



Executive Summary:

Methodology for Computing Proposed FHWA DBE Goals

Minnesota Department of Transportation (MnDOT)

FY2025-2027

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Executive Summary

This report provides the proposed Disadvantaged Business Enterprise (DBE) program goal that the Minnesota Department of Transportation (MnDOT) should set for fiscal years 2025 to 2027 on Federal Highway Administration funded expenditures. The report was constructed based on the best available information received from MnDOT, as well as government-published secondary data,¹ such as the County Business Patterns from the US Census Bureau.

The analysis suggests a proposed agency-wide DBE goal of 15.3 percent for FY2025 to 2027 on FHWA-funded projects.

This goal was derived in the following manner:

- A base goal of 11.2 percent was computed.
- An adjustment to the base goal was made to account for disparities in prime and subcontract awards that cannot be attributed to differences in industry, location, firm size, credit risk, or other characteristics of DBE versus non-DBE contracts. This calculation resulted in an adjustment of 36.8 percent to the base goal, resulting in the adjusted goal of 15.3 percent ($= 0.112 \times (1 + 0.368) = 0.112 \times 1.368$).
- The maximum portion of the adjusted goal deemed to be achievable by race-neutral means was found to be equal to 29.7 percent. Therefore, the race-neutral goal was computed to be equal to 4.6 percent ($= 0.153 \times 0.297$)² and the race-conscious goal was computed to be equal to 10.8 percent ($= 0.153 \times (1 - 0.297) = 0.153 \times 0.703$).

Table 1 provides the detailed breakdowns:

Table 1. Proposed MnDOT FHWA DBE Goals, FY2025-2027

Type	Goal	RN/RC Portion	Note
Base Goal	11.2%		(a)
Discrimination Gap for Adjustment	36.8%		(b)
Adjusted Goal	15.3%		(c)={a}*[1+(b)]
Race-Neutral (RN) Goal	4.6%	29.7%	=(c)*RN portion
Race-Conscious (RC) Goal	10.8%	70.3%	=(c)*RC portion

Source: FHWA Contracts FY2021 to 2023

¹ The research team used County Business Patterns, NAICS.com, and Dun & Bradstreet Hoovers in the analysis.

² Numbers used for this calculation are displayed only to one decimal place in this text, but the team performed those calculations to all significant digits. To four decimal places, the calculation of the adjusted goal is $0.1534 \times 0.2970 = 0.0456$.

COMPARISON WITH PREVIOUS TRIENNIALS

Table 2. DBE Goals -- Proposed and two previous triennials

Type	FY2019-2021	FY2022-2024	FY2025-2027*
Base Goal	9.4%	11.3%	11.2%
Adjusted Goal	12.2%	13.0%	15.3%
Race-Neutral Goal	3.8%	3.5%	4.6%
Race-Conscious Goal	8.4%	9.5%	10.8%

* Proposed

Table 3. Utilization Rates

Contract Data	FY2015-2017	FY2018-2020	FY2021-2023
Utilization Rate	7.9%	11.3%	11.9%

BACKGROUND

As a recipient of federal transportation dollars awarded through the U.S. Department of Transportation’s Federal Highway Administration (FHWA), MnDOT is required to establish and submit a three-year DBE goal to the FHWA for review (49 C.F.R. §26). This goal is to be established in compliance with the federal regulations that govern the *Participation by Disadvantaged Business Enterprises in Department of Transportation Financial Assistance Programs* (hereafter referred to as “USDOT regulations”). The USDOT regulations instruct state and local grant recipients to follow a two-step process to establish their annual DBE goal [49 C.F.R. §26.45]. The analysis conducted by the Roy Wilkins Center complies with these guidelines.

METHODOLOGY

In order for the MnDOT FHWA DBE goals to satisfy the requirements set forth in the USDOT regulations, availability rates of willing, able, and qualified firms must be computed for well-defined geographic market areas (GMAs). The research team established three different geographic market areas that are based on political jurisdictions with substantial numbers of prime and subcontractors for MnDOT contracts between fiscal years 2021 and 2023. Relevant industries with MnDOT contracts were identified by examining the distribution of MnDOT contract dollars by industry classification for contracts awarded in federal FY2021 to 2023. The research team then estimated the distribution of anticipated MnDOT contract dollars by industry classification for FY2025 to 2027 from information about future projects that was provided by MnDOT.

Availability rates were computed from multiple data sets and were appropriately weighted to produce a base goal. The base goal was then adjusted to account for disparities in prime contract and subcontract award amounts. The result is the proposed goal. The proposed goal was further portioned into race-conscious and race-neutral portions using a methodology upheld by the 3rd

Circuit Federal Court in *GEOD v. New Jersey Transit* and published in the peer reviewed journal, *Applied Economics Letters*.

DATA COLLECTION

The research team obtained all prime contract and subcontract files from the Minnesota Department of Transportation for fiscal years 2021 to 2023. Obvious data entry errors, improbable measures, possible duplicates and related questionable items were flagged and forwarded to MnDOT staff for clarification and/or correction.

Contract files and bid participation data were supplemented with data obtained from Dun & Bradstreet (D&B) and NAICS.com. Other data used included the Minnesota Unified Certification Program (MNUCP) Directory, AASHTOWare, and the County Business Patterns (CBP) data for 2022.

UTILIZATION

The utilization analysis (see *Table 4*) shows that 99.3 percent of total prime contract dollars were awarded to non-DBE businesses (equivalent to \$3.369 billion), while 0.7 percent of total prime contract dollars were awarded to DBE businesses (\$23 million). *Table 4* shows that 77.1 percent of total subcontract dollars were awarded to non-DBE businesses (\$1.294 billion), while 22.9 percent of total subcontract dollars were awarded to DBE businesses (\$384 million). After controlling for double counting, DBEs were awarded 11.9 percent of all awarded dollars (both prime and subcontract) between FY2021 and 2023 (\$404 million).

The vast majority of contract dollars were awarded to Minnesota firms (87.2% of prime contract dollars and 90.2% of subcontract dollars) followed by Wisconsin firms (11.3% of prime contract dollars and 6.7% of subcontract dollars). The bulk of awarded contracts and contract dollars were in the construction industry with a non-trivial share of contracts and contract dollars in various professional services.

Table 4. Utilization Rates of Certified DBEs

Type	N	Average Contract Amount	Total Contract Amount	Share of Dollars
Prime Contracts				
DBE (a)	35	\$675,428.31	\$23,639,990.94	0.7%
Non-DBE	745	\$4,522,349.03	\$3,369,150,023.84	99.3%
Total (b)	780	\$4,349,730.79	\$3,392,790,014.78	100.0%
Subcontracts				
DBE (c)	1,604	\$239,725.63	\$384,519,908.22	22.9%
Non-DBE	2,924	\$442,492.32	\$1,293,847,556.24	77.1%
Total	4,528	\$370,664.19	\$1,678,367,464.46	100.0%
Total DBE Contract Amount (a + c)			\$408,159,899.16	
Prime DBE to Sub DBE Contract Amount (d)*			\$3,724,193.79	
Adjusted Total DBE Contract Amount (a + c - d)**			\$404,435,705.37	
DBE share without double counting [(a + c - d) / b]				11.9%

Source: FHWA Contracts FY2021-2023

* This is the amount of subcontracts given to DBE contractors by DBE prime contractors

** This adjusted amount eliminates double counting DBE subcontract dollars

Table 5 shows that 0.7 percent of prime contract dollars were awarded to DBE firms. Among prime contracts awarded to women-owned contractors, 98.9 percent of dollars went to women-owned DBE contractors. Among prime contracts awarded to men-owned businesses, 4 percent went to men-owned DBE businesses. The vast majority of prime contractors do not identify the gender of the owner (95.9%) or the race/ethnicity of the owner (80.3%). Among the prime contracts awarded to businesses owned by Caucasians, 3.2 percent of dollars went to Caucasian-owned DBE contractors. There were no prime contracts awarded to Asian or black-owned businesses.

Table 5 shows that 22.9 percent of subcontracts were awarded to DBE firms. A majority of subcontractors do not identify the gender of the owner (64.1%). Among subcontracts awarded to women-owned contractors, 99.2 percent of dollars went to women-owned DBE contractors. Among subcontracts awarded to men-owned businesses, 93.6 percent went to men-owned DBE businesses. Among the subcontracts awarded to businesses owned by Caucasians, 55.4 percent of dollars went to Caucasian-owned DBE contractors. The vast majority of subcontract dollars awarded to businesses owned by Asians, Blacks, Hispanics, and Native Americans went to DBE businesses (97.8%, 99.8%, 93.5%, and 100.0%).

Table 5. Distribution of FHWA Contract Dollars by Race/Ethnicity/Gender/DBE

Race/Ethnicity /Gender	Overall		DBE		DBE Share
	N	Contract Amount	N	Contract Amount	
Prime Contracts					
by Gender					
Female	27	\$22,920,327.13	26	\$22,674,164.61	98.9%
Male	5	\$9,703,029.40	3	\$390,549.82	4.0%
Unknown	748	\$3,360,166,658.25	6	\$575,276.51	0.0%
by Race					
Asian	0	\$0.00	0	\$0.00	0.0%
Black	0	\$0.00	0	\$0.00	0.0%
Caucasian	150	\$716,174,639.44	26	\$22,674,164.61	3.2%
Hispanic	3	\$390,549.82	3	\$390,549.82	100.0%
Native American	1	\$9,288,604.58	0	\$0.00	0.0%
Unknown	626	\$2,666,936,220.94	6	\$575,276.51	0.9%
Overall (Primes)	780	\$3,392,790,014.78	35	\$23,639,990.94	0.7%
Sub Contracts					
by Gender					
Female	1,497	\$349,437,174.70	1,484	\$346,670,957.05	99.2%
Male	130	\$39,787,143.67	115	\$37,222,060.67	93.6%
Unknown	2,901	\$1,289,143,146.09	5	\$626,890.50	0.0%
by Race					
Asian	68	\$15,735,866.01	65	\$15,387,956.41	97.8%
Black	26	\$5,860,311.57	25	\$5,849,706.57	99.8%
Caucasian	2,539	\$605,430,722.93	1,427	\$335,132,716.68	55.4%
Hispanic	43	\$4,154,594.51	41	\$3,885,813.73	93.5%
Native American	41	\$23,636,824.33	41	\$23,636,824.33	100.0%
Unknown	1,811	\$1,023,549,145.11	5	\$626,890.50	0.1%
Overall (Subs)	4,528	\$1,678,367,464.46	1,604	\$384,519,908.22	22.9%

Source: FHWA Contracts FY2021-2023

Table 6 shows that the yearly DBE shares of both prime and subcontracts for FY2021 to 2023 did not vary substantially from the three-year averages.

Table 6. Utilization Rates of Certified DBEs by Fiscal View

Type	N (All)	Total Contract Amount	N(DBEs)	DBE Contract Amount	DBE Share
Prime Contract Amount by Fiscal Year					
FY2021	247	\$574,264,201.58	10	\$4,401,485.29	0.8%
FY2022	248	\$1,318,742,142.27	9	\$6,642,348.15	0.5%
FY2023	285	\$1,499,783,670.93	16	\$12,596,157.50	0.8%
FY2021-2023	780	\$3,392,790,014.78	35	\$23,639,990.94	0.7%
Subcontract Amount by Fiscal Year					
FY2021	1,285	\$186,558,940.36	440	\$51,346,129.18	27.5%
FY2022	1,665	\$524,237,567.71	579	\$126,031,644.84	24.0%
FY2023	1,578	\$967,570,956.39	585	\$207,142,134.20	21.4%
FY2021-2023	4,528	\$1,678,367,464.46	1,604	\$384,519,908.22	22.9%

Source: FHWA Contracts FY2021-2023

GEOGRAPHIC MARKET AREAS

In order for the MnDOT FHWA DBE goal to satisfy the requirements set forth in USDOT regulations as well as comply with the US Supreme Court’s narrowly tailored standard, the DBE goal must be based on a narrowly defined geographic market. To develop the geographic markets, the research team included those counties that had received contracts during the FY2021 to 2023 period starting with those that had received the highest value contracts to the lowest value and kept adding counties until the sum of included contracts was greater than 75% of the total amount awarded. Each included county has at least 1% of the total awarded amount.

In order to define the geographic market in such a manner that the vast majority of contract dollars awarded would be incorporated in the definition, the research team used a political jurisdiction method, based on the counties where contracts were awarded.

Table 7. MnDOT FHWA Geographical Market Areas: Prime and Subcontracts

Geographical Market Area	GMA #	Prime Contracts only			Sub Contracts only		
		N	Contract Amount	Share	N	Contract Amount	Share
Overall		780	\$3,392,790,014.78	100%	4515	\$1,678,367,464.46	100.0%
All counties in MN	1	610	\$2,957,955,950.32	87.2%	4058	\$1,514,610,892.14	90.2%
21 counties (at least 1% of total amount based on primes)	2	488	\$2,962,524,682.28	87.3%	2792	\$1,248,755,817.66	74.4%
19 counties (at least 1% of total amount based on subs)	3	459	\$2,570,020,680.44	75.7%	3254	\$1,402,553,159.45	83.6%

Source: FHWA Contracts FY2021-2023

In *Table 7*, GMA1 captures all 87 counties of the State of Minnesota. GMA2 is based on prime contract dollars and contains the group of 21 counties with a total prime contract amount that exceeds 75 percent of all prime contracts. GMA3 is based on subcontract dollars and contains the group of 19 counties with a total subcontract amount that exceeds 75 percent of all subcontracts. For both GMA2 and GMA3, the marginal contribution of each county to the overall total contract amount is at least 1 percent of total dollars spent during the reporting period.

DISCUSSION OF AVAILABILITY METHODS

The research team obtained a list of all firms from MnDOT that included prime contractors and subcontractors, certified DBEs, bidders and vendors, while NAICS codes for the firms were obtained from the DBE list and Dun & Bradstreet (D&B). When no NAICS code could be found³, observations were not used in the weighted availability counts.

The research team also obtained from MnDOT the State Transportation Improvement Program (STIP) list of projects⁴ that MnDOT expects to undertake during the FY 2025 to 2027 period. Based on comparable projects for which construction has already been completed, the team identified 27 separate six-digit NAICS codes associated with comparable projects. Weights were obtained by using the projected expenditures provided by MnDOT.⁵

Availability rates were calculated separately using American Business Survey (ABS) data, the Bidders List, the DBE List, Dun & Bradstreet Hoovers data, and the Vendors List. Although each of the five methods differs, the calculations share the following steps:

1. The availability rate is the number of ready, willing and able DBE firms of an industry (represented by a NAICS code), divided by the number of all firms in the same industry within a defined GMA. Only those industries that are expected to be used in the forecasted projects are included.

³ The research team could not identify NAICS codes for 27.1% of the observations from the bidders list and 7.4% of the observations from the vendors list (Minnesota and Wisconsin observations only).

⁴ State Transportation Improvement Program (STIP) 2024-2027, <http://www.dot.state.mn.us/planning/program/stip.html>. Only data from FY2025 to 2027 were used for this report.

⁵ According to U.S. Department of Transportation regulations, the availability rate should be weighted by the “amount of money to be spent” in each industry. The research team requested a copy of MnDOT’s estimated expenditures for the next three years, broken down by NAICS code. Projected expenditures for the next three years included in the provided State Transportation Improvement Program (STIP) 2024-2027 data files were categorized by type of work. In order to calculate the weights for the availability analysis, the research team categorized projected expenditures by NAICS code. The result was 27 NAICS codes.

2. The research team identified 27 six-digit NAICS codes associated with the forecasted projects. The share of forecasted expenditures in each of the 27 NAICS codes is calculated and then multiplied by each industry to obtain the rate.
3. As shown in the general formula below, the next step is to sum the availability rates across the identified industries (NAICS codes) for a given GMA. The numerator and denominator will differ according to the data list or method used.

$$Availability\ Rate = \sum_{j=1}^n \frac{\#\ of\ DBEs\ in\ NAICS_j}{Total\ Number\ of\ Firms\ in\ NAICS_j} weight_j, \text{ where } j = \text{industry}$$

American Business Survey (ABS) Method⁶

The American Business Survey, one of the business and financial surveys collected by the Bureau of Census, provides information on select economic and demographic characteristics for businesses and business owners by sex, ethnicity, race, and veteran status. Using the State of Minnesota subset of the ABS data for 2021, the research team computed the numbers and shares of minority-owned and women-owned businesses in the NAICS codes in which MnDOT projects it will contract in 2025-2027. The research team estimated overlap rates to avoid double-counting women and minority-owned firms. The ABS method can only be used for GMA-1 for the latest year's data (2021) due to the masking of county-level data in the Public-Use ABS data.

Bidders List Method⁷

The bidders list includes firms that bid on a federal prime contract or subcontract. The research team obtained the list of bidders on each prime contract and associated subcontracts from the

⁶ This formula was used to calculate the availability analysis using the ABS Method.

$$Availability\ Rate = \sum_{j=1}^n \frac{\# \text{ of } (WBEs + MBEs - WMBEs) \text{ in } NAICS_j}{Total\ Number\ of\ Firms\ in\ NAICS_j} weight_j, \text{ where } j = \text{industry}$$

WBEs refer to Women Owned Business Enterprises. MBEs refer to Minority Owned Business Enterprises. WMBEs refer to Women and Minority Owned Business Enterprises (overlap).

⁷ This formula was used to calculate the availability analysis using the Bidders List Method.

$$Availability\ Rate = \sum_{j=1}^n \frac{(Number\ of\ DBE\ Bidders)_j}{(Total\ Number\ of\ Bidders)_j} \times weight_j, \text{ where } j = \text{industry}$$

AASHTOWare system. The prime contract and subcontract lists were matched with the certified DBE database and the vendors list to identify the race/ethnicity and gender status of bidders.

The availability rate is the weighted share of certified DBEs within each NAICS code for a given geographic market area. The weights are based on the expected share of dollars MnDOT anticipates it will spend on different types of projects from FY 2025 to 2027. The numerator is the number of DBE bidders, and the denominator is the total number of bidders. With the Bidders List Method, the numerator and denominator come from the same source.

Information on NAICS codes is not available for all firms. The NAICS codes associated with each firm came from the MnDOT Bidders List, Minnesota UCP DBE List, D&B Hoovers, and NAICS.com. When the research team was unable to obtain a NAICS code from the MnDOT information, the team used the D&B Hoovers database or the NAICS.com database. When the research team was unable to find a NAICS code for a firm, that firm was not included in this availability method. The research team excluded 136 firms due to lack of information.

DBE List Method⁸

The research team obtained the list of certified DBEs from MnDOT. The numerator in the availability rate is the number of certified DBE firms for specified NAICS codes within a given geographic market area. The denominator is the number of firms in the County Business Patterns (CBP) depending on the definition of the geographic market area, for specified NAICS codes within a geographic market area. The numerator and denominator come from different sources.

The numerator is the number of DBE bidders in a given industry j and the denominator is the total number of bidders with the same industry j . The weight j is the percent of contract amounts in each industry.

⁸ This formula was used to calculate the availability analysis using the Certified DBE List Method.

$$Availability\ Rate = \sum_{j=1}^n \frac{(Number\ of\ DBEs)_j}{(Number\ of\ Firms\ in\ CBP)_j} \times weight_j, \text{ where } j = \text{industry}$$

The numerator is the number of DBE firms in a given industry j and the denominator is the total number of firms with the same industry j from the County Business Patterns dataset. The weight j is the percent of contract amounts in each industry.

The numerator counts firms, and the denominator counts establishments⁹ with paid employees.¹⁰

Dun & Bradstreet Method¹¹

The research team obtained access to Hoovers database, a subsidiary of Dun & Bradstreet (D&B), to compute the number of firms in each relevant NAICS code within a specified geographic market area¹². This research product covers more than 23 million U.S corporations and other entities (i.e. government agencies, partnerships, non-profits, and educational institutions). For the state of Minnesota, information included information on headquarters, branches, and single locations.¹³

The availability rate is computed by finding the weighted share of women- and minority-owned businesses within each NAICS code for a specified geographic market area. Unlike the other methods, the D&B method uses “self-reported” minority/gender designations. Thus, the D&B method can include firms that are not MnDOT certified DBEs. On the other hand, not every certified DBE is included in this database because a requirement of inclusion is the existence of a DUNS number. According to Hoovers customer service, D&B contacts firms directly to verify

⁹ The Census Bureau explains: “an establishment is a single physical location at which business is conducted or services or industrial operations are performed. An establishment is not necessarily equivalent to a company or enterprise, which may consist of one or more establishments. A single-unit company owns or operates only one establishment. A multi-unit company owns or operates two or more establishments”.
<https://www.census.gov/programs-surveys/cbp/technical-documentation/methodology.html> (Census Bureau, County Business Patterns, “Technical Documentation: Methodology”).

¹⁰ Note that the denominator may overstate the number of firms since it includes each establishment owned by a multi-unit firm.

¹¹ This formula was used to calculate the availability analysis using the Dun & Bradstreet Method.

$$Availability\ Rate = \sum_{j=1}^n \frac{\# of (WBEs + MBEs - WMBEs) in NAICS_j}{Total\ Number\ of\ Firms\ in\ NAICS_j} weight_j, \text{ where } j = \text{industry}$$

WBEs refer to Women Owned Business Enterprises. MBEs refer to Minority Owned Business Enterprises. WMBEs refer to Women and Minority Owned Business Enterprises (overlap).

¹² Due to system upgrades, D&B Hoovers provides one main NAICS code for each business. This data limitation allowed the research team to calculate the availability rate based on the main NAICS code for the firm.

¹³ Headquarters: indicates that the company has subsidiaries or branches; branch indicates a company location other than the headquarters; and single location indicates that the company does not have any subsidiaries or branches.

their gender or minority status and checks with third party sources and proprietary databases for further verification.

Vendors List Method¹⁴

The vendors list includes the list of firms that are allowed to bid on MnDOT projects. MnDOT keeps this list current by requiring firms to re-register every three years. The research team used the vendors list submitted by MnDOT.¹⁵

The availability rate is the weighted share of certified DBE vendors within each NAICS code for a given geographic market area. The counts for the numerator and the denominator come from the same data source – the vendors list. As is the case with the bidders list, when the research team was unable to match a firm with a NAICS code that firm was not included in the count.

THE BASE GOAL

Depending on the method used to calculate availability rates, each geographic market area captures a different share of available contract dollars. As a result, each method also yields a different DBE availability goal for each geographic market.

In order to derive a single base goal for MnDOT that is based on all the goals calculated for each geographic market, it is necessary to weight each geographic market-specific goal according to the percentage of contract dollars awarded in that area (shown in *Table 8*).

The five different methods use data that report multiple industries for many of the firms in their databases. *Table 8* presents the details of the weighted availability rate using the main NAICS code for each business. When using the main NAICS code level computation, the base goal is found to be 11.2 percent. This base goal is used in subsequent analyses.

¹⁴ This formula was used to calculate the availability using the Vendors List Method:

$$\text{Availability Rate} = \sum_{j=1}^n \frac{(\text{Number of DBE Vendors})_j}{(\text{Total Number of Vendors})_j} \times \text{weight}_j, \text{ where } j = \text{industry}$$

The numerator is the number of DBE vendors in a given industry j and the denominator is the total number of vendors with the same industry j . The weight j is the percent of contract amounts in each industry.

¹⁵ The vendors list provided by MnDOT was created from AASHTOWare on October 19, 2023.

Table 8. FHWA Availability Rates and Base Goal

Method	GMA-1	GMA-2	GMA-3	Weighted Average
ABS Method	15.4%	-	-	15.4%
Bidders List Method	7.8%	8.0%	8.0%	7.9%
DBE List Method	11.6%	14.9%	18.2%	14.7%
D&B Method	6.4%	7.1%	4.9%	6.2%
Vendors List Method	13.5%	13.9%	16.1%	14.5%
Average by GMA (a)	10.9%	11.0%	11.8%	
Proportional Weight (b)	35.3%	33.3%	31.4%	
(c = a x b)	3.9%	3.6%	3.7%	
Base Goal = c(GMA-1) + c(GMA-2) + c(GMA-3)				11.2%

GMA-1: State of Minnesota

GMA-2: 21 counties in MN or WI

GMA-3: 19 counties in MN or WI

Source: FHWA Contracts FY2021-2023

Table 9. Distribution of the award amount and proportional weights

Method	GMA-1	GMA-2	GMA-3
Percent Distribution of Award Amount	88.2%	83.0%	78.3%
	(a)	(b)	(c)
Proportional Weight	35.3%	33.3%	31.4%
	(d)	(e)	(f)

GMA-1: State of Minnesota

GMA-2: 21 counties in MN or WI

GMA-3: 19 counties in MN or WI

(d) = (a)/[(a)+(b)+(c)]

(e) = (b)/[(a)+(b)+(c)]

(f) = (c)/[(a)+(b)+(c)]

Source: FHWA Contracts FY2021-2023

ADJUSTMENTS TO THE BASE GOAL

According to USDOT regulations, recipients of federal funds may adjust their base goals in light of other evidence regarding the market area [49 C.F.R. §26.45(d)]. One valid reason for adjusting the goal would be if the analysis showed discrimination, either in the overall marketplace or in the specific agency or governmental unit undertaking the procurement and contracting process. The research team estimates the amount of contract and subcontract dollars awarded to DBE businesses had they been treated like identically situated non-DBE businesses.

Factors included in the control for relevant characteristics include year of contract, industry, whether the firm is located in Minnesota, credit rating, tenure of the firm, whether a firm was awarded both prime and subcontracts, and whether the firm had more than one contract. The research team estimated the measures of discrimination for prime contracts and subcontracts

for different model specifications. The reasons for different specifications include the fact that there are missing values for some observations on credit risk, tenure, and size of firms.¹⁶

The base goal was adjusted using the average unexplained portion from the residual difference composition—for prime and subcontractors contract disparities (see *Table 9*). The adjustment for FY2025 to 2027 equals 36.8 percent.¹⁷

Table 10. Discrimination Analysis for Goal Adjustments

Method	Model	Mean Difference in Log Contract Amount by DBE Status (a)	Explained Gap (b)	Unexplained Gap (c)	Unexplained Portion (= c/a)
	1	0.8109	0.4601	0.3508	43.3%
Oaxaca	2	0.8360	0.6164	0.2196	26.3%
Decomposition	3	0.8109	0.5533	0.2575	31.8%
	4	0.8109	0.4399	0.3709	45.7%
Average					36.8%

Source: FHWA Contracts FY2021-2023

(a) = mean of predicted value of $\ln(\text{contract amount of non-DBEs}) - \text{mean of predicted value of } \ln(\text{contract amount of DBEs})$

Table 11. Adjustments to the Base Goal – Proposed and two previous triennials

FY2019-2021	FY2022-2024	FY2025-2027*
30.1%	14.9%	36.8%

* Proposed

RACE-NEUTRAL ANALYSIS

In compliance with federal regulations, state and local transportation authorities must identify the maximum feasible portion of the DBE goal that can be achieved through race-neutral measures and the percentage of the goal that can only be achieved through race-conscious measures [49 C.F.R. §26.51(a)]. Myers and Ha have pioneered the use of a detailed econometric

¹⁶ See the technical report for details about the interpretation of sequential Oaxaca decompositions and the alternative Gelbach decomposition methodology.

¹⁷ Standard regression and Oaxaca command in Stata 18 was used for the analysis.

procedure that maximizes the race-neutral component of the DBE goals.¹⁸ This method has established a rigorous standard for maximizing the race-neutral portion of the overall DBE goal.¹⁹

The logic of the analysis is that some share of DBE dollars awarded would have gone to DBEs without goals. One can compute the share of dollars that would have gone to DBEs without goals for contracts and firms that are comparable. This method requires the estimation of a regression model that controls for a list of relevant variables.

The race-neutral analysis uses the best regression model for predicting DBE contract amounts with and without goals. Following this specification, our analysis shows that 29.7 percent of the goal can be achieved through race-neutral measures and 70.3 percent can be achieved through race-conscious goals.

¹⁸ Myers, Samuel L. and Inhyuck "Steve" Ha. "Estimation of Race Neutral Goals in Public Procurement and Contracting," *Applied Economics Letters*, 2009, vol. 16, issue 3, pages 251-256.

¹⁹ 2010-10-19, Civil Action No. 04-2425, GEOD CORPORATION, et al., Plaintiffs v. NEW JERSEY TRANSIT CORPORATION, et al., Defendants.