Executive Summary:

Methodology for Computing Proposed FTA DBE Goals

Minnesota Department of Transportation (MnDOT)
FY2025-2027

Submitted to:

Minnesota Department of Transportation

395 John Ireland Blvd, St. Paul, MN 55155-1899

Submitted by:

The Roy Wilkins Center for Human Relations and Social Justice

Hubert H. Humphrey School of Public Affairs

University of Minnesota

06/18/2024

ACKNOWLEDGEMENTS

Dr. Samuel L. Myers, Jr., Roy Wilkins Professor of Human Relations and Social Justice and director of the Roy Wilkins Center, Hubert H. Humphrey School of Public Affairs, University of Minnesota, served as the principal investigator for the project, developing the methodology for the analysis and providing overall leadership to the project. David G. Stanton, Ph.D., oversaw the project and acted as a liaison between MnDOT and the University of Minnesota. Dr. Steve Ha, Professor of Economics at Western Carolina University, performed the statistical analysis including the utilization and discrimination analysis. Haiyue Jiang and Xiting Zhang performed the statistical analysis including the availability calculation.

We are grateful to Sean Skibbie (Director of the Minnesota Department of Transportation Office of Civil Rights), Lee Nordstrom (Operations Manager), Melyssa Mdumuka (Small Business Contracting Supervisor), Scott Hoffman (Small Business Contracting Team Lead), Benjamin Osemenam (Engineer), and Jean Meyer (MnDOT Office of Transit Compliance Program Coordinator), for their partnership in the preparation of this report.

University of Minnesota
Roy Wilkins Center for Human Relations and Social Justice
263 Humphrey Center
301 19th Avenue South
Minneapolis, MN 55455
myers006@umn.edu

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 Transit 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 8.7 percent for FY2025 to 2027 on FTA-funded projects.

This goal was derived in the following manner:

- A base goal of 8.7 percent was computed.
- No adjustment was made to the base goal due to the absence of data required to make a discrimination adjustment
- 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 2.6 percent (= 0.087 x 0.297), and the race-conscious goal was computed to be equal to 6.1 percent (= 0.087 × (1 – 0.297) = 0.087 x 0.703).

Table 1 provides the detailed breakdowns:

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

Type	Goal	RN/RC Portion	Note
Base Goal	8.7%		(a)
Discrimination Gap for Adjustment	n/a		
Adjusted Goal	8.7%		=(a)
Race-Neutral (RN) Goal	2.6%	29.7%	=(a)*RN portion
Race-Conscious (RC) Goal	6.1%	70.3%	=(a)*RC portion

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

COMPARISON WITH PREVIOUS TRIENNIALS

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

Type	FY2019-2021	FY2022-2024	FY2025-2027*
Base Goal	6.5%	6.3%	8.7%
Adjusted Goal	9.1%	6.8%	8.7%
Race-Neutral Goal	6.7%	19.0%	2.6%
Race-Conscious Goal	2.4%	5.0%	6.1%

* Proposed

BACKGROUND

As a recipient of federal transit dollars awarded through the U.S. Department of Transportation's Federal Transit Administration (FTA), MnDOT is required to establish and submit a three-year DBE goal to the FTA 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 FTA 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 one geographic market area 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 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* 3) shows that 100.0 percent of total prime dollars were awarded to non-DBE businesses for FY2021 to 2023 (equivalent to $13.5 million).

Table 3. Utilization FY2021 to 2023[2]

Fiscal Year	N	Contract Amount	Awarded to DBEs	DBE Share
FY2021	22	$5,355,601.00	0	0.0%
FY2022	26	$5,084,309.05	0	0.0%
FY2023	14	$3,015,243.92	0	0.0%
Total	62	$13,455,153.97	0	0.0%

Source: MnDOT FTA Projects FY2021-2023

GEOGRAPHIC MARKET AREAS

In order for the MnDOT FTA 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. However, with no contracts awarded to DBE businesses in FY2021 to 2023 the team had no information upon which to calculate geographic market areas (GMAs). The team constituted one GMA containing all Minnesota counties.

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 found[3], observations were not used in the weighted availability counts.

[2] This table compiles data of original contract award amounts during FY 2021 – 2023 and does not include change orders or amendments to contracts awarded in earlier years.

[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).

The research team also obtained from MnDOT the State Transportation Improvement Program (STIP) list of projects[4] 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 3 separate six-digit NAICS codes associated with comparable projects. Weights were obtained by using the projected expenditures provided by MnDOT.[5]

American Business Survey (ABS) Method[6]

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.

DBE List Method[7]

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

---

[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 3 NAICS codes.

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

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

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 Certified DBE List Method.

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

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 counts firms, and the denominator counts establishments[8] with paid employees.[9]

Dun & Bradstreet Method[10]

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 area[11]. 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.[12]

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

---

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.

[8] 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").

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

[10] This formula was used to calculate the availability analysis using the Dun & Bradstreet Method.

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

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

[11] 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.

[12] 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.

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

THE BASE GOAL

The three different methods (ABS, DBE list, D&B) use data that report multiple industries for many of the firms in their databases. *Table 4* presents the details of the weighted availability rate using the main NAICS code level. When using the main NAICS[13] code level computation, the base goal is found to be 8.7 percent. This base goal is used in subsequent analyses.

Table 4. FTA Availability Rates and Base Goal

Method	Availability Rate
ABS Method	12.2%
DBE List Method	7.8%
D&B Method	6.2%
Base Goal	8.7%

GMA is the entire State of Minnesota

Table 5. FTA Weights

NAICS	Projected Expenditure	Weights
236220	$16,143,482	0.9471
423110	$706,192	0.0414
485111	$196,000	0.0115
Grand Total	$17,045,674	1.0000

Source: FTA Projected Expenditures FY2025-2027

[13] When multiple NAICS codes are found for one business, the research team uses the code identified as the main code. If there is no main code listed, the research team used the first code listed.

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)*]. The conventional methodologies for adjusting a base goal are reported in the guidance provided by the US Department of Transportation:

> Remember: while you must consider making adjustments to the base figure for all of the factors listed here, you are not required to make such an adjustment. If the evidence does not suggest such an adjustment is necessary, then no adjustment should be made. Moreover, if the evidence suggests that an adjustment is warranted, it is critically important to ensure that there is a rational relationship between the data you are using to make the adjustment and the actual numerical adjustment made. A clear explanation of which information sources you considered, how you made your Step Two adjustment - or why you determined that no adjustment was warranted - is a very important part of your overall submission.
>
> (Tips for Goal-Setting, 2014, https://www.transportation.gov/osdbu/disadvantaged-business-enterprise/tips-goal-setting-disadvantaged-business-enterprise)

In previous reports, there were sufficient DBE observations needed to estimate an adjustment to the base goal using a regression methodology for measuring discrimination and to compute the maximum race-neutral portion of the goals. These results are displayed in *Table 6*.

Table 6. FTA Goals Reports Timeline

	FTA Goals Report			
	FY2016-2018	FY2019-2021	FY2022-2024	FY2025-2027*
DBE Utilization Rate (n = number of DBEs)	0.00% (0) primes 100.00% (3) subs 1.79% (3) primes+subs	0.00% (0) primes 0.75% (2) subs 0.55% (2) primes+subs	0.00% (0) primes 16.16% (1) subs 0.00004% (1) primes+subs	0.0% (0) primes 0.0% (0) subs 0.0% (0) primes+subs
Base Goal	5.71%	6.54%	6.27%	8.70%
Adjustment to Base Goal	15.02%	39.52%	8.93%	n/a
Adjusted Goal	6.57%	9.12%	6.83%	8.70%
Race-Neutral/ Race-Conscious Goals	RN 1.95% RC 4.62%	RN 6.69% RC 2.43%	RN 1.88% RC 4.94%	RN 2.6% RC 6.1%

*** Proposed**

We are unable to adjust the base goal for lack of new DBE contracts awarded during the reporting period of FY2021 to 2023.

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 procedure that maximizes the race-neutral component of the DBE goals.[14] This method has established a rigorous standard for maximizing the race-neutral portion of the overall DBE goal.[15]

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. Since there were no new DBE contracts awarded during the reporting period the research team is unable to calculate race-neutral/race-conscious portions. We recommend that the race-neutral/race-conscious portion be applied based on the FHWA race-neutral/race-conscious portions from the FY2025-2027 report.

[14] 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.

[15] 2010-10-19, Civil Action No. 04-2425, GEOD CORPORATION, et al., Plaintiffs v. NEW JERSEY TRANSIT CORPORATION, et al., Defendants.