

# Montana Department of Transportation 2016 Disparity Study



David Keen, Principal  
Keen Independent Research LLC  
100 Fillmore St., 5<sup>th</sup> Floor  
Denver CO 80206  
303-385-8515  
928-684-3021 (fax)  
[dkeen@keenindependent.com](mailto:dkeen@keenindependent.com)

Lynn Fagan  
Fagan Law Office PC  
435 West Alder  
Missoula MT 59808

February 19, 2016  
Availability and Disparity Study  
Technical Panel Briefing



# Topics for preliminary briefing

1. Availability
2. Overall DBE goal and neutral projections
3. Utilization
4. MBE and WBE utilization and availability
5. Disparity indices by group
6. Monte Carlo simulation
7. Results by subsets of MDT contracts
8. Marketplace results
9. Overconcentration analysis
10. Next steps

# 1a. Availability – headcount from master bidders list

## Master bidders list - headcount

<b>Race/ethnicity and gender</b>	<b>Number of firms</b>	<b>Percent of firms</b>
African American-owned	3	0.3 %
Asian-Pacific American-owned	7	0.7
Subcontinent Asian American-owned	3	0.3
Hispanic American-owned	11	1.1
Native American-owned	<u>36</u>	<u>3.8</u>
Total MBE	60	6.2 %
WBE (white women-owned)	<u>156</u>	<u>16.3</u>
Total MBE/WBE	216	22.5 %
Total majority-owned firms	<u>743</u>	<u>77.5</u>
Total firms	959	100.0 %

# 1b. Detailed availability survey

Detailed availability survey – headcount

Race/ethnicity and gender	Number of firms	Percent of firms
African American-owned	2	0.5 %
Asian-Pacific American-owned	2	0.5
Subcontinent Asian American-owned	0	0.0
Hispanic American-owned	2	0.5
Native American-owned	20	4.6
Total MBE	26	6.0 %
WBE (white women-owned)	70	16.1
Total MBE/WBE	96	22.1 %
Total majority-owned firms	339	77.9
Total firms	435	100.0 %

Detailed availability survey – dollar-weighted

Race/ethnicity and gender	FHWA	State	Total
African American-owned	0.01 %	0.00 %	0.01 %
Asian-Pacific American-owned	1.67	4.03	1.81
Subcontinent Asian American-owned	0.00	0.00	0.00
Hispanic American-owned	1.20	4.09	1.37
Native American-owned	4.81	6.98	4.94
Total MBE	7.69 %	15.10 %	8.13 %
WBE (white women-owned)	11.28	8.19	11.10
Total MBE/WBE	18.97 %	23.29 %	19.23 %

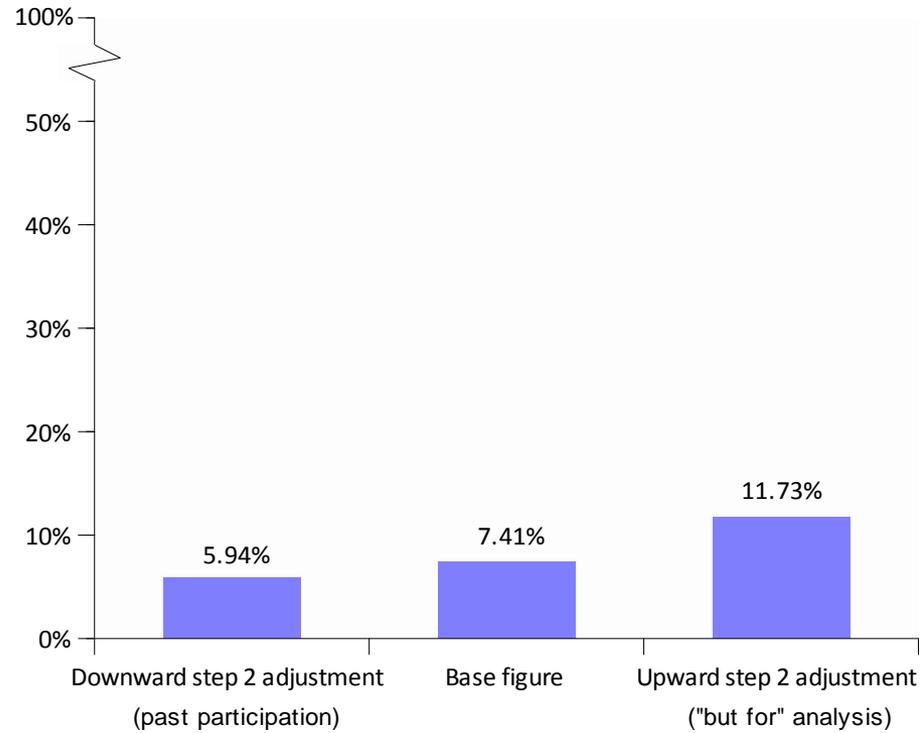
## 2a. Availability results for setting overall DBE goal

Calculation of base figure	FHWA
Minority- and women-owned DBEs	7.07 %
White male-owned DBEs	<u>0.34</u>
Total currently-certified DBEs	7.41 %

## 2b. Analysis of potential step 2 adjustments

Step 2 adjustment component	Value	Explanation
<b>Lower range of overall DBE goal</b>		
Base figure	7.41 %	From base figure analysis
Evidence of current capacity	- 4.46	Median DBE participation based on awards
Difference	2.95 %	
	÷ 2	Reduce by one-half
Adjustment	1.47 %	Downward adjustment for current capacity
Base figure	7.41 %	From base figure analysis
Adjustment for current capacity	- 1.47	Downward step 2 adjustment
<b>Overall DBE goal</b>	<b>5.94 %</b>	Lower range of DBE goal
<b>Upper range of overall DBE goal</b>		
Base figure	7.41 %	From base figure analysis
Adjustment for "but for" factors	+ 4.32	"But for" step 2 adjustment for business ownership
<b>Overall DBE goal</b>	<b>11.73 %</b>	Upper range of DBE goal

## 2c. Overall DBE goal for FHWA-funded contracts



## 2d. Analysis of neutral projections

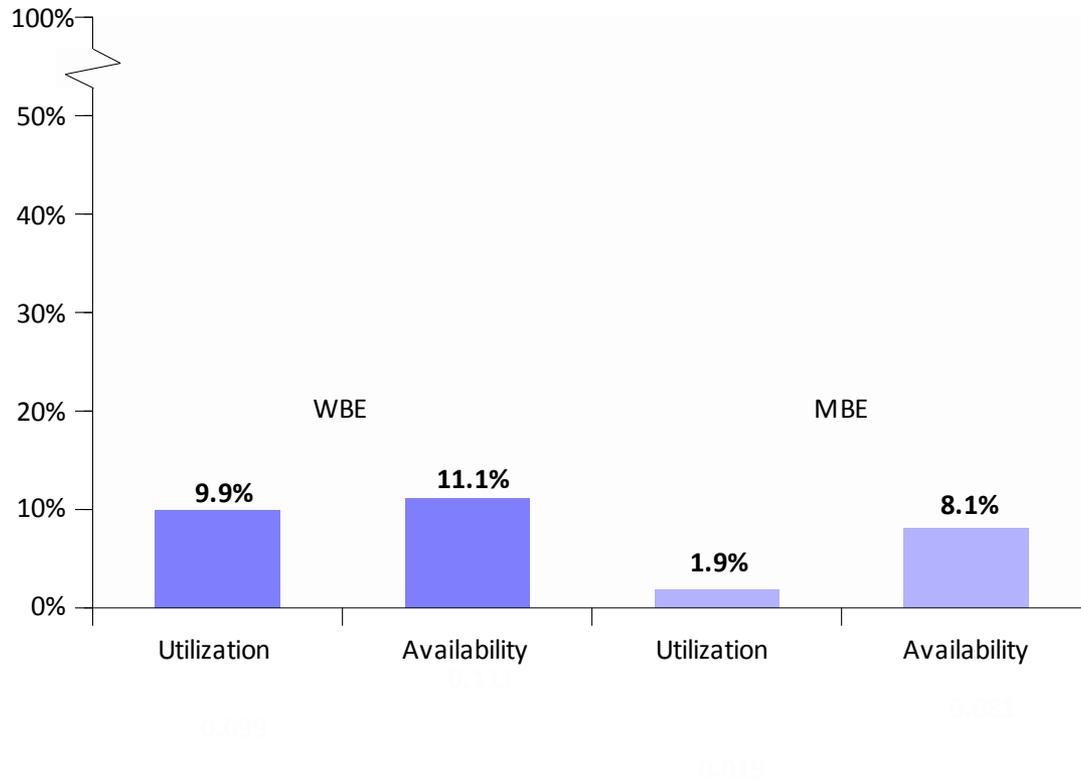
Component of overall goal <sup>2</sup>	FFY 2017- FFY 2019			
	FFY 2014- FFY 2016	Downward adjustment	Base figure	Upward adjustment
Overall goal	3.55 %	5.94 %	7.41 %	11.73 %
Neutral projection	- <u>3.55</u>	- <u>3.96</u>	- <u>3.96 %</u>	- <u>3.96</u>
Race-conscious projection	0.00 %	1.98 %	3.45 %	7.77 %

### 3. MBE/WBE and DBE utilization FFY 2010-FFY2014

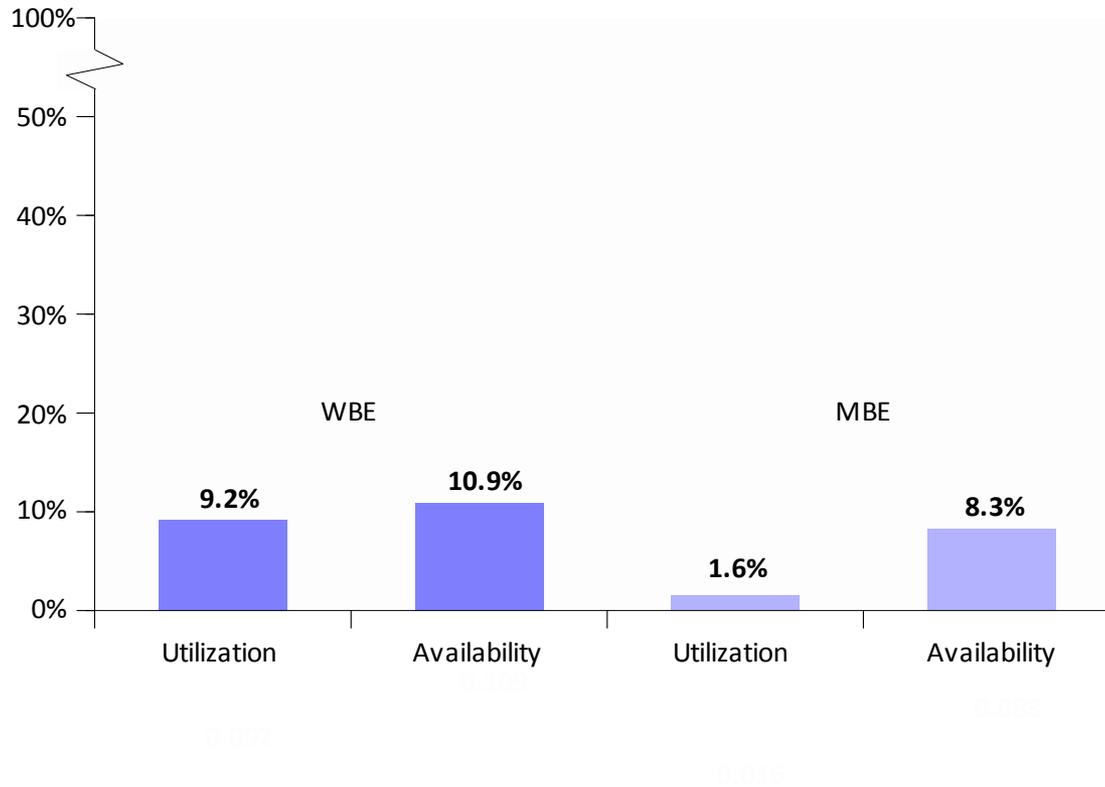
	Total FHWA and State		
	Number of contracts*	\$1,000s	Percent of dollars
<b>MBE/WBEs</b>			
African American-owned	0	\$ 0	0.0 %
Asian-Pacific American-owned	37	5,522	0.3
Subcontinent Asian American-owned	0	0	0.0
Hispanic American-owned	50	1,424	0.1
Native American-owned	<u>168</u>	<u>28,762</u>	<u>1.5</u>
Total MBE	255	\$ 35,708	1.9 %
WBE (white women-owned)	<u>1,072</u>	<u>190,612</u>	<u>9.9</u>
<b>Total MBE/WBE</b>	<b>1,327</b>	<b>\$ 226,320</b>	<b>11.7 %</b>
Majority-owned	<u>5,352</u>	<u>1,701,825</u>	<u>88.3</u>
<b>Total</b>	<b>6,679</b>	<b>\$ 1,928,145</b>	<b>100.0 %</b>
<b>DBEs</b>			
African American-owned	0	\$ 0	0.0 %
Asian-Pacific American-owned	35	4,794	0.2
Subcontinent Asian American-owned	0	0	0.0
Hispanic American-owned	29	1,198	0.1
Native American-owned	<u>119</u>	<u>18,742</u>	<u>1.0</u>
Total MBE	183	\$ 24,734	1.3 %
WBE (white women-owned)	582	52,455	2.7
White male-owned DBE	<u>0</u>	<u>0</u>	<u>0.0</u>
<b>Total DBE-certified</b>	<b>765</b>	<b>\$ 77,189</b>	<b>4.0 %</b>
Non-DBE	<u>5,914</u>	<u>1,850,956</u>	<u>96.0</u>
<b>Total</b>	<b>6,679</b>	<b>\$ 1,928,145</b>	<b>100.0 %</b>

\*Number of prime contracts and subcontracts

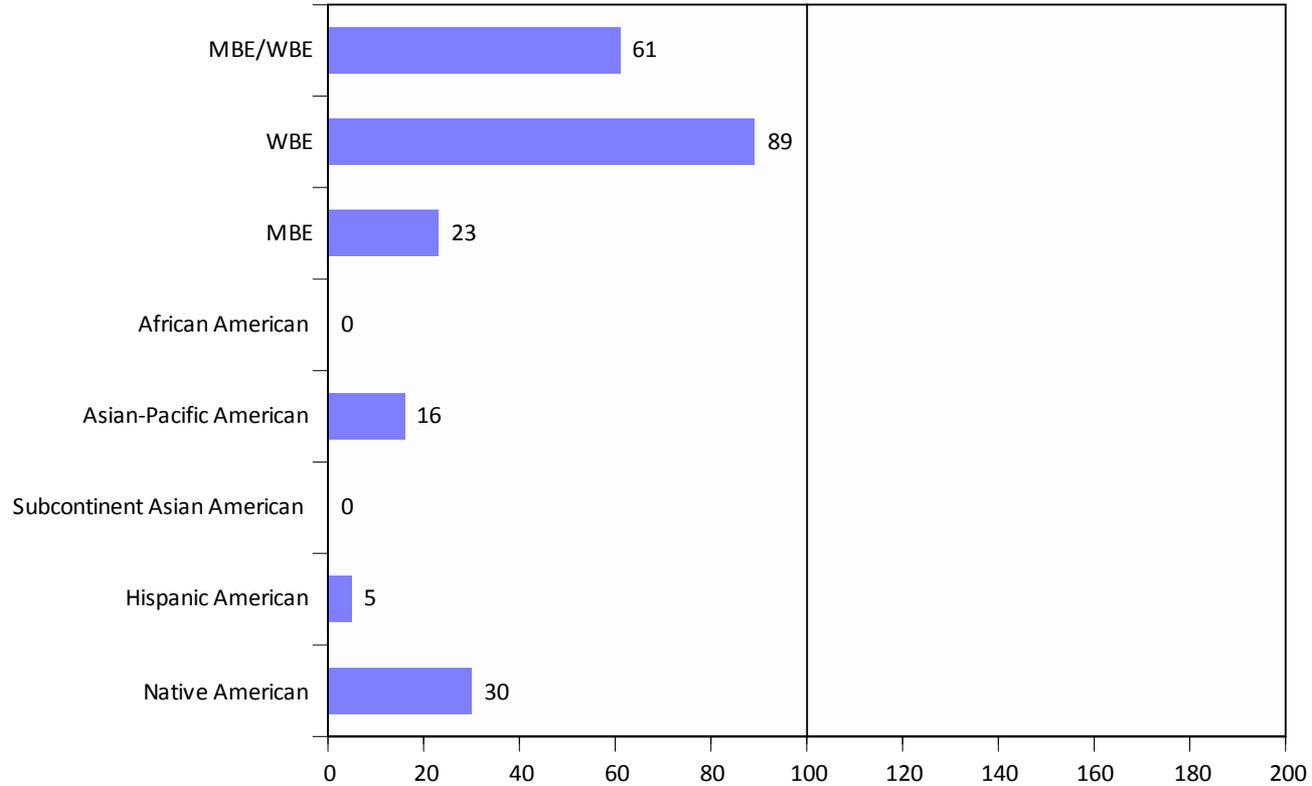
# 4a. For all contracts, MBE and WBE utilization and availability



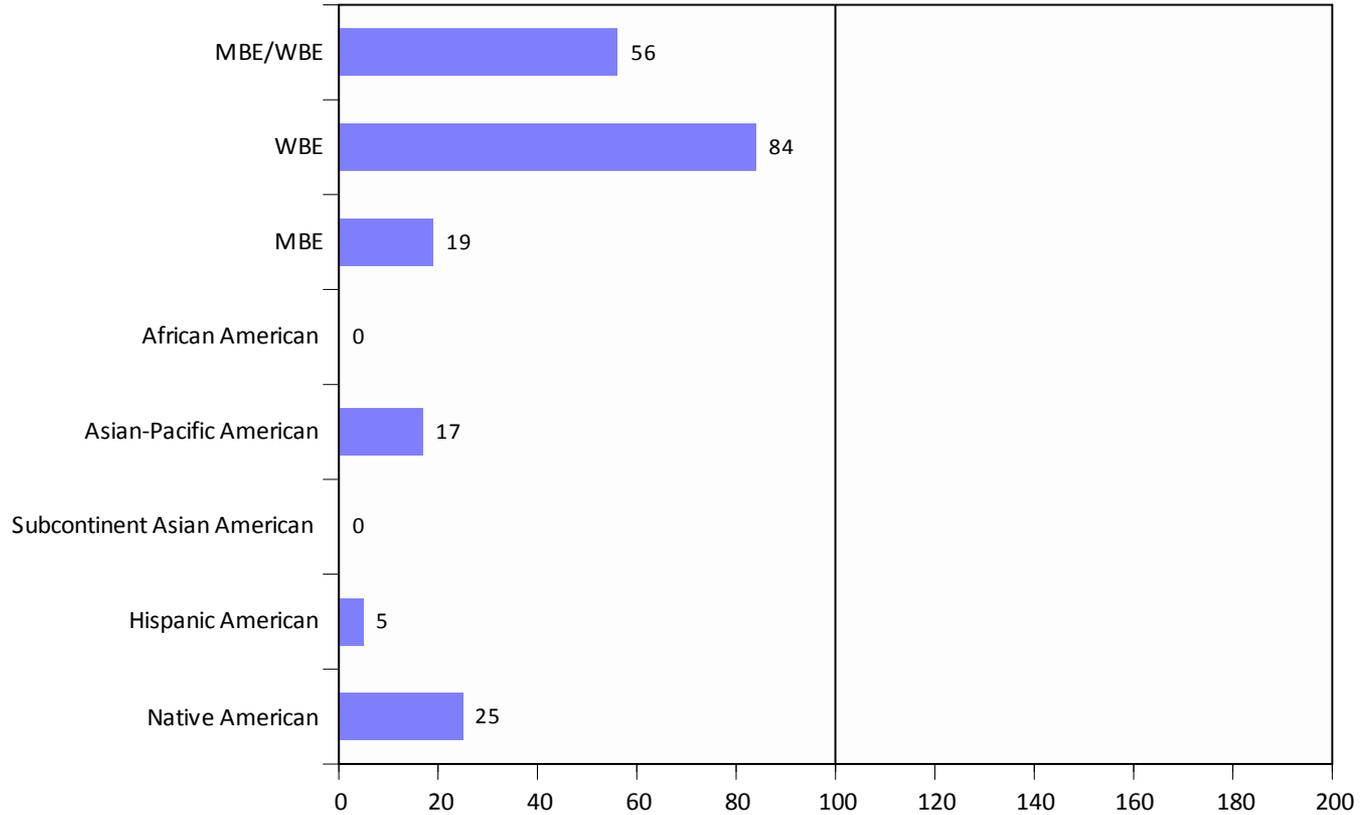
## 4b. MBE and WBE utilization and availability for non-goals contracts



# 5a. Disparity indices by group for total contracts



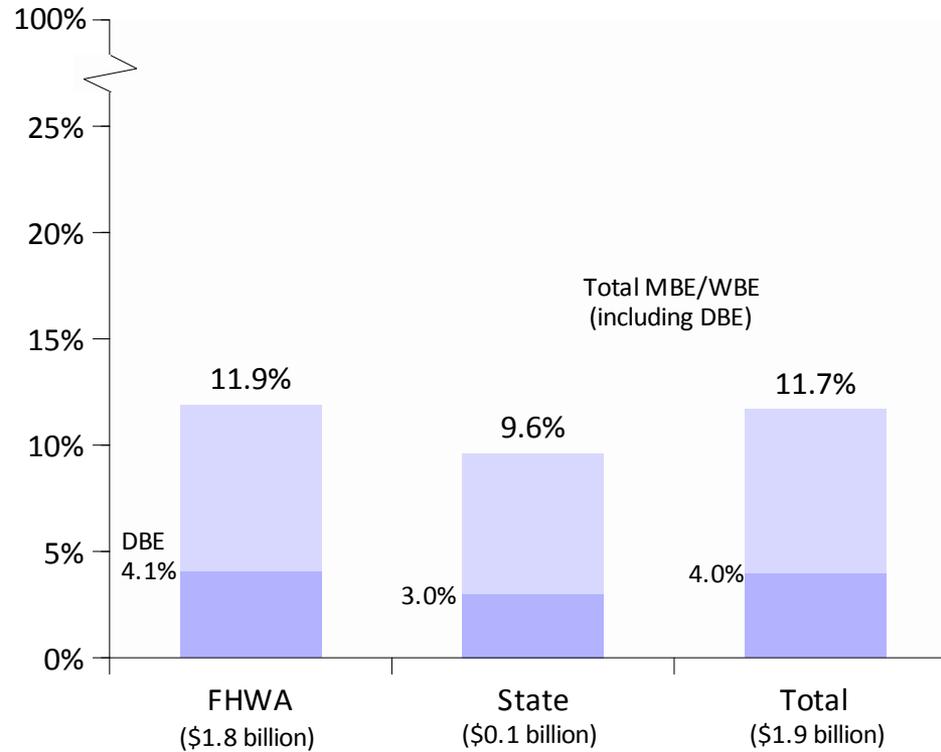
## 5b. Disparity indices by group for non-goals contracts



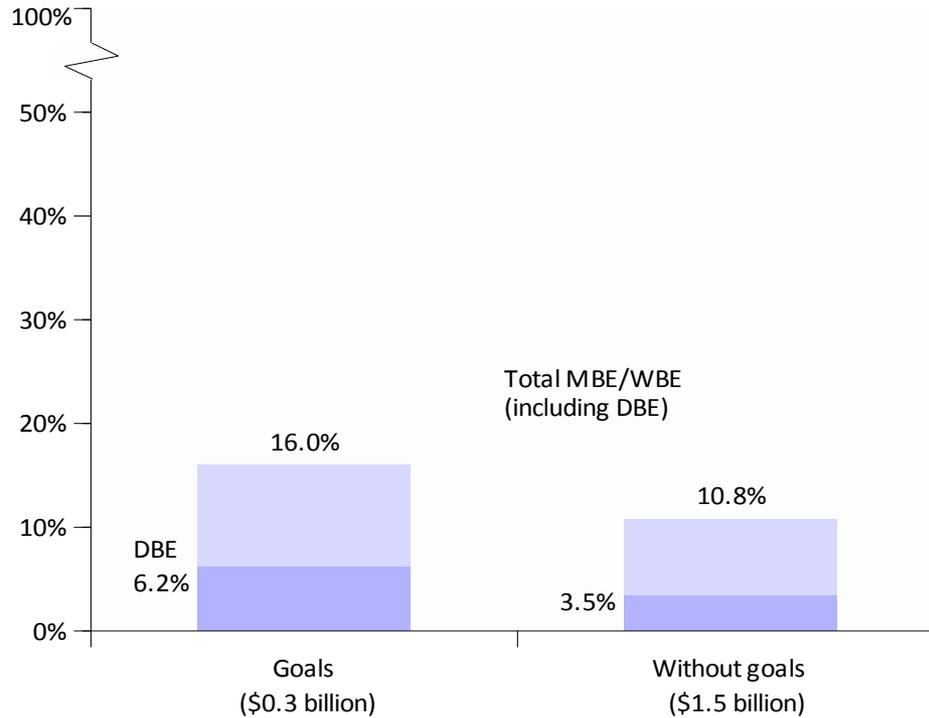
## 6. Monte Carlo simulation for MBEs and WBEs

	All contracts		Contracts without goals	
	MBE	WBE	MBE	WBE
Disparity index	23	89	19	84
Number of simulation runs out of 10,000 that replicated observed utilization	0	1,468	0	780
Probability of observed disparity occurring due to "chance"	< 0.1 %	14.7 %	< 0.1 %	7.8 %
Reject chance in awards of contracts as a cause of disparity?	Yes	No	Yes	No

## 7a. MBE/WBE and DBE utilization for FHWA, State and total

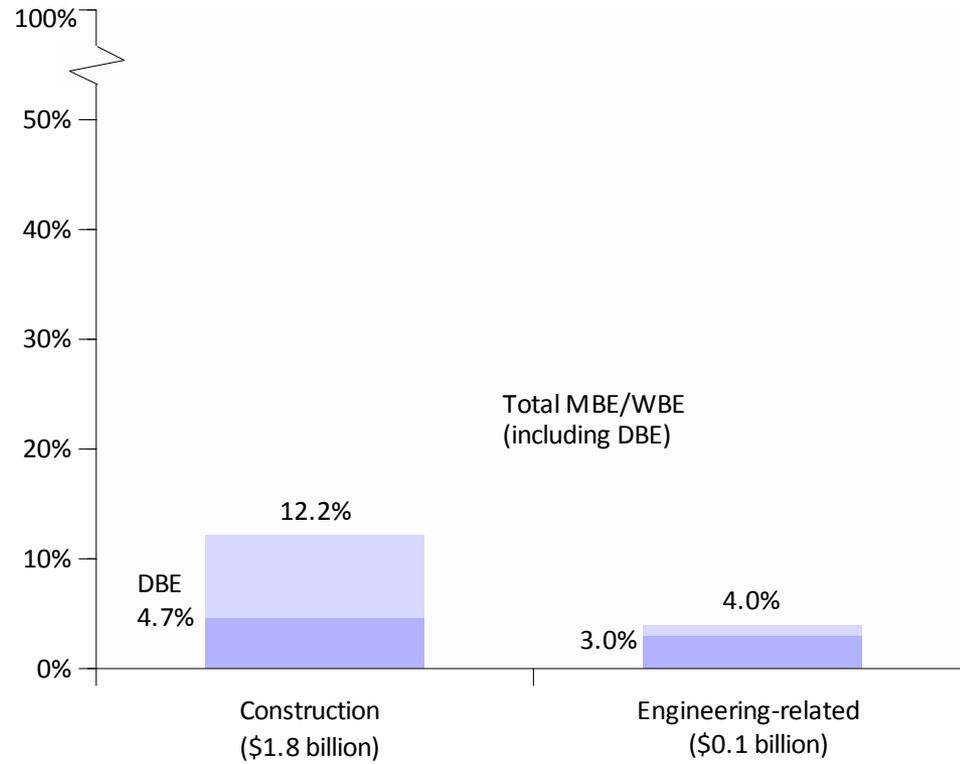


## 7b. MBE/WBE and DBE utilization with and without goals

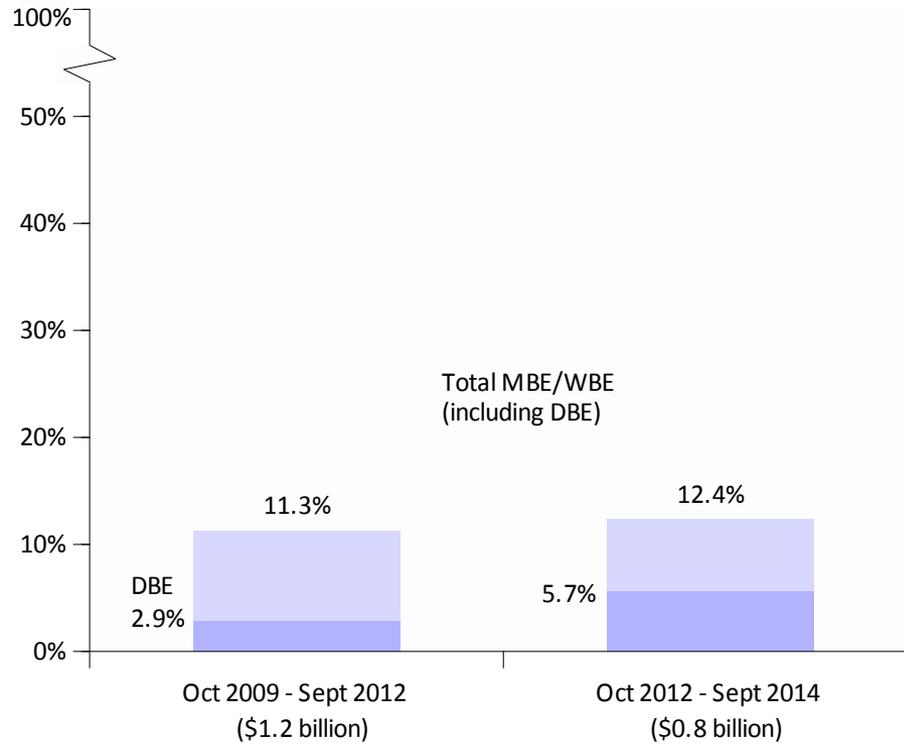


Disparity index with goals is 40 for MBEs and 109 for WBEs  
Disparity index without goals is 20 for MBEs and 84 for WBEs

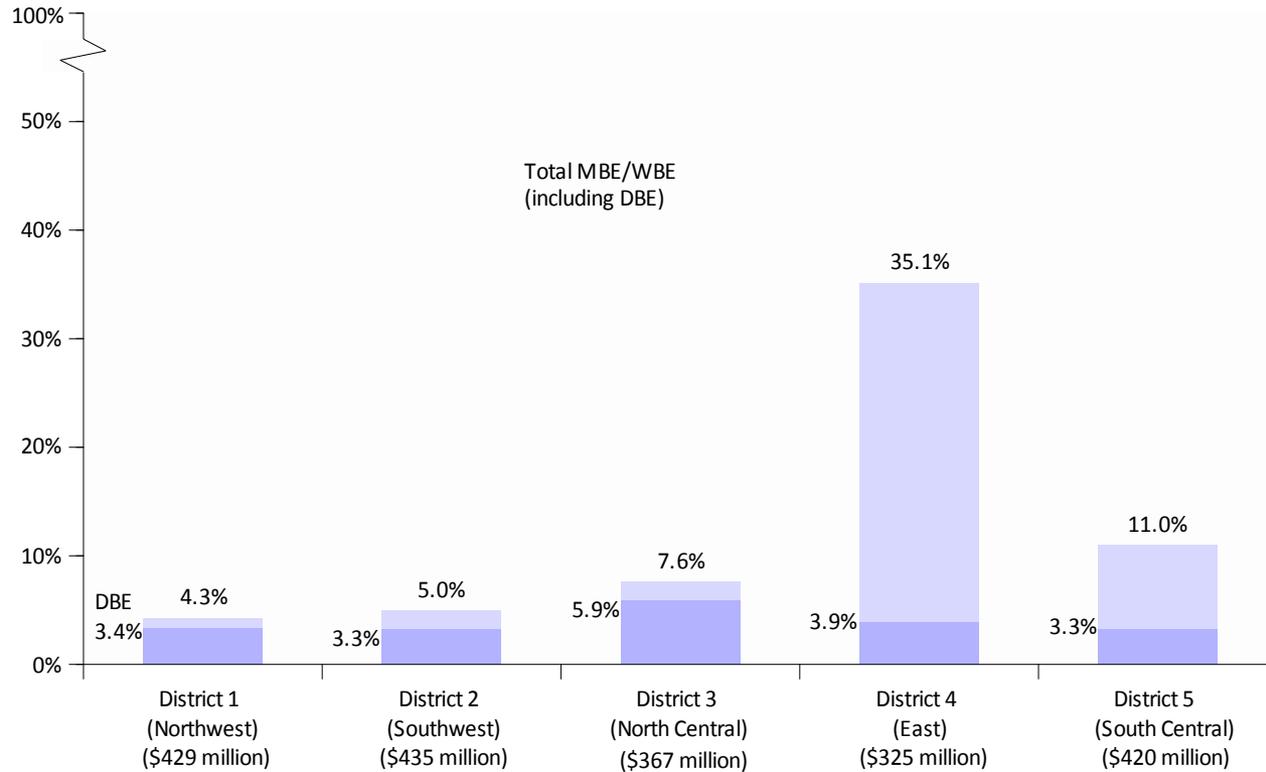
# 7c. MBE/WBE and DBE utilization for construction and engineering



# 7d. MBE/WBE and DBE utilization by time period

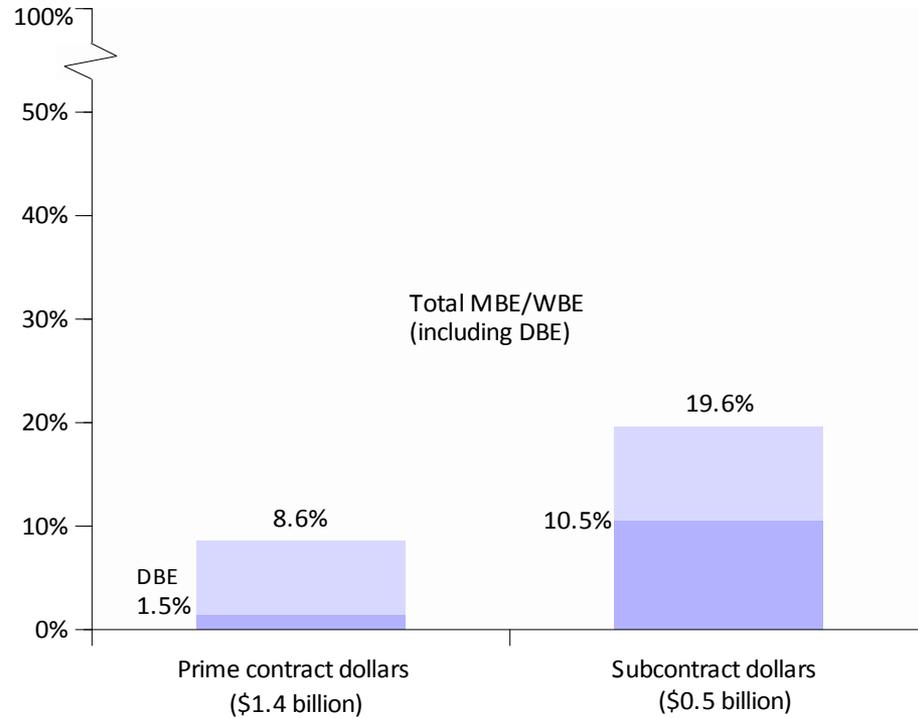


# 7e. MBE/WBE and DBE utilization by MDT district



Substantial disparities for MBEs in each district  
 Substantial disparities for WBEs in each district except for District 4

# 7f. MBE/WBE and DBE utilization by prime/sub



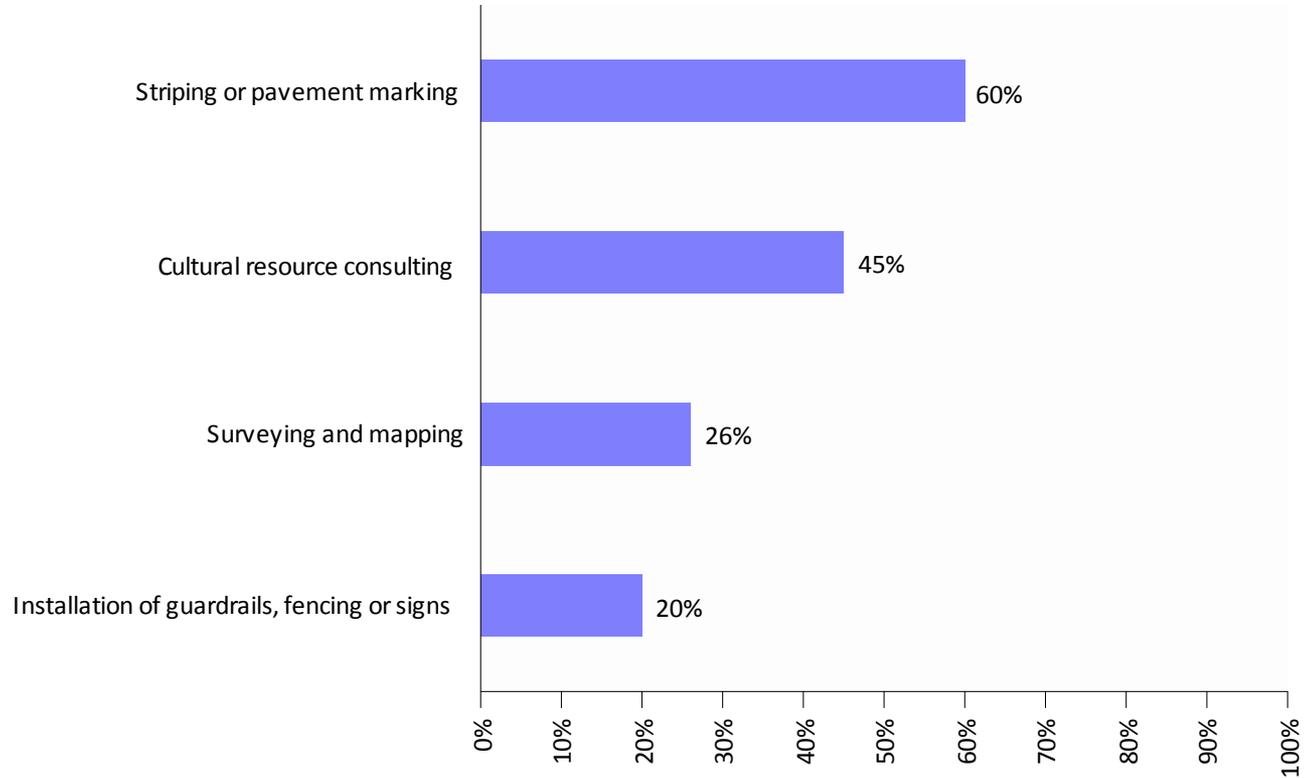
## 8a. Marketplace results (quantitative)

- Barriers to entry as employees for women in construction and engineering
- Disparities in advancement within construction industry
- Disparity in rate of business ownership for Native Americans in construction and women in engineering
- Disparities in home ownership and mortgage lending for minorities
- Disparities in Mountain region regarding small business loans for minorities and women
- MBEs in MT transportation contracting industry more likely to report difficulties obtaining loans or lines of credit
- MBE/WBEs more likely to report difficulty obtaining bonds
- WBE more likely than majority-owned firms to report difficulties learning about opportunities and networking with prime contractors and customers

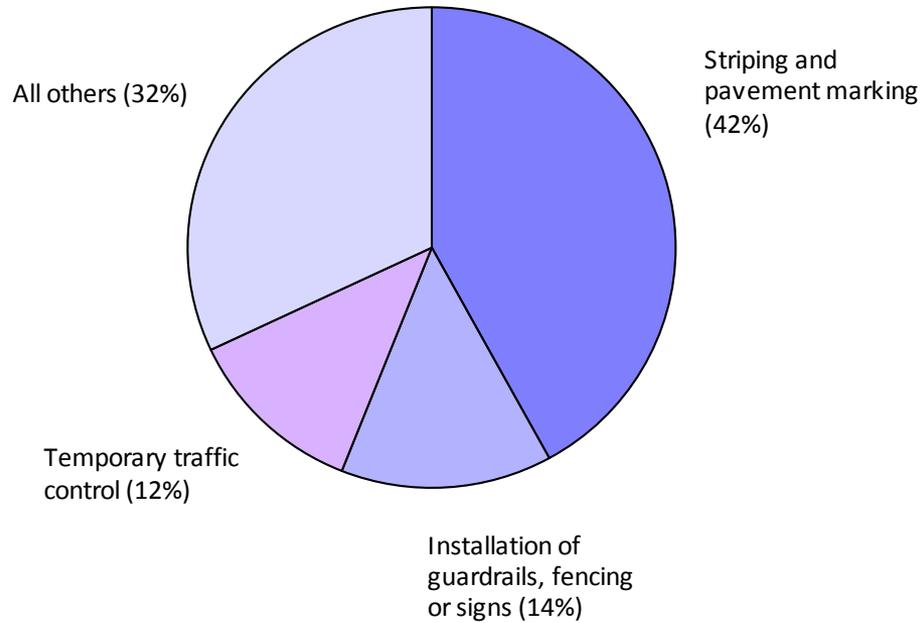
## 8b. Marketplace results (qualitative)

- Some minority and female business owners report experiencing discrimination, including overt statements
- Reports included racial and sexist writings on port-a-potties on jobsites
- Many interviewees, including white males, said there were negative stereotypes affecting minorities and women in the industry
- Some interviewees indicated that conditions have improved over time
- Many reported existence of a “good ol’ boy” network affecting the industry in Montana

## 9a. For certain types of work, DBE share of dollars



## 9b. Distribution of DBE dollars across types of work



## 10. Next steps

- Prepare final draft report for distribution to the public
- Announce availability of draft report, MDT's proposed DBE goal, public meetings and request for comments
- Hold public meetings in late March
- Review comments and prepare final report