to prime contract and subcontract opportunities (Appendix H); and
- Certain other issues potentially affecting minorities and women in the local marketplace (Chapter 5 and Appendix J).

Chapter 5 of the Disparity Study synthesizes information about local marketplace conditions, including comments from telephone interviews with business owners and managers, a review of complaints made with MDT concerning DBE issues, and results of in-depth personal interviews with business owners and trade associations completed and analyzed as of the time of this report. Keen Independent will also review comments received during or after public meetings held in March 2016 and include an analyses of these comments in the final 2016 Disparity Study report to be prepared in late spring 2016. This combined quantitative and qualitative information about the marketplace is relevant to MDT's development of an overall DBE goal and its projection of how much of the goal will be met through neutral means.

**MBE/WBE utilization and disparity analysis.** Chapter 7 presents Keen Independent's analysis of the utilization of minority- and women-owned businesses in MDT's FHWA-funded contracts during the study period. The disparity analysis in Chapter 7 compares utilization to availability to determine whether there is underutilization of minority- or women-owned firms in MDT's transportation contracts.

Chapter 8 further explores this information, including results for different types of MDT contracts. It also contains analysis of DBE participation on FHWA-funded contracts, and explores whether there is any evidence of overconcentration of DBEs.

**Recommendations.** Chapter 11 presents study team recommendations concerning MDT's future operation of the Federal DBE Program.

**Presentation of results in the study.** Report chapters provide information to help MDT make decisions concerning its operation of the Federal DBE Program (see Figure 1-2).

Figure 1-2.  
Chapters in the 2016 Disparity Study report

| Chapter   | Description   |
|---|---|
| ES. Executive Summary                                   | Brief summary of study results  |
| 1. Introduction   | Study purpose, study team and overview of analyses  |
| 2. Legal Framework                                      | Summary of Federal DBE Program regulations and relevant court decisions   |
| 3. MDT Transportation Contracts                         | How the study team collected MDT and local agency contract data and defined the geographic area and transportation contracting industry                                     |
| 4. MDT Operation of the Federal DBE Program             | Summary of MDT's operation of the Federal DBE Program in recent years   |
| 5. Marketplace Conditions                               | Summary of quantitative and qualitative information about the Montana transportation contracting marketplace  |
| 6. Availability Analysis                                | Methodology and results regarding availability of minority- and women-owned firms and other businesses for MDT contracts and subcontracts                                   |
| 7. Utilization and Disparity Analysis                   | Methodology and results regarding any disparities in the utilization of minority- and women-owned firms in MDT contracts  |
| 8. Further Exploration of MBE/WBE and DBE Utilization   | Additional analyses of the utilization of minority- and women-owned firms for subsets of MDT contracts, including an analysis of any overconcentration of DBE participation |
| 9. Overall DBE Goal for FHWA-funded Contracts           | Information for MDT to review when setting a three-year overall DBE goal, including consideration of a "step 2 adjustment"  |
| 10. Portion of DBE Goal to be Met through Neutral Means | Information helpful when MDT projects the percentage of overall DBE goal to be met through neutral means  |
| 11. Recommendation for future Program operation         | Suggestions for future MDT initiatives that might enhance the operation of the Federal DBE Program in Montana   |

In addition to the chapters described above, nine report appendices provide supporting information concerning 2016 Disparity Study methodology and results.

#### **D. Public Comment Process for the Draft 2016 Disparity Study Report**

MDT will distribute this Draft Disparity Study report for public comment. Concurrently, MDT will ask for public comments about its proposed overall three-year goal for FHWA-funded contracts.

MDT is holding public hearings concerning the proposed DBE goal study and the Draft Disparity Study:

- Times and locations for these public hearings can be found at <http://mdt.mt.gov/disparitystudy/>.
- The public can give feedback at those meetings and/or provide written comments in person at the hearings or online or via email at <http://mdt.mt.gov/disparitystudy/>.

Keen Independent will review feedback and comments before preparing the final 2016 Disparity Study report in late spring. The final Disparity Study report will also summarize public comments. MDT will also review comments before preparing the overall DBE goal it will submit to FHWA before October 1, 2016.

## CHAPTER 2.

### Legal Framework

The legal framework for the disparity study is based on applicable regulations for the Federal DBE Program and other sources, including the Official USDOT Guidance, court decisions related to the Federal DBE Program and relevant court decisions concerning challenges to minority- and women-owned business programs. The applicable federal regulations are located at Title 49 Code of Federal Regulations (CFR) Part 26.

Since the 1980s, there have been lawsuits challenging the constitutionality of the Federal DBE Program and individual state and local agencies' implementation of the Program. Figure 2-1 on the following page summarizes some of the recent legal challenges. To summarize:

- The Federal DBE Program has been upheld as valid and constitutional.
- For the most part, state DOTs have been successful in defending against the legal challenge, including MDT.<sup>1, 2</sup>
- Western States Paving Company, however, was successful in challenging the Washington State Department of Transportation's implementation of the Federal DBE Program.
- Many state and local agencies, especially those in the west (i.e., states within the Ninth Circuit), made adjustments in their implementation of the Federal DBE Program to comply with the United States Ninth Circuit Court of Appeals decision in the *Western States Paving* case, and in accordance with the Official USDOT Guidance issued after the decision.
- The Ninth Circuit Court of Appeals held California Department of Transportation's implementation of the Federal DBE Program was valid and complied with the decision in *Western States Paving*.

Each of the lawsuits identified in Figure 2-1 pertains to state DOT operation of the Federal DBE Program for USDOT-funded contracts. Court decisions regarding local government implementation of the Federal DBE Program are important as well.

Groups have also challenged state departments of transportation and other agencies that implement similar programs for their state- or locally-funded contracts (including California, North Carolina and Florida). Appendix B of this report provides detailed analysis of relevant legal decisions and federal regulations.

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<sup>1</sup> M.K. *Weeden Construction v. State of Montana, Montana Department of Transportation, et al.* 2013 WL 4774517 (D. Mont. 2013).

<sup>2</sup> *Mountain West Holding Company, Inc. v. State of Montana; Montana DOT, et al.* U.S. District Court, District of Montana (Billings), 2014 WL 6686734 (D. Mont. Nov. 26, 2014), *appeal pending* in the U.S. Court of Appeals, Ninth Circuit, Docket Numbers 14-36097 and 15-35003.

Figure 2-1. Legal challenges to state DOT implementation of the Federal DBE Program

| State   | Successfully defended implementation of Federal DBE Program  | Unsuccessfully defended implementation of Federal DBE Program           | Ongoing litigation at time of report   |
|---|--|---|--|
| California  | <i>Associated General Contractors of America, San Diego Chapter v. California DOT</i> <sup>1</sup>   |   |  |
| Illinois  | <i>Northern Contracting, Inc. v. State of Illinois</i> <sup>2</sup><br><i>Midwest Fence Corp. v. United States DOT, Illinois DOT, et al.</i> <sup>3</sup><br><i>Dunnet Bay Construction Company v. Borggren, Illinois DOT, et al.</i> <sup>4</sup>                             |   | <i>Midwest Fence Corp. v. United States DOT, Illinois DOT, et al.</i> <sup>3</sup> appeal pending<br><i>Dunnet Bay</i> , Petition for Writ of Certiorari to the Supreme Court pending <sup>4</sup> |
| Minnesota   | <i>Sherbrooke Turf, Inc. v. Minnesota Department of Transportation</i> <sup>5</sup><br><i>Geyer Signal, Inc. v. Minnesota DOT, U.S. DOT, Federal Highway Administration, et al.</i> <sup>6</sup>   |   |  |
| Montana   | <i>Mountain West Holding Co., Inc. v. The State of Montana, Montana DOT, et al.</i> appeal pending in the U.S. Court of Appeals, Ninth Circuit, <sup>7</sup><br><i>M.K. Weeden Construction v. State of Montana, Montana Department of Transportation, et al.</i> <sup>8</sup> |   | <i>Mountain West Holding Co., Inc. v. The State of Montana, Montana DOT, et al.</i> , appeal pending. <sup>7</sup>   |
| Nebraska  | <i>Gross Seed Company v. Nebraska Department of Roads</i> <sup>9</sup>   |   |  |
| Washington  |  | <i>Western States Paving Co., v. Washington State DOT</i> <sup>10</sup> |  |
| <p><sup>1</sup> <i>Associated General Contractors of America, San Diego Chapter, Inc. v. California Department of Transportation, et al.</i>, 713 F. 3d 1187, 2013 WL 1607239 (9<sup>th</sup> Cir. April 16, 2013).</p> <p><sup>2</sup> <i>Northern Contracting, Inc. v. Illinois</i>, 473 F.3d 715 (7<sup>th</sup> Cir. 2007).</p> <p><sup>3</sup> <i>Midwest Fence Corp. v. United States DOT, Illinois DOT, et al.</i>, 2015 WL 1396376 (N.D. Ill, March 24, 2015) <i>appeal pending</i> in the U.S. Court of Appeals, Seventh Circuit, Docket Number 15-1827.</p> <p><sup>4</sup> <i>Dunnet Bay Construction Co. v. Borggren, Illinois DOT, et al.</i>, 799 F.3d 676, 2015 WL 4934560 (7<sup>th</sup> Cir. August 19, 2015); <i>Dunnet Bay Construction Co. v. Illinois DOT, et. al.</i> 2014 WL 552213 (C. D. Ill. 2014), affirmed by <i>Dunnet Bay</i>, 2015 WL 4934560 (7<sup>th</sup> Cir. August 19, 2015).</p> <p><sup>5</sup> <i>Sherbrooke Turf, Inc. v. Minnesota Department of Transportation</i>, 345 F.3d 964 (8<sup>th</sup> Cir. 2003), <i>cert. denied</i>, 541 U.S. 1041.</p> <p><sup>6</sup> <i>Geyer Signal, Inc., et al. v. Minnesota DOT, U.S. DOT, Federal Highway Administration, et al.</i>, 2014 WL 1309092 (D. Minn. March 31, 2014).</p> <p><sup>7</sup> <i>Mountain West Holding Company, Inc. v. State of Montana; Montana DOT, et al.</i> U.S. District Court, District of Montana (Billings), 2014 WL 6686734 (D. Mont. Nov. 26, 2014). <i>appeal pending</i> in the U.S. Court of Appeals, Ninth Circuit, Docket Numbers 14-36097 and 15-35003.</p> <p><sup>8</sup> <i>M.K. Weeden Construction v. State of Montana, Montana Dept. of Transportation, et al.</i>, 2013 WL 4774517 (D. Mont.) (September 4, 2013).</p> <p><sup>9</sup> <i>Gross Seed Company v. Nebraska Department of Roads</i>, 345 F.3d 964 (8<sup>th</sup> Cir. 2003), <i>cert. denied</i>, 541 U.S. 1041.</p> <p><sup>10</sup> <i>Western States Paving Co. v. Washington State DOT</i>, 407 F.3d 983 (9<sup>th</sup> Cir. 2005), <i>cert. denied</i>, 546 U.S. 1170 (2006).</p> <p>See Appendix B for complete discussion of these cases.</p> |  |   |  |

The legal challenges have focused on implementation of race- and gender-conscious program measures such as DBE contract goals. This is important background for the Disparity Study.

To understand the legal context for the availability analysis and disparity study, it is useful to review:

- A. The Federal DBE Program; and
- B. Legal standards that race- and gender-conscious programs must satisfy.

### **A. The Federal DBE Program**

The Federal DBE Program includes a number of requirements for state and local governments implementing the program. Three important requirements are:

- Setting overall goals for DBE participation in USDOT-funded contracts. (49 CFR Section 26.45)
- Meeting the maximum feasible portion of the overall DBE goal through race- and gender-neutral means. (49 CFR Section 26.51)
  - Race- and gender-neutral measures include removing barriers to the participation of businesses in general or promoting the participation of small or emerging businesses.<sup>3</sup>
  - If an agency can meet its overall DBE goal solely through race- and gender-neutral means, it must not use race- and gender-conscious measures as part of its implementation of the Federal DBE Program.
- Appropriate use of race- and gender-conscious measures, such as contract-specific DBE goals. (49 CFR Section 26.51)
  - Because these measures are based on the race or gender of business owners, use of these measures must satisfy stringent court imposed legal and regulatory standards in order to be legally valid.<sup>4</sup>
  - Measures such as DBE quotas are prohibited; DBE set-asides may only be used in limited and extreme circumstances (49 CFR Section 26.43).
  - Some state DOTs have restricted eligibility to participate in DBE contract goals programs to certain racial/ethnic/gender groups based on the evidence of discrimination in the state's transportation contracting industry.

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<sup>3</sup> Note that all use of the term “race- and gender-neutral” refers to “race-, ethnic- and gender-neutral” in this report.

<sup>4</sup> Certain Federal Courts of Appeal, including the Ninth Circuit Court of Appeals, apply the “intermediate scrutiny” standard to gender-conscious programs. Appendix B describes the intermediate scrutiny standard in detail.

Figure 2-2 summarizes approaches that state DOTs use to implement the Federal DBE Program:

- All state DOTs set an overall goal for DBE participation.
- All state DOTs use certain neutral measures to encourage DBE participation.
- Many state DOTs use race- and gender-conscious measures such as DBE contract goals to help meet their overall DBE goal.
- Some state DOTs limit participation in race- and gender-conscious programs such as DBE contract goals to those DBE groups for which there is sufficient evidence of discrimination in the state transportation contracting industry (sometimes called “underutilized DBE” or “UDBE” contract goals programs).
- At present, MDT and some other states operate a solely neutral program.

Because an individual state DOT sometimes adjusts how it implements the Program, the examples discussed in this Chapter might change after release of this report.

Figure 2-2. Examples of state DOT implementation of the Federal DBE Program

|  | Set overall DBE goal | Neutral measures* | Race- and gender-conscious measures                   |                |                                      | Examples  |
|--|----------------------|-------------------|---|----------------|--------------------------------------|---|
|  |                      |                   | DBE contract goals                                    | DBE set-asides | Eligible DBEs                        |   |
| 1. Combination of neutral and race- and gender-conscious measures  | Yes                  | Yes               | Yes   | No             | All firms that are certified as DBEs | Most state DOTs<br>MDT in the past                                  |
| 2. DBE set-asides  | Yes                  | Yes               | Yes   | Yes            | All firms that are certified as DBEs | No state DOTs at time of report                                     |
| 3. Underutilized DBE (UDBE) contract goals   | Yes                  | Yes               | Yes<br>Only UDBEs count toward meeting contract goals | No             | Only underutilized DBE groups        | California DOT until mid-2012<br>Oregon DOT<br>Colorado DOT in past |
| 4. Entirely race- and gender-neutral program   | Yes                  | Yes               | No  | No             | No contract goals                    | MDT at present<br>Idaho Transp. Department<br>Florida DOT           |
| *Examples: outreach, technical assistance, removing barriers to bidding, small business enterprise programs. |                      |                   |   |                |                                      |   |

## B. Legal Standards that Race- and Gender-Conscious Programs Must Satisfy

The U.S. Supreme Court has established that government contracting programs with race-conscious measures must satisfy the “strict scrutiny” standard of constitutional review.<sup>5</sup> Two key U.S. Supreme Court cases are:

- The 1989 decision in *City of Richmond v. J.A. Croson Company*, which established the strict scrutiny standard of review for race-conscious programs adopted by state and local governments;<sup>6</sup> and
- The 2005 decision in *Adarand Constructors, Inc. v. Peña*, which established the same standard of review for federal race-conscious programs.<sup>7</sup>

As described in detail in Appendix B, the strict scrutiny standard is very difficult for a government entity to meet. The strict scrutiny standard establishes a stringent threshold for evaluating the legality of race-conscious programs. Under the strict scrutiny standard, a governmental entity must have a strong basis in evidence that:

- There is a *compelling governmental interest* in remedying specific past identified discrimination or its present effects; and
- Any program adopted is *narrowly tailored* to remedy the identified discrimination. There are a number of factors a court considers when determining whether a program is narrowly tailored (see Appendix B).

A government agency must satisfy both components of the strict scrutiny standard. A race-conscious program that fails to meet either one is unconstitutional.

**Constitutionality of the Federal DBE Program.** The Federal DBE Program has been held to be constitutional “on its face” in legal challenges to date, although individual agencies implementing the program might still fail to meet this legal standard in their implementation of the Program. Appendix B discusses a number of important legal decisions in detail, including *AGC, San Diego Chapter v. California DOT*,<sup>8</sup> *Northern Contracting, Inc. v. Illinois DOT*,<sup>9</sup> *Sherbrooke Turf, Inc. v. Minn DOT*,<sup>10</sup> *Gross Seed v. Nebraska Department of Roads, Western States Paving Co. v. Washington State DOT, Adarand Constructors, Inc. v. Slater*,<sup>11</sup> *M.K. Weeden Construction v. State of Montana, Montana Department of Transportation, et al.*,<sup>12</sup> *Mountain West Holding Co., Inc. v. The State of Montana, Montana DOT, et al.*<sup>13</sup> and *Midwest Fence Corp. v. United States DOT, Illinois DOT, et al.*<sup>14</sup>

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<sup>5</sup> See footnote 4.

<sup>6</sup> *City of Richmond v. J.A. Croson Company*, 488 U.S. 469 (1989).

<sup>7</sup> *Adarand Constructors, Inc. v. Peña*, 515 U.S. 200 (1995).

<sup>8</sup> 713 F. 3d 1187 (9<sup>th</sup> Cir. 2013).

<sup>9</sup> 473 F.3d 715 (7<sup>th</sup> Cir. 2007).

<sup>10</sup> 345 F.3d 964 (8<sup>th</sup> Cir. 2003), *cert. denied*, 541 U.S. 1041 (2004).

<sup>11</sup> *Adarand Constructors, Inc. v. Slater*, 228 F.3d 1147 (10<sup>th</sup> Cir. 2000) *cert. granted then dismissed as improvidently granted sub nom. Adarand Constructors, Inc. v. Mineta*, 532 U.S. 941, 534 U.S. 103 (2001).

<sup>12</sup> *M.K. Weeden Construction* 2013 WL 4774517 (D. Mont. 2013).

<sup>13</sup> *Mountain West Holding Company, Inc.* 2014 WL 6686734 (D. Mont. Nov. 26, 2014), *appeal pending*.

<sup>14</sup> *Midwest Fence Corp. v. United States DOT, Illinois DOT, et al.*, 2015 WL 1396376 (N.D. Ill, March 24, 2015), *appeal pending*.

The 2005 Ninth Circuit Court of Appeals decision in *Western States Paving Co. v. Washington State DOT* is important for this disparity study, as Montana is within the jurisdiction of the Ninth Circuit.

- The Court upheld the constitutionality of the Federal DBE Program.
- However, the Ninth Circuit found that the Washington State DOT failed to show its implementation of the Federal DBE Program to be narrowly tailored.

After that ruling, state departments of transportation within the Ninth Circuit operated entirely race- and gender-neutral programs until studies could be completed to provide information that would allow them to implement the Federal DBE Program in a narrowly tailored manner.<sup>15</sup>

The first court review of an agency's implementation of the Federal DBE Program in the Ninth Circuit after the *Western States Paving* decision was in *Associated General Contractors of America, San Diego Chapter, Inc. v. California Department of Transportation, et al.* The Ninth Circuit held Caltrans' implementation of the Federal DBE Program to be constitutional, which is of particular significance to this study (see Appendix B).<sup>16</sup>

In *Mountain West Holding* and *M.K. Weeden*, two U.S. District Courts in Montana upheld the validity of the MDT DBE Program implementing the Federal DBE Program.<sup>17</sup> The *Mountain West Holding* decision, at the time of this report, has been appealed to the U.S. Court of Appeals for the Ninth Circuit.<sup>18</sup>

**Constitutionality of state and local race-conscious programs.** In addition to the Federal DBE Program, some state and local government minority business programs have been found to meet the strict scrutiny standard. Appendix B discusses the successful defense of state and local race-conscious programs, including *Concrete Works of Colorado v. City and County of Denver*<sup>19</sup> and *H.B. Rowe Company, Inc. v. W. Lyndo Tippet, North Carolina Department of Transportation, et al.* (upheld in part).<sup>20</sup>

As discussed in Appendix B, many local and state race-conscious programs have been challenged in court and have been found to be unconstitutional. Appendix B discusses the *Western States Paving* decision as well as examples where courts found that operation of a state or local MBE/WBE program did not meet the strict scrutiny standard.

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<sup>15</sup> Disparity studies have been conducted for state DOTs in each Ninth Circuit state — Alaska, Hawaii, Washington, Idaho, Montana, Oregon, California, Nevada and Arizona — as well as many local transit agencies and some airports in those states.

<sup>16</sup> *Associated General Contractors of America, San Diego Chapter, Inc. v. California Department of Transportation, et al.*, 713 F.3d 1187 (9th Cir. 2013).

<sup>17</sup> *M.K. Weeden Construction* 2013 WL 4774517 (D. Mont. 2013).

<sup>18</sup> *Mountain West Holding* 2014 WL 6686734 (D. Mont. 2014), *appeal pending*.

<sup>19</sup> *Concrete Works of Colorado v. City and County of Denver*, 321 F.3d 950 (10th Cir. 2003), *cert. denied*, 540 U.S. 1027 (2003).

<sup>20</sup> Program upheld with regard to African American- and Native American-owned subcontractors but held invalid for inclusion of other groups. *H.B. Rowe Company, Inc. v. W. Lyndo Tippet, North Carolina Department of Transportation, et al.*, 615 F.3d 233 (4th Cir. 2010).

## CHAPTER 3.

### MDT Transportation Contracts

Many components of the 2016 Disparity Study require MDT contract and subcontract data as building blocks for the analysis. When designing the availability research, for example, it is important to understand the geographic area from which MDT draws contractors and consultants and the types of work involved in MDT transportation contracts. Also, the study team’s utilization and disparity analyses are based on information from MDT prime contracts and subcontracts.

Before conducting other analyses, Keen Independent collected information for MDT and local agency transportation contracts for the October 2009 through September 2014 study period. Chapter 3 describes the study team’s process for compiling and merging these data. Chapter 3 consists of four parts:

- A. Overview of MDT transportation contracts;
- B. Collection and analysis of MDT contract data;
- C. Types of work involved in MDT contracts; and
- D. Location of businesses performing MDT work.

Appendix C provides additional detail concerning collection and analysis of contract data.

#### A. Overview of MDT Transportation Contracts

MDT uses FHWA and state funds to build and maintain highway transportation projects. The Disparity Study also includes highway-related contracts awarded by cities, counties, other local agencies and tribal entities using money passed through MDT.

- Construction projects include building new highway segments and interchanges, widening and resurfacing roads, and improving bridges. The largest construction contract in the study period was the \$24 million Two Medicine River Bridge project.
- Engineering-related work includes design and management of projects, planning and environmental studies, surveying and other transportation-related consulting services.

The 2016 Disparity Study focused on highway-related contracts using FHWA or state monies and did not include contracts using funds from the Federal Transit Administration (FTA) or Federal Aviation Administration (FAA). In total, the study team examined about \$1.9 billion in highway-related contract dollars over the study period.

**Prime contracts, subcontracts, trucking and materials supply.** A typical construction project includes a prime contractor and a number of subcontractors. Some subcontractors on MDT construction projects further contract out work to what is known as a “second-tier” or “lower-tier” subcontractor. Keen Independent examined MDT contract information for each level of subcontractor.

Trucking companies and materials suppliers are often involved in construction projects as well. MDT does not require its prime contractors to procure trucking services or materials supplies through subcontracts. As a result, MDT’s data concerning subcontracts include only some of the trucking and materials supply companies involved in MDT contracts.

Many MDT projects have an engineering phase prior to construction that requires work performed by engineering companies and related firms. The engineering prime consultant retains the specialized subconsultants needed to complete these contracts. Keen Independent included engineering-related prime contracts and subcontracts in the study.

MDT sometimes contracts with engineering companies through on-call agreements. When specific work is needed, MDT issues task orders to those firms. Keen Independent included engineering task orders in this analysis.

For both construction and engineering contracts, Keen Independent separated the contract dollars going to subcontractors (and any identified trucking companies and suppliers) from the dollars retained by the prime contractor. Keen Independent calculated the total dollars retained by the prime contractor by subtracting subcontractor, trucker and supplier dollars from the total contract value. This step was important for both the availability analyses and the utilization analyses performed in the 2016 Disparity Study.

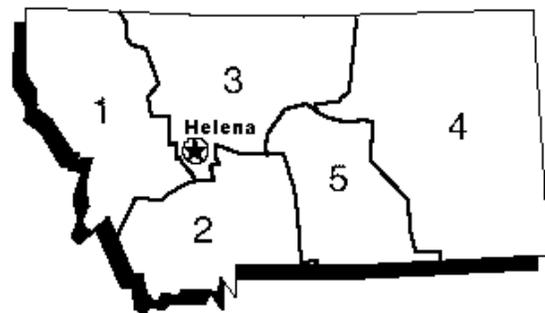
**MDT contracts and local public agency CTEP contracts.** The 2016 Disparity Study includes MDT contracts and those for local agencies using funds MDT administered. Through MDT’s Community Transportation Enhancement Program (CTEP), FHWA funds for transportation projects go to cities, counties, regional transportation commissions, other local agencies and tribal entities.

**Contracts related to transportation construction and engineering.** The study focused on transportation construction and engineering contracts and does not include acquisition of real property. The study team also excluded any contracts to not-for-profit entities or government agencies.

**Regions.** Based on MDT and industry input, Keen Independent divided the Montana contracting market into five regions corresponding to the five MDT districts (see Figure 3-1). The region for a contract corresponds to the physical location of the project, not the address of the contractor.

Keen Independent coded statewide assignments as “statewide.” The study team also coded work without a physical location as “statewide.”

Figure 3-1.  
MDT districts



## B. Collection and Analysis of Contract Data

As shown in Figure 3-2, Keen Independent collected contract data from multiple sources. Data for most MDT construction contracts came from MDT’s Site Manager system. The Purchasing Services Section provided data for maintenance-related construction projects. Data for Engineering projects came from the Consultant Design CIS System. The Community Transportation Enhancement Program (CTEP) Oracle database contained data for local agency contracts. Data for DBE tracking came from DBE Suite, CRLMS (Civil Rights and Labor Management System) and Site Manager.

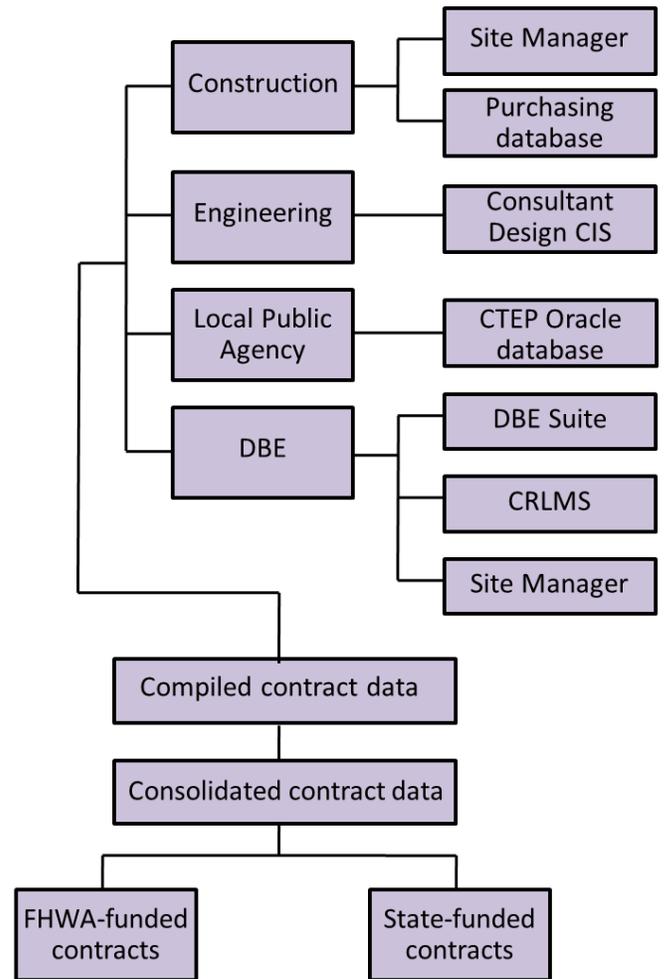
MDT contract records provided information about award date, dollars, location (district), general description of the work, whether or not the contract was FHWA- or state-funded, and whether DBE contract goals applied. Keen Independent used consistent methods to collect information on FHWA- and state-funded contracts.

Keen Independent merged contracts from different sources into one database, which the study team reviewed for duplicate records and then separated by funding source.

**Study period.** Keen Independent examined contracts awarded from October 2009 through September 2014. The end date of the study period corresponded to the most recently completed federal fiscal year at the time when the study team began collecting contract data. The study team also collected data for task orders executed from October 2009 through September 2014 on engineering-related contracts awarded before 2009.

**Contract totals based on actual or expected payments.** Keen Independent obtained dollar values for prime contracts, subcontracts, trucking services and materials suppliers from MDT records. To the extent possible, the dollar amounts used correspond to the total dollars paid or expected to be paid to the firm for services on that contract or subcontract.<sup>1</sup>

Figure 3-2.  
Collection of contract data



<sup>1</sup> For example, Keen Independent examined the *total* value of the contract and related subcontracts for a May 2012 contract, not what was paid on that contract before the September 2014 study period end date. For certain completed contracts and task orders, the study team used payment amounts to determine contract value.

When there was any amount of FHWA-funding expected for a contract, MDT typically treated that contract as FHWA-funded. “State-funded” contracts are those with no FHWA funding. CTEP projects receive funding from multiple sources, including federal, state and local sources. CTEP contracts are considered federally-funded in this analysis.

**Data sources for local public agency contracts.** MDT maintains some information about local public agency (LPA) projects funded through CTEP, but does not obtain complete data about the subcontractors working on those projects. Keen Independent followed up with certain local agencies concerning the largest of these contracts.

**Limitations concerning contract data.** As discussed in Appendix C, MDT contracting rules do not require prime contractors to formally subcontract for supplies and trucking; therefore, subcontracting data for supplies and trucking is limited. Also, the information for CTEP contracts included in this Disparity Study was not as comprehensive as for MDT contracts.

Keen Independent coded each prime contract and subcontract according to the type of work that appeared to comprise the most dollars. In other words, if a firm performed both site prep and landscaping on a subcontract, Keen Independent coded the entire subcontract into one or the other category based on what appeared to be the most work in the subcontract.

These data limitations do not appear to have a meaningful effect on overall study results.

### C. Types of Work Involved in MDT Contracts

Keen Independent examined 6,679 transportation-related contracts, task orders and subcontracts totaling about \$1.9 billion over the October 2009 through September 2014 study period. Figure 3-3 presents the number and dollar value of FHWA- and state-funded contracts for MDT and for local public agency (LPA) CTEP contracts.

Figure 3-3.  
Number and dollars of MDT and LPA CTEP transportation contracts,  
October 2009 through September 2014

|                            | MDT            | CTEP      | Total          |
|----------------------------|----------------|-----------|----------------|
| <b>Number of contracts</b> |                |           |                |
| FHWA-funded                | 4,873          | 1,375     | 6,248          |
| State-funded               | <u>431</u>     | <u>0</u>  | <u>431</u>     |
| Total                      | 5,304          | 1,375     | 6,679          |
| <b>Dollars (1,000s)</b>    |                |           |                |
| FHWA-funded                | \$ 1,774,655   | \$ 38,681 | \$ 1,813,335   |
| State-funded               | <u>115,115</u> | <u>0</u>  | <u>115,115</u> |
| Total                      | \$ 1,889,770   | \$ 38,681 | \$ 1,928,451   |

Note: Numbers may not add due to rounding.  
Source: Keen Independent from MDT contract data.

The study team coded types of work involved in each prime contract and subcontract based upon data in MDT contract records and, as a supplement, information about the primary line of business of the firm performing the work. Keen Independent developed the work types based in part on the coding systems used by MDT as well as Dun & Bradstreet's 8-digit classification codes.

**Contract dollars by type of work for FHWA- and state-funded contracts.** Figure 3-4 presents information about dollars for 35 different types of prime contract and subcontract work. Dollars for prime contracts are based on the contract dollars retained (i.e., not subcontracted out) by the prime contractor or prime consultant.

Figure 3-4.  
Dollars of FHWA- and state-funded prime contracts and subcontracts by type of work, October 2009 through September 2014

| Type of work  | FHWA-funded         |                | State-funded        |                | Total               |                |
|---|---------------------|----------------|---------------------|----------------|---------------------|----------------|
|   | Dollars<br>(1,000s) | Percent        | Dollars<br>(1,000s) | Percent        | Dollars<br>(1,000s) | Percent        |
| General road construction and widening                  | \$642,197           | 35.4 %         | \$7,378             | 6.4 %          | \$649,576           | 33.7 %         |
| Asphalt and concrete paving                             | 266,572             | 14.7           | 2,306               | 2.0            | 268,878             | 13.9           |
| Pavement surface treatment (such as sealing)            | 80,250              | 4.4            | 79,828              | 69.3           | 160,078             | 8.3            |
| Bridge and elevated highway construction                | 151,555             | 8.4            | 4,958               | 4.3            | 156,514             | 8.1            |
| Excavation, site prep, grading and drainage             | 121,486             | 6.7            | 1,655               | 1.4            | 123,140             | 6.4            |
| Temporary traffic control                               | 84,405              | 4.7            | 2,599               | 2.3            | 87,004              | 4.5            |
| Engineering   | 76,861              | 4.2            | 525                 | 0.5            | 77,386              | 4.0            |
| Other concrete work                                     | 67,294              | 3.7            | 639                 | 0.6            | 67,933              | 3.5            |
| Striping or pavement marking                            | 53,366              | 2.9            | 555                 | 0.5            | 53,921              | 2.8            |
| Installation of guardrails, fencing or signs            | 46,933              | 2.6            | 7,300               | 6.3            | 54,233              | 2.8            |
| Asphalt, concrete or other paving materials             | 32,291              | 1.8            | 1,623               | 1.4            | 33,914              | 1.8            |
| Landscaping and related work including erosion control  | 24,544              | 1.4            | 496                 | 0.4            | 25,040              | 1.3            |
| Electrical work including lighting and signals          | 20,729              | 1.1            | 940                 | 0.8            | 21,669              | 1.1            |
| Concrete flatwork (including sidewalk, curb and gutter) | 13,150              | 0.7            | 402                 | 0.3            | 13,553              | 0.7            |
| Multi-use paths   | 11,086              | 0.6            | 2,129               | 1.8            | 13,215              | 0.7            |
| Concrete cutting  | 12,816              | 0.7            | 20                  | 0.0            | 12,837              | 0.7            |
| Aggregate materials supply                              | 9,695               | 0.5            | 287                 | 0.2            | 9,982               | 0.5            |
| Drilling and foundations                                | 9,777               | 0.5            | 7                   | 0.0            | 9,784               | 0.5            |
| Environmental consulting                                | 8,821               | 0.5            | 0                   | 0.0            | 8,821               | 0.5            |
| Transportation planning                                 | 8,656               | 0.5            | 38                  | 0.0            | 8,694               | 0.5            |
| Structural steel work                                   | 5,718               | 0.3            | 300                 | 0.3            | 6,018               | 0.3            |
| Surveying and mapping                                   | 5,830               | 0.3            | 26                  | 0.0            | 5,856               | 0.3            |
| Trucking and hauling                                    | 5,153               | 0.3            | 107                 | 0.1            | 5,260               | 0.3            |
| Inspection and testing                                  | 4,665               | 0.3            | 6                   | 0.0            | 4,671               | 0.2            |
| Pavement milling  | 4,015               | 0.2            | 564                 | 0.5            | 4,578               | 0.2            |
| Underground utilities                                   | 3,755               | 0.2            | 106                 | 0.1            | 3,861               | 0.2            |
| Geotechnical engineering and consulting                 | 3,726               | 0.2            | 10                  | 0.0            | 3,736               | 0.2            |
| Construction management                                 | 3,428               | 0.2            | 0                   | 0.0            | 3,428               | 0.2            |
| Wrecking and demolition                                 | 2,511               | 0.1            | 11                  | 0.0            | 2,523               | 0.1            |
| Cultural resource consulting                            | 794                 | 0.0            | 0                   | 0.0            | 794                 | 0.0            |
| Other construction                                      | 29,084              | 1.6            | 300                 | 0.3            | 29,384              | 1.5            |
| Other professional services                             | 1,086               | 0.1            | 0                   | 0.0            | 1,086               | 0.1            |
| Other construction materials                            | 838                 | 0.0            | 0                   | 0.0            | 838                 | 0.0            |
| Other services  | 247                 | 0              | 0                   | 0.0            | 247                 | 0.0            |
| <b>Total</b>  | <b>\$1,813,335</b>  | <b>100.0 %</b> | <b>\$115,115</b>    | <b>100.0 %</b> | <b>\$1,928,451</b>  | <b>100.0 %</b> |

Note: Numbers may not add due to rounding.

Source: Keen Independent from MDT contract data.

When prime contracts and subcontracts pertain to multiple types of work, Keen Independent coded the entire work element based on what appeared to be the predominant type of work in the prime contract or subcontract. For example, if a subcontract included fencing and landscaping, and it appeared that the work was predominantly fencing, the entire subcontract was coded as fencing.<sup>2</sup>

Similarly, an individual prime contract or subcontract was sometimes for a broad range of road construction activities. When a more specialized activity could not be identified as the primary area of work, these contracts were classified as general road construction and widening.

As shown in Figure 3-4, prime contracts or subcontracts relating to general road construction and widening, asphalt and concrete paving, pavement surface treatment, and bridge and elevated highway construction comprised almost two-thirds of the contract dollars examined in the study.

Although work categories in Figure 3-4 as “engineering” was only 4 percent of MDT contract dollars during the study period, engineering-related contracts including pertinent subcontracts was about 6 percent of the dollars.

Types of work that did not fit into the specific categories listed in Figure 3-4 were included in “other professional services and consulting,” “other construction,” “other construction materials” or “other services” as appropriate. Together, these four “other” categories comprised less than 2 percent of FHWA- and state-funded contract dollars in the MDT contract data, as shown in Figure 3-4.

One of the reasons to examine types of work involved in MDT highway-related contracts is to establish the proper focus of the availability analysis, including the subindustries of interest and the types of questions to be asked. The “other work” categories not included as a focus of the availability analysis represented less than 2 percent of FHWA- and state-funded transportation contract dollars. In other words, the study team’s analysis of availability was based on types of work accounting for 98 percent of transportation contract dollars, a very high share of total dollars.

#### **D. Location of Businesses Performing MDT Work**

In this study, analyses of local marketplace conditions and the availability of firms to perform contracts and subcontracts focus on the “relevant geographic market area” for MDT contracting. The relevant geographic market area was determined through the following steps.

For each prime contractor and subcontractor, Keen Independent determined whether the company had a business establishment in Montana based upon MDT vendor records and additional research. Keen Independent then added the dollars for firms with Montana locations and compared the total with that for companies with no establishments within the state.

Firms with locations in Montana obtained 89 percent of total contract dollars during the study period, as shown in Figure 3-5 below. Keen Independent selected Montana as the relevant geographic market area for the study. Therefore, Keen Independent’s availability analysis primarily focused on firms with locations in Montana. The quantitative and qualitative analyses of marketplace conditions in Chapter 5 also focus on Montana.

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<sup>2</sup> Data concerning subcontract awards or payments were for the entire subcontract, not individual work elements.

Figure 3-5.  
 Dollars of prime contracts and subcontracts going to firms with and without  
 Montana locations, October 2009 through September 2014

|              | Dollars (1,000s) |              |                | Percent     |              |           |
|--------------|------------------|--------------|----------------|-------------|--------------|-----------|
|              | FHWA-funded      | State-funded | Total          | FHWA-funded | State-funded | Total     |
| Montana      | \$ 1,593,626     | \$ 113,650   | \$ 1,707,276   | 88 %        | 99 %         | 89 %      |
| Out of state | <u>219,709</u>   | <u>1,465</u> | <u>221,174</u> | <u>12</u>   | <u>1</u>     | <u>12</u> |
| Total        | \$ 1,813,335     | \$ 115,115   | \$ 1,928,451   | 100 %       | 100 %        | 100 %     |

Note: Numbers may not add due to rounding.  
 Source: Keen Independent from MDT contract data.

## CHAPTER 4.

### MDT DBE Program Operation

Federal regulations in 49 CFR Part 26 describe program elements that agencies such as MDT must implement to properly operate the Federal DBE Program.

In general, for many years until 2006, MDT operated the Federal DBE Program for its FHWA-funded contracts using a combination of neutral efforts such as business assistance in combination with one race- and gender-conscious program — DBE contract goals. After the *Western States Paving* decision, the USDOT directed state departments of transportation and other agencies within the Ninth Circuit to operate entirely race- and gender-neutral programs until studies could be completed to provide information that would allow them to implement the Federal DBE Program in a narrowly tailored manner. MDT, like other state DOTs in the region, discontinued use of DBE contract goals at that time.

In 2011, MDT submitted a Goal Methodology to FHWA that proposed use of DBE contract goals. FHWA approved MDT's plan, and MDT began setting DBE contract goals on FHWA-funded contracts in June 2012. MDT discontinued their use in June 2014, and has since operated a 100 percent race-neutral program. These neutral efforts include a broad range of business assistance efforts, as discussed in this chapter.

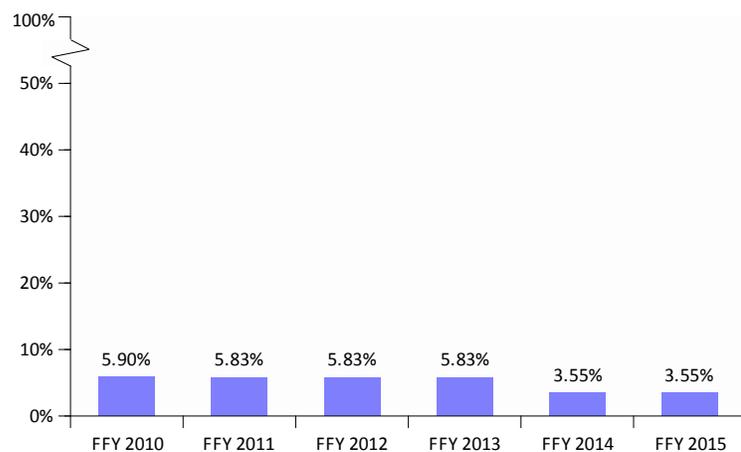
Prior to discontinuing their use in 2006, MDT had set DBE contract goals on certain FHWA-funded engineering contracts. It has not reintroduced their use since then.

As part of implementing the Federal DBE Program, MDT sets overall goals for DBE participation for USDOT- funded contracts. Figure 4-1 shows MDT's overall annual DBE goals for FHWA contracts since FFY 2010.

Figure 4-1.  
MDT FHWA annual  
DBE goals FFY 2010-FFY 2015

Source:

MDT Uniform Reports of  
annual DBE goals



The balance of this chapter discusses program elements under the Federal DBE Program and how MDT has addressed each requirement. Keen Independent discusses them in the order in which they appear in the federal regulations in 49 CFR Part 26. Chapter 4 is a brief summary of these requirements; the reader is directed to the full regulations and other USDOT guidance for a comprehensive view of the federal requirements.

### **Reporting to DOT — 49 CFR Section 26.11 (b)**

MDT must periodically report DBE participation in its transportation-related construction and engineering contracts to FHWA. MDT compiles information on DBE commitments/awards and on DBE payments and submits Uniform Reports of DBE Awards or Commitments and Payments to FHWA every six months.

Although not required under federal regulations, MDT also makes monthly reports to its Transportation Commission. This gives MDT enhanced ability to monitor DBE participation on individual contracts as well as regular assessment of whether it is meeting its overall DBE goal for FHWA-funded contracts.

### **Records Required to Keep — 49 CFR Section 26.11**

As part of its implementation of the Federal DBE Program, MDT must submit Uniform Reports of DBE Awards or Commitments and Payments to FHWA using forms provided by USDOT, and provide other reports as directed.

MDT must also develop a bidders list of businesses that are available for its transportation contracts. The bidders list must include the following information about each available business:

- Name;
- Address;
- DBE status;
- Type of work performed;
- Age of business; and
- Annual gross receipts (within a selected range).

This information is required to help agencies such as MDT develop accurate data about the universe of DBE and non-DBE firms that seek to work on contracts for use in helping it set its overall DBE goals.

MDT collects information from the following sources as part of its bidders list:

- MDT has a database of contractors submitting bids on construction contracts;
- Bidders on construction contracts are also to provide MDT with a list of firms from which they obtained subcontract quotes; and
- MDT maintains lists for other types of contracts, such as firms interested in receiving information about engineering contract opportunities.

MDT maintains information about race, ethnicity or gender ownership of firms, the age of firms, their gross receipts and the types of work they perform in its DBE Directory.

The information required in the federal regulations is difficult to compile and maintain on a consistent basis across areas of transportation contracting, as many state DOTs and other agencies have found. The information Keen Independent prepared from the detailed availability interviews can supplement MDT information to provide age, gross receipts and other firm information in a consistent list.

#### **Assurances — 49 CFR Section 26.13**

MDT must make certain required assurances in its agreements with FHWA, and does so.

#### **Program Updates — 49 CFR Section 26.21**

MDT has submitted a DBE Program document for approval to FHWA in 2014 and would need to periodically update this document.

#### **Policy Statement — 49 CFR Section 26.23**

MDT has a signed and dated policy statement expressing its commitment to the DBE Program.

#### **DBE Liaison Officer — 49 CFR Section 26.25**

The Operations Chief of the Office of Civil Rights is the DBE Liaison Officer for MDT.

#### **DBE Financial Institutions — 49 CFR Section 26.27**

MDT is required to investigate services offered by financial institutions owned and controlled by socially- and economically-disadvantaged individuals and has done so in its DBE Program Guide.

#### **Prompt Payment Mechanisms — 49 CFR Section 26.29**

Prompt payment of subcontractors is a requirement in the Federal DBE Program (49 CFR Section 26.29) and is a current point of emphasis from USDOT. On USDOT-funded contracts, prime contractors are required to pay subcontractors for satisfactory performance of work no later than 30 days from their receipt of payment from the agency. There are parallel requirements for release of retainage to subcontractors.

Montana has a seven-day prompt payment statute for construction contracts.

- Within seven days of receiving payment, prime contractors on construction contracts are required to notify MDT of corresponding payments to subcontractors. MDT will then automatically email subcontractors this information. Subcontractors can notify MDT if they were not actually paid or the information was incorrect. This system will be in place for construction contracts awarded starting February 2016.
- Within 30 days of receiving payment, prime consultants on MDT's consulting contracts must notify MDT of corresponding payments to subconsultants. MDT does not yet have a system to notify subconsultants of those payments.

MDT requires subcontractors on MDT projects to pay their subcontractors (i.e., second-tier subcontractors) and their suppliers within seven days of receiving payment from the prime contractor.

### **DBE Directory — 49 CFR Section 26.31**

Federal regulations require the MDT maintain a DBE directory and that it include address, phone number and the types of work the firm has been certified to perform as a DBE, using NAICS codes.

MDT maintains a DBE Directory on its website. It appears to meet and exceed the requirements in 49 CFR Section 26.31, as it has more detailed work types listed for each firm, notes whether the firm is involved in highway, transit, aviation or other work, and provides fax number, email address and website when available. The DBE Directory is searchable by business name, work type, NAICS code and owner name, as well as by whether it is highway-, transit-, aviation or non-transportation-related.

### **Overconcentration — 49 CFR Section 26.33**

Agencies implementing the Federal DBE Program are required to report and take corrective measures if they find that DBEs are so overconcentrated in certain work areas as to unduly burden non-DBEs working in those areas. If an agency does identify overconcentration, examples of appropriate measures include the use of incentives, technical assistance, business development programs and mentor-protégé programs to assist DBEs in performing work outside of the specific field in which the agency has determined that non-DBEs are unduly burdened. An agency can also consider varying its use of contract goals to ensure that non-DBEs are not unfairly prevented from competing for subcontracts. Any determination of overconcentration and measures to address it must receive approval from FHWA.

MDT reported in its 2014 Program Guide that it did not identify any overconcentration in the types of work that DBEs perform. Chapter 8 of this report further examines this issue based on data collected in this disparity study.

## **Business Development Programs and Mentor-Protégé Programs— 49 CFR Section 26.35 and 49 CFR Appendix D to Part 26**

Business development programs (BDPs) are programs designed to assist DBE-certified businesses in developing the capabilities to compete for work independent of the DBE Program. Agencies such as MDT may establish a BDP as part of their implementation of the Federal DBE Program (or if they are directed to do so by FHWA or another USDOT operating administration, they must do so).

As part of a BDP, or separately, agencies may establish a mentor-protégé program, in which a non-DBE or another DBE serves as a mentor and principle source of business development assistance to a protégé DBE.

**Business Development Program.** MDT has developed a BDP. One requirement of the plan is that each firm must develop and submit a comprehensive business plan and business self-assessment. Firms must complete these plans in order to be eligible for reimbursement for training, travel and other supportive services.

**Development stage.** Firms are provided a DBE Tool Kit when they enter the program. As a part of the Program, firms must submit a comprehensive business plan within one year of Program entry. Each firm must also conduct a Business Self-Assessment, which is provided by MDT. The assessment is used to help the firm improve their business development plan, which is reviewed on an annual basis with MDT staff. As a part of the business plan review, each firm will prepare a report of its need for contracts awards for the next two years. Each firm is required to attend at least two training courses per year.

**Transitional stage.** This stage is designed to prepare the firm to leave the Program. When the firm enters the transitional stage, they must submit an annual transition management plan which outlines steps to promote business in areas outside traditional DBE participation.

**Mentor-protégé program.** MDT reports that it has not been able to develop its own mentor-protégé program because of the small pool of contractors in the state, which affects the willingness of a mentor to assist a protégé that may also be a competitor. Instead, MDT assists DBEs in also becoming certified under the U.S. Small Business Administration 8(a) program, which has its own mentorship program. Under the SBA 8(a) Program, Montana firms might be able to be mentored by out-of-state companies.

There are other organizations in Montana that offer general business assistance, including mentoring, as discussed later in this chapter.

## **Responsibilities for Monitoring the Performance of Other Program Participants — 49 CFR Section 26.37**

The Final Rule effective February 28, 2011 revised requirements for monitoring and enforcing that the work that prime contractors commit to DBE subcontractors at contract award (or through contract modifications) is actually performed by those DBEs. USDOT describes the requirements in 49 CFR Section 26.37(b). The Final Rule states that prime contractors can only terminate DBEs for “good cause” and with written consent from the awarding agency.

MDT reported that it has a mechanism in place to regularly verify that prime contractors actually utilize DBEs to the degree to which they committed to doing so at contract award. For example, MDT staff produce monthly reports that examine commitments and attainments on construction contracts, which it submits to the Transportation Commission.

When MDT set DBE contract goals on contracts, its monitoring of those contracts included review of commercially useful function (CUF). MDT staff prepare a Commercially Useful Function (CUF) report for each DBE on a project to ensure that work committed to DBEs at contract award or subsequently (e.g., as the result of modification to the contract) is actually performed by the DBEs to which the work was committed. MDT staff monitor DBE payments made to DBE firms and compares payments to contract award commitments.

MDT staff are also responsible for informing the USDOT of any false, fraudulent, or dishonest conduct in connection with the program. Montana Administrative Rule 18.3.104, titled Reasons for Debarment, section D, provides MDT the ability to debar a firm for violating the DBE program. Violations include establishing a “DBE front,” using a DBE that is not performing a “commercially useful function,” self-performing work committed to a DBE, or not making prompt payments as required by law.

### **Fostering Small Business Participation — 49 CFR Section 26.39**

When implementing the Federal DBE Program, MDT must include a measure to structure contracting requirements to facilitate competition by small businesses, “taking all reasonable steps to eliminate obstacles to their participation, including unnecessary and unjustified bundling of contract requirements that may preclude small business participation in procurements as prime contractors or subcontractors.”<sup>1</sup> The Final Rule effective February 28, 2011 added a requirement for transportation agencies to foster small business participation in their contracting.

MDT initiatives include the following:

- In its 2014 DBE Program Guide, MDT reports that it attempts to create a reasonable number of prime contracts that are of a size that DBEs can reasonably perform and that it encourages prime contractors to do so as well for subcontracts. Chapter 8 of this report specifically examines small prime contracts and DBE participation on those contracts.
- MDT also has a number of small business assistance measures. For example, MDT DBE training sessions are open to any small business.

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<sup>1</sup> 49 CFR Section 26.39(a).

Federal regulations also include as acceptable program measures:

- Race- and gender-neutral small business set-aside for prime contracts under a stated amount (e.g., \$1 million); and
- On prime contracts that do not include DBE contract goals, requiring the prime contractor to provide subcontracting opportunities of a size that small businesses, including DBEs, can reasonably perform, rather than self-performing all of the work involved.

MDT staff report that the agency has considered a small business goals program and has researched potential certification of small businesses. It has not implemented such a program, to date. Regarding self-performance, MDT does not have a formal requirement for a certain amount of subcontracting. It does require a certain percentage of a construction contract to be performed by the prime contractor (in effect applying a subcontracting “maximum”), although this requirement can be adjusted for unusual projects that require substantial subcontracting.

### **Prohibition of DBE Quotas and Prohibition of Set-asides for DBEs Unless in Limited and Extreme Circumstances — 49 CFR Section 26.43**

DBE quotas are prohibited under the Federal DBE Program. DBE set-asides are only to be used in extreme circumstances.

MDT does not use quotas in any way in its administration of the Federal DBE Program.

### **Setting Overall Annual DBE Goals — 49 CFR Section 26.45**

In the Final Rule effective February 28, 2011, USDOT changed how often agencies that implement the Federal DBE Program are required to submit overall annual DBE goals. Agencies such as MDT now need to develop and submit overall annual DBE goals every three years.

Chapter 9 of this report provides MDT with information that pertains to overall annual DBE goal for DBE participation for FFY 2017 through FFY 2019. Keen Independent’s process follows the instructions given in 49 CFR Section 26.45 and additional USDOT guidance.<sup>2</sup>

MDT must also provide for consultation and publication of its proposed overall DBE goal. Consultation must include stakeholders and publication must be on the MDT website and may include other means as well, as described in 49 CFR Section 26.45(g).

### **Analysis of Reasons for not Meeting Overall DBE Goal — 49 CFR Section 26.47(c)**

Another addition to the Federal DBE Program made under the Final Rule effective February 28, 2011 requires agencies to take the following actions if their DBE participation for a

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<sup>2</sup> USDOT. Tips for Goal-Setting in the Federal Disadvantaged Enterprise (DBE) Program as updated December 22, 2014 <http://www.dot.gov/osdbu/disadvantaged-business-enterprise/tips-goal-setting-disadvantaged-business-enterprise>.

particular fiscal year is less than their overall goals for that year:

- Analyze in detail the reasons for the difference; and
- Establish specific steps and milestones to address the difference and enable the agency to meet the goal in the next fiscal year.

### **Maximum Feasible Portion of Goal Met through Neutral Means — 49 CFR Section 26.51(a)**

As discussed in Chapters 1, 2 and 10, MDT must meet the maximum feasible portion of its overall annual DBE goal through the use of race- and gender-neutral means of facilitating DBE participation. MDT must project the portion of its overall annual DBE goal that could be achieved through such means.

In its 2014 Program Guide, MDT determined that it would attempt to meet all of its overall DBE goal for FHWA-funded contracts through neutral means. Chapters 7 and 10 examine MDT's success in doing so.

### **Use of Specific Neutral Programs — 49 CFR Section 26.51(b)**

Race- and gender-neutral programs are a major component of the Federal DBE Program. Federal regulations in 49 CFR Section 26.51(b) provide examples of race-neutral means of facilitating DBE participation, which we summarize below:

1. Arranging solicitations, times for the presentation of bids, quantities, specifications and delivery schedules in ways that facilitate participation by DBEs and other small businesses;
2. Providing assistance in overcoming limitations such as inability to obtain bonding or financing;
3. Providing technical assistance and other services;
4. Carrying out information and communications programs on contracting procedures and specific contract opportunities;
5. Implementing a supportive services program to develop and improve immediate and long-term business management, recordkeeping, and financial and accounting capability for DBEs and other small businesses;
6. Providing services to help DBEs, and other small business, improve long-term development, increase opportunities to participate in a variety of kinds of work, handle increasingly significant projects, and achieve eventual self-sufficiency;
7. Establishing a program to assist new, start-up firms, particularly in fields in which DBE participation has historically been low;
8. Ensuring distribution of a DBE directory; and
9. Assisting DBEs, and other small businesses, to develop their capability to utilize emerging technology and conduct business through electronic media.

Beyond this list, there are several other examples of neutral measures identified in other parts of the Federal DBE Program including prompt payment mechanisms, eliminating unnecessary bundling of contract requirements, establishing mentor-protégé programs and other means.

**MDT Supportive Services Program and other assistance.** In addition to its Business Development Program, MDT provides group training, conferences and other activities to assist DBEs and other small businesses. For example, MDT holds DBE Summit's that provides several days of training to DBEs and small businesses (the February 3-4, 2016 DBE Summit in Helena is one example). Such sessions provide information about bonding, financing, how to learn about MDT contracts, bidding on MDT contracts, networking and other topics. The Summits also connect DBEs with prime contractors and consultants.

MDT also supports individualized company training and assistance in the areas including:

- Business plans;
- Bonding and reimbursement of bonding costs;
- Licenses;
- Use of plan rooms;
- Website development;
- Professional memberships; and
- Travel to business-related venues.

MDT can provide reimbursement of up to \$2,545 per year per firm for this specialized assistance.

The study team's review of MDT neutral initiatives identified efforts across many of these areas. In addition, other groups in Montana provide services that MDT leverages for DBE and other small business assistance, as discussed below. MDT directs DBEs and other small businesses needing this assistance to these and other groups.

**Technical Assistance Programs.** The Montana Procurement Technical Assistance Center (PTAC) offers training and support services to Montana businesses interested in local, state and federal government contracting. PTAC services include telephone consultations, personal appointments, workshops, seminars and special contracting events. Montana PTAC has offices in Billings, Bozeman, Kalispell, Missoula, Butte, Great Falls, Hamilton, Lewistown and Ronan.<sup>3</sup>

The Native American Development Corporation is the current Northern Plains Region Small Business Transportation Resource Center, which serves Montana and other states. It is headquartered in Billings, and provides procurement, ethnical, financial and bonding assistance to small businesses throughout the state.

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<sup>3</sup> How Montana PTAC Can Help You. (n.d.). Retrieved October 2, 2015, from <http://www.montanaptac.org/services>.

Other technical assistance programs are provided below.

- The Certified Regional Development Corporations (CRDC) program supports a regional approach to economic development. The program supports each of the CRDCs with annual funding for economic development services that support their region.<sup>4</sup>
- Montana Entrepreneur is a Montana Department of Commerce program that provides individualized business counseling. Montana Entrepreneur has partnered with the State Tribal Economic Development Commission (STEDC), the Governor's Office of Indian Affairs, the Development Commission Commerce's Small Business Development Center Bureau (SBDC) and the Indian Country Economic Development Program (ICED).<sup>5</sup>
- The DBE Supportive Services Program provides business assistance to contribute to the growth and self-sufficiency of DBE companies in the highway industry. Services include business skill development and training, assistance with bonding/financing, and resources, to provide information and assistance. All highway-related DBE certified companies are eligible for these services.<sup>6</sup>

**Small business assistance organizations.** There are many other organizations throughout Montana that offer assistance to minority- and women-owned firms as well as small businesses in general. Examples of these small business assistance organizations are provided below.

The Montana District Office is the only SBA office in Montana and serves all 56 counties. The Office is located in the city of Helena and serves as an independent voice for small businesses within the state. The Office collaborates with both entrepreneurs and state agencies to help foster and improve Montana's business climate; this includes assisting entrepreneurs who believe they have been subject to unreasonable or unjust state regulatory actions. SBA resource partners have 32 office locations across the state.<sup>7, 8</sup>

- Montana's Small Business Development Center (SBDC) network has 11 centers across the state, with headquarters in Helena. These centers act as small business incubators and provide advising, training, online courses and resources for businesses throughout the state.<sup>9</sup>

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<sup>4</sup> Certified Regional Development Corporations. (n.d.). Retrieved October 2, 2015, from <http://businessresources.mt.gov/CRDC>.

<sup>5</sup> Department of Commerce, Montana. (n.d.). Retrieved October 2, 2015, from <http://entrepreneur.mt.gov/default.mcpx>.

<sup>6</sup> Disadvantaged Business Enterprise, Supportive Services. (n.d.). Retrieved October 5, 2015, from <http://www.mdt.mt.gov/business/contracting/civil/dbe-already.shtml>.

<sup>7</sup> Local Assistance, Montana. (n.d.). Retrieved October 2, 2015, from <https://www.sba.gov/tools/local-assistance/map/state/MT>.

<sup>8</sup> About the Montana District Office. (n.d.). Retrieved September 17, 2015, from <https://www.sba.gov/offices/district/mt/helena/about-us>.

<sup>9</sup> Counseling, Small Business Development Centers. (2014). *Resources Guide for Small Businesses, U.S. Small Business Administration, Montana*, 6-8.

- SCORE has offices in communities throughout Montana where it provides small business entrepreneurs free, confidential business counseling services and ongoing mentoring, as well as the resources, templates and tools needed to achieve small business success. SCORE Montana Chapters include Billings, Bozeman, Great Falls, Helena and Northwest Montana.<sup>10</sup>
- The American Council of Engineering Companies (ACEC) acts on behalf of America's engineering industry, and represents more than 500,000 employees throughout the country. ACEC Montana provides members with access to best practice information, solutions, resources and networking opportunities.<sup>11</sup>

**Small business lending.** The USDOT has a Short Term Lending Program (STLP) that enables DBE- and SBA-certified businesses to access the financing they need to participate in transportation-related contracts. The Lending Program allows for a maximum loan amount of \$750,000. While the line of credit normally covers a one-year period, the applicant has the option of requesting one or more renewals; the line of credit cannot exceed five years.<sup>12</sup>

MDT partners with economic development authorities, state agencies and federal agencies that provide financial assistance to present lending opportunities to DBEs at different training events.

The Big Sky Economic Development Trust Fund (BSTF) provides state funds to aid in both business development and economic development planning. The governing bodies of each of Montana's eight tribal governments are eligible applicants for tribal priority economic development projects; those eligible may use Indian Country Economic Development (ICED) funds to support a business enterprise if it will benefit the Tribe(s) economically.<sup>13</sup>

Local banks and other private and not-for-profit organizations offer financing using U.S. Small Business Administration loan programs. There are many other organizations throughout the State that offer SBA loan programs and assist minority- and women-owned firms as well as other small businesses that need finance training.

**Small business development centers.** Some business development centers focus on minority-owned companies. Examples include:

- The Native American Collateral Support (NACS) Program addresses the lack of capital available to Native American-owned businesses; NACS provides collateral support security for lenders making loans with Native American-owned businesses that only lack sufficient collateral/equity for business loans according to their loan risk profiles.<sup>14</sup>

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<sup>10</sup> Counseling, SCORE. (2014). *Resources Guide for Small Businesses*, U.S. Small Business Administration, Montana, 6.

<sup>11</sup> Welcome to ACEC of Montana. (n.d.). Retrieved September 17, 2015, from <http://www.acecmt.org>.

<sup>12</sup> Short Term Lending Program. (n.d.). Retrieved August 28, 2015, from <http://www.transportation.gov/osdlbu/financial-assistance/short-term-lending-program>.

<sup>13</sup> Business Planning and Feasibility. (n.d.). Retrieved September 17, 2015, from <http://businessresources.mt.gov/Finance#Business-Planning-and-Feasibility-28>.

<sup>14</sup> Indian Economic Development. (n.d.). Retrieved September 17, 2015, from <http://businessresources.mt.gov/Finance#Indian-Economic-Development-33>.

- The SBA Office of Native American Affairs (ONAA) ensures that American Indians, Alaska Natives and Native Hawaiians have full access to business development, contracting and lending programs in Montana. The office provides a network of training initiatives that include finance and incubator workshops.<sup>15</sup>
- The Montana Women’s Business Center (WBC) is a Prospera Business Network program partially funded by the U.S. Small Business Administration. Established in 2009, the Montana WBC gives women the opportunity to excel in business by providing confidential business counseling and training services.<sup>16</sup>

**Trade associations and professional groups.** There are many trade associations and professional groups related to transportation-related construction and professional services in Montana. For example, the Montana Contractors Association (MCA) serves a broad range of firms engaged in transportation construction and other heavy construction. The MCA also creates economic growth opportunities by partnering with Montana’s industrial sectors (e.g., construction, agriculture, mining, energy) to support growth and success in every sector of Montana’s economy.<sup>17</sup>

**Bid notification resources.** There are many low-cost bid notification services available to Montana businesses. Businesses can learn of MDT bid opportunities on its website and through Bid Express Secure Internet Bidding; this service allows contractors to submit and withdraw bids in a secure, electronic environment. Many contractors who work with MDT already use this service to produce and submit a bid with an electronic bid file.<sup>18</sup>

**Overall assessment of neutral efforts.** Review of current race- and gender-neutral initiatives shows considerable MDT efforts alone and in partnership with others. Much of MDT’s assistance is highly individualized to the specific needs of a DBE based on information developed in a formal assessment and business plan.

In addition, public, not-for-profit and private institutions provide networking, training and technical assistance, financing and other small business services. This assistance outside of MDT efforts is substantial. MDT makes efforts to connect DBEs and other small businesses to this outside assistance, and offers financial support to DBEs for transportation and any fees associated with these services.

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<sup>15</sup> Native American Business Development, Small Business Development Centers. (2014). *Resources Guide for Small Businesses, U.S. Small Business Administration, Montana*, 11.

<sup>16</sup> Montana Women's Business Center. (n.d.). Retrieved September 17, 2015, from <http://www.montanawbc.org>.

<sup>17</sup> Montana Contractors Association, Overview. (n.d.). Retrieved October 5, 2015, from <http://www.mtagc.org/overview>.

<sup>18</sup> Bid Letting, Electronic Bids. (n.d.). Retrieved September 17, 2015, from <http://www.mdt.mt.gov/business/contracting/software.shtml>.

## **Use of DBE Contract Goals— 49 CFR Section 26.51(d and e)**

The Federal DBE Program requires agencies to establish contract goals to meet any portion of their overall DBE goals that they do not project being able to meet using race- and gender-neutral means, as noted in 49 CFR Section 26.51(d).

USDOT guidelines on the use of DBE contract goals, which are presented in 49 CFR Section 26.51(e), include the following guidance:

- Contract goals may only be used on contracts that have subcontracting possibilities;
- Agencies are not required to set a contract goal on every FHWA-funded contract;
- Agencies should set a goal for a specific contract based on factors such as the type of work involved, the location of the work and the availability of DBEs for the work of the particular contract;
- Over the period covered by the overall DBE goal, an agency must set contract goals so that they will cumulatively result in meeting the portion of the overall goal that the agency projects being unable to meet through race- and gender-neutral means; and
- An agency's contract goals must provide for participation by all DBE groups eligible for race- and gender-conscious measures and must not be subdivided into group-specific goals.

Federal regulations allow for an agency to require information regarding compliance with the DBE contract goal at time of bid or proposal, or up to seven days after bid opening (to be reduced to five days beginning January 1, 2017).<sup>19</sup> The regulations provide for some flexibility for what a proposer needs to provide under negotiated procurements such as design-build contracts.<sup>20</sup> Regulations also establish procedures for calculating the value of the DBE participation for specific types of subcontractors and suppliers.<sup>21</sup> For example, only if a DBE performs a “commercially useful function” can it be counted toward the goal.

Once the prime contractor has identified a DBE subcontractor to meet a contract goal, it may not terminate that DBE or substitute another DBE without the agency's prior consent. An agency may only give such consent if there is good cause for terminating the listed DBE (federal regulations provide direction on what constitutes “good cause”).<sup>22</sup>

**MDT use of DBE contract goals.** MDT reinstated the use of race- and gender-conscious goals for FFY 2011-FFY 2013 after the completion of the 2009 Disparity Study. FHWA approved the reinstatement in April 2011.

The first project-specific goals were set in June 2012. MDT set goals on 62 construction contracts through June 2014, under the extension.

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<sup>19</sup> 49 CFR Section 26.53(b)(3)(i).

<sup>20</sup> 49 CFR Section 26.53(b)(3)(ii).

<sup>21</sup> 49 CFR Section 26.55.

<sup>22</sup> 49 CFR Section 26.53(f)(1).

Project-specific goals were temporarily suspended for a short period of time during the June 2012 through June 2014 period. MDT did not apply goals to engineering-related contracts during this time.

MDT submitted a FFY 2014-2016 DBE Goal Methodology in July 2014. The methodology included an overall race-neutral DBE goal. The FHWA approved the methodology on an interim basis.

**MDT process for setting goals for specific contracts.** During the time that it used DBE contract goals, a committee of MDT staff set those goals based on the types of information outlined in the Federal DBE Program. The committee would examine information about the amount of different types of work in a project and the availability of DBEs for that work. Contract goals varied by project. Sometimes MDT would set a 0 percent goal on a contract.

**MDT process for determining whether a bidder had met the goal or shown good faith efforts to meet the goal.** MDT required bidders to identify DBEs, their scope of work and their dollar commitments at time of bid (normally, subcontractor information is only required four to six days after bid submission). MDT contacted those DBEs to confirm the information before recommending project award to the Transportation Commission. A bidder could also comply with the goals program by showing good faith efforts to meet the contract goal, as discussed below.

**Success of prime contractors in meeting the DBE goal.** In most instances, bidders complied with the contract goals program by showing DBE participation that met the goal. Based on communication from MDT staff, MDT monitoring of contracts found that prime contractors were able to meet those commitments. There were only a few instances in which a prime contractor was unable to meet the DBE contract goal in the performance of the contract due to factors such as change orders that did not involve DBEs. In one instance, the MDT engineer's estimate for a particular type of work overstated what was actually needed, which led to a lower amount of DBE participation than anticipated. MDT did not penalize the prime contractor in any of these cases.

#### **Flexible Use of any Race- and Gender-conscious Measures — 49 CFR Section 26.51(f)**

State and local agencies must exercise flexibility in any use of race- and gender-conscious measures such as DBE contract goals. For example, if MDT uses DBE contract goals and determines that its DBE utilization is exceeding its overall DBE goal in a particular fiscal year, it must reduce its use of DBE contract goals to the extent necessary. If it determines that it will fall short of the overall DBE goal in a particular fiscal year, then it must make appropriate modifications in the use of race- and gender-neutral and race- and gender-conscious measures to allow it to meet the overall goal.

#### **Good Faith Effort Procedures — 49 CFR Section 26.53**

A bidder or proposer can comply with a DBE contract goal by documenting that it made adequate good faith efforts to meet the goal, even though it did not succeed in doing so. If an agency determines that a bidder or proposer did not make good faith efforts to meet the contract goal, it must provide that bidder or proposer an opportunity for administrative reconsideration.

USDOT has provided guidance for agencies to review good faith efforts, including materials in Appendix A of 49 CFR Section 26. The Final Rule effective February 28, 2011 updated requirements for good faith efforts when agencies use DBE contract goals. MDT's past implementation of DBE contract goals included good faith efforts procedures.

- MDT has adopted a procedure for reviewing a firm's good faith efforts.
- MDT uses a committee to review any good faith efforts submissions. If that committee finds that those efforts to be inadequate, the bidder can appeal that decision within MDT (which has occurred at MDT).

### **Counting DBE and MBE/WBE Participation — 49 CFR Section 26.55**

Section 26.55 of 49 CFR describes how agencies should count DBE participation and evaluate whether bidders have met DBE contract goals. Federal regulations also give specific guidance for counting the participation of different types of DBE suppliers and trucking companies. Section 26.11 discusses the Uniform Report of DBE Awards or Commitments and Payments.

### **DBE certification — 49 CFR Part 26 Subpart D**

MDT is the sole certifying agency in Montana. It has designed its DBE certification process to comply with 49 CFR Part 26 Subpart D. It uses USDOT forms and follows federal regulations in certifying firms as DBEs within the state.

### **Other Program Elements**

MDT has other program elements as well.

**DBE Quote Request.** MDT provides a quote request service that allows contractors to solicit bids for a specific project from certified DBE firms. DBE Quote Request can be accessed directly from the MDT website.

**Complaint procedure.** MDT maintains a complaint procedure for DBEs experiencing difficulties or other firms wishing to provide information to MDT.

## CHAPTER 5.

### Marketplace Conditions

Understanding current marketplace conditions is important as MDT examines its overall goals for DBE participation in FHWA-funded contracts and projects the portion of its overall goal to be met through neutral means. It also provides information to help MDT determine whether there is a level playing field for minorities and women, and minority- and women-owned firms, in the Montana marketplace.

Federal courts have found that Congress “spent decades compiling evidence of race discrimination in government highway contracting, barriers to the formation of minority-owned construction businesses, and barriers to entry.”<sup>1</sup> Congress found that discrimination has impeded the formation and expansion of qualified MBE/WBEs.

As part of the 2016 Disparity Study, Keen Independent conducted quantitative and qualitative analyses of conditions in the Montana marketplace to examine whether barriers that Congress found on a national level also appear in Montana. The study team analyzed whether barriers exist in the Montana construction and engineering industries for minorities, women, and MBE/WBEs, and whether such barriers might affect opportunities on MDT and local agency transportation contracts.

For example:

- Although racial and ethnic minorities comprise 10 percent of the Montana workforce, only 5 percent of business owners in the general construction and engineering industries are minority.
- Women are 47 percent of the Montana workforce but only 9 percent of construction and engineering business owners.

Understanding why there are relatively few minority and female business owners in the Montana construction and engineering industries compared to the workforce in the state is one component of the marketplace research. Keen Independent also examined the relative success of those businesses once formed. Keen Independent reviewed conditions in the Montana marketplace in four primary areas:

- A. Entry and advancement;
- B. Business ownership;
- C. Access to capital, bonding and insurance; and
- D. Success of businesses.

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<sup>1</sup> *Sherbrooke Turf, Inc. v. Minnesota DOT*, 345 F.3d, 970 (8th Cir. 2003) (citing *Adarand Constructors, Inc.*, 228 F.3d at 1167 – 76); *Western States Paving Co. v. Washington State DOT*, 407 F.3d 983, 992 (9th Cir. 2005).

Appendices E through H present detailed quantitative information concerning conditions in the Montana marketplace. Appendix I discusses data sources.

Chapter 5 also summarizes the analysis of input from about 150 individuals representing businesses, trade associations and other groups throughout the state.

- The Keen Independent study team conducted telephone and online availability interviews with businesses from July 2015 through October 2015.
- The study team conducted in-depth personal interviews with 43 businesses and trade associations from September 2015 to January 2016.
- The study team developed a website, an email address and dedicated telephone hotline for the study that asked any interested individuals to provide comments.

Appendix J provides a summary of the qualitative information collected to date. Keen Independent will collect and analyze additional qualitative information through spring 2016 received through public meetings and other public comment concerning the draft report.

## **A. Entry and Advancement**

Many business owners and managers that the study team involved in interviews and availability interviews commented that individuals who form construction and engineering businesses tend to work in those industries before starting their own businesses. Any barriers related to entry or advancement in the construction and engineering industries may prevent some minorities and women from starting businesses in those industries.

Several studies throughout the United States have indicated that race and gender discrimination has affected the employment and advancement of certain groups in the construction and engineering industries. The study team examined the representation of minorities and women among all workers in the Montana construction and engineering industries, and in construction, the advancement of minorities and women into supervisory and managerial roles. Appendix E presents detailed results.

As summarized below, quantitative analyses of the Montana marketplace — based primarily on data from the 2000 U.S. Census and the 2008-2012 American Community Survey (ACS) — showed that, in general, certain minority groups and women appear to be underrepresented among all workers in the Montana construction and engineering industries. In addition, minorities and women appeared to face barriers regarding advancement to supervisory or managerial positions.

**Quantitative information concerning entry into construction and engineering industries in Montana.** Keen Independent examined whether barriers to entry into the construction and engineering industries as employees could explain the relatively low rates of business owners in these industries for minorities and for women.

- There is little statistical evidence of barriers to entering the construction industry for minorities living in Montana. As explained in Appendix E, racial and ethnic minorities comprise about the same share of the Montana construction workforce (9% in 2008-2012) as found in other industries overall (10%). Other than for African Americans in 2000, there were no statistically significant differences in the representation of minority groups in 2000 and 2008-2012 in the Montana construction industry compared with other industries as a whole. Native Americans (6%) comprise the largest minority group among both the construction workforce and the overall workforce in Montana, followed by Hispanic Americans (2.5%). African Americans and Asian Americans combined comprise less than 1 percent of the construction workforce and about 1.4 percent of the Montana workforce.
- Workers who are minority comprise 7 percent of the Montana engineering industry workforce, which matches the share of the workforce with a four-year college degree. The percentage of Hispanic Americans and Native Americans who are college graduates is lower than non-Hispanic whites, African Americans and Asian Americans living in the state, which is one reason behind the low representation of minorities in the engineering industry.
- Women account for a smaller portion of the Montana construction industry (9%) and engineering workforce (34%) compared with other industries. These results indicate that there may be gender-based barriers to entry into these industries in Montana. For engineering, some of this underrepresentation of women is related to national differences in male and female students obtaining engineering degrees.

In sum, there is little statistical evidence of barriers to initial employment based on race or ethnicity in the construction and engineering industries for minorities living in Montana other than the educational barriers for the engineering industry. There may be gender barriers, however.

**Quantitative information concerning any barriers to advancement in the construction industry.** Any barriers to advancement in the construction industry might also affect the relative number of minority and female business owners in Montana.

- Although small sample sizes limit conclusions, representation of minorities and women is much lower in certain construction trades compared with other trades. There is some evidence that opportunities are not equal across trades for minorities and women working in the Montana construction industry.
- Historically, few minorities working in the Montana construction industry have advanced to the level of first-line supervisor or manager, although this gap may be narrowing.

In sum, for minorities, data show differences in opportunities in certain trades and for advancement within the Montana construction industry that might indicate different treatment based on race or ethnicity. There is some similar statistical evidence for women working in the construction industry.

**Qualitative information about entry and advancement.** Keen Independent collected qualitative information about entry and advancement in the Montana construction and engineering industries through the avenues described at the beginning of Chapter 5.

Many business owners reported that their companies were started (or purchased) by individuals with experience in those industries. Interviewees indicated that construction, engineering and related consulting companies are typically started by individuals with work experience or connections to the construction or engineering industries. Therefore, business ownership could be affected by any barriers to becoming employed in the construction or engineering industry that might exist.

Some minority, female and white male interviewees described workplace conditions that are unfavorable to women and minorities in the Montana construction industry. Several interviewees described “hidden” or overt discrimination or sexual harassment on job sites.

- The white female owner of a DBE-certified specialty contracting firm reported anti-Hispanic attitudes on jobsites.
- The white female owner of a DBE-certified specialty contracting firm disturbing racial and sexist graffiti on porta-potty walls.
- A white female owner of a DBE-certified construction firm reported unfavorable working conditions including offensive gender slurs.
- When asked about unfavorable work environments for minorities or women, a white male representative of a trade organization commented that much of the unfavorable treatment is “hidden” and “not obvious” at first.

**Effects of entry and advancement on the Montana transportation contracting industry.** If there are barriers for minorities and women entering and advancing within the Montana construction and engineering industries, there could be substantial effects on the number of minority- and women-owned construction and engineering-related businesses.

- Typically, employment and advancement are preconditions to business ownership in the construction and engineering industries. Because of apparent differences in opportunities for minorities and for women in certain aspects of the industry, the number of minorities and women starting businesses may have been depressed. There is evidence that overall MBE/WBE availability in the Montana transportation contracting industry would be higher but for the effects of discrimination.
- If these differences that appear from the Census data for Montana indicate different treatment, as suggested by the in-depth interviews, this may perpetuate any beliefs or stereotypical attitudes that MBE/WBEs may not be as qualified as majority-owned businesses. Any such beliefs may make it more difficult for MBE/WBEs to win work in Montana, including work with MDT and local agencies.

## **B. Business Ownership**

National research and studies in other states have found that race, ethnicity and gender also affect opportunities for business ownership among people working in an industry, even after accounting for race- and gender-neutral factors. Figure 5-1 summarizes how courts have used information from such studies — particularly from regression analyses — when considering the validity of an agency’s implementation of the Federal DBE Program.

**Quantitative information about business ownership.** Data for Montana indicate disparities in the rates of business ownership for Native Americans working in the construction industry and women working in the engineering industry.

- In Montana, one-third of non-Hispanic whites working in the construction industry in 2008 through 2012 had their own businesses. However, only 14 percent of Native Americans working in the Montana construction industry were business owners. This statistically significant disparity has persisted over time.
- Similarly, 22 percent of men working in the Montana engineering industry owned their businesses, but only 4 percent of women working in the industry were business owners. This is also a statistically significant disparity found in both 2000 and in 2008-2012 in Montana.

Keen Independent used regression analyses and data sources that were similar to those used in court-reviewed studies to analyze whether those disparities in business ownership persisted after taking into account other personal characteristics such as age and education.

- Regression analysis for 2008-2012 indicated that Native Americans working in the Montana construction industry had about one-half the rate of business ownership as similarly situated non-Hispanic whites, a substantial disparity.
- Gender-based differences in business ownership in the engineering industry persisted in the regression analysis that accounted for other personal characteristics. The rate of business ownership for women working in the industry was about one-third that of white men after controlling for these personal characteristics, a substantial disparity.

In sum, business ownership for Native Americans working in the Montana construction industry appear to be negatively affected based on race. Business ownership rates for women in the Montana engineering might be negatively affected based on gender. Based on this evidence, there appears to be fewer Native American-owned construction firms and women-owned engineering firms in Montana today than if there had been no racial or gender differences in business ownership opportunities.

Appendix F presents detailed results from the quantitative analyses of business ownership rates.

Figure 5-1.  
Use of regression analyses of business ownership in defense of the Federal DBE Program

State and federal courts have considered differences in business ownership rates between minorities and women and non-Hispanic whites and males when reviewing the implementation of the Federal DBE Program, particularly when considering DBE goals. For example, disparity studies in California, Illinois and Minnesota used regression analyses to examine the impact of race, ethnicity and gender on business ownership in the construction and engineering industries. Results from those analyses helped determine whether differences in business ownership exist between minorities and women and non-Hispanic white males after statistically controlling for race- and gender-neutral characteristics. Those analyses, which were based on Census data, were included in materials submitted to the courts in subsequent litigation concerning the implementation of the Federal DBE Program.

**Qualitative information about business ownership.** Keen Independent collected qualitative information about business ownership in the Montana construction and engineering industries through in-depth interviews and availability interviews.

Some interviewees indicated that lack of business experience was a challenge when they first started their companies. A number of interviewees said that having enough start-up capital or dealing with cash flow were issues. Some interviewees faced difficulty establishing relationships or generally “breaking in to the market” and finding work at a price that allowed them to make a profit. Although these types of comments came from minority, female and white male business owners, some minority and female business owners said that start-up was more difficult because of their race or gender. Some reported that it was not more difficult.

Many interviewees indicated that the Great Recession that began in 2007 made it extremely difficult for any owner of a construction or engineering firm to stay in business in Montana. A white female business owner, said, “We were practically begging for jobs.” A number of business owners described across-the-board pay cuts and layoffs of employees to keep their doors open.

The result was extreme price pressure in the industry, and, for some, a reduced volume of work since that time. One white female owner of a DBE-certified specialty contracting business reported that businesses were underbidding each other for work and that she could not compete because her firm did not have the capital to underbid and lose money. Some interviewees reported that, for their companies, current economic conditions are still poor.

**Effects of disparities in business ownership rates for minorities and women.** The disparities in business ownership rates for Native Americans and women mean that there are fewer minority- and women-owned firms in the transportation contracting marketplace than there would be if there were a level playing field for minorities and women in the Montana marketplace. Results suggest that the relative MBE and WBE availability for MDT transportation contracts may have been depressed. This may result in a lower availability benchmark for minority- and women-owned firms and a lower base figure for the overall DBE goal when only considering current availability.

### **C. Access to Capital, Bonding and Insurance**

Access to capital represents one of the key factors that researchers have examined when studying business formation and success. If race- or gender-based discrimination exists in capital markets, minorities and women may have difficulty acquiring the capital necessary to start or expand a business.

Keen Independent examined whether minority and female business owners (and potential business owners) have access to capital — both for their homes and for their businesses — that is comparable to that of non-minorities and men. In addition, the study team examined information about whether minority- and women-owned firms face any barriers in obtaining bonding and insurance. Appendix G provides details about the study team’s quantitative analyses of access to capital, bonding and insurance.

There is evidence that minorities face certain disadvantages in accessing capital that is necessary to start, operate and expand businesses. There is some evidence from small business lending data for

the Mountain region that women do not have the same access to capital as men. Capital is required to start companies, so any barriers accessing capital can affect the number of minorities and women who are able to start businesses. In addition, minorities and women start businesses with less capital (based on national data). A number of studies have demonstrated that lower start-up capital adversely affects prospects for those businesses.

**Quantitative information about homeownership and mortgage lending.** Wealth created through homeownership can be an important source of funds to start or expand a business. Barriers to homeownership or home equity can affect business opportunities by limiting the availability of funds for new or expanding businesses.

Keen Independent analyzed 2008-2012 American Community Survey (ACS) data to determine if there were any differences in homeownership in Montana by racial and ethnic groups. The study team examined the potential impact of race and ethnicity on mortgage lending in Montana based on Home Mortgage Disclosure Act (HMDA) data for 2007 and 2013. (See Appendix G for more detail.)

- **Homeownership rates.** Fewer African Americans, Asian Americans, Hispanic Americans and Native Americans in Montana own homes compared with non-Hispanic whites. These differences in homeownership rates were present prior to the Great Recession and persisted in 2008 through 2012.
- **Home values.** Native Americans and Hispanic Americans in Montana who do own homes tend to have lower home values than non-Hispanic whites. These differences were evident before and after the Great Recession.
- **Mortgage lending.** Minorities may be denied opportunities to own homes, to purchase more expensive homes or to access equity in their homes if they are discriminated against when applying for home mortgages. In 2007, high-income Asian Americans, Hispanic Americans and Native Americans applying for home mortgages in Montana were more likely than high-income non-Hispanic whites to have their applications denied. Except for Hispanic Americans, these disparities were also evident in 2013.

Mortgage lending discrimination can also occur through higher fees and interest rates. Subprime lending is one example of such types of discrimination through fees associated with various loan types. Because of higher interest rates and additional costs, subprime loans affected homeowners' ability to grow home equity and increased their risks of foreclosure. There is national evidence that predatory lenders disproportionately targeted minorities with subprime loans, even when applicants could qualify for prime loans. Compared with non-Hispanic whites, subprime loans represented a greater proportion of 2007 Montana conventional home purchase loans for Hispanic Americans and Native Americans. Although the share of loans that were subprime dropped for other groups by 2013, it increased to 29 percent of conventional home purchase loans for Native Americans. Disparities in use of subprime loans also persisted for Hispanic Americans in Montana in 2013. (There were also disparities in the use of subprime loans for home refinance loans for certain minority groups in Montana.)

In conclusion, there is substantial quantitative evidence of disparities in homeownership, home values and home mortgage lending for racial and ethnic minorities in Montana. Any past discrimination against minorities that affected the ability to purchase and stay in homes could have long-term impacts on the home equity available to start and expand businesses, the ability of minority business owners to access business credit, and access to bonding for construction business owners.

**Quantitative information about business credit.** Business credit is also an important source of funds for small businesses. Any race- or gender-based barriers in the application or approval processes of business loans could affect the formation and success of MBE/WBEs.

To examine the role of race/ethnicity and gender in capital markets, the study team analyzed data from the Federal Reserve Board's Survey of Small Business Finances (SSBF) — the most comprehensive national source of credit characteristics of small businesses (those with fewer than 500 employees). The survey contains information on loan denial and interest rates as well as anecdotal information from businesses. The Mountain region is the level of geographic detail of SSBF data most specific to Montana, and 2003 is the most recent information available from the SSBF. (More recent national data are consistent with SSBF results.)

**Business loan approval rates, loan values and interest rates for small businesses.** There appeared to be different outcomes for minority and female small business owners than non-minorities and male small business owners based on the SSBF data for the Mountain region:

- Relatively more minority- and women-owned small businesses were denied loans than non-Hispanic male-owned small businesses.
- Among small business owners who reported needing business loans, minority and female business owners in the Mountain region were nearly twice as likely as non-Hispanic white men to report that they did not apply due to fear of denial.
- The mean value of approved loans for minority- and female-owned businesses in the Mountain region was less than one-half that for non-Hispanic white male-owned firms.
- There is evidence that minority- and women-owned small businesses in the Mountain region paid higher interest rates on their business loans than non-minority male-owned small businesses.

Although Montana comprises a small part of the Mountain region and the SSBF data are from 2003, these types of disparities in lending to small businesses persist across regions, and more recent national data show continued disparities.

**Difficulties obtaining lines of credit or loans for firms within the Montana construction industry.**

At the close of the 2015 availability interviews the study team conducted as part of the disparity study, respondents were asked questions regarding potential barriers or difficulties the firm might have experienced in the Montana marketplace. The series of questions was introduced with the following statement: “Finally, we’re interested in whether your company has experienced barriers or difficulties associated with starting or expanding a business in your industry or with obtaining work.

Think about your experiences within the past five years as you answer these questions.” Respondents were then asked about specific potential barriers or difficulties.

For each potential barrier, the study team examined whether responses differed between minority-, women- and majority-owned firms (which are companies not owned by minorities or women). The first question was, “Has your company experienced any difficulties in obtaining lines of credit or loans?” About 17 percent of minority-owned businesses reported difficulties in obtaining lines of credit or loans, higher than for WBEs (9%) and majority-owned firms (8%). Although the number of MBE respondents was small, these data for minority-owned firms in the Montana transportation contracting industry in 2015 are consistent with the regional data from 2003 from the SSBF.

**Quantitative information about bonding and insurance.** Keen Independent also examined whether businesses face difficulties obtaining bonding and insurance as part of the availability interviews.

**Bonding.** As discussed in Appendix G, some national studies have identified barriers pertaining to MBE/WBEs’ access to surety bonds for public construction projects. Keen Independent asked firms completing availability interviews the following two questions:

- Has your company obtained or tried to obtain a bond for a project?
- [If so] Has your company had any difficulties obtaining bonds needed for a project?

Among the one-half of firms that had obtained or tried to obtain a bond for a project, 20 percent of MBE/WBEs indicated difficulties obtaining bonds needed for a project compared with 13 percent of majority-owned firms.

**Insurance requirements.** The study team also examined whether MBE/WBEs were more likely than majority-owned firms within the study area to report that “insurance requirements represented a barrier to bidding.” There were no differences in responses for MBEs and WBEs compared with majority-owned firms. Across MBEs, WBEs and majority-owned firms interviewed, only about one-in-ten indicated that insurance requirements on projects have presented a barrier to bidding.

**Qualitative information about access to capital, bonding and insurance.** Keen Independent collected qualitative information about access to capital, bonding and insurance for businesses in the Montana transportation contracting industry through in-depth interviews and availability interviews.

**Business financing.** Many firm owners reported that obtaining financing was important in starting and expanding their businesses (including financing for working capital and for equipment), and surviving poor market conditions.

- Small business owners indicated that access to financing was a barrier in general and more specifically when starting and first growing. Many used personal or family resources to finance their businesses. One interviewee said that a firm should not expect to make money in its first three to five years. Even those who had been in business for some time discussed how personal credit affects business credit, and vice-versa. A number of interviewees talked about the importance of good business planning.

- Some owners of engineering or other professional services firms said that, in their industry, banks rely on personal credit as there are few physical assets in their businesses.
- Many business owners reported that obtaining financing continues to be a barrier for their businesses today.
- Some interviewees, including MBEs, WBEs and majority-owned firms, reported that slow payment on contracts and subcontracts led to an increased need for business capital and financing.
- The firms reporting few barriers regarding access to capital had established relationships with lenders or business longevity.

Some interviewees reported that it was more difficult for women and minorities to obtain financing.

- A Native American male owner of a DBE-certified consulting firm reported community banks were not willing to lend to a tribal-owned firm. [#6]
- The white female owner of a DBE-certified specialty contracting business indicated that when she approached a banker with whom she had a previous business relationship to discuss her new specialty contracting business, the banker requested to meet with her husband, despite his having nothing to do with the new business.
- A white male representative of a DBE-certified, women-owned specialty contractor stated that cost is a barrier for a small, woman-owned business at start-up. He said, “You pay a higher interest rate ... higher bonding rate .... There’s just more expenses ... to do the same work ....”

Also, if business size and personal equity are affected by race or gender discrimination, such discrimination could also impact the ability to obtain business financing. This can have a self-reinforcing effect, as many interviewees noted the importance of business capital and credit to pursue larger construction and engineering contracts.

- The Native American female owner of a DBE-certified consulting firm mentioned that she never felt comfortable to go and get financing. “So pretty much, anything that I’ve done I’ve had to finance myself.” [#18]
- The white female owner of a DBE-certified specialty contracting business reported that her need to secure credit for materials purchases impacts her personal credit history. She explained that the credit checks run on the LLC affects her personal credit. [#1]

**Bonding.** For MDT and local agency construction contracts, surety bonds are typically required to bid on projects. Sometimes prime contractors require subcontractors on a project to have bonds, although some will waive bonding or let a subcontractor substitute a letter of credit.

In order to obtain a bond, businesses must provide company history and evidence of financial strength to a bonding company. The bonding company uses this information to determine whether

to issue a bond of a particular size. Consequently, any effects on access to capital may impact the ability to obtain a bond. Bonding companies also use different ratios to calculate bonding capacity and they charge different rates based on a number of factors, which can affect the cost-competitiveness of a firm's bids.

- Some owners of construction companies reported that they cannot obtain the necessary bonding to bid on MDT and other public contracts or are closed out of certain sizes of contracts. They indicated that they had lost contracts or were unable to compete for them because of bonding requirements. Bonding requirements may force them to operate as subcontractors on public contracts where primes are willing to “carry” the subcontractors. A Native American female business owner stated, “... bonding is a huge battle for almost every small company.” Some interviewees indicated that it was a particular problem for newer businesses.
- Other representatives of construction companies, many of them majority-owned firms, reported that they do not have difficulty getting bonds. Some attributed this to the relationship they had with their bonding company. Bonding is typically not an issue for engineering and other professional services firms, according to interviewees.
- Bonding is linked to company assets, and according to some interviewees, a personal guarantee can be required. It is closely tied to the business owner's access to capital. It can also depend on factors such as experience and reputation, according to a trade association representative.
- Interviewees explained the link between business and personal finances and bonding. One business representative said, “If you can't borrow \$250,000, you cannot get a bond for a \$50,000 project; if you don't qualify for a certain credit amount you cannot get bonded.” Another business owner talked about the link between timely payment on work and the ability to maintain bonding. For example, the white female owner of a DBE-certified specialty contracting firm considered the bonding required by public sector projects a barrier to entry. She added, “For us it [bonding] has been virtually impossible.” The high requirements of available cash and line of credit are the major cause of barriers to securing the required bonds. (Appendix J discusses these issues in more detail.)
- Some interviewees reported different treatment of minority- and women-owned firms by bonding companies. Many minority- and woman-owned construction companies interviewed as part of this study reported difficulties due to bonding. Some interviewees said that bonding is particularly difficult for Native American-owned firms. One minority female business owner reported difficulties for minorities when they try to acquire financial help and bonding.

**Access to insurance.** Construction and professional services firms bidding or proposing on MDT and local government contracts must meet those agencies' insurance requirements. Provisions often apply to subcontractors and subconsultants.

The study team asked business owners and managers whether insurance requirements and obtaining insurance presented barriers to doing business.

- In general, interviewees reported that obtaining insurance is relatively easy and that it is the cost that is the barrier for small businesses, especially at high dollar limits or for specialized types of insurance. One interviewee reported that the cost of errors and omissions insurance given what her firm does on a project is “totally, stupidly, out of proportion.” Some small business owners said that this puts them at a competitive disadvantage. A few interviewees commented about how public agencies put language in contracts that put firms in difficult situations.
- A few interviewees indicated that the insurance itself was difficult to secure when the business was new.

If a small business owner decides that the premiums for a certain level of insurance are cost-prohibitive, it may preclude the firm from bidding on certain contracts, especially public sector contracts. For example, the Native American female owner of a DBE-certified consulting firm reported, “I think insurance is unreal because it costs so much.” She added that so many different places require different types of insurance. If she wants to go to another project she has to buy more insurance.

#### **Effects of access to capital, bonding and insurance on the transportation contracting industry.**

Potential barriers associated with access to capital and bonding may affect business outcomes for MBE/WBEs.

- Well-capitalized businesses are, in general, more successful than other businesses.
- For MDT and other public sector construction contracts, bonding is required to bid as a prime contractor. Interviewees reported that these requirements affect subcontractors as well.
- A company must also have considerable working capital to complete an MDT contract or subcontract, especially if there are delays in payment on that contract (which some businesses experience).
- Obtaining business financing and bonding is more of a barrier to small businesses than large businesses. The effect of such barriers is to make it less likely that a small firm can expand or successfully pursue public sector work.
- To obtain bonding, a company must have financial strength. Any barriers to accessing capital can affect a company’s ability to obtain a bond of a certain size. There is evidence that minority- and women-owned firms do not have the same access to capital as majority-owned firms.
- There is some quantitative evidence that minorities do not have the same personal access to capital as non-minorities, which affects personal financial resources. Personal

net worth and financial history can affect access to business loans and bonding in Montana.

#### **D. Success of Businesses**

Keen Independent's quantitative and qualitative analyses assessed whether the success of MBEs and WBEs differs from that of majority-owned businesses in the Montana marketplace. The study team examined business success in terms of participation in the public and private sector; relative bid capacity; business closure, expansion, and contraction; and business receipts and earnings. Appendix H provides details about these quantitative analyses of success of businesses. Keen Independent also collected and analyzed information from interviews with business owners and managers and others knowledgeable about the Montana transportation contracting industry.

##### **Quantitative analysis of participation in the public sector, contracting roles and bid capacity.**

Keen Independent drew on information from availability interviews to examine any patterns of MBE/WBE and majority-owned business participation in the industry. Results suggest the following:

- Many firms in the transportation contracting industry pursue both public and private sector work depending on the type of work they do and market opportunities. This is true for MBEs and WBEs as well as majority-owned firms.
- About two-thirds of MBEs, WBEs and majority-owned firms bid or propose as prime contractors or prime consultants. Many firms also bid as subcontractors as well. Compared with majority-owned companies, relatively few MBEs or WBEs have been awarded contracts or subcontracts of \$1 million or more in size.
- Firms in different lines of work within the transportation industry tend to bid on different sizes of contracts (i.e., paving contracts are larger than surveying contracts). Less than one-third of firms in the industry reported that they had bid on or received a road-, highway- or bridge-related contract in Montana of more than \$1 million in the past five years. However, MBE/WBEs were somewhat more likely to report bidding on large contracts than majority-owned firms. And, after controlling for firm specialization, there is no indication that "bid capacity" is, on average, less for MBE/WBEs than majority-owned firms. Age of firm and its primary line of work, not whether it was minority- or women-owned, were the primary determinants of "bid capacity" in this analysis.

Appendix H describes these analyses.

**Quantitative analysis of business closure, expansion and contraction.** Keen Independent examined U.S. Small Business Administration analyses for 2002 to 2006 for Montana regarding rates of business closure, expansion or contraction by race, ethnicity and gender of the business owner. The data for the state are for all industries (Appendix H presents some national statistics for the construction and professional services sectors).

Compared with white-owned firms, these data indicate greater rates of business closure and contraction for African American- and Asian American-owned firms in Montana from 2002 to 2006, but not for Hispanic American-owned firms. There was evidence that women-owned firms fared

better than male-owned firms when examining the relative number of firms in Montana that closed, contracted and expanded.

**Quantitative analysis of business receipts and earnings.** Keen Independent examined business earnings data for Montana construction and engineering-related industries from the U.S. Census Bureau and the 2015 availability interviews with Montana businesses.

- The U.S. Survey of Business Owners for 2007 indicated lower revenue for Native American-owned construction firms compared with non-Hispanic white-owned firms but not for Asian American-owned construction firms. Average revenue of female- and male-owned construction firms in 2007 was about the same. (There were no data reported for African American- or Hispanic American-owned construction businesses.) This data source indicated lower annual revenue for minority- and women-owned professional, scientific and technical services firms in Montana in 2007.
- U.S. Census data for 2000 and American Community Survey (ACS) data for 2008 through 2012 showed substantially lower business owner earnings for minority and female construction business owners in Montana compared with non-minority or male business owners.
- The study team developed regression models using the ACS data for 2008 through 2012 to examine whether disparities for minority and female construction business owners persisted after accounting for personal characteristics of the business owner. Regression analyses using these data indicated that minority and female construction business owners had lower earnings than non-minority and male owners after controlling for other factors.
- Based on 2015 availability interview results, MBE/WBEs were far less likely than majority-owned transportation contracting firms to have average annual revenue above \$10 million for 2012 through 2014 (15% of majority-owned firms reported such revenue compared with 5% of MBE/WBEs). Based on this result, relatively more MBE/WBEs in the Montana transportation contracting industry are “small businesses.” Even though one-half of MBE/WBEs in the Montana transportation contracting industry reported annual revenue of less than \$1 million, relatively more majority-owned firms (56%) reported annual revenue in this range.

**Quantitative analysis of telephone interview results concerning potential barriers.**

Keen Independent’s availability interviews with businesses in the Montana transportation contracting industry included questions about whether firms had experienced barriers or difficulties associated with starting or expanding a business or obtaining work.

Relatively more WBEs than majority-owned firms experience difficulties:

- Learning about MDT and other public agency bid opportunities;
- Learning about subcontract opportunities; and
- Networking with prime contractors and customers.

These three types of barriers appear to indicate unequal access to information about opportunities for white women-owned firms in Montana. Minority-owned firms were also more likely than majority-owned firms to report these barriers, although the number of MBE respondents was small and the differences were not as large as for WBEs. Both MBEs and WBEs were more likely than majority-owned firms to indicate that large project size presented a barrier.

MBE, WBE and majority-owned firms' responses to other questions about potential barriers were very similar. For example, very few firms reported prequalification or receiving approvals as barriers. Appendix H discusses these results in detail.

### **Qualitative information about success of businesses in the Montana marketplace.**

Keen Independent also collected qualitative information about success of businesses in the Montana transportation contracting industry through in-depth personal interviews and availability interviews. Some of the comments, especially related to the Great Recession, were noted earlier in Chapter 5.

**Fluid employment size and types of work.** Interviewees explained that firms in the transportation contracting industry must continuously adapt their operations in response to market conditions. This flexibility includes the size of a company's permanent and temporary workforce, owned and leased equipment, the types of work they pursue and where they work within the state.

- Some firms indicated they have changed the types of work they perform in response to market opportunities, or lack thereof. Many businesses reported bidding as both a prime and subcontractor, and pursuing both public and private sector work, again based on market opportunities and competitive forces. Even those firms that tend to work mostly in the private sector will sometimes do public sector work, and vice-versa. A representative of a trade organization reported that there was not a clean “dividing line” between sectors. Many firms work as both a prime contractor and as a subcontractor depending on opportunities, although some tend to get most of their work as either a prime or as a subcontractor.
- A number of companies reported that their employment size expands and contracts depending on opportunities and market conditions. Seasonal changes in staffing are common for construction-related firms.
- Some firm owners reported flexibility in the sizes of contracts that their businesses perform. “\$100 up to \$50 million” was one of the larger ranges mentioned, with many firms reporting doing work that might be a few thousand dollars to \$1 million or more. However, some firm owners or managers said that project size could be a barrier. Projects that were too large precluded them from bidding or proposing, or required them to team up with other firms. These comments tended to come from minority- or women-owned firms (often DBEs).
- Some businesses reported that they prefer to work in their local area, but many firms reported that they frequently seek work throughout the state. Many Montana companies work out of state as well. In some cases, business owners said they had to expand geographically to find work.

- Business owners said that they could subcontract work or team up with other firms to handle certain projects. Some prime contractors reported that they typically subcontract specialty work. Others reported that they prefer to self-perform as much of the work as they can.

**Disadvantages for small businesses.** In addition to financing, bonding and insurance, which were discussed previously in this chapter, many interviewees indicated that small businesses or newer businesses are at a disadvantage when competing in the transportation contracting industry.

- Some interviewees said that certain public sector requirements, including MDT's, make it more difficult for small firms to work as prime contractors or consultants. Some business owners mentioned excessive paperwork. For consultants, other issues range from experience requirements to needed insurance coverage and accounting systems to support the hourly rates they charge. One interviewee said that compliance with all of the MDT requirements was [particularly challenging when] gross revenue from MDT projects is relative low [compared] to the cost of ... compliance.”
- Excessive paperwork that often comes with public sector work is an extra burden to small businesses. The white female owner of a DBE-certified consulting firm reported that the barrier to working in the public sector is the amount of paperwork geared towards large firms.
- Large size and scope of public sector contracts and subcontracts present a barrier to bidding. A number of small and minority- and women-owned business owners reported that unbundling of larger projects would be helpful.
- Slow payment or non-payment by customers or by prime contractors can be especially damaging to small businesses and represent a barrier to performing that work. For example, the white female owner of a consulting firm remarked, “It’s an issue ... cash flow is always an issue for small business.” According to interviewees, sometimes the issue relates to retainage by the project owner or slow payment of subcontractors by the prime contractor. Many interviewees, however, reported few problems concerning payment on public sector contracts, including MDT contracts.
- Subjective screening of engineering firms through prequalification can be a barrier based on the interviews. In reference to the prequalification process, a white male manager of a majority-owned engineering firm reported because MDT requires previous MDT work experience. He added that the firms getting MDT work are repeatedly the same five firms on the top of the MDT prequalified list. This issue is tied to the importance of business relationships, as discussed below.

**Importance of business relationships.** Existing relationships are an important factor in finding opportunities to bid on work according to many prime and subcontractors. Interviewees frequently reported the following.

- Many firms said that reputation and longevity are keys to success. Several business owners said that if they got a new customer, they could prove themselves through quality work for that customer. Often, the challenge was getting the initial opportunity.
- Several interviewees indicated that it was difficult to dislodge incumbent firms because of long-standing relationships with customers, especially in consulting or in the private sector. For example, one DBE consultant said that a county representative told her not to bid a job because there was a preferred incumbent and no plans to hire another firm. A respondent from a majority-owned engineering firm reported, “With government work, if you’re not an older company, it’s very hard to break in.”
- A few interviewees reported that MDT staff prefer certain companies as well.
- One way that public agencies advantage firms with existing relationships is through experience requirements or other restrictive specifications. Some interviewees said that their firms were shut out of work because of this. For example, a representative of a woman-owned engineering firm commented on a current proposal that awarded 20 percent of the points based on a firm’s current work with the entity. He explained that this is how public agencies write their RFPs to guarantee that they can hire the same firms each time.

Some of the complaints concerning unnecessarily restrictive requirements were directed towards MDT. For example, two engineering firms said that MDT’s requirements to use MicroStation software preclude them from working with MDT. According to these interviewees, other public agencies in Montana use more standard software and do not use MicroStation, which makes it difficult to justify the cost of buying MicroStation just to do MDT work. This appears to advantage engineering firms with ongoing work with MDT.

- Prime contractors report that they often use subcontractors they already know based on past experience. Primes might select a new subcontractor based on recommendations from others. One interviewee said that their company sometimes receives unsolicited bids from subcontractors and are not always sure if those bids are reliable. Trade organization representatives confirmed that the prime contractor’s knowledge of a potential subcontractor’s qualifications, skill and reputation is key to choosing a subcontractor, and that low bid is either not a factor or is only one factor. It is more difficult for smaller firms to market and identify contract opportunities. One female business owner stated that contractors work with whom they are comfortable, and that in her experience there does not seem to be positive feelings toward women-owned companies (although this may be changing).

- Some interviewees reported that prime contractors sometimes “shop” a subcontractor’s bid, so even priced-based selection of subcontractors is not always fair. For example, the white female owner of a specialty contracting business said, “That [bid shopping] happens and that’s the reason that there are some contractors I do not give quotes to.”

Many minority, female and white male interviewees reported the “culture” of a “good ol’ boy” network in Montana that affects the construction and engineering industries. There was substantial evidence of a “good ol’ boy” network in Montana from the in-depth interviews. Very few interviewees reported no experience with it or said that it did not exist. Some reported that the “good ol’ boy” network added barriers for women- and minority-owned firms in the transportation contracting industry. For example:

- The white female owner of a DBE-certified consulting firm reported that there is a “good ol’ boy” network present; it is “the culture” in Montana. She further stated that the closed network is part of the reason firms have difficulty breaking into the Montana market.
- The white male manager of a DBE-certified, Asian-Pacific American-owned specialty contractor reported that there are definitely forged relationships that have been in place for many years.
- A DBE-certified engineering and consulting firm said, “It is huge – it definitely exists.” She reported that getting work often depends on access to networking opportunities. She just knows she is not going to get the jobs that are up for discussion “while golfing at the country club or in the locker room at the gym.”
- The white male owner of a consulting firm said that the “good ol’ boy” network is a closed network; some companies go with whom they have always used and continue to use. “Favoritism” drives those networks, according to this interviewee.
- Representatives of one engineering firm indicated that MDT is an example of a closed network.

Some interviewees said that closed networks might be diminishing, including those at MDT. One female business owner said that the “good ol’ boy” network was once a barrier for her, but she was able to overcome it over time.

**About one-half of the interviewees reported stereotyping, unequal treatment, unfavorable work environments or other negative treatment that negatively affected minorities and women.**

Reports of discriminatory treatment affecting minorities and women, including business owners, came from many of the interviewees, including interviews with white men.

- Underlying negative stereotyping and other unfavorable treatment of minorities and women negatively affects business opportunities and work environment, according to some minority and women business owners.

- Some of the interviewees, including a white male business owner, reported instances of overt racist or sexist statements against women or minorities. For example, “Because you’re a woman,” was given as a response to one female business owner about why she had to act a certain way when bidding on a job, according to this business owner. As discussed previously in this chapter, another interviewee reported disturbing racial and sexist graffiti on porta-potty walls.
- One minority business reported that his firm likely did not win a municipal job because it is Native American-owned; he added that the firm was even low bidder for the job. One minority business owner said that he was discriminated against by MDT employees and that he no longer bids many MDT projects because of unfair treatment. (See Appendix J.)

The discussion above and in the other parts of Chapter 5 provides examples from the extensive interviewee comments reviewed in Appendix J.

**Effects of success of businesses on the transportation contracting industry.** Success in the transportation contracting industry depends on relationships with prime contractors and customers. Some of the minority and female interviewees reported unequal treatment, negative stereotypes and other forms of discrimination in Montana.

### **Summary**

As discussed in this chapter and supporting appendices, there is quantitative and qualitative information suggesting that there is not a level playing field for minorities and women, and minority- and women-owned businesses, in the Montana transportation contracting industry. For example, there is substantial qualitative evidence that a “good ol’ boy” network negatively affects opportunities for businesses including those owned by minorities and women.

Such information should be considered when interpreting the results of the disparity analyses in Chapters 7 and 8 and assessing MDT’s future operation of the Federal DBE Program for FHWA-funded contracts (see Chapters 9, 10 and 11).

In March 2016, MDT will hold public meetings and solicit comments concerning the results contained in the draft 2016 Disparity Study. The Final Report will incorporate analysis of this additional input.

## CHAPTER 6.

### Availability Analysis

Keen Independent analyzed the availability of minority- and women-owned business enterprises (MBE/WBEs) that are ready, willing and able to perform MDT and local agency prime contracts and subcontracts. MDT can use availability results and other information from the study as it makes decisions about its future operation of the Federal DBE Program.

Chapter 6 describes the study team’s availability analysis in eight parts:

- A. Purpose of the availability analysis;
- B. Definitions of MBEs, WBEs, certified DBEs, potential DBEs and Majority-owned businesses;
- C. Detailed Information Collected about Potentially Available Businesses;
- D. Businesses Included in the Detailed Availability Analysis;
- E. Dollar-weighted MBE/WBE Availability Calculations on a Contract-by-Contract Basis;
- F. Dollar-weighted Availability Results;
- G. Headcount Availability from Analysis of an MDT “Bidders List”; and
- H. Base Figure for MDT’s Overall DBE Goal for FHWA-funded Contracts.

Appendix D provides supporting information.

#### **A. Purpose of the Availability Analysis**

Keen Independent examined the availability of MBE/WBEs for transportation contracts to develop:

1. A benchmark used in the disparity analysis; and
2. The base figure for MDT’s overall DBE goals for FHWA-funded contracts.

**1. Benchmark in the disparity analysis.** Chapter 7 of this Disparity Study compares MDT’s utilization of MBE/WBEs against availability benchmarks.

- The disparity analysis compares the percentage of MDT contract dollars that went to minority- and women-owned firms (MBE/WBE “utilization”) to the percentage of dollars that might be expected to go to those businesses based on their availability for specific types and sizes of MDT contracts (MBE/WBE “availability”).
- Comparisons between utilization and availability identify whether any MBE/WBE groups were underutilized based on their availability for MDT work.

**2. Base figure for MDT’s overall DBE goals.** Part of MDT’s operation of the Federal DBE Program is establishing an overall goal for DBE participation in its FHWA-funded contracts. The 2016 Disparity Study examines information for the three-year goal for FHWA-funded contracts starting October 1, 2016.

The process for calculating DBE availability for an overall DBE goal is the same as for determining MBE/WBE availability in a disparity analysis, except that it only includes firms currently certified as DBEs. Although MDT could also include “potential DBEs” in its goal calculation, it chose not to for the following reasons:

- Changes in DBE certification status of a number of firms makes it difficult to determine whether some former DBEs would be eligible to be counted as potential DBEs for the future;<sup>1</sup>
- In MDT’s experience, some minority- and women-owned firms that initially appear eligible do not qualify for certification under the Federal DBE Program; and
- A number of Montana firms started DBE certification applications during the study period but never completed them, which also raises a question about inclusion of non-certified MBEs and WBEs in the base figure.

To avoid overstating the base figure by including minority- and women-owned firms that might not be eligible for DBE certification or would not take all the steps required to do so, the study team, in consultation with MDT, calculated the base figure from firms that were DBE-certified.<sup>2</sup> Keen Independent used information in the DBE Directory as of late 2015 when the study team began this analysis.

The balance of Chapter 6 explains each step in determining the availability benchmarks and the base figure for MDT’s overall DBE goal, beginning with definitions of terms.

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<sup>1</sup> For example, Prince, Inc., a white woman-owned firm that was once certified as a DBE and Highway Specialties, Inc., another former DBE, were no longer certified as of 2015. Inclusion of these firm and other businesses that withdrew from DBE certification would have a large effect on the overall goal if they were included as “potential DBEs.”

<sup>2</sup> Note that these circumstances might be unique to Montana at the time of the study. MDT might properly include information on non-certified firms when setting its overall DBE goals for USDOT-funded contracts in the future.

## **B. Definitions of MBEs, WBEs, Certified DBEs, Potential DBEs and Majority-owned Businesses**

The following definitions of terms based on ownership and certification status are useful background to the availability analysis.

**MBE/WBEs.** The availability benchmark and the base figure analyses use the same definitions of minority- and women-owned firms as do other components of the 2016 Disparity Study.

**Race, ethnic and gender groups.** As specified in 49 Code of Federal Regulations (CFR) Part 26, the study team separately examined utilization, availability and disparity results for businesses owned by:

- African Americans;
- Asian-Pacific Americans;
- Subcontinent Asian Americans;
- Hispanic Americans;
- Native Americans; and
- Non-Hispanic white women.

Note that “majority-owned businesses” refer to businesses that are not minority- or women-owned.

**Firms owned by minority women.** Businesses owned by minority women are included with the results for each minority group. “WBEs” in this report refers to non-Hispanic white women-owned businesses. This definition of WBEs gives MDT information to answer questions that may arise pertaining to the utilization of non-Hispanic white women-owned businesses, such as whether the work that goes to MBE/WBEs disproportionately goes to businesses owned by non-Hispanic white women. Keen Independent’s approach is consistent with court decisions that have considered this issue.

**All MBE/WBEs, not only certified DBEs.** When availability results are used as a benchmark in the disparity analysis, all minority- and women-owned firms are counted as such whether or not they are certified as DBEs or as MBEs or WBEs. For the following reasons, researching whether race- or gender-based discrimination has affected the participation of MBE/WBEs in contracting is properly analyzed based on the race, ethnicity and gender of business ownership and not on DBE certification status.

- Analyzing the availability and utilization of minority- and women-owned firms regardless of DBE/MBE/WBE certification status allows one to assess whether there are disparities affecting *all* MBE/WBEs and not just certified DBEs. Businesses may be discriminated against because of the race or gender of their owners regardless of whether they have successfully applied for DBE certification.
- Moreover, the study team’s analyses of whether MBE/WBEs face disadvantages must include the most successful, highest-revenue MBE/WBEs. A disparity study that focuses only on MBE/WBEs that are, or could be, DBE-certified would improperly compare outcomes for “economically disadvantaged” businesses with all other businesses, including both non-Hispanic white male-owned businesses and relatively

successful MBE/WBEs.<sup>3</sup> Limiting the analyses to a group of businesses that only includes low-revenue companies would have inappropriately made it more likely for the study team to observe disparities for MBE/WBE groups.<sup>4</sup>

The courts that have reviewed disparity studies have accepted analyses based on the race, ethnicity and gender of business ownership rather than on DBE certification status.

**Certified DBEs.** Certified DBEs are businesses that are certified as such through MDT’s Office of Civil Rights, which means that they are businesses that:

- Are owned and controlled by one or more individuals who are presumed to be both socially and economically disadvantaged according to 49 CFR Part 26;<sup>5</sup> and
- Have met the gross revenue and personal net worth requirements described in 49 CFR Part 26.

Figure 6-1 explains these size limitations.

**Figure 6-1.  
Size limits for DBEs**

At the time of this study, the overall revenue limit for DBE certification was \$23,980,000 three-year average of annual gross receipts. Lower revenue limits applied for subindustries according to the U.S. Small Business Administration small business standards.

Business owners must also meet USDOT personal net worth limits for their businesses to qualify for DBE certification.

White male-owned firms can and do become certified as DBEs if they meet definitions of social and economic disadvantage in the Federal DBE Program.

**Majority-owned businesses.** Majority-owned businesses are businesses that are not owned by minorities or women (i.e., businesses owned by non-Hispanic white males).

- In the utilization and availability analyses, the study team coded each business as minority-, women-, or majority-owned.
- Majority-owned businesses included any non-Hispanic white male-owned businesses that were certified as DBEs.

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<sup>3</sup> In addition, 49 CFR Part 26 allows certification of white male-owned businesses as DBEs. Thus, disparity analyses based on certified DBEs might not purely be an analysis of disparities based on race/ethnicity and gender.

<sup>4</sup> An analogous situation concerns analysis of possible wage discrimination. A disparity analysis that would compare wages of minority employees to wages of all employees should include both low- and high-wage minorities in the statistics for minority employees. If the analysis removed high-wage minorities from the analyses, any comparison of wages between minorities and non-minorities would more likely show disparities in wage levels.

<sup>5</sup> The Federal DBE Program specifies that African Americans, Hispanic Americans, Native Americans, Asian-Pacific Americans, Subcontinent Asian Americans, women of any race or ethnicity, and any additional groups whose members are designated as socially and economically disadvantaged by the Small Business Administration are presumed to be disadvantaged.

## C. Detailed Information Collected about Potentially Available Businesses

Keen Independent's availability analysis focused on firms with locations in Montana that work in subindustries related to MDT transportation-related construction and engineering contracts.

Based on review of MDT prime contracts and subcontracts during the study period, the study team identified specific subindustries for inclusion in the availability analysis. Keen Independent contacted businesses within those subindustries by telephone to collect information about their availability for specific types, sizes and locations of MDT and local agency prime contracts and subcontracts.

Keen Independent's method of examining availability is sometimes referred to as a "custom census" and has been accepted in federal court. Figure 6-2 summarizes characteristics of Keen Independent's custom census approach to examining availability.

**Overview of availability interviews.** The study team conducted telephone interviews with business owners and managers to identify businesses that are potentially available for MDT and local agency transportation prime contracts and subcontracts.<sup>6</sup> Figure 6-3 summarizes the process for identifying businesses, contacting them and completing the interviews.

Keen Independent began by compiling lists of business establishments that Dun & Bradstreet/Hoovers identified in certain transportation contracting-related subindustries in Montana.<sup>7</sup> MDT also had a list of firms interested in transportation-related work for which it had email addresses. These firms were sent a link to an online survey. Any other company interested in completing an online survey could do so as well.

**Telephone interviews.** Figure 6-3 outlines the process Keen Independent used to complete interviews with businesses possibly available for MDT and local agency transportation-related work.

- The study team contacted firms by telephone to ask them to participate in the interviews (identifying MDT as the organization requesting the information). Firms indicating over the phone that they were not interested or not involved in transportation contracting work were not asked to complete the other interview questions. Interviews began in August 2015 and were completed in September 2015.

### Figure 6-2. Summary of the strengths of Keen Independent's "custom census" approach

Federal courts have reviewed and upheld "custom census" approaches to examining availability. Compared with some other previous court-reviewed custom census approaches, Keen Independent added several layers of screening to determine which businesses are potentially available for work in the transportation contracting industry in Montana.

For example, the Keen Independent analysis included discussions with businesses about interest in MDT and local government work, contract role and geographic locations of their work — items not included in some of the previous court-reviewed custom census approaches. Keen Independent also analyzed the sizes of contracts and subcontracts that businesses have bid on or performed in the past (referred to as "bid capacity" in this analysis).

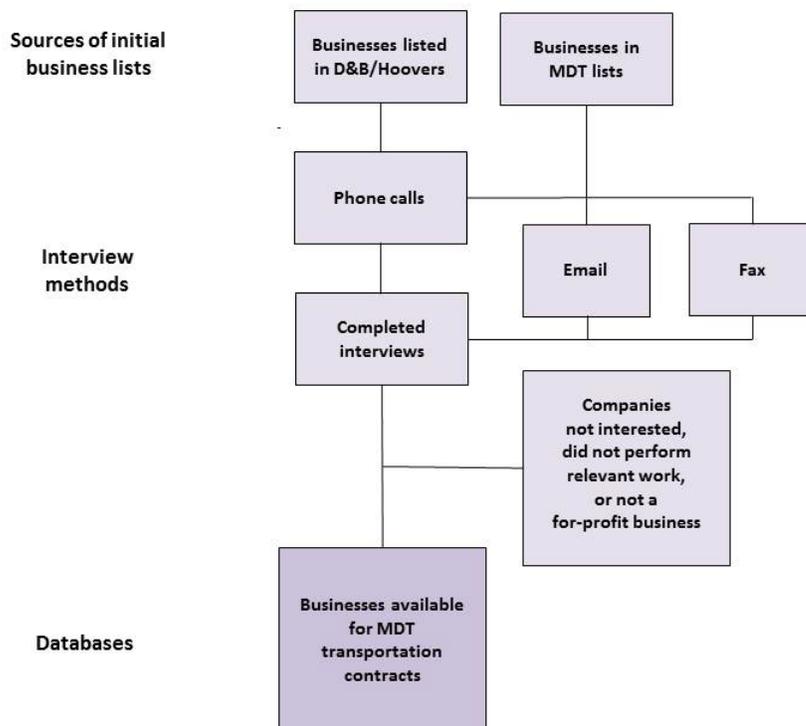
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<sup>6</sup> The study team offered business representatives the option of completing interviews via fax or email if they preferred not to complete interviews via telephone.

<sup>7</sup> D&B's Hoover's database is accepted as the most comprehensive and complete source of business listings in the nation. Keen Independent collected information about all business establishments listed under 8-digit work specialization codes (as developed by D&B) that were most related to the transportation contracts that MDT awarded during the study period.

- Some firms completed interviews when first contacted. For firms not immediately responding, the study team executed intensive follow-up over many weeks.
- Businesses could also learn about the availability interviews or complete the interviews via other methods such as:
  - Fax or email; and
  - Through the disparity study website that was maintained throughout the project. (Interested companies that learned about the interviews through the website or other means could complete the questionnaire online.)

Figure 6-3.  
Availability interview process



**Information collected in availability interviews.** Interview questions covered many topics about each organization, including:

- Status as a private business (as opposed to a public agency or not-for-profit organization);
- Status as a subsidiary or branch of another company;
- Types of transportation contract work performed, from asphalt paving to temporary traffic control for construction and from design engineering to surveying for engineering-related work (Figure 3-4 in Chapter 3 provides a list of work categories included in the interviews);
- Qualifications and interest in performing transportation-related work for MDT and local agencies in Montana;
- Qualifications and interest in performing transportation-related work as a prime contractor or as a subcontractor (or trucking company or materials supplier);
- Past work in Montana as a prime contractor or as a subcontractor, trucker or supplier;
- Ability to work in specific geographic regions (Northwest, Southwest, North Central, East and South Central Montana);
- Largest prime contract or subcontract bid on or performed in Montana in the previous five years;
- Year of establishment; and
- Race/ethnicity and gender of ownership.

Appendix D provides an availability interview instrument.

**Screening of firms for the availability database.** The study team asked business owners and managers several questions concerning the types of work that their companies performed; their past bidding history; and their qualifications and interest in working on contracts for MDT and local government agencies, among other topics. Keen Independent considered businesses to be potentially available for MDT transportation prime contracts or subcontracts if they reported possessing *all* of the following characteristics:

- a. Being a private business (as opposed to a public agency or not-for-profit organization);
- b. Performing work relevant to transportation contracting;
- c. Having bid on or performed transportation-related prime contracts or subcontracts in Montana in the previous five years; and
- d. Reporting qualifications for and interest in work for MDT and/or for local governments.<sup>8</sup>

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<sup>8</sup> For both MDT and for local agency work, separate interview questions were asked about prime contract work and subcontract work.

## D. Businesses Included in the Detailed Availability Database

After completing the availability interviews and online surveys, the study team developed a database of information about businesses that are potentially available for MDT transportation contracting work. The study team used the availability database to produce availability benchmarks to:

- Determine whether there were any disparities in MDT and local agency utilization of MBE/WBEs during the study period; and
- Help calculate a base figure for MDT’s overall DBE goals for FHWA contracts.

Data from the availability interviews allowed Keen Independent to develop a representative depiction of businesses that are qualified and interested in the highest dollar volume areas of MDT and local agency transportation-related work, but it should not be considered an exhaustive list of every business that could potentially participate in MDT and local agency contracts. Appendix D provides a detailed discussion about why the database should not be considered an exhaustive list of potentially available businesses.

Figure 6-4 presents the number of businesses that the study team included in the availability database for each racial/ethnic and gender group. The study team’s research identified 435 businesses reporting that they were available for specific transportation contracts that MDT and local agencies awarded during the study period. Of those businesses 96 (22%) were MBEs or WBEs.

Because results are based on a simple count of firms with no analysis of availability for specific MDT contracts, they only reflect the first step in the availability analysis.

**Figure 6-4.**  
Number of businesses included in the availability database

Note:  
Numbers rounded to nearest tenth of 1 percent. Percentages may not add to totals due to rounding.

Source:  
Keen Independent availability analysis.

| Race/ethnicity and gender         | Number of firms | Percent of firms |
|-----------------------------------|-----------------|------------------|
| African American-owned            | 2               | 0.5 %            |
| Asian-Pacific American-owned      | 2               | 0.5              |
| Subcontinent Asian American-owned | 0               | 0.0              |
| Hispanic American-owned           | 2               | 0.5              |
| Native American-owned             | 20              | 4.6              |
| Total MBE                         | 26              | 6.0 %            |
| WBE (white women-owned)           | 70              | 16.1             |
| Total MBE/WBE                     | 96              | 22.1 %           |
| Total majority-owned firms        | 339             | 77.9             |
| Total firms                       | 435             | 100.0 %          |

## **E. Dollar-weighted MBE/WBE Availability Calculations on a Contract-by-Contract Basis**

Keen Independent analyzed information from the availability database to develop dollar-weighted availability estimates for use as a benchmark in the disparity analysis and in helping MDT set its overall DBE goals for FHWA-funded contracts.

- Dollar-weighted availability estimates represent the percentage of MDT transportation contracting dollars that MBE/WBEs might be expected to receive based on their availability for specific types and sizes of MDT transportation-related construction and engineering prime contracts and subcontracts.
- Keen Independent's approach to calculating availability was a bottom up, contract-by-contract process of "matching" available firms to specific prime contracts and subcontracts.

**Steps to calculating availability.** Only a portion of the businesses in the availability database were considered potentially available for any given MDT construction or engineering prime contract or subcontract (referred to collectively as "contract elements"). The study team first examined the characteristics of each specific contract element, including type of work, location of work, contract size and contract date. The study team then identified businesses in the availability database that perform work of that type, in that location, of that size, in that role (i.e., prime contractor or subcontractor), and that were in business in the year that the contract element was awarded.

**Steps to the availability calculations.** The study team identified the specific characteristics of each of the 6,679 MDT and local agency prime contracts and subcontracts included in the utilization analysis and then took the following steps to calculate availability for each contract element:

1. For each contract element, the study team identified businesses in the availability database that reported that they:
  - Are qualified and interested in performing transportation-related work in that particular role, for that specific type of work, for that particular type of agency (MDT or local agencies) or had actually performed work in that role based on contract data for the study period;
  - Indicated in the interview that they had performed work in the particular role (prime or sub) in Montana within the past five years (or had done so based on contract data for the study period);
  - Are able to do work in that geographic location (or had done so based on contract data for the study period);
  - Had bid on or performed work of that size in Montana in the past five years (or had done so based on contract data for the study period); and
  - Were in business in the year that the contract or task order was awarded.

2. For the specific contract element, the study team then counted the number of MBEs (by race/ethnicity), WBEs and majority-owned businesses among all businesses in the availability database that met the criteria specified in step 1 above.
3. The study team translated the numeric availability of businesses for the contract element into percentage availability (as described in Figure 6-5).

The study team repeated those steps for each contract element examined in the Disparity Study. The study team multiplied the percentage availability for each contract element by the dollars associated with the contract element, added results across all contract elements, and divided by the total dollars for all contract elements. The result was a dollar-weighted estimate of overall availability of MBE/WBEs and estimates of availability for each MBE/WBE group. Figure 6-5 provides an example of how the study team calculated availability for a specific subcontract in the study period.

#### Special considerations for supply contracts.

When calculating availability for a particular type of materials supplies, Keen Independent counted as available all firms supplying those materials that reported qualifications and interest in that work for MDT (or for local agencies when it was a local agency contract) and indicated that they could provide supplies in the pertinent region of the state. Bid capacity was not considered in these calculations.

**Improvements on a simple “head count” of businesses.** Keen Independent used a “custom census” approach to calculating MBE/WBE availability for MDT and local agency work rather than using a simple “head count” of MBE/WBEs (i.e., simply calculating the percentage of all Montana transportation contracting businesses that are minority- or women-owned). Using a custom census approach typically results in lower availability estimates for MBEs and WBEs than a headcount approach due in large part to Keen Independent’s consideration of “bid capacity” in measuring availability and because of dollar-weighting availability results for each contract element (a large prime contract has a greater weight in calculating overall availability than a small subcontract).

There are several important ways in which Keen Independent’s custom census approach to measuring availability is more precise than completing a simple head count approach.

**Figure 6-5.**  
Example of an availability calculation

One of the subcontracts examined was for surveying (about \$15,000) on a 2010 contract MDT in the Billings area. To determine the number of MBE/WBEs and majority-owned firms available for that subcontract, the study team identified businesses in the availability database that:

- a. Were in business in 2010;
- b. Indicated that they performed surveying on transportation-related projects;
- c. Reported working or bidding on subcontracts in Montana in the past five years;
- d. Reported bidding on work of similar or greater size in the past five years;
- e. Reported ability to perform work in South Central Montana; and
- f. Reported qualifications and interest in working as a subcontractor on MDT transportation projects.

There were 49 businesses in the availability database that met those criteria. Of those businesses, none were MBEs and four were WBEs. Therefore, MBE/WBE availability for the subcontract was 8 percent (i.e.,  $4/49 = 8\%$ ).

The weight applied to this contract was  $\$15,000 \div \$1.9 \text{ billion} = 0.000008\%$  (equal to its share of total FHWA-funded contract dollars). Keen Independent repeated this process for each prime contract and subcontract.

**Keen Independent’s approach accounts for type of work.** USDOT suggests calculating availability based on businesses’ abilities to perform specific types of work. USDOT gives the following example in Part II F of “Tips for Goal-Setting in the Disadvantaged Business Enterprise (DBE) Program”:

*For instance, if 90 percent of your contract dollars will be spent on heavy construction and 10 percent on trucking, you should weight your calculation of the relative availability of firms by the same percentages.<sup>9</sup>*

The study team took type of work into account by examining 35 different subindustries related to transportation construction, engineering and related purchases as part of estimating availability for MDT and local agency work.

**Keen Independent’s approach accounts for qualifications and interest in transportation-related prime contract and subcontract work.** The study team collected information on whether businesses are qualified and interested in working as prime contractors, subcontractors, or both on MDT and local agency transportation work, in addition to the consideration of several other factors related to prime contracts and subcontracts (e.g., contract types, sizes and locations):

- Only businesses that reported being qualified for and interested in working as prime contractors were counted as available for prime contracts (or included because contract data for MDT or local agencies indicated that they had prime contracts in the past five years).
- Only businesses that reported being qualified for and interested in working as subcontractors were counted as available for subcontracts (or included because contract data for MDT or local agencies indicated that they had subcontracts in the past five years).
- Businesses that reported being qualified for and interested in working as both prime contractors and subcontractors were counted as available for both prime contracts and subcontracts.

**Keen Independent’s approach accounts for the size of prime contracts and subcontracts.** The study team considered the size — in terms of dollar value — of the prime contracts and subcontracts that a business bid on or received in the previous five years (i.e., bid capacity) when determining whether to count that business as available for a particular contract element. When counting available businesses for a particular prime contract or subcontract, the study team considered whether businesses had previously bid on or received at least one contract of an equivalent or greater dollar value in Montana in the previous five years, based on the most inclusive information from survey results and analysis of past MDT and local agency prime contracts and subcontracts.

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<sup>9</sup> USDOT. Tips for Goal-Setting in the Federal Disadvantaged Enterprise (DBE) Program as updated June 25, 2013 <http://www.dot.gov/osdbu/disadvantaged-business-enterprise/tips-goal-setting-disadvantaged-business-enterprise>.

Keen Independent’s approach is consistent with many recent, key court decisions that have found relative capacity measures to be important to measuring availability (e.g., *Associated General Contractors of America, San Diego Chapter, Inc. v. California Department of Transportation, et al.*; *Western States Paving Company v. Washington State DOT*; *Rothe Development Corp. v. U.S. Department of Defense*;<sup>10</sup> and *Engineering Contractors Association of S. Fla. Inc. vs. Metro Dade County*<sup>11</sup>).

Keen Independent’s approach accounts for the geographic location of the work. The study team determined the location where work was performed for MDT and local agency contracts (Northwest, Southwest, North Central, East and South Central Montana).

Keen Independent’s approach generates dollar-weighted results. Keen Independent examined availability on a contract-by-contract basis and then dollar-weighted the results for different sets of contract elements. Thus, the results of relatively large contract elements contributed more to overall availability estimates than those of relatively small contract elements. This approach is consistent with USDOT’s “Tips for Goal-Setting in the Disadvantaged Business Enterprise (DBE) Program,” which suggests a dollar-weighted approach to calculating availability.

## **F. Dollar-weighted Availability Results**

Keen Independent used the custom census approach described above to estimate the availability of MBE/WBEs and majority-owned businesses for FHWA- and state-funded prime contracts and subcontracts that MDT and local agencies awarded during the study period.

Figure 6-6 presents overall dollar-weighted availability estimates by MBE/WBE group for those contracts. Overall, MBE/WBE availability for FHWA- and state-funded contracts combined is 19.22 percent. This result is lower than the 22 percent “headcount” availability of MBE/WBEs in Figure 6-4. Dollar-weighted availability was highest for white women-owned firms (11.10%) and Native American-owned companies (4.94%). Availability was 1.81 percent for Asian-Pacific American-owned businesses and about 1.29 percent for Hispanic American-owned firms.

Note that dollar-weighted availability estimates for FHWA-funded contracts during the study period were very similar to the availability for all contracts combined because most MDT contract dollars examined were FHWA-funded. As shown in the first column of Figure 6-6, overall dollar-weighted availability of minority- and women-owned firms for FHWA-funded contracts was 18.97 percent.

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<sup>10</sup> *Rothe Development Corp. v. U.S. Department of Defense*, 545 F.3d 1023 (Fed. Cir. 2008).

<sup>11</sup> *Engineering Contractors Association of S. Fla. Inc. vs. Metro Dade County*, 943 F. Supp. 1546 (S.D. Fla. 1996).

Figure 6-6. Overall dollar-weighted availability estimates for MBE/WBEs for MDT FHWA-funded contracts, October 2010-September 2014

| Race/ethnicity and gender         | FHWA         | State       | Total        |
|-----------------------------------|--------------|-------------|--------------|
| African American-owned            | 0.01 %       | 0.00 %      | 0.01 %       |
| Asian-Pacific American-owned      | 1.67         | 4.03        | 1.81         |
| Subcontinent Asian American-owned | 0.00         | 0.00        | 0.00         |
| Hispanic American-owned           | 1.20         | 4.09        | 1.37         |
| Native American-owned             | <u>4.81</u>  | <u>6.98</u> | <u>4.94</u>  |
| Total MBE                         | 7.69 %       | 15.10 %     | 8.13 %       |
| WBE (white women-owned)           | <u>11.28</u> | <u>8.19</u> | <u>11.10</u> |
| Total MBE/WBE                     | 18.97 %      | 23.29 %     | 19.22 %      |

Note: Numbers may not add to totals due to rounding.

Source: Keen Independent availability analysis.

### G. Headcount Availability from Analysis of an MDT “Bidders List”

To evaluate the reasonableness of the availability results from the detailed availability interviews, Keen Independent also built a master MDT bidders list to develop estimates of headcount availability. The MDT bidders list compiled firms identified from a number of different sources, including:

1. Construction contract bidders from MDT;
2. MDT data for 2015 showing subcontractors on construction contracts from which primes reported soliciting bids;
3. Contractor Eblast list from MDT (EEO current submissions spreadsheet);
4. Consultant Eblast list from MDT;
5. Proposers identified for a sample of MDT engineering-related contracts (case studies);
6. The current DBE directory for firms in lines of work relevant to transportation construction and engineering projects; and
7. Any other firms indicating qualifications and interest in MDT work from the availability surveys conducted as part of the Disparity Study.

The only information about firms consistently provided in MDT and other data sources was name and address of these companies. The bidders list data sources did not consistently indicate what types of work firms performed, gross annual receipts or ownership status. After removing duplicate entries, the master bidders list included 959 firms.

Only the DBE directory and the availability survey data provided information about race, ethnicity and gender ownership. Therefore, the study team attempted to identify race, ethnicity and gender ownership for all the other firms.

Of the 959 firms on the master bidders list, 216 were identified as minority- or women-owned. Figure 6-7 shows these results.

The overall percentage availability from the master bidders list headcount analysis (22.5%) is almost exactly the headcount percentage in Figure 6-4 (22.4%) from the detailed availability interviews completed as part of the disparity study, and the results for individual minority groups and for WBEs are also very consistent.

Because results are based on a simple count of firms with no analysis of availability for specific MDT contracts, they only reflect “headcount availability” and are not used in this study to determine a base figure for the overall DBE goal or as a benchmark for the disparity analysis. As the master bidders list does indicate some availability of Subcontinent Asian American-owned firms for MDT contracts, this fact is used in the disparity analysis presented in Chapter 7.

**Figure 6-7.**  
Number of businesses included in the master bidders list

Note:  
Numbers rounded to nearest tenth of 1 percent. Percentages may not add to totals due to rounding.

Source:  
Keen Independent availability analysis.

| Race/ethnicity and gender         | Number of firms | Percent of firms |
|-----------------------------------|-----------------|------------------|
| African American-owned            | 3               | 0.3 %            |
| Asian-Pacific American-owned      | 7               | 0.7              |
| Subcontinent Asian American-owned | 3               | 0.3              |
| Hispanic American-owned           | 11              | 1.1              |
| Native American-owned             | 36              | 3.8              |
| Total MBE                         | 60              | 6.2 %            |
| WBE (white women-owned)           | 156             | 16.3             |
| Total MBE/WBE                     | 216             | 22.5 %           |
| Total majority-owned firms        | 743             | 77.5             |
| Total firms                       | 959             | 100.0 %          |

## H. Base Figure for MDT’s Overall DBE Goal for FHWA-funded Contracts

Establishing a base figure is the first step in calculating an overall goal for DBE participation in MDT’s FHWA-funded contracts. For the base figure for FHWA-funded contracts, calculations focus on currently certified DBEs.

Keen Independent’s approach to calculating MDT’s base figure is consistent with:

- Court-reviewed methodologies in several states, including California;
- Instructions in The Final Rule effective February 28, 2011 that outline revisions to the Federal DBE Program; and
- USDOT’s “Tips for Goal-Setting in the Disadvantaged Business Enterprise (DBE) Program.”

**Base figure for FHWA-funded contracts.** Keen Independent’s availability analysis indicates that the availability of current DBEs for MDT’s FHWA-funded transportation contracts is 7.41 percent based on current availability information and analysis of FHWA-funded MDT and local agency contracts awarded from October 2009 through September 2014. This includes minority-, women- and white male-owned firms certified as DBEs as of late 2015.

The dollar-weighted availability of minority- and women-owned firms certified as DBEs is 7.07 percent. Inclusion of white male-owned DBEs added 0.34 percentage points to the total availability for current and potential DBEs. This increases the base figure to 7.41 percent, as shown in Figure 6-8.

Figure 6-8.  
Overall dollar-weighted availability estimates for DBEs  
for FHWA-funded contracts, October 2010-September 2014

| Calculation of base figure     | FHWA        |
|--------------------------------|-------------|
| Minority- and women-owned DBEs | 7.07 %      |
| White male-owned DBEs          | <u>0.34</u> |
| Total currently-certified DBEs | 7.41 %      |

Source: Keen Independent availability analysis.

The 7.41 percent base figure represents the level of DBE participation anticipated based on analysis of FHWA-funded contracts from October 2009 through September 2014. If MDT’s mix of projects, including size and location, were to substantially change for the FFY 2017 through FFY 2019 period, it might affect the overall base figure.

**Additional steps before MDT determines its overall DBE goals for FHWA-funded contracts.** As discussed in Chapter 9, MDT must consider whether to make a step 2 adjustment to the base figure as part of determining its overall DBE goal for FHWA-funded contracts. Step 2 adjustments can be upward or downward, but there is no requirement for MDT to make a step 2 adjustment as long as the agency can explain the factors considered and why no adjustment was warranted.

Chapters later in this report discuss factors that MDT might consider in deciding whether to make a step 2 adjustment to the base figures for FHWA-funded contracts.

## CHAPTER 7.

### Utilization and Disparity Analysis

Keen Independent’s utilization analysis reports the percentage of MDT transportation contract dollars going to minority- and women-owned firms. The disparity analysis compares that utilization with the participation of minority- and women-owned firms that might be expected based on the availability analysis. (Chapter 6 and Appendix D explain the availability analysis.)

Chapter 7 presents results of the utilization and disparity analysis in five parts:

- A. Overview of the utilization analysis;
- B. Overall MBE/WBE and DBE utilization on MDT contracts;
- C. Utilization by racial, ethnic and gender group;
- D. Disparity analysis for MDT contracts; and
- E. Statistical significance of disparity analysis results.

#### A. Overview of the Utilization Analysis

Keen Independent examined the participation of minority- and women-owned firms on MDT transportation contracts from October 2009 through September 2014. In total, Keen Independent’s utilization analysis included 2,425 contracts totaling \$1.9 billion over this time period, including FHWA- and state-funded contracts. Keen Independent’s analysis of these contracts included 4,254 subcontracts.

The study team collected information about MDT projects as well as work awarded for local agency projects that use funds administered through MDT (“CTEP” contracts). Chapter 3 and Appendix C explain the methods used to collect these data and determine the racial, ethnic and gender ownership characteristics of individual firms.

Note that MDT awards work through a variety of contract agreements; to simplify, the utilization analysis refers to all such work as “contracts.”<sup>1</sup>

#### Figure 7-1. Defining and measuring “utilization”

“Utilization” of MBE/WBEs refers to the share of prime contract and subcontract dollars that an agency awarded to MBE/WBEs during a particular time period. Keen Independent measures the utilization of all MBE/WBEs, regardless of certification. The study team reports utilization for firms owned by different racial, ethnic and gender groups.

Keen Independent measures MBE/WBE utilization as percentage of total prime contract and subcontract dollars. For example, if 5 percent of prime contract and subcontract dollars went to WBEs during the study period, WBE utilization would be 5 percent.

Information about MBE/WBE utilization is instructive on its own, but it is even more useful when it is compared with the utilization that might be expected based on the availability of MBE/WBEs for MDT work. The study team presents such comparisons as part of the “disparity analysis” later in Chapter 7.

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<sup>1</sup> Also, prime contractors, not MDT or local agencies, “award” subcontracts to subcontractors. To streamline the discussion, MDT and local agency “award” of contract elements is used here and throughout the report.

**Calculation of “utilization.”** The study team measured MBE/WBE “utilization” as the percentage of prime contract and subcontract dollars awarded to MBE/WBEs during the study period (see Figure 7-1). Keen Independent calculated MBE/WBE utilization for a group of contracts by dividing the contract dollars going to MBE/WBEs by the contract dollars for all firms.

To avoid double-counting contract dollars and better gauging utilization of different types of firms, Keen Independent based the utilization of prime contractors in the amount of the contract retained by the prime after deducting subcontract amounts. In other words, a \$1 million contract that involved \$400,000 in subcontracting only counts as \$600,000 to the prime contractor in the utilization analysis.

**Different results than in MDT Uniform Reports of DBE Commitments/Awards and Payments.** USDOT requires agencies such as MDT to submit reports about its DBE utilization on its FHWA-funded transportation contracts twice each year (typically in April and October).

Keen Independent’s analysis of MBE/WBE utilization goes beyond what MDT currently reports to the FHWA, as explained below.

- **All MBE/WBEs, not just certified DBEs.** Per USDOT regulations, MDT’s Uniform Reports focus exclusively on certified DBEs.

Keen Independent’s utilization analyses examines the utilization of minority- and women-owned firms — not just the utilization of certified DBEs. The study team’s analysis includes the utilization of MBE/WBEs that may have once been DBE-certified and graduated (or let their certifications lapse) and the utilization of MBE/WBEs that have never been DBE-certified. (Keen Independent separately reports utilization of MBE/WBEs that were DBE-certified during the study period.<sup>2</sup>)

- **All transportation contracts, not just FHWA-funded contracts.** Because FHWA requires MDT to prepare DBE utilization reports on its FHWA-funded transportation contracts, MDT’s Uniform Reports do not include state-funded contracts.
- **More complete contract information.** Through MDT’s assistance during the disparity study, and as part of MDT’s ongoing improvements to its contract data collection and reporting, the study team was able to analyze more complete data than MDT had in its Uniform Reports.

## **B. Overall MBE/WBE and DBE Utilization on MDT Contracts**

Figure 7-2 presents overall MBE/WBE utilization (as a percentage of total dollars) on MDT transportation-related contracts awarded during the study period. Results are for the 6,679 prime contracts and subcontracts for FHWA- and state-funded contracts. The darker portion of the bar presents the utilization of MBE/WBEs that were DBE-certified.

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<sup>2</sup> Although businesses that are owned and operated by socially- and economically-disadvantaged white men can become certified as DBEs, Keen Independent identified no DBE-certified white male-owned businesses that MDT utilized during the study period. In other words, all DBEs that MDT utilized during the study period were MBE/WBEs. Thus, utilization results for certified DBEs are a subset of the utilization results for all MBE/WBEs.

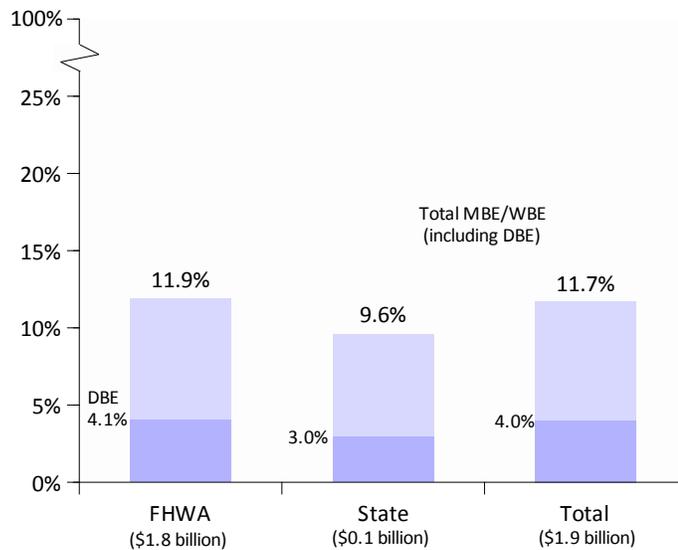
Figure 7-2.  
 MBE/WBE and DBE share of prime contract/subcontract dollars for MDT FHWA- and state-funded transportation contracts, October 2009-September 2014

Note:

Dark portion of bar is certified DBE utilization.  
 Number of contracts/subcontracts analyzed is 6,248 for FHWA-funded contracts, 431 for state-funded contracts and 6,679 for all contracts/subcontracts.

Source:

Keen Independent from data on MDT and CTEP contracts October 2009-September 2014.



**FHWA-funded contracts.** Keen Independent examined 6,248 FHWA-funded prime contracts and subcontracts from October 2009 through September 2014 totaling \$1.8 billion.<sup>3</sup>

MBE/WBEs received \$215 million, or 11.9 percent of MDT FHWA-funded contract dollars during the study period. About \$74 million (4.1%) of contract dollars went to MBE/WBEs that were DBE-certified during the time of the contract. Minority- and women-owned firms not certified as DBEs accounted for \$141 million or 7.8 percentage points of the total 11.9 percent MBE/WBE participation. (MDT set DBE contract goals on some FHWA-funded projects during this time.)

**State-funded contracts.** The study team obtained data on 431 state-funded transportation construction and engineering-related prime contracts and subcontracts totaling \$115 million for October 2009 through September 2014. Minority- and women-owned firms received 9.6 percent of the contract dollars for state-funded transportation contracts during the study period. Compared with FHWA-funded contracts, less of this utilization (3.0%) was DBE participation (see Figure 7-2).

### C. Utilization by Racial, Ethnic and Gender Group

Figure 7-3 presents detailed information for minority- and women-owned firms (top portion of the table) and certified DBEs (bottom portion of the table) for FHWA- and for state-funded contracts. For each of these two sets of contracts, Figure 7-3 shows:

- Total number of prime contracts and subcontracts awarded to the group (e.g. 992 FHWA-funded prime contracts and subcontracts to white women-owned firms);
- Combined dollars of prime contracts and subcontracts going to the group (e.g., \$182,232,000 to white women-owned firms); and
- The percentage of combined contract dollars for the group (e.g., white women-owned firms received 10.0 percent of total FHWA-funded contract dollars).

<sup>3</sup> Note that because MDT and USDOT treat each contract with any FHWA dollars as “FHWA-funded,” the study team did so as well (some of the funding on these contracts was state dollars).

**FHWA-funded contracts.** As shown in the top portion of Figure 7-3 for FHWA-funded contracts, white women-owned firms (WBEs) received the largest number of prime contracts and subcontracts, the most dollars and the highest share of dollars out of all MBE/WBE groups. Among minority-owned firms, Native American-owned firms received the most prime contracts and subcontracts (157) and the most dollars of FHWA-funded contracts (\$27 million). Native American-owned firms received 1.5 percent of MDT FHWA-funded contract dollars. All other minority groups combined accounted for less than 0.3 percent of FHWA-funded contract dollars.

The bottom portion of Figure 7-3 indicates that DBEs owned by white women and Native Americans accounted for nearly all of the DBE participation on FHWA-funded contracts. In total, firms certified as DBEs received 718 prime contracts and subcontracts and \$74 million of FHWA-funded contracts during the study period (4.1% of FHWA-funded contract dollars).

**State-funded contracts.** Figure 7-3 also shows participation of MBE/WBEs on state-funded contracts. White women-owned firms (7.3%), Asian-Pacific American-owned businesses (1.2%) and Native American-owned firms (1.1%) accounted for most of the total participation of MBE/WBEs on state-funded contracts. Even though DBE contract goals were not applied, DBEs did participate in state-funded contracts, receiving about 3.0 percent of total contract dollars (see the bottom portion of Figure 7-3).

Figure 7-3.  
MBE/WBE and DBE share of MDT prime contracts and subcontracts for  
FHWA- and state-funded contracts, October 2009-September 2014

|                                   | FHWA                 |                     |                    | State                |                   |                    |
|-----------------------------------|----------------------|---------------------|--------------------|----------------------|-------------------|--------------------|
|                                   | Number of contracts* | \$1,000s            | Percent of dollars | Number of contracts* | \$1,000s          | Percent of dollars |
| <b>MBE/WBEs</b>                   |                      |                     |                    |                      |                   |                    |
| African American-owned            | 0                    | \$ 0                | 0.0 %              | 0                    | \$ 0              | 0.0 %              |
| Asian-Pacific American-owned      | 32                   | 4,147               | 0.2                | 5                    | 1,375             | 1.2                |
| Subcontinent Asian American-owned | 0                    | 0                   | 0.0                | 0                    | 0                 | 0.0                |
| Hispanic American-owned           | 49                   | 1,408               | 0.1                | 1                    | 17                | 0.0                |
| Native American-owned             | 157                  | 27,459              | 1.5                | 11                   | 1,303             | 1.1                |
| Total MBE                         | 238                  | 33,014              | 1.9                | 17                   | \$ 2,695          | 2.3 %              |
| WBE (white women-owned)           | 992                  | 182,232             | 10.0               | 80                   | 8,380             | 7.3                |
| <b>Total MBE/WBE</b>              | <b>1,230</b>         | <b>\$ 215,246</b>   | <b>11.9 %</b>      | <b>97</b>            | <b>\$ 11,075</b>  | <b>9.6 %</b>       |
| Majority-owned                    | 5,018                | 1,598,089           | 88.1               | 334                  | 104,040           | 90.4               |
| <b>Total</b>                      | <b>6,248</b>         | <b>\$ 1,813,335</b> | <b>100.0 %</b>     | <b>431</b>           | <b>\$ 115,115</b> | <b>100.0 %</b>     |
| <b>DBEs</b>                       |                      |                     |                    |                      |                   |                    |
| African American-owned            | 0                    | \$ 0                | 0.0 %              | 0                    | \$ 0              | 0.0 %              |
| Asian-Pacific American-owned      | 30                   | 3,419               | 0.2                | 5                    | 1,375             | 1.2                |
| Subcontinent Asian American-owned | 0                    | 0                   | 0.0                | 0                    | 0                 | 0.0                |
| Hispanic American-owned           | 29                   | 1,198               | 0.1                | 0                    | 0                 | 0.0                |
| Native American-owned             | 109                  | 17,527              | 1.0                | 10                   | 1,265             | 1.1                |
| Total MDBE                        | 168                  | \$ 22,144           | 1.2 %              | 15                   | \$ 2,641          | 2.3 %              |
| WBE (white women-owned)           | 550                  | 51,620              | 2.8                | 32                   | 835               | 0.7                |
| White male-owned DBE              | 0                    | 0                   | 0.0                | 0                    | 0                 | 0.0                |
| <b>Total DBE certified</b>        | <b>718</b>           | <b>\$ 73,764</b>    | <b>4.1 %</b>       | <b>47</b>            | <b>\$ 3,475</b>   | <b>3.0 %</b>       |
| Non-DBE                           | 5,530                | 1,739,571           | 95.9               | 384                  | 111,640           | 97.0               |
| <b>Total</b>                      | <b>6,248</b>         | <b>\$ 1,813,335</b> | <b>100.0 %</b>     | <b>431</b>           | <b>\$ 115,115</b> | <b>100.0 %</b>     |

Note: \*Number of prime contracts and subcontracts.

Numbers rounded to nearest tenth of 1 percent. Numbers may not add to totals due to rounding.

Source: Keen Independent from data on MDT and CTEP contracts October 2009-September 2014.

**Utilization of minority- and women-owned firms on MDT transportation contracts.** Keen Independent examined MBE/WBE and DBE participation on MDT transportation construction and engineering-related contracts. Figure 7-4 presents these results.

White women-owned firms represented the largest share of contract dollars going to MBE/WBEs for FHWA- and state-funded contracts combined (9.9%). Minority-owned firms received 1.9 percent of MDT contract dollars. In total, 11.7 percent of MDT contract dollars went to minority- and women-owned firms.

MBE/WBEs certified as DBEs received 4.0 percent of MDT contract dollars with the balance going to minority- and women-owned firms that did not have DBE certification in the study period.

**Figure 7-4.**  
MBE/WBE and DBE share of MDT prime contracts and subcontracts for combined FHWA- and state-funded contracts, October 2009-September 2014

|                                   | Total FHWA and State |                     |                    |
|-----------------------------------|----------------------|---------------------|--------------------|
|                                   | Number of contracts* | \$1,000s            | Percent of dollars |
| <b>MBE/WBEs</b>                   |                      |                     |                    |
| African American-owned            | 0                    | \$ 0                | 0.0 %              |
| Asian-Pacific American-owned      | 37                   | 5,522               | 0.3                |
| Subcontinent Asian American-owned | 0                    | 0                   | 0.0                |
| Hispanic American-owned           | 50                   | 1,424               | 0.1                |
| Native American-owned             | 168                  | 28,762              | 1.5                |
| Total MBE                         | 255                  | \$ 35,708           | 1.9 %              |
| WBE (white women-owned)           | 1,072                | 190,612             | 9.9                |
| <b>Total MBE/WBE</b>              | <b>1,327</b>         | <b>\$ 226,320</b>   | <b>11.7 %</b>      |
| Majority-owned                    | 5,352                | 1,701,825           | 88.3               |
| <b>Total</b>                      | <b>6,679</b>         | <b>\$ 1,928,145</b> | <b>100.0 %</b>     |
| <b>DBEs</b>                       |                      |                     |                    |
| African American-owned            | 0                    | \$ 0                | 0.0 %              |
| Asian-Pacific American-owned      | 35                   | 4,794               | 0.2                |
| Subcontinent Asian American-owned | 0                    | 0                   | 0.0                |
| Hispanic American-owned           | 29                   | 1,198               | 0.1                |
| Native American-owned             | 119                  | 18,742              | 1.0                |
| Total MBE                         | 183                  | \$ 24,734           | 1.3 %              |
| WBE (white women-owned)           | 582                  | 52,455              | 2.7                |
| White male-owned DBE              | 0                    | 0                   | 0.0                |
| <b>Total DBE-certified</b>        | <b>765</b>           | <b>\$ 77,189</b>    | <b>4.0 %</b>       |
| Non-DBE                           | 5,914                | 1,850,956           | 96.0               |
| <b>Total</b>                      | <b>6,679</b>         | <b>\$ 1,928,145</b> | <b>100.0 %</b>     |

Note: \*Number of prime contracts and subcontracts.

Numbers rounded to nearest tenth of 1 percent. Numbers may not add to totals due to rounding.

Source: Keen Independent from data on MDT and CTEP contracts October 2009-September 2014.

**Contracts without DBE goals.** Figure 7-5 examines contract dollars going to minority- and women-owned firms on contracts for which MDT did not set DBE contract goals. Those contracts totaled \$1.6 billion, or more than 80 percent of dollars for total contracts in Figure 7-4. Because most contracts in Figure 7-4 did not have DBE goals, results for the two figures are similar.

The proportion of dollars on non-goals contracts going to WBEs was 9.2 percent, somewhat less than the utilization of white women-owned firms for all contracts (9.9%) shown in Figure 7-4. Minority-owned firms received 1.6 percent of MDT contract dollars when DBE contract goals did not apply, slightly less than for all contracts (1.9%).

DBE participation was 3.5 percent on non-goals contracts. This was also less than for all contracts.

**Figure 7-5.**  
**MBE/WBE and DBE share of MDT prime contracts and subcontracts for FHWA- and state-funded contracts without DBE contract goals, October 2009-September 2014**

|                                   | Total FHWA and State |                     |                    |
|-----------------------------------|----------------------|---------------------|--------------------|
|                                   | Number of contracts* | \$1,000s            | Percent of dollars |
| <b>MBE/WBEs</b>                   |                      |                     |                    |
| African American-owned            | 0                    | \$ 0                | 0.0 %              |
| Asian-Pacific American-owned      | 31                   | 5,177               | 0.3                |
| Subcontinent Asian American-owned | 0                    | 0                   | 0.0                |
| Hispanic American-owned           | 44                   | 1,154               | 0.1                |
| Native American-owned             | 139                  | 18,934              | 1.2                |
| <b>Total MBE</b>                  | <b>214</b>           | <b>\$ 25,624</b>    | <b>1.6 %</b>       |
| WBE (white women-owned)           | 927                  | 145,349             | 9.2                |
| <b>Total MBE/WBE</b>              | <b>1,141</b>         | <b>\$ 170,973</b>   | <b>10.8 %</b>      |
| Majority-owned                    | 4,852                | 1,409,018           | 89.2               |
| <b>Total</b>                      | <b>5,993</b>         | <b>\$ 1,579,991</b> | <b>100.0 %</b>     |
| <b>DBEs</b>                       |                      |                     |                    |
| African American-owned            | 0                    | \$ 0                | 0.0 %              |
| Asian-Pacific American-owned      | 29                   | 4,448               | 0.3                |
| Subcontinent Asian American-owned | 0                    | 0                   | 0.0                |
| Hispanic American-owned           | 25                   | 956                 | 0.1                |
| Native American-owned             | 92                   | 10,736              | 0.7                |
| <b>Total MBE</b>                  | <b>146</b>           | <b>\$ 16,140</b>    | <b>1.0 %</b>       |
| WBE (white women-owned)           | 487                  | 39,607              | 2.5                |
| White male-owned DBE              | 0                    | 0                   | 0.0                |
| <b>Total DBE-certified</b>        | <b>633</b>           | <b>\$ 55,747</b>    | <b>3.5 %</b>       |
| Non-DBE                           | 5,360                | 1,524,244           | 96.5               |
| <b>Total</b>                      | <b>5,993</b>         | <b>\$ 1,579,991</b> | <b>100.0 %</b>     |

Note: \*Number of prime contracts and subcontracts.

Numbers rounded to nearest tenth of 1 percent. Numbers may not add to totals due to rounding.

Source: Keen Independent from data on MDT and CTEP contracts October 2009-September 2014.

## D. Disparity Analysis for MDT Contracts

To conduct the disparity analysis, Keen Independent compared the actual utilization of MBE/WBEs on MDT transportation prime contracts and subcontracts with the percentage of contract dollars that MBE/WBEs might be expected to receive based on their availability for that work. (Availability is also referred to as the “utilization benchmark.”) Keen Independent made those comparisons for individual MBE/WBE groups. Chapter 6 explains how the study team developed benchmarks from the availability data.

Keen Independent expressed both utilization and availability as percentages of the total dollars associated with a particular set of contracts, making them directly comparable (e.g., 5% utilization compared with 4% availability). Keen Independent then calculated a “disparity index” to help compare utilization and availability results among MBE/WBE groups and across different sets of contracts. Figure 7-6 describes how Keen Independent calculated disparity indices.

- A disparity index of 100 indicates an exact match between actual utilization and what might be expected based on MBE/WBE availability for a specific set of contracts (often referred to as “parity”).
- A disparity index of less than 100 may indicate a disparity between utilization and availability, and disparities of less than 80 in this report are described as “substantial.”<sup>4</sup>

**Figure 7-6.**  
Calculation of disparity indices

The disparity index provides a straightforward way of assessing how closely actual utilization of an MBE/WBE group matches what might be expected based on its availability for a specific set of contracts. With the disparity index, one can directly compare results for one group to that of another group, and across different sets of contracts. Disparity indices are calculated using the following formula:

$$\frac{\% \text{ actual utilization} \times 100}{\% \text{ availability}}$$

For example, if actual utilization of MBEs on a set of MDT contracts was 2 percent and the availability of MBEs for those contracts was 4 percent, then the disparity index would be 2 percent divided by 4 percent, which would then be multiplied by 100 to equal 50. In this example, MBEs would have actually received 50 cents of every dollar that they might be expected to receive based on their availability for the work.

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<sup>4</sup> Some courts deem a disparity index below 80 as being “substantial” and have accepted it as evidence of adverse impacts against MBE/WBEs. For example, see *Associated General Contractors of America, San Diego Chapter, Inc. v. California Department of Transportation, et al.*, \_\_\_ F. 3d \_\_\_, 2013 WL 1607239 (9<sup>th</sup> Cir. April 16, 2013); *Rothe Development Corp v. U.S. Dept of Defense*, 545 F.3d 1023, 1041; *Eng’g Contractors Ass’n of South Florida, Inc. v. Metropolitan Dade County*, 122 F.3d at 914, 923 (11<sup>th</sup> Circuit 1997); *Concrete Works of Colo., Inc. v. City and County of Denver*, 36 F.3d 1513, 1524 (10<sup>th</sup> Cir. 1994). Also see Appendix B for additional discussion.

**Results for minority- and women-owned firms on MDT contracts.** White women-owned firms received 9.9 percent of MDT contract dollars (FHWA- and state-funded combined). This utilization was below what might be expected from the availability analysis — 11.1 percent. Minority-owned firms received 1.9 percent of combined FHWA- and state-funded contract dollars, a result that was also below what might be expected from the availability analysis — 8.1 percent. Figure 7-7 shows these results.

The resulting disparity index for WBEs is 89 (9.9% divided 11.1% times 100). The disparity occurred even with application of DBE contract goals on some FHWA-funded contracts in recent years.

The disparity index for MBEs is 23 (1.9% divided by 8.1% times 100). This is a substantial disparity.

**Figure 7-7.**  
**MBE/WBE utilization**  
**and availability for**  
**MDT FHWA- and state-**  
**funded contracts,**  
**October 2009-**  
**September 2014**

Note:

Number of contracts/subcontracts analyzed is 13,506.

Source:

Keen Independent disparity analysis.

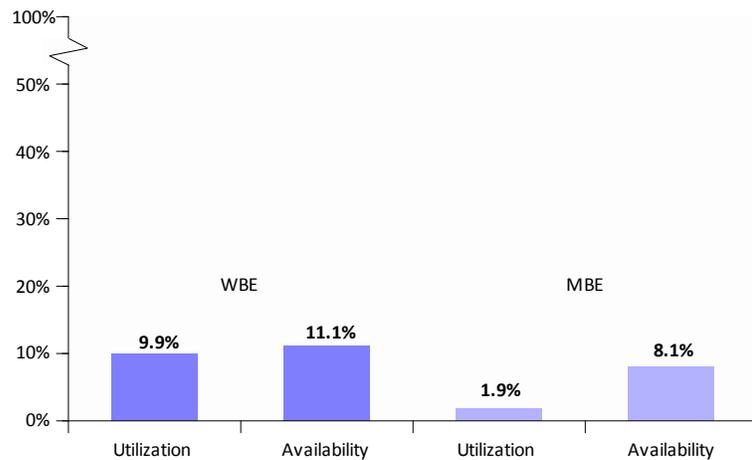
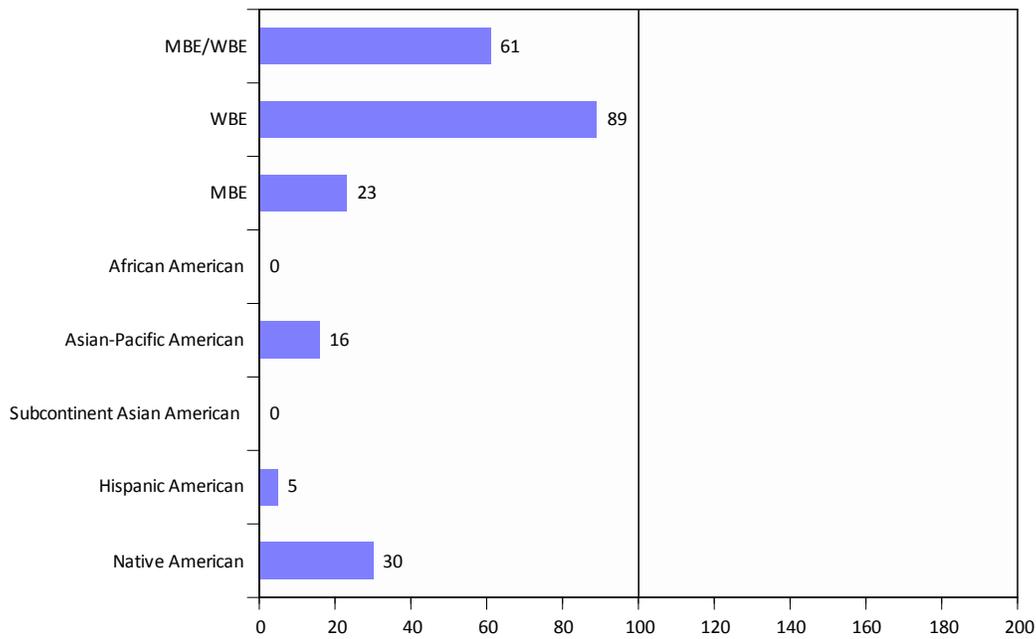


Figure 7-8 shows disparity results for individual MBE groups as well as WBEs.

- As there was no utilization of firms identified as African American-owned or Subcontinent Asian-owned, the disparity indices for these groups is “0.” (There was some availability for these two groups for MDT work based on analysis of the MDT bidders list discussed in Chapter 6.)
- Utilization of Asian-Pacific American-owned firms (0.3%) was substantially less than what might be expected from the availability analysis (1.8%), and the corresponding disparity index was 16 for this group.
- Hispanic American-owned firms obtained less than 0.1 percent of MDT contract dollars, substantially below what might be expected from the availability analysis (1.4%), resulting in a disparity index of 5.

- Native American-owned firms had a utilization of 1.5 percent, substantially below what might be expected based on the availability analysis (4.9%). The disparity index for this group was 30.
- Overall, the disparity index for MBE/WBEs combined was 61, even with the application of DBE contract goals for some of these contracts. The disparity index for WBEs (89) is also shown.

Figure 7-8. Disparity indices for MBE/WBEs, by group, for MDT FHWA- and state-funded contracts, October 2009-September 2014



Note: Number of contracts/subcontracts analyzed is 6,679.

Source: Keen Independent disparity analysis.

### Results for minority- and women-owned firms on MDT contracts without DBE contract goals.

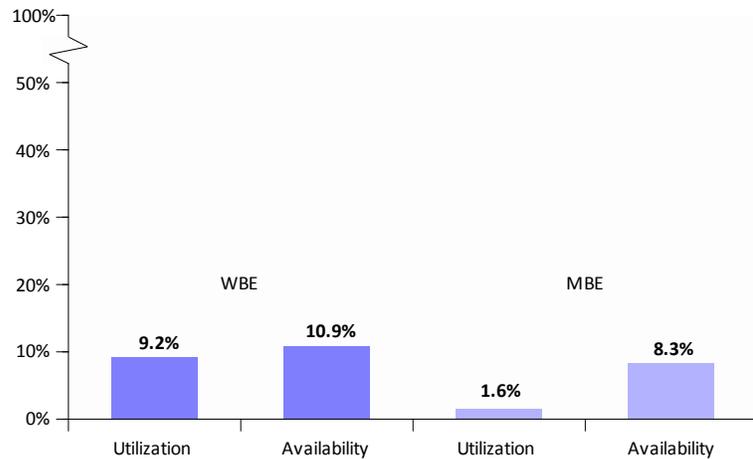
Keen Independent also examined utilization and availability results for MDT contracts without DBE contract goals, as shown in Figure 7-9. Most of the contract dollars during the study period pertained to contracts without goals (\$1.6 billion out of \$1.9 billion). White women-owned firms received 9.2 percent of MDT contract dollars, which was below the 10.9 percent that might be expected from the availability analysis for the non-goals contracts. Minority-owned firms received 1.6 percent of the contract dollars, also below what might be expected from the 8.3 percent level that might be expected based on the availability analysis.

The resulting disparity index for WBEs is 84 and the disparity index for MBEs is 19. For both WBEs and MBEs, disparities are larger than when examining all contracts, including those with DBE contract goals.

**Figure 7-9.**  
 MBE/WBE utilization and availability for FHWA- and state-funded contracts without DBE contract goals, October 2009-September 2014

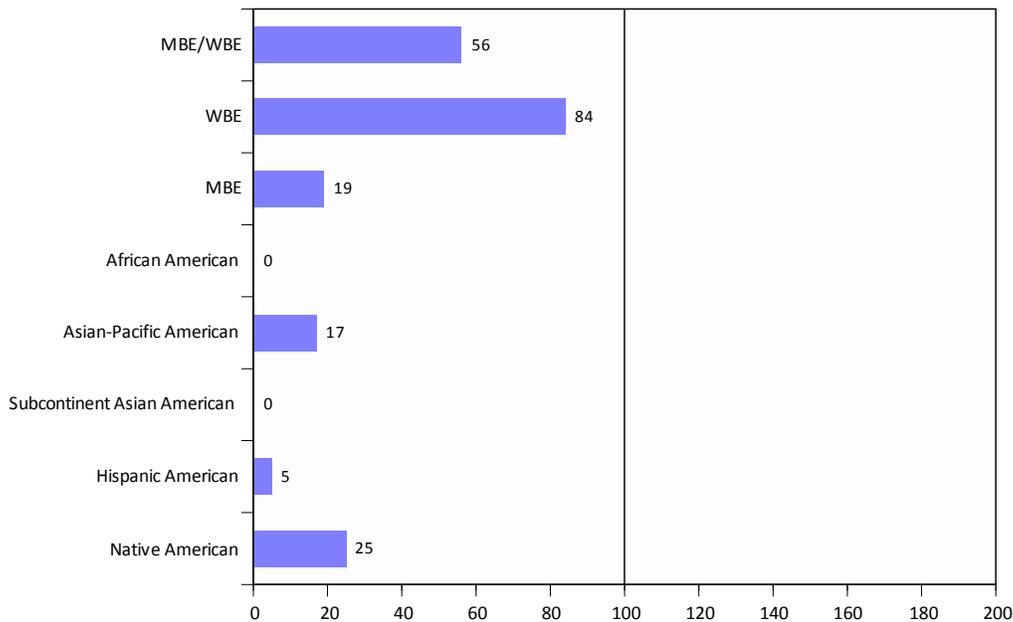
Note:  
 Number of contracts/subcontracts analyzed is 5,993.

Source:  
 Keen Independent disparity analysis.



Disparity indexes for MBEs groups in Figure 7-10 for contracts without goals are similar to all contracts in Figure 7-8. There are substantial disparities for each MBE group.

**Figure 7-10.** Disparity indices for MBE/WBEs, by group, for MDT FHWA- and state-funded contracts without DBE contract goals, October 2009-September 2014



Note: Number of contracts/subcontracts analyzed is 5,993.

Source: Keen Independent disparity analysis.

## E. Statistical Significance of Disparity Analysis Results

Testing for statistical significance relates to testing the degree to which a researcher can reject “random chance” as an explanation for any observed differences. Random chance in data sampling is the factor that researchers consider most in determining the statistical significance of results. The study team attempted to reach each firm in the relevant geographic market area identified as possibly doing business within relevant subindustries (as described in Chapter 6), mitigating many of the concerns associated with random chance in data sampling as they may relate to Keen Independent’s availability analysis. The utilization analysis also approaches a “population” of contracts. Therefore, one might consider any disparity identified when comparing overall utilization with availability to be “statistically significant.”

Figure 7-11 explains the high level of statistical confidence in the utilization and availability results. As outlined on the next page, the study team also used a sophisticated statistical simulation tool to further examine statistical significance of disparity results.

### Figure 7-11. Confidence intervals for availability and utilization measures

Keen Independent conducted telephone interviews with more than 1,245 business establishments — a number of completed interviews that might be considered large enough to be treated as a “population,” not a sample. However, if the results are treated as a sample, the reported 22.4 percent representation of MBE/WBEs among all available firms is accurate within about +/- 1.6 percentage points. By comparison, many survey results for proportions reported in the popular press are accurate within +/- 5 percentage points. (Keen Independent applied a 95 percent confidence level and the finite population correction factor when determining these confidence intervals.)

Keen Independent attempted to collect data for all relevant MDT and CTEP transportation construction and engineering-related contracts during the study period and no confidence interval calculation applies for the utilization results.

**Monte Carlo analysis.** There were many opportunities in the sets of prime contracts and subcontracts for MBE/WBEs to be awarded work. Some contract elements involved large dollar amounts and others involved only a few thousand dollars.

Monte Carlo analysis was a useful tool for the study team to use for statistical significance testing in the disparity study, because there were many individual chances at winning MDT and local agency transportation prime contracts and subcontracts during the study period, each with a different payoff. Figure 7-12 describes Keen Independent's use of Monte Carlo analysis.

**Results.** Figure 7-13 presents the results from the Monte Carlo analysis as they relate to the statistical significance of disparity analysis results for MBEs and WBEs for all contracts and separately for contracts without DBE goals.

**All contracts.** The Monte Carlo simulations did not replicate the disparities for MBEs in any of the 10,000 simulation runs. Therefore, one can be confident that chance in contract and subcontract awards can be rejected as an explanation for the observed disparity for minority-owned businesses in MDT contracts.

#### Figure 7-12. Monte Carlo analysis

The study team began the Monte Carlo analysis by examining individual contract elements. For each contract element, Keen Independent's availability database provided information on individual businesses that were available for that contract element, based on type of work, contractor role, contract size and location of the work.

The study team assumed that each available firm had an equal chance of "receiving" that contract element. For example, the odds of an MBE receiving that contract element were equal to the number of MBEs available for the contract element divided by the total number of firms available for the work. The Monte Carlo simulation then randomly chose a business from the pool of available businesses to "receive" that contract element.

The Monte Carlo simulation repeated the above process for all other elements in a particular set of contracts. The output of a single Monte Carlo simulation for all contract elements in the set represented simulated utilization of MBEs for that set of contract elements.

The entire Monte Carlo simulation was then repeated 10,000 times. The combined output from all 10,000 simulations represented a probability distribution of the overall utilization of MBEs and utilization of WBEs if contracts were awarded randomly based on the availability of businesses working in the Montana transportation contracting industry.

The Monte Carlo simulations replicated the disparity for white women-owned firms in 1,468 of the 10,000 simulation runs, or 14.7 percent of the time. Applying a 95 percent confidence level for “statistical significance,” the disparity for white women-owned firms is not statistically significant.

**Contracts without DBE goals.** Keen Independent also performed the Monte Carlo analysis for contracts without DBE contract goals. As shown in the two right-most columns of Figure 7-13, none of the 10,000 simulation runs replicated the disparity observed for MBEs observed for those contracts solely through random chance in award of prime contracts and subcontracts. For WBEs, chance in contract awards could replicate the observed disparity in 780 out of 10,000 simulations, or 7.8 percent of the time. One would reject chance in contract awards as an explanation of the disparity for WBEs for non-goals contracts if applying a 90 percent confidence level (7.8% is less than 10.0%), but not at the 95 percent confidence level.

It is important to note that this test may not be necessary to establish statistical significance of results (see discussion in Figure 7-12 and elsewhere in this chapter), and it may not be appropriate for very small populations of firms.<sup>5</sup>

Figure 7-13.  
Monte Carlo results for MBEs and WBEs for MDT FHWA- and state-funded contracts October 2009-September 2014

|  | All contracts |        | Contracts without goals |       |
|--|---------------|--------|-------------------------|-------|
|  | MBE           | WBE    | MBE                     | WBE   |
| Disparity index  | 23            | 89     | 19                      | 84    |
| Number of simulation runs out of 10,000 that replicated observed utilization | 0             | 1,468  | 0                       | 780   |
| Probability of observed disparity occurring due to "chance"                  | < 0.1 %       | 14.7 % | < 0.1 %                 | 7.8 % |
| Reject chance in awards of contracts as a cause of disparity?                | Yes           | No     | Yes                     | No    |

Source: Keen Independent from data on FHWA- and state-funded contracts, October 2009-September 2014.

<sup>5</sup> Even if there were zero utilization of a particular group, Monte Carlo simulation might not reject chance in contract awards as an explanation for that result if there were a small number of firms in that group or a small number of contracts and subcontracts included in the analysis. Results can also be affected by the size distribution of contracts and subcontracts.

## **CHAPTER 8.**

### **Further Exploration of MBE/WBE and DBE Utilization on FHWA- and State-funded Contracts**

Building upon the analysis presented in Chapter 7, Keen Independent further examined the utilization of minority- and women-owned firms for different types and locations of MDT contracts. Chapter 8 also reports participation of DBEs.<sup>1</sup> Results focus on FHWA- and state-funded contracts combined. Unless otherwise specified, results combine MDT and CTEP contracts.

Chapter 8 examines MBE/WBE and DBE utilization on FHWA- and state-funded contracts for different subsets of contracts:

- A. With and without DBE contract goals;
- B. Construction and engineering contracts;
- C. MDT contracts and CTEP contracts;
- D. October 2009-September 2012 and October 2012-September 2014 time periods;
- E. MDT districts; and
- F. Prime contracts and subcontracts.

Part G builds on the analysis of MBE/WBE and DBE participation on prime contracts to assess whether there are barriers to MBE/WBE participation as primes on MDT construction contracts. This includes analysis of the number of bids submitted on MDT construction contracts.

Part H provides similar information for MDT engineering-related contracts.

Part I of Chapter 8 analyzes MDT's operation of the Federal DBE Program for FHWA-funded contracts, including examination of any overconcentration of DBE participation by type of work. The study team also identifies the DBEs during the study period that obtained the most work.

Part J summarizes results, including whether any results from the disparity analysis presented in Chapter 7 vary across the subsets of contracts considered in Chapter 8.

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<sup>1</sup> Keen Independent calculated DBE participation on MDT contracts using a somewhat different method than MDT did in its Uniform Reports. DBE participation reported in this disparity study pertains to utilization of firms certified by DBEs at any point during the study period. MDT calculates DBE participation for firms certified as DBEs at the time of specific contracts. That is one reason Keen Independent calculations of DBE participation are slightly higher than what is reported for commitments/awards in MDT's Uniform Reports.

## A. Utilization With and Without DBE Contract Goals

MDT set DBE contract goals during different portions of the study period on some FHWA-funded contracts. Other FHWA-funded contracts did not have DBE contract goals, as discussed in Chapter 7.

**DBE participation.** Keen Independent’s analysis shows higher DBE utilization on contracts with DBE contract goals than those without contract goals. As shown in Figure 8-1, 6.2 percent of contract dollars went to DBEs when MDT set a DBE contract goal. Without DBE contract goals, DBE participation was 3.5 percent. MDT might consider this 3.5 percent participation when projecting the amount of DBE participation it can achieve through neutral means (see Chapter 10).<sup>2</sup>

**MBE/WBE participation.** MBE/WBE participation was about 16.0 percent on contracts with DBE contract goals and 10.8 percent on contracts without contract goals.

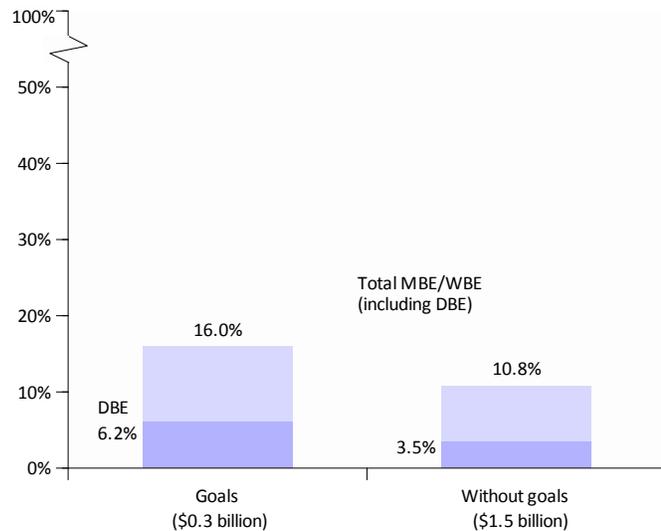
Figure 8-1.  
MBE/WBE and DBE share of dollars for contracts with and without DBE contract goals, October 2009-September 2014

**Note:**

Dark portion of bar is certified DBE utilization.  
Number of contracts/subcontracts analyzed is 686 with DBE contract goals and 5,993 without contract goals.

**Source:**

Keen Independent from data on MDT and CTEP FHWA- and state-funded prime contracts and subcontracts, October 2009-September 2014.



Disparity analysis for contracts with DBE goals indicated that it eliminated the disparity for white women-owned firms (disparity index of 109), but not for minority-owned firms (disparity index of 40).

<sup>2</sup>Note that this might somewhat overstate actual utilization of firms certified as DBEs at the time of the contract, as DBE participation figures in this report are for any firm recertified as a DBE during the study period.

## B. Construction and Engineering Contracts

Figure 8-2 presents MBE/WBE participation for construction contracts and engineering-related contracts. Overall, MBE/WBE participation was higher on construction contracts (about 12.2%) than engineering-related contracts (4.0%). Participation of DBEs was also higher on construction contracts than engineering-related contracts (4.1% compared with 3.0%).

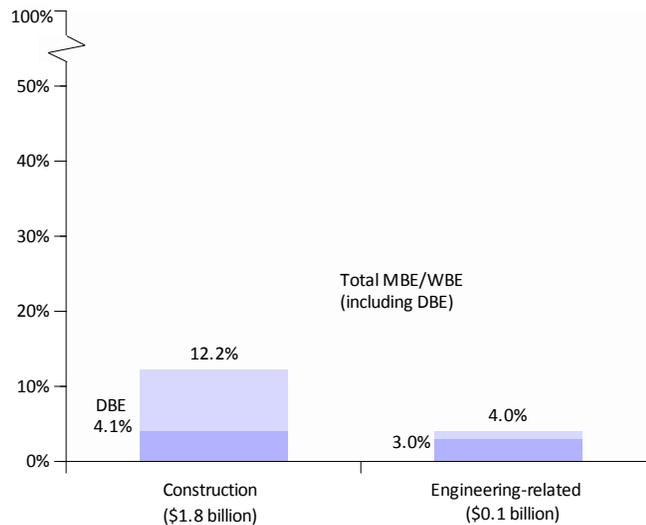
**Figure 8-2.**  
MBE/WBE and DBE share of dollars for construction and engineering contracts, October 2009-September 2014

**Note:**

Dark portion of bar is certified DBE utilization.  
Number of contracts/subcontracts analyzed is 5,303 for construction and 1,376 for engineering.

**Source:**

Keen Independent from data on MDT and CTEP FHWA- and state-funded prime contracts and subcontracts, October 2009-September 2014.



There were disparities between MBE/WBE utilization and availability for both construction and engineering contracts.

## C. Utilization in MDT Contracts and Local Public Agency CTEP Contracts

In terms of dollars, most of the FHWA- and all of the state-funded transportation contracts examined in this disparity study were for MDT projects. CTEP contracts totaled \$38 million. Keen Independent researched whether local public agency projects had a similar level of MBE/WBE and DBE participation as MDT projects.

As shown in Figure 8-3, MBE/WBE and DBE participation was slightly higher on MDT contracts and LPA CTEP contracts.

**Figure 8-3.**  
 MBE/WBE and DBE share of dollars for  
 MDT and LPA CTEP projects, October  
 2009-September 2014

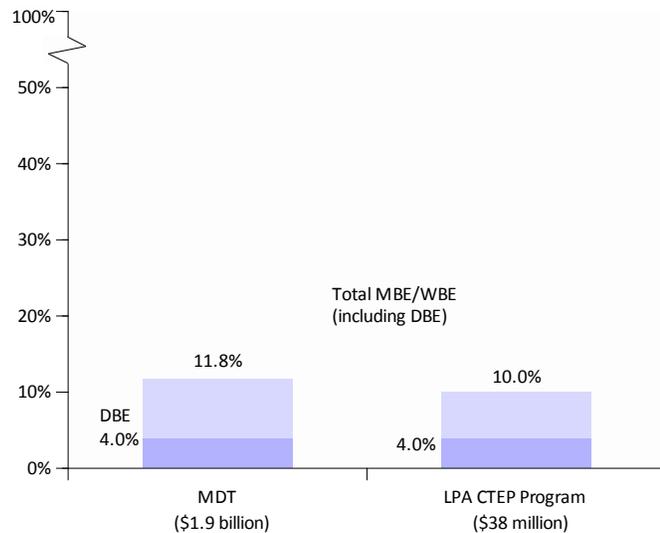
Note:

Dark portion of bar is certified DBE utilization.

Number of contracts/subcontracts analyzed is  
 5,304 for MDT contracts and 1,375 for CTEP  
 contracts.

Source:

Keen Independent from data on MDT and CTEP  
 FHWA- and state-funded prime contracts and  
 subcontracts, October 2009-September 2014.



There were disparities for MBE/WBEs combined for both MDT-awarded contracts and for LPA CTEP contracts.

#### **D. Utilization in October 2009-September 2012 and October 2012-September 2014 Time Periods**

Keen Independent analyzed whether overall MBE/WBE participation changed between the first three years and the last two years of the study period (when DBE contract goals were reintroduced). As shown in Figure 8-4, there was little difference in MBE/WBE participation for October 2009 through September 2012 (11.3%) compared with October 2012 through September 2014 (12.4%). The percentage DBE participation was higher for October 2012-September 2014 contracts (5.7%) than earlier contracts (2.9%).

**Figure 8-4.**  
 MBE/WBE and DBE share of dollars for  
 contracts awarded October 2009-  
 September 2012 and awarded October  
 2012-September 2014

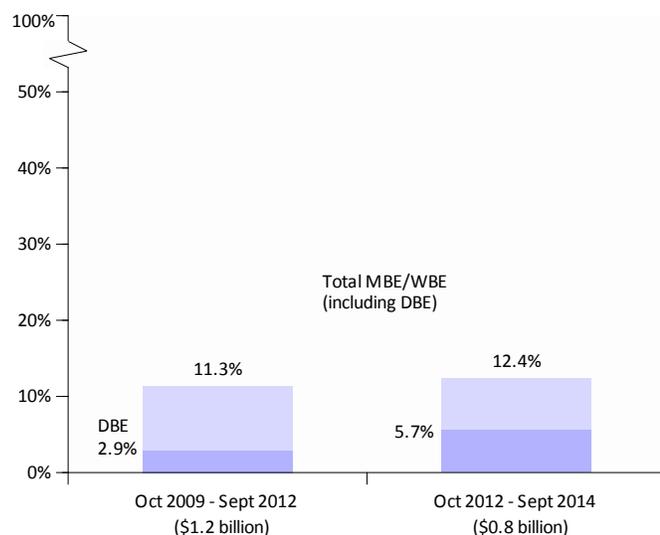
Note:

Dark portion of bar is certified DBE utilization.

Number of contracts/subcontracts analyzed is  
 4,070 for October 2009-September 2012 and 2,609  
 for October 2012-September 2014.

Source:

Keen Independent from data on MDT and CTEP  
 FHWA- and state-funded prime contracts and  
 subcontracts, October 2009-September 2014.

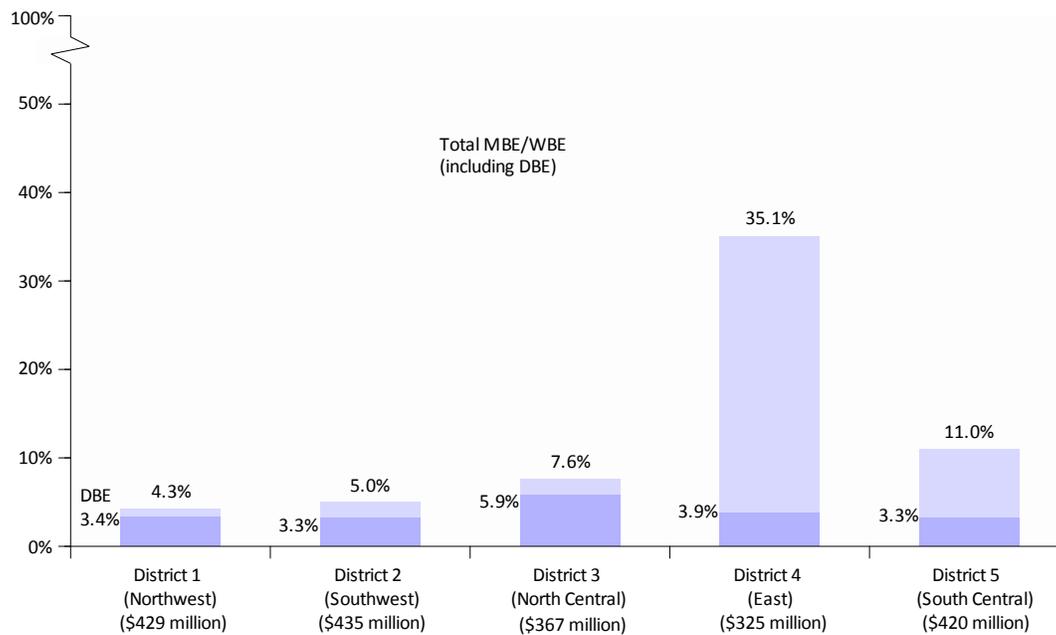


There were disparities between MBE/WBE utilization and availability for both time periods.

## E. Utilization by MDT District

Keen Independent examined MBE/WBE and DBE utilization in each MDT district. Statewide contracts are counted in each district and any projects spanning two districts are counted in each. MBE/WBE participation was highest in District 4 (35%) due to large contract dollars for two white woman-owned firms in that district (Prince, Inc. and Wickens Construction). MBE/WBE utilization was 11 percent in District 5. In the other three districts, MBE/WBE utilization was 4.3 percent to 7.6 percent. As shown in Figure 8-5, DBE participation varied from 3.3 percent in District 2 to 5.9 percent in District 3.

Figure 8-5. MBE/WBE and DBE share of dollars for contracts by MDT district, October 2009-September 2014



Note: Dark portion of bar is certified DBE utilization. Number of contracts/subcontracts analyzed is: District 1 (1,826), 2 (1,460), 3 (1,425), 4 (896) and 5 (1,417).

Source: Keen Independent from data on FHWA- and state-funded prime contracts and subcontracts, October 2009-September 2014.

There were substantial disparities between MBE utilization and availability for each district. There were substantial disparities between WBE utilization and availability for each district except for District 4.

## F. Utilization in Prime Contracts and Subcontracts

**Subcontracts.** MBE/WBEs obtained about 20 percent of MDT subcontract dollars, with DBEs accounting for about two-thirds of this amount (10.5 percentage points). This means that 80 percent of subcontract dollars went to majority-owned firms during the study period.

**Prime contracts.** The study team also analyzed dollars going to prime contractors based on amounts retained by prime contractors after subtracting the value of subcontracts. MBE/WBEs received 8.6 percent of prime contract dollars. DBEs accounted for 1.5 percent of total prime contract dollars.

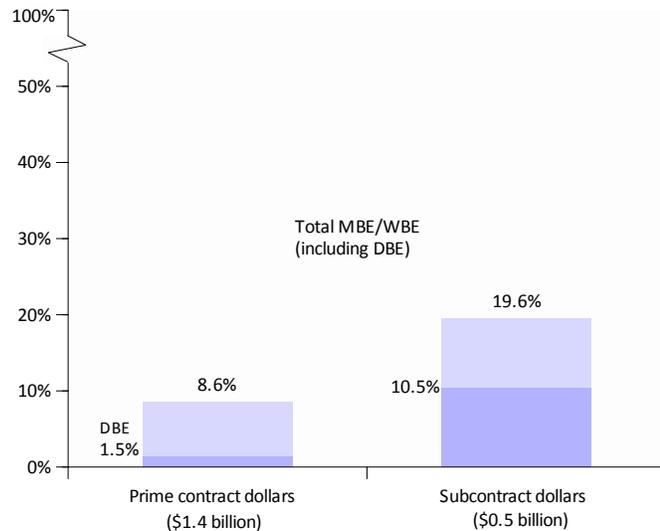
**Figure 8-6.**  
MBE/WBE and DBE share of dollars for  
prime contracts and subcontracts

**Note:**

Dark portion of bar is certified DBE utilization.  
Number of prime contracts analyzed is 2,425.  
Number of subcontracts analyzed is 4254.

**Source:**

Keen Independent from data on MDT and LPA  
FHWA- and state-funded prime contracts and  
subcontracts, October 2009-September 2014.



There were disparities between utilization and availability for MBEs and WBEs as prime contractors and for MBEs as subcontractors. There was not a disparity for WBEs when examining all subcontracts. However, utilization of WBEs was below availability for subcontracts when no DBE goals applied.

**Large and small prime contracts.** Keen Independent further analyzed MBE/WBE and DBE participation on prime contracts by examining large and small prime contracts during the study period. “Large” contracts were those of \$250,000 or more for construction and \$100,000 or more for engineering:

- MBE/WBEs received 8.3 percent of prime contract dollars on large contracts (1.0% for DBEs); and
- On small contracts, 16.6 percent of prime contract dollars went to minority- and women-owned firms (11.1% for DBEs).

## **G. Analysis of Potential Barriers to MBE/WBE/DBE Participation in MDT Construction Contracts**

Keen Independent analyzed participation of minority- and women-owned firms as prime contractors on MDT construction contracts during the October 2009 through September 2014 study period.

**Utilization of MBE/WBEs and DBEs as prime contractors on MDT construction contracts.** Keen Independent performed additional analysis concerning the number of construction prime contracts awarded to minority- and women-owned firms as well as the dollars going to those firms. The study team examined:

- Overall utilization;
- Large and small construction contracts; and
- MDT-awarded contracts.

**Overall awards and dollars for construction prime contracts.** Minority- and women-owned firms won 210 or 13 percent of the 1,566 FHWA- and state-funded construction prime contracts during the study period. Because MBE/WBEs won smaller contracts, on average, MBE/WBEs received 9.1 percent of construction prime contract dollars, or \$118 million out of \$1.3 billion of the dollars retained by prime contractors (i.e., not subcontracted).

DBEs won 119 construction prime contracts totaling \$21 million during the study period (1.6% of the total dollars).

Relative success differed for MBEs and WBEs:

- Minority-owned firms won 58 (3.7%) of the contracts and received 0.7 percent of construction prime contract dollars (retained amount). This was considerably below the utilization anticipated from the availability analysis (8.5%). The disparity index was 8. The contracts MBEs won were, on average, much smaller than for majority-owned firms.
- White women-owned firms received 152 (9.7%) of the construction contracts and received 8.4 percent of prime contract dollars. WBEs won large contracts and small contracts. In terms of dollars, the percentage of prime contract dollars going to WBEs was somewhat less than what would be anticipated from the availability analysis for those contracts (8.4% compared with 9.9%, or a disparity index of 85).

**Large and small contracts.** Keen Independent examined awards for construction prime contracts of \$250,000 and above and below \$250,000.

First considering small contracts, more than one-half of the construction prime contracts (937) were under \$250,000.

- MBEs won 53 (5.7%) of the 937 small contracts and won 8.1 percent of the dollars on small prime contracts. Analysis of availability of MBEs for small construction contracts indicated that 9.6 percent of small prime contract dollars might be expected to go to minority-owned firms (disparity index of 84 for these contracts).
- WBEs were awarded 86 of the 937 of the small construction contracts (9.2% of those contracts). WBEs received 10.5 percent of the prime contract dollars on small construction contracts. Utilization of WBEs as prime contractors on these contracts was considerably less than what might be expected from the availability analysis (16.6%). The disparity index for white women-owned firms on these contracts was 63.

Keen Independent also examined large construction contracts, which for purposes of this analysis are contracts of \$250,000 or more. There were 629 large contracts among the construction contracts examined in this study. Even though they accounted for fewer of the construction contracts examined, large contracts accounted for 96 percent of the total prime contract dollars analyzed for construction contracts in the study. Results were very different from small contracts:

- MBEs won five (0.8%) of the 629 large contracts for 0.4 percent of the dollars on large prime contracts. Analysis of availability of MBEs for small construction contracts indicated that 8.4 percent of large prime contract dollars might be expected to go to minority-owned firms. The disparity index for MBEs was 5 for the large contracts.
- WBEs were awarded 66, or 10.4 percent of the large construction contracts and 8.3 percent of the contract dollars. Utilization of WBEs as prime contractors on these contracts was somewhat less than what might be expected from the availability analysis for these contracts (9.6%). The disparity index for white women-owned firms on these contracts was 86.

In sum, utilization of MBEs as prime contractors in small construction contracts was considerably higher than for all contracts, but disparities persisted. Utilization of WBEs as prime contractors in small construction contracts was substantially below what might be expected from the availability analysis. WBEs did not win as many of these contracts as one might anticipate based on their availability.

These results reversed for large construction prime contracts. MBEs won only five of these contracts, which was one reason behind the very large disparities for MBEs for all transportation contracts dollars. WBEs were more successful winning large construction contracts although utilization was somewhat below what might be expected from the availability analysis.

**MDT and LPA contracts.** The study team analyzed awards of MDT and local public agency (LPA) construction contracts to determine whether there were any differences in MBE and WBE success winning these contracts. Most of the prime contract dollars (97%) were for MDT-awarded contracts.

- MBEs won 38 (4.6%) of the 835 MDT-awarded construction contracts and 20 (2.7%) of the 731 LPA-awarded contracts. In terms of prime contract dollars, utilization of MBEs as prime contractors was very low — 0.6 percent — for MDT construction contracts, which is consistent with the low utilization of MBEs among large contracts overall (0.8%).
- WBEs won 108 (12.9%) of the MDT-awarded construction contracts and 44 (6.0%) of the LPA-awarded contracts. Utilization based on construction prime contracts dollars was similar for WBEs between MDT and LPA contracts (8.4% and 7.8%, respectively).

**Analysis of bids on MDT construction contracts.** Keen Independent analyzed bid information for a sample of 608 MDT construction contracts from October 2009 through September 2014 (see Appendix C for a description of this methodology). In total, 2,327 bids were submitted for these 608 contracts. MBE/WBEs submitted 287 of the 2,327 bids:

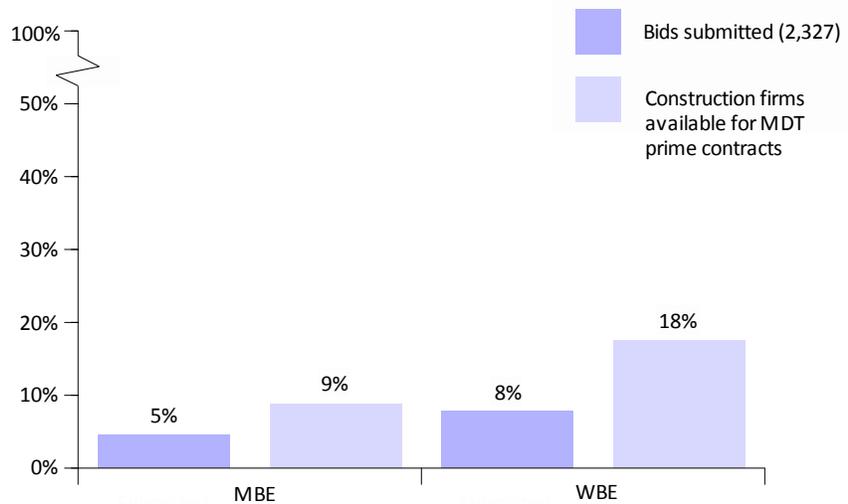
- A total of 107 bids on these prime contracts (4.6% of all bids) came from minority-owned firms; and
- 182 bids (7.8% of all bids) came from WBEs.

The proportion of bids from MBEs was low compared with the share of firms available for prime construction contracts that were MBEs (8.8%). Bids from WBEs were also low compared with the proportion of available firms that were WBEs (17.5%).<sup>3</sup>

**Figure 8-7.**  
MBE/WBE bids as a share of total bids submitted on MDT construction contracts

Note: Based on analysis of 2,327 bids on 608 MDT construction contracts within the October 2009-September 2014 study period.

Source: Keen Independent Research from MDT contract records and availability survey.



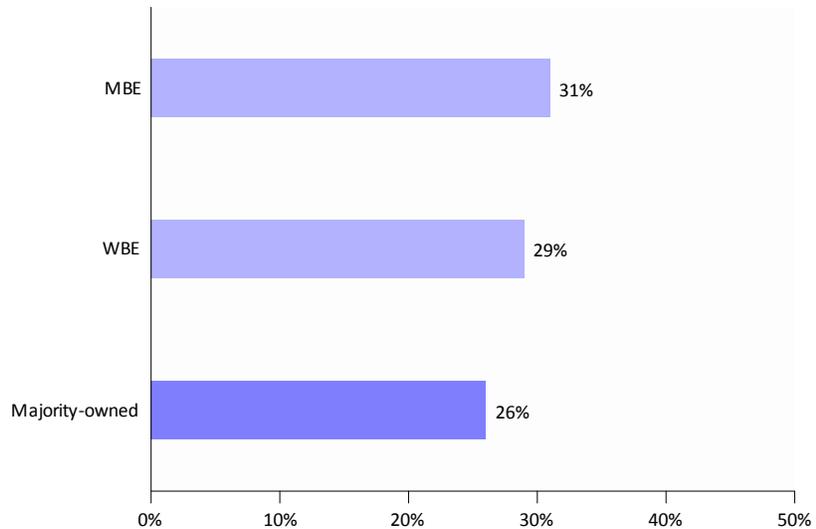
<sup>3</sup> Note that this is based on a count of firms identified in the availability analysis that were available for MDT construction prime contracts; it is not dollar-weighted.

Minority- and women-owned firms that did bid on MDT construction contracts were as likely to be successful as majority-owned firms. As shown in Figure 8-8, 31 percent of the bids submitted by MBEs and 29 percent of bids submitted by WBEs resulted in contract awards, somewhat above the 26 percent win rate found for majority-owned firms bidding on MDT contracts.

**Figure 8-8.**  
**Percentage of bids that results in contract awards on MDT construction contracts**

Note: Can also be interpreted as “odds of winning” based on analysis of 2,327 bids on 608 contracts randomly sampled within the October 2009-September 2014 study period.

Source: Keen Independent Research from MDT contract records.



Keen Independent determined that MBEs submitted 13 percent of bids on construction contracts of less than \$250,000, but only 3 percent of contracts of \$250,000 or above. WBEs accounted for 1 percent of bids on small contracts and 7 percent of bids on large contracts.

**MDT bid process for construction contracts.** MDT awards construction contracts to low bidders (that are deemed responsive and responsible). It is possible that some aspects of the bidding process present barriers to small business participation as prime contractors, including for MBE/WBEs.

Keen Independent examined MDT requirements for bidding on its construction contracts, processes for notifying potential bidders of construction contract opportunities, and methods for selecting a prime contractor to perform the work in order to explore this possibility.

**Notification of upcoming projects.** MDT provides an advance list of projects and expected letting dates on its website. For example, the Projects Proposed for Letting accessed on January 21, 2016 listed projects and expected bid dates for each month through June 2016.

**Advertisement of invitations to bid.** Public bidding of public construction contracts is generally required by state law. Twice each month, MDT advertises construction contract bid opportunities on its website. Private bid services such as Bid Express may also provide information on MDT contracts that are available to bid. MDT generally advertises invitations to bid for four weeks prior to the bid date.

MDT will also email invitations to bid to contractors requesting such information.

**Distribution of bid files, plans and specifications.** Contractors download bid files necessary to submit a bid from the MDT website. Businesses interested in a project can purchase hardcopy bid packages or download bid documents for free from the MDT bid package page on its website.

**Question and Answer Forum.** Once an invitation to bid for a project has been released, MDT encourages potential bidders to use the Question and Answer Forum on the MDT website to submit questions related to contracts open for bidding. Each potential bidder can view answers and any additional materials MDT provides related to each contract open for bid. MDT also notifies potential bidders concerning any addendums to invitations to bid through this Forum.

**Distribution of planholders lists.** Any business interested in a specific MDT construction contract can ask to be added to the planholders list for that project. They do so through the ePass electronic system. Firms can also download a list of companies that are on the planholders list. Being listed as a planholder is not required to bid as a prime contractor or participate as a subcontractor.

**Registration with the Montana Department of Labor and Industry.** State law requires contractors to register with the Montana Department of Labor and Industry. On state-funded contracts, bidders must be registered to be able to submit a bid. On federally-funded contracts, a prime contractor must be registered before executing a contract.

**Prequalification requirement for construction prime contractors.** Prequalification with MDT is only required for specialty contractors performing blasting, rock slope and stream restoration work. Firms must submit prequalification information two weeks in advance of the MDT bid date.

**Bonding.** Proof of bonding is required for bidders on MDT construction contracts. Bidders submit bonding information through a hardcopy or electronic form. Contractors are only required to provide bonds upon contract award.

**Preparation and submission of bids.** Firms submitting bids on MDT construction contracts are required to use the Expedite Electronic Bidding System to prepare their bid. They can submit the bid in hardcopy or through the Bid Express electronic bidding system.

**Information about awards.** MDT posts award sheets on its website showing bidders and bid amounts for each awarded contract

**Local agency guidelines.** Local public agencies using funds through MDT must follow MDT guidelines.

**Design-build.** MDT has special procedures for awarding design-build contracts that incorporate steps from its consultant selection process (discussed later in this chapter).

**Comments from in-depth interviews and other input.** The study team conducted in-depth interviews with construction firms and trade associations that included questions about MDT's construction bidding process. Many of the comments are included elsewhere, but several interviewees had favorable comments about the online bidding process and access to information about bidding opportunities through MDT's website. Several interviewees said that MDT's process has improved over recent years with additional information being accessible through the website. A

number of comments indicated that some DBE consultants did not understand MDT's processes or did not find them transparent. One white women-owned design firm said that she met with MDT staff indicating that her firm could participate on certain projects but that MDT did not ask her to bid. There were also some negative comments from the interviews concerning perceived concentration of MDT work in just a few favored engineering firms. Appendix J provides additional input from engineering companies and other consultants.

## **H. Analysis of Potential Barriers to MBE/WBE/DBE Participation in MDT Engineering-related Prime Contracts**

Keen Independent also explored participation of minority- and women-owned firms in the 859 engineering and related professional services contracts during the study period (FHWA- and state-funded combined).

**Utilization of MBE/WBEs and DBEs as prime consultants on MDT engineering-related contracts.** Minority- and women-owned firms were awarded 58 of the engineering-related prime contracts, or 7 percent of the total number of contracts. About \$1 million in prime contract dollars (after deducting subcontracts) went to MBE/WBEs, 1.2 percent of total prime contract dollars for engineering-related contracts.

Although more prime contracts went to WBEs (43) than MBEs (15), white women-owned firms accounted for just \$288,000 of prime contract dollars, or 0.3 percent of prime contract dollars. MBEs received 0.9% of total prime contract dollars. Asian-Pacific American-, Hispanic American- and Native American-owned firms were awarded contracts, but dollar amounts to Asian-Pacific American- and Hispanic-owned firms together accounted for less than \$100,000 of prime contract dollars.

Of the MBE/WBEs receiving engineering and related prime contracts, firms certified as DBEs during the study period won 37 prime contracts, or 4 percent of the total (0.4% of prime contract dollars).

**Analysis of proposals on MDT engineering-related contracts.** Keen Independent analyzed the relative number of proposals submitted by MBEs and WBEs for a random sample of engineering-related contracts during the study period.

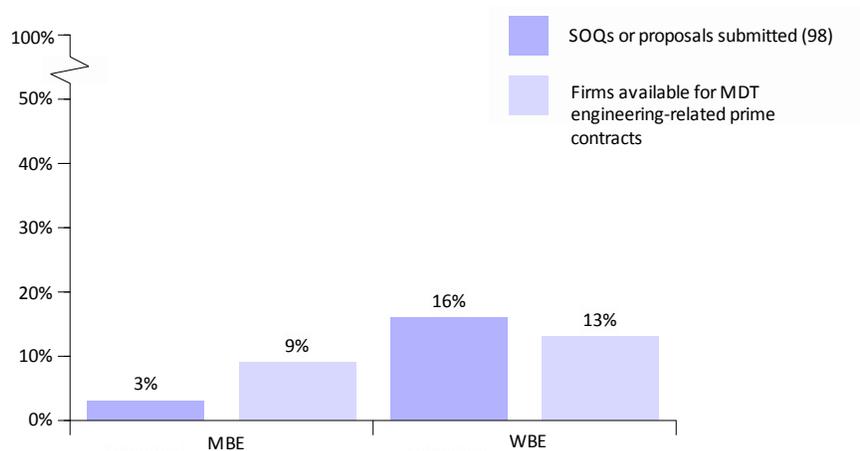
The study team was able to collect and analyze evaluation data for 18 MDT engineering-related projects for contracts executed during the study period. Of the 98 SOQs submitted, three were submitted by MBEs and 16 were submitted by WBEs.

Based on the detailed availability analysis, 9 percent of companies available for MDT engineering-related prime contracts were MBEs and 13 percent were WBEs. The relative number of SOQs for MBEs appears lower than what might be expected from their relative availability for this work (3% compared with 9%). Figure 8-9 displays these results.

**Figure 8-9.**  
**MBE/WBE proposals as a share of total proposals submitted on a sample of MDT engineering contracts**

Note: Based on analysis of 98 proposals on 18 contracts randomly sampled within the October 2009-September 2014 study period.

Source: Keen Independent Research from MDT contract records.



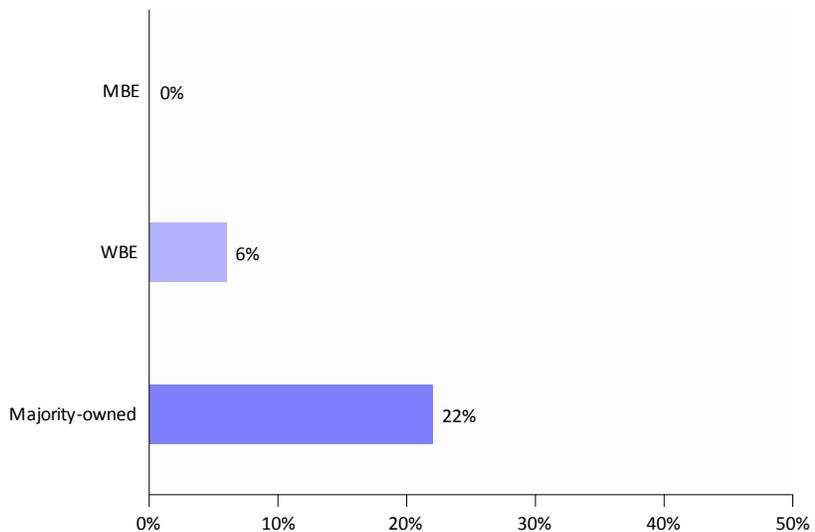
In the 18 randomly-sampled engineering-related contracts, none of the awards went to MBEs. Therefore, the success rate for MBEs was 0 percent, as shown in Figure 8-10. In addition, none of the MBEs were ranked second among proposals submitted. One of the 16 proposals from WBEs resulted in a contract award (6% success rate). Two of the proposals from WBEs were ranked second. About 22 percent of SOQs from majority-owned firms resulted in contract awards.

Therefore, based on this small sample, MBE/WBE proposers might be at a disadvantage winning MDT engineering-related contracts.

**Figure 8-10.**  
**Proportion of proposals that resulted in MDT contract awards**

Note: Can also be interpreted as “odds of winning” based on analysis of 98 proposals bids on 18 contracts randomly sampled within the October 2009-September 2014 study period.

Source: Keen Independent Research from MDT contract records.



This analysis, although for a small number of contracts, suggests that MBEs are not competing for MDT engineering-related work at the rate one might expect, and that MBEs and WBEs are less successful in winning the contracts than majority-owned firms.

**MDT contract award process.** MDT follows state law as well as federal law and regulations for award of its engineering and related professional services contracts.

In general, MDT uses a qualifications-based selection process to award engineering, surveying and architectural services contracts. Firms competing for these contracts must periodically submit statements of qualifications to MDT. MDT can consider cost in addition to qualifications for other types of professional services. These types of contracts include right-of-way acquisition, geotechnical work, cultural and biological resource surveys.

**General application to be on an MDT solicitation list.** MDT requests that consultants interested in MDT engineering, surveying and architectural services contracts submit a letter of interest and standardized qualifications forms (electronically) to MDT. Such a submission is necessary for the consultant to be placed on MDT's mailing list to receive MDT solicitations for those services. (This list was one component of the master bidders list for MDT, as discussed in Chapter 6.)

**Engineering, surveying and architectural services contracts selected through project-specific SOQs.** When selecting a firm for a specific project, MDT will advertise on its website and through its mailing list (supplemented as necessary) to ask consultants to submit Statements of Qualification (SOQs) for that assignment.

The MDT rating panel for that project then evaluates SOQs based on:

- Location (proximity of the firm's office to the project site, but only at the time of selection for specific projects, not for rating of the SOQ);
- Quality of firm and personnel (related experience on similar projects, and qualifications of personnel to be assigned to the projects);
- Capacity and capability of the firm (ability to meet technical requirements, time requirements, project requirements and other factors); and
- Record of past performance and reference checks (previous record with MDT or outside references if no previous record with MDT).

These evaluation criteria can vary for specific projects depending at the discretion of MDT staff.

Consultant rankings from the MDT rating panel go to MDT's Consultant Selection Board, composed of senior MDT staff and others as necessary. This group considers the rating panel's rankings as well as other information in making a final selection. These other factors can include:

- Specific type of project;
- Location of the project;
- Experience in the specific locale of the project;
- Existing workload with MDT;
- The most recent information about past performance; and
- Other factors as appropriate.

Once the Consultant Selection Board has identified the three top-ranked consultants, MDT staff can begin negotiations with the top firm. If those negotiations are not successful, MDT proceeds to negotiate with the second-ranked firm, and possibly the third-ranked proposer if those negotiations are not successful.

MDT can provide de-briefings to unsuccessful proposers, but does not provide access to other consultants' proposals or their scoring.

**Selection of consultants for term contracts through prequalification.** MDT also uses a qualifications-based process to identify a roster of firms that can be used for "term contracts." It differs somewhat from the project selection process described above because firms compete to be placed on a roster without specific projects in mind.

Every one to two years, MDT issues requests for SOQs from consultants, and based on reviews of those submissions, rates consultants for each work category based on the general qualifications factors previously discussed. ("Surveying" is an example of a work category). Rating panel recommendations for each type of work go to the MDT Consultant Selection Board for final approval. MDT selects a minimum of three consultants as prequalified for each type of work.

Prequalification for work does not mean that a selected firm will receive any MDT term contracts or projects. As needs for services arise, MDT staff select among the panel for that category of work.

**Comments from in-depth interviews and other input.** The study team conducted in-depth interviews with engineering firms and other consultants that included questions about MDT's consultant selection processes. A number of comments indicated that some DBE consultants did not understand MDT's processes or did not find them transparent. One white women-owned design firm said that she met with MDT staff indicating that her firm could participate on certain projects but that MDT did not ask her to bid. There were also some negative comments from the interviews concerning perceived concentration of MDT work in just a few favored engineering firms. Appendix J provides additional input from engineering companies and other consultants.

## **I. MDT Operation of the Federal DBE Program, including Overconcentration Analysis**

This part of Chapter 8 examines:

- Results of the DBE contract goals program;
- Any overconcentration of DBEs;
- Participation of individual DBEs in MDT contracts; and
- DBE participation as prime contractors.

Results of the DBE contract goals program. Keen Independent determined that \$21 million in contract dollars were awarded to DBEs on FHWA-funded contracts for which DBE contract goals were applied. This was comprised of 132 subcontracts to DBEs totaling \$21 million. MDT applied DBE contract goals to 62 FHWA-funded construction contracts over different periods from 2012 to mid-2014.

Figure 8-11 provides results by racial, ethnic or gender group.

Figure 8-11.  
MBE/WBE and DBE utilization for contracts with DBE contract goals,  
October 2009-September 2014

|                                   | Number of<br>contracts* | \$1,000s          | Percent of<br>dollars |
|-----------------------------------|-------------------------|-------------------|-----------------------|
| <b>MBE/WBEs</b>                   |                         |                   |                       |
| African American-owned            | 0                       | \$ 0              | 0.0 %                 |
| Asian-Pacific American-owned      | 6                       | 346               | 0.1                   |
| Subcontinent Asian American-owned | 0                       | 0                 | 0.0                   |
| Hispanic American-owned           | 6                       | 271               | 0.1                   |
| Native American-owned             | <u>29</u>               | <u>9,828</u>      | <u>2.8</u>            |
| Total MBE                         | 41                      | \$ 10,444         | 3.0 %                 |
| WBE (white women-owned)           | <u>145</u>              | <u>45,263</u>     | <u>13.0</u>           |
| <b>Total MBE/WBE</b>              | <b>186</b>              | <b>\$ 55,707</b>  | <b>16.0 %</b>         |
| Majority-owned                    | <u>500</u>              | <u>292,752</u>    | <u>84.0</u>           |
| <b>Total</b>                      | <b>686</b>              | <b>\$ 348,459</b> | <b>100.0 %</b>        |
| <b>DBEs</b>                       |                         |                   |                       |
| African American-owned            | 0                       | \$ 0              | 0.0 %                 |
| Asian-Pacific American-owned      | 6                       | 346               | 0.1                   |
| Subcontinent Asian American-owned | 0                       | 0                 | 0.0                   |
| Hispanic American-owned           | 4                       | 242               | 0.1                   |
| Native American-owned             | <u>27</u>               | <u>8,056</u>      | <u>2.3</u>            |
| Total MBE                         | 37                      | \$ 8,644          | 2.5 %                 |
| WBE (white women-owned)           | 95                      | 12,848            | 3.7                   |
| White male-owned DBE              | <u>0</u>                | <u>0</u>          | <u>0.0</u>            |
| <b>Total DBE-certified</b>        | <b>132</b>              | <b>\$ 21,492</b>  | <b>6.2 %</b>          |
| Non-DBE                           | <u>554</u>              | <u>326,967</u>    | <u>93.8</u>           |
| <b>Total</b>                      | <b>686</b>              | <b>\$ 348,459</b> | <b>100.0 %</b>        |

Note: \*Number of prime contracts and subcontracts.

Numbers rounded to nearest tenth of 1 percent. Numbers may not add to totals due to rounding.

Source: Keen Independent from data on MDT and CTEP contracts October 2009-September 2014.

These results indicate that DBE contract goals have a positive effect on participation of minority- and women-owned firms as subcontractors.

- Based on Keen Independent's analysis, overall participation of DBEs was 6.2 percent on contracts with DBE contract goals and DBE participation on contracts without goals was 3.5 percent, as shown earlier in Figure 8-1.
- DBEs received 17 percent of the subcontract dollars on contracts with DBE contract goals. By comparison, DBEs received 8 percent of the subcontract dollars on FHWA- and state-funded contracts without DBE contract goals.
- DBE participation as subcontractors on contracts with DBE goals included white women-owned DBEs (10.4% utilization), Native American-owned DBEs (6.5%), Asian-Pacific American-owned DBEs (0.3%) and Hispanic American-owned firms (0.2% of subcontract dollars).
- The disparity index for MBE/WBE participation in subcontracts was 117 for contracts with DBE contract goals and 76 for subcontracts without goals.

Data showing the higher DBE utilization with DBE contract goals were borne out in the in-depth interviews with DBEs (see Appendix J). Many construction firms reported that they had opportunities to participate on MDT contracts with the DBE goals program in place that sharply reduced when MDT discontinued using the goals.

Consulting firms that had been in business in 2005 when MDT last set DBE contract goals on consultant contracts also reported a reduction in opportunities after MDT discontinued use of goals at that time.

There was at least one white male business owner interviewed (a non-DBE) who said that primes would overlook his firm for subcontracting opportunities when they were trying to meet a DBE contract goal.

**Analysis of any overconcentration of DBEs.** The Federal DBE Program requires agencies implementing the program to take certain steps if they determine that “DBE firms are so overconcentrated in a certain type of work as to unduly burden the opportunity of non-DBE firms to participate in this type of work” (see 49 CFR Section 26.33(a)). The Federal DBE Program does not specifically define “overconcentration.”

Keen Independent examined the representation of DBEs and work going to DBEs in three ways:

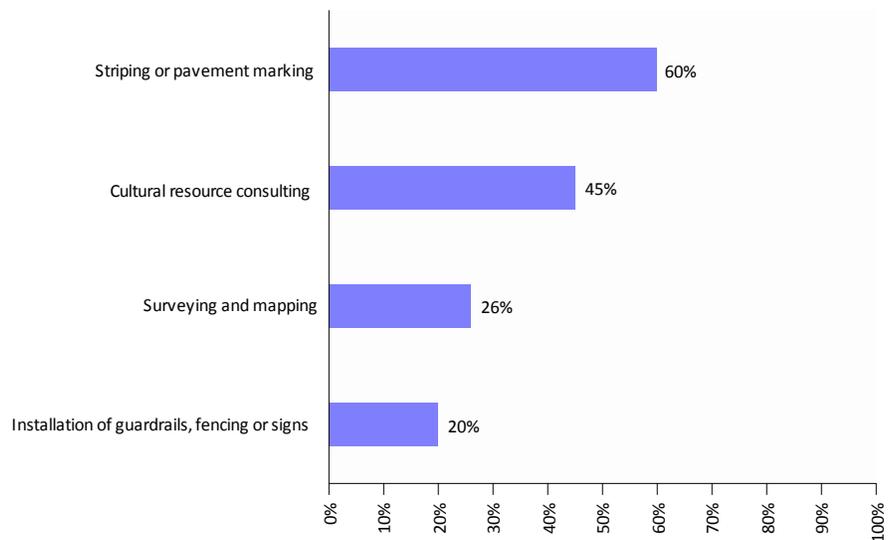
- Share of MDT contract dollars within a type of work going to DBEs;
- Distribution of DBE dollars by work type; and
- Representation of DBEs among all firms available for specific types of work.

**Share of MDT contract dollars within a type of work going to DBEs.** For each specific type of work examined in the study, the study team calculated the share of dollars going to firms certified as DBEs at the time of the contract. Figure 8-12 shows that DBEs accounted for more than 20 percent of the total work in five types of work, plus “other professional services” (which is not shown). Striping or pavement marking work shows the highest percentage of DBE participation (60%).

**Figure 8-12.**  
DBE share of total contract dollars on FHWA- and state- funded contracts, October 2009-September 2014

Note: Number of prime contracts/subcontracts analyzed is 6,679.

Source: Keen Independent Research from MDT contract records.



Several areas for which DBE participation was between 10 and 20 percent of work area dollars were environmental consulting, pavement milling, concrete flatwork and temporary traffic control. One-third of work Keen Independent grouped as “other professional services” went to DBEs.

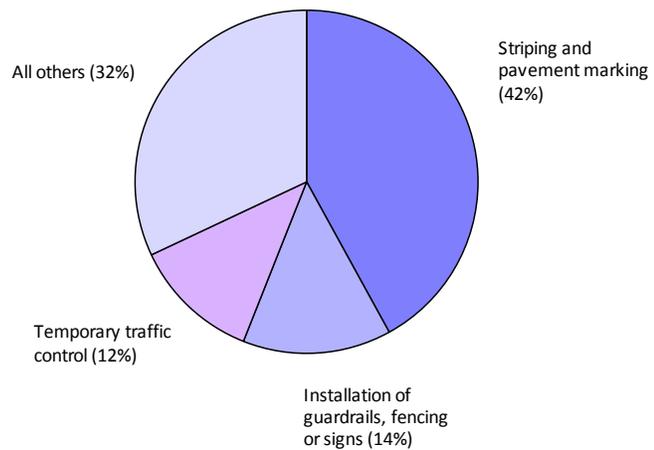
**Distribution of DBE contract dollars across types of work.** Another way to examine potential overconcentration of DBEs is whether DBE participation is only found in certain types of work. That might be another indicator that DBE contract goals overly burden non-DBEs in those subindustries.

In the study period, striping and pavement marking accounted for 42 percent of DBE participation, installation of guardrails, fencing or signs was 14 percent of DBE dollars and temporary traffic control work was 12 percent of dollars going to DBEs. Fourteen other types of work accounted for the balance of the DBE dollars, indicating broad participation of DBEs across types of work. Figure 8-13 presents these results.

**Figure 8-13.**  
DBE share of total contract dollars on FHWA- and state-funded contracts, October 2009-September 2014

Note: Number of prime contracts/subcontracts analyzed is 6,679.

Source: Keen Independent Research from MDT contract records.



**Representation of DBEs among firms available for particular types of work.** Finally, Keen Independent analyzed whether DBEs account for a dominant share of firms available for particular types, sizes or locations of MDT prime contracts and subcontracts.

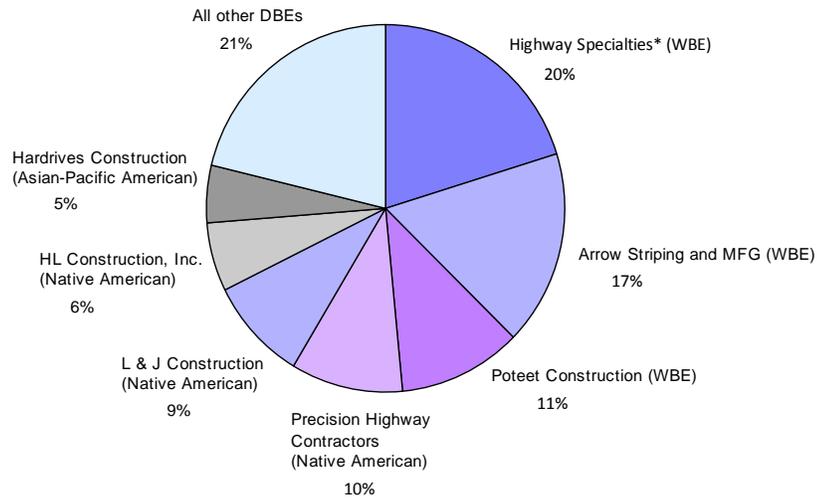
There were no types of work for which currently certified DBEs represented more than 16 percent of the firms in the availability database performing that type of work. Based on firms in the availability analysis for this disparity study, DBEs do not constitute a dominant portion of firms available for any type of MDT work.

**Participation of individual DBEs in MDT contracts.** Counting dollars as “DBE” for firms certified as DBEs at any point of the study period, 13 firms accounted for about 90 percent of the total MDT contract dollars going to DBEs during the study period (counting total dollars for those DBE firms). Two of these DBEs are no longer certified. The MBE/WBE firm receiving the most MDT work — Prince Inc. — withdrew from the DBE Program years ago when it exceeded the personal net worth limit. One might conclude that, in Montana, some firms that have been DBE-certified do grow out of the Federal DBE Program.

**Figure 8-14.**  
DBEs accounting for the most dollars of MDT contracts, October 2009 – September 2014

Note: Number of prime contracts/subcontracts analyzed is 6,679.

Source: Keen Independent Research from MDT contract records.



\*No longer DBE certified starting in 2015

**DBE participation as prime contractors.** As noted earlier in Chapter 8, relatively little of prime contract dollars on MDT contracts went to DBE primes.

There were 146 prime contracts that went to DBEs during the study period, however, DBEs accounted for only 1.5 percent of prime contract dollars.

## J. Summary from the Further Exploration of MBE/WBE and DBE Utilization

The analyses presented in Chapter 8 indicate relatively consistent results of the MBE/WBE utilization analysis across different sets of MDT contracts. Keen Independent’s disparity analyses also showed similar results across these subsets of MDT contracts as shown for all MDT FHWA- and state-funded contracts combined or for contracts without DBE goals (see Chapter 7). There was a pattern of substantial disparities for each group of minority-owned firms and some evidence of disparities for white-women owned firms.

The one difference in this pattern was the high utilization of a few large WBEs in eastern Montana and substantial disparities for WBEs in all other districts within the state.

Analysis of MDT's procurement process for construction contracts indicates:

- Disparities in awards of construction prime contracts for minority- and women-owned firms, especially for MBEs concerning construction contracts of \$250,000 or more;
- Equal or higher rates of success in winning construction contracts for MBEs and WBEs given the number of bids submitted by minority- and women-owned construction firms, but a low overall number of bids from MBEs and WBEs as prime contractors compared with the availability of minority- and women-owned firms to perform that work; and
- A predominance of large prime contracts when examining total contract dollars awarded (96% of construction prime contract dollars were on the contracts exceeding \$250,000).

Review of engineering-related contracts suggests:

- Very low participation of minority- and women-owned firms as prime consultants on MDT engineering-related contracts (about 1% of prime consultant dollars);
- Relatively few SOQs submitted by MBEs and relatively little success for WBEs submitting SOQs among the sample of contracts reviewed (small sample, but might suggest a need for MDT process improvement); and
- A consultant selection process that may work to the advantage of larger, older companies that already have had success winning MDT work.

Analysis of MDT's operation of the Federal DBE Program indicates that:

- When used, DBE contract goals had a positive impact on total DBE participation and overall MBE/WBE participation;
- Even including contracts with DBE goals, 80 percent of the participation as subcontractors on MDT contracts was by majority-owned firms and 90 percent of the participation was non-DBEs.
- By one measure of overconcentration — percentage of dollars within a work type going to DBEs — there might have been potential overconcentration of DBEs in past years, but other measures did not indicate overconcentration of DBEs and undue burdens on non-DBEs; and
- Thirteen DBEs owned by white women, Native Americans and Asian-Pacific Americans accounted for the most dollars going to DBEs during the study period. One of those DBEs, as others in the past, is no longer certified as a DBE as of late 2015.

## **CHAPTER 9.**

### **Overall Annual DBE Goal**

As part of its implementation of the Federal DBE Program, MDT is required to set an overall annual goal for DBE participation in its FHWA-funded transportation contracts. The Final Rule effective February 28, 2011 revised requirements for goal-setting so that agencies that implement the Federal DBE Program only need to develop and submit overall annual DBE goals every three years. MDT last submitted its overall annual DBE goal (a goal of 3.55%) for federal fiscal years 2014 through 2016. It must submit a new goal by summer 2016 for federal fiscal years 2017 through 2019 (beginning October 1, 2016).

MDT must prepare and submit a Goal and Methodology document to FHWA that presents its overall annual DBE goal for the next three fiscal years, supported by information about the steps used to develop the overall goal. Chapter 9 provides information that MDT might consider as part of setting its overall annual DBE goal. Chapter 9 is organized in two parts, based on the two-step process that 49 CFR Part 26.45 outlines for agencies to set their overall goals:

- A. Establishing a base figure; and
- B. Consideration of a step 2 adjustment.

Through these steps, agencies such as MDT are to determine “the level of DBE participation you would expect absent the effects of discrimination.”

#### **A. Establishing a Base Figure**

Establishing a base figure is the first step in calculating an overall annual goal for DBE participation in MDT’s FHWA-funded transportation contracts.

As presented in Chapter 6, current DBEs are available for 7.41 percent of MDT FHWA-funded transportation contracts based on analysis of October 2009 through September 2014 FHWA-funded contracts. MDT might consider 7.41 percent as the base figure for its overall annual DBE goal if it anticipates that the types of FHWA-funded contracts that the agency will award in federal fiscal years 2017 through 2019 are, on balance, reasonably similar to the types of FHWA-funded contracts that the agency awarded during the October 2009 through September 2014 study period.

Chapter 6 explains the methodology for the base figure calculation in considerable detail.

#### **B. Consideration of a Step 2 Adjustment**

Per the Federal DBE Program, MDT must consider potential step 2 adjustments to the base figure as part of determining its overall annual DBE goal for FHWA-funded contracts. MDT is not required to make any step 2 adjustments as long as it considers appropriate factors and explains its decision in its Goal and Methodology document.

The Federal DBE Program outlines factors that an agency must consider when assessing whether to make any step 2 adjustments to its base figure:

1. Current capacity of DBEs to perform work, as measured by the volume of work DBEs have performed in recent years;
2. Information related to employment, self-employment, education, training and unions;
3. Any disparities in the ability of DBEs to get financing, bonding and insurance; and
4. Other relevant factors.<sup>1</sup>

Keen Independent completed an analysis of each of the above step 2 factors and was able to quantify the effect of certain factors on the base figure. Other information examined was not as easily quantifiable but is still relevant to MDT as it determines whether to make any step 2 adjustments.

**1. Current capacity of DBEs to perform work, as measured by the volume of work DBEs have performed in recent years.** USDOT's "Tips for Goal-Setting" suggests that agencies should examine data on past DBE participation on their USDOT-funded contracts in recent years (i.e., the percentage of contract dollars going to DBEs).

**DBE participation based on MDT Uniform Reports to FHWA.** USDOT suggests that agencies should choose the median level of annual DBE participation for relevant years as the measure of past participation: "Your goal setting process will be more accurate if you use the median (instead of the average or mean) of your past participation to make your adjustment because the process of determining the median excludes all outlier (abnormally high or abnormally low) past participation percentages."<sup>2</sup>

Figure 9-1 presents information about past DBE participation based on payments from MDT Uniform Reports of DBE Awards or Commitments and Payments reported to the FHWA. Participation is shown for FFYs 2010, 2011, 2012, 2013, 2014 and 2015, which corresponds to the FFY 2010 through FFY 2014 study period examined in the disparity study plus the most recent fiscal year (FFY 2015).

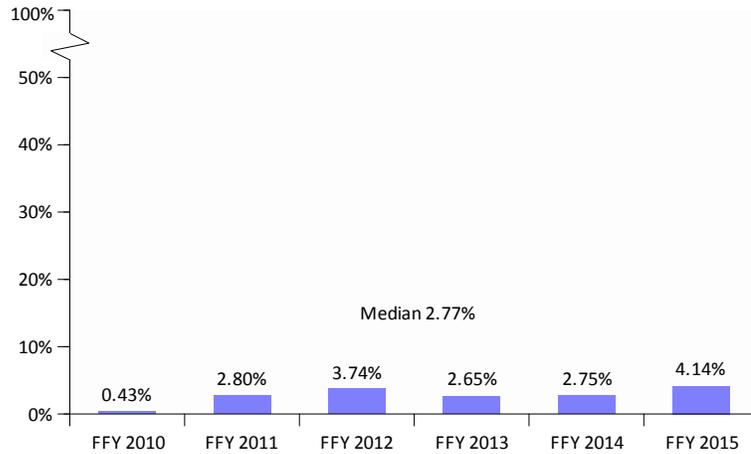
The median value of the annual DBE participation based on payments is 2.77 percent (FFYs 2010, 2013 and 2014 were lower and FFYs 2011, 2012 and 2015 were higher). A median of 2.77 percent is the average of the two mid-point years (FFY 2014 and 2011) or  $(2.75\% + 2.80\%) / 2$ .

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<sup>1</sup> 49 CFR Section 26.45.

<sup>2</sup> Section III (A)(5)(c) in USDOT. Tips for Goal-Setting in the Federal Disadvantaged Enterprise (DBE) Program as updated December 22, 2014 <http://www.dot.gov/osdbu/disadvantaged-business-enterprise/tips-goal-setting-disadvantaged-business-enterprise>.

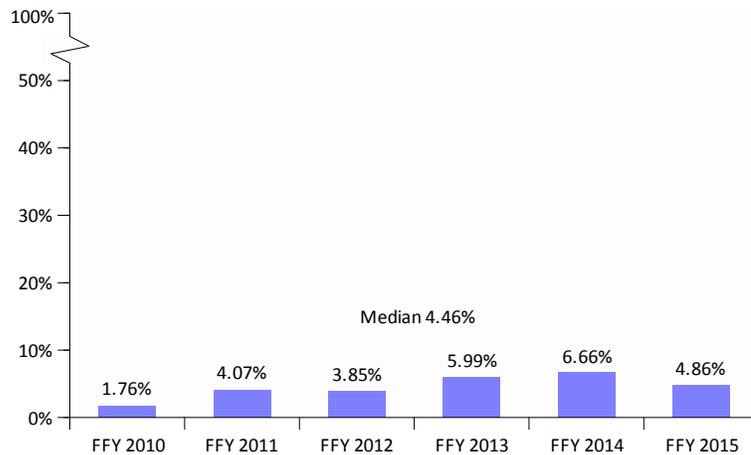
Figure 9-1.  
MDT reported past DBE participation on FHWA-funded contracts based on payments, federal fiscal years 2010, 2011, 2012, 2013, 2014 and 2015



Source: MDT Uniform Reports of DBE Awards/Commitments and Payments.

As shown in Figure 9-2, the median value of the annual DBE participation based on contract awards is 4.46 percent (FFYs 2010, 2011 and 2012 were lower and FFYs 2013, 2014 and 2015 were higher). A median of 4.46 percent is the average of the two mid-point years (FFY 2011 and 2015) or  $(4.07\% + 4.86\%) / 2$ .

Figure 9-2.  
MDT reported past DBE participation on FHWA-funded contracts based on awards, federal fiscal years 2010, 2011, 2012, 2013, 2014 and 2015



Source: MDT Uniform Reports of DBE Awards/Commitments and Payments.

Analysis of median DBE participation for FHWA-funded contracts the past six fiscal years, based on MDT's information on awards or payments, indicates that MDT might make a downward step 2 adjustment based on this factor, as explained later in this chapter. The adjustment would be slightly higher if it were based on payments rather than awards.

**DBE participation based on Keen Independent utilization analysis for FHWA- and state-funded contracts.** Keen Independent's analysis identified 4.01 percent participation of DBEs on FHWA- and state-funded contracts from October 2009 through September 2014 (see Figure 7-2 in Chapter 7). This figure is based on total dollars for the study period, and reflects more contracts. DBE participation was 4.07 percent during this time period based on Keen Independent's analysis for FHWA-funded contracts.

## **2. Information related to employment, self-employment, education, training and unions.**

Chapter 5 summarizes information about conditions in the Montana transportation contracting industry for minorities, women and MBE/WBEs. Detailed quantitative analyses of marketplace conditions in Montana are presented in Appendices E through H. Keen Independent's analyses indicate that there are barriers that certain minority groups and women face related to entry and advancement and business ownership in the Montana construction and engineering industries. Such barriers may affect the availability of MBE/WBEs to obtain and perform MDT and local agency transportation contracts.

It may not be possible to quantify the cumulative effect that barriers in employment, education, and training may have had in depressing the availability of minority- and women-owned firms in the Montana transportation contracting industry. However, the effects of barriers in business ownership can be quantified, as explained below.

The study team used regression analyses to investigate whether race, ethnicity and gender affected rates of business ownership among workers in the Montana construction and engineering industries.

- The regression analyses allowed the study team to examine those effects while statistically controlling for various personal characteristics including education and age (Appendix F provides detailed results of the business ownership regression analyses).<sup>3</sup> Those analyses revealed that Native Americans working in the Montana construction industry were less likely than non-minorities to own construction businesses, even after accounting for various race-neutral personal characteristics. This disparity was statistically significant.
- In addition, women working in the Montana engineering industry were less likely than men to own engineering companies after accounting for various gender-neutral personal characteristics. This disparity was statistically significant.

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<sup>3</sup> The study team examined U.S. Census data on business ownership rates using methods similar to analyses examined in court cases involving state departments of transportation in California, Illinois, and Minnesota.

Keen Independent analyzed the impact that barriers in business ownership would have on the base figure if Native Americans in the construction industry and white women in the engineering industry owned businesses at the same rate as similarly-situated non-minorities and white men. This type of inquiry is sometimes referred to as a “but for” analysis because it estimates the availability of MBE/WBEs *but for* the effects of race- and gender-based discrimination.

Figure 9-3 calculates the impact on overall MBE/WBE availability, resulting in possible upward adjustment of the base figure to 11.73 percent. The analysis included the same contracts that the study team analyzed to determine the base figure (i.e., FHWA-funded prime contracts and subcontracts awarded from October 2009 through September 2014). Calculations are explained below.

Figure 9-3.  
Potential step 2 adjustment considering disparities in the rates of business ownership

| Subindustry and group                       | a.<br>Current<br>availability<br>(DBEs) | b.<br>Disparity index<br>for business<br>ownership | c.<br>Availability<br>after initial<br>adjustment* | d.<br>Availability<br>after scaling<br>to 100% | e.<br>Components of<br>overall DBEs<br>availability** |
|---|---|--|--|--|---|
| <b>Construction</b>                         |   |  |  |  |   |
| Native American                             | 4.35 %                                  | 46   | 9.46 %   | 9.00 %   |   |
| Other minorities                            | 1.80                                    | n/a  | 1.80   | 1.71   |   |
| White women                                 | 1.26                                    | n/a  | 1.26   | 1.20   |   |
| White male DBEs                             | <u>0.26</u>                             | n/a  | <u>0.26</u>  | <u>0.25</u>                                    |   |
| DBEs  | 7.67 %                                  | n/a  | 12.78 %  | 12.16 %  | 11.43 %   |
| Non-DBEs                                    | <u>92.33</u>                            | n/a  | <u>92.33</u>                                       | <u>87.84</u>                                   |   |
| <b>Total firms</b>                          | <b>100.00 %</b>                         | n/a  | <b>105.11 %</b>                                    | <b>100.00 %</b>                                |   |
| <b>Engineering and other subindustries</b>  |   |  |  |  |   |
| Minorities                                  | 0.72 %                                  | n/a  | 0.72 %   | 0.69 %   |   |
| White women                                 | 0.93                                    | 31   | 3.00   | 2.89   |   |
| White male DBEs                             | <u>1.60</u>                             | n/a  | <u>1.60</u>  | <u>1.54</u>                                    |   |
| DBEs  | 3.25 %                                  | n/a  | 5.32 %   | 5.13 %   | 0.31 %  |
| Non-DBEs                                    | <u>98.37</u>                            | n/a  | <u>98.37</u>                                       | <u>94.87</u>                                   |   |
| <b>Total firms</b>                          | <b>101.62 %</b>                         | n/a  | <b>103.69 %</b>                                    | <b>100.00 %</b>                                |   |
| <b>Total for DBEs</b>                       | <b>7.41 %</b>                           | n/a  | n/a  |  | <b>11.73 %</b>  |
| <b>Difference from current availability</b> |   |  |  |  | <b>4.32 %</b>   |

Note: Numbers may not add to 100.00% due to rounding.

\* Initial adjustment is calculated as current availability divided by the disparity index for business ownership.

\*\* Components of the base figure were calculated as the value after adjustment and scaling to 100 percent, multiplied by the percentage of total FHWA-funded contract dollars in each industry (construction = 94%, engineering = 6%).

Source: Keen Independent based on FHWA-funded contracts for October 2009 through September 2014 and statistical analysis of U.S. Census Bureau American Community Survey data for Montana for 2008-2012.

The study team completed these “but for” analyses separately for construction and engineering contracts and then weighted the results based on the proportion of FHWA-funded contract dollars that MDT awarded for construction and engineering for October 2009-September 2014 (i.e., a 94% weight for construction and 6% weight for engineering). The rows and columns of Figure 9-3 present the following information from Keen Independent’s “but for” analyses:

- a. **Current availability.** Column (a) presents the current dollar-weighted availability of DBEs by group for construction and for engineering and other subindustries. Each row presents the dollar-weighted percentage availability for DBEs. The current combined availability of DBEs for MDT FHWA-funded transportation contracts for October 2009-September 2014 is 7.41 percent, as shown in the bottom row of column (a).
- b. **Disparity indices for business ownership.** As presented in Appendix F, Native Americans were significantly less likely to own construction firms than similarly-situated non-minorities.

Keen Independent calculated simulated business ownership rates if those groups owned businesses at the same rate as non-minorities and white males who share similar personal characteristics. The study team then calculated a business ownership disparity index for each group by dividing the observed business ownership rate by the benchmark business ownership rate and then multiplying the result by 100.

Column (b) of Figure 9-3 presents disparity indices related to business ownership for the different racial/ethnic and gender groups. For example, as shown in column (b), Native Americans own construction businesses at 46 percent of the rate that would be expected based on the simulated business ownership rates of non-minorities who share similar personal characteristics. White women working in engineering owned businesses were 31 percent of the rate of white men. Appendix F explains how the study team calculated the disparity indices.

- c. **Availability after initial adjustment.** Column (c) presents availability estimates for DBEs by industry after initially adjusting for statistically significant disparities in business ownership rates (Native Americans in construction and white women in engineering). The study team calculated those estimates by dividing the current availability in column (a) by the disparity index for business ownership in column (b) and then multiplying by 100.
- d. **Availability after scaling to 100%.** Column (d) shows adjusted availability estimates that were re-scaled so that the sum of the availability estimates equals 100 percent for each industry. The study team re-scaled the adjusted availability estimates by taking each group’s adjusted availability estimate in column (c) and dividing it by the sum of availability estimates shown under “Total firms” in column (c) — and multiplying by 100. For example, the re-scaled availability estimate for Native American-owned DBEs shown for construction was calculated in the following way:  $(9.46\% \div 105.11\%) \times 100 = 9.00\%$ .

- e. **Components of overall DBE goal with upward adjustment.** Column (e) of Figure 9-3 shows the component of the total base figure attributed to the adjusted DBE availability for construction versus engineering and other subindustries. The study team calculated each component by taking the total availability estimate shown in column (d) for construction and for engineering/other — and multiplying it by the proportion of total FHWA-funded contract dollars in each industry (i.e., 94% for construction and 6% for engineering). For example, the study team used the 12.16 percent shown for DBE availability for construction firms in column (d) and multiplied it by 94 percent for a result of 11.43 percent. A similar weighting of DBE availability for engineering/other produced a value of 0.31 percent.

The values in column (e) were then summed to equal the overall base figure adjusted for barriers in business ownership, which is 11.73 percent as shown in the bottom of column (e).

Finally, Keen Independent calculated the difference between the “but for” MBE/WBE availability (11.73%) and the current DBE availability (7.41%) to calculate the potential upward adjustment. This difference, and potential upward adjustment, is 4.32 percentage points ( $11.73\% - 7.41\% = 4.32\%$ ).

Therefore, based on information related to business ownership, MDT might consider an upward adjustment to its overall DBE goal of up to 4.32 percentage points.

**3. Any disparities in the ability of DBEs to get financing, bonding and insurance.** Analysis of access to financing and bonding revealed quantitative and qualitative evidence of disadvantages for minorities, women and MBE/WBEs.

- Any barriers to obtaining financing and bonding might affect opportunities for minorities and women to successfully form and operate construction and engineering businesses in the Montana marketplace.
- Any barriers that MBE/WBEs face in obtaining financing and bonding would also place those businesses at a disadvantage in obtaining MDT and local agency construction and engineering prime contracts and subcontracts.

Note that financing and bonding are closely linked, as discussed in Chapter 5 and Appendix J.

There is also evidence that some firms cannot bid on certain public sector projects because they cannot afford the levels of insurance required by the agency. This barrier appears to affect small businesses, which might disproportionately impact minority- and women-owned firms.

The information about financing and bonding supports an upward step 2 adjustment in MDT’s overall annual goal for DBE participation in FHWA-funded contracts.

**4. Other factors.** The Federal DBE Program suggests that federal aid recipients also examine “other factors” when determining whether to make any step 2 adjustments to their base figure.<sup>4</sup>

**Success in the Montana marketplace.** Among the “other factors” examined in this study was the success of MBE/WBEs relative to majority-owned businesses in the Montana marketplace. There is quantitative evidence that minority- and women-owned firms are less successful than majority-owned firms, and face greater barriers in the marketplace, even after considering neutral factors. Chapter 5 summarizes that evidence and Appendix H presents supporting quantitative analyses. There is also qualitative evidence of barriers to the success of minority- and women-owned businesses, as summarized in Chapter 5. Some of this qualitative information suggests that discrimination on the basis of race, ethnicity and gender affects minority- and women-owned firms in the Montana transportation contracting industry.

**Approaches for making step 2 adjustments.** Quantification is discussed below.

**1. Current capacity of DBEs to perform work, as measured by the volume of work DBEs have performed in recent years.** Analysis of this factor might indicate a downward step 2 adjustment if MDT analyzed its estimates of past DBE participation for FFY 2010 through FFY 2015. MDT has based past analyses on awards data, as it deemed those data more reliable than payments data.<sup>5</sup> The median DBE participation for awards is higher than for payments (4.46% vs. 2.77%), as shown in Figure 9-1 and Figure 9-2. Keen Independent chose the median based on awards for this calculation to be most consistent with data in the Disparity Study.

USDOT “Tips for Goal-Setting” suggests taking one-half of the difference between the base figure and evidence of current capacity as one approach to calculate the step 2 adjustment for that factor.

The difference between the 7.41 percent base figure (calculated in Chapter 6) and 4.46 percent median DBE participation (based on awards) is 2.95 percentage points ( $7.41\% - 4.46\% = 2.95\%$ ). One-half of this difference is a downward adjustment of 1.47 percentage points ( $2.95\% \div 2 = 1.47\%$ ). The goal would then be calculated as follows:  $7.41\% - 1.47\% = 5.94\%$ , as shown in Figure 9-4 on the following page.

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<sup>4</sup> 49 CFR Section 26.45.

<sup>5</sup> Montana Department of Transportation. 2013. Federal Fiscal Year 2014-2016 DBE Goal Methodology.

Figure 9-4.  
 Potential step 2 adjustments for MDT’s overall DBE goal for FHWA-funded contracts,  
 FFY 2017–FFY 2019

| Step 2 adjustment component            | Value          | Explanation  |
|--|----------------|--|
| <b>Lower range of overall DBE goal</b> |                |  |
| Base figure                            | 7.41 %         | From base figure analysis                          |
| Evidence of current capacity           | - 4.46         | Median DBE participation based on awards           |
| Difference                             | <u>2.95 %</u>  |  |
|  | ÷ 2            | Reduce by one-half                                 |
| Adjustment                             | <u>1.47 %</u>  | Downward adjustment for current capacity           |
| Base figure                            | 7.41 %         | From base figure analysis                          |
| Adjustment for current capacity        | - 1.47         | Downward step 2 adjustment                         |
| <b>Overall DBE goal</b>                | <b>5.94 %</b>  | Lower range of DBE goal                            |
| <b>Upper range of overall DBE goal</b> |                |  |
| Base figure                            | 7.41 %         | From base figure analysis                          |
| Adjustment for "but for" factors       | + 4.32         | "But for" step 2 adjustment for business ownership |
| <b>Overall DBE goal</b>                | <b>11.73 %</b> | Upper range of DBE goal                            |

Source: Keen Independent analysis.

2. Information related to employment, self-employment, education, training and unions. The study team was not able to quantify all of the information regarding barriers to entry for MBE/WBEs. Quantification of the business ownership factor indicates an upward step 2 adjustment of 4.32 percentage points to reflect the “but-for” analyses of business ownership rates presented in Figure 9-3. If MDT made this adjustment, the overall DBE goal for FHWA-funded contracts would be 11.73 percent (7.41% + 4.32% = 11.73%). Figure 9-4 presents this calculation.

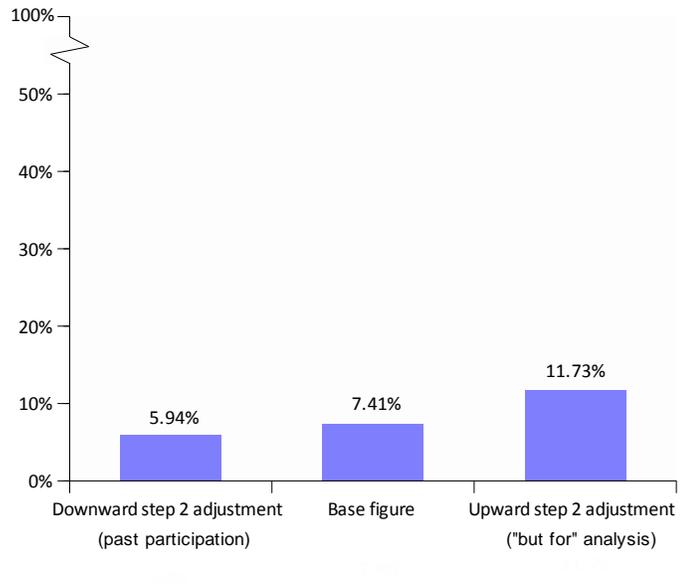
3. Any disparities in the ability of DBEs to get financing, bonding and insurance. Analysis of financing and bonding indicates that an upward adjustment is appropriate. However, impact of these factors on availability could not be quantified.

4. Other factors. Impact of the many barriers to success of MBE/WBEs in Montana could not be specifically quantified. However, the evidence supports an upward adjustment.

**Summary.** MDT will need to consider whether to make a downward, upward or no step 2 adjustment when determining its overall DBE goal. If MDT makes a downward step 2 adjustment reflecting current capacity to perform work, its overall DBE goal for FHWA-funded contracts would be 5.94 percent as calculated in Figure 9-4. If MDT decides to not make a downward adjustment and to make an upward adjustment that reflects analyses of business ownership rates, its overall DBE goal would be 11.73 percent. MDT might also choose to not make a step 2 adjustment, which would mean a DBE goal of 7.41 percent. Figure 9-5 summarizes this information.

**Figure 9-5.**  
Potential step 2 adjustments  
to overall DBE goal for  
FHWA-funded contracts,  
FFY 2017–FFY 2019

Source:  
Keen Independent analysis.



## CHAPTER 10.

### Portion of DBE Goal for FHWA-funded Contracts to be Met through Neutral Means

The Federal DBE Program requires state and local transportation agencies to meet the maximum feasible portion of their overall DBE goals using race- and gender-neutral measures.<sup>1</sup> Race- and gender-neutral measures are initiatives that encourage the participation of all businesses, or all small businesses, and are not specifically limited to MBE/WBEs or DBEs. Agencies must determine whether they can meet their overall DBE goals solely through neutral means or whether race- and gender-conscious measures — such as DBE contract goals — are also needed. As part of doing so, agencies must project the portion of their overall DBE goals that they expect to meet (a) through race- and gender-neutral means, and (b) through race- and gender-conscious programs (if any).

- If an agency determines that it can meet its overall DBE goal solely through race- and gender-neutral means, then it would propose using only neutral measures as part of its program. The agency would project 100 percent of its overall DBE goal to be met through neutral means and 0 percent to be met through race- and gender-conscious means.
- If an agency determines that a combination of race- and gender-neutral and race- and gender-conscious measures are needed to meet its overall DBE goal, then the agency would propose using a combination of neutral and conscious measures as part of its program. The agency would project that some percent of its overall DBE goal would be met through neutral means and that the remainder would be met through race- and gender-conscious means.

USDOT offers guidance concerning how transportation agencies should project the portions of their overall DBE goals that will be met through race- and gender-neutral and race- and gender-conscious measures, including the following:

- USDOT Questions and Answers about 49 CFR Part 26 addresses factors for federal aid recipients to consider when projecting the portion of their overall DBE goals that they will meet through race- and gender-neutral means.<sup>2</sup>
- USDOT “Tips for Goal-Setting” also suggests factors for federal aid recipients to consider when making such projections.<sup>3</sup>

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<sup>1</sup> 49 CFR Section 26.51.

<sup>2</sup> See <http://www.dotcr.ost.dot.gov/Documents/Dbe/49CFRPART26.doc>.

<sup>3</sup> <http://www.osdbu.dot.gov/DBEProgram/tips.cfm>.

- An FHWA template for how it considers approving DBE goal and methodology submissions includes a section on projecting the percentage of overall DBE goals to be met through neutral and conscious means. An excerpt from that template is provided in Figure 10-1.

Based on 49 CFR Part 26 and the resources above, general areas of questions that transportation agencies might ask related to making any projections include:

- A. Is there evidence of discrimination within the local transportation contracting marketplace for any racial, ethnic or gender groups?
- B. What has been the agency's past experience in meeting its overall DBE goal?
- C. What has DBE participation been when the agency did not use race- or gender-conscious measures?<sup>4</sup>
- D. What is the extent and effectiveness of race- and gender-neutral measures that the agency could have in place for the next fiscal year?

Chapter 10 is organized around each of those general areas of questions.

**Figure 10-1.**  
Excerpt from Explanation of Approval of [State] DBE Goal Setting Process for FY [Year]

You must also explain the basis for the State's race-neutral/race-conscious division and why it is the State's best estimate of the maximum amount of participation that can be achieved through race-neutral means. There are a variety of types of information that can be relied upon when determining a recipient's race-neutral/race-conscious division. Appropriate information should give a sound analysis of the recipient's market, the race-neutral measures it employs and information on contracting in the recipient's contracting area. Information that could be relied on includes: the extent of participation of DBEs in the recipient's contracts that do not have contract goals; past prime contractors' achievements; excess DBE achievements over past goals; how many DBE primes have participated in the state's programs in the past; or information about state, local or private contracting in similar areas that do not use contracting goals and how many minority and women's businesses participate in programs without goals.

Source:  
FHWA, Explanation for Approval of [State] DBE Program Goal Setting Process for FY [Year].

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<sup>4</sup> USDOT guidance suggests evaluating (a) certain DBE participation as prime contractors if the DBE contract goals did not affect utilization, (b) DBE participation as prime contractors and subcontractors for agency contracts without DBE goals, and (c) overall utilization for other state, local or private contracting where contract goals are not used.

## **A. Is there evidence of discrimination within the local transportation contracting marketplace for any racial, ethnic or gender groups?**

**Minority-owned firms.** There is quantitative evidence of disparities for minority-owned firms in MDT contracts and in the Montana transportation contracting marketplace, and qualitative evidence of racial discrimination in the Montana transportation contracting marketplace. The federal courts have held that a significant statistical disparity between the utilization and availability of minority- and women-owned firms may raise an inference of discriminatory exclusion.<sup>5</sup> However, a small statistical disparity, standing alone, may be insufficient to establish discrimination.<sup>6</sup> The second prong of the strict scrutiny analysis requires the implementation of the Federal DBE Program by recipients of federal funds be “narrowly tailored” to remedy identified discrimination in the particular recipient’s contracting and procurement market.<sup>7</sup> The narrow tailoring requirement has several components.

In *Western States Paving*, the Ninth Circuit held the recipient of federal funds must have independent evidence of discrimination within the recipient’s own transportation contracting and procurement marketplace in order to determine whether or not there is the need for race-, ethnicity-, or gender-conscious remedial action.<sup>8</sup> In *Western States Paving*, and in *AGC, SDC v. Caltrans*, the Ninth Circuit Court found that even where evidence of discrimination is present in a recipient’s market, a narrowly tailored program must apply only to those minority groups who have actually suffered discrimination. Thus, under a race- or ethnicity-conscious program, for each of the minority groups to be included in any race- or ethnicity-conscious elements in a recipient’s implementation of the Federal DBE Program, there must be evidence that the minority group suffered discrimination within the recipient’s marketplace.<sup>9</sup>

In *Western States Paving*, the Ninth Circuit announced a two-pronged test for “narrow tailoring”:

“(1) the state must establish the presence of discrimination within its transportation contracting industry, and

(2) the remedial program must be limited to those minority groups that have actually suffered discrimination.” *Id.* 1191, citing *Western States Paving Co.*, 407 F.3d at 997-998.

The evidence of disparities should be considered by MDT in determining whether or not there is the presence of discrimination within the Montana transportation contracting marketplace, and as to which groups that may be properly included in narrowly-tailored race-conscious measures under the Federal DBE Program.

**White women-owned firms.** There is also some quantitative evidence of disparities for white women-owned firms in MDT contracts and in the Montana transportation contracting industry, and qualitative evidence of gender discrimination for Montana transportation contracting marketplace,

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<sup>5</sup> See, e.g., *Croson*, 488 U.S. at 509; *AGC, SDC v. Caltrans*, 713 F.3d at 1191-1197; *Rothe*, 545 F.3d at 1041; *Concrete Works II*, 321 F.3d at 970; see also *Western States Paving*, 407 F.3d at 1001.

<sup>6</sup> *Western States Paving*, 407 F.3d at 1001.

<sup>7</sup> *Western States Paving*, 407 F.3d at 995-998; *Sherbrooke Turf*, 345 F.3d at 970-71.

<sup>8</sup> *Western States Paving*, 407 F.3d at 997-98, 1002-03; see *AGC, SDC v. Caltrans*, 713 F.3d at 1197-1199.

<sup>9</sup> 407 F.3d at 996-1000; See *AGC, SDC v. Caltrans*, 713 F.3d at 1197-1199.

which MDT should consider in determining whether gender-based discrimination affects these firms. Disparities in the utilization of white women-owned firms in MDT contracts are not as large as the substantial disparities identified for minority-owned firms. MDT will need to evaluate this evidence in light of USDOT requirements and the intermediate scrutiny legal standard of review for gender-conscious programs when deciding whether gender-conscious remedies are supportable in its implementation of the Federal DBE Program in Montana.

Certain federal Courts of Appeal, including the Ninth Circuit Court of Appeals, apply intermediate scrutiny to gender-conscious programs.<sup>10</sup> The Ninth Circuit and other courts have interpreted this standard to require that gender-based classifications be:

1. Supported by both “sufficient probative” evidence or “exceedingly persuasive justification” in support of the stated rationale for the program; and
2. Substantially related to a sufficiently important governmental interest or the achievement of that underlying objective.<sup>11</sup>

Under the traditional intermediate scrutiny standard, the court reviews a gender-conscious program by analyzing whether the state actor has established a sufficient factual predicate for the claim that female-owned businesses have suffered discrimination, and whether the gender-conscious remedy is an appropriate response to such discrimination. This standard requires the state actor to present “sufficient probative” evidence in support of its stated rationale for the program.<sup>12</sup>

Intermediate scrutiny, as interpreted by the federal circuit courts of appeal, requires a direct, substantial relationship between the objective of the gender preference and the means chosen to accomplish the objective. The measure of evidence required to satisfy intermediate scrutiny is less than that necessary to satisfy strict scrutiny. Unlike strict scrutiny, it has been held that the intermediate scrutiny standard does not require a showing of government involvement, active or passive, in the discrimination it seeks to remedy.<sup>13</sup>

If MDT chooses to include white women-owned firms certified as DBEs as eligible for race- and gender-conscious programs, those DBEs would participate in the DBE contract goals program along with minority-owned DBEs and any other firms certified as DBEs. If MDT concludes that the combined evidence does not support inclusion of white women-owned DBEs as eligible for race- and gender-conscious programs, then MDT would request a waiver under 49 CFR Part 26.15 from FHWA to limit participation in the DBE contract goals program to minority-owned firms certified as DBEs as well as any white male-owned firms certified as DBEs. In this circumstance, white women-owned DBEs could participate in technical assistance programs and any other race- and gender-neutral elements of the Federal DBE Program operated by MDT.

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<sup>10</sup> See generally, *AGC, SDC v. Caltrans*, 713 F.3d at 1195; *Western States Paving*, 407 F.3d at 990 n. 6; *Coral Constr. Co.*, 941 F.2d at 931-932 (9<sup>th</sup> Cir. 1991); *Eng’g Contractors Ass’n*, 122 F.3d at 905, 908, 910; *Equal. Found. v. City of Cincinnati*, 128 F.3d 289 (6<sup>th</sup> Cir. 1997); *Ensley Branch N.A.A.C.P. v. Seibels*, 31 F.3d 1548 (11<sup>th</sup> Cir. 1994); see also *U.S. v. Virginia*, 518 U.S. 515, 532 and n. 6 (1996)(“exceedingly persuasive justification.”).

<sup>11</sup> *Id.*

<sup>12</sup> *Id.*

<sup>13</sup> *Coral Constr. Co.*, 941 F.2d at 931-932; See *Eng’g Contractors Ass’n*, 122 F.3d at 910.

## B. What has been the agency's past experience in meeting its overall DBE goal?

Figure 10-2 displays MDT's reported DBE participation on FHWA-funded contracts from FFY 2010 through FFY 2015. The two right-hand columns display the difference between the DBE participation and the overall DBE goal in place for that federal fiscal year based on awards data and payments data.

**Analysis of participation based on commitments/awards.** The following compares attainment with the overall DBE goal based on data for DBE commitments and awards:

- For FFYs 2010, 2011 and 2012, reported DBE participation based on DBE commitments/awards was lower than MDT's overall DBE goal. The shortfall was 4.14 percentage points in FFY 2010, narrowing to about 2 percentage points in FFY 2011 and FFY 2012.
- In FFY 2013, DBE participation was very close to the overall DBE goal.
- DBE participation exceeded the overall DBE goal in FFY 2014 and FFY 2015 based on MDT reporting of DBE commitments/awards.

**Analysis of participation based on payments.** MDT also reported participation based on payments to DBEs. These data show participation between 2 and 4 percent, except for 0.43 percent DBE participation in FFY 2010 and 4.14 percent participation in FFY 2015.

- The shortfall based on payments data varied from 0.80 percentage points in FFY 2014 to 5.47 percentage points in FFY 2010.
- DBE utilization based on payments was slightly higher than the DBE goal in FFY 2015.

**Summary.** From FFY 2010 through FFY 2012, MDT's reported DBE participation based on both awards and payments data was below its overall DBE goal. In FFY 2015, DBE utilization exceeded the overall goal based on both awards and payments information. DBE participation exceeded the goal in FFY 2014 based on commitments/awards data.

Figure 10-2.  
MDT overall DBE goal and reported DBE participation on FHWA-funded contracts, FFY 2010 through FFY 2015

| Federal fiscal year | DBE goal | DBE commitments/awards |              | Difference from DBE goal |          |
|---------------------|----------|------------------------|--------------|--------------------------|----------|
|                     |          | awards                 | DBE payments | Awards                   | Payments |
| 2010                | 5.90 %   | 1.76 %                 | 0.43 %       | -4.14 %                  | -5.47 %  |
| 2011                | 5.83     | 4.07                   | 2.80         | -1.76                    | -3.03    |
| 2012                | 5.83     | 3.85                   | 3.74         | -1.98                    | -2.09    |
| 2013                | 5.83     | 5.99                   | 2.65         | 0.16                     | -3.18    |
| 2014                | 3.55     | 6.66                   | 2.75         | 3.11                     | -0.80    |
| 2015                | 3.55     | 4.86                   | 4.14         | 1.31                     | 0.59     |

Source: MDT Uniform Reports of DBE Awards/Commitments and Payments.

### **C. What has DBE participation been when MDT has not applied DBE contract goals (or other race-conscious remedies)?**

Keen Independent examined four sources of information to assess race-neutral DBE participation:

- DBE participation on FHWA-funded contracts in FFY 2010, 2011 and 2015 (years in which MDT did not apply DBE contract goals);
- MDT-reported race-neutral DBE participation on FHWA-funded contracts;
- Keen Independent estimates of DBE participation on FHWA- and state-funded contracts for which no DBE contract goals applied; and
- Information concerning DBE participation as prime contractors.

The discussion in the following two pages examines these four sets of participation figures.

**DBE participation in years in which MDT did not apply DBE contract goals.** MDT did not apply race- or gender-conscious program elements from 2006 until June 2012 (late in FFY 2012). It also did not apply DBE contract goals in FFY 2015.

For FFYs 2010, 2011, 2012 and 2015, reported DBE utilization ranged from 0.43 percent to 4.86 percent based on DBE commitments/awards (median of 3.96 percent). Figure 10-2 provides these results. (In its 2014-2016 Goal Methodology, MDT reports that its commitments/awards information provides a more accurate depiction of DBE participation in its Uniform Reports.)

In sum, analysis of DBE participation in years MDT did not use DBE contract goals suggests that DBE participation of about 4 percent is possible in a neutral environment.

**Race-neutral DBE participation in recent MDT Uniform Reports.** Per USDOT instructions, MDT counts as “neutral” participation any prime contracts going to DBEs as well as subcontracts to DBEs beyond what was needed to meet DBE contract goals set for a project or that were otherwise awarded in a race-neutral manner. (Note that FHWA instructs agencies to prepare these analyses from commitments/awards data rather than from payments.)

MDT’s reports for years in which it did not apply DBE contract goals shows 100 percent of the participation as neutral.

MDT’s Uniform Reports of DBE Awards/Commitments and Payments submitted to FHWA for the FFY 2013 and FFY 2014 indicate race-neutral participation of:

- 3.60 percent in FFY 2013; and
- 5.85 percent in FFY 2014.

Figure 10-3 presents these results. The right-hand column of Figure 10-3 calculates the share of total participation achieved through neutral means (neutral DBE participation ÷ total DBE participation).

- In FFY 2013, MDT achieved 60 percent of its total DBE commitments/awards through neutral means ( $3.60 \div 5.99 = 60\%$ ).
- In FFY 2014, MDT achieved 88 percent of its DBE participation through neutral means ( $5.85 \div 6.66 = 88\%$ ).

Examination of Figure 10-3 indicates race-neutral participation in most years was in the range of about 3 to 5 percentage. The only years in which neutral participation was higher or lower were FFY 2010 (1.76%) and FFY 2014 (5.85%).

Median neutral DBE participation from FFY 2010 through FFY 2015 was 3.96 percent.

Figure 10-3.  
MDT-reported race-neutral and race-conscious DBE participation on FHWA-funded contracts for FFY 2009 through FFY 2015

| Federal fiscal year | DBE commitments/awards |              |                | Share achieved Through neutral |
|---------------------|------------------------|--------------|----------------|--------------------------------|
|                     | Total                  | Race-neutral | Race-conscious |                                |
| 2010                | 1.76 %                 | 1.76 %       | 0.00 %         | 100 %                          |
| 2011                | 4.07                   | 4.07         | 0.00           | 100                            |
| 2012                | 3.85                   | 3.85         | 0.00           | 100                            |
| 2013                | 5.99                   | 3.60         | 2.39           | 60                             |
| 2014                | 6.66                   | 5.85         | 0.81           | 88                             |
| 2015                | 4.86                   | 4.86         | 0.00           | 100                            |

Source: MDT Uniform Reports of DBE Awards/Commitments and Payments.

**DBE participation on contracts without DBE contract goals.** Keen Independent also analyzed DBE participation on MDT's FHWA- and state-funded contracts without DBE contract goals. As reported in Chapter 8, MDT achieved 3.5 percent DBE participation on these contracts from October 2009 through September 2014.

**DBE participation as prime contractors.** Focusing just on participation as prime contractors, Keen Independent determined that DBEs obtained 1.5 percent of prime contract dollars on FHWA- and state-funded contracts from October 2009 through September 2014 (see Figure 8-6 in Chapter 8).

## **D. What is the extent and effectiveness of race- and gender-neutral measures that the agency could have in place for the next fiscal year?**

When determining the extent to which it could meet its overall DBE goal through the use of neutral measures, MDT must review the race- and gender-neutral measures that it and other organizations have in place, and those it has planned or could consider for future implementation.

Keen Independent's discussion of neutral remedies in Chapter 4 indicates that MDT has implemented an extensive set of neutral measures, often on a highly-tailored basis for individual DBEs. At this time, it is difficult to quantify how much more race-neutral participation these ongoing programs might achieve.

Keen Independent also examined other potential neutral measures. Research into expanded SBC programs, such as SBE contract goals, indicate that MDT might not have the authority under state law to implement such measures. Although MDT might consider further research into a small business enterprise subcontract goals program, it does not appear that state legislation could be passed, a certification program established and program implementation launched before well into the FFY 2017 through FFY 2019 time period for which these projections apply. The impact that such a program might have on race-neutral participation is also uncertain.

## **E. Summary**

Chapter 10 provides information to MDT as it considers (1) any refinements to its overall DBE goal for FFY 2017 through FFY 2019 for FHWA-funded contracts, (2) any revisions to its projection of the portion of its overall DBE goal to be achieved through neutral means, and (3) if all DBE groups will be allowed to participate in any DBE contract goals program, or whether MDT will request a waiver that limits participation to certain groups.

### **1. Should MDT project that it can meet all of its overall DBE goal through neutral means?**

MDT must consider whether it can achieve 100 percent of its overall DBE goal through neutral means or whether race-conscious programs are needed. Such a determination depends in part on the level of the overall DBE goal. If MDT's overall DBE goal for FHWA-funded contracts is in the range of 5.94 percent or higher, the evidence presented in this report indicates that MDT might not meet its DBE goal solely through neutral means.

MDT should consider all of the information in the report and other sources when reaching its decision on any use of race- and gender-conscious programs (such as DBE contract goals).

- There is information indicating disparities in outcomes for minorities and women in the Montana contracting marketplace, substantial disparities for MBEs in MDT contracts, some evidence of disparities for WBEs in MDT contracts (as discussed earlier in this chapter) and some qualitative evidence of race and gender discrimination within the local transportation contracting marketplace.
- Median annual DBE participation for the most recent federal fiscal years in which MDT reported that it operated a 100 percent neutral program was about 4 percent based on awards/commitments. This level of participation is considerably below an overall DBE goal of 5.94 percent or higher.

Keen Independent estimated the DBE participation was 3.5 percent on FHWA- and state-funded contracts without DBE contract goals during the study period. It is considerably below a 5.94 percent (or higher) overall DBE goal.

- MDT has extensive neutral measures in place and there are many small business assistance programs offered by other institutions throughout the state. Any additional measures MDT might be able to immediately institute would probably have only a small impact in comparison with what already exists. It appears unlikely that MDT could increase its neutral participation of DBEs to reach an overall DBE goal to the level of 5.94 percent or higher solely through additional neutral measures.

**2. If MDT uses a combination of neutral means and DBE contract goals, how much of the overall DBE goal can MDT project to be met through neutral means?** MDT will need to choose the appropriate neutral projection based on information in this study and other information it may have. Relevant results include the following:

- Median annual DBE participation for the most recent federal fiscal years in which MDT reported that it operated a 100 percent neutral program was about 4 percent based on awards/commitments.
- MDT achieved 3.5 percent DBE participation on MDT contracts without DBE contract goals based on Keen Independent analysis of these contracts from October 2009 through September 2014 (average for entire time period).

If MDT achieved the same level of race-neutral participation in FFY 2017 through FFY 2019 as it did in the four most recent fiscal years in which it reported entirely neutral participation (3.96 percent median), it would need to achieve 1.98 percentage points of a 5.94 percent overall DBE goal through race- and possibly gender-conscious means ( $5.94\% - 3.96\% = 1.98\%$ ).

If the overall DBE goal were higher than 5.94 percent, MDT might need to project a larger portion of the goal to be met through race- and gender-conscious means, as demonstrated in Figure 10-4 on the following page.

- For purposes of comparison, the left-hand column of Figure 10-4 shows the overall DBE goal and projections that MDT developed for the current time period.
- The three columns to the right in Figure 10-4 present neutral and race-conscious projections for three examples of the different levels of overall DBE goals that MDT might select for FFY 2017 through FFY 2019.
- In each column, the neutral projection (row 2) is subtracted from the overall DBE goal (row 1) to derive the race-conscious projection (row 3).

Figure 10-4.

Current MDT overall DBE goal and projections of race-neutral for FHWA-funded contracts for FFY 2014-FFY2016 and examples of overall goal and projections for FFY 2017 through FFY 2019

| Component of overall goal ☒ | FFY 2014-<br>FFY 2016 | FFY 2017- FFY 2019     |                 |                      |
|-----------------------------|-----------------------|------------------------|-----------------|----------------------|
|                             |                       | Downward<br>adjustment | Base figure     | Upward<br>adjustment |
| Overall goal                | 3.55 %                | 5.94 %                 | 7.41 %          | 11.73 %              |
| Neutral projection          | - <u>3.55</u>         | - <u>3.96</u>          | - <u>3.96 %</u> | - <u>3.96</u>        |
| Race-conscious projection   | 0.00 %                | 1.98 %                 | 3.45 %          | 7.77 %               |

Source: Keen Independent analysis.

## **CHAPTER 11.**

### **Recommendations**

MDT operates the Federal DBE Program in line with federal regulations and had improved its operation of DBE contract goals prior to when it stopped setting goals on contracts in June 2014. The 2016 Disparity Study includes suggestions in the following areas as MDT continue to operate the Federal DBE Program on FHWA-funded contracts.

1. Consideration of the Draft 2016 Disparity Study Report;
2. MDT development of overall DBE goal and neutral projections;
3. MDT utilization data collection and reporting procedures;
4. Future maintenance of an MDT bidders list;
5. Extension of payment notification information to consultant contracts;
6. Further review of consultant selection procedures;
7. New small business goals program;
8. Other neutral measures;
9. Operation of DBE contract goals if MDT chooses to resume their use;
10. DBE and other certification; and
11. Schedule for future availability and disparity studies;

#### **1. Consideration of the Draft 2016 Disparity Study Report**

Keen Independent, in coordination with MDT, developed the following plan for MDT receipt and consideration of the draft report and preparation of the final report, including opportunities for public input.

**Review of initial draft report prior to public release.** This report is submitted as a draft for review by MDT staff and the Technical Panel, which includes internal and external stakeholders that have been reviewing this project from its initiation.

**Release of draft report to the public for review and comment.** After receiving MDT staff and Technical Panel comments, Keen Independent plans to complete a draft report suitable for release for public review and comment.

The following schedule is anticipated:

- The study team plans, in coordination with MDT, release of the draft report in March 2016. It will be posted on the disparity study page on MDT's website and MDT will send links to the study to interested parties. MDT will also issue a press release announcing the study and public meeting dates, with study team assistance.

- MDT and the study team will hold a public meeting in Missoula and a public meeting in Billings in late March, as well as hold additional virtual public meetings. MDT and Keen Independent will explain study results at these meetings and solicit input from the public. Keen Independent will review and incorporate public comments prior to submitting a final report to MDT.

**Initial briefings of FHWA.** MDT, with assistance from Keen Independent as needed, can brief FHWA about the results in this draft report concurrent with or prior to release for public input.

**Consideration of public comments and preparation of final draft report and final report.** Keen Independent will compile and analyze input from the public before preparing a final draft for final MDT review. This final draft will incorporate public feedback.

The study team will submit the final draft for MDT final review and approval, and then submit a final report later in spring 2016.

## **2. MDT Development of Overall DBE Goal and Neutral Projections**

MDT should use information in the 2016 Disparity Study and other information it may have to establish an overall goal for DBE participation in its FHWA-funded contracts for FFY 2017 through FFY 2019.

**MDT development of the proposed DBE goal and preparation of a Goal Methodology document for public distribution concurrent with the draft disparity study report.** Keen Independent recommends that MDT proceed by early spring 2016 to develop:

- A proposed DBE goal for FHWA-funded contracts;
- Proposed projections of race-neutral and any race- and gender-conscious portions of the goal; and, if MDT plans to use DBE contract goals in the future; and
- Proposed determination of the racial, ethnic and gender groups of DBEs eligible to meet those goals.

MDT will summarize its proposal in a FFY 2017-FFY2019 FHWA Goal Methodology document, as it has in past years.

Keen Independent suggests that MDT then publish its proposed goal on its website and distribute it to stakeholders and other interested parties to solicit stakeholder input and other public comments. It can also brief FHWA staff. (Publication of notices of the proposed goal in newspapers is no longer required by USDOT.)

**Stakeholder consultation and public comment process.** The study team recommends a review and public input process that is concurrent with the public review and input concerning the Draft 2016 Disparity Study report. Public meetings held in late March 2016 could include MDT presentation and discussion of the proposed goal, projections and inclusions of any DBE groups in subcontract goals. MDT might extend its public comment period into April under this schedule.

**Timeline for MDT submission of proposed DBE goal to FHWA.** If MDT follows this schedule, it will be able to submit its proposed DBE goal, projections and plan for how it would meet this goal several months prior to the August 1, 2016 deadline for submission to FHWA.

**Early briefings of FHWA.** Under Recommendation #1, Keen Independent suggests early briefings of FHWA that might allow expedited USDOT review and approval of the proposed DBE goal.

### **3. MDT Utilization Data Collection and Reporting Procedures**

MDT is implementing new tracking systems that will better integrate information on its construction contracts that will improve the ease and accuracy of reporting DBE utilization information for those contracts. Keen Independent strongly supports and encourages MDT expansion of this initiative.

**Improvements to the process for collecting and reporting information on MDT construction contracts.** MDT might consider the following further improvements:

- DBE tracking systems for MDT construction contracts currently focus on information for any firm entering a subcontract with a prime contractor. As trucking, supplies and certain other services might be performed through other contractual agreements, MDT might explore the possibility of collecting comprehensive information for this work as well. Other state DOTs have similar difficulty obtaining this information. A first step might be requiring prime contractor notification to MDT of any service agreements or agreements that would place a firm on the project worksite. These types of agreements might not be available immediately after contract award, but MDT might require their submission prior to the firm's use on the project.
- MDT should determine whether it can track DBE participation on future state-funded contracts with the new information systems it is launching for its construction contracts. It might not need to require prime contractors to identify DBE subcontractors; MDT would code firms as DBEs when appearing on subcontractor lists and when prime contractors submit payment information for those firms. This recommendation would ensure that MDT was tracking the same DBE participation information for state-funded contracts as it does for FHWA-funded contracts. This might facilitate future analyses of the impact of the Federal DBE Program on FHWA-funded contracts.
- MDT might consider introducing systems to identify race, ethnicity and gender ownership of all firms doing business with MDT to track participation of minority- and women-owned firms parallel with the tracking of DBE participation for FHWA-funded contracts. The Disparity Study found considerable utilization of minority- and women-owned firms beyond currently-certified DBEs. Ownership would be self-reported by the business owner; there would be no formal MDT review of ownership and control as part of this system.

- MDT might start by introducing this feature for its new construction tracking system. Its database on race, ethnicity and gender ownership could start with information produced in the 2016 Disparity Study and be augmented with an improved bidders list (see recommendations concerning bidders list below).
- MDT might introduce a similar tracking system for small business participation in its contracts. As a start, MDT might request firms to self-identify whether or not they are small businesses based on U.S. Small Business Administration guidelines for small business size standards by business specialization found at <https://www.sba.gov/content/small-business-size-standards>. Keen Independent has compiled business size information for some but not all current MDT prime contractors and subcontractors as part of this study.

**Extension of MDT automated data collection to consultant contracts and for Purchasing.**

Although less than 10 percent of MDT transportation contract dollars are in engineering contracts, MDT should consider improving its data collection and reporting process for consultant contracts parallel with its system for construction contracts.

- MDT prepares monthly reports of DBE participation for the Transportation Commission. This currently requires manual data entry for consultant contracts, and the hardcopy data might not be received in a timely manner. It will be difficult to maintain accurate monthly reports without fully automated contract and payment information for all highway-related contracts.
- An improved tracking system for consultant and additional Purchasing contracts may also provide MDT with better tools to monitor DBE participation on individual consultant and Purchasing contracts in the future.

**Separate ongoing analysis of participation of former DBEs and other MBE/WBEs.** Keen Independent recommends that MDT consider preparing reports on MBE/WBE participation parallel to reports on DBE participation, including review of the participation of former DBEs in MDT contracts.

- One of the reasons that MDT might not have met its overall DBE goal in past years, and might not meet it in the future, is that its measurement of DBE participation is properly limited to businesses that are DBE-certified at the time of a contract. If firms that were DBE-certified when it set its overall DBE goal graduated or otherwise let certifications lapse, they might still obtain MDT work but not be counted toward total DBE participation.
- In addition, state DOTs such as MDT would benefit from information about the success or failure of former DBEs. That can provide a roadmap for MDT programs to assist DBEs currently in the Federal DBE Program or those that might enter the program. One measure of whether MDT is successful in operating the Federal DBE Program is whether DBEs grow to the level that they no longer qualify for certification. Such information would help MDT gauge future Program success.

- Finally, the 2016 Disparity Study identified as much participation of minority- and women-owned firms that were not currently certified as DBEs as it did for currently-certified DBEs. MDT might not have an accurate measure of whether its operation of the Program is addressing any race or gender discrimination affecting the Montana transportation contracting industry without complete information about the utilization of all minority- and women-owned firms on its contracts, including those firms that might be too large to be certified as DBEs.
- Such ongoing data collection also expedites completion of future MDT disparity studies.

In sum, Keen Independent recommends that MDT develop and implement collection and reporting of this information. MDT should consider including such information in its monthly reports to the Transportation Commission.

**Tracking of small business participation.** Based on interviews with staff, MDT has considered implementing a small business enterprise (SBE) program for its transportation contracts. In anticipation of a new SBE program, or to determine whether a program is needed, MDT should develop data on the small business status of firms participating in its transportation contracts as prime contractors and subcontractors. It should then develop reports on small business participation for different types of MDT contracts.

MDT staff indicated that its new data tracking system for construction contracts has the capabilities to report SBE participation if it had data on which prime contractors and subcontractors were small businesses. Information developed in this disparity study could assist MDT in building this information about its contractors.

If MDT were to develop a small business participation reporting system, it should work to include consultant contracts and Purchasing contracts as well.

#### **4. Future Maintenance of Bidders List**

Although MDT's current data collection appears to be more comprehensive than found for other state DOTs, MDT does not currently maintain a comprehensive bidders list that meets all of the requirements under the Federal DBE Program (see discussion in Chapter 4).

Keen Independent improved upon existing MDT information in the master bidders list developed in this study, as described in Chapter 5. These data can be the start of a new MDT bidders list; however, there is not complete information on age of firm, revenue and type of work performed for each firm on the list.

**Continued identification of bidders on construction contracts.** MDT should continue to compile data on construction bidders and to request prime contractors to prepare lists of firms providing subcontract and supply quotes on construction contracts.

**Identification of proposers on engineering and other consulting contracts.** MDT should also systematically collect information on firms submitting SOQs or otherwise competing as prime consultants on its consulting contracts.

As it has data on DBE status, MDT can easily append that information to its records for firms on the master bidders list.

**Compilation of comprehensive information concerning firm characteristics.** Creating a list of firms interested in MDT work is a first step. MDT will also need to collect, maintain and periodically update information about these firms, which is the more challenging step. MDT already maintains certain data for firms in its data systems but will need to expand this information. Keen Independent recommends collection of certain types of firm data beyond the bidders list data requirements in 49 CFR Section 26.11, as described below:

- MDT already has firm name and address data in its bidders list, and maintains information on DBE-certified firms. One challenge in maintaining such a list is to accurately identify branches, subsidiaries and affiliates of businesses under a single list for the “parent” company.
- Starting with the information collected by Keen Independent through this study, MDT should obtain firm age and revenue information for bidders list businesses. MDT should consider collecting revenue information on a self-reported basis based on general size categories rather than obtaining exact figures for a firm as suggested in federal regulations in 49 CFR 26.11(b)(2).
- MDT will also need to identify types of work performed. The Federal DBE Program requires this information based on NAICS codes; Keen Independent recommends that MDT also identify type of work based on more detailed work types. The 35+ codes used in this study might be a starting point.
- Keen Independent also recommends that MDT compile ownership information (beyond DBE status), to include race, ethnicity and gender ownership status of non-DBEs. (This additional information is not a requirement under the program, but would assist MDT in implementing aspects under Recommendation #3 above.)
- If MDT considers setting DBE contract goals in the future, it might benefit from including information about locations of work performed in the bidders list.

Periodic surveys, such as conducted in the 2016 Disparity Study, might be the most straightforward way to obtain this information for many of the firms on the bidders list.

## **5. Extension of Payment Notification Information to Consultant Contracts**

MDT implemented a new payment notification system for construction contracts awarded in February 2016 that will automatically notify subcontractors when MDT has paid an invoice from a prime contractor.

MDT should examine whether it could extend this payment notification system to its consultant contracts and any Purchasing contracts that might have subcontractors (or service providers, as discussed under Recommendation #3).

## 6. Further Review of Consultant Selection Procedures

Based on the very low utilization of minority- and women-owned firms in MDT engineering-related contracts identified in this study, discussions with MDT staff and interviews with business owners and trade associations, it appears timely for MDT to fully review whether its selection procedures for consultant contracts provide a level playing field for competition from smaller and newer businesses, and minority- and women-owned firms, including DBEs.

**Improvements to the selection process.** The negative comments provided in Appendix J about consultant selection processes go beyond MDT to public agencies in general, and they are similar to comments relating to state DOTs and local governments in other states as well. There are many practices to open the selection process to new firms, including:

- Ensuring that the assessment of qualifications is based on the individual who will perform the work rather than firm qualifications;
- Considering past work for any agency, not just MDT, when awarding points for past performance;
- Minimizing the weight of firm age, employment size, breadth of specializations and number of offices when evaluating consultants; and
- If necessary, adding an evaluation factor that deducts points based on the current amount of work a firm currently has with MDT.

**Encouragement of the use of subconsultants.** MDT might also encourage participation of subconsultants on consultant SOQs and when awarding consultant work. It could provide for identification of teams when considering qualifications, or even award more points for greater use of subconsultants. MDT's term contracts or task orders might also encourage use of subconsultants.

**Communication of contract opportunities and selection process.** Some of the interviews conducted in this study indicated that consultants do not understand MDT's processes for advertising opportunities or selecting consultants for specific assignments. As MDT improves its processes, Keen Independent recommends better communication of the process on MDT's website and through outreach to DBEs and other businesses.

## 7. New Small Business Program

Alone or with other public agencies in Montana, MDT might consider a small business program for its construction, consulting and other contracts. Such programs are encouraged under the Federal DBE Program and might apply to state-funded contracts as well.

MDT will need to consider:

- Definitions of small businesses;
- Certification process; and
- Types of benefits for small businesses.

Some states such as California have state-wide small business programs that limit benefits to firms with headquarters within the state. Such programs are precluded when using federal funding, however. MDT should not enact a small business program limited to firms located in Montana.

**Definitions of small businesses.** The U.S. Small Business Administration defines small businesses according to revenues (and employees for suppliers and manufacturers) and applies limits for each subindustry (engineering firms versus architecture firms, for example). It is the same subindustry-specific size standards applied in DBE certification and other federal programs. In 49 CFR Section 26.5, the Federal DBE Program also applies this standard when defining small businesses, except that a small business concern must also be below the overall revenue size limit for DBEs (\$23.98 million at the time of this study).

Keen Independent recommends that MDT consider this size definition if it enacts a small business program. One of the advantages is that any firm certified as a DBE would meet the small business guidelines.

**Certification process.** Some public agencies allow companies to self-certify as small businesses. If MDT uses a goals program or other preferences, Keen Independent recommends that it not allow self-certification and instead establish a formal certification process similar to what it uses for the Federal DBE Program.

**Benefits for small businesses.** The Federal DBE Program (49 CFR Section 26.39) provides for a small business set-aside for prime contracts, small business contract goals and other measures for small businesses.

MDT will need to consider what is allowable under state law when determining the structure of any small business program, and perhaps obtain legislation for that program;

- A small business set-aside for small prime contracts might be a powerful tool to promote small business utilization in types of work that may have had low participation (certain types of engineering contracts, for example).
- If MDT uses SBE contract goals, it would apply them to contracts that did not have DBE contract goals, per 49 CFR 26.39(b)(3).

## 8. Other Neutral Measures

As discussed throughout this report, the Federal DBE Program requires agencies such as MDT to meet the maximum feasible portion of its overall goal through race-neutral means. The following provides feedback from DBEs and others about MDT's ongoing efforts as well as Keen Independent suggestions for additional measures for MDT consideration.

**Ongoing MDT neutral efforts.** Many of the owners of DBE-certified firms interviewed in the study were very supportive of MDT's efforts in operating the Federal DBE Program, even without DBE contract goals.

- Many of the DBEs interviewed as part of this study reported that MDT's technical assistance and supportive services effects were useful.

- MDT received favorable comments about seminars, workshops, website building and other assistance, as discussed in Appendix J.
- Some DBEs that used MDT reimbursement for training or other services said that their firms benefitted considerably. An advantage of the reimbursement program is that it can be customized to the needs of different types of construction and professional services firms, and it covers cost of travel to training or other events.
- A few DBEs mentioned that DBE Program staff helped their companies when they faced certain difficulties on MDT projects.

MDT should consider this feedback as it continues to implement these types of efforts.

**Interest in additional bonding assistance training and programs.** It appears from this study that bonding continues to be a barrier that disproportionately affects minority- and women-owned firms.

Many of the business owners who had participated in training on bonding or bonding assistance programs reported that those programs were useful. MDT might consider expanding bonding assistance programs, perhaps through the USDOT Bonding Education Program.

The study team did not receive many comments about financing assistance, although many DBEs and other firms identified financing as a barrier.

**Limited interest in assistance obtaining business insurance.** Although MDT should examine the impact of its insurance requirements on small businesses, there was only one business owner interviewed as part of this study who suggested that training or assistance regarding business insurance would be helpful.

**Assistance using emerging technology.** Some business owners had taken advantage of past training and assistance, and some of the other DBE business owners interviewed expressed some interest in this type of assistance.

**Unbundling contracts.** Unbundling contracts is another neutral measure specifically mentioned in the Federal DBE Program. MDT might review its construction contracts, and especially its consultant contracts, to determine if it could unbundle more of its work. However, certain unbundling is not practicable or can be cost-inefficient. Feedback from in-depth interviews included the following.

- Many construction and engineering-related companies interviewed in this study indicated that unbundling of MDT contracts would be helpful to their firms. A number made specific recommendations for MDT to carve out work from larger projects that would normally be under a large prime contract and award it directly to firms providing that specialty work.
- Some thought that MDT was already unbundling work through district contracts, or that unbundling would cause more work for MDT and cost taxpayers more money. A few minority- and women-owned firms indicated that they like bigger contracts.

**Simplified bidding and reduced paperwork.** A number of firms and a trade association representative suggested that demanding specifications and paperwork are also barriers to small businesses to compete as prime contractors on MDT projects.

**Dissemination of information.** In the in-depth interviews, some business owners and managers from DBE-certified firms and other business requested additional ongoing communication from MDT, including a newsletter (see Appendix J). It appears that MDT had a monthly Inroads newsletter for DBEs through 2012, but has not published it as frequently since that time.

MDT might review this feedback when evaluating the breadth of its ongoing communications to DBEs and other businesses.

**MDT complaint procedures.** MDT should continue to maintain its procedures that DBEs and other businesses can use to make complaints regarding contracting processes, performing work on MDT projects and other matters.

Some business owners and managers interviewed were familiar with MDT complaint procedures and were supportive of the process. Most of those who were not familiar with those procedures thought that it was important for agencies such as MDT to have them. Only a few interviewees were skeptical about formal complaint or grievance procedures. One interviewee pointed out that it is difficult for them to remain anonymous.

**Encouragement of DBE certification as SBA 8(a) firms.** The DBEs that were also certified under the U.S. Small Business Administration 8(a) Program reported substantial benefits from the program. MDT staff report that they sometimes help DBEs obtain 8(a) certification. MDT might formalize this effort and research whether supportive services reimbursement can be used by DBEs seeking assistance in becoming SBA 8(a) certified.

**Other neutral measures.** The above are just some of the examples of neutral measures MDT has implemented or might consider. MDT should continue to review best practices in this area as they evolve across state DOTs and other agencies.

## **9. Operation of DBE Contract Goals if MDT Chooses to Resume their Use**

The following suggestions apply if MDT chooses to resume its use of DBE contract goals.

**Goal-setting.** Based on interviews with staff, MDT's past process for setting DBE contract goals was similar to those of other state DOTs and appeared to comply with federal regulations and USDOT guidance. Even so, MDT might consider expanding the information it has about availability of firms to conduct certain types of work in different locations in the state, and develop a simple goal calculation software application that could provide a starting point for its goal consideration. The Arizona Department of Transportation's internally-developed goal setting software is one example.

**Good faith efforts.** MDT discontinued its use of DBE contract goals for a short period in 2012 while it improved its process for considering prime contractors' good faith efforts to meet a goal. MDT will need to continue to assess whether its process effectively implements USDOT guidance concerning good faith effort consideration. This includes an internal appeals procedure available to a prime contractor whose good faith efforts submission is initially denied.

Some of the DBEs interviewed in this study reported abuse of the good faith efforts process, but not necessarily on MDT contracts. One business owner indicated that firms will call and leave a message and count that as good faith efforts to hire a DBE firm. Another interviewee from a DBE-certified firm said that an example of abuse of good faith efforts is that his firm receives 1,600 emails a year from prime contractors requesting bids on work the firm does not perform, including requests from states where the firm does not work.

USDOT guidance encourages agencies using DBE contract goals to have strong processes for reviewing good faith efforts submissions that maintain the spirit of the Federal DBE Program and do not become a “paper-pushing” exercise, as described in the interview above.

**Monitoring.** Based on discussions with DBE Program staff, MDT appeared to have well-developed monitoring systems in place for its contracts when it applied DBE contract goals. New tracking systems for construction contracts that begin with February 2016 contracts may make it easier for MDT to monitor its construction contracts.

- Interviews with DBEs and prime contractors obtained positive and negative comments about monitoring of goals contracts. One prime contractor, for example, reported that a DBE subcontractor underperformed on one of his MDT projects and that he thought that MDT treated his firm unfairly in this situation.
- Some DBEs reported being used by prime contractors to get work but then did not get any work out of a contract. They often said that the prime contractors or consultants performed the work themselves. Some of these allegations were specific to abuse of the DBE contract goals program.

MDT should be aware of monitoring failures in other states when assessing the soundness of its own procedures.

**Extension of the program to consultant contracts.** If MDT chooses to implement a DBE contract goals program, it should review how it might extend that program to consultant contracts with FHWA-funding. Many other state DOTs throughout the country set DBE contract goals for consultant contracts using similar procedures as for construction contracts.

However, consultants are sometimes selected to be placed on a panel for future use based on general qualifications without specific scopes of work. This requires modification to standard goal-setting for these contracts. Some state DOTs set an overall goal for these solicitations, which are then refined through negotiations with the prime consultant when term contracts or task orders are assigned.

**Extension of the program to design-build contracts.** Keen Independent recently completed research for the Transportation Research Board concerning DBE contract goals on alternative delivery method contracts, including design-build contracts. If MDT chooses to use a DBE contract goals program, it should extend it to design-build contracts using one of the methods described in the report.<sup>1</sup>

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<sup>1</sup> [http://onlinepubs.trb.org/onlinepubs/nchrp/nchrp\\_syn\\_481.pdf](http://onlinepubs.trb.org/onlinepubs/nchrp/nchrp_syn_481.pdf).

## 10. DBE and other Certification

MDT is the sole DBE certifying agency for Montana, and must maintain an effective certification process. If it implements an SBE program, MDT might become the certifying agency for that program as well, even if the program extends to other state or local agencies.

**Recruitment, encouragement and assistance for firms becoming DBE-certified for the first time.** MDT, as it has in the past, will need to continue to recruit, encourage and assist firms with first-time DBE certification.

- With the data provided on non-DBE-certified minority- and women-owned firms in this study, MDT might make renewed efforts to recruit new DBEs in Montana into the Federal DBE Program. If MDT chooses to operate a DBE contract goals program in the future, the study team's research indicates that this will aid in recruitment of new DBEs.
- As with other certifying agencies throughout the country, “paperwork” is the primary complaint of firms becoming DBE-certified for the first time through MDT. When asked about the certification process in in-depth interviews, about one-half of the DBE-certified firms indicated the process was straightforward but somewhat daunting due to paperwork. Some of these individuals were appreciative of MDT staff who helped them with the process. (About one-half of firms interviewed had more negative comments, including that the process was difficult, time-consuming and took months to complete.)

**Certification renewals.** Certified DBEs are required to submit information to the certifying agency as part of an annual certification renewal process. Many owners or managers of DBE-certified firms said that once their firms were certified, becoming recertified with MDT or certified in other states was relatively easy. Even so, some interviewees reported that, due to the paperwork and lack of DBE goals, they had considered not recertifying. As it has in the past, MDT will need to encourage existing DBEs to submit annual renewals to continue to participate in the Program.

**Protections against abuse of the Federal DBE Program and consideration of new regulations concerning economic disadvantage.** To avoid potential abuse of the Federal DBE Program by ineligible firms, USDOT provides guidance to certifying agencies about proper review of certification applications.

MDT will need to continue to properly evaluate ownership and control of firms applying for DBE certification. Input collected as part of this study suggests that there remains potential for abuse. When asked about any “front” companies or other abuse of DBE certification, a few business owners or managers had comments.

- One interviewee said that he is aware of instances where husbands arrange for their wives to own 51 percent of the company just to achieve DBE certification, even though the wives have no real involvement in the business.

- A respondent from a woman-owned consulting firm reported “collusion by DBEs who are married” and “DBEs hiding assets in net worth reports.”
- Another interviewee reported seeing a few “front” companies, especially when the DBE Program first started. He said firms launched their own DBE companies to meet goals. He said he did not think that is prevalent now. Some interviewees had no comments about any fronts or fraud.

USDOT has also recently refined the concept of economic disadvantage and has provided certifying agencies with more guidance on factors to consider when considering the wealth of an applicant. Under 49 CFR 26.67, a certifying agency such as MDT should determine that an individual is not economically disadvantaged even though he or she meets revenue guidelines and is technically under the \$1.32 million personal net worth cap if the individual is able to accumulate substantial wealth. The federal regulations provide some guidance about factors to consider, however, there is no associated “bright line” test for denial of certification. Factors listed in 49 CFR Section 26.67(b) are:

1. Whether the average adjusted gross income of the owner over the most recent three year period exceeds \$350,000;
2. Whether the income was unusual and not likely to occur in the future;
3. Whether the earnings were offset by losses;
4. Whether the income was reinvested in the firm or used to pay taxes arising in the normal course of operations by the firm;
5. Other evidence that income is not indicative of lack of economic disadvantage; and
6. Whether the total fair market value of the owner’s assets exceed \$6 million.

Because this new aspect of certification is new, state DOTs and other certifying agencies do not have much experience considering these aspects of wealth. MDT should further research best practices as they emerge.

## **11. Schedule for Future Availability and Disparity Studies**

The time between the last disparity study for MDT in 2009 and the present study is seven years. Keen Independent recommends that MDT conduct a disparity study update or new disparity study within a shorter time frame.

**Potential disparity study update by 2019.** MDT might consider conducting a disparity study update prior to its 2019 submission of a DBE goal and projection for its FHWA-funded contracts for FFY 2020 through FFY 2022. That update would analyze:

- Utilization and availability of minority- and women-owned firms (by group) for MDT FHWA- and state-funded contracts from October 2014 through September 2017, or perhaps a longer time period;
- Availability of DBEs for FHWA-funded contracts for purposes of establishing a new base figure for its overall DBE goal;

- DBE utilization and the effectiveness of any new or expanded race- and gender-neutral programs, which would assist MDT when projecting the portion of its future overall DBE goal to be met through new means; and
- Other aspects of MDT's operation of the Federal DBE Program, including review of compliance with any changes in federal regulations or guidance concerning the Program.

That study might or might not include collection and analysis of quantitative and qualitative information about the local marketplace. Even though the study period for MDT contracts might be only three to four years, that time period, coupled with the results of the 2016 Disparity Study, might be the most instructive for MDT decisions concerning its operation of the Program for FFY 2020 through FY 2022.

**Potential full disparity study within 5-6 years, or before.** With or without an intervening disparity study update, MDT might consider a full disparity study within the next five to six years that would include each of the components listed above, and quantitative and qualitative information about the local marketplace, within the next five to six years. It might also be timed to support setting an overall DBE goal, projecting the portion of the goal to be met through neutral means, and other aspects of a three-year plan for operating the Federal DBE Program for FHWA-funded contracts.