

NCHRP Project 20-95A

Final Results

Compendium of Successful DBEs, Practices, Strategies and Resources in the FHWA Disadvantaged Business Enterprise (DBE) Program

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Project objectives

- Add to knowledge concerning the characteristics, business practices and behaviors of successful DBEs, including firms that graduated
- Assess whether DBEs that graduated have been able to survive post-graduation, and if so, factors that contributed to post-program sustainability
- Identify specific practices of state DOTs that have contributed to (or hindered) DBE success
- Identify good practices for state DOTs to promote “success” and create self-sufficiency of DBEs on contracts falling under the Federal DBE Program as well as work outside the program

Research steps

- Fillable PDF survey with state DOTs to identify successful DBEs and learn about program elements (41 responses)
- Telephone calls to trade associations in non-respondent states to identify successful DBEs (added 4 states)
- Analysis of characteristics of identified successful DBEs, with comparison to all certified DBEs in 17 states for which directories could be used (800+ firm sample from 17,296 DBEs in those directories)
- Intro telephone calls followed by online survey of successful DBEs (182 survey responses, including partial responses)
- In-depth telephone interviews with 27 DBEs
- In-depth telephone interviews with 18 state DOTs
- Interviews or written comments from 14 trade associations
- Analysis of qualitative results from past state DOT disparity studies

Limitations

- Little existing information on this topic – study is a first step
- Dependent on state DOT knowledge of successful DBEs and graduates
- Because very few graduates, limited analysis of what differentiates them from other successful DBEs
- Did not ask questions about wealth or net income of DBEs – these appear to be important to causing “graduation”
- Cross-sectional analysis only – future studies might track firms over time
- Relied on DBE directories for 17 states to draw a sample of all DBEs, no national database of DBEs that had data we needed
- Used information from Dun & Bradstreet regarding firm characteristics when comparing successful DBEs and graduates to all DBEs
- Very few state DOTs have designed assistance specifically for successful DBEs and firms on path to graduation – this limits what can be said about “good practices” of state DOTs
- Interviewees often discussed factors for success as “outcomes” (such as delivering quality work), not how outcomes were achieved

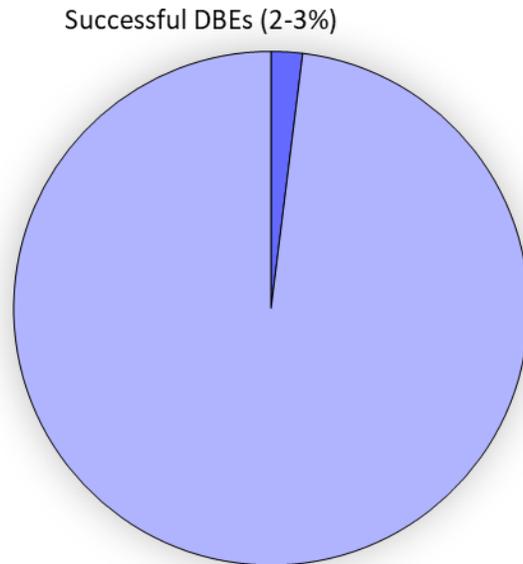
1. About 750 successful DBEs identified by state DOTs

Some DBEs identified within more than one definition of “success”

State DOT and trade association identification of successful DBEs	Positive responses	Number of DBEs provided
1. Are there DBEs that obtain a substantial volume of your state DOT subcontracts without the benefit of a DBE or MBE/WBE goal?	63 %	216
2. Are there DBEs that are often successful in participating as prime contractors on your state DOT contracts (including construction, consultant or other contracts)?	96	124
3. Are there DBEs that participate in state DOT work that you know obtain a substantial amount of revenue from their work with other public or private sector customers that do not operate a program?	67	100
4. Are there DBEs that obtain considerably more contract dollars than other DBEs in an individual discipline?	90	239
5 a. Are there any current DBEs that are on a growth path where they might exceed size standards for the Program in the next few years?	75	70
5 b. Are there any DBEs that, after certification, have diversified their businesses and requested additional NAICS codes?	88	93
5 c. Are you working with any DBEs to prepare them for when they exit the Program?	31	9
6. Are there any former DBEs that have experienced growth in revenue or personal net worth such that they are no longer certified?	87	101

2. State DOTs' successful DBEs are small share of all DBEs

- National DBE Directory contained about 41,000 DBEs in July 2018
- 749 successful DBEs certified as of summer 2018 (data for 45 states)
- Successful DBEs (that are certified) are about 2% of total certified DBEs
- In highway construction NAICS code, successful DBEs are 3% of all DBEs



3. State DOTs identified 101 companies as “graduated”

- No formal action required for graduates (and no data collected), they often simply do not renew their certification
- Asked each state DOT to identify firms they knew had experienced growth in revenue or personal net worth such that they are no longer certified
- On average, each state DOT identified 2-5 companies
- Some grew mostly because of non-state DOT work
- Most are still in business, but 2 known to have failed
- If no longer in business, primarily because owner of DBE retired, sold the business, merged with another firm
- No known graduates for a few state DOTs

4. “Graduation” temporary for some companies

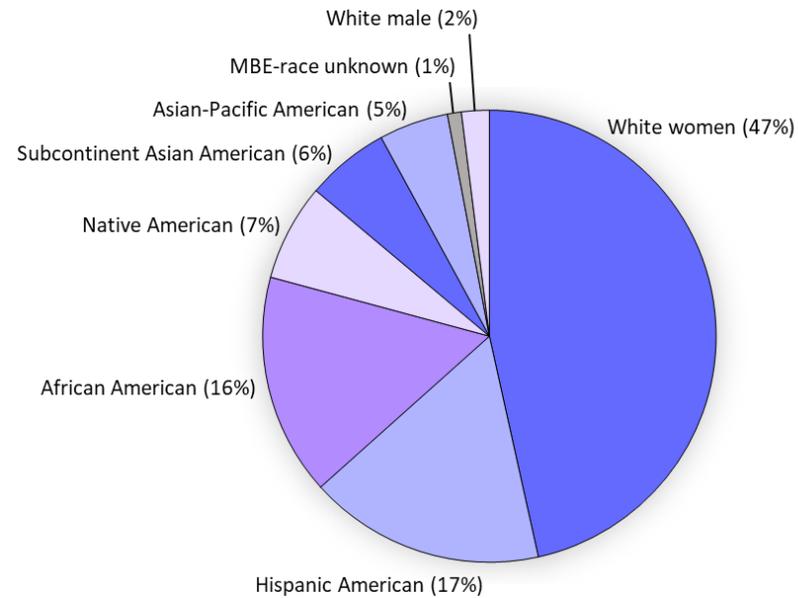
- One-third of DBEs identified as “graduated” appeared in DBE directories as of summer 2018
- State DOTs reported that some firms appealed decertification
- Some DBEs appear to return because of lower revenue once graduated and some return because restructured business
- “Ability to accumulate substantial wealth” important in some recent graduations
- Did not have sufficient data to analyze what causes firms to permanently graduate and what leads to re-entry

5. Some DBEs on a growth path where they may graduate

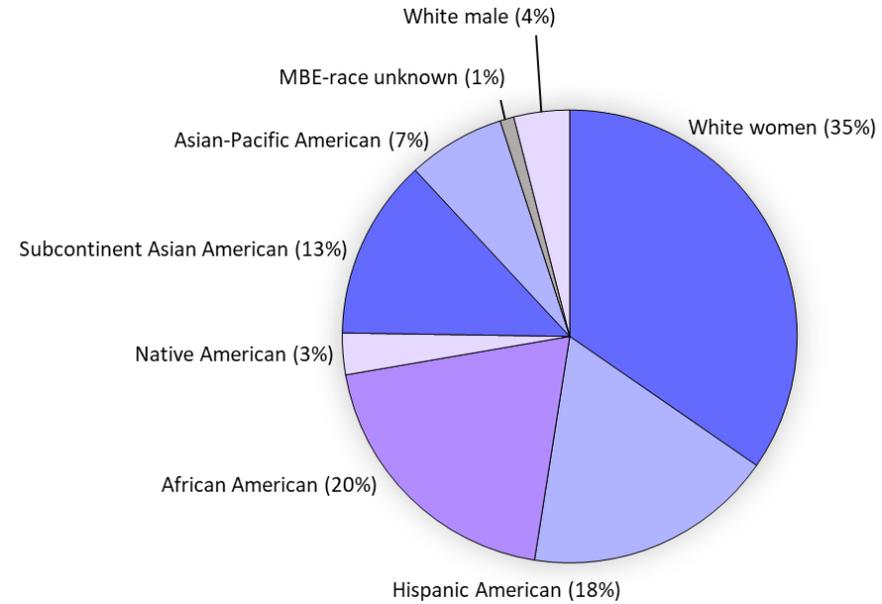
- About one-half of all successful DBEs anticipate substantial revenue growth in future
- State DOTs identified 70 DBEs when asked if any on a growth path where they might exceed size standards in the next few years
- Some successful DBEs say they worry about their future if they graduate from the program

6. About one-half of successful DBEs owned by white women

Successful DBEs



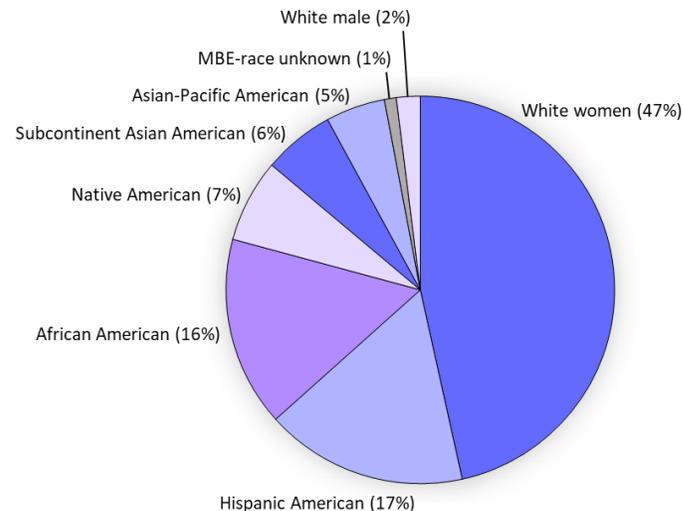
Graduated DBEs



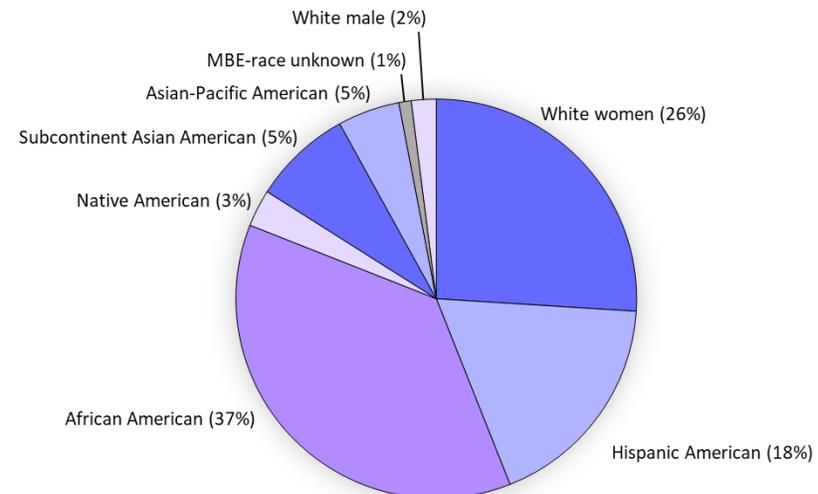
7. Ownership of successful DBEs differs from all DBEs

- White women-owned DBEs twice as likely as other DBEs to be identified by state DOTs as successful
- African American-owned DBEs half as likely as other DBEs to be identified as successful
- Regression analysis indicates these results persist after controlling for firm age and industry

Successful DBEs



All DBEs



8. Successful DBEs mostly construction and prof. services

Primary type of work performed	2-digit NAICS code	Percentage of successful DBEs	Percentage of all DBEs
Agriculture and mining	11, 21	1.3 %	0.6 %
Construction	23	43.2	21.3
Manufacturing, wholesale trade, retail trade	32-45	8.7	9.7
Transportation and warehousing	48	7.3	8.7
Information, finance, insurance, real estate and rental	51-53	2.6	3.7
Professional, scientific and technical services	54	26.0	37.8
Administrative and support and waste management and remediation services	56	9.7	12.6
Other sectors	62-81	1.2	5.5
Total		100.0 %	100.0 %

9. However, no concentration in any one 4-digit NAICS code

Primary line of work	2-digit NAICS code	Percentage of successful DBEs	Percentage of all DBEs
Support activities for crop production	1151	0.5 %	0.1 %
Residential building construction	2361	3.8	5.9
Nonresidential building construction	2362	3.5	3.3
Utility system construction	2371	1.7	1.0
Highway, street and bridge construction	2373	18.0	1.0
Other heavy and civil engineering construction	2379	0.7	0.2
Foundation, structure and building exterior contractors	2381	4.8	2.7
Building equipment contractors	2382	2.3	3.7
Building finishing contractors	2383	2.4	1.8
Other specialty trade contractors	2389	5.9	1.7
Lumber and other construction materials merchant wholesalers	4233	1.1	0.6
Machinery, equipment and merchant wholesalers	4238	0.7	1.1
General freight trucking	4841	4.3	5.0
Specialized freight trucking	4842	2.0	1.7
Consumer goods rental	5322	1.2	0.1
Commercial and industrial machinery and equip. rental/leasing	5324	0.7	0.2
Architectural, engineering and related services	5413	14.1	11.8
Computer systems design and related services	5415	1.5	4.2
Management, scientific and technical consulting services	5416	8.1	13.9
Scientific research and development services	5417	0.7	0.2
Advertising, public relations and related services	5418	0.8	1.3
Other professional, scientific and technical services	5419	0.7	2.9
Office administrative services	5611	1.3	3.1
Employment services	5613	0.9	1.6
Business support services	5614	0.5	1.6
Services to buildings and dwellings	5617	3.0	2.3
Other support services	5619	2.8	2.0
Other sectors	62-81	11.8	24.9
Total		100.0 %	100.0 %

10a. Successful DBEs cover many specific disciplines in state DOT work (from survey of successful DBEs)

Type of work performed	Original primary line of work	Current primary line of work	All current lines of work
Construction			
Bridge and elevated highway	1.5 %	2.2 %	15.6 %
Asphalt and concrete paving	1.5	1.5	15.6
Pavement milling	0.7	1.5	10.4
Pavement surface treatment	0.0	0.0	8.1
General road construction	5.2	8.1	24.4
Building construction	1.5	0.7	9.6
Wrecking and demolition	0.7	0.7	13.3
Excavation, site prep, grading and drainage	2.2	3.7	23.0
Drilling and foundations	1.5	1.5	7.4
Concrete pumping	0.0	0.7	0.7
Underground utilities	2.2	0.7	8.1
Electrical work	2.2	3.0	3.0
Concrete cutting	0.7	0.0	13.3
Concrete flatwork	4.4	3.7	22.2
Structural steel and rebar work	3.7	3.7	14.1
Installation of guardrails, fencing or signs	5.2	5.9	14.8
Plumbing and HVAC	0.0	0.0	0.7
Striping and pavement marking	0.7	1.5	11.9
Painting for road or bridge projects	1.5	1.5	5.2
Landscaping and related work including erosion control	4.4	5.2	11.9
Temporary traffic control	11.9	11.1	22.2
Trucking and hauling	9.6	7.4	22.2
Equipment rental	0.0	0.0	8.1
Other construction	3.0	0.7	0.7

10b. Successful DBEs cover many disciplines

Type of work performed	Original primary line of work	Current primary line of work	All current lines of work
Professional Services			
Architecture and engineering	12.6 %	8.9 %	16.3 %
Transportation planning	2.2	1.5	8.1
Construction management	0.0	0.7	18.5
Environmental consulting	3.7	3.0	8.9
Inspection and testing	3.7	5.2	14.8
Surveying and mapping	1.5	2.2	7.4
Right-of-way consulting	0.0	0.0	1.5
Archaeology	0.0	0.0	3.7
Public information and outreach	2.2	3.0	10.4
Staffing	1.5	0.0	0.7
Other professional services	3.7	3.7	6.7
Suppliers			
Asphalt, concrete or other paving materials	2.2	1.5	7.4
Other materials supply	2.2	5.2	43.7

- No concentration in any one line of work
- Some change from original primary line of work
- 86% of successful DBEs perform more than one type of work

11. Successful DBEs often older firms, certified many years

- Median company age of successful DBEs is 18 years (20 for grads), compared with 11 years for all DBEs
- Median number of years certified for successful DBEs: 16.5 years
- Median firm age of when first certified: 2 years

	Year started	When first certified
Before 1960	0.7 %	0.0 %
1960–1969	0.7	0.0
1970–1979	4.5	0.8
1980–1989	14.9	7.7
1990–1999	35.8	30.8
2000–2009	32.1	34.6
2010–2018	11.2	26.2
Total	100.0 %	100.0 %

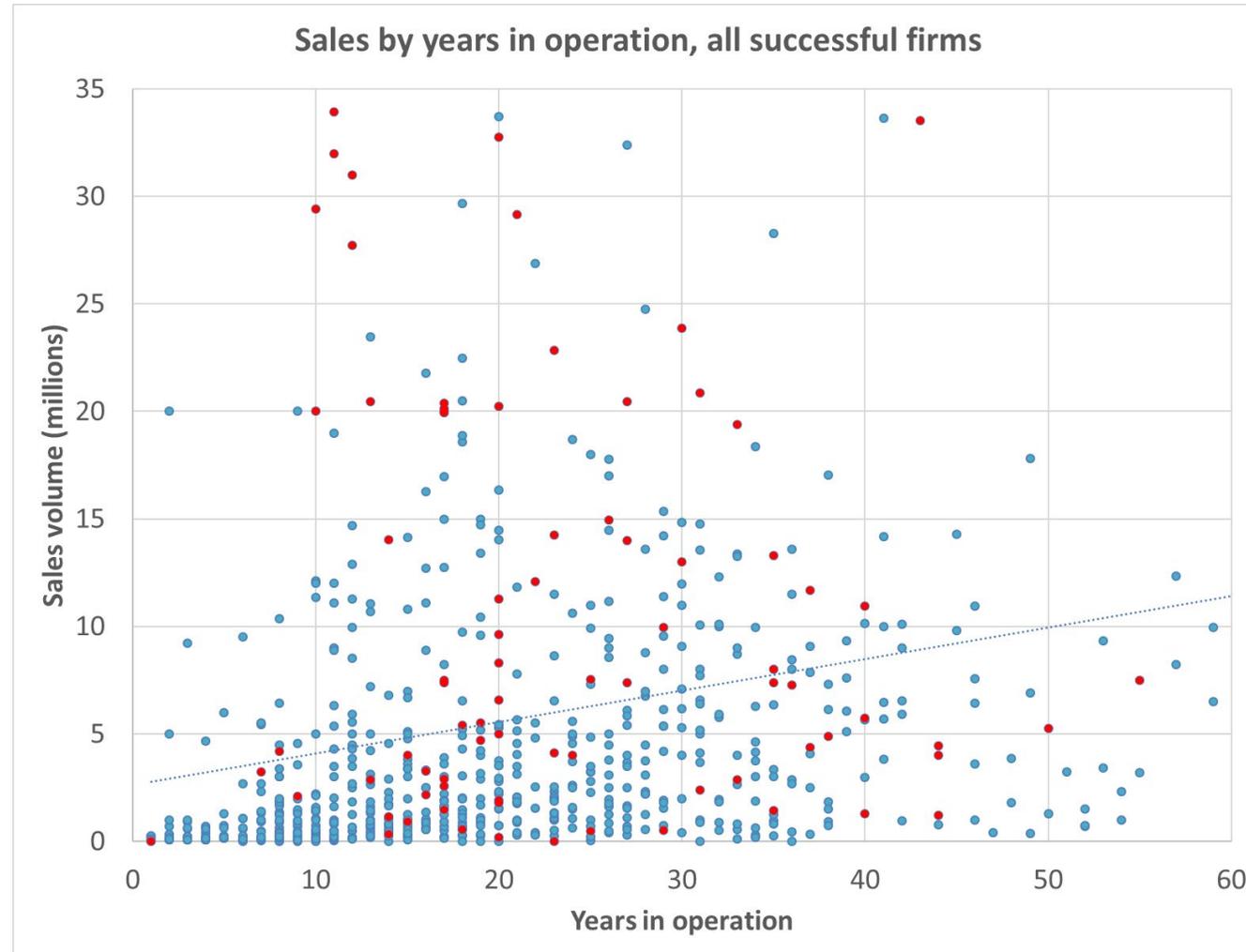
12. Revenue for most successful DBEs ≤ \$10 million

- 80% of successful DBEs have annual gross receipts of \$10 million or less (true for one-half of graduated DBEs)
- Almost all successful DBEs NOT near revenue threshold that would cause graduation
- Successful DBE median revenue (\$2.2 million) higher than all DBEs (\$0.3 mil)
- Among surveyed successful DBEs (below), very few over \$15 million

Average annual gross revenue	Percentage
Up to \$0.5 million	11.1 %
\$0.6 million to \$1 million	4.0
\$1.1 million to \$2.5 million	18.3
\$2.6 million to \$5 million	27.8
\$5.1 million to \$7.5 million	7.1
\$7.6 million to \$10 million	8.7
\$10.1 million to \$15 million	11.1
\$15.1 million to \$24 million	10.3
\$24.1 million to \$36.5 million	0.8
\$36.6 million or more	0.8
Total	100.0 %

13. Wide range of annual revenue among successful DBEs

- Revenue alone is not a good measure of whether a firm is “successful” or on a path to graduation (graduated firms in red below)



14. Successful DBEs appear to go through same stages of development as any other firm, but with better results

Stages of development

1. Pre-start-up
2. Start-up
3. Growth and change
4. Surviving unfavorable economic conditions or other events
5. Relative stability and profitability
6. Succession planning
7. For some, exiting DBE Program or other program

Many successful DBEs experienced difficult periods, especially when firm was younger

Many say there is still tough competition with larger firms in their field

15. Many ingredients to becoming a successful DBE

	Mandatory from start	Mandatory as mature	Strategies for some
Experience and relationships prior to start-up	<input type="checkbox"/>		
Being in a field with demand for services	<input type="checkbox"/>	<input type="checkbox"/>	
Access to capital	<input type="checkbox"/>	<input type="checkbox"/>	
Business acumen	<input type="checkbox"/>	<input type="checkbox"/>	
Quality of work and reputation	<input type="checkbox"/>	<input type="checkbox"/>	
Relationships with customers	<input type="checkbox"/>	<input type="checkbox"/>	
Ability to hire, train and retain quality workforce		<input type="checkbox"/>	
Operational efficiency and competitive pricing		<input type="checkbox"/>	
Succession planning		<input type="checkbox"/>	
Diversification, vertical integration			<input type="checkbox"/>
Serving a geographically large market			<input type="checkbox"/>
Bidding/proposing as a prime			<input type="checkbox"/>

16. State DOTs help DBEs through multiple avenues

	Basic services	Important for many	Used by some
DBE recruitment and effective DBE certification	<input type="checkbox"/>		
Relationship-building	<input type="checkbox"/>		
Information about contract opportunities	<input type="checkbox"/>		
Enforcement of prompt payment	<input type="checkbox"/>		
General training	<input type="checkbox"/>		
Individualized training and assistance		<input type="checkbox"/>	
Individualized assistance tailored to successful DBEs			<input type="checkbox"/>
Delivering access to capital			<input type="checkbox"/>
DBE or other contract goals		<input type="checkbox"/>	
Unbundling contracts, small bus.-friendly selection		<input type="checkbox"/>	
Sheltered market bidding for small primes			<input type="checkbox"/>

17. DBE Program helped DBEs be successful (according to successful DBEs)

When asked how things would be different if never been DBE certified ...

- Two-thirds say annual revenue would be lower
- 42% say profit margins would be lower
- 32% say would not be competitive in their field;
42% say they still would be competitive
- 23% say would have failed

Only ...

- 10% say would work more as prime and less as a sub
- 19% say would do more work on non-goals contracts
and less on contracts with goals
- 14% say would specialize in a different field

18. Successful DBEs say they have and will continue to use different types of general training

- Survey asked successful DBEs about 27 different types of potential state DOT training and other assistance
- 43% of successful DBEs say they participated in classes on record-keeping, contract compliance or office functions in past 3 years and many thought it was valuable
- Some mismatch between what successful DBEs say would be helpful in future and training state DOTs offer (record-keeping, human resources, safety)
- Training specific to the state DOT highly valued (e.g., safety training specific to state DOT work)
- Each training topic in survey received some interest from successful DBEs

19. Few state DOTs have specific assistance for successful DBEs or those on graduation path
- 88% of state DOTs reported offering one-on-one or individualized assistance
 - Some reported that successful DBEs do not take advantage of this assistance
 - Very few reported customized assistance for the DBEs that had been the most successful or were nearing graduation (only 9 DBEs)
 - “The program is not intended to ‘graduate’ successful DBEs but to assist DBEs with business growth,” according to one state DOT
 - Some state DOTs reported once having programs to prepare DBEs for graduation that they discontinued
 - One challenge: there is a disincentive for the DBE and for the state DOT to have a firm graduate
 - From other research: relatively small number of DBEs often receive much of a state DOT’s total DBE dollars when contract goals apply

20. Many good practices available for state DOTs and partners to help create successful DBEs

1. Successfully deliver basic services (recruitment/certification, relationship-building, info on contract opportunities, prompt payment, general training)
2. Emphasize training specific to industry and state DOT (including non-construction)
3. Provide individualized training and assistance, including for successful DBEs (delivery models vary)
4. Address access to capital and bonding (going beyond classes)
5. Open more prime contract opportunities to small businesses including DBEs
6. Track successful DBEs, share info across states and develop multi-state efforts to provide specialized assistance to firms on graduation path
7. Encourage successful DBEs to assist emerging DBEs
8. Ease transition from being a DBE-certified firm to program graduate
9. Consider ways for graduation to be “permanent” for more graduates
10. Celebrate graduations, track graduations as a metric of program success
11. Track utilization of all MBE/WBEs (including graduated DBEs) to provide measures of program success in addition to DBE Uniform Reports
12. Internally plan for graduation of some DBEs, including when set overall DBE goals

Summary – successful DBEs

1. About 750 successful DBEs identified by state DOTs
2. State DOTs' successful DBEs are 2-3% of all DBEs
3. About 100 companies identified as “graduated”
4. “Graduation” temporary for some companies
5. Another 70 DBEs on a growth path where might graduate
6. About one-half of successful DBEs owned by white women
7. Ownership of successful DBEs differs from all DBEs
(e.g., more white women-owned and fewer African American-owned)
8. Successful DBEs mostly construction and prof. services
9. However, no concentration in any one 4-digit NAICS code
10. Successful DBEs cover many specific disciplines involved in state DOT work
(and most perform more than one type of work)
11. Successful DBEs often older firms, certified many years
12. Revenue for most successful DBEs ≤ \$10 million
13. Wide range of annual revenue among successful DBEs
14. Successful DBEs appear to go through same stages of development as any other firm,
but with better results

Summary – state DOT operation of DBE Program

15. Many ingredients to becoming a successful DBE
16. State DOTs help DBEs through multiple avenues
17. DBE Program helped DBEs be successful, according to those companies
18. Successful DBEs say they have and will continue to use different types of general training
19. Few state DOTs have specific assistance for successful DBEs or those on graduation path, and there is a disincentive for DBEs (and state DOTs) to have a firm graduate
20. Many good practices available for state DOTs and partners to help create successful DBEs

Future research

1. Surveys and interviews with new and emerging DBEs, and possibly minority- and women-owned firms that are not DBE-certified
2. Include DBE program managers from airports and transit properties in the identification of successful DBE firms
3. Focus the research on DBEs that have been in the market for many years to address what they need in order to graduate, and what about the DBE Program led them to staying a DBE for so long
4. Compare successful DBEs with successful potential DBEs to determine if non-certified firms that can qualify as DBEs are receiving contracts from state DOTs or private entities