

**AVAILABILITY OF DISADVANTAGED  
BUSINESS ENTERPRISES IN THE ILLINOIS  
DEPARTMENT OF TRANSPORTATION'S  
MARKET FOR FEDERAL HIGHWAY  
ADMINISTRATION FUNDED CONTRACTS**



# I. Introduction

CHA analyzed data from Illinois Department of Transportation (“IDOT”) contracts funded with monies from the U.S. Department of Transportation’s Federal Highway Administration (“FHWA”) for the fiscal years 2016 through 2021. This data set contained 8,713 contracts worth \$5,078,380,506. Firms receiving 91.6% of these monies were located in the state of Illinois and, therefore, Illinois was determined to be the geographic market for study purposes. After constraining the data set to the state, the Final Contract Data File (“FCDF”) of remaining contracts was comprised 48 NAICS codes totaling \$4,653,919,258. This report presents estimates of available DBEs in this geographic and product market.

# II. The Availability of DBEs in its Geographic and Product Market

Estimates of the availability of DBEs in IDOT’s geographic and product market are a critical component of IDOT’s compliance with its constitutional obligations under strict scrutiny and under 49 C.F.R. Part 26 for the DBE program. The availability estimates must reflect the number of “ready, willing and able” firms that can perform the specific types of work required for the IDOT’s prime contracts and associated subcontracts.<sup>1</sup> These availability estimates are compared to the utilization percentage of dollars received by DBEs to determine whether minority- and woman-owned firms achieve parity. Availability estimates are also crucial for IDOT to set narrowly tailored DBE goals for its FHWA assisted contracts.

We applied the “custom census” approach, with refinements, to estimate availability. The courts and the National Model Disparity Study Guidelines<sup>2</sup> have recognized this methodology as superior to the other methods for at least four reasons:

- First, it provides an internally consistent and rigorous “apples to apples” comparison between firms in the availability numerator and those in the denominator. Other approaches often have different definitions for the firms in the numerator (e.g., certified or firms that respond to a survey) and the denominator (e.g., registered vendors or the Census Bureau’s County Business Patterns data).
- Second, by examining a comprehensive group of firms, it “casts a broader net” beyond those known to the agency. As recognized by the courts, this comports with the remedial nature of contracting affirmative action programs by seeking to bring in businesses that have historically been excluded. Our methodology is less likely to be tainted by the effects of past and present discrimination than other methods, such as bidders’ lists, because it seeks out firms in the agency’s market area that have not been able to access the agency’s opportunities.
- Third, this approach is less impacted by variables affected by discrimination. Factors such as firm age, size, qualifications, and experience are all elements of business success where discrimination would be manifested. Several courts have held that

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<sup>1</sup> 49 C.F.R. §25.45(c).

<sup>2</sup> National Academies of Sciences, Engineering, and Medicine 2010, *Guidelines for Conducting a Disparity and Availability Study for the Federal WMBE Program*. Washington, DC: The National Academies Press. <https://doi.org/10.17226/14346> (“*National Disparity Study Guidelines*”) at pp.57-58. This was also the approach used in the successful defense of IDOT’s DBE Program in *Northern Contracting, Inc. v. Illinois Department of Transportation*, 473 F.3d 715, 720 (7<sup>th</sup> Cir. 2007).

the results of discrimination – which impact factors affecting capacity – should not be the benchmark for a program designed to ameliorate the effects of discrimination. They have acknowledged that minority and woman firms may be smaller, newer, and otherwise less competitive than non-DBE firms because of the very discrimination sought to be remedied by race-conscious contracting programs. Racial and gender differences in these “capacity” factors are the outcomes of discrimination and it is therefore inappropriate as a matter of economics and statistics to use them as “control” variables in a disparity study.<sup>3</sup>

- Fourth, it has been upheld by every court that has reviewed it, including most recently in the successful defense of the Illinois Tollway’s DBE program, for which we served as testifying experts.<sup>4</sup>

Using this framework, CHA utilized three databases to estimate availability:

1. The Final Contract Data File
2. The Master DBE Directory compiled by CHA
3. Dun & Bradstreet/Hoovers Database

First, we eliminated any duplicate entries in the geographically constrained data set. Some firms received multiple contracts for work performed in the same NAICS codes. Without this elimination of duplicate listings, the availability database would be artificially large. This list of unique firms comprised the first component of the Study’s availability determination.

To develop the Master Directory, we utilized the Illinois Unified Certification Program DBE Directory and the FCDF. We limited the firms we used in our analysis to those operating within IDOT’s geographic and product market.

We next developed a custom database from Hoovers, a Dun & Bradstreet company, for minority- and woman-owned firms and non-DBE firms. Hoovers maintains a comprehensive, extensive and regularly updated listing of all firms conducting business. The database includes a vast amount of information on each firm, including location and detailed industry codes, and is the broadest publicly available data source for firm information. We purchased the information from Hoovers for the firms in the NAICS codes located in IDOT’s market area to form our custom Dun & Bradstreet/Hoovers Database. In the initial download, the data from Hoovers simply identified a firm as being minority owned.<sup>5</sup> However, the company does keep detailed information on ethnicity (*i.e.*, is the minority firm owner Black, Hispanic, Asian, or Native American). We obtained this additional information from Hoovers by special request.

The Hoovers database is the most comprehensive list of minority-owned and woman-owned businesses available. It is developed from the efforts of a national firm whose business is collecting business information. Hoovers builds its database from over 250 sources, including information from government sources and various associations, and its own efforts. Hoovers conducts an audit of the preliminary database prior to the public release of the data. That audit must result in a minimum of 94% accuracy. Once published, Hoovers has an established

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<sup>3</sup> For a detailed discussion of the role of capacity in disparity studies, see *the National Disparity Study Guidelines*, Appendix B, “Understanding Capacity.”

<sup>4</sup> *Midwest Fence, Corp. v. U.S. Department of Transportation et al.*, 840 F.3d 932 (2016); see also *Northern Contracting, Inc. v. Illinois Department of Transportation*, 473 F.3d 715 (7<sup>th</sup> Cir. 2007), *cert. denied*, 137 S.Ct. 2292 (2007).

<sup>5</sup> The variable is labeled: “Is Minority Owned” and values for the variable can be either “1” (for yes) or blank.

protocol to regularly refresh its data. This protocol involves updating any third-party lists that were used and contacting a selection of firms via Hoover's own call centers.

We merged these three databases to form an accurate estimate of firms available to work on the IDOT's contracts.

### III. The Availability Data and Results

Tables 1 through 3 present data on:

- The unweighted availability percentages by race and gender and by NAICS codes for firms in the product market for IDOT's FHWA funded contracts;
- The weights used to adjust the unweighted numbers;<sup>6</sup> and
- The final estimates of the weighted averages of the individual six-digit level NAICS availability estimates in IDOT's market area.

We "weighted" the availability data for two reasons. First, weighting also reflects the importance of the availability of a demographic group in a particular NAICS code, that is, how important that NAICS code is to IDOT's FHWA funded contracting patterns.<sup>7</sup> For example, in a hypothetical NAICS Code 123456, the total available firms are 100 and 60 of these firms are DBE firms; hence, DBE availability would be 60%. However, if IDOT spends only one percent of its contract dollars in this NAICS code, then this high availability would be offset by the low level of spending in that NAICS code. In contrast, if IDOT spends 25% of its contract dollars in NAICS Code 123456, then the same availability would carry a greater weight. For an extended explanation of how unweighted and weighted availability are calculated, please see Appendix D.

Second, this comports with national best practices, case law and USDOT Guidance. The weighted availability represents the share of total possible contractors for each demographic group, weighted by the distribution of contract dollars across the NAICS codes in which IDOT spends its contract dollars.

To calculate the weighted availability for each NAICS code, we first determined the unweighted availability for each demographic group in each NAICS code, presented in Table 1. In the previous example, the unweighted availability for DBE firms in NAICS Code 123456 is 60%. We then multiplied the unweighted availability by the share of IDOT's spending in that NAICS code, presented in Table 2. This share is the *weight*. Using the previous example, where IDOT's spending in NAICS Code 123456 was one percent, the component of DBE weighted availability for NAICS Code 123456 would be 0.006: 60% multiplied by one percent. We say "the component of DBE firm weighted availability for NAICS Code 123456" because this process is repeated for each NAICS code and then the components are summed to generate an overall weighted availability estimate. The results of this calculation are presented in Table 3.

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<sup>6</sup> These weights are equivalent to the share of contract dollars presented in the previous section.

<sup>7</sup> <https://www.transportation.gov/osdbu/disadvantaged-business-enterprise/tips-goal-setting-disadvantaged-business-enterprise>.

**Table 1**  
**Unweighted DBE Availability for IDOT Contracts**  
**(FHWA-Funded)**

NAICS	Black	Hispanic	Asian	Native American	White Woman	DBE	Non-DBE	Total
236210	2.7%	3.5%	2.0%	0.4%	7.4%	16.0%	84.0%	100.0%
236220	4.1%	2.8%	1.1%	0.2%	6.0%	14.1%	85.9%	100.0%
237110	1.4%	3.6%	2.2%	0.1%	9.6%	17.0%	83.0%	100.0%
237130	6.3%	11.3%	6.9%	0.0%	11.9%	36.3%	63.8%	100.0%
237310	5.3%	6.8%	1.5%	0.2%	9.3%	23.0%	77.0%	100.0%
237990	3.4%	4.0%	1.3%	0.0%	10.8%	19.5%	80.5%	100.0%
238110	1.9%	2.1%	0.3%	0.0%	3.9%	8.3%	91.7%	100.0%
238120	6.8%	8.2%	1.4%	0.0%	19.2%	35.6%	64.4%	100.0%
238130	1.4%	1.1%	0.1%	0.0%	2.0%	4.6%	95.4%	100.0%
238140	1.5%	1.8%	0.1%	0.0%	2.4%	5.9%	94.1%	100.0%
238150	2.3%	1.9%	0.0%	0.0%	3.5%	7.7%	92.3%	100.0%
238160	0.7%	0.4%	0.2%	0.0%	2.3%	3.6%	96.4%	100.0%
238190	6.9%	5.5%	2.1%	0.7%	8.3%	23.4%	76.6%	100.0%
238210	1.6%	1.2%	0.5%	0.0%	5.8%	9.2%	90.8%	100.0%
238220	0.8%	0.6%	0.2%	0.0%	3.1%	4.6%	95.4%	100.0%
238310	2.6%	2.3%	0.3%	0.0%	4.0%	9.2%	90.8%	100.0%
238320	1.4%	0.6%	0.1%	0.0%	2.9%	4.9%	95.1%	100.0%
238390	1.2%	2.2%	0.4%	0.0%	3.1%	6.9%	93.1%	100.0%
238910	2.0%	2.7%	0.6%	0.1%	7.6%	13.0%	87.0%	100.0%
238990	0.7%	0.9%	0.2%	0.0%	2.6%	4.4%	95.6%	100.0%
423320	0.6%	1.3%	0.9%	0.0%	5.3%	8.1%	91.9%	100.0%
423390	3.0%	1.5%	3.0%	0.0%	11.9%	19.4%	80.6%	100.0%
423510	1.0%	0.3%	0.4%	0.0%	4.6%	6.3%	93.7%	100.0%
423610	1.7%	0.9%	0.8%	0.1%	7.7%	11.1%	88.9%	100.0%
423810	0.3%	1.1%	0.3%	0.3%	6.2%	8.0%	92.0%	100.0%
424610	0.0%	0.0%	0.0%	0.0%	4.7%	4.7%	95.3%	100.0%
444190	0.3%	0.3%	0.3%	0.1%	4.0%	4.9%	95.1%	100.0%
484220	6.6%	33.7%	1.0%	0.0%	13.6%	54.9%	45.1%	100.0%
488490	3.1%	1.4%	0.0%	0.0%	5.5%	10.0%	90.0%	100.0%
519110	3.3%	0.0%	1.1%	0.0%	4.3%	8.7%	91.3%	100.0%
531210	0.5%	0.1%	0.0%	0.0%	3.4%	4.0%	96.0%	100.0%

NAICS	Black	Hispanic	Asian	Native American	White Woman	DBE	Non-DBE	Total
541330	2.6%	1.9%	4.6%	0.2%	4.9%	14.1%	85.9%	100.0%
541370	3.2%	1.7%	4.6%	0.2%	10.7%	20.5%	79.5%	100.0%
541380	0.5%	0.3%	1.9%	0.1%	2.9%	5.7%	94.3%	100.0%
541420	3.2%	1.1%	1.1%	0.0%	16.8%	22.1%	77.9%	100.0%
541611	3.2%	0.7%	0.8%	0.0%	6.6%	11.2%	88.8%	100.0%
541618	1.0%	0.2%	0.2%	0.0%	2.5%	3.9%	96.1%	100.0%
541620	2.3%	2.0%	1.9%	0.3%	7.2%	13.7%	86.3%	100.0%
541690	3.0%	0.7%	1.1%	0.1%	7.2%	12.2%	87.8%	100.0%
541720	1.1%	0.0%	0.3%	0.0%	3.1%	4.5%	95.5%	100.0%
541820	3.0%	1.2%	0.6%	0.0%	13.3%	18.2%	81.8%	100.0%
541990	1.1%	0.5%	1.0%	0.0%	5.9%	8.7%	91.3%	100.0%
561320	2.5%	1.5%	1.0%	0.0%	10.2%	15.1%	84.9%	100.0%
561730	0.6%	0.8%	0.1%	0.0%	3.0%	4.5%	95.5%	100.0%
561790	1.0%	0.3%	0.0%	0.0%	4.7%	6.0%	94.0%	100.0%
561990	1.2%	0.2%	0.2%	0.0%	9.8%	11.4%	88.6%	100.0%
562910	8.4%	6.0%	2.4%	0.0%	9.0%	25.7%	74.3%	100.0%
562998	1.1%	1.1%	1.1%	0.0%	16.1%	19.4%	80.6%	100.0%
<b>TOTAL</b>	<b>1.3%</b>	<b>0.9%</b>	<b>0.4%</b>	<b>0.0%</b>	<b>4.8%</b>	<b>7.5%</b>	<b>92.5%</b>	<b>100.0%</b>

Source: CHA analysis of IDOT data; Hoovers; CHA Master Directory

**Table 2**  
**Distribution of IDOT's Spending by NAICS Code**  
**(FHWA-Funded)**  
**(the Weights)**

NAICS	NAICS Code Description	WEIGHT (Pct Share of Total Sector Dollars)
236210	Industrial Building Construction	0.1%
236220	Commercial and Institutional Building Construction	0.04%
237110	Water and Sewer Line and Related Structures Construction	3.4%
237130	Power and Communication Line and Related Structures Construction	0.6%
237310	Highway, Street, and Bridge Construction	64.9%
237990	Other Heavy and Civil Engineering Construction	0.3%
238110	Poured Concrete Foundation and Structure Contractors	13.3%
238120	Structural Steel and Precast Concrete Contractors	1.8%

NAICS	NAICS Code Description	WEIGHT (Pct Share of Total Sector Dollars)
238130	Framing Contractors	0.001%
238140	Masonry Contractors	0.02%
238150	Glass and Glazing Contractors	0.001%
238160	Roofing Contractors	0.01%
238190	Other Foundation, Structure, and Building Exterior Contractors	0.7%
238210	Electrical Contractors and Other Wiring Installation Contractors	2.9%
238220	Plumbing, Heating, and Air-Conditioning Contractors	0.1%
238310	Drywall and Insulation Contractors	0.1%
238320	Painting and Wall Covering Contractors	0.1%
238390	Other Building Finishing Contractors	0.3%
238910	Site Preparation Contractors	3.5%
238990	All Other Specialty Trade Contractors	0.9%
423320	Brick, Stone, and Related Construction Material Merchant Wholesalers	0.3%
423390	Other Construction Material Merchant Wholesalers	0.01%
423510	Metal Service Centers and Other Metal Merchant Wholesalers	0.01%
423610	Electrical Apparatus and Equipment, Wiring Supplies, and Related Equipment Merchant Wholesalers	0.01%
423810	Construction and Mining (except Oil Well) Machinery and Equipment Merchant Wholesalers	0.0003%
424610	Plastics Materials and Basic Forms and Shapes Merchant Wholesalers	0.001%
444190	Other Building Material Dealers	0.0004%
484220	Specialized Freight (except Used Goods) Trucking, Local	0.3%
488490	Other Support Activities for Road Transportation	0.1%
519110	News Syndicates	0.0002%
531210	Offices of Real Estate Agents and Brokers	0.003%
541330	Engineering Services	2.4%
541370	Surveying and Mapping (except Geophysical) Services	0.1%
541380	Testing Laboratories	0.1%
541420	Industrial Design Services	0.1%
541611	Administrative Management and General Management Consulting Services	0.3%



NAICS	NAICS Code Description	WEIGHT (Pct Share of Total Sector Dollars)
541618	Other Management Consulting Services	0.02%
541620	Environmental Consulting Services	0.03%
541690	Other Scientific and Technical Consulting Services	0.003%
541720	Research and Development in the Social Sciences and Humanities	0.0003%
541820	Public Relations Agencies	0.03%
541990	All Other Professional, Scientific, and Technical Services	1.2%
561320	Temporary Help Services	0.004%
561730	Landscaping Services	0.8%
561790	Other Services to Buildings and Dwellings	0.001%
561990	All Other Support Services	1.2%
562910	Remediation Services	0.1%
562998	All Other Miscellaneous Waste Management Services	0.1%
<b>TOTAL</b>		<b>100.0%</b>

Source: CHA analysis of IDOT of Seattle data

Table 4-3 presents the weighted availability results for each of the racial and gender categories. The aggregated availability of DBE firms, weighted by IDOT's spending in its geographic and industry markets, is 19.4%. This result can be used to establish IDOT triennial DBE goal for FHWA funded contracts.

**Table 3**  
**Aggregated Weighted DBE Availability**  
**(FHWA-Funded)**

Black	Hispanic	Asian	Native American	White Women	DBE	Non-DBE	Total
4.2%	5.4%	1.4%	0.2%	8.3%	19.4%	80.6%	100.0%

Source: CHA analysis of IDOT data; Hoovers; CHA Master Directory