

DBE ANALYSIS OF AIP vs. PFC FUNDED PROJECTS



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The purpose of this analysis is to provide support to the Airport Minority Advisory Council's appeal to Congress to include CFR Title 49 Part 26 on all federally authorized Airport Capital Improvement Plan projects. Currently, this legislation only mandates participation by Disadvantaged Business Enterprises (DBE) in Department of Transportation financial assistance programs such as the FAA's Airport Improvement Program (AIP). Airports receiving AIP grants and awarding prime contracts in excess of \$250,000 in a fiscal year must establish DBE goals. Goals are established locally, by airport, for a 3-year period based on the ratio of regional DBE availability and readiness. AIP grants are limited to projects which enhance capacity, security, safety, or environmental conditions, and the associated professional services.

The 2015 Presidential Budget, however, proposes to reduce total AIP funding grants to \$2.9 billion from \$3.35 billion, and would increase the Passenger Facility Charge (PFC) to \$8 per flight segment from its current cap of \$4.50. In exchange for the elevated PFC, large hub airports would no longer receive AIP entitlement grants and would therefore have to rely more on other sources of funding for capital improvement projects such as PFC's, bonds, and airport revenue; all of which do not have federal DBE participation mandates.

Expanding the reach of CFR 49 Part 26 to all federally authorized Airport Capital Improvement Plan projects would then include PFC funded projects. PFC funds are also eligible to enhance capacity, security, safety, or environmental conditions as well as reduce noise and congestion and enhance competition between air carriers. Expanding the legislation to include PFC funded projects would provide DBE's access to projects on which they might have been previously underutilized.

By not mandating DBE goals on PFC funded projects in the future, DBE participation may be limited, thus imposing an opportunity cost for future airport capital projects. In order to assess the potential impact on DBE participation and hence jobs associated with airport projects, Martin Associates developed a methodology to: 1.) Measure the utilization of DBEs on AIP funded projects and the voluntary use of DBE's on PFC funded projects over the past 5 years at the nation's 15 leading airports. 2.) Identify the opportunity cost to DBEs of the non-mandated goals on PFC funded projects in terms of lost jobs and income. 3.) Project the potential opportunity cost on DBEs in the future should CFR 49 Part 26 not be included on all federally authorized Airport Capital Improvement Plan projects.

1. Opportunity Cost to DBEs Resulting from Non-Mandated Participation Goals on Past Airport Capital Improvement Plan Projects

The quantification of the past opportunity cost on DBEs under the current legislation is based on the identification of DBE participation under the mandated participation goals applied to the AIP projects compared to the non-mandated goals associated with the PFC funded projects over the past 5 years. To determine the levels of DBE participation, Martin Associates interviewed the leading 15 large hub airports (based on 2013 enplanements) to establish a benchmark as to DBE participation on both AIP funded projects, as well as PFC funded projects.

Each airport provided their AIP spending for 2009-2013, including DBE spending for the same time period. Airports also provided PFC spending for 2009-2013, if applicable, and the associated DBE spending, if any. Because the FAA only mandates DBE goals on AIP funded projects, some airports do not place DBE goals on PFC funded projects.

The opportunity cost is measured as the amount of funding that would have been received by DBEs on PFC funded projects should the same DBE goals associated with the AIP funded projects been imposed on the PFC projects. The lost funding opportunities over the past 5 years are then used to estimate lost job and income opportunities to DBEs due to the non-mandated goals on PFC funded projects. The opportunity cost is measured in terms of jobs and income that were not received by the DBE community due to the fact that participation goals on PFC projects were not in place.

1.1 Historical Capital Improvement Projects Funding and DBE Participation

Martin Associates focused on large hub airports because they account for the highest PFC spending than any other airport category. According to the Airport Council International North America (ACI-NA) Capital Needs Survey for 2013-2017¹, funding for capital improvement projects for large airports is expected to be financed 50% from bonds, 20% from PFC's and PFC-backed bonds, 12% from AIP grants (entitlements and discretionary funds), 7% from state and local contributions, and 10% from airport revenue. The airports which participated in this analysis were:

1. Hartsfield – Jackson Atlanta International
2. Los Angeles International
3. Chicago O'Hare International
4. Dallas/Fort Worth International
5. Denver International
6. John F. Kennedy International
7. San Francisco International
8. Charlotte/Douglas International
9. McCarran International
10. Phoenix Sky Harbor International
11. Miami International
12. George Bush Intercontinental
13. Newark Liberty International
14. Orlando International
15. Seattle-Tacoma International

Martin Associates contacted each airport individually while also reviewing FAA Uniform Reports of DBE Commitments/Awards and Payments and the U.S.D.O.T. Office of the Inspector

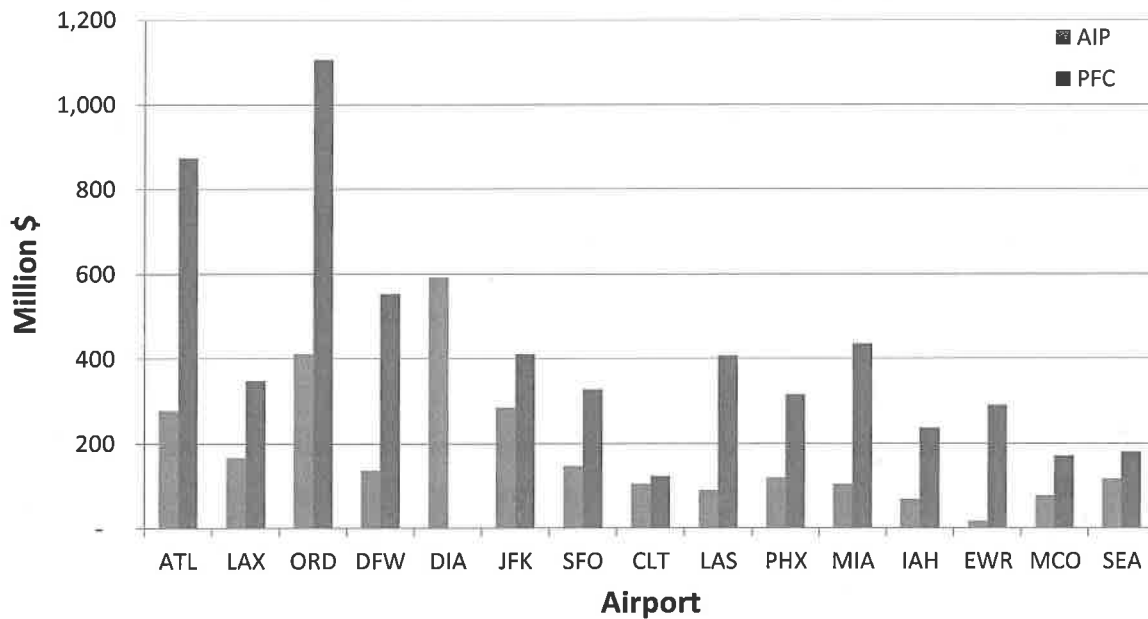
¹ The ACI-NA Capital Needs Survey for 2015-2019 was released in March 2015 however it did not include updated funding sourcing estimates.

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General's Audit Report.² The Audit Report, however, focused primarily on new DBE's for 2012; so it was not entirely inclusive of the historical capital projects expenditure information.

Based on airport responses, total 5-year AIP spend at 15 of the nation's top airports for 2009-2013 was \$2.7 billion. Total PFC spending in the same time period was at the minimum \$5.8 billion. Individual airport spending is shown in Exhibit 1.³

Exhibit 1: Total AIP and PFC Spending for Capital Improvement Projects by Airport 2009-2013



DBE spending on AIP-funded projects is illustrated in Exhibit 2. The overall average DBE participation rate from 2009-2013 was 21.2% for a total spending of \$574 million. Exhibit 3 shows the share of DBE spending at each airport.⁴

² Department of Transportation. Office of the Inspector General. Audit Report. New Disadvantaged Business Enterprise Firms Face Barriers to Obtaining Work at the Nation's Largest Airports. June 2014.

³ San Francisco International Airport provided award amounts, not actual spending. Denver International Airport's PFC spending was not available.

⁴ Total spend amounts and DBE goals are provided in spreadsheet form in the appendix at the end of the report.

Exhibit 2: AIP Spending Including DBE Allocation 2009-2013

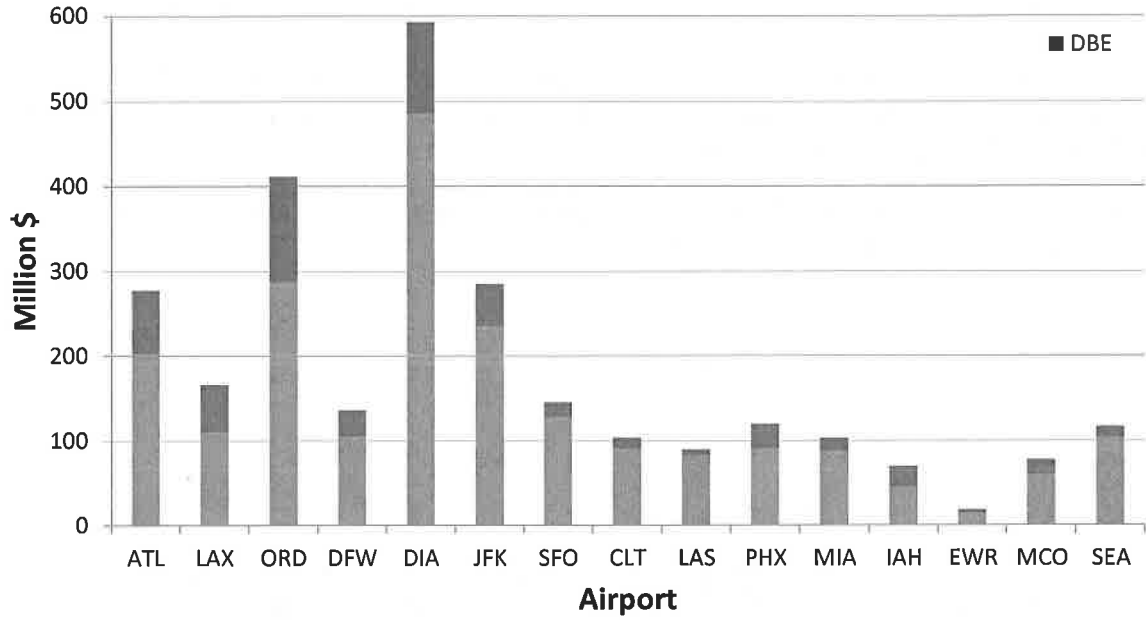
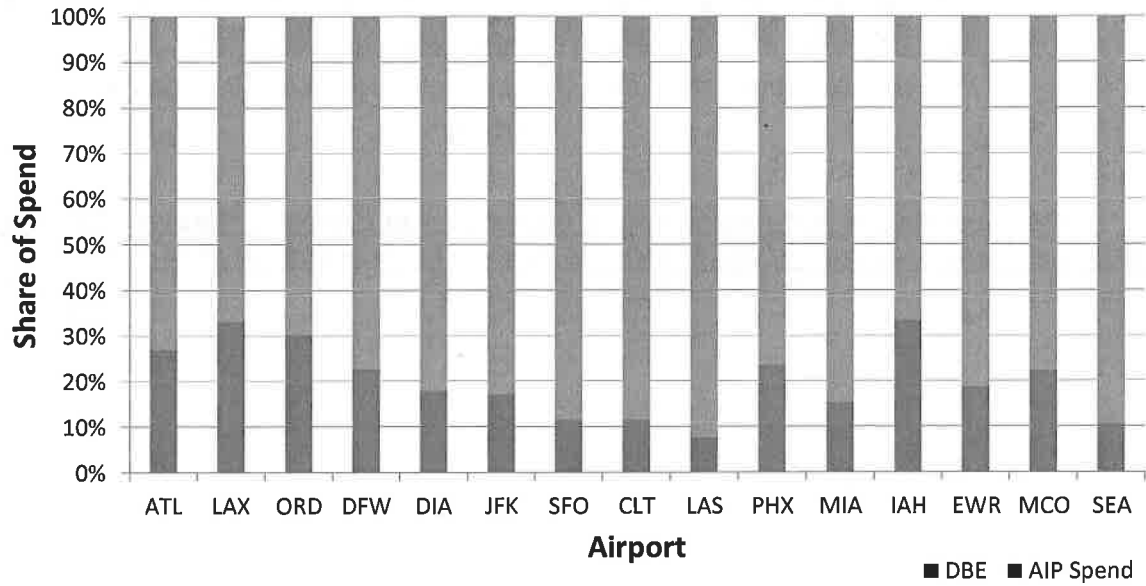
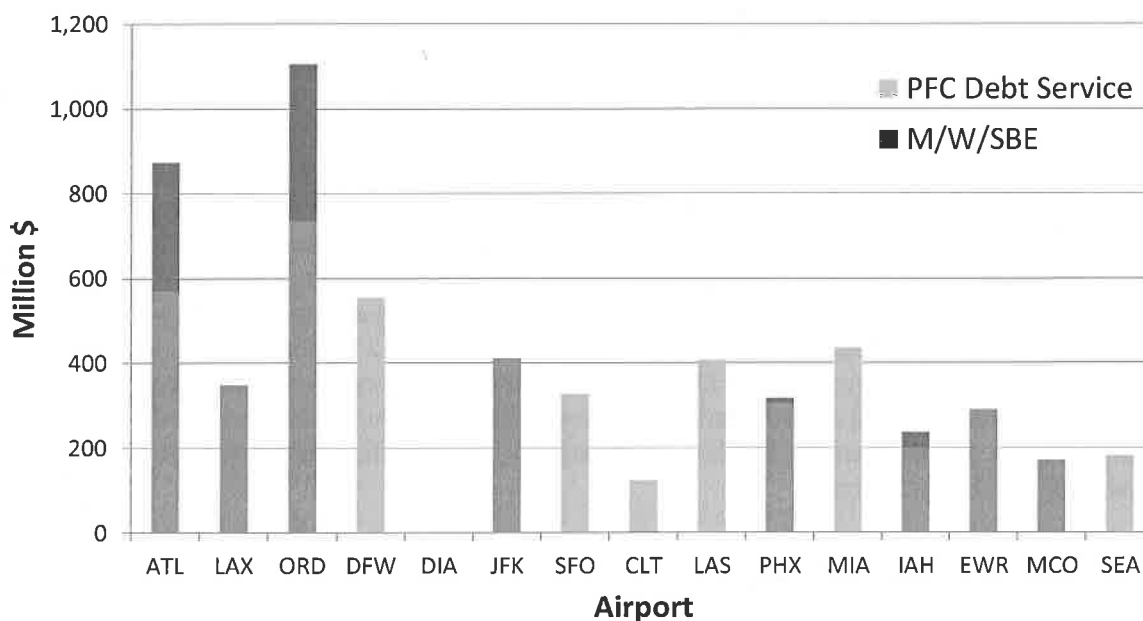


Exhibit 3: Share of DBE Spending of Total AIP Capital Improvement Projects by Airport 2009-2013



Of the airports interviewed, nine indicated they place some form of disadvantaged business goal on PFC projects. This might include MWBE, SBE, or LDB goals. However, since it is not federally mandated, some airports do not track this spending or have it in a reportable format. As a result, total disadvantaged participation on PFC projects may be underestimated. Conversely, because Hartsfield-Jackson and O’Hare’s DBE spend on PFC projects is much greater than the other reporting airports, it skews the participation rates higher. Exhibit 4 represents PFC spending by airport for 2009-2013.⁵

Exhibit 4: PFC Spending Including Disadvantaged Allocation 2009-2013



The comparison of DBE participation on goal mandated AIP projects versus non-mandated PFC projects clearly reflects a much lower utilization of DBEs on PFC funded capital improvement projects. The opportunity cost of the non-mandated DBE goals for PFC projects is measured in terms of jobs and income that would have been received by DBEs had such goals been mandated. The quantification of the historical opportunity cost to DBEs is presented in the following section.

1.2. Historical Opportunity Cost of Non-mandated DBE Goals for PFC Funded Capital Improvement Projects

Opportunity costs are defined as the jobs and personal income to DBEs that would have been supported by PFC funded airport improvement projects had the mandated goals applied to the AIP projects been followed. To compute the historical opportunity cost to DBEs, the actual

⁵ Houston provided local MBE/WBE goal percentages, not actual spending. Six airports used PFC’s almost exclusively for debt services during 2009-2013. Refer to the appendix for specific spend amounts.

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historical DBE participation rate associated with the AIP projects at each airport was applied to the 2009-2013 PFC funded projects. Exhibit 5 summarizes the value of PFC funded projects; the actual DBE participation rate by airport on these projects; the historical DBE participation rate at each airport on AIP projects, and the additional DBE spending that would have occurred should the DBE participation rate on AIP projects been applied to the PFC funded projects.

Exhibit 5: Lost Earnings Opportunities for DBEs due to Non-Participation Goals on PFC Funded Projects 2009-2013

PFC Amount 2009-2013	DBE Value Paid on PFC Funded Projects	Actual DBE Share of PFC Funded Projects	Average DBE Share on AIP Funded Projects	Value to DBE with 21.2% Participation Rate	Opportunity Cost to DBE Community
\$5,773,632,563	\$717,836,265	12.4%	21.2%	\$1,224,010,103	\$506,173,838

As this exhibit demonstrates, between 2009 and 2013, \$5.8 billion of projects at the 15 leading airports were PFC funded. Of these, about \$717.8 million were paid to some form of disadvantaged business, and this occurred primarily at Hartsfield-Jackson and O'Hare. Overall, this represented a 12.4% DBE share of PFC funded projects, significantly lower than the 21.2% average participation rate on AIP funded projects. If this same participation rate were applied to the PFC projects, the DBE community would have received \$1.2 billion dollars, rather than the \$717.8 million actually received by DBEs. The difference between what was received by the DBE community without a participation goal, and what would have been received had the historical participation rate for DBEs on AIP projects, \$506 million represents the opportunity cost to the DBE community.

The lost expenditures to DBEs due to the absence of mandated DBE goals on PFC funded projects were converted into lost employment and personal income opportunities for DBEs. To estimate the lost job and personal income opportunities, the total jobs multiplier and personal income multiplier for construction activity in the United States were obtained from the U.S. Bureau of Economic Analysis, Regional Input Output Modeling System (RIMS II)⁶. The foregone DBE expenditures by airport for PFC funded projects, \$506 million, were converted into constant 2010 dollars, reflecting the monetary base of the job and income multipliers from the RIMS II model. The opportunity cost of the non-mandated goals on PFC funded projects is summarized in Exhibit 6.

⁶ For every \$1 million of construction activity, the RIMSII model estimates that 23.55 total direct, induced and indirect jobs are generated. Of these total jobs, direct jobs represent about 36.8% of total jobs, and these are the jobs that would be directly held by DBEs. Direct income is based on a construction industry income multiplier of 2.51, which is applied to the total direct, induced and indirect personal income in construction activity generated by a \$1 million expenditure for construction activity in the U.S.

Exhibit 6: Opportunity Cost of Non-Mandated DBE Goals for PFC Funded Capital Airport Improvement Projects

Jobs	
Direct Personhours	10,341,637
Indirect Personhours	<u>17,744,181</u>
Total Personhours	28,085,819
Personal Income (1,000)	
Direct	\$224,671
Indirect	<u>\$339,433</u>
Total	\$564,105

As this table reflects, had the mandated DBE goals for AIP projects been applied to the PFC funded projects, 10.3 million personhours with disadvantaged business enterprises would have been directly generated over the 2009-2013 period. As the result of the local purchases by those directly employed, another 17.7 million hours would be generated indirectly. However, it is not certain that these hours would be with disadvantaged business enterprises. It is to be emphasized that the opportunity cost is expressed in lost personhours rather than actual jobs, since the timing of the projects is not known, and hence, the actual number of new jobs generated annually cannot be determined. Associated with these personhours is a direct personal income of \$224.67 million, for an average hourly rate of \$21.72 per hour.

2. Potential Opportunity Costs of the 2015 Presidential Budget Proposal to Disadvantaged Business Enterprises

The 2015 Presidential Budget proposes to reduce total AIP funding grants to \$2.9 billion from \$3.35 billion, and would increase the PFC to \$8 per flight segment from its current cap of \$4.50. In exchange for the elevated PFC, large hub airports would no longer receive AIP entitlement grants and would therefore have to rely more on other sources of funding for capital improvement projects such as PFC's, bonds, and airport revenue.⁷ Based on the historical analysis of the use of disadvantaged businesses on projects funded by PFCs, should CFR 49 Part 26 not be included on all federally authorized Airport Capital Improvement Plan projects, it is likely the future role of DBEs on capital airport improvement projects will be diminished. In this section, the jobs and income supported by future airport capital improvement projects likely to be generated under the historical participation rates of disadvantaged businesses on PFC funded projects are compared to the potential job and income impacts should the level of DBE participation rates associated with AIP funded projects be applied to the projected PFC project funding.

⁷ The same airports will still be eligible for AIP discretionary grants.

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In order to assess prospective DBE opportunities, Martin Associates reviewed the FAA's National Plan of Integrated Airport Systems (NPIAS) Report to Congress for 2013-2017 and the Airports Council International North America (ACI-NA) Capital Needs Survey for the same time period.⁸

NPIAS estimated capital needs for all airports at \$42.5 billion for 2013-2017 or approximately \$8.5 billion per year, whereas, ACI-NA forecast \$71.3 billion or \$14.3 billion per year.⁹ The forecast from ACI-NA is much higher because it also considers capital improvements not eligible for AIP grants such as gates, parking facilities, hangars, cargo buildings and revenue generating terminal areas which could instead be financed using PFC funds. For this analysis, Martin Associates used the projections from the ACI-NA survey instead of NPIAS because ACI-NA is more inclusive and better represents our target market. The ACI-NA figures are also more current and adjusted for inflation.

Of the \$71.3 billion forecast, large airports account for 51.9% or just over \$37 billion. Exhibit 7 shows this distribution by year as compared to medium and small hub airports.

Exhibit 7: Projected Airport Capital Development Cost Estimates by Year and Airport Category, billion\$

	2013	2014	2015	2016	2017	Total	Percent
Large Hub	\$7.995	\$7.926	\$7.769	\$6.091	\$7.229	\$37.010	51.9%
Medium Hub	\$1.660	\$1.673	\$1.446	\$1.811	\$2.716	\$9.305	13.1%
Small Hub	\$1.457	\$1.226	\$0.896	\$1.065	\$1.120	\$5.764	8.1%

Source: ACI-NA Capital Needs Survey 2013-2017, January 2013

As previously stated, large airport funding is expected to be sourced 50% from bonds, 20% from PFC's, 12% from AIP, 7% from state and local contributions, and 10% from airport revenue. Funding has already been secured for 65.1% of the projects from the forecast. The adjusted cost estimates are listed in Exhibit 8. It is estimated that between 2013 and 2017, \$4.8 billion of projects will be funded from PFC sources.

⁸ Martin Associates used the 2013-2017 reports instead of the 2015-2019 reports because the latest versions did not include updated funding sources.

⁹ The FAA NPIAS Report to Congress for 2015-2019 estimated total capital needs as \$33.5 billion. The ACI-NA Capital Needs Survey for 2015-2019 estimated capital needs as \$75.7 billion.

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Exhibit 8: Funding Source Estimates for Large Hub Committed Projects 2013-2017, billion\$

	PFC Bonds	PFC Pay-as-you-go	AIP Entitlement	AIP Discretionary
Percentage	7.8%	12.2%	4.5%	7.7%
Cost Estimate	\$1.879	\$2.939	\$1.084	\$1.855

Source: ACI-NA Capital Needs Survey 2013-2017, January 2013

Applying the historical (2009-2013) disadvantaged business utilization rate for PFC projects of 12.4% to the projected PFC cost estimates provides an estimate of DBE jobs and income projected under a non-mandated DBE participation rate. Under the assumption CFR 49 Part 26 is not included on all federally authorized Airport Capital Improvement Plan projects, the future level of PFC funded projects are estimated to support 10.8 million direct personhours and \$234.7 million of personal income for DBEs, using the RIMSII job and income multipliers for construction activity. These future opportunity costs are summarized in Exhibit 9.

Exhibit 9: Potential Future Opportunity Costs

Estimated Value of PFC Funded Projects	\$4,818,000,000	DBE Direct Personhours	DBE Direct Personal Income
Actual Share of DBE Participation on PFC Projects	12.4%	10,806,069	\$234,761,041
Historical AIP Participation Rate	21.2%	18,425,842	\$400,300,041
Potential Future Opportunity Cost		7,619,773	\$165,539,000

If the historically mandated participation rate for AIP projects, 21.2%, were to be applied to the future PFC funded projects due to the inclusion of CFR 49 Part 26 on all federally authorized Airport Capital Improvement Plan projects, 18.4 million direct personhours with the DBE community would be supported, along with \$400.3 million of personal income. ***Therefore, if CFR 49 Part 26 is not included on all federally authorized Airport Capital Improvement Plan projects in the future, the potential opportunity cost to the DBE community is estimated at 7.6 million direct personhours over the 2013-2017 period, with a lost direct payroll of \$165.5 million.***

The FAA Aerospace Forecast for fiscal years 2015-2035 predicts U.S. airlines will surpass the one billion passenger mark by 2029,¹⁰ necessitating additional airport capital developments projects. With AIP and PFC funding linked to passenger activity it underscores the need for DBE goals on all federally authorized Airport Capital Improvement Plan projects.

¹⁰ ACI-NA Capital Needs Survey 2015-2019, March 2015.

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APPENDIX: Total Spend and DBE Percentage by Airport

	Miami	Los Angeles	Chicago O'Hare	DFW	Denver
Total AIP Spend	\$ 102,944,814	\$ 165,736,023	\$ 411,658,399	\$ 136,161,999	\$ 592,716,799
Total DBE Spend on AIP Projects	\$ 15,750,596	\$ 54,869,988	\$ 124,596,120	\$ 30,944,568	\$ 105,887,605
Actual DBE % on AIP Projects	15%	33%	30%	23%	18%
Total PFC Spend	\$ 435,000,000	\$ 348,093,000	\$ 1,104,466,384	\$ 553,400,738	\$ -
Total DBE Spend on PFC Projects	\$ -	\$ -	\$ 367,649,902	\$ -	\$ -
Actual DBE % on PFC Projects	0%	0%	33%	0%	0%

	JFK	Charlotte	McCarran/Las Vegas	George Bush/Houston	Newark Liberty
Total AIP Spend	\$ 284,695,456	\$ 102,998,874	\$ 89,316,287	\$ 69,080,734	\$ 17,784,934
Total DBE Spend on AIP Projects	\$ 48,758,032	\$ 11,838,714	\$ 6,738,391	\$ 23,021,986	\$ 3,332,815
Actual DBE % on AIP Projects	17%	11%	8%	33%	19%
Total PFC Spend	\$ 410,863,000	\$ 122,698,669	\$ 406,435,000	\$ 236,747,588	\$ 289,072,000
Total DBE Spend on PFC Projects	\$ -	\$ 412,296	\$ -	\$ 36,782,349	\$ -
Actual DBE % on PFC Projects	0%	0.3%	0%	16%	0%

	Orlando Int'l	Phoenix	SeaTac	San Francisco	Atlanta
Total AIP Spend	\$ 77,227,676	\$ 119,162,000	\$ 115,860,936	\$ 145,296,982	\$ 277,320,605
Total DBE Spend on AIP Projects	\$ 17,231,752	\$ 27,883,520	\$ 12,188,936	\$ 16,856,037	\$ 74,874,604
Actual DBE % on AIP Projects	22%	23%	11%	12%	27.0%
Total PFC Spend	\$ 170,490,000	\$ 315,795,000	\$ 180,369,138	\$ 327,200,000	\$ 873,002,046
Total DBE Spend on PFC Projects	\$ -	\$ 9,521,906	\$ -	\$ -	\$ 303,469,812
Actual DBE % on PFC Projects	0%	3%	0%	0%	35%

Miami, San Francisco, Dallas/Ft Worth, McCarran/Las Vegas, and Seattle-Tacoma used PFC funds exclusively for debt services.

Charlotte also used PFC funds for debt services, however, they started to track LDB spend in 2013.

Denver indicated they had no PFC projects and therefore no DSBO goals.

JFK and Newark Liberty do review PFC projects for eligible MWBE goals but the spending is not in an easily reportable format.

Orlando International also does not capture DBE PFC spend in a reportable format. However, they indicated their MWBE goal of 25% and LDB goal of 2.5% were met.

Los Angeles does not track MWBE/LDB goals or spends on PFC projects.

Phoenix Sky Harbor's SBE goals ranged from 8.4%-11.7% depending on the year. They indicated these goals were met however they did not provide total spend.

George Bush Intercontinental set project specific MWSBE goals, however, not all were met and they did not provide actual spend amounts.