CHAPTER 9.
Overall Annual DBE Goal

As part of its implementation of the Federal DBE Program, ODOT 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. At the time of this study, ODOT had an overall annual goal of 13.10 percent for FHWA-funded contracts. It must submit a new goal in 2016 for federal fiscal years 2017 through 2019 (new goal starting October 1, 2016).

ODOT 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 ODOT might consider as part of setting its overall annual DBE goal. Chapter 9 is organized in the following 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 (step 1);

B. Consideration of a step 2 adjustment; and

C. Quantification of any step 2 adjustment.

Through these steps, agencies such as ODOT are to determine "the level of DBE participation you would expect absent the effects of discrimination."[1]

A. Establishing a Base Figure

Establishing a base figure is the first step in calculating an overall annual goal for DBE participation in ODOT's FHWA-funded transportation contracts.

As presented in Chapter 6, current and potential DBEs are available for 15.84 percent of ODOT FHWA-funded transportation contracts based on analysis of October 2010 through September 2014 FHWA-funded contracts.[2] ODOT might consider 15.84 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 2010 through September 2014 study period.

Chapter 6 explains the availability analysis that developed the base figure.

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[1] 49 CFR Section 26.45(b).

[2] As discussed in Chapter 5, potential DBEs include current DBEs and those MBE/WBEs that are DBE-certified or appear that they could be based on annual revenue limits described in 49 CFR Part 26.

As point of reference, Keen Independent also calculated the base figure only counting currently certified DBEs. The base figure including only current DBEs is 6.00 percent.

B. Consideration of a Step 2 Adjustment

Per the Federal DBE Program, ODOT must consider potential step 2 adjustments to the base figure as part of determining its overall annual DBE goal for FHWA-funded contracts. ODOT 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.[3]

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 ODOT 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 ODOT 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."[4]

[3] 49 CFR Section 26.45.

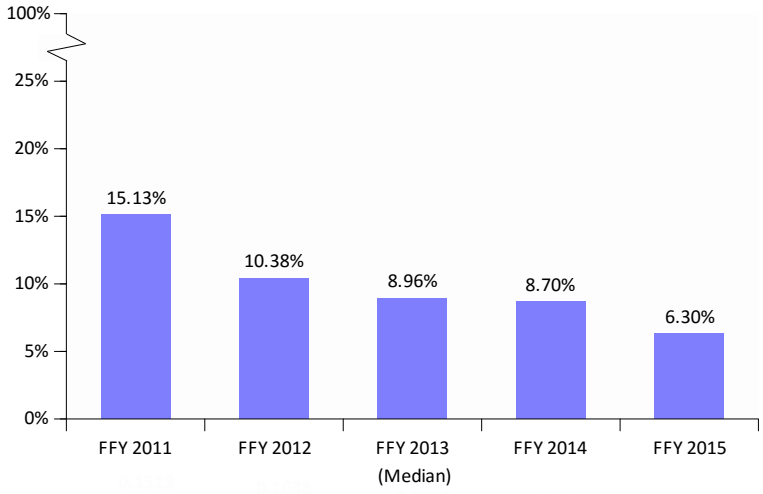
[4] Section III (A)(5)(c), see Tips for Goal-Setting in the Federal Disadvantaged Enterprise (DBE) Program. (June 25, 2013) Available at http://www.dot.gov/osdbu/disadvantaged-business-enterprise/tips-goal-setting-disadvantaged-business-enterprise

Figure 9-1 presents information about past DBE participation based on commitments/awards data from ODOT Uniform Reports of DBE Awards or Commitments and Payments reported to the FHWA. Participation in FFY 2013 (8.96%) represented the median annual participation based on these data. DBE participation is shown for FFYs 2011, 2012, 2013, 2014 and 2015. This provides one more year of DBE utilization information than included in the disparity study utilization data, which ended with FFY 2014.

ODOT data regarding commitments and awards were more instructive than payments because ODOT did not include non-committed DBEs without Commercially Useful Function (CUF) review in its payments data.

Note that, due to data limitations, ODOT had not included information about FHWA-funded engineering-related contracts in its Uniform Reports submitted to FHWA up until FFY 2015.[5] Keen Independent's analysis indicated lower DBE utilization during the study period on engineering-related contracts (3.3%). As such, the results in Figures 9-1 somewhat overstate actual DBE participation on FHWA-funded contracts combining construction and engineering.

Figure 9-1.
ODOT reported past DBE participation on FHWA-funded contracts based on awards, federal fiscal years 2011, 2012, 2013, 2014 and 2015



Source: ODOT Uniform Reports of DBE Awards/Commitments and Payments.

The median DBE participation for FHWA-funded contracts indicates that ODOT might make a downward step 2 adjustment based on this factor, as explained later in this chapter.

DBE participation based on Keen Independent utilization analysis for FHWA-funded contracts. Keen Independent's analysis identified 7.42 percent participation of DBEs on FHWA-funded contracts from October 2010 through September 2014, as shown in Figure 7-4 in Chapter 7. Because Keen Independent was able to include data for engineering-related contracts, this utilization figure might be a more accurate indicator of past DBE participation on all FHWA-funded contracts than ODOT reports.

[5] FHWA was aware of these data limitations.

2. Information related to employment, self-employment, education, training and unions. Chapter 5 summarizes information about conditions in the Oregon transportation contracting industry for minorities, women and MBE/WBEs. Detailed quantitative analyses of marketplace conditions in Oregon 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 in the Oregon construction and engineering industries. Such barriers may affect the availability of MBE/WBEs to obtain and perform ODOT and local agency transportation contracts. There are also barriers to business ownership for those working in these industries.

It may not be possible to quantify all the cumulative effects that barriers may have had in depressing the availability of minority- and women-owned firms in the Oregon 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 Oregon 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).[6] Those analyses revealed that Hispanic Americans, Native Americans and white women working in construction were less likely than non-minorities and white men to own construction businesses, even after accounting for various race- and gender-neutral personal characteristics. Each of these disparities was statistically significant.

- In addition, women working in the Oregon engineering industry were less likely than men to own engineering companies after accounting for various gender-neutral personal characteristics. This disparity was statistically significant. There were disparities for certain minority groups as well, but the results were such that the study team could not quantify the impact on availability.

[6] 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 Hispanic Americans, Native Americans and white women 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.[7]

Figure 9-2 calculates the impact on overall MBE/WBE availability, resulting in possible upward adjustment of the base figure to 21.31 percent. The analysis included the same contracts that the study team analyzed to determine the base figure (i.e., FHWA-funded construction and engineering prime contracts and subcontracts that ODOT and local agencies awarded from October 2010 through September 2014). Calculations are explained below.

Figure 9-2.
Potential step 2 adjustment considering disparities in the rates of business ownership

Current and potential DBEs	a. Current availability	b. Disparity index for business ownership	c. Availability after initial adjustment*	d. Availability after scaling to 100%	e. Components of overall DBEs availability**
Construction					
Hispanic Americans	2.04 %	53	3.85 %	3.58 %	
Native Americans	2.86	61	4.69	4.36	
Other minorities	3.18	n/a	3.18	2.96	
White women	7.71	67	11.51	10.71	
Minorities and women	15.79 %	n/a	23.23 %	21.62 %	19.20 %
All other businesses	84.21	n/a	84.21	78.38	
Total firms	**100.00** %	n/a	**107.44** %	**100.00** %	
Engineering and other subindustries					
Minorities	8.75 %	n/a	8.75 %	8.48 %	
White women	7.53	70	10.76	10.42	
Minorities and women	16.28 %	n/a	19.51 %	18.90 %	2.11 %
White men/majority	83.72	n/a	83.72	81.10	
Total firms	**100.00** %	n/a	**103.23** %	**100.00** %	
Total for current and potential DBEs	**15.84** %	n/a	n/a		**21.31 %**
Difference from base figure					**5.47 %**

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 = 88.8%, engineering = 11.2%).

Source: Keen Independent based on FHWA-funded contracts for October 2010 through September 2014 and statistical analysis of U.S. Census Bureau American Community Survey data for Oregon for 2008-2012.

[7] 49 CFR Section 26.45(d)(3).

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 ODOT awarded for construction and engineering for October 2010-September 2014 (88.8% weight for construction and 11.2% weight for engineering). The rows and columns of Figure 9-2 present the following information from Keen Independent's "but for" analyses:

a. Current availability. Column (a) presents the current availability of MBE/WBEs by group for construction and for engineering and other subindustries among firms included in the base figure analysis (i.e., excludes graduated DBEs, firms with revenue too high to be a DBE and firms on BOLI list). Each row presents the percentage availability for MBEs and WBEs. The current combined availability of MBE/WBEs for ODOT FHWA-funded transportation contracts for October 2010-September 2014 is 15.84 percent, as shown in bottom row of column (a).

b. Disparity indices for business ownership. As presented in Appendix F, Hispanic Americans, Native Americans and white women working in the Oregon construction industry were significantly less likely to own construction firms than similarly-situated non-minorities and white men. Keen Independent projected business ownership rates for those groups if they owned businesses at the same rate as non-minorities and white males with similar personal characteristics (i.e., business ownership rate for those firms given a level playing field). The study team then calculated a business ownership disparity index for each group by dividing the actual business ownership rate by the business ownership rate projected given a level playing field, and then multiplying the result by 100.

   Column (b) of Figure 9-2 presents disparity indices related to business ownership for the different racial/ethnic and gender groups. For example, as shown in column (b), Hispanic Americans owned construction businesses at 53 percent of the rate that would be expected based on the projection if business ownership rates were in line with white males who had similar personal characteristics. Appendix F explains how the study team calculated the disparity indices.

c. Availability after initial adjustment. Column (c) presents availability estimates for MBEs and WBEs by industry after initially adjusting for statistically significant disparities in business ownership rates. 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. For example, for Hispanic American-owned firms, current availability (2.04%) was divided by the disparity index of 53, with 3.85 percent as the result after this initial adjustment.

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 Hispanic Americans shown for construction was calculated in the following way: (3.85% ÷ 107.44%) x 100 = 3.58%.

e. Components of overall DBE goal with upward adjustment. Column (e) of Figure 9-2 shows the component of the total base figure attributed to the adjusted MBE and WBE 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., 88.8% for construction and 11.2% for engineering). For example, the study team used the 21.62 percent figure shown for MBE/WBE availability for construction firms in column (d) and multiplied it by 88.8 percent for a result of 19.20 percent. A similar weighting of MBE/WBE availability for engineering/other produced a value of 2.11 percent.

   The values in column (e) were then summed to equal the overall base figure adjusted for barriers in business ownership, which is 21.31 percent as shown in the bottom of column (e).

   Finally, Keen Independent calculated the difference between the "but for" MBE/WBE availability (21.31%) and the base figure calculated from current availability (15.84%) to determine the potential upward adjustment. This difference, and potential upward adjustment, is 5.47 percentage points (21.31% – 15.84% = 5.47%).

Therefore, based on information related to business ownership, ODOT might consider an upward adjustment to its overall DBE goal of up to 5.47 percentage points. This goal would be 21.31 percent.

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 Oregon marketplace.

- Any barriers that MBE/WBEs face in obtaining financing and bonding would also place those businesses at a disadvantage in obtaining ODOT and local agency construction and engineering prime contracts and subcontracts.

Note that financing and bonding are closely linked, as discussed in Chapter 5, Appendix G 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 a relatively large number of minority- and women-owned firms compared with majority-owned firms based on survey results (see Appendix G).

The information about financing, bonding and insurance supports an upward step 2 adjustment in ODOT's overall annual goal for DBE participation in FHWA-funded contracts, but there is not a clear way to quantify the impact of such barriers on the current availability of MBE/WBEs.

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.[8]

Among the "other factors" examined in this study was the success of MBE/WBEs relative to majority-owned businesses in the Oregon marketplace. There is quantitative evidence that certain groups of MBE/WBEs 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 Oregon transportation contracting industry.

There is not a straightforward way to project the number of MBE/WBEs available for ODOT work but for the effects of these other factors.

C. Quantification of Any Step 2 Adjustment

Quantification of potential downward or upward step 2 adjustments is summarized 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 ODOT based past DBE participation on Keen Independent's analysis of FHWA-funded contracts for October 2010 through September 2014. DBEs obtained 7.42 percent of FHWA-funded construction and engineering-related contracts contract dollars during this time period.

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 15.84 percent base figure and 7.42 percent DBE participation is 8.42 percentage points. One-half of this difference is a downward adjustment of 4.21 percentage points. The goal would then be calculated as 15.84% – 4.21% = 11.63% (see Figure 9-3 on page 9).

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 5.47 percentage points to reflect the "but-for" analyses of business ownership rates presented in Figure 9-2. If ODOT made this adjustment, the overall DBE goal for FHWA-funded contracts would be 21.31 percent (15.84% + 5.47% = 21.31%). Figure 9-3 also shows these calculations.

[8] 49 CFR Section 26.45.

3. Any disparities in the ability of DBEs to get financing, bonding and insurance. Analysis of financing, bonding and insurance indicates that an upward adjustment is appropriate. However, as explained, impact of these factors on availability could not be quantified.

4. Other factors. Impact of the many barriers to success of MBE/WBEs in Oregon could not be specifically quantified. However, the evidence supports an upward adjustment.

Figure 9-3.
Potential step 2 adjustments for ODOT's overall DBE goal for FHWA-funded contracts,
FFY 2017-FFY 2019

Step 2 adjustment component		Value		Explanation
Lower range of overall DBE goal				
Base figure		15.84	%	From base figure analysis
Evidence of current capacity	-	7.42		Past DBE participation
Difference		8.42	%	
	÷	2		Reduce by one-half
Adjustment		4.21	%	Downward adjustment for current capacity
Base figure		15.84	%	From base figure analysis
Adjustment for current capacity	-	4.21		Downward step 2 adjustment
Overall DBE goal		**11.63**	%	Lower range of DBE goal
Upper range of overall DBE goal				
Base figure		15.84	%	From base figure analysis
Adjustment for "but for" factors	+	5.47		"But for" step 2 adjustment for business ownership
Overall DBE goal		**21.31**	%	Upper range of DBE goal

Source: Keen Independent analysis.

Summary. ODOT will need to consider whether to make a downward, upward or no step 2 adjustment when determining its overall DBE goal. Figure 9-4 summarizes the potential adjustments described in this chapter.

Figure 9-4.
Potential step 2 adjustments to ODOT overall DBE goal for FHWA-funded contracts, FFY 2017–FFY 2019

Source: Keen Independent analysis.