

El Dorado County

Disadvantaged Business Enterprise (DBE) Program

Methodology and Calculations Used to Determine Annual Anticipated DBE Participation Level (AADPL) for Federal Highway Administration (FHWA) Funded Projects for Federal Fiscal Years 2011/2012 through 2013/2014

- I. First, determine the FHWA funded projects that El Dorado County anticipates awarding in the upcoming three (3) federal fiscal years (FFY). List these projects, including both construction and consultant contracts. Next, determine the various work types and amounts of work that will be involved, using the work categories and codes that can be found on the California Unified Certification Program (CUCP) website. For each Work Category, calculate the percentage (Weight) of the total contract work to be performed. Table 1 provides this information.

TABLE 1

Projects	Work Category	NAICS Code	Estimated Contracts FFY 2011/2012 through 2013/2014	% of FHWA Funding by Work Category (Weight)
Pleasant Valley Road at Oak Hill Road Intersection Improvements	Highway, Street, & Bridge Construction	237310	\$16,933,680	88%
Rubicon Trail at Ellis Creek - Bridge Replacement				
Wentworth Springs Road at Gerle Creek - Bridge Replacement				
Sly Park Road at Clear Creek Crossing - Bridge Replacement				
Green Valley Road at Weber Creek - Bridge Replacement				
Bucks Bar Road at the North Fork Cosumnes River - Bridge Rehabilitation				
Cold Springs Road at Mount Shasta Lane Realignment				
Salmon Falls Road South of Glenesk Lane Realignment				
Newtown Road at South Fork of Weber Creek - Bridge Replacement				

Projects	Work Category	NAICS Code	Estimated Contracts FFY 2011/2012 through 2013/2014	% of FHWA Funding by Work Category (Weight)
Pleasant Valley Road at Oak Hill Road Intersection Improvements	Water and Sewer Line and Related Structures Construction	237110	\$50,000	0.3%
Green Valley Road at Weber Creek - Bridge Replacement	Electrical Contractors	238210	\$75,000	0.4%
Pleasant Valley Road at Oak Hill Road Intersection Improvements	General Freight Trucking, Local	484110	\$145,264	0.8%
Sly Park Road at Clear Creek Crossing - Bridge Replacement				
Green Valley Road at Weber Creek - Bridge Replacement				
Cold Springs Road at Mount Shasta Lane Realignment				
Salmon Falls Road South of Glenesk Lane Realignment				

Projects	Work Category	NAICS Code	Estimated Contracts FFY 2011/2012 through 2013/2014	% of FHWA Funding by Work Category (Weight)
Alder Drive at EID Canal - Bridge Replacement	Environmental Consulting Services	541620	\$2,033,000	10.6%
Bassi Road at Granite Creek - Bridge Replacement				
Blair Road at EID Canal - Bridge Replacement				
Green Valley Road at Indian Creek - Bridge Replacement				
Hazel Valley Road at PG&E Canal - Bridge Replacement				
Mosquito Road Bridge at South Fork American River - Bridge Replacement				
Mt. Murphy Road at South Fork American River - Bridge Replacement				
Silver Fork Road at South Fork American River Bridge Replacement				
	TOTALS:		\$19,236,944	100%

II. In order to determine the AADPL base figure, first compute the AADPL formula for each Work Category:

$$\text{AADPL (per Work Category)} = \left[\sum \frac{\text{No. of DBEs in a Work Category}}{\text{No. of All Firms in same Work Category}} \times \text{Weight} \right] \times 100$$

Each Work Category AADPL is then multiplied by its percentage (Weight) of the total work to be performed. The resulting numbers are then added up to obtain the overall AADPL Base Figure:

FORMULA AADPL (Base Figure) =

$$\left[+ \frac{\text{\# of DBEs in 237310}}{\text{\# of all firms in 237310}} \times 0.88 + \frac{\text{\# of DBEs in 237110}}{\text{\# of all firms in 237110}} \times 0.003 \right] \times 100 + +$$

$$\left[+ \frac{\text{\# of DBEs in 238210}}{\text{\# of all firms in 238210}} \times 0.004 + \frac{\text{\# of DBEs in 484110}}{\text{\# of all firms in 484110}} \times 0.008 \right] \times 100 +$$

$$\left[+ \frac{\text{\# of DBEs in 541620}}{\text{\# of all firms in 541620}} \times 0.106 \right] \times 100$$

To determine the number of DBE firms (for the *numerator* in the calculation):

1. For each NAICS Work Category listed above, determine total number of DBEs in El Dorado County’s Market Area¹ that can perform that type of work. To do this, use the CUCP website, which can be accessed by going to

http://www.dot.ca.gov/hq/bep/find_certified.htm

and clicking on the “Click here to Access the DBE Query Form” link.

2. On the resulting page, go to the “County” box and highlight all the counties in the agency’s Market Area.

3. Click on the appropriate 2-digit code in the “NAICS Categories” box. This will automatically bring up the more detailed 6-digit NAICS Work Category codes in a new box. Highlight the appropriate 6-digit

¹ The Market Areas for the NAICS Categories 237310, 237110, 238210, and 484110 were determined by using the bidders’ list containing all prime and subcontractors that bid on El Dorado County Department of Transportation construction projects over the past four Federal Fiscal Years. The counties in which the majority of bidders were located were considered to be within the Market Area. This approach resulted in six counties being in the Market Area: Alameda, Contra Costa, El Dorado, Placer, Sacramento, and Solano for NAICS categories 237310 and 237110. For NAICS category 238210 Alameda and Sacramento Counties were determined to be the Market Area. For NAICS category 484110 El Dorado, Sacramento and Solano Counties were determined to be the Market Area.

The Market Area for the NAICS Category 541620 was determined by compiling a list of all ongoing consultant contracts within the El Dorado County Department of Transportation and sorting the list by type of service (e.g. Civil Engineering, Geotechnical, Right of Way, and Environmental Consulting Services) and location. The resulting Market Area for Environmental Services is Sacramento County.

code. Finally, click the “Start Search-PDF Results” button at the bottom of the page. This will give the number of DBE firms available to do work in that NAICS Work Category, followed by a list of individual firms.

4. To narrow it down to El Dorado County’s Market Area, print out the list and cross off any firms that are not located within the Market Area counties. This will result in a list of DBE firms that are in El Dorado County’s Market Area. The number of firms remaining on the list becomes the numerator for that Work Category.

5. Repeat this process for each Work Category.

To determine the total number of firms (for the denominator in the calculation):

1. For each NAICS Work Category, determine the total number of firms in El Dorado County’s Market Area that are willing to perform that type of work. To do this, go to the following website:

<http://censtats.census.gov/cbpnaic/cbpnaic.shtml>

2. At the top of the page, select “California” and click on the “Go” button.

3. On the next page, use the drop-down menu to select one of the counties in El Dorado County’s Market Area, and click the “Select” button. The “Industry Codes” listed are the same as the NAICS codes. For each 2-digit category that is being used, click on the “Detail” button. This will bring up a list of all of the 6-digit Work Category codes contained within that category.

4. For each 6-digit Work Category to be used, click the “Compare” button to get a county-by-county list of the total number of establishments. Add the numbers for each county in the Market Area to get the total number of firms for this type of work, which becomes the denominator for that Work Category.

5. Repeat this process for each Work Category.

After completing the above tasks, Table 2 results:

TABLE 2

NAICS Category	# of DBE Firms (Numerator)	Total # of Firms (denominator)	% of total contract funding (Weight)
237310	23	148	88%
237110	4	126	0.3%
238210	6	628	0.4%
484110	9	105	0.8%
541620	6	90	10.6%

Entering the values shown in Table 2 into the Formula AADPL (Base Figure) yields an **AADPL (Base Figure) of 14.46% (15% rounded).**

III. Race-Conscious (RC) Portion of AADPL (Using UDBEs):

To obtain the **RC AADPL**, use the same method shown above, except substitute UDBEs for DBEs in the formula.

To get the number of UDBE firms (UDBE firms = male-owned UDBE firms + all female-owned firms), eliminate all firms on the DBE lists from the CUCP database that are not designated as either female-owned or male-owned with the UDBE-designated ethnicities (Asian Pacific, Native American, African American).

Table 3 shows the number of UDBE firms, number of total firms, and Work Category Weights results.

TABLE 3

NAICS Category	# of UDBE Firms (Numerator)	Total # of Firms (denominator)	% of total contract funding (Weight)
237310	10	148	88%
237110	2	126	0.3%
238210	6	628	0.4%
484110	4	105	0.8%
541620	5	90	10.6%

Inserting the Table values as appropriate in the formula

$$RC\ AADPL = \left[\sum \frac{No.\ of\ UDBEs\ in\ a\ Work\ Category}{No.\ of\ All\ Firms\ in\ same\ Work\ Category} \times Weight \right] \times 100$$

Results in a **RC AADPL = 6.57% (rounded to 7%)**.

IV. Race-Neutral (RN) Portion of AADPL:

The Race-Neutral portion of the AADPL is the overall AADPL minus the Race-Conscious portion.

$$RN\ AADPL = AADPL - RC\ AADPL = 14.46 - 6.57 = 7.89\% \text{ (rounded to 8\%)}$$

V. Step Two - Adjusting the Base Figure – Section 49 CFR 26.45 (d)

According to the guidelines, Step 2 is to examine all of the evidence available in the jurisdiction to determine what adjustment, if any, is needed to the Base Figure to arrive at the overall goal. Factors to consider include:

- Past participation (the volume of work DBEs have performed in recent years) or other measure of demonstrated capacity;
- Evidence from disparity studies conducted anywhere within our jurisdiction, to the extent that it is not already accounted for in the base figure;
- Statistical disparities in the ability of DBEs to get financing, bonding, and insurance required to participate in our program; and
- Data on employment, self-employment, education, training and union apprenticeship programs, to the extent that these factors can be related to the opportunities for DBEs to perform in our program.

A. Adjustments Based on Past Participation

Table 4 contains the list of past FHWA-funded projects under the Race Conscious DBE Program, the level of AADPL and Race Conscious DBE participation, and the AADPL and Race Conscious goals for the FFY.

TABLE 4

	Year	Project Name Type of Contract	AADPL/RC % Attainment	AADPL/RC Goal
1	09-10	Wentworth Springs at Gerle Creek – Bridge Replacement – On-call Geotechnical/Geological Engineering Services	12.2% / 10.7% Not all projects have been completed	18% / 6.6%
2	09-10	US Highway 50/Missouri Flat Road Interchange Improvements – 1B – Construction		
3	09-10	US Highway 50/Missouri Flat Road Interchange Improvements – 1B – Construction Support		
4	09-10	Green Valley Road at Tennessee Creek – Bridge Replacement Project – Vegetation and Tree Removal		
5	09-10	Bucks Bar Bridge at N. Fork Cosumnes River Bridge Replacement Project – 3D Laser Scanning		
6	09-10	Mosquito Bridge Materials - Supplier		
7	09-10	Ice House Road Bridges Maintenance - On-call Geotechnical/Geological Engineering Services		
8	09-10	Rubicon Trail at Ellis Creek Bridge Replacement Project - On-call Geotechnical/Geological Engineering Services		
9	09-10	Green Valley Road Bridge at Weber Creek Bridge Replacement - On-call Environmental Review Services		
10	09-10	Latrobe Road Asphalt Overlay - Construction		
11	09-10	Pioneer Trail Overlay – Construction		
12	09-10	Northside School Class 1 Bike Path, Phases 1 & 2 – Engineering Services		

TABLE 4

	Year	Project Name Type of Contract	ASDPL/RC % Attainment	AADPL/RC Goal
13	10-11	Green Valley Road at Tennessee Creek Bridge Replacement – On- call Geotechnical/Geological Engineering Services	No projects have been completed	15% / 9%
14	10-11	Bucks Bar Bridge at N. Fork Cosumnes River Bridge Replacement Project – Feasibility Study		
15	10-11	Green Valley Road at Tennessee Creek Bridge Replacement - Construction		
16	10-11	Rubicon Trail at Ellis Creek Bridge Replacement Project – Environmental (Historic Resource Evaluation Report)		
17	10-11	Rubicon Trail at Ellis Creek Bridge Replacement Project - Environmental		
18	10-11	Bucks Bar Bridge at N. Fork Cosumnes River Bridge Replacement Project – Environmental Technical Studies and Engineering Support Services		

Since not all projects have been completed final numbers on the goals attained are not available. Therefore no adjustment to the goal for FFY 2011-2012 through 2013-2014 is recommended.

B. Evidence Based Disparity Studies within County’s Jurisdiction

The County is relying on the Caltrans Disparity Study and has not performed its own study. The results of the Caltrans Study, the use of race-conscious goals for the four underutilized DBE groups, have been incorporated into the County’s base figure.

C. Statistical disparities in the ability of DBEs to get financing, bonding, and insurance and Data on employment, self-employment, education, training and union apprenticeship programs

Appendix F of Caltrans Disparity Study examines in detail the numerous barriers to entry and expansion in the transportation industry. Highlights of the findings are¹:

- **Employment.** Employment of African Americans in the construction industry is relatively low compared to other industries in California, even among entry-level jobs. The employment of women in construction as a whole is relatively low, and very few women in the construction trades are involved in transportation construction. Employment of Hispanic Americans in the construction industry is considerably higher than for all industries as a whole (37 percent in construction and 29 percent in all industries in California).

¹ 2009 Goal & Methodology (Amended) to Federal Highway Administration (FHWA). In Caltrans 2010 Goal and Methodology Submittal to FHWA, Caltrans notes that four months of data under a partial Race-Conscious Program is not sufficient time and data to amend its goal, methodology, or approach, since FHWA approved Caltrans 2009 goals and methodology in April 2009, and Caltrans submitted its 2010 goals and methodology in September 2010 - <http://www.dot.ca.gov/hq/bep/>

- **Advancement.** There appears to be disparities in the advancement of Hispanic Americans to certain construction occupations and first-line supervisory positions. Compared to non-Hispanic whites (and men), relatively few African Americans, Hispanic Americans, and women working in construction are managers.
- **Business Formation and Ownership.** BBC examined U.S. Census data on business ownership rates using similar methods to the information reviewed in the court cases involving the Illinois and Minnesota Departments of Transportation. African Americans, Hispanic Americans, Subcontinent Asian Americans, and women working in the California construction industry are less likely than non-Hispanic whites to own construction businesses. BBC, through regression analysis, identified statistically significant disparities after controlling for neutral factors (see Appendix H of the Study).
If qualified members of these groups working in the construction industry owned businesses at the same rate as non-Hispanic whites (and men), then there would be about twice as many construction firms owned by African Americans, Hispanic Americans, Subcontinent Asian Americans, and women in California.
- **Rates of business closure.** BBC's analyses found that African American-owned firms in California, in general, are more likely to close than other firms (see Appendix F of the Study).
- **Access to Capital.** Evidence reveals that minority-owned firms face disadvantages in accessing capital necessary to start and expand businesses.
- **Business Capital from Home Equity.** Home equity is an important source of capital for business start-up and growth.
 - Fewer African Americans, Hispanic Americans, and Native Americans in California own homes than non-Hispanic whites, and those who do own homes tend to have lower home values.
 - African Americans, Asian-Pacific Americans, Hispanic Americans, and Native Americans applying for home mortgages are more likely than non-minorities to have their applications denied.
 - African American, Hispanic American, and Native American mortgage borrowers are more likely to have sub prime loans.
- **Business Loans.** BBC also identified disparities in access to business loans for certain minority groups. African American, Asian-Pacific American, and Hispanic American-owned businesses have higher denial rates when applying for business loans, and when they receive loans they have smaller loan amounts. After accounting for certain neutral influences, firms owned by African Americans and Hispanic Americans remain significantly more likely to have their loans denied than other firms (see Appendix H of the Study). More African American and Hispanic American-owned firms that need credit do not apply for loans because they fear being denied the loan.
- **Bonding.** Interviews with business owners and trade associations indicated difficulty obtaining bonding for small and new construction contractors in California. Problems in obtaining bonding were reported in interviews with minority/women-owned firms and non minority-owned firms (reported in Section VI and Appendix I of the Study). Minority/women-owned firms in the transportation contracting industry in California are more likely to be small businesses than majority-owned firms and, therefore, may be adversely affected by barriers in obtaining bonding.
- **Insurance.** Similarly, some small business owners had problems obtaining insurance as required for Caltrans projects. These issues are further explored in Sections V through VIII and in Appendix I of the Study.

These factors are important and suggest an upward adjustment of the base figure. However given the nature of the projects for 2010-2011, the County believes an upward adjustment would result in an unrealistic goal. Therefore the County has decided not to make any Step Two adjustments.

VI. Public Participation – Section 49 CFR 26.45 (g)

Caltrans performs this activity for local agencies for FHWA-funded projects.

VII. Race-Conscious and Race Neutral Measures – Section 49 CFR 26.51 (f) (3)

Race Conscious Measures

The Race-Conscious goal will be achieved by:

- Setting a DBE goal on individual contracts based upon the type of work included in each contract, opportunities for subcontracting, and on the availability of the four targeted groups capable of performing such work.
- Using Appendix A of 49 CFR 26, “Guidance Concerning Good Faith Efforts” to justify the award when the goal is not met.

Race Neutral Measures

- Arrange solicitations, times for the presentation of bids, quantities, specifications, and delivery schedules in ways that facilitate DBE, and other small businesses, participation (e.g., unbundling large contracts to make them more accessible to small businesses, requiring or encouraging prime contractors to subcontract portions of work that they might otherwise perform with their own forces);
- Through the Good Faith Effort requirements included in the County’s contracts, provide assistance in overcoming limitations such as inability to obtain bonding or financing (e.g., by such means as simplifying the bonding process, reducing bonding requirements, eliminating the impact of surety costs from bids, and providing services to help DBEs, and other small businesses, obtain bonding and financing);
- Ensure compliance with prompt payment specifications by requiring prime contractors to include in their subcontracts language providing that prime contractors and subcontractors will use appropriate alternative dispute resolution mechanisms to resolve payment disputes, and by enforcing the provisions of Section 7108.5 of the Business and Professions Code;
- Track all DBE participation on federally-assisted contracts, including monitoring the Commercially Useful Function of DBEs;
- Host construction pre-bid meetings, encourage all businesses to attend, and facilitate networking among potential bidders;
- Maintain County website describing projects advertised for bids; and
- Unbundle large consultant contracts into smaller contracts.